

9 PROPERTY BOUNDARIES IN ØSTLANDET

In this chapter I shall discuss the growth of a right to property and of property boundaries in Østlandet by pulling together the threads and placing the patterns that have been demonstrated in respect of building practice (Ch. 6) and settlement (Ch. 7) within a wider social framework (Ch. 8). To this point, I have demonstrated that rights to land were almost certainly socially defined at the start of the Iron Age and became territorially based at the threshold of the historical period (Ch. 8.2). I shall now attempt to date the transition from the earlier form of organization to its successor (Ch. 9.1–4). I intend also to discuss how the three-aisled building came to be superseded by other types of structure at the start of the historical period and to investigate whether or not there is any connexion between these two transformations (Ch. 9.5).

As an alternative to the conventional view of property in the Iron Age I have developed a model for how a non-state agrarian society with social and economic differentiation could function without territorially embedded rights (Ch. 8.5). I have noted that the concept of *óðal* that is crucial to the understanding of land rights in Norwegian Iron Age scholarship originally had a wide sense and was enmeshed with ancestor cult; and only later took on the narrower sense of a right of inheritance to land (Ch. 8.2). I aim now to link these points to what I regard as central, historically specific features of Iron-age society in Østlandet at different times in the Iron Age. I shall base myself on a broad spectrum of archaeological evidence and attach especial weight to the funerary archaeology, to evidence of cultivation, and to demonstrable changes in the cultural landscape. There are certain challenges involved in the use of such evidence. There is no detailed overview of techniques and strategies for agriculture based upon syntheses of fossil cultivation traces or archaeobotanical evidence from Østlandet, and it lies beyond the scope of this study to produce one (see, however, Myhre 2000; Mjærum 2020; Solheim 2021). There is likewise no available comprehensive analysis of synchronic and diachronic variations in the funerary remains across the Iron Age apart from Solberg's (2000) summary in *Jernalderen i Norge* [The Iron Age in Norway]. Although Myhre and Solberg provide good introductions and overviews of agriculture and the burial

evidence respectively, their works are not detailed studies of synchronic and diachronic variation and change. I aim, therefore, to supplement them with works more focused in time or place. The presentation of the extensive archaeological evidence is anything but exhaustive, but it is aimed at drawing out the main lines within the various geographical areas at different times in such a way as will shed light on the primary research question. As a result, some periods are given far more space than others. I attach especial importance to the evidence from Østlandet, with Vestfold being particularly well illustrated, although I draw support in certain cases from evidence from elsewhere in Scandinavia in order to be able to outline core aspects of the society. At some locations, too, I go into greater detail.

In Chapter 7, I identified three different types of farmstead (Fig. 9.1) and these are the starting point, which to some extent structures the discussion, in the current chapter. The three types of farmstead can also be perceived as expressing a social chronology (Rødsrud 2012:2, 13; Amundsen and Fredriksen 2014); I shall therefore briefly recapitulate their key features to start with. The random farmstead (500 BC–AD 200) has been called that because it appears to be located at sites with no history or continuity. The buildings were usually short and narrow, rarely rebuilt or adapted, and in those cases where several buildings are found at the same site they do not overlap. The exception is Østfold, where the buildings did overlap and were repaired and rebuilt as early as around 200 BC. The marked farmstead (AD 200–600) by contrast, with longer and wider buildings, some of them with multiple phases, was often located at sites which had an earlier history and at a place which is frequently still used after the settlement has been abandoned. It would appear, in other words, that history and possibly in fact continuity played a greater role than they had before. The settlement evidence of the Late Iron Age has not been widely compared with that of the Early Iron Age, and the unknown farmstead (AD 600–1000/1100?) is relatively unfamiliar, as that term indicates. It is likely that both building practice and the settlement pattern passed through major changes during this period in the study area, and everywhere else in what is now Norway and Scandinavia. The farmstead appears to be

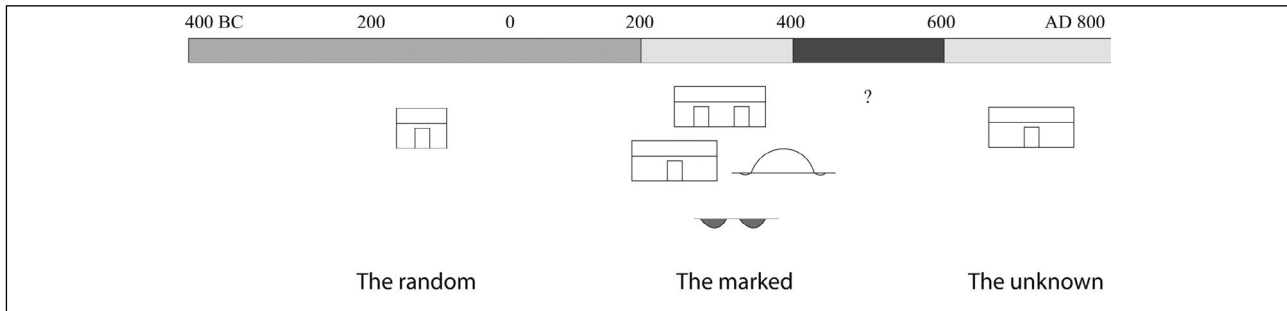


Figure 9.1 *The chronology of the The random farmstead / The marked farmstead / The unknown farmstead. Drawn by Elise Naumann.*

founded at new sites, preferably close to historically known farmsteads, before the 2,500-year tradition of building three-aisled structures went out of use at the threshold of the historical period.

The changes in the settlement evidence came about gradually, and while that impression could be due to some extent to imprecise dating (Ch. 4.4) it is likely that most of the changes should be understood as processes rather than rapid responses to sudden events. This does not exclude the possibility of major individual events having affected social, economic or ideological structures and consequently the settlement pattern. I shall look, therefore, for any possible linked variations and causal factors between specific known events and the changes in the settlement pattern. One event that stands out is the Great Dust-veil of AD 536, which very probably led to crop failure and several years of bad agricultural conditions. This event coincided in time with the settlement pattern changing radically between the Early and the Late Iron Age in Østlandet. I believe that the key to understanding the emergence of property boundaries resides in understanding what happened in the transition between the Early and the Late Iron Age and shall consequently look carefully at this possible catastrophe (Ch. 9.3.2).

The long lines or rough trends in building practice and settlement conceal a range of diachronic and synchronic variations. The studies of the building practice revealed variance in time and place in both southern and northern Østlandet (Ch. 6). The limits to the evidence mean, however, that variation in the settlement pattern can best be understood in southern Østlandet (Ch. 7). The settlement pattern and building practice in Østfold differ to quite a considerable extent from the remainder of Østlandet. In order for it to be possible to produce a social chronology that will cover the greatest possible range of Østlandet I shall largely ignore Østfold in the first section of the present chapter. Towards the end, however, I return to the variance and the regional differences and work Østfold into the social chronology (Ch. 9.6).

THE RANDOM FARMSTEAD AND INDIVIDUALIZED COMMUNITY

From the start of the Iron Age to around AD 200, there was rarely more than one building at each settlement site in Østlandet, and the location of the settlements had seldom been in use before the settlement phase or would remain so after it. The term ‘the random farmstead’ emphasizes that continuity and history did not take material form through the sites of residence and buildings (Ch. 7.2.1). The sites appear to have had some sort of life before or after their use for settlement to a very minor degree. The phase probably involved some form of ‘individualized community’ with socially grounded rights to land, and the situation thus has much in common with the model explicated in Chapter 8.5 as an alternative to societies with fixed property boundaries. I use the term individualized community because the archaeological evidence indicates that personal capacities were important while it was a community of representatives from relatively equal households who decided the distribution of land.

There is a range of separate circumstances which serve to support the view that society at this period was relatively egalitarian. The large cooking-pit sites, which date primarily to the Early Iron Age, are found away from any close association with the settlements and indicate that the community would meet with no one holding control over the assemblies (Gjerpe 2001; 2008c). Lisbeth Skogstrand (2014:203) has pointed out that in the pre-Roman and Early Roman Iron Age, men of weapon-bearing age were buried with weaponry but older men were buried with different grave goods. She believes it is likely, as a result, that the grave furnishing reflects the actual capacities and practical abilities of the deceased at the time of their deaths. There probably weren’t any old warriors, either because a good warrior would have died in battle or because the status of warrior disappeared along with the ability to make use of weapons (Ch. 8.4.3). It would appear, to put it another way, to have been more important to mark the capacity of the deceased than

to mark his heritable status. The graves in Østlandet from this phase are normally quite simply furnished cremation burials, which indicate that grave goods were not used to express social inequality (Nybruget 1978; Wangen 1999:57–62; Skogstrand 2014). Nor, indeed, does any possibly conspicuous marking of the graves appear to have been constructed in order to create a monumental impression. There are, nevertheless, some richer graves that stand out, showing that there was some differentiation (Martens 2008; Rødsrud 2012; Skogstrand 2014). The few visible funerary monuments indicate that *óðal* was not marked in the landscape, either in its wider sense of an ancestor cult or in its narrower sense of a male right to inherit land (Ch. 8.2).

All the same, some variance in the size of the buildings in Østlandet, especially their length (Ch. 6.2.3 and 6.3.2), implies that the society was stratified in economic terms and possibly socially too. There is no evidence of dynastic burial grounds either: i.e. cemeteries with several large burial mounds or something else that could show that a lordly kin-group retained power through several generations (Gansum 1996; Bratt 2008:147). There are few signs of repair or development of the buildings (Ch. 7.1.3 and 7.3.1), which presumably stood for just one generation. Neither burial nor settlement evidence indicates that history, continuity and genealogy mattered in this phase; on the contrary, the burial evidence implies that personal capacities were decisive. Textual sources also suggest that personal capacities were more important than heritage (Skre 2019). In my view it is likely that some of heterarchical distribution of power amongst warriors, leaders and farmers countered any concentration of power (Ch. 8.4.3). It was not common at this time to mark the right of ownership of artefacts by curating them in locked containers, which probably reflects both the lack of any need to mark status in a relatively egalitarian society while small and transparent societies had little need for such safety measures (Berg 2021:425). It is hardly likely that there was any territorial property right; conversely there was very probably an accepted ‘human right’ to establish one’s own household while the right to make use of land was distributed in accordance with social status (Herschend 1997a:71; 2009:277). This does not preclude some strong social stratification including subordinates or thralls, and it is not certain that all humans were recognized as entitled to such rights within the society (Patterson 1982; Brink 2012:15, 101). Power may have been exercised over other people directly rather than through the control of land. A leader would then be dependent upon personal

ties within the heterarchy. Although economic and social differences appear to intensify somewhat in the course of the pre-Roman Iron Age and in the first half of the Roman Iron Age, the burial evidence indicates that the society was less hierarchical than it was later in the Iron Age. The agriculture reveals a less firmly fixed division of the landscape. In this phase both well-manured fields sub-divided into patches and unmanured fields were cultivated side-by-side (Holm 1995; Jerpåsen 1996; Mjærum 2012b). Detailed archaeometric analyses from Vestfold have indicated that the land was farmed in a cycle involving cultivation, pasture, reforestation and clearance by burning (Mjærum 2012a; 2012b; Cannell 2013; Mikkelsen and Bartholin 2013; Svensson and Regnéll 2013; Viklund et al. 2013). Some of the fallow periods can appear to have been long enough for the land to have been covered in woodland again, meaning that the roots had to be cleared before it could be cultivated once more (Mikkelsen and Bartholin 2013). As a result, the difference in the investment of labour that was required to use fallow land or previously uncultivated land was relatively small. With shifting and labile settlement in a shifting and unfixed landscape, sites did not mean very much.

Distinctive architectonic details of Nøkleby *hus* 1 and Dikeveien *hus* 5 in Østfold show that the building was undertaken on a community basis by the same master-builder or under local influence (Ch. 6.2.3). Housebuilding may thus have been a collective activity which concurrently served as recognition of the new household (Herschend 2009:169). Although the evidence rarely allows such conclusions to be drawn it appears likely that community of this kind was relatively typical.

THE MARKED FARMSTEAD AND COMPETITION FOR LAND

In the period AD 200–600 there was a tendency to put up contemporary or consecutive buildings at the settlement sites; there are several cases of two or three overlapping buildings on the same plot, and some buildings were also reconstructed or repaired. The marked farmstead emphasizes the point that the farmsteads were often located at sites with signs of earlier activity, and that there was often activity at the site after the settlement itself had been left. The site thus had a life both preceding and following the period at which it was a settlement location. I regard the marking of the farmsteads both before and after the settlement phase as a sign of growing competition for land and an attempt to hinder new farmers from

using the land. The marking also betokens increasing and more permanent associations with sites. There are greater differences in the size of the buildings than formerly (Ch. 6.3), pointing to growing social and economic differentiation. The archaeological evidence otherwise, such as rich grave finds, major burial mounds and imported prestige goods, supports my perception of the presence of such inequalities (Lund Hansen 1987; Myhre 1987; Østmo 1997). It also became more common within the study area in this period to construct conspicuous markers over the graves in the form of barrows (Martens 1969; Løken 1974; Solberg 2000:77–8; Østmo 2005). The *óðal* land thus appears to have been marked in the terrain (Ch. 8.2). The barrows are just as likely to have been raised over the graves of women as of men, and they therefore more probably represent an opportunistic ancestor cult than the *óðal*-right in the narrower sense of a male right of inheritance that appears in much later documentary sources (Ch. 8.2). Locked and relatively small portable containers became more common in this period. This presumably reflects labile communities for whom mobility was high, and within which lockable containers were significant in defining the individual's role (Berg 2021:427–8). I regard the major cooking-pit sites as a sign that collective assembly places and community were still important (Gjerpe 2001). Considered in light of the fact that building practice in Østfold differs from that in the remainder of Østlandet, it is of interest that a hall of the Early Roman Iron Age at Missingen in Østfold has been excavated (Bårdseth 2009) while no buildings of that type of the Early Iron Age have been found in Vestfold or Akershus.

The transition to a new settlement pattern may be even more clear in the archaeological evidence from outside of Østlandet, above all on Jæren. Around AD 200 the landscape there was divided into infield and outfield with the help of stone walls, and stone-walled driveways from the farmstead to the pasture were built. The buildings became larger and the farmsteads typically came to remain on the same spot for longer. Many have inferred that the stone walls functioned as property boundaries (Ch. 2) but walls of this kind or other forms of boundary marking or enclosure of infield are lacking over much of Østlandet. Some of the elements of the farm known from historical times were found, however, equally in Østlandet (Myhre 2002:138). The finds from Hørdalsåsen in Vestfold could indicate that the separation of arable fields from pasture came about as early as the pre-Roman Iron Age (Mjærum 2012a; 2012b; Ch. 1.3), and that in Vestfold barley and possibly wheat were sown in

the spring into manured land, while various types of land were exploited (Viklund et al. 2013). The land thus appears to have fluctuated between being under cultivation, being grazed, returning to scrub or woodland, and often then being cleared once again (Holm 1995; Jerpåsen 1996; Mikkelsen and Bartholin 2013; Svensson and Regnéll 2013; Viklund et al. 2013). It is difficult to determine how long such a cycle would have lasted but it was probably a matter of several decades (Gjerpe 2013; Viklund et al. 2013). This shows that even though the arable land was manured and probably remained in use for a longer period than before, while the fields were apparently quite firmly established, the boundary between pasture and cultivated land was constantly shifting. What one person may have understood as fixed boundaries between fields and outfield could, over generations of cultivation and fallow, very probably indeed have led to massive changes and repurposing.

Society around the Oslofjord must have been influenced by ideas and impulses from outside. One of the most important cultural impulses of the Roman Iron Age was contact with the Roman Empire, especially in the latter part of that period (Lund Hansen 1987; Rygh 2007). Geir Grønnesby (2019) regards the contact with the Empire as definitive of the Germanic social model even in Trøndelag. In the Roman Iron Age, it is highly probable that men from Østlandet served in the Roman army. Soldiers in the Roman army had to subordinate themselves to a higher rank and so give up much of their freedom and their rights. This must have been a fundamentally alien experience for a Scandinavian warrior (Brink 2012:249). It is not inconceivable that some of the ideas and norms were brought back again alongside provincial Roman goods and gold that were important as prestige items in a newly established chieftainship system (Myhre 1987). Prestige goods and an increasing acceptance of personal conformity rendered it possible to organize hierarchical, army-like forces even in areas with no direct contact with the Empire (Hedeager et al. 2001; Ystgaard 2014). In the second half of the Roman Iron Age a Roman-inspired leader class was progressively consolidating its grip on society in Østlandet as elsewhere. With the aid of army-like warrior castes they controlled relatively large areas and collected a surplus, some of which they disposed of themselves, but which was partially redistributed and partially exchanged for prestige goods (Ystgaard 2014:261). The organization of the army-like forces indicates that wider areas, or perhaps rather confederations of several smaller communities, were increasingly perceived as units in the Roman Iron Age compared with what the case

would be in the 6th century. It is tempting to imagine that the geographical extent of a community would to some degree have been a variable quantity within some topographically delimited land area, such as a 'district' (Ch. 6.2.3). In some places, these areas would have been surrounded by unfarmable lands which may have served as boundaries. In other places there may have been extensive contiguous areas that were cultivable, as, for instance, on the large end morrain of Raet in Vestfold (Pedersen 1990b; 1999; Jerpåsen 1996). The boundaries would then have been more fluid because repeated fallow periods and recultivation would have led to the rolling use of large coherent areas (Ch. 9.2). There is little in the building evidence that is able to suggest the size of the smallest units of this period, but Chapter 6 shows that northern and southern Østlandet had different building practices and may have constituted two regions, while minor areas and possibly districts with their own building styles can be distinguished. It is likely that the occupants of the buildings belonged to several forms of related but not necessarily overlapping communities and identities, with varying numbers of members (Røstad 2021:302–4).

I regard the introduction of army-like forces as an attempt to take power from the collective or society itself and to concentrate it in the hands of an army-leader (Ch. 8.4.3). The continuity in settlement of the Roman Iron Age and Migration Period can be understood as the result of a leader class aiming to cement the social order. The marked break in settlement in the 6th or 7th century looks to me as a sign that that leader class failed in its objective. This is underlined by the fact that the major army-like forces disappeared in the 6th century and were replaced by individual warriors, as Ingrid Ystgaard (2014) has demonstrated in the case of Trøndelag. In the course of the Migration Period, then, some of the pattern from the last phase of the Roman Iron Age broke down. The existing settlements did not change much but it appears that some settlements fell out of use with no new replacements being founded, so that there were fewer settlements overall. Although history and continuity were present, the long lines of settlement thus look to have been severed (Ch. 9.3). This can be due to the fact that the collapse of the Roman Empire in the 5th century and later changes in power relations on the Continent led to the people of Scandinavia losing their contacts and, with that, access to gold and prestige goods (Hedeager 1978; Herschend 1991; Hedeager 1992; Andersson and Herschend 1997; Axboe 1999; Hedeager et al. 2001; Hedeager 2011). This must have weakened

the basis of elite power. Consequently, the incipient change undermining the ideal of continuity and the constriction of the individual household's right to establish itself with its own land would have been terminated.

THE TRANSITION FROM THE MARKED FARMSTEAD TO THE UNKNOWN FARMSTEAD: CATASTROPHE OR SOCIAL CHANGE?

In the pre-Roman and the Roman Iron Age, it appears that settlements were quite routinely given up and new ones were created. This pattern changed, however, in the Migration or early Merovingian Period, which means at the crossing point from the Early to the Late Iron Age. A number of settlement sites were still being abandoned, but it does not appear that new replacements were being established (Ch. 7.2). Fewer settlement sites are known from the Late Iron Age than from the Early Iron Age, while such sites concurrently appear quite different from one another. It may seem, as a result, as if a long sequence of the establishment and abandonment of farmsteads came to an end and a new sequence began (Fig. 9.1). This new course, however, is much less clearly visible in the archaeological evidence, for which reason it has been labelled 'the unknown farmstead'. The transition from the marked to the unknown farmstead is nevertheless complex and a challenge to understand. The difficulties are all the greater because so few farmsteads from the late 6th and 7th centuries have been identified and excavated. I shall therefore devote some space to an examination of the transition from the one type of farmstead to the other. In this period, the settlement pattern changed throughout Scandinavia, and I shall attribute more weight than I have done hitherto to observations from areas other than Østlandet (Pedersen and Widgren 1999; Myhre 2002; Ethelberg 2003; Jensen 2004; Göthberg 2007; Herschend 2009; Löwenberg 2010; Grønnesby 2015; Grønnesby and Heen-Pettersen 2015; Hansen 2015; Grønnesby 2019; Løken 2020). It is not only the settlement evidence which shows changes. Most archaeologists agree that Scandinavian societies underwent radical changes in the 5th and 6th centuries and I believe that the key to understanding settlement, the political and economic course of development, and so the emergence of territorially based land rights, lies precisely in an explanation of the transition from the marked farmstead to the unknown farmstead in the light of the other conspicuous social changes.

Major changes

The changes between the Early Iron Age and the Late are reflected, amongst other things, in new stylistic repertoires, a new technology of iron-extraction, the cessation of use of cooking-pit sites, changes both in individual weapons and in weapon-sets, the end of the use of district fortifications, a change of religion, change in sacrificial practice and the deposition of objects, a relocation of cult from the landscape to the settlements, a different view of the relationship between the sexes, a change in burial practice, a new concept of the relationship between humankind and the gods, changes in political power relations and changes in the language — in other words, a series of major and minor changes that are frequently viewed together (Magnus and Myhre 1986; Hedeager 1990; Fabech 1991; Randsborg 1991; Ström 1993:39–41; Fabech 1994; Narmo 1996; Webster and Brown 1997; Axboe 1999; Pedersen and Widgren 1999; Solberg 2000; Wiker 2001; Hamerow 2002; Myhre 2002; Ethelberg 2003; Hedeager 2003; Jensen 2004; Gustafson 2005b; Gräslund 2007; Kristensen 2007; Gjerpe 2008c; Larsen 2009; Löwenborg 2010; Andrén 2014; Ystgaard 2014:49; Røstad 2016; Skre 2019; Amundsen 2021; Berg 2021). Not least, the settlement pattern changed at this time (Grønnesby 2019; Løken 2020). There is less consensus over the reason for the changes even though, in simple terms, there are two main hypotheses (Näsman 1988; Andrén 2014:172). One of those stresses that the society collapsed as a result of a demographic crisis caused by plague, climatic crisis or other external factors, and regards the Migration Period as the end of the Early Iron Age. The other avers that there was no crisis but rather a restructuring of society, and thus in many ways perceives the Migration Period as the beginning of the Late Iron Age. The debate can also be regarded as a discussion of the information value of the sources, in which scholars of the crisis party consider that the sharp decrease in the number of grave finds and settlement sites is due to an actual decline in population, while scholars on the restructuring side regard the reduction in the number of grave finds and settlements as due to a reduced need to mark status through conspicuous burials and to the fact that agricultural settlement became concentrated on fewer and larger farms (e.g. Myhre 2002:170–85). The discussion of the possible crisis within the Migration Period and the general transition from the Early Iron Age to the Late is thus profoundly relevant to an understanding of several of the trends in the settlement evidence from Østlandet.

There is no agreement on the reason why fewer buildings and settlement sites are known from the Late Iron Age, although just like discussions over the Migration Period as a whole, the debate can again broadly be resolved into two positions (Andrén 2014:169–78). Either settlement was moved to the sites of present-day farmsteads or buildings with no earth-fast posts, which therefore cannot be revealed using mechanical open-area stripping, began to be put up (Ch. 4.1, 4.3). This source-critical discussion is nicely illustrated by two interpretations of the cessation of the use of district fortified sites in the 7th century. Skre (1998:288) believes they lost their function because lordship had become firmly established and the conduct of warfare either ceased as a result or involved such large forces that the district fortifications no longer served as refuges. Ystgaard (2014:212) has subsequently demonstrated that the end of the district fortifications coincides with weaponry being redirected towards battles at an individual level. Ystgaard interprets the breakdown of the Roman Iron-age military organization in the Migration and Merovingian Periods as a continuation of the centralization of power and the growth of the decentralized military organization of the Late Iron Age (2015:261–4). She additionally specifies that she can find no basis for inferring a decentralized military structure as early as in the Merovingian Period in mid-Norway, and that the focus was falling on warrior symbolism rather than actual warfare. On this basis I would point out that the cessation of the use of district fortifications can just as well be perceived as a result of lordship having collapsed and lords no longer being able to mobilize large forces.

The hypothesis of a fall in population size, usually referred to as the Migration Period crisis (Näsman 1988), has in recent years been empirically reinforced by ‘the dust-veil event’. A cloud of dust or ash produced by a massive volcanic eruption in the year 536 blocked out the sun and led to several years with reduced temperatures. The year following the eruption may have been the coldest in the last 2,000 years and a further volcanic eruption in AD 540 may have meant that 536–545 was the coldest decade in that period too (Gräslund 2007; Gräslund and Prince 2012; Toohey et al. 2016). Several people have stressed that the consequences for agriculture were major and negative throughout Europe, and indeed must have been fatal in those parts of Scandinavia where the summer temperature barely permits grain crops to ripen. The reduction in temperature that followed these volcanic eruptions must therefore have been followed by failed harvests and catastrophic famines. Studies from

the Mälars region show that a practically collapsed society was subsequently re-organized (Löwenberg 2010). Growth-ring studies of well-dated timber from Raknehaugen show that there was likewise a failure of growth in the 530s in Østlandet. The summer of 536 likely corresponds to the 15th growth ring in the timber from Raknehaugen. According to Asbjørn Ording who examined timber from the mound, the growth of the trees had that year been ‘interrupted in an unnatural fashion’ (*avbrutt på en unormal måte*: Ording 1941:122). Assuming that this was indeed the summer of 536, the trees were felled during the winter of 551/552 and the mound built the following summer. This date is consistent with Skre’s wiggle-matching radiocarbon dating of the felling of the timber to the winter 533/534 at the latest and the winter of 551/552 at the earliest (Skre 1997b:31. I am indebted to Dagfinn Skre for making me aware of these connections by personal communication). More recently, however, the view of this period has been refined (e.g. Gundersen 2019; 2021; Gjerpe 2021). Although there is still essentially full agreement that the fall in temperature was a fact, it has been pointed out that contemporaneity is not the same as causality; that some of the changes that took place after AD 536 were the result of processes that had begun before then; and not least that in parts of Norway agriculture was more resilient to a fall in temperature than had previously been supposed. Some of the major changes occurred as early as the 5th century. This is particularly clear in the pottery evidence, where chronological resolution is good (Kristoffersen 1995; Fredriksen 2006; Kristoffersen and Magnus 2010; Rødsrud 2012). An unanticipated event a century later quite obviously could not have been the primary factor. The same applies to, amongst other things, the cooking pits, which apparently went out of use immediately following the year 536. Detailed regional studies demonstrate, nonetheless, that this too was a process which had begun a great deal earlier (Gundersen et al. 2020). In the case of armament as well, it would appear that major changes occurred early in the 6th century. These are dated to AD 520/30, in other words immediately prior to the first volcanic eruption of 536 (Jørgensen 1999). Although the disaster did not initiate the changes, it may have accelerated on-going changes or have influenced the direction they took. This is well illustrated by the changes in the production of pottery and bucket-shaped vessels. Pottery manufacture at Augland in Agder ceased before the year 536, while the mass production of individual bucket-shaped vessels ceased on the whole around AD 500 (Fredriksen

et al. 2010; Fredriksen and Kristoffersen 2020). After the beginning of the 6th century specialists associated with the circles of powerful individuals were producing fewer and more complex bucket-shaped pots, until manufacture ceases entirely around the end of the Migration Period or start of the Merovingian Period (Fredriksen et al. 2014). The virtually complete cessation of the deposition of gold in hoards may also illustrate the relationship between social changes and the catastrophe. Bracteates and other gold artefacts were already being cached in the 5th century, but the number of deposits was especially high in the first half of the 6th century (Axboe 1999; 2007; Amundsen 2020). Although the hoards can rarely be dated very precisely, it is likely that the major dust-veil stimulated the need for religious performances and communication with the gods. The practice of deposition did not in itself appear as a consequence of the catastrophe but it may have increased in intensity. The massive decline in the number of hoards after around the middle of the 6th century may also be viewed in the same light. Access to gold from outside of Scandinavia was cut off in the 5th century because of the fall of the Roman Empire, while the greater frequency of gold caches from the period following AD 536 led to the gold reserves being used up more quickly than the consumption of gold before that time would have implied (Fagerlie 1967; Axboe 2007). It may thus appear that it was social changes which brought about the end of the Early Iron Age while the natural catastrophe and the fall in population laid the ground for the Late Iron Age. I will therefore take a closer look at the sort of consequences failed harvests and the catastrophic famines that could have followed may have had for settlement and for society in general.

The Black Death as an analogy

I shall now demonstrate that relatively well-evidenced falls in population in the Middle Ages and more recent times can serve as a basis for understanding the effect of a hypothetical population decline in the 6th century (Löwenberg 2012; Andrén 2014). Admittedly, social organization in those later periods was different than that of the 6th century, and the comparisons have to be treated with caution therefore, and perhaps primarily as suggestive rather than simple analogies (Ch. 1.4.4). The majority of the demographic crises in 18th-century Norway were caused directly or indirectly by famines resulting from failed harvests, and it is difficult to imagine that such conditions did not also afflict prehistoric society (Haarstad 1980;

Dybdahl 2010). The greatest known demographic collapse in Norway came about when the Black Death struck the country in 1348 or 1349 (Benedictow 2002). One of the known consequences of the Black Death was that many farms were deserted (Sandnes and Salvesen 1978; Lunden 2002), just like, as noted, also happened at the transition from the Migration to the Merovingian Period. It would appear, however, that the plague did not initiate but rather reinforced an existing decline in population. A court judgment of 1260 shows that farms were deserted on the eve of the Black Death while iron production at Gråfjell, amongst other things, came to an end around 1300 (Dybdahl 2010:203; Rundberget 2012). Here too there are similarities with the possible crisis of the 6th century: the changes both in the settlement pattern and in other archaeological evidence apparently set in before the inferred catastrophe of AD 536. Failed harvests on the eve of the Black Death weakened the population's resistance to disease, and further waves of plague following it meant that the population was slow to regather itself (Benedictow 1992).

It is not easy to calculate the medieval population size although Jørgen Benedictow (1996:180) believes that it may have been around 300,000 in what is now Norway before the Black Death, and that it fell by more than 60% to 115,000 at the turn of the 15th and 16th centuries. The population level before and after the Migration-period catastrophe is even harder, if not impossible, to determine, although the level of mortality must have been at least as severe (Gräslund 2007; Gräslund and Price 2012). It has recently been revealed that the volcanic eruption of 536 was followed by further eruptions in 540 and 547 (Buntgen et al. 2016; Tooley et al. 2016). In a complex interaction with other natural phenomena this caused lower temperatures through the period AD 536–660, which is known as the Late Antique Little Ice Age. Alongside that, the Justinianic Plague may have reached Scandinavia and the Oslofjord area. It certainly reached Ireland in 544, having spread rapidly from the Continent (Dooley 2007:218; McCormick 2007:297). It has also recently been suggested that ergot poisoning could have led to further population decline or delayed maturation in an already decimated population (Bondeson and Bondesson 2014). Ergot is a fungus that grows on several types of grass, including cereals, and thrives in a cold and wet climate with little sunlight. In the immediate wake of the dust-veil, therefore, the conditions for the growth of this fungus were favourable. If it is consumed in large quantities it leads to poisoning and death for people and animals. Consumed in smaller quantities,

it can cause miscarriages or stillbirths for both people and animals, and the poison can also be transferred through a mother's milk. While it may have been cereal cultivation that was primarily impacted by the climatic crisis, possible ergot poisoning of grazing animals would also have led to that source of nutriment being severely reduced or even lost. Furthermore, even minor amounts of ergot could have led to even higher child mortality than normal (Alm and Elvevåg 2013; Bondeson and Bondesson 2014). Failed harvests and stunted growth combined with plague and/or ergot poisoning may therefore have led to a drastic fall in population and very slow recovery of population figures.

It is suggested that around 60% of farms were deserted in the wake of the Black Death but that the average number of residents at each surviving farm fell only from 4.5 to 4.25 (Benedictow 1996:180). The reduction in the number of farms, therefore, is fairly representative of the decrease in population. In that case, it is interesting that the number of farms on Gotland was reduced by at least 30% and possibly as much as 70% between the Migration Period and the Merovingian [Vendel] Period (Svedjemo 2014:212). Gotland is perhaps the one area of Scandinavia where the basis for calculating changes in the number of farms across that period is best; however the number of farms seems to have fallen drastically in other places too (Myhre 1983; Göthberg 2000; 2007). There is, in other words, reason to believe that the fall in population was great and can be compared with that which followed the Black Death. The Black Death probably hit representatives of one of the greatest landowners of the time, the Church, harder than ordinary farmers since the clergy were infected with the bacterium when ministering to the sick and the dead (Holmsen 1977:343). If the crisis of the 6th century was caused by famine as a result of failed harvests, it is reasonable to suppose that it directly affected the well-off and powerful rather less because they more than others should have been able to build up reserves of food, or to steal, plunder, gain by exchange or buy supplies. Concurrently, their social position must have been massively weakened because they could no longer provide food or drink as gifts as gift-exchange required. The demand on the elite to provide gifts could even have been so great that that class was seriously weakened. The reduction in population after the Black Death led to less competition for land, and rents fell as a result. It appears, however, that the income of landowners was reduced even more than the tolls due from individual tenants because many farms were left deserted while land rent was kept artificially

high for those farms that were working (Ersland and Sandvik 1999:52–3; Lunden 2002:52). It is likely that many deserted farms became royal property as the king had a right to unowned goods (Holm 2011). As no one was defending the rights of the landless, be those socially or territorially embedded, ‘empty’ land would not necessarily be any benefit to them, either in the Medieval Period or at the beginning of the Late Iron Age. The Black Death caused the social elite to lose legitimacy because bad times were attributed to bad leaders and failed harvests brought challenges to power (Herlihy and Cohn 1997:61–5; Dybdahl 2010; see also Ch. 8). Immediately after the catastrophe of AD 536, land with no farmers or with farmers who lacked the ability to defend themselves reverted to the community (cf. Ch. 8.5). If there was a human right to establish one’s own household this land would have been redistributed. The defensive system of society — heterarchy and the division of power — might have collapsed, however, and individuals could have grabbed or sneaked themselves on to the land (Löwenberg 2010). This possible re-organization of the Late Iron Age may therefore be due to new households or groups more or less discreetly exploiting the power-vacuum that had come about. The catastrophe may, then, also have led to religious changes. Following the Black Death, by comparison, Christ ceased to be represented as Lord of Victory but as the sacrificial victim. Correspondingly, sun symbolism seems to disappear in the 6th century (Andrén 2014:162, 181–2). As noted, I regard the cooking-pit sites as meeting places for a collective at which people assembled on an equal basis (Ch. 9.1 and 9.2). The halls, conversely, are definite signs of the presence of a social or economic elite, and are themselves meeting places dominated by their owners (Fabech 1991; 1994; Enright 1996:13; Herschend 1998:16; Løken 2001a; Carstens 2015). There may be evidence that cooking-pit sites remained in use some time after the introduction of the hall in Østlandet. The transition should then be viewed as an extended process, and it is possible that eventually studies benefiting from fine chronological and geographical resolution could explicate such detail (Gundersen et al. 2020; Gjerpe 2021; Gundersen 2021). At the end of the Late Iron Age, in any event, some aspects of public cult were moved to within the hall and the cooking-pit sites disappeared (Fabech 1991; 1994; Narmo 1996; Gjerpe 2001; 2008c; Arrhenius 2013). The political symmetry came to an end and power was taken from the community.

The population crisis of the 14th century led to the supply of labour falling more than demand for

it. In a market economy this will lead to the cost of labour, i.e. wages, rising. This market-led adjustment was countered by bans, regulations, moral storytelling and social pressure. At first, the rich and powerful succeeded in maintaining the relationship between wages and prices relatively steady so that their income did not fall dramatically. As time passed, however, it became clear that only to a minor extent did direct sanctions against higher wage demands exist in reality, and wages rose. The social order was challenged, and amongst other things the workers gained the right to better foodstuffs and ‘conspicuous consumption’ that had previously been restricted to the well-off (Hatcher 1994; Herlihy and Cohn 1997:47–51; Benedictow 2004:390). In the Iron Age, payment for work was not necessarily regulated by the relationship between supply and demand. It may rather have been regulated by social norms and have covered the worker’s basic needs for food, clothing and housing (Yrwing 1981; Hodges 1989; Skre 2008). Fewer workers and a shortage of labour would thus not necessarily have led to labour costing more or a more even distribution of the agricultural surplus. In the course of the 7th century, however, richly furnished burials, which Hans Gude Gudesen (1980:128) called ‘upper-class graves’, disappeared. This may indicate that responses to increased payment for labour did come into play straight after the catastrophe but lost their effect bit-by-bit, just as in the wake of the Black Death. From such a perspective, Raknehaugen can be perceived as a terminal feature of the Early Iron Age.

New technology and the re-organization of agriculture?

Following the Black Death, high labour costs led to new and less labour-intensive technology (Hatcher 1994; Herlihy and Cohn 1997:47–51; Benedictow 2004:390). New agricultural technology was introduced at the transition from the Early to the Late Iron Age too, possibly because the payments for work rose or simply because less manpower was available. At the same time, the introduction of new technology is a continual process. During the Roman Iron Age, the rake and the short-handled scythe — a short-bladed and short-shafted sickle — were added to the effective toolkit, and at the transition to the Merovingian Period the leafhook or leafknife was introduced: a specialized tool for cutting leaves (Myhre 2002:148, 199 with refs.). These new inventions meant that it was possible to harvest more fodder for the same amount of work as before, or an equal amount with less effort, and keeping livestock thus was relatively

less labour-intensive than it had been. In more recent times it has been calculated that enough leaves to feed a sheep through the winter can be harvested in one day's work (Kardell 1996). Deciduous trees are, as a rule, the first to establish themselves on fallowed pastures or soils, and they were used for fodder in the Iron Age, Middle Ages and modern times. However, the development and use of a specialized implement for collecting leaves may indicate that woodland became more important at the transition between the Early Iron Age and the Late (Brøgger 1933; Ropeid 1960; Fremstad 1998; Jørund et al. 2002:26; Regnell 2003; Regnell and Sjögren 2006; Mikkelsen and Bartholin 2013; Viklund et al. 2013). If ergot was a problem for the livestock, that too could have helped make leaf-collection more important, as ergot grows only on grasses (Alm and Elvevåg 2013).

In both the 6th century and the 14th century, a large number of farms were abandoned, the area under cultivation shrank, and the pressure on pastureland was lower, while much of the man-made landscape reverted to woodland (Andersen and Berglund 1994; Lagerås 2007). The demographic crisis of the 14th century probably led to the keeping of livestock having a greater role to play compared with cereal cultivation than it had had before (Salvesen 1979; Erslund and Sandvik 1999:56; Imsen 2000:65; Lunden 2002:58–66; Berglund et al. 2009; Gundersen 2021). The changes at the transition from the Early Iron Age to the Late did not, however, run exclusively in the direction of desertion. In some relatively central and productive agricultural areas in Vestfold, such as Østre Borge and Borre, both pasture and arable farming intensified in the 6th and/or 7th centuries (Høeg 1992; Jerpåsen 1996; Storrusten and Østmo 2012; Svensson and Regnell 2013:62). Neither is there always a reduction in agriculture in what are assumed to have been more marginal zones. Sostelid in Åseral in Vest-Agder was once regarded as a marginal farm which went out of use in the transition from the Early Iron Age to the Late (Hagen 1953), but new analyses of well-dated pollen diagrams show no sign of any break in cereal cultivation or grazing, either in the 5th century or the 6th (Jessen and Stylegard 2012:139). At Vardal in Toten in Hedmark too, at Rødsmoen in Åmot in Hedmark, and in some other relatively marginal agricultural areas, there appears to have been continuous farming throughout the supposed crisis (Gustafson 1995; Holm 1995; Høeg 1996; 1997; Bergstøl 1997; Myhre 2002:173–7 with refs.). Even in Grimsdal in the north of Oppland, more than 800

m over sea-level, pollen diagrams and back-filled hunting pits show that the pasturing of domesticated animals intensified in the 5th and 6th centuries and that cereals were occasionally grown (Stene et al. 2015:59). In the mountain valleys of Sogn, from the 5th century through to the Late Iron Age, there was settlement along with livestock, smithing, textile working and possibly also cereal cultivation in apparently marginal arable zones (Bjørge, Prescott and Kristoffersen 1992). The apparently paradoxical situation of good agricultural land being abandoned or being used as pasture at the same time as marginal areas were being cultivated may best be understood by perceiving the centuries from the Roman Iron Age to the Merovingian Period as a period both of restructuring and crisis (Myhre 2002:179–89). In some cases this brought about new economic adaptations and specialization, and new organizations, both political and economic (Gundersen 2021).

When the population rose again, re-clearance and new clearances probably led to conflicts, both after the Black Death and after the great dust-veil (Dybdahl 2010; Löwenborg 2010; Holm 2011). Following the 6th-century catastrophe, famine and perhaps plague as well led to a fall in population while new technology made winter-fodder less labour-intensive and woodland, especially scrub, easier to exploit for fodder. As a result, the reduction in the population did not necessarily lead to less need of land, but rather that a higher proportion of the land was used for pasture than had been the case. The intensity of labour in agriculture is often directly linked to population pressure, even though social or economic circumstances can also lead to more labour being used per unit area (Boserup 1973; Eder 1991). Livestock farming requires more land to produce the same quantity of calories as cereal cultivation, but probably less labour. At the same time, there was a limit to how much land one person could cultivate under an intensive, prehistoric, agricultural regime: possibly no more than 3 hectares (Lunden 2002:164). Large numbers of domesticated animals per unit area also produce a higher quantity of dung, which was probably a scarce resource in the Iron Age. Thus the greater significance of stock could lead the way to more permanent and labour-demanding lands, while the need for land was concurrently maintained. Furthermore a leading class could have exploited this opportunity to seize lordless property. There was probably, as a result, conflict over land in the wake of the bad years of the 6th century, even though access to land per farmer was greater than it had been prior to the crisis.

Conclusion: a complex situation

So far, I have adumbrated how at the transition from the Early Iron Age to the Late Iron Age marginal land was cultivated at the same time as good land in central agricultural areas was left fallow. This seems paradoxical. I wish to propose, consequently, that the transition between the Early Iron Age and the Late has to be understood along two lines which overlap in just this phase. More or less regular founding and desertion of settlements can be seen as a continuous line throughout the period of the marked farmstead. This line apparently ran to its end around the year 600, after which few new settlement sites were established. At the end of the Roman Iron Age or early in the Migration Period it would appear that another line came into being, which gradually developed into that of the unknown farmstead. This strand ran into the Late Iron Age, implying that continuity became more significant, and some settlements of this phase remained in use for longer than before.

THE UNKNOWN FARMSTEAD: PROPERTY BOUNDARIES ARE ESTABLISHED AND CONSOLIDATED

In comparison with the Early Iron Age, relatively few Late Iron-age buildings and settlement sites have been excavated. The Merovingian Period is particularly poorly represented, not only in Østlandet (Ch. 6.1) but throughout present-day Norway (Eriksen 2019:51). As a result, I have labelled its settlement as ‘the unknown farmstead’. The known settlement sites from the year 600 through to the threshold of historical times lie close to, or at, known and existing farmsteads more often than is the case with earlier sites (Grønnesby 2019; Ch. 7), and in several cases buildings were put up over the top of predecessors (Ch. 7.3), especially in settlements of high status (Eriksen 2019:137). To a greater extent than before, contemporary burials are sited close to the settlements. Two or three halls, which are to be counted as high-status structures, have also been identified from this phase. The buildings of the Late Iron Age are, on the whole, shorter than their predecessors, while concurrently the preference for the three-aisled building with earth-fast posts appears to have come under challenge, towards the end of the Viking Period at least. The absence of finds permits us, in my opinion, to draw certain tentative conclusions. In the Merovingian Period, the paucity of settlement sites and graves may indicate a small population, although the sparsity of burials could also be due to a different burial practice (Gjerpe 2021). In

the Viking Period, however, a series of graves points to a relatively large population. I do not suppose that there is a one-to-one relationship between the number of known graves and the size of the population, but do accept that a high number of graves must reflect a population of a certain size. Per Sveaas Andersen (1977:209) has suggested that the population of what is now Norway in the Viking Period must have been between 100,000 and 300,000. It is probable, as a result, that the lack of buildings is due to a new building style or new settlement pattern, by the Viking Period at the latest if not in the Merovingian Period. The patchy picture of settlement in the Late Iron Age is probably the product of the combination of three factors. Extant farmsteads are only rarely explored archaeologically; buildings without earth-fast posts are more difficult to find; and a genuine fall in population in the 6th century meant that fewer buildings were constructed.

The greater importance of history and continuity at the end of the Roman Iron Age and in the Migration Period (Ch. 9.2 and 9.3) formed the social and conceptual foundation for the growth of territorially embedded rights and the historically familiar settlement pattern. This process, however, cannot be understood without attention to the power-vacuum that the fall in population of the 6th century brought about, as I have argued in Chapter 9.3. Hans Gude Gudesen (1980:136) has noted that, in the Merovingian Period, the earlier society fell apart and the foundation of the Viking Period was laid, while Daniel Löwenborg (2010) sees parallels between the 6th-century crisis and the collapse of the Soviet Union. He demonstrated that the fall in population created more land per head but that the social organization collapsed alongside that. As a result, society’s defence against the concentration of power had gone, and the roles of the warrior and leader could merge to a greater extent than before. Along with lawlessness or new laws that favoured the strong, this brought about the emergence of a new economic and possibly also social overclass which Löwenborg (2010) has styled a kleptocracy, the rule of thieves who rob society (see also Fischer 2005:14 for a discussion of this term). At the beginning of the Merovingian Period there was, in consequence, a lot of free land, a desire to make use of it as pasture, and both new and old elites in competition. One of the preconditions for success was having enough land and labour to produce ale and meat which could then be used to attract warriors (Herschend 1997a). The leaders could additionally offer institutional security and stability in a challenging period through rituals and

the construction of monuments (Price and Gräslund 2015; Skre 2019).

In the first phase of the Merovingian Period, therefore, society was characterized by a power-vacuum which arose after the incipient re-organization at the transition from the Roman Iron Age to the Merovingian Period lost its way or changed direction in wake of the population decline of the 6th century. The specialized cooking-pit sites, the assembly places for the community for a millennium, passed gradually out of use: in Østlandet their use came to an end at the latest at the end of the 6th or beginning of the 7th century (Narmo 1996; Gjerpe 2001; 2008c; Baar-Dahl 2012). About the same time, the earliest halls were constructed in Østlandet, and it is likely that the meetings were moved into the halls. The owner of the hall was thus able, much more than before, to dominate what had previously been a community of relatively equally ranked individuals (Fabech 1994; Herschend 1997a:85–7; Skre 1998:335).

New cemeteries and old

Löwenborg's argument for the emergence of a kleptocracy is based, amongst other things, on the lack of continuity across the Migration Period within a large number of cemeteries in the Mälars region. Before I take a closer look at any possible lack of continuity in burial places in Østlandet, I shall refer briefly to the cemetery at Borre in Vestfold, indisputably an example of site-continuity from the Early Iron Age to the Late (Myhre 2015:67, 72). In this cemetery there are both minor graves of the Early Iron Age and major barrows of the Late Iron Age. In this way, it is able to reflect a new social order of the Late Iron Age despite its continuity. Two of the great barrows are dated to the 7th century. These datings, however, have been taken from insecure contexts or cover a relatively long span of time, so that the barrows themselves could be either earlier or later. The large number of radiocarbon dates from the cemetery and the area immediately around it, however, do confirm that there was continuous activity here since the beginning of the Christian Era at least (Myhre 2015). Borre is thus a case of site-continuity notwithstanding the fact that the character of site changed.

No larger-scale analysis of possible continuity in the use of all burial grounds in Østlandet has been made, although Mari Østmo (2005; 2009) has shown that few of the cemeteries along Raet in Vestfold were in unbroken use throughout the Iron Age. The site at Borre is thus one of a minority. In the Late Iron Age, new cemeteries were commonly created at new

sites: e.g. at Gulli (Gjerpe 2005a) and perhaps also at Jarlsberg Prison in Vestfold (Grindkåsa 2012b). I shall pay some attention to the cemetery at Gulli because it is able to shed light on the relationship between graves and farms in the Viking Period. This cemetery comprised at least 42 graves but had been ploughed over so that some parts of the site had been destroyed with no prior examination, and there could have been up to 60 burials. The organization of the cemetery indicates, in my view, that all of the graves, even those with no marked ring-ditch, were visibly marked. From the grave goods, seven of the burials are inferred to have been women's graves and eight men's: in other words, effectively an equal balance. The majority of the burials were made before c. AD 950 but it is impossible to exclude the possibility that some of the graves were later — even though that is rare in outer Vestfold (Sjøvold 1944; Forseth 1993; 2003; Stylegar 2010). This means that burial may have taken place at Gulli at a rate of more than one every third year (with 60 graves distributed across the period of AD 800–950) and at a minimum rate of one every sixth year (42 graves distributed across the period of AD 800–1050).

Mari Østmo (2005:113–15) interprets Gulli as a district cemetery and a readily accessible district centre, while Frans-Arne Stylegar (2006) is of the opinion that Gulli could have been the burial ground for two families of fifteen individuals at which all members of the families were laid to rest. Around the year 1400, the farm of Gulli was part-owned by the monastery of Olav in Tønsberg and assessed at 2.46 *markebol* (a farm that should yield 2.46 marks annually). The mean size of the farms owned by that monastery was 2.97 *markebol* (Eriksson 1993:103), and Gulli was therefore not an especially large farm in the Middle Ages. Nowadays the farm is divided into two holdings and if this was also the case in the Viking Period it is possible that the cemetery was shared by the two farms and used by two families. It is not, however, until the 19th century that there is evidence of the two holdings in the documentary evidence (Johnsen 1945). Can we see the graves at Gulli as marking heritable rights? There seem to me to be three possible reasons for the collection of graves. One possibility is that the farm itself was divided into two or run by two families as early as the Viking Period, and all of the adults were buried in graves marked by barrows. In that case, not all of the barrows can mark the transfer of property or prioritized male inheritance. The second possibility is that those buried were leaders and members of households at several farms, of which Gulli may have been just one. In

this case, as in the first, not all of the barrows could mark the transfer of property or the right to *óðal*. The third possibility is that those buried had lived at several different farms and that only the heads of the households — those who owned the farms — were buried under barrows. In that case the graves could mark the transfer of property. The distribution of the sexes, however, is inconsistent with preferential male inheritance, for in such circumstances half of the holders of the farms can hardly have been women. If those buried were *óðal* farmers, they were not buried at the farms which they had farmed or owned. In those circumstances, it is impossible to posit that farms without burial mounds lacked *óðal* in the sense of a male right to inherit the land of one specific farm. The cemetery rather shows that there may be a complex relationship between settlement and grave, under which one settlement site might use several different burial places or one cemetery could be used by multiple settlement sites (Petré 1984; Liljeholm 1999; Andrén 2014:60).

If the graves are unable to shed light on property conditions directly, they may possibly shed light on the struggle for power in the Late Iron Age. One of the graves was of the Late Merovingian Period, the others from the Viking Period. The Merovingian-period grave was disturbed when a ring-ditch was partially dug through it, and this is the only grave that was not respected when later graves were inserted. In the Merovingian-period grave and seven further graves, boats had been used as coffins. Gulli is situated about 3.5 km north-east of the current coastline and lay only fractionally closer in the Viking Period. The narrow River Auli is barely 2 km as the crow flies to the west but is not visible from the cemetery. This position is rather unusual, as Viking-period boat graves in Vestfold are usually found close to water (Næss 1970). There is a viewshed out across lower-lying plains around 600 m to the north of the cemetery. These were linked to the sea down to the first centuries of the Christian Era. It is not inconceivable that a knowledge of the sea remained in collective memory, and the graves with a view towards the clay plains were constructed so as to relate to the sea that had withdrawn long since (Gjerpe 2005c; 2020).

New foundations may therefore be viewed as attempts to construct a new and inauthentic history (Gjerpe 2020). The disturbance of the Merovingian-period grave can be seen both as an attempt to appropriate the preceding group's (false) history and to erase the memory of the group. Subsequently, the newly founded cemeteries, like at least some of the settlements that were founded in the Late Iron Age

and particularly in the Viking Period, can be said to look forwards, in the direction of a further restructuring of the landscape in the Viking Period and early in medieval times (Lund 2009:230). In a study of 902 medieval churches, May-Liss Bøe Sollund and Jan Brendalsmo (2013) have found that 28% of them were constructed less than 100 m from pre-Christian burial grounds. Few of those cemeteries are dated, but of the 29 dated finds that are thought to have come from graves as many as 27 are of the Late Iron Age and 24 of the Viking Period. Only one of the finds has been retrieved through archaeological excavation; the others are the products of other forms of digging in the churchyard or in barrows. The source-critical problems in using evidence of which so little is dated, while the dated artefacts are almost entirely stray finds, are plain. All the same, Sollund and Brendalsmo's study is able to show that in those cases where the churches were built close to cemeteries they were primarily adjacent to Late Iron-age cemeteries. In retrospect, it may seem, then, that in the Late Iron Age new cemeteries were frequently founded by groups who had a promising future. This reinforces the supposition of new relations of power in that period. It does not, however, look as if all new foundations were successful. In the Merovingian Period, a new phenomenon appeared in Østlandet where two relatively well furnished graves were placed in the central aisles of deserted buildings at Sem Prison and Rødbøl 27 in Vestfold (Rønne 2008; Grindkåsa 2012a). I regard these burials as a statement that, although the settlement had been left, the site was to be marked and the land reserved without those who may have farmed it living there themselves. At Rødbøl 27 the construction of the grave was the last thing that happened, while at Sem Prison at least five further graves were inserted. This can be interpreted along the lines of those who made the burials at Sem Prison having succeeded in establishing themselves while those at Rødbøl 27 failed.

The property boundaries are imposed

Burial practice implies that society was in a state of continuous change through the Migration Period and down to around the year 700, while the burial practice of the 8th century has points of similarity with that of the Viking Period (Gudesen 1980:71, 126; Solberg 1985; Myhre 1993; Näsman 2000) although the Viking Period was by no means homogeneous in this respect (Andersen 1977; Pedersen and Pilø 2007; Pedersen 2008b; Nordeide 2011; Rundberget 2012; Ystgaard 2014; Myhre 2015). Around AD 700

European influence becomes evident at the same time as dress-accessories started to signal common identity over wide areas (Myhre 2003:93; Røstad 2016:403–4 with refs.). After a period of few burials we start to have a lot again, the burial practice in Østlandet changed, and it appears that there were fewer, larger polities within Norway (Gudesen 1980; Myhre 1987; Solberg 2000:135, 188; Myhre 2015; Røstad 2021). Some graves of the Viking Period are furnished with such a rich range of grave goods, such as equipment for both fine and heavy metalwork, kitchen utensils and weaponry, that the entire assemblage can hardly represent the personal possessions of the deceased (Pedersen 2009). Concurrently, older objects, possibly heirlooms, became more common amongst the grave goods (Glørstad and Røstad 2015). It is possible that heritable status and formal roles were emphasized in the burial rite at this time because personal capabilities and skills were not of themselves sufficient for people who wished to be leaders but needed to be supplemented with an inherited right. A hypothetical heritable right of this kind could have been materialized through heirlooms or ‘inalienable possessions’ (Weiner 1992). In the Late Iron Age, the graves are often marked by barrows or other conspicuous and durable markers, and in several cases there are two or more large Late Iron-age barrows at the same cemetery. Altogether, this indicates that history and genealogy mattered, and that heritable concentrations of power had become established. It seems reasonable to interpret the burial mounds as reflexes of an ancestor cult despite the fact that the gender distribution is inconsistent with them displaying a male right of inheritance, prior to the final phase of the Viking Period in any case. One point indicates a change in the view of boundedness and boundaries. In the Viking Period, keys become much more common than before in both burial and settlement contexts — notwithstanding the fact that they occur as early as the Roman Iron Age (Berg 2021). This implies that individual property was more important. In the Viking Period there is also greater variance in lock technology, and larger, lockable chests are found for the first time. It may be that this indicates that personal property was playing a more prominent role than before in the structuration of society (Berg 2021:430).

If Gudesen (1980) was right that the overclass lost its ability to furnish graves with rich grave goods in the 7th century, the wealthy ship graves of the 9th and 10th centuries show that an overclass had definitively returned, with both the ability and the will to furnish its burials with rich grave goods (Shetelig

1917; Bonde and Christensen 1993; Nicolaysen 2003 [1882]; Bill and Daly 2012; Myhre 2015:55). Neither the Oseberg nor the Gokstad barrow had any earlier graves in the immediate vicinity, so they may therefore be seen as signs of a new elite or kleptocracy that had established itself at new sites in wake of the restructuration of settlement. Recently, however, a market and production site immediately alongside the Gokstad barrow has been excavated (Bill and Rødsrud 2013). It is possible or even probable, then, that the basis of power for those who raised the barrow was not an agricultural surplus. In Østlandet limited continuity has been revealed on the settlement sites or in cultivation through the Migration Period despite the fact that some sites were used both in the Early and the Late Iron Age (Ch. 7.2.3). The new settlement pattern that I discern in the Late Iron Age must, in my view, be viewed in connexion with a re-organization of agriculture around the year 600 that several other scholars have previously noticed (Jerpåsen 1996; Myhre 2015:103–8). At least in some areas more livestock were kept than before, and less land may have been cultivated (Fabech and Ringtved 2009). At the same time, more beasts produce more dung, which could be a basis for better yields per unit area. The osteological evidence available from settlements in Østlandet is not adequate for a discussion of which out of smaller or larger livestock was more important and can only confirm that both were around. In the cremation burials sheep/goats are found from the transition between the Migration and Merovingian Periods onwards (Mansrud 2006:tab. 2). Together with a growing number of male graves with textile and kitchen equipment (Rabben 2002), this could indicate that roles associated with the production of textiles and food had grown in significance along with, possibly, greater economic differentiation and specialization. Wool was essential for sails for the sailing ships that were developed in the Viking Period, while meat was important as a status marker and for supplying the lord’s retinue (Isaksson 2000; Jessen and Stylegar 2012; Jørgensen 2012). Although cereal cultivation replaced livestock farming as the most important ideological resource, and rights to arable land were the determinative element behind settlement, the basis of power in the Viking Period was not land for growing cereal crops but access to good pasture and winter fodder (Sindbæk 2011; Grønnesby 2019). Concurrently, a greater holding of livestock and thus better access to manure generated the possibility of making longer use of land without fallow periods, and for yields per land unit to increase. Paradoxically, then, the greater importance

of livestock as the economic basis of power may thus have led to arable farming imposing the preconditions of the settlement pattern (cf. Grønnesby 2019). As a result, the settlements of the Late Iron Age could then be located close to good arable land, good pasture and good areas for gathering feed to a greater degree than was the case before (Gjerpe 2013; Grønnesby 2019). Borre was thus very probably one of the sites at which settlement became focused in connexion with the re-organization at the transition to the Late Iron Age.

Such re-organization of production could have had a crucial impact on property conditions. Ingunn Holm (2015) has shown how the relations of property in an inland valley system were changed when timber became a marketable commodity in the 16th century and it became more profitable to let the forest grow than to grow corn in clearances that took up space. The re-organization of the settlement within the landscape is also a social change (Grønnesby 2019). Søren Sindbæk (2011) has suggested that, in connexion with the re-organization of agriculture in the Viking Period, headmen ‘appropriated’ or ‘privatized’ the land between the settlements which had hitherto been largely common, and that new farms of low social status were founded in such areas early in the Medieval Period. Farm names in *-rud*, *-rød*, and *-torp* may point to similar foundations in Østlandet at that time (Harsson 2002). The commandeering of common land by magnates may be one reason why what are considered to be peripheral or marginal zones came into use at the end of the Merovingian Period and in the Viking Period in Østlandet (Solem 2005; Stene et al. 2015). My perception of rights to land thus makes it possible for it not to have been a lack of land but rather the skewed distribution of accessible land that was the basis for the expansionism and overseas voyages of the Viking Period. For long periods, waging war was organized along different lines to agriculture, a point which reflected the bipartite division of power (Ch. 8.4.3). From the middle of the 8th century the method of warfare changed in the direction of larger armies and battles at an increasingly regional level, and the ritual warfare that had characterized earlier society ceased (Andrén 2014;(8; Ystgaard 2014:144, 264). This was when the division of power came to an end and the resistance within society collapsed. The ideal of one’s own household remained strong, however (Hanisch 2002), but it was achievable for a smaller proportion of the population than before. What had previously been a right became a privilege, and decisions were no longer agreed by the collective around the cooking pits but were made by a

leader in the hall. In this way, the leader could impose conditions upon rights to a greater degree than hitherto: such as, for instance, that of receiving shares of the surplus, or obligatory military duties. Since there was less accessible land, the role of the warrior in the service of the lord became a more difficult path to supplies and honour. In this way, the lord consolidated his role, and the struggle for land became harder and harder. The movement in the direction of larger geographical units and a hierarchical society which had been cut in the 5th or 6th century thus started off again in the late Merovingian or early Viking Period, and it is in my view only then that society can be characterized as ‘pre-state’ (Ch. 8.4.2). It was also then that lordship based upon territorially embedded rights grew. It is possible that an almost feudal society with multiple estates and subordinate farmsteads worked by the unfree (serfs or slaves) emerged first in the Viking Period or the early Medieval Period (Brink 2012:246). This is supported by a study from Vestfold. In an attempt to trace multiple estates from the Medieval Period back into the Iron Age, Marie Ødegaard (2007; 2010) examined farms with so-called ‘boundary graves’ in southern Vestfold. She had anticipated as a premiss that more farms that were owned by farmers in the Middle Ages would have had graves adjacent to the farms’ boundaries in order to mark the right of property than Church or royal holdings did. The study revealed, however, that roughly equal proportions of farmers’, crown and Church properties had boundary graves of that kind. The property conditions in southern Vestfold in the Medieval Period thus could not be traced back into the Iron Age. Even if it were the case that farm boundaries do have a history extending right back to the Iron Age, and that burial mounds mark the right to hold property (on both of which points I am sceptical), it cannot be denied that the relationship between the boundaries and the burials belongs to a context in which the Church and kingship were well established (Chs. 3 and 8).

The dating of place-names and the understanding of the relationship between place- and farm-names in Østlandet are problematic (Pilø 2005; Grønnesby 2019:291). Norwegian place-name scholarship is intimately interwoven with continuity scholarship (Ch. 3) and for that reason I have made little use of the rich toponymic evidence in this study. As noted, there is a break in the direct settlement-site evidence around the year 600 and, amongst other things on the basis of the absence of finds, I have argued that the historically known farmsteads were founded in the Late Iron Age, perhaps as late as AD 700.

A comparable historical situation has recently been demonstrated in Trøndelag where stable farmsteads were founded at or close to historically recorded farmsteads around AD 600, while settlement before then was much less stable (Grønnesby 2013; 2015; 2019; Grønnesby and Heen-Pettersen 2015). Individual excavations close to farmsteads in Vestfold have produced finds of cooking pits of the Late Iron Age, a rare phenomenon otherwise (Gjerpe 2008c; Baardahl 2012; Gollwitzer 2012b). This helps to reinforce the inference that the historically attested farmsteads were founded in the Late Iron Age. Although it lies outside of the scope of the present study to discuss the development of place-names and the relationship between place-names and farm-names, I believe that Geir Grønnesby (2015:126, 2019) may be correct when he suggests that place-names pre-dating AD 600 could have been preserved because they were re-adopted as farm-names when a more stable pattern of farms was subsequently established.

Conclusion: the growth of property boundaries

In the Late Iron Age then, history, continuity and genealogy came to be important, and were essential to supplement personal capacities and skills. At the same time, agricultural production was gradually directed

more towards animal products, so that pasturelands and fodder production grew in relevance. In the 7th century, it appears as if the resistance within society to concentrations of power dissolved, and that individuals appropriated rights to land, including land they were not farming themselves. I would conclude, as a result, that territorially based rights, or delimited properties, emerged in the 7th century (fig. 9.2).

The right to hold property was extended in the crossing zone between social and political circumstances on the one hand, and production and economy on the other (Myrdal 1989:38). The introduction of property rights must, in my view, be recognized as a process, and it is difficult to determine when this process was completed. The removal of the barrow at Gulli in the 9th century may betoken that the burial mounds then already marked the right to land. However, the cemetery that was founded at Gulli in the Viking Period contains so many graves that it cannot represent the successive inheritance of one farm, while there are so many women that the graves simply cannot reflect óðal in the sense of a male right to inherit land (see Ch. 8.2 for a discussion of the proportion of women in the Viking-period burial record). For this reason, I conclude that that sense of óðal only developed late in the Viking Period or early in the Medieval Period in Vestfold.

Years	-400	-200	0	200	400	600	800	1000	
Farmsteadtype	The random farmstead								
					The marked farmstead				
						The unknown farmstead			
Agriculture and use of landscape	Labile use of the landscape, cultivation, grazing, regrowth and re-cultivation. Plenty of space.			Livestock farming more important. Competition for land.		'Central' land is left fallow; 'marginal' land is cultivated. Further shift towards pastoralism, increased access to dung and more simple cereal cultivation.			
Important features	Incipient social/economic differences. Some graves are distinguished. Heterarchy.			Chieftainships. Social/economic differences. The heterarchy under threat.		Graves above buildings. New cemeteries. Graves are removed. A Christian social model and religion. Cooking pits discontinued. Hierarchy takes over.			
Rights to land	Socially grounded rights.			Socially VS Territorially rooted rights.		Territorially rooted rights.			

Figure 9.2 The three types of farmsteads and the growth of property boundaries. The black box cover the period when The marked farmstead disappear and The unknown farmstead appear, and the archaeological evidence diminish. This may have been caused either by a fall in population or a changed settlement pattern, or as I argue, social change and population fall.

THE THREE-AISLED BUILDING BECOMES SUPERFLUOUS

The three-aisled building with earth-fast posts was the preferred housing from c. 1500 BC to around AD 1000 in Østlandet (Ch. 6), as throughout Scandinavia (Myhre 1980; 2002:45; Løken 1999; Pedersen and Widgren 1999; Jensen 2004; 2006; Eriksen 2019). Below, I shall explore in a relatively summary manner the reason for that continuity and the question of why it was not desirable or necessary to 'challenge and contest cultural paradigms and tradition, and thus create the conditions that lead to change' (Dobres 2000:148). In the Late Iron Age, it seems that the three-aisled building was abandoned but was evidently replaced by different solutions in Østlandet (Ch. 6.3) than in the remainder of Norway (Øye 2002:277–8). I shall therefore briefly discuss why the technological context and the reflexive relationship between society and technology changed at the transition to Christianity.

Three-aisled buildings as efficient technology

The building with two internal rows of earth-fast posts is a relatively simple structure. The internal posts bear practically the entire weight of the roof while the external walls are light and only have to support their own weight (Myhre 1980; Herschend 1989; Komber 1989; Göthberg 2000; Edblom 2004). By undertaking an (over-)simplified *chaîne opératoire* analysis (Dobres 2000) I shall identify advantages and disadvantages of building houses with internal earth-fast posts. The preparatory tasks, namely obtaining and preparing materials and tools, preparing the plot and laying it out, can be undertaken by one person over a long period or by several people in a shorter time. The pits for the posts have to be dug and then a team of people, perhaps a minimum of five, have to raise the posts and connect three or four posts to one another so that they stand unsupported (Draiby 1991; Edblom 2004). After two hurdles or pairs of posts have been put up and joined up, in theory an unlimited number of further units can be added. There is no fundamental technical difference between buildings with the same structural form whether they are 8 or 80 m long. In most buildings the light outer walls were constructed after the internal, roof-bearing construction, and those walls can be built by a single person (Edblom 2004). This building technology was well suited to buildings with around the same life-span as their occupants. An adult individual could make the preparations and do much of the building alone, and so sort out an independent life in his or her own

house, even though help would be needed for a short time (Edblom 2004). Life-expectancy in the Iron Age must have been relatively short even for those who had reached adulthood (Sellevold et al. 1984:209). A building with an expected life-span of 25–50 years built by a young adult should therefore last for the rest of its builder's life. The children of the building, however, could not expect the building to last throughout their lives, and would have to undertake comprehensive repairs or build a new house.

When the building is studied as efficient technology, the interplay between people and the cultural environment appears salient (Ch. 1.4.2). The floor of a three-aisled building was usually compacted clay or earth and the building was heated by one or more open hearths. People and livestock often lived under the same roof, although presumably in separate areas (Viklund 1998; Viklund et al. 1998; Myhre 2002; Webley 2008). From a modern point of view the buildings were probably cold, damp, smoky, draughty, smelly and generally unpleasant for most of the time (Beck et al. 2007). The internal posts would probably irritate modern Scandinavians, and the short life-span of the buildings would be considered inefficient. Nevertheless, the short-lived three-aisled building with internal earth-fast posts was the preferred form of house for 2,500 years. Several considerations may indicate that what was preferred was not the result of a lack of alternatives but that the earth-fast posts and open hearths were a conscious choice and a cultural necessity (Edblom 2004:117–19, 201; Rosberg 2009).

Open fireplaces are not a very efficient means of heating and generate a lot of smoke (Edblom 2004:157–93; Beck et al. 2007), while shaft-furnaces for iron extraction show that more advanced fire management was known. The shaft-furnaces have a great deal in common with stoves, with an opening for the smoke at the top and a ventilation shaft at the base (Larsen 2009:fig. 8). The non-use of stoves and chimneys is thus in all probability a matter of cultural choice, not ignorance of the method. Might the open hearths perhaps have been important for the household's daily rituals (Thörn 1996; Bradley 2005; Kaliff 2007)?

Over the course of the Iron Age, the width, length, use of space and other features of building construction varied (Ch. 6, and, e.g., Myhre 1980; Norr 1996; Løken 1997; 1999; 2001a; Artursson 2005; Gustafson 2005a; Martens 2007; Bårdseth 2008a; Gjerpe 2008a; Webley 2008; Eriksen 2019). Earth-fast posts have been viewed by some scholars as a practical and essential feature of the three-aisled structure because the

heavy roof and the wind would cause the building to collapse otherwise (e.g. Komber 1989). Finds of buildings in which post-holes have not been found in all parts of the structure, and where some of the posts were very probably placed upon flat slabs of stone, and reconstructions of framed buildings show, however, that it is not necessary to place the posts in pits (Myhre 1980; Herschend 1989; photograph by H. Schelderup in Seip 1999; Grindkåsa 2012a). Skilled Scandinavian housebuilders knew how one should construct walls which had to carry more weight: the underbalanced buildings did not fall down. The internal development of building technology could therefore have produced buildings with roof-bearing walls and no internal posts (Callmer 1994; Weber 2003). Scandinavians, including the people of Østlandet, were in contact with the Continent (Shetelig 1925:121–47; Gudesen 1980:112–14; Resi 1986; Lund Hansen 1987; Ilkjær 2000; Sindbæk 2007), and must have known of the building techniques which did not require earth-fast posts (Zimmermann 1998). It was an option to dispense with internal posts within the buildings. Put rather more simply, the skilful craftsmen of the Iron Age could probably have built houses without internal posts by turning, for instance, the Hjortspring boat upside-down. Nonetheless buildings with internal earth-fast posts continued as the preferred type of structure. It must therefore have had some features that were considered good.

The three-aisled longhouse undoubtedly played a central role in ancient *seiðr* — heathen custom. Artefacts deposited within post-holes and in other cut features inside the buildings indicate that the building did not just provide shelter from the elements but was also a place of offering and for rituals (Guttormsen 2003; Carlie 2004; Kristensen 2006; Eriksen 2019). Under the Christian religion, by contrast, the house played a much less significant role because rituals and religious activities were largely carried out in dedicated buildings — churches. The archaeological evidence indicates that the phasing-out of buildings with internal earth-fast posts in Østlandet was an extended process, which started in the Merovingian Period or the Early Viking Period and was completed when the three-aisled building went out of use at the transition between the Viking Period and the Medieval Period, or early in the Medieval Period (Ch. 6). The introduction of Christianity has been described as a long-term process (Steinsland 1995). Along with many others, I see the influence of Christianity as a two-stage process: first an extended period of Christian influence on Scandinavian ideas and the pre-Christian social model, and then the

introduction of Christianity as a religion and the institution of an ecclesiastical organization (Andersen 1977; Skre 1995; Solli 1995; Gråslund 2001; Wiker 2001; Schumacher 2005; Bagge 2010). The transition to a new building practice coincides in time with the transition from heathenism to Christianity, and I shall now discuss whether or not there could have been a connexion between these two processes of change in light of earlier analyses of building techniques.

A pre-Christian model of society, under Christian influence

Towards the end of the Viking Period at the latest, influence from Christian states in Europe became clearly visible in Østlandet (Nordeide 2011). The new religion brought with it a new ideology which legitimized a hierarchy headed by the king (Steinsland 2000). As part of this process, the ideals of the warrior were undermined, the ideal of a balance of power was lost, and the suppression of free men became more acceptable in social terms than it had been before (Sigurðsson 2003; Lunden 2004:30–3). The influence of Christianity, even before Christianity itself achieved a foothold, may therefore be seen as a precondition for the hierarchicization of the Late Iron Age and the introduction of monarchy early in the Middle Ages (Lindkvist 1996; Steinsland 2000; Nordeide 2011:310–11). The emergence of monarchy can thus be understood in terms of commonality of interest between (parts of) the elite and the Church. The Church accepted the careers of the male overclass, even as warriors, and the overclass accepted partition into relatively static social classes. In this way, personal capacities became less important and social relationships more formal and so easier to conform with. The net result was that the struggle for power was simplified (Herschend 2001:178).

The Christian (or Latin) social order, in which to be an aristocrat was first and foremost a function, or to put it sharply a job, was the product of Christian influence but not necessarily introduced by Christianity. As Herschend points out (2001:127), the transition from a heathen organization of society to a Christian order could have been either a short process or a long one, and could have taken place at different times in different places. Herschend proposed that the process itself had started around the year 950 in Trøndelag, 250 years later than in France (2001:129–31). The Christian burial rite appears to have been established earlier along the coast than inland, and around AD 950 Østfold was the first part of Østlandet from which the pre-Christian burial rite

was lost (Forseth 1993; 2003; Nordeide and Gulliksen 2007; Nordeide 2011). If the leadership ideals spread from Uppland to Østlandet as Myhre (1992; 2013; 2015) has suggested, and Christian social ideals were introduced before the actual conversion, it seems reasonable to believe that those Christian social ideals were introduced in Østlandet before AD 950.

The consequences of the new ideals and property rights were that the settlements became more concentrated. A higher proportion of the settlement sites of the Viking Period than before are located on or immediately alongside historically known farmsteads. At the same time as new ideals were slowly being brought in, the ideal of establishing one's own household remained strong. Along with the warrior ideal, territorial property rights and the ability of the elite to seize more land than they were able to farm produced a new state of affairs. The opportunities to found one's own household became fewer and with that it became a more attractive option to enter the service of the divine kin-groups in exchange for land or support. Leadership in war and cult appear now to have become conjoined within the hall, and power was removed from society. Dynastic burial sites such as the Borre cemetery and Mølen show at least the possibility of power being heritable (Løken 1977; Myhre 2015). Heritable territorially based property rights over land increased the opportunity for a family to accumulate greater wealth. If the land could also be farmed by others for some payment, a family or individual could accumulate items of value which far exceeded what they could produce themselves (Earle 1997; 2000). This enhanced the scope for durable hierarchical structures.

Christianity appears to have supplanted heathenism in Østlandet as the leading world-view around the year 1000 and the first Christian churches were built very shortly before AD 1100 in the reign of Olav the Peaceful [Óláfr kyrrri] (Skre 1995:215; Nordeide 2011). According to Snorri, the old custom in Norway was to have the high-seat in the middle of the long bench, and ale was carried around the fire before a toast was drunk to the gods (Sturluson 1968:587). The hearth thus played a central role in a pre-Christian drinking ritual (Edblom 2004:118; Sundqvist 2015:242–3). Olav the Peaceful, however, broke with this tradition during his reign of 1067–1093. He was the first to move the high-seat to the raised dias which lay athwart the hall, and the first to install stove rooms. The introduction of a new building practice and a new religion thus coincided in time according to Snorri. This matches the result of my own researches, which clearly indicate that the change of religion

made the three-aisled building superfluous (Valtýr 1889). The religion was no longer rooted in the house and in society but became institutionalized within the Church and removed from society (Kristjánsdóttir 2015), simultaneously with domestic offerings changing character or ceasing (Carlie 2004; Falk 2008). Carrying ale around the hearth or depositing offerings in post-holes was no longer seen as a demonstration of the competence to live well. Earth-fast posts and open hearths in the centre of the room became problematic, and the collective solution of the technicians was to change building practice (Ch. 1.4.2). The three-aisled building with earth-fast internal posts was replaced by new types of building early in the Medieval Period at the latest (Ch. 6). In my judgment, this was due to the fact that the three-aisled building was no longer an efficient or desirable means of sustaining society. The collective investment that may have implied acceptance of the right to establish a household was no longer needed because the material for building a lafted house could gradually be collected by just one person and the structure itself put up in a relatively short time by two people. The individual was now defined first and foremost by means of continuity, history and genealogy, and only subsequently by his or her personal abilities. In consequence, the strong link between buildings and individuals was undone. The new technique of building meant that the structures could last longer and they became heritable. Conversely, lafted buildings tied the family to the farm. The buildings may have taken over the function of the burial mounds as markers of genealogy, and the dead came to be political agents to a lesser extent than before.

PROPERTY BOUNDARIES IN THE IRON AGE — A SUMMARY

There follows a short summary of how rights to land in Østlandet developed across the Iron Age, with greater attention to regional differences. The random farmstead was founded at sites where there was neither earlier nor later activity following the settlement phase. There was usually only one building at the settlement site and that was rarely repaired or altered. In this phase, therefore, history and continuity lacked importance. It was a 'human right' to establish one's own household and the land was shared out by the community, perhaps the community of a settlement district. In Vestfold and Akershus this was the state of affairs that continued until the marked farmstead was introduced around AD 200, while in Østfold that transition took place earlier, around 200 BC. The

evidence from the rest of Østlandet is weak but not incompatible with a transition around AD 200.

Østfold is thus manifestly different from the remainder of Østlandet. It appears that the marked farmstead appeared there as early as the pre-Roman Iron Age, and the buildings were often rebuilt or successive buildings were raised on the same plot. A large building at Missingen in Østfold from the Early Roman Iron Age has been interpreted as a hall (Bårdseth 2009). Two later structures were built on the same plot before the settlement was apparently deserted at the threshold of the Migration Period even though the settlement may have extended beyond the limits of excavation (Bårdseth and Sandvik 2007; Bårdseth 2009). The hall, its successor buildings, and evidence of, amongst other things, gold- and silver-smithing from the ploughsoil, led Birgit Maixner (2015) to interpret the site as a major farm or possibly a central place of the southern Scandinavian type. With the exception of Åker, no other major farms or central places of the Roman Iron Age have been identified in Østlandet. That could be due to the representativity of the evidence, but I would also emphasize that burial practice in Østfold was different from the remainder of Østlandet (Hougen 1924; Løken 1974; Forseth 1993; 2003; Stylegar 2005a; Rødsrud 2012). A crucial feature of the burial evidence from coastal Østfold is that the social middle class is largely absent in the Viking Period (Stylegar 2005a). This could indicate that genealogy was no longer significant in competition for land because those rights had already become established.

Elsewhere in Østlandet the period of AD 200–600 is characterized by the marked farmstead. This was sited at places that were in use both before and after the settlement phase. Some farmsteads remained in use for a longer period, but most were abandoned after a relatively short period. In this phase rebuilt, extended or repaired buildings were not uncommon, and in some cases several successive buildings were raised on more or less the same plot. Towards the end of the Roman Iron Age, under ideological influence from the Roman Empire, were that direct or filtered through southern Scandinavia, and economic influence because of the reduced access to land, there was a restructuring of society. I regard this as an attempt by the elite to take power away from society, to introduce a more hierarchical social order, and to control who would cultivate what and where. This was, in other words, the first attempt to introduce property boundaries. After the move towards larger and more permanent units had begun, but before it was completed, society collapsed as a result of a fall in population

following the great dust-veil of AD 536. After that catastrophe, settlement became concentrated at a few sites, some of them newly founded and others older settlement sites. The turn towards a greater reliance on pastoral farming continued and may have been promoted further in consequence of the reduction of population and greater access to land. More beasts produced more dung, which in turn could be used to increase the yield of cereals per unit area. The livestock, however, needed more space, and land eventually became a scarce resource again even though there were fewer people than before. It was in this period of a power-vacuum that the kleptocracy threatened the old community. In that context, grave mounds became important markers of genealogy and of the right to establish one's own household, and reflect the *óðal*-right in the sense of an ancestor cult.

Few settlement sites of the Late Iron Age have been excavated, and I have labelled the settlement of that time as the unknown farmstead. It is likely, nonetheless, that the settlement pattern changed in the course of that period. Settlements progressively became more stable and the historical farmsteads were founded. Åker in Hedmark illustrates how important continuity came to be in the Late Iron Age. In the Roman Iron Age, an example of the marked farmstead was established there, and several successive buildings were constructed without overlapping. At the end of the Merovingian Period or beginning of the Viking Period a new and larger building was raised. After a relatively short time it was replaced by a new building on almost exactly the same spot, with the post-holes shifted just a few centimetres along the length of the building. The same happened one further time. The removal and destruction of graves in Vestfold testifies to a struggle over ownership and shows that new owners both established themselves and marked their presence at the end of the Merovingian Period or early in the Viking Period (Kristiansen 1998:176; Gjerpe 2007; Renck 2008; Herschend 2009:398). Territorially embedded rights to land — property rights — were thus established. Towards the end of this period the dominance of the three-aisled buildings was challenged by new building-types because the ideals that the three-aisled building was adapted to were superseded by new ones. The flexibility of the three-aisled building was no longer wanted, either as a marker of the status of the occupants or to defend a stateless society, at the same time as the foundations of the three-aisled building in the pre-Christian religion left it unwanted by the Church.

I propose, then, that before around AD 200, a right to property as we know it from later periods and

from textual sources was quite unknown in Østlandet except in Østfold. In the period of AD 200–600 the phenomenon may have been understood and attempts made to introduce it, but it did not come to predominate in the relationships amongst the population or

the relationship between people and land. After the year 600 the right to property was introduced and accepted through a process that was completed some time in the course of the Late Iron Age or early in the Medieval Period.