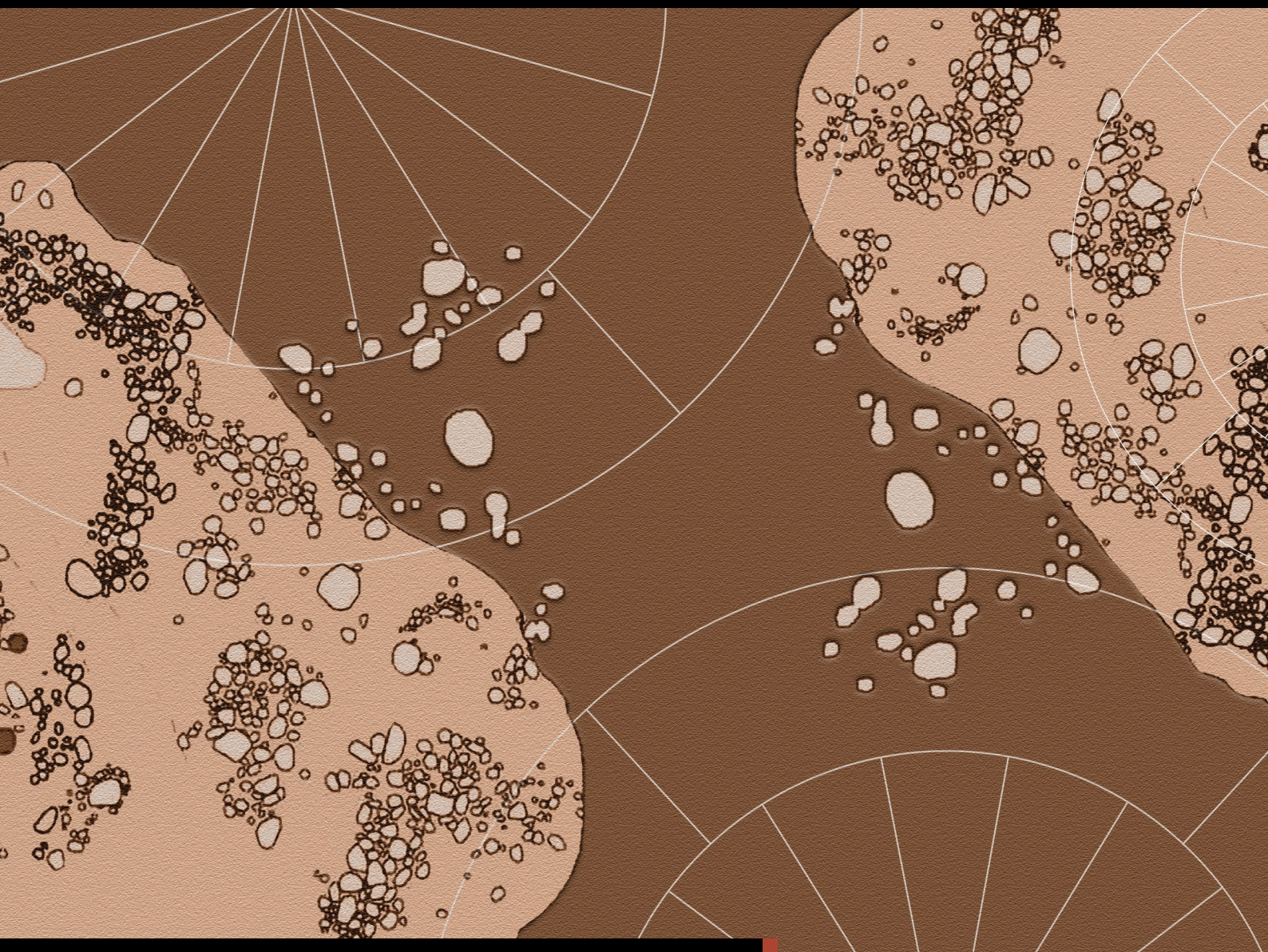
EFFECTIVE HOUSES

Property Rights and Settlement in Iron-age Eastern Norway

Lars Erik Gjerpe



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UiO : Kulturhistorisk museum

Kulturhistorisk museum
Arkeologisk seksjon
Postboks 6762 St. Olavs plass
0130 Oslo Norway

Tlf.: (+47) 22 85 19 00
postmottak@khm.uio.no

Alle henvendelser om denne boka kan rettes til:
Cappelen Damm Akademisk/NOASP
Postboks 1900 Sentrum
N-0055 Oslo
noasp.no
noasp@cappelendamm.no

CONTENTS

APPENDIX: See *Effektive hus. Bosetning, jord og rettigheter på Østlandet i jernalder. Bind II av II* at www.duo.uio.no

FOREWORD

This book is the result of a long process that started around the year 2000 when I read Bergljot Solberg's overview of the Norwegian Iron age and Dagfinn Skre's important thesis on Iron-age property and settlement. Later on it was fuelled further when I managed large-scale excavation projects which produced archaeological evidence that didn't really fit in with the existing view of Iron-age settlement, but did, on the other hand, concur strongly with Lars Pilø's critique of Norwegian settlement research.

However, I did most of the work while I was working on my PhD at the Museum of Cultural History, University of Oslo. After the public defence of my thesis I rectified mistakes and shortcomings pointed out by my opponents Frands Herschend and Helena Victor, arguments were developed or enhanced, sentences added here and removed there, and after a while my thesis transformed into a manuscript and finally a book. I am grateful for John Hines's translation of the main text (Any readers who have experienced my own English will be particularly appreciative of his work!).

A lot of people have, of course, been involved in this long process – there is only room to mention a few of them here. When I was directing large-scale excavations, advice from, among others, Jan Henning Larsen and Lars Pilø was important. Karl Kallhovd and Lene Melheim, Heads of Department at, respectively, the start and the finish of my PhD, made conditions favourable at the those stages of the research project.

Jan Kristian Hellan, Elise Naumann and Irmelin Axelsen helped with illustrations and literature for my thesis, and some of their work is re-used here – thanks!

The help and advice from my supervisor Per Ditlef Fredriksen has been invaluable, and without him there probably wouldn't have been any thesis, and therefore no book. Tutorials were always pleasant and useful, and I know he spent a lot more time than was formally required of him. Thank you! Several others also commented on my thesis, or parts of it – thanks to you all.

Many thanks also to Unn Pedersen, a lousy housewife, a helpful reader and a great partner!

Finally, I want to thank the Centre for Viking Age Studies (VIS) and the Department of Archaeology, both at the Museum of Cultural History, for financing this publication.

1 INTRODUCTION

This book seeks to examine property rights in Norway's Østlandet in the Iron Age.[1] When did property rights over land become a crucial part of social organization in Østlandet? Implicit within this question is a reciprocal possibility that land rights were organized without any form of territorial rights of ownership or even possession; I shall therefore also explore alternative forms of organized land rights in this region during the period from 500 BC to AD 1050. In order to shed light on these issues, I shall study the building practices and the settlement pattern with the benefit of the extensive and new settlement evidence that is the result of machine-stripping of areas in the past 30 years.

The background to this study is a desire to understand how, from c. AD 400, the lands of Hørdalsåsen in southern Vestfold came to be left unused after nine centuries of continuous cultivation. At a higher level, I want to explain breaks and continuity in agrarian settlement. Archaeological work of the past 20–30 years has shown that Hørdalsåsen is not unique. Areas of land are newly cultivated and left unused, and farmsteads built and abandoned, throughout the Iron Age, and Østlandet is in no way exceptional. This contrasts sharply with a long-standing view in Norwegian settlement archaeology which has very largely perceived the named farm as a stable unit with stable boundaries from the Roman Iron Age, if not even earlier, through to the present day. According to this research tradition, which I refer to as 'continuity scholarship', the establishment of farmsteads is explained through marginal agricultural lands being brought into use in periods when population pressure was high, while abandonment is reciprocally explained through their being deserted when the population level falls. The period in which Hørdalsåsen began to be farmed, however, the pre-Roman Iron Age, is not regarded as a period of high population pressure in Vestfold. It can also scarcely be right to describe land that was cultivated and manured for nine centuries as marginal. Hørdalsåsen and similar places thus conclusively refute the premiss which continuity scholarship has based itself upon. My aim, therefore, is to challenge continuity scholarship by investigating whether the functioning period of farmsteads and of land can be explained by means of the manner in which rights to land were organized.

This study is itself based upon a number of principles and premisses. Rights to the use of land are examined in this monograph as a set of rules that regulate relationships amongst people (Davis 1973:157; Hann 1998:5). Put another way, this means that I am looking for a social explanation (Shanks and Tilley 1987) of the deserted farms of the Iron Age. In a broad perspective, the studies of rights thus embrace the whole agrarian society.

At the level of individual farms, the settlement pattern as I perceive it can only be discussed on the basis of the primary settlement evidence, i.e. the buildings, and not through secondary evidence such as farm names, funerary monuments or later historical sources (Pilø 2005). A three-aisled building with earth-fast internal roof-bearing posts was the preferred house for farmers in Scandinavia throughout the Iron Age. From a modern functionalist perspective this type of structure has several drawbacks. I would emphasize in particular its short life-span. This could be as little as 25–50 years and can scarcely have been more than a century even if a few buildings may have survived even longer (Draiby 1991; Løken 2020; Zimmermann 1998:60–2; Ängeby 1999; Gerritsen 2003:39; Webley 2008:39–40; Herschend 2009:143; Diinhoff and Slinning 2013). The earth-fast posts suffered from damp, and rotted quite rapidly. I consider it fundamental that there was a reflexive relationship between the short-lived house and society (Gerritsen 2003). The building technology made it possible — in some cases desirable or even necessary — to move the settlements after one or just a few generations. Reciprocally, the repositioning of settlements caused the short-lived three-aisle houses to become the preferred building-type. Short-lived houses influenced and were influenced by property rights, agricultural systems, and probably also the world-view of their

1 Østlandet is the south-eastern quarter of Norway, comprising the historical provinces (from 1919, called *fylker*; previously *amter*) of Vestfold, Telemark, Østfold, Akershus, Buskerud, Hedmark and Oppland. In 2020, regional administration within this area was reorganized into three units: Vestfold og Telemark, Viken, and Innlandet. The Iron Age in Norway is defined as a period of prehistory that continued to and includes the Viking Period, and so ends in the 11th century AD, when the Middle Ages/(early) Medieval Period began.

residents. In other words, building technology linked social organization, economy and perhaps even systems of belief and cosmology (Bourdieu 1973; Lévi-Strauss 1983; Dobres 2000:96). Since (building) technology is "a medium for expressing, reaffirming, and contesting world views and social values" (Dobres 2000:100), it is essential to understand the technical aspects of Iron-age longhouses, which were the central institution in social life (Hastrup 1990; e.g. Carsten and Hugh-Jones 1995; Norr 1996; Gerritsen 2003:31; Webley 2008; Herschend 2009; Eriksen 2015). In consequence, I study *agency* as a collective, social movement, and treat the buildings as an effective mode of maintaining or promoting social organization (Dobres 2000:145; Ingold 2008).

I hope, then, to explain both change and continuity at micro- and macro-levels. At the macro-level, social continuity will be examined first and foremost through history and over long sequences. At the micro-level, continuity will be examined first and foremost through the functioning periods of individual buildings and sites. By distinguishing between continuity at these two different levels it becomes possible to show how persistent structures such as the three-aisled house were able to serve as core institutions over many hundreds of years or as a 'central feature of the *longue durée*', while at the same time settlement at a micro-level can be seen as composed of shorter term solutions or 'conjunctions' (Le Roy Laudrie 1974; Braudel 1980; 1995; Jones 1995). Through the study of the primary source material for settlement — the buildings themselves — it is also possible to identify regional or landscape-related characteristics, alongside changes in building practice and settlement pattern over time. The analyses are, in other words, both synchronous and diachronic, and the material spans a wide range of time and space. This makes it possible to study both continuity and discontinuity, and makes the choice of scale for the analyses and interpretations crucial (Mathieu and Scott 2004; Wells 2004). Concurrently, the use of the primary evidence makes it possible to discover historically specific features in Iron-age society which cannot be examined by using retrogressive methods — i.e. by drawing inferences from historically evidenced situations back in time in order to shed light on obscurer contexts. In continuity scholarship, research is conducted upon named and cadastral farms known from more recent times,[2] as if they had remained unchanged from the Iron Age. At the social level, most emphasis is given to features of Iron-age society within which we might recognize ourselves and which can shed light upon our own age: for instance, the accumulation of plural estate holdings and state-formation. Continuity scholars have thus written a settlement history of the Iron Age in such a way that only those features which re-appear in historical sources are treated as significant.

This has the corollary that the cultural difference between Us and the Other is reduced or disappears in order that our own roots can be sought in prehistoric society. In consequence, Iron-age people lose their individuality and agency, and function solely as a representation or projection of ourselves. They become puppets in a sequence of development, and have no independent significance. In that sense, the people of the Iron Age are 'colonialized' (Svanberg 2003:19–20). The philosopher and educationalist Paulo Freire (2003:24, 30) has studied education as an instrument of colonialization. He points out that colonialization is characterized by an absence of dialogue, and compares it with necrophilia: the triumphant masters satisfy their desires but deny the life of the object. Freire's pointed formulation seems to me appropriate to a critique of continuity scholarship at the same time as it indicates how such problematic situations can be avoided. The historical specificity and individuality of Iron-age people — their lives — are taken from them when they are reduced to silent representatives of an inchoate version of our way of organizing ourselves socially. In such a situation dialogue becomes impossible, and only the desire of continuity scholarship to understand our own time can be met.

This study is an attempt to establish a dialogue with Iron-age people. My goal is for them to be treated as individuals, not only because dead people *ought* to be treated in that way, in my view, but also because this renders it possible to understand a society that may have different features from our own. I shall achieve this through a presentation of the foundations of continuity scholarship in Chapter 3 and shall then formulate an alternative understanding of Iron-age people as actively dealing and thinking individuals or agents with their own, particular, historical value (Freire 2003:24–30; Svanberg 2003:110–13; Holst 2014a).

AN INTRODUCTION TO THE EVIDENCE AND TO BUILDING TERMINOLOGY

Our archaeological evidence is first and foremost buildings which represent the agrarian culture of the

2 A 'cadastral' or 'matriculated' farm is a property that has been included in a central property register.

Iron Age in Østlandet and the sites at which they were raised. In total, 311 probable or possible buildings from 107 sites have been analysed (Ch. 6). With a few exceptions these were uncovered in the course of machine stripping of formerly cultivated land undertaken as part of development projects (Ch. 2). This also means that it is primarily buildings that had earth-fast posts which have been examined. That produces a number of critical challenges, not least in connexion with a possible phasing-out of buildings with earth-fast posts and possible continuity to farmsteads still known today (Ch. 4). Sunken-feature buildings (SFBs), often referred to as *Grubenhäuser*, are not part of this study because they can be specialized functional structures and not necessarily components of the farmstead itself (Jørgensen 2002; Herschend 2020). But otherwise, all of the Iron-age buildings from the study area on which information was available on 1 January 2014 will be included.

A common way of characterizing the buildings is to start from the structure that supports the roof (Rosberg 2013). Buildings with earth-fast posts inside the building are usually referred to as 'two-' or 'three-aisled' according to whether the building is divided lengthways by these posts into two or three spaces or 'aisles' (Fig. 1.1). In a technical discussion, 'buildings with internal posts' can be a better term (Rosberg 2013). Supplementarily, the term 'one-aisled' is regularly used of buildings that have earth-fast roof-bearing posts in their walls but none inside the structure. Three-aisled buildings constitute the majority of the examples in this study and it is questionable whether there are any one-aisled structures. With their elongated plans, three-aisled buildings are often referred to as 'longhouses' by archaeologists, especially if they include both human residential space and animal stalls (Egeberg Hansen et al. 1991:19). It is assumed that such were the main houses of the farmstead (Carlie and Artursson 2005:164). Archaeologists thus define longhouses partly on the basis of the outer form and partly on the basis of functional use. I shall not use the term 'longhouse' extensively, and so shall avoid confusion with 'longhouse' as a term used in social anthropology of buildings with special and in most cases collective functions: in other words a different role from that which archaeology takes as definitive (Carsten and Hugh-Jones 1995).

There are also three-aisled buildings which had other primary functions than the combination of house and stalls. These are usually referred to as 'economic buildings'. It is often difficult to distinguish houses from economic buildings in the archaeological record in cases where specific functions — for instance as a smithy — cannot be linked to the building (Carlie and Artursson 2005:164). Interpretations of the spatial divisions of the multifunctional building and their role are based to a great extent on well-preserved examples in Jutland and northern Germany. With less well-preserved evidence it is harder to distinguish between economic

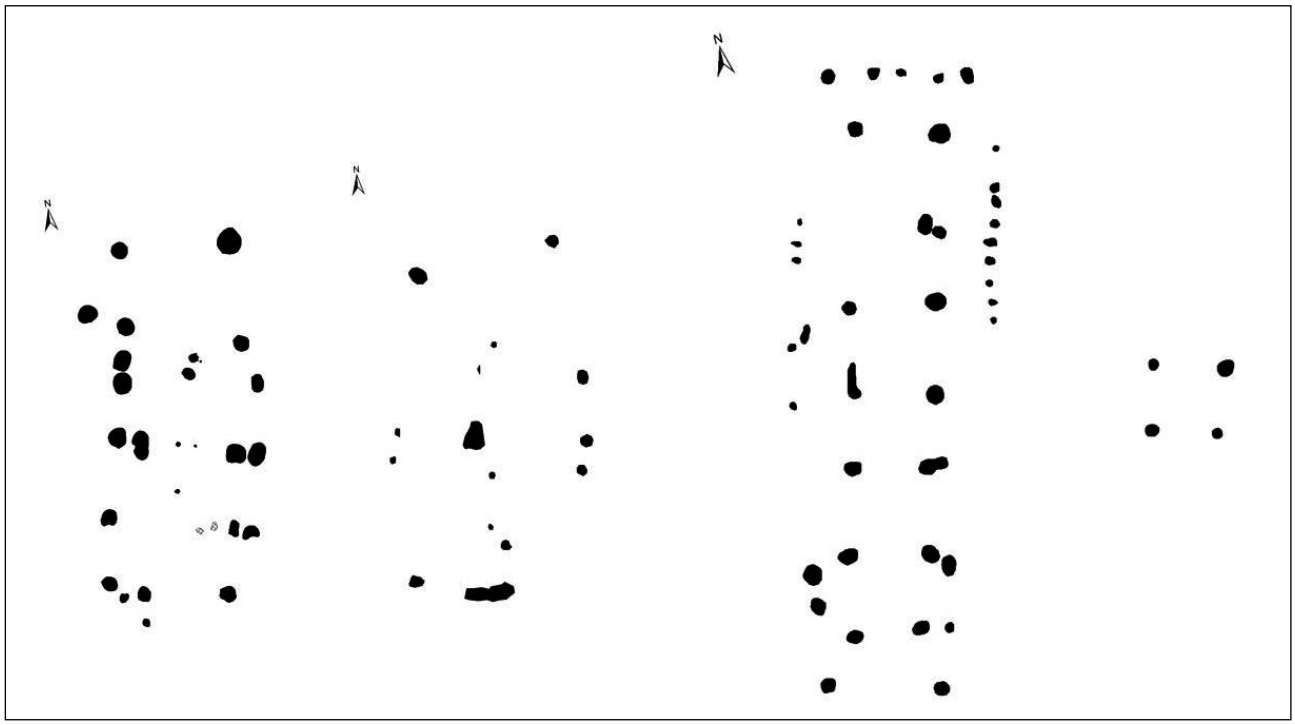


Figure 1.1 *From the left: examples of one-, two- and three-aisled buildings and a four-post structure. Drawn by Jan Kristian Hellan.*

buildings and residential houses plus stalls, while in some cases it is uncertain whether such a contrast ever was so clear in Sweden and Norway (Carlie 1999; Gjerpe 2008a). Here, the length of the three-aisled buildings is often used to distinguish the long buildings with both a house and stalls from the shorter economic buildings. A building with both human residential space and stalls at a farm with only a few animals may in fact be shorter than a large workshop building for specialized craft. Size alone, therefore, is not a good criterion for distinguishing the two categories of building. Often too, the position of a building 'moderately distant' from the principal farmhouse is used to identify economic buildings (Artursson 2005; Carlie and Artursson 2005). Some postulated economic buildings are nevertheless more easily identified, and it is often presumed that two-aisled buildings are economic buildings (Carlie and Artursson 2005:164). There is also general agreement that four-post structures are economic buildings (Løken 2020). These comprise four posts which together form a more or less rectangular or square shape. They rarely if ever have walls or fireplaces, and were probably sheds or the like used for storage (Zimmermann 1991; 1992). Because of the difficulties in distinguishing between houses and economic buildings in the Norwegian evidence, I shall not make great use of these terms (although see Løken 2020).

The terms that I shall use are also functionally based, but less dependent upon good conditions of preservation and detailed understanding of the function of the buildings. 'Building' is used as a general term for structures raised for the purpose of sheltering humans, animals, objects or anything else from the wind and weather (Hoff 1997:45–6). 'House' will be used of those buildings with walls and a roof which were more or less certainly used as housing or work spaces for people (Carlie and Artursson 2005:164): in other words, the majority of the buildings in this sample.

RANGE IN TIME AND SPACE

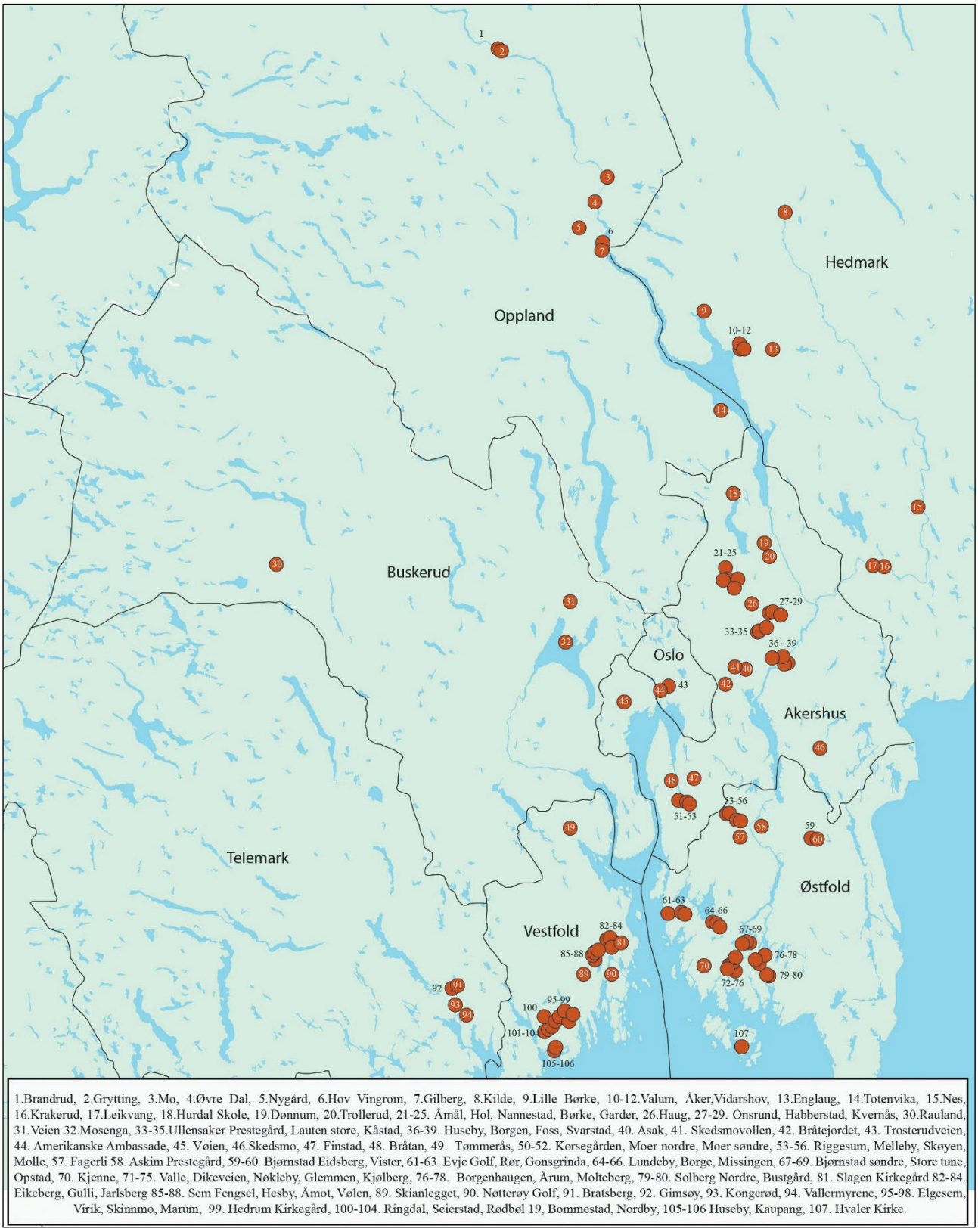
This book is concerned with the Iron Age in its entirety (500 BC — AD 1050). Geographically, the study is limited to Vestfold, Akershus, Oslo, Østfold, the lower part of Buskerud and the central agricultural areas of Hedmark, Oppland and Telemark (Fig. 1.2). This area is referred to as Østlandet. The cultivable land consists primarily of marine alluvium and sand, silt and clay, with patches of moraine. Within the study area, temperature, rainfall and topographical conditions were on the whole relatively consistent. Restricting the geographical range to an area with reasonably similar opportunities for agriculture in the Iron Age increases the likelihood of possibly variant solutions in respect of architecture, the organization of the farmstead or the settlement pattern being due to cultural decisions rather than simple adaptation to differing potentials in respect of farming.

Practically all of the buildings are dated in terms of calendar years by means of radiocarbon dating and calibration programmes. Concurrently, I make use of a relative-chronological framework in the discussion of buildings and social development. This creates some tension between absolute datings in calendar years derived from radiocarbon determinations and relative datings to archaeological periods that are almost entirely based upon artefact typology. There are some periods in which radiocarbon dating produces quite broad probability margins, and the calibration curve is relatively flat at the beginning of the pre-Roman Iron Age, at the end of the Roman Iron Age and in the Viking Period. Buildings can nevertheless be assigned to archaeological periods, and changes through time be identified. The source-related problems, datings and periodization are discussed in fuller detail in Chapter 4.4.

THE BACKGROUND TO THE STUDY: HØRDALSÅSEN

The desire to understand how Hørdalsåsen was farmed between 500 BC and AD 400 and why the area was then abandoned is, as noted, the key motivation for this study. Thorough and detailed excavations combined with precisely targeted archaeometric analyses show complexity in origins, practices, change and abandonment that is difficult to explain without moving away from the distinctly Norwegian belief in continuity of settlement (Ch. 3). The limitations of the retrospective or retrogressive method are thus clearly revealed. The case of Hørdalsåsen is a crucial starting point for research into this question, while at the same time it provides for the reader an introduction to Iron-age agriculture in Vestfold that appears to be reasonably typical of the remainder of the area under examination. A summary overview of Hørdalsåsen is therefore presented already here in the introduction.

The site is located at the farm of Hørdalen in Sandefjord *kommune* (k., = administrative district) in Vestfold, and prior to the excavations this looked like a typical area of clearance cairns which stood at 5–10 m intervals (cf. Pedersen 1990; Holm 1995).



1.Brandrud, 2.Grytting, 3.Mo, 4.Øvre Dal, 5.Nygård, 6.Hov Vingrom, 7.Gilberg, 8.Kilde, 9.Lille Børke, 10-12.Valum, Åker,Vidarshov, 13.Englaug, 14.Totenvika, 15.Nes, 16.Krakerud, 17.Leikvang, 18.Hurdal Skole, 19.Dønnum, 20.Trollerud, 21-25. Åmål, Hol, Nannestad, Børke, Garder, 26.Haug, 27-29. Onsrund, Habberstad, Kvernås, 30.Rauland, 31.Veien 32.Mosenga, 33-35.Ullensaker Prestegård, Lauten store, Kåstad, 36-39. Huseby, Borgen, Foss, Svarstad, 40. Asak, 41. Skedsmovollen, 42. Bråtejordet, 43. Trosterudveien, 44. Amerikanske Ambassade, 45. Vøien, 46.Skedsmo, 47. Finstad, 48. Bråtan, 49. Tømmerås, 50-52. Korsegården, Moer nordre, Moer søndre, 53-56. Riggesum, Melleby, Skøyen, Molle, 57. Fagerli 58. Askim Prestegård, 59-60. Bjørnstad Eidsberg, Vister, 61-63. Evje Golf, Rør, Gonsgrinda, 64-66. Lundeby, Borge, Missingen, 67-69. Bjørnstad søndre, Store tune, Opstad, 70. Kjenne, 71-75. Valle, Dikeveien, Nøkleby, Glemmen, Kjølberg, 76-78. Borgenhaugen, Årum, Molteberg, 79-80. Solberg Nordre, Bustgård, 81. Slagen Kirkegård 82-84. Eikeberg, Gulli, Jarlsberg 85-88. Sem Fengsel, Hesby, Åmot, Vølen, 89. Skianlegget, 90. Nøtterøy Golf, 91. Bratsberg, 92. Gimsøy, 93. Kongerød, 94. Vallermyrene, 95-98. Elgesem, Virik, Skinnmo, Marum, 99. Hedrum Kirkegård, 100-104. Ringdal, Seierstad, Rødbøl 19, Bommestad, Nordby, 105-106 Huseby, Kaupang, 107. Hvaler Kirke.

Figure 1.2 *The study area and the 107 sites that are included in this study. Drawn by Elise Naumann.*

The area has been investigated in three campaigns. First, a thorough cultural geographical survey of the visible ancient monuments was undertaken (Höglin 1984); next, a number of the clearance cairns were excavated (Pedersen 1990); and, finally, a good 2,000 sq m were fully excavated and documented using the single-context method (Mjærum 2012a). Survey, recording and minor excavations were also carried out in advance of the final excavations (Iversen et al. 2007). The combination of undisturbed agricultural cultivation layers and very meticulous excavation with comprehensive archaeometric analyses has generated what is in Norwegian terms a unique insight into the conditions of agriculture in the Early Iron Age (Mjærum 2012b; Cannell 2013; Mikkelsen and Bartholin 2013; Svensson and Regnéll 2013; Viklund et al. 2013).

On Hørdalsåsen, traces of cultivation have been identified on the side of the ridge (= *åsen*) along with an associated droveway that runs to what is inferred to be a settlement area on the top. The settlement area has been identified with the help of minor trenches that have uncovered cooking pits and of phosphate mapping but has not been excavated. Alongside the settlement area there are also cairns which may be grave mounds. The vegetation on the area with cultivation evidence was cleared early in the first half of the pre-Roman Iron Age, probably around 400 BC. Immediately after that the area was cleared of stones measuring 0.1–0.4 m across, which were re-laid in rows of stone or clearance cairns. Both larger and smaller stones thus were left lying in the arable soil. Around half of the area appears as a single block of land. In the other half, the droveway, the clearance cairns and the stone rows separated unequal fields of 250–400 sq m along with some smaller areas that were not cultivated. The lane from the cultivation plots towards the settlement area on top of the ridge was in use from the beginning of cultivation. Stock farming was therefore integrated into the exploitation of the land from the beginning. The division between infield and outfield that is often dated to the Roman Iron Age (Myhre 2002:137–9) was thus established at Hørdalsåsen as early as 400 BC. Very early in the 1st century AD minor restructuring of the plots took place. It is also noteworthy that neither the plot-boundaries nor the lane were built up as traditional stone walls as is known, for instance, from the Roman Iron Age and Migration Period in Jæren (e.g. Petersen 1933). They consist rather of one or two courses of small stones and must have been reinforced with timber bars if they were to constrain animals. This was not due to the lack of suitable stone for construction: as noted, the area has plenty of stones. There is also no sign of any outer boundary to the infield or anything which might suggest property boundaries, such as have been noted from the Roman Iron Age and Migration Period in Agder, Jæren and parts of Vestlandet (Myhre 2002). Since material for stone walls was readily available, it is rational to infer that it was a cultural choice not to mark boundaries.

Archaeometric analyses have shown that the land for cultivation was manured to various degrees with settlement waste and dung, and perhaps also with soil or turf (Viklund et al. 2013). In the latest layers in particular, dung from domesticated animals was found, which points to an increase in manuring in the period immediately after the time of Christ, from around the same time as the field-divisions were restructured. At that time more stones were cleared as well, and those were deposited in smaller clearance cairns on the large, continuous surface. The comprehensive archaeometric analyses have, in combination with the thoroughness of the excavations, demonstrated that the cultivation areas were worked using a system of rotation involving fallow, pasture and re-wilding followed by clearance and a new round of cultivation (Mjærum 2012a; Cannell 2013; Mikkelsen and Bartholin 2013; Svensson and Regnéll 2013; Viklund et al. 2013). Around AD 400, arable farming came to an end and the area became pasture; but grazing also ceased within a few decades. Pollen analyses show that the area became pastureland once again in the Viking Period or early in the Middle Ages (Svensson and Regnéll 2013). Altogether this shows with full clarity that the transition between the Early and Late Iron Age can at least not be fully attributable to a decline in population caused by a volcanic eruption in the year 536 and years of famine that followed (see Gräslund 2007; Gräslund and Price 2012).

Nowadays, Hørdalsåsen is stony, dry, morainic land, but it is not implausible that the advantage of good drainage more than outweighed the undesirable risk of drying out, and that morainic land was regarded as good for cultivation in the Early Iron Age (Mjærum 2012b). The excavations and archaeometric analyses also show that the land was cultivated for nearly a thousand years, which can hardly have been the case had it been regarded as marginal in that period. It is worth noting that the soil was well manured, and still had high phosphate levels when it was excavated (Cannell 2013; Viklund et al. 2013). It is thus far from credible that it was abandoned because it was exhausted.

Table 1.1 *Variation in material culture, farm names and other sources for settlement at the farm that is now called Hørdalen*

Period	Material culture	Name	Other
400 f.Kr. – 500 e.Kr.	Droveway (Farmstead?)	?	Archaeometric analyses etc.
Vikingtid – 1700	?	Frøytveit	Written sources (pollen?)
1700 –	Farmstead etc.	Hørdalen	Written sources

Historical information on the farm's name is also relatively inconsistent with a direct development from the Early Iron Age to the modern named farm in the way that continuity scholarship posits. The name *Hørdalen* is from the 18th century; the farm was formerly called *Frøytveit* (Rygh 1967:264). The change of name took place at a time when documentary evidence indicates that the farm was in permanent use, but the reason for the change is unknown. The second element *-tveit* may refer to cleared land or pasture within woodland, and it came into use from the Late Iron Age onwards (Harsson 2002). The first element *Frøy* relates to the name of the god Freyr, and it has been proposed that before it was cleared, this area had ritual functions. As the generic *-tveit* is from the Late Iron Age and the farmstead that has been excavated is from the Early Iron Age, the area must have had a third name that is unknown to us (Karlsson-Lönn 1989; Vikstrand 2013). This is consistent with the fact that the modern settlement is in a completely different place from the Early Iron-age farmstead, and that the area which was under intensive cultivation in the Early Iron Age has not been ploughed since. We therefore have an anonymous farmstead of the Early Iron Age (Tab. 1.1), the farm name Frøytveit of the Late Iron Age or Middle Ages connected with an unknown farmstead, and the cadastral farm Hørdalen from the 18th century with a recorded name and a known farmstead (Mjærum 2012a; 2012b; Gjerpe 2013). On this basis, and contra the continuity position, I put two questions: can we assess the age of the farm of Hørdalen on the basis of archaeological finds of the Early Iron Age? And, secondly, can studies of the status and resources of the farm of Hørdalen shed light on the farmstead of the Early Iron Age?

The answer to both of these questions is 'no'. There was no farm Hørdalen in the Early Iron Age, and the only thing that the farmstead of the Early Iron Age and the cadastral farm Hørdalen have in common is coincidental collocation in geographical terms. The case of Hørdalen underlines the point that the farm and the nature of property have to be analysed on the basis of their own chronological conditions (Hagen 1953:11, 113). I shall therefore attempt to find an alternative to the retrogressive method, and shall include features which change or disappear along with stable elements, so that what is particular to the farms in temporal and spatial terms is revealed (Widgren 2000; Herschend 2009).

THE THEORETICAL FRAMEWORK AND FOUNDATIONS

In scholarship in the Humanities, archaeology included, there is a long tradition of focusing intellectual endeavours first upon thinking about concepts and then using data to illustrate or to test the conclusions (Evans-Pritchard 1954:vii; Olsen 1997:92–94; Johnson 1999:38–40; Swedberg 2014:14–16). The background to my own research question, conversely, is finding myself in the position of having identified data that do not allow themselves to be explained or clarified by the conventional explanatory model (see e.g. Hansen 2015:30–31 for a similar situation in Danish settlement archaeology). This empirical observation may therefore indicate that the accepted explanation is not valid (Chalmers 1999:38–59; Popper 2002). In this study, it will be shown that Hørsdalsåsen is just one of many farms that cannot be explained in this way. The common rules of the game respected by the continuity scholars are thus challenged. To put it another way, what could be seen at Hørsdalsåsen could not be explained either by existing explanations or in some *ad hoc* way. In the light of Thomas Kuhn's philosophy of science (1962), one may say that the paradigm has been challenged, and that it is time to formulate new questions and to seek new answers. With this introductory account, I have attempted to offer a brief insight into my own hermeneutic cycle (Gadamer 1979) and concurrently to pave the way for my own theoretical position. The objective is not to argue either for or against the hypothetico-deductive method or induction. My understanding of continuity scholarship as a paradigm and my rejection of that paradigm (Gjerpe 2014) mean that I have to look for a new set of rules (Kuhn 1962; Chalmers 1999:94–7). My observation, therefore, can be regarded as a first step in what may be called 'abduction' or 'creative

theorizing': in other words, to look for a hypothesis or an explanation starting from some observed phenomenon (Swedberg 2014:29–51).

In my work as a field archaeologist, I have at times been searching for explanations of objects or features that neither I nor my colleagues knew any parallels to. I therefore agree with Richard Swedberg (2014:8) when he "argues that creative theorizing in social science has to begin with observation." The facts are, in consequence, not only that the research question of this study derives primarily from an observation made in the field but also that the theoretical framework and the methodology I use to solve the problem are inspired by personal experience in archaeological fieldwork. Even though it is my understanding that the research question being considered here has its foundation in an observation, I do not want to encourage naïve induction or empiricism or to ignore how observation is dependent upon theory (Olsen 1997; Chalmers 1999; Popper 2002). What I rather wish to emphasize is my belief that there is a prehistoric reality that is not contingent upon my own consciousness, and my unattainable ideal is to capture that reality. The presentation of my own background can also be understood as my attempt to approach Pierre Bourdieu's unreachable goal: to uncover my approach to what it is I am studying, and to liberate myself from unconscious norms, positions and assumptions (Bourdieu and Wacquant 1996:59–66). He recommends, in addition, that one should be explicit about which theories and authorities have provided inspiration and which one distances oneself from. The latter will be presented in the critical history of the concepts (Ch. 3) while the sources of inspiration are briefly presented in this chapter. As stated, I am critical of what I call continuity scholarship. This does not mean that I dispute continuity *per se* but that I am critical of continuity that is purely assumed and not supported or critically challenged, and of a concept of continuity that is barely defined or nuanced. As a result, it has been important for me to use a method that is equally well adapted to demonstrating breaks in settlement as continuity (Ch. 5).

Property and social praxis

Property rights over land differ from other types of property right for several reasons. Land is the most important element in production for an agricultural society. Land is also a finite resource: it is impossible to produce more land — in contrast to, for instance, domesticated animals, a second vital resource for an agricultural society. In theory it is possible to produce an infinite number of animals, although the figure is in fact limited precisely by access to land that can produce fodder or provide pasture. A property right is the right that one person or group has to control a specific piece of land. The right of control may be limited, or voided, through agreements and by others' rights, but as a general rule the property right gives the person who holds it the right to determine who is going to make use of the land, and on what conditions, and to keep other users out (Ch. 8). Property right also implies that a piece of land is delimited and has its own status. Even when the owner dies, it is not necessarily free for others to make use of this property, and the right of property, the property itself and the right to inherit are indissolubly intertwined (Chapter 8).

An understanding of property rights is important because they play their part in governing interpersonal relationships (Davis 1973:157; Hann 1998:5). The field of my research is therefore the values, norms, customs and attitudes, or *habitus*, which in turn are the starting point for interactions and praxis amongst Iron-age people (Bourdieu and Wacquant 1996:106). As a result, the daily use of a farmstead and its land are understood as traditions anchored in social and cultural values and norms. I aim, in addition, to investigate whether the maintenance and abandonment of farms can also be understood as an aspect of habitus. Although not everybody founded farms or abandoned them, and presumably very few ever did that more than once, the procedures in certain situations may have been expected, and thus would have been included in the collective norms, values and customs of the society. I want to stress that I do not overlook the fact that external factors may have influenced social, economic or ideological structures, and with that the settlement pattern. At the same time, however, I am sceptical with regard to the settlement pattern being the product of some simple, economic response to such external changes, or changes in the size of the population, or the exhaustion of land. I also find it difficult to accept that agriculture was organized solely in order to maximize an economic surplus. Iron-age people were naturally able to make rational choices in order to achieve their objectives, and, just as self-evidently, they would have reacted to external events. However, their goals, means and reactions would have been culturally conditioned, founded upon their understanding of the world (Gerritsen 2003:7–8). I therefore study agricultural practice as social praxis and concurrently do not regard the farm exclusively as a

rational, economic enterprise (Bradley 2005; Bradley and Yates 2007).

By way of introduction, I have indicated that I wish to understand the interplay between people and material culture, and especially the reflexive relationship between material culture in the form of the built environment and the society's collective ideals and ideas, through looking at building practice and the buildings as effective elements of technology in a social sense (Warnier 2009; Chapter 1.4.2). A consequence of this is that social ideals and ideas are also part of the field of investigation. I regard Iron-age society as a foreign place (Lowenthal 1985; Solli 1996; 2002) and shall draw upon models and analogies that have not been widely made use of in Norwegian settlement research (but see Grønnesby 2019) such as Leo Webley, for instance (2008:125), has proposed. I also look upon the Iron-age economy as *embedded*, or anchored in, and constrained and governed by, non-economic institutions (Granovetter 1985; Hodges 1989; Skre 2012). In consequence, production, distribution and consumption of goods in short supply cannot be understood without an understanding of society as a whole. The distribution of burdens and rights must indeed rather be understood as political (Jenks 1902). Once again, it becomes clear that rights to land — an essential part of an agricultural economy — cannot be understood exclusively in a rationalist economic perspective.

Buildings as technology

The reflexive relationship between buildings that had short life-spans and the nature of property, the organization of agriculture, and in all probability the world-view of the residents, makes it fundamentally necessary to understand the technical aspects of the three-aisled building, the central institution of social life in the Iron Age (e.g. Hastrup 1990; Norr 1996; Skare 1999; Gerritsen 2003:31; Webley 2008; Herschend 2009; Eriksen 2019). I am therefore studying agency as a collective social movement (Dobres 2000:145). Agency can also be understood as a means of recognizing routines and activities as random, combined with a desire to refuse to comply with them (Bourdieu 1977:166; Smith 2001:158). Agency in this respect requires conscious application, but I regard the building as an instrument or a technology and not as an active element (Glørstad 2008; Ingold 2008). I shall also study both the presence and the absence of continuity (Gerritsen 2003).

With a focus on how a building influences its residents, the building can also be studied as an effective technology (Warnier 2009). The ability of living indoors is a technology that most of us master as a matter of course and rarely think about; what may be called the 'ability to dwell' is a feature of habitus (Bourdieu 1995). We do not keep meat on the sitting room table and do not light fires in cupboards; we dispose of rubbish quite regularly and do the washing up in the sink not in the toilet bowl. These behaviours are part of the *doxa*: routines or activities that are taken for granted and are so thoroughly regularized that they appear to lack intentionality (Bourdieu 1977:164–6). Much of this can be explained as functional. Fires in cupboards would be hard to control, and the building could burn down or the occupants be choked by smoke; meat attracts insects and becomes inedible after a few days, while bacteria from the toilet bowl can cause sickness. In other cases the functional aspect is less obvious, and the social is more prominent. Keeping hundreds of kilograms of paper indoors is fully in line with an elevated 'ability to dwell' if the paper is kept on hardwood shelves, is bound with leather, and the words 'Darwin' or 'Ibsen' are on the spines. It is less promising if the paper is unbound and the words on the spine are 'Fifty Shades of Grey', but the occupant is still to be considered as someone who knows how to dwell indoors. If the papers take the form of newspapers and hundreds of them are placed apparently haphazardly around the rooms, it is a marked breach of the doxa, and the occupant may be regarded as someone who lacks the ability to dwell: the person in question has not mastered the technique of living indoors. Different ways of keeping paper illustrate not only different ways of living, they also illustrate the difficulty of studying agency through material culture. Analyses of agency are not based upon knowledge of the context which an individual belongs to but on insights into the individual's intention (Smith 2001). To determine whether or not the newspapers on the floor are the result of a lack of ability to pick them up, the intention to use them as insulation or covering, or a desire to be different from the sort of people who have Ibsen on the bookshelf, is not a matter of simple observation. It is clear, meanwhile, that the residents of buildings in the Iron Age were endowed with the ability to dwell indoors (Norr 1996; Herschend 1997; 2009; Skare 1999; Webley 2008; Beck 2011; Eriksen 2019), and contrary to a functionalist viewpoint I would argue that the earth-fast and therefore rotting posts were an integral part of the technology, not merely a practical weakness. As a result there was no reason why skilled individuals of the Iron Age would either evade or

resolve the problem of rotting posts — it just was not regarded as a problem (cf. Dobres 2000:152).

"In many ways the household was a microcosmos, reflecting the larger order of cosmology and society at the only relevant 'local' level," wrote Kirsten Hastrup (1990:48). The investigation of what sort of society is reflected in the three-aisled building with earth-fast posts is a vital part of this research which will not be prejudged here.

A building technology that made it simple to adjust the length of the building (Gerritsen 2003:34–8, with refs.) is significant if there is a reflexive relationship between the life-cycle of the occupants and the length of the building. There are a number of different historical examples of buildings varying with the status and economy of the occupants — the buildings reflect the life-cycle of their residents, and the buildings have their own life which can itself be written in a biography (Gerritsen 2003:34–8, with refs.). The social biography of the buildings will not be studied in great detail in this work, simply because there is insufficient evidence to support it. All the same, it is crucial to keep it in mind that the buildings have lifeways which may have been broken at various points. These may have special consequences for the establishment of typological characteristics and for understanding the symbolic and social aspects of the building.

Although the three-aisled building was a constant and insistent presence in Scandinavia, it was not static. The technology changed through time, and different options were adopted in different parts of the study area (Chs. 6–7; and, e.g., Pilø 2005; Martens 2004; 2007; Bårdseth 2008; Gjerpe 2008a). I shall propose that these variations can throw light on to the interwoven and reflexive relationship between building technology, building practice, property relations, and social stratification. To put it another way, the heart of my thesis, the organization of rights to land and the creation or abandonment of fields and of farmsteads, can be researched by studying buildings as technology.

The 'farm'

The term 'farm' (Norw. *gård*) is used in this study of an agricultural settlement. The concept is commonly associated with present-day cadastral farmsteads or named farms, and in this light it can introduce preconceptions to the understanding of prehistoric settlement and agriculture. The term 'agrarian settlement' is often used as an alternative, especially by archaeologists who do not take it as a given that there was continuity in the farm's bounds (Østmo 1991; Burström 1995; Løken et al. 1996; Holm 2000; Myhre 2002; Pilø 2005; Gjerpe 2010). The equivalent Old Norse noun, *garðr*, had the original sense of enclosure or boundary, and it is generally supposed that the term emerged no later than the Early Iron Age even though that is hard to prove (Hovda 1981a). In the Late Iron Age the term also comprised the land along with the buildings that stood on the holding, as per the modern sense of 'farm' (Hovda 1981a). Although the term is ancient, it thus changed in sense between the Early and Late periods of the Iron Age. In this book, I nonetheless use the term 'farm' of an agricultural settlement, essentially because I do not want continuity scholarship alone to give the term its meaning. Another reason for using this term is that to do so impels reflections about agricultural settlement. In the Gulathing Law, the term *bær* is frequently used of the farming unit, while *garðr* is often used in its original sense, an enclosed area (Munch and Keyser 1846:128; Helle 2001:115 and refs.). Additionally, *bær* is also used in the Gulathing Law of an 'existing rural community', where the members' houses together constituted the *bær* in the sense of 'a cluster of buildings' (Munch and Keyser 1846:128). There are also examples in the Gulathing Law of two or even more people owning, working and dwelling at a farm with shared land, indicating that there was some form of collective rights. This use of the term may identify earlier features to which little attention has, as a rule, been paid. Commenting on Bjørn Myhre (1990:136), Per Sveaas Andersen has emphasized the possibility that *bær*/*býr* was used of 'the farm' in the Viking Period and earlier because the cognition of space was social rather than economic. Sveaas Andersen further suggests that the term 'farm' first gained the meaning it has nowadays in the Viking or early Medieval Period as a result of rigorous territorial divisions that took place only then (Myhre 1990:136). The word *bær* or *býr* is now found in many Scandinavian farm names as the second element in the form *-by* or *-bø*, and the original sense appears to have been 'homestead' (Hald 1981; Hovda 1981b). Place-names in *-býr* are also familiar in England and Wales, where they are used to identify Scandinavian settlement, or at least Scandinavian influence (Abrams and Parsons 2004). Conversely, there are diverse views on how that second ('generic') element should be interpreted: some specialists read it as very similar in sense to *garðr* while others take the view that its original sense may have 'to cultivate' or 'to prepare' (Vikstrand 2013:35–7 with refs.). Essential to this study is establishing clarity concerning land rights, and for that reason I take a

social rather than a territorial sense of the term 'farm' as fundamental.

The past as a foreign place — drawing upon analogies

"If it walks like a duck and quacks like a duck, then it must be a duck," is an observation sometimes attributed to Ronald Reagan (Cryer 2010:164). From similarities in behaviour and sound, he concludes that the object he is looking at shares other analogous features, and the logic is that two objects which share a certain number of characteristics are also similar to one another in other respects (Hodder 1982:16; Fahlander 2004). Analogy is the use of information taken from one context that we know or believe we know well, in archaeology often the present, in order to explain data from a situation we know less well, which in archaeology is usually prehistory (Johnson 1999:48). Analogies, therefore, are absolutely necessary to archaeology. The long, flat objects of iron or steel that are round at one end but otherwise have sharp edges are very similar to swords such as we know them from our own time, and for this reason we call them swords even though they are several centuries if not a couple of millennia old. Those who use relational analogies attribute importance to the fact that the similarity between a known phenomenon and the unknown phenomenon which is the object of study is sufficiently great for comparison to be relevant, and attribute less importance to the differences. The specifically Norwegian variant of the retrogressive method combined with a belief in continuity can be seen as an example of the application of relational analogies (Ch. 3). The abandoned buildings, fences and lands of the Early Iron Age have many features in common with the farms of more recent periods, and archaeologists as a result first used this formal analogy to conclude that they represented farms of the Early Iron Age. Continuity scholars go on to use relational analogies to emphasize the similarity between the farms of historical periods and the Early Iron Age, and concurrently to under-communicate the differences. In this way, a relatively simple use of analogies turns into an interpretation of the community. At the same time, the continuity scholars expressed explicit opposition to the use of analogies from places and times other than the Scandinavian Iron Age and Norwegian Middle Ages or more recent times (Sandnes 2000:205). The more the similarities are between two situations, the greater the informative strength of the analogy (Johnson 1999:48). What the researcher treats as important, i.e. the similarities or the differences between two situations, is therefore critical to the use of analogies. As a result, it is not necessarily the type of analogy but just as much the researcher's viewpoint which governs the use of analogy. Both relational and formal analogies can be regarded as simple analogies: they are used for the purpose of transferring the understanding of one phenomenon to another, be that from contemporary to prehistoric swords or from 19th-century farms to Iron-age farms. Simple analogies thus do not involve any new understanding.

Continuity scholarship has not been able to explain the settlement pattern that has now been revealed by means of archaeological excavations. This can be due to the fact that those scholars have to a large degree derived their simple analogies from the farm as it is known on the basis of historical sources (Ch. 3), and in this way they filter their data through models so that prehistory itself is difficult to recognize and praxis gradually becomes more or less self-fulfilling (Fahlander 2004). In very recent years, features of prehistory which are radically different from the later agrarian society we know of through historical sources have been steadily revealed (Herschend 1998; 2009; Oma 2000; 2010; Skre 2008; 2012; Hedeager 2011; Sindbæk 2011; Holst 2014a). I do therefore consider it probable that "The past is a foreign country: they do things differently there" (Hartley 1953:1). I shall consequently investigate whether alternative ways of organising rights and obligations linked to the use of land for agriculture serve better to explain the patterns discovered and described in Chapters 6 and 7. However, no archaeologist can imagine or describe a totally foreign or unknown prehistory (Johansen 1974; Solli 1996; 2002; Kyvik 2002). Conversely, it is entirely possible to combine information in unexpected or unconventional ways in such a way that something 'new' is produced (Fahlander 2004:203). In an attempt to understand the unknown, I use analogies or narratives as sources, irrespective of the context from which they derive (Fahander 2004; Johannesen 2004). By using complex analogies, which means a concatenation of analogies or analogies as something other than the simple comparison of two phenomena, new understanding can emerge (Swedberg 2014:82). In order to imagine something that does not exist but which may have existed — for example, an agricultural society in Scandinavia with no property boundaries — imagination is needed (Swedberg 2014:190–5). Jean-Paul Sartre (2004) introduced the concept of the *analogon* for objects which stimulate the imagination. My analogies are narratives concerning property relations which diverged fundamentally from what is

postulated by continuity scholarship. Many of them are taken from studies in social anthropology concerning places beyond Europe, although I shall also take inspiration from written sources concerned with Scandinavia and northern Europe (Ch. 8).

The farmstead as a site — with and without a history

Some of the farmsteads in Østlandet were constructed at places which had been used for a long time while others were apparently built at new locations (Gjerpe 2013). A site is also distinguished from the surrounding environment or its wider context through having *feelings* associated with it (Thomas 1996). Feelings can consequently convert any conceivable spatial point into a site (Gussow 1971:27; Smith 1987). "What had been worst was finding the Place, nobody's Place but his; now the Days were filled with Work," wrote Knut Hamsum (1919:7) of his character Isak's founding of the farm of Sellanraa. Isak has looked at many "agreeable places" and finally finds an area with birds, game, good pastures, water and good arable land. From an economic point of view, therefore, the situation is suitable. But Isak isn't entirely convinced. "For two Days his Work is to explore the surrounding Area but he returns to the Shelter in the Evenings. He sleeps at Night on a Bed of Straw, he has become so at home here, he has a Bed of Straw below a Crag" (Hamsun 1919:7). Thus it is ultimately Isak's feelings rather than a rational, economic assessment that determine the choice of site. This situation could have close parallels in the Iron Age (Nyqvist 2001:221). Another new settler, Loðmundr, known from *Landnámabók* as one of the first to settle in Iceland, threw his high posts overboard in order to settle where they landed (Schei 1997:137–8). He chose, in other words, to let chance, fate or the gods decide, and did not make a judgment based upon economic and logical considerations. The stories of both Isak and Loðmundr are classic settlers' legends: they establish themselves in places with no history and no name. Isak's farm is given the name Sellanraa by chance when Isak makes a formal claim on the area. Hamsun's account is an analogon and not an analogy or a metaphor for my comprehension of the foundation of sites and farmsteads in the Iron Age. The account nevertheless beautifully illustrates — better than the story of Loðmundr — Alan Gussow's (1971:27) proposition that "Viewed simply as a life-support system, the earth is an environment. Viewed as a resource that sustains our humanity, the earth is a collection of places." These two narratives point to two problems that have to be dealt with when a farm is to be founded. The first is how to choose a site and the second is how to make the site one's own — or how to imbue a site with feelings. In line with my research question, I can also add: how to end the use of a site (Eriksen 2010; Amundsen and Fredriksen 2014).

Drawing inspiration from the social biography of things as a metaphor and the application of this line of thought to buildings and sites, I shall examine two different (settlement) sites' biographies (Kopytoff 1986; Gerritsen 1999; Gosden and Marshall 1999; Gerritsen 2003; Lakoff and Johnson 2003; Eriksen 2010; Amundsen and Fredriksen 2014; Bukkemoen 2015). The point of conception is the period at which the site was selected, and during the pregnancy the site moves from being a geographical point to being a site in human consciousness. The construction of the first house can be compared to the birth of the site as a social construct, a settlement or a farmstead. The life of the settlement site may be short or long, and in some cases of extended continuity it may appear as if the site has practically achieved eternal life. At the same time there are certain critical challenges in the evidence. Put concisely, this is a matter of how widely hypothetical settlement sites with continuity from the Iron Age to the present might be found (Ch. 4). In accordance with my wish to examine both discontinuation and continuity, I attach considerable significance to this challenge while I am investigating the death of the settlements and the possible return of the sites to life.

In my research into the biography of the site, the starting point is the lived life: in other words, geographical points that were first founded as a site and then built upon and so born as farmsteads. It can be difficult to link the various biographical phases to archaeological evidence. The choice of a site is particularly difficult — this will not necessarily have left any traces, but if a farmstead comes into being we know that it must have been conceived. We can certainly recognize sites that are well suited for settlement locations, but Isak's feeling that the site was *his* is something that it is hard to associate with material culture. The period of pregnancy, when Isak lies on his bed of straw and feels that the place is home, can be recognized through cooking pits, hearths, graves and other more or less manifest signs in the landscape. This does not mean that all cooking pits at sites without buildings are signs of failed pregnancies: not all points in the landscape were conceived of as settlement sites.

Perhaps the most important reason why the stories of Isak Sellanraa or Loðmundr the Old are not good analogies for the foundation of a farm in the Iron

Age is that both Isak and Loðmundr were placed within an unpopulated landscape with no history. The landscape is usually full of memories and expressions of identity; these are both formed and used in a social system (Nyqvist 2001). Sites and farmsteads are therefore more than geographical points: they are also physical expressions of social systems (Knapp and Ashmore 1999; Bukkemoen 2007; 2014). It also takes time to shape a landscape, and, just as society is continually formed and reformed, the landscape is not static (Snead and Preucel 1999:173). It will be formed and reformed at various levels or scales, and in this study I shall look at the landscape first and foremost at a broad scale in geographical terms (Lock and Molyneaux 2006) — that is, at the individual sites and farmsteads. All the same, my attention to regions and landscapes is essentially secondary.

History and legend comprise narratives of the time past that are relevant to the present (Kjeldstadli 1992:1–28; Steinsland 2005; Brink 2013). In a society that was effectively without a written language, the formation of the landscape must have played a major role in the establishment and transmission of history (Tuan 1974). Funerary monuments are expressions of one element of history in the Iron Age, often linked up in various ways to legitimize rights to land (Zachrisson 1994; Gansum 1996; 1997; Skre 1997a; 1998; Gansum and Østigård 1999; Gerritsen 2003; Thäte 2007; Lund 2009; Ødegaard 2010; Amundsen and Fredriksen 2014; Bukkemoen 2014). If the right to land can be legitimized by way of history, control of history is a means to power (Skre 1998; Nyqvist 2001; Svanberg 2003:11). The form and position of the funerary monuments in Østlandet vary chronologically and spatially (Hougen 1924; Løken 1974; 1987a; Gansum 1997; Solberg 2000; Forseth 2003; Stylegar and Norseng 2003; Stylegar 2004; Østmo 2009; Nordeide 2011). This means that the contents, the importance and even the motivation of the histories and legends vary. If ancestors are actively used to legitimize rights to land, changes in burial practice may reflect changes in these rights (Gerritsen 2003:145–50). Even though the landscape of Østlandet has a history covering the whole of the Iron Age, the contents and perhaps the importance of that history vary through time and space. Tradition, in the sense of formalized and ritual activities, is often used to establish continuity and contact with the past: we do what our ancestors did, and our actions are then accepted and commended by the ancestors. An example of such use of the past from the Iron Age is the lords' presentation of themselves as descendants of the gods in order to legitimize their pre-eminent role (Skre 1998). Tradition is, however, often created, and therefore much more recent than it purports to be; this false age is employed precisely in order to give the activities an appearance of authenticity and credibility (Hobsbawm 1992). In the same way, rituals can be used to change or cancel memories (Williams 2006:121). A tradition or a memory will have the same effect irrespective of whether it is artificial or genuine. Both tradition and newly created tradition say something about the society they belong to, but an invented tradition cannot be used to explore the distant past it claims to derive from.

In this study, therefore, I treat the landscape as a large number of sites with which feelings are connected, feelings that are often made material in the landscape. I also treat the presentation of tradition and history by Iron-age society as a political instrument rather than tentatively objective narratives of the past. Representations of the past can, as a result, be normative, and affected by what the past was supposed to have been like, rather than descriptive and based in how things were. It is important, consequently, to distinguish between tradition and created tradition.

2 THE GATHERING OF DATA: BUILDINGS EXCAVATED IN ØSTLANDET

An essential basis for my studies of the conditions of ownership is the systematization and comparison of settlement-site evidence from Østlandet, as hitherto there has been no synthesis of the evidence (Ch. 2). Here, I shall briefly describe how the archaeological evidence has been created. The aim of this chapter is first and foremost to make the point that area stripping by machine was introduced at a very late juncture, and began to make a real difference even later. The presentation of the history of data collection is based upon published literature, and a thorough review of the evidence which this study is based upon will appear in Chapter 6.

Archaeological fieldwork in Østlandet cannot really be viewed in isolation from fieldwork in the rest of Norway and may rather roughly be divided into three periods. In what I have described as the First Golden Age, the 'building ruin phase' before the Second World War, Norwegian field archaeology was at the same level as elsewhere in Scandinavia (Ch. 2). After area stripping by machine became established in Danish, and then in Swedish, archaeology, Norwegian settlement archaeology was left behind (Ch. 2). Only in the last two decades has this method become an integral or 'internalized' part of Norwegian archaeological practice, and I speculate we may be on the threshold of a new Golden Age (Ch. 2).

THE ABSENCE OF AN OVERVIEW

In 1907, Shetelig (1909) carried out the first published excavation of Iron-age farmhouses in Norway. Gabriel Gustafson's journal notes from 1893 reveal in fact that he had already, 14 years earlier, investigated a building ruin at Ødemotland on Jæren, but these excavations were never published (Kallhovd 1994:102). Deserted farms from earlier periods had, however, been known about long before they were blessed with the attention of archaeologists. As early as 1745, Governor Bendix Christian de Fine (1870:109–10) referred to deserted farms on Jæren in *Stavanger Amtes udførlige beskrifelse* [A comprehensive description of Stavanger Amt]. He refers to building ruins, walls and fields, and was in no doubt that these were remains of the agrarian settlement of earlier periods, and must at least pre-date the Black Death. In 1842, Jacob Neumann referred to the foundations of boathouses and buildings at Ferkingstad on Karmøy, which were later investigated by Jan Petersen. Nicolaysen (1862–6:313) reproduced de Fine's description in *Norske fornlevninger* [Norwegian archaeological remains] but made no attempt to add any comments of his own.

It therefore took a long time from buildings, and then the other parts of the farm or the agrarian unit, being recognized by archaeologists to their becoming the object of archaeological investigations (Pilø 2005; Løken et al. 1996; Gjerpe 2016). It was only in 1935 that Sigurd Grieg undertook the first archaeological excavation of a building ruin in Østlandet, at Langset in Østre Gausdal. Down to 1938, he excavated what he understood to be five ruins of the Viking Period in Gudbrandsdalen (Grieg 1938), although they were subsequently dated to the Medieval Period. It is still the case that relatively few Iron-age settlements have been excavated across Østlandet compared with, for instance, southern Vestlandet or Denmark (Østmo 1991; Løken 1998a; Bårdseth 2006; 2008; Martens 2007; Gjerpe 2008a).

Recently, Eriksen (2019) has produced an overview of farm settlement of the Late Iron Age within what is now Norway. We have, however, no recent, comprehensive overview of excavated building ruins or farmsteads of the Early Iron Age or Medieval Period in Norway. Substantial methodological work was thus necessary as a foundation for this study. This could, to some degree, be based upon extant publications. Bjørn Myhre (2002) and Ingvild Øye (2002) provided references to many major excavations and important results. Dagfinn Skre (1996) offers an overview of building practice in Norway in the period AD 400–1400, and in the same year Trond Løken, Olle Hemdorff and Lars Pilø (1996) published an account of building ruins from Norway, investigated with the aid of area stripping by machine.

There are also a number of works which provide local or thematic overviews. Until recently, the majority of the synthetic studies had been produced with a focus on Jæren or Agder, the areas with far and away the majority of excavated buildings and farms. It was the Migration Period in particular that was the focus of Petersen's (1943; 1954) and Asbjørn E. Herteig's (1955a) work. Odmund J. Møllerop (1958) and

Wencke Slomann (1971) addressed themselves to the whole of the Early Iron Age, while Bjørn Myhre (1972; 1980; 1983) considered both the Early and the Late phases of the Iron Age. Trond Løken (2020) synthesized the Forsandmoen Bronze Age and Early Iron Age settlement. Settlement research in Østlandet and Agder was reviewed by Einar Østmo (1991), who summarized knowledge of the farm as it was around the time at which area stripping by machine came into use in Østlandet. Jes Martens (2007) published radiocarbon-dated three-aisled buildings of the Iron Age excavated down to 2002 in the same region, while more recently Karl Kallhovd and Frans-Arne Stylegar (2014) have published an updated overview of the settlement evidence from Agder. Gro Anita Bårdseth (2006) has published buildings excavated in Østfold down to 2006, while Iron-age farms in North Norway have been presented by Olav Sverre Johansen (1979). Geir Grønneby (2005) offers a short introduction to building ruins uncovered by area stripping by machine in Trøndelag, and Søren Kiinhoff (2005; 2013) has done likewise for the west of Norway. A number of investigations in Møre og Romsdal have been published by Bjørn Ringstad (2000). My compilation of the evidence from the Iron Age in Østlandet (Chs. 6–7) is thus just one of several works that are needed in order to produce a comprehensive picture of agrarian settlement in Norway.

THE FIRST GOLDEN AGE: BUILDING RUINS

The first systematic recordings of ruined building foundations and farmsteads in Norway was undertaken by Tor Helliesen on Jæren at the end of the 1890s (Helliesen and Løken 1997). He did not, though, conduct any excavations. Shetelig's excavation (1909) of two building ruins of the Migration Period at Vestad in Varhaug on Jæren in 1907 was therefore the first such fieldwork in Norway. These excavations of more than a century ago were the start of the first Golden Age in Norwegian building research, which has also been labelled 'the building ruin phase' (e.g. Martens 2004:4, *hustuftfasen*). Subsequently, through to the end of the 1930s, a series of buildings were excavated on Jæren, at Lista, and in Sunnmøre (Gjessing 1917; Bøe 1925; Petersen 1926; 1933; 1936; Lindøe 1931; Grieg 1934). In the 1930s, Norwegian settlement-site excavations and studies were of the same quality as elsewhere in Scandinavia, as is illustrated by the fact that Grieg, Helge Gjessing, Gutorm Gjessing, Shetelig, A. W. Brøgger and Petersen are referred to in Mårten Stenberger's Öland under äldre järnåldern (1933).

Magnus Olsen (1926:32–5) summarized the knowledge of individual buildings immediately before the results of Petersen and Grieg's major excavation campaigns were published. The buildings are usually 10–20 m long and 5–6 m wide, although the largest are more than 50 m long. The low walls of turf and stone led Olsen to infer that the buildings must have had low walls. He also wrote that as early as the 5th century the building had practically reached its final form with parallel rows of roof-bearing posts, at least one hearth, higher walls, and in some cases a large hall. Although Myhre (1980) modified this 'status quo of research' somewhat, it only changed significantly following the excavations at Forsand in the 1980s (Løken 2020). Much more detail is now known, and it is clear that the banks of stone and turf did not form the walls themselves but rather just an outer protective skin. It is also clear that far from all of the buildings have wall banks, and that three-aisled buildings were in existence as early as c. 1500 BC. All the same, Olsen's summary can in many ways be applied to the buildings discovered through area stripping by machine. It is also worth noting that Olsen (1926:32) was clear that the buildings belonged to a common Scandinavian tradition, the point that to some extent became forgotten when area stripping by machine produced new evidence in Sweden and Denmark (Ch. 3).

Although Jæren and southern Vestlandet were at the centre of Norwegian farm research, some excavations were also carried out in Østlandet in this period. Grieg (1938) was, as noted, the first to excavate and publish Iron-age buildings in Østlandet, and for a long time those structures constituted a high proportion of the known Iron-age buildings from the region (even though, in fact, Grieg's ruins have been reinterpreted and dated to the Medieval Period: see Finstad 1998; 2009). His excavations also represented a major proportion of the sites dug before area stripping by machine became common. I shall therefore take a brief look at his assumptions in the context of his excavation and publication of building ruins from Lista. Grieg had a fundamentally evolutionary perspective, and was critical of the Swede Gerda Boethius who "over-emphasizes the importance of the carpenters of the Early Iron Age." "Both internally and externally, these buildings must have looked primitive," wrote Grieg, and "It is, however, certain that from the outside these [buildings] must have appeared particularly plain and not much to look at" (Grieg 1934:103, 105, 113, translated). Grieg found great variation in the building-types. In addition to both short and long

longhouses with earth-fast posts, he discovered a type of longhouse that did not have earth-fast posts; square buildings with entrances at the corners; and irregular buildings with bowed walls and gable ends. He later commented that the lack of post-holes could be due to the state of preservation or to their having been missed during excavation (1934:116). Grieg was also of the opinion that the buildings had walls of earth and stone that were at least a metre high, with internal wooden panels or daub. The wooden panel was not necessarily placed immediately against the external wall, in his view, and there could have been a gap up to a metre wide between them. Where post-holes are found, the roof was supported by earth-fast posts, by preference with a longitudinal ridge, and the walls were only the outer skin of the building. The form of the walls and the position of the post-holes mean that in certain cases one may have had a hipped or bonnet rather than a box gable roof. The turf roof had a base lining of bark (Grieg 1934:102, 110, 111). Grieg (1934:94–5) did have some scientific analyses undertaken, and both charcoal and the contents of what was thought to be ancient dung were determined to species. He also emphasized that building practice was adapted to local conditions (1934:98). He was particularly preoccupied with the notion that the choice of roof-structure must have been conditioned by available building timber, and argued for the use of markedly bent deciduous timber because there was a lack of spruce or pine that would have grown straight. In fact, pine charcoal has been found in two different hearths, but Grieg attached more importance to the situation on Lista in his own day, when there was a lack of naturally straight building timber.

Most of the buildings published in 'Jernalderhus på Lista' [Iron-age buildings on Lista] were excavated by Helge Gjessing, but some by Grieg himself. It is not difficult to see that there was a difference in quality between the two excavators, and Grieg himself (1934:116) commented that his excavations had telltale signs of inexperience. It must be accepted, too, that the quality of Grieg's excavations was not equivalent to the best of his time, something he recognized himself. It would also appear that Grieg attached greater importance to evolutionary theories than to the archaeological evidence. He ignored, for instance, the pinewood charcoal, rather than the vegetation of his own day, and thus could maintain his belief in primitive buildings. Conversely, he was also open to the possibility of different types of building having existed side-by-side. On the basis of the weakly identified buildings from Lista, though, it is appropriate to ask whether such open-mindedness was the product of an inability to recognize patterns.

I have already shown that the five buildings which Grieg (1938) excavated in Gudbrandsdalen in the 1930s were the first that were investigated in Østlandet. Shortly afterwards, in 1942, Gutorm Gjessing excavated two buildings at Land. The amateur archaeologist Aksel Helmen, who took part in both Grieg's and Gjessing's excavations, dug a further building ruin in Land in 1948 (Helmen 1953). Gjessing's two sites had no datable material, and were inferred, on typological grounds, to be of the Stone Age. They were not published by Gjessing himself, and they came to be forgotten as time passed, probably because of the inadequate dating evidence. Even now the buildings cannot be dated with certainty. A quick look at the published plans (Helmen 1953:19, 22) does, however, indicate that they could be from later periods.

Grieg excavated at speed: the building at Søndre Nygård in Oppland, for example, was excavated and recorded over just two July days in 1935 (Finstad 1998:71). At that time, little consideration was given to the possibility of the buildings or settlements having had multiple phases, and archaeologists were not aware that post-holes normally pertained to earlier buildings with earth-fast posts while the visible wall banks and walls were from later buildings either with or without earth-fast posts. Before 1950, it was also not the usual practice to identify or record as many post-holes as the positions of the roof-bearing posts would subsequently allow one to reconstruct (Myhre 1980:174). As already noted, Finstad has re-assessed Grieg's and Helmen's evidence and undertaken his own, minor excavations of some of the ruins. Grieg and Helmen believed that the buildings were large, composite, and of the Viking Period, and that the sites were single-phase. Finstad observes that there are several phases at the sites investigated, and (to simplify the case a little) argues that the individual buildings actually comprise several smaller structures of the Medieval Period. The post-holes which Grieg and Helmen linked to stone foundation walls are interpreted by Finstad (1998; 2009) as poorly preserved traces of three-aisled buildings with earth-fast posts of the Iron Age.

NORWEGIAN SETTLEMENT-SITE RESEARCH IN THE PAUSE POSITION

Anders Hagen's excavations at Sostelid (1953) can be regarded as the last of the building ruin phase. Hagen found very little new in respect of the buildings

themselves; his important contribution in terms of field archaeology was to expand the excavations to include the wider farmstead context and traces of cultivation. At the same time, his dissertation pointed the way forward in that he placed the buildings within both a Scandinavian and a European framework.

After the publication of Hagen's dissertation on Sostelid, many years passed in which primarily an increasing number of ruins with visible wall banks were being investigated. The majority of the excavations, therefore, took place in areas which have not been farmed in modern times and the buildings were, as a result, considered to have pertained to marginal farms. First and foremost, these excavations contributed more detailed knowledge of aspects that were already known. In the light of Thomas S. Kuhn's (1962) philosophy of science, the collection of source evidence can therefore best be described as 'normal science'. Concurrently, the methods were gradually improved, and agrarian settlement was investigated in new areas, including North Norway and the mountain regions of Vestlandet and Østlandet (Martens 1973; Johansen 1979; Bjørgo et al. 1992; Martens 2009). The situation was still that it was mostly buildings of the Early Iron Age that were examined, although the addition of buildings from both earlier and later periods increased: Ytre Moa, for instance, was excavated during this time (Bakka 1965). Little happened in Østlandet in this period either.

The most important step forward was the greater use of natural scientific methods than before, both in the discipline as a whole and within settlement-site archaeology. Pollen analysis is no new method in the context of archaeology but it gained ever greater significance, and eventually phosphate analyses, analyses of macrofossils, and radiocarbon dating were also employed in excavation of settlement sites (Provan 1971; Mydal et al. 1979; Prøsch-Danielsen 2005; Soltvedt 2005). The excavations at Ullandhaug of 1967–68 are similar in some respects to the earlier excavations in southern Vestlandet. They stand apart, however, in that macrofossil, phosphate and pollen analyses were undertaken, along with radiocarbon datings. Furthermore, relatively large areas were deturfed, albeit not using a mechanical digger. The thorough review of the functional and spatial subdivision of the Iron-age building undertaken by Myhre in Volume 1 of *Gårdsanlegget på Ullanhaug* (1980) achieved considerable impact in Norwegian, and to some extent in Scandinavian, archaeology. Volume 2, in which the scientific analyses were to be presented, never appeared however (although some material was published in the form of articles: Simonsen 1968; Provan 1971; Lundberg 1972; Rindal 2011). In connection, amongst other things, with watercourse studies in Vestlandet, building ruins where the possibility of cereal cultivation was low or non-existent were excavated, and these have therefore been interpreted as, amongst other things, shieling structures (Randers 1986; Bjørgo et al. 1992; Randers and Kvamme 1992; Indrelid 2009:122). Larger buildings in areas where cereal cultivation must have played a minor role are known from Østlandet too (Martens 1973; Mikkelsen 1994; Martens et al. 2007).

Other important steps forward in this period were that more building ruins predating the Roman Iron Age were excavated. At Ogna on Jæren two buildings of the Bronze Age and two of the pre-Roman Iron Age were excavated in the 1960s (Skjølsvod 1970a; 1970b). The Bronze-age buildings were post-built with wall trenches that functioned as foundations for the walls, hitherto a little-known feature of Bronze-age settlement in Norway or indeed within Scandinavia. Already at the end of the 1930s, Harald Egenæs Lund (1937; 1939) predicted that Bronze-age buildings with no visible wall banks but with daub-lined walls would be found (Ch. 3.2.1). Around 30 years later, the first almost complete longhouses with no surviving wall banks were found sealed by a burial mound at Stokkset, Sande in Sunnmøre. Egil Bakka then excavated two three-aisled longhouses of the Late Neolithic. This excavation, however, remained unpublished for a long time, and has had little influence on the methodology of Norwegian archaeology (Johnson and Prescott 1993). In Østlandet too, post-holes and hearths were found without influencing matters: for instance, beneath the graves at Hunn, underneath Hvaler church, and at Skjellbanken on Kråkerøy (Hagen 1954; Johansen 1955; 1957). At that time, Norwegian archaeologists should have been fully familiar with open-area excavation through C. J. Becker's (1966) comprehensive publication of Grøntøft in Jutland, Denmark. The discovery of the settlement traces noted here ought therefore to have led to the use of machine stripping in Norway at a much earlier point. But that was not the case.

Three possible explanations of the late introduction of this method to Norway have previously been suggested (Løken et al. 1996:10–12). The large number of visible agrarian settlement structures, especially on Lista and Jæren, may have led to a mental block against the idea of buildings with no surviving wall banks in cultivated ground, but that was not the case in Denmark, notwithstanding the fact that it should be noted that far fewer ruins with visible wall banks are known there. It has also been claimed

that Brøgger's (1925b) insistence on the absence of permanent settlement before the time of Christ, combined with the known and visible agrarian structures of the Roman Iron Age and Migration Period, and the assumption that those of the Late Iron Age lay beneath modern farmsteads, seemed to imply that there was no reason to strip large areas (Løken et al. 1996:10–12). Furthermore, the archaeology of heritage management was bogged down in work on cultural monuments of familiar form, and financial resources were directed to known ancient monuments. It is perhaps Shetelig (1945:48) who enunciated most clearly why there was little purpose in searching for settlement traces in the fully cultivated lands of the present:

> But it is precisely the connectedness of the long history of the farm that means that it is difficult for us to grasp what form a Norwegian farm really took in the Early Iron Age, because the buildings were for the most part always rebuilt on the same foundations on which the old ones had stood before they collapsed; or, if the settlement was relocated, earlier wall foundations would, in the course of time, have been cleared in the course of cultivation… The only chance would be if farms or small groups of farms that were occupied in the heathen era were abandoned and left waste ever since; and such lucky hits we must truly be thankful for, from which we now know a considerable number of farming settlements left undisturbed from Prehistory [translated].

THE SECOND GOLDEN AGE? OPEN-AREA STRIPPING BY MACHINE

The first time that a digging machine was used to remove topsoil in an archaeological excavation in Norway was during the excavation of cooking pits at Oddernes in Kristiansand in 1960 (Skjelsvik 1960). Exactly ten years later, Bjørn Myhre (1973b) was the first to publish buildings of the Iron Age found in a cultivated area where there were no visible traces at ground level. The two buildings at Gjerland in Førde, Sogn og Fjordane, have subsequently been interpreted as part of a 'courtyard site' [Norw. *ringtun*] (Randers 1989). The buildings are well defined, and post-holes for roof-bearing posts, walls and separate gable posts and hearths were recorded. The dating of the buildings to the Early Roman Iron Age relies upon a single radiocarbon date, and no datable artefacts were found with these buildings. Myhre took the view that the sparsity of finds and the lack of culture layers meant that the buildings had not been regular residences or that this settlement was short-lived. Since broadly similar buildings were known in Denmark (Becker 1966) this looks like a conclusion that is firmly rooted in the 'primeval farm model': the tenet of continuity and a distinctively Norwegian settlement history (Pilø 2005), and no less the heritage of the 1814 generation (Ch. 3). The conclusion also contrasts starkly with Lund's earlier suggestion, which has in the course of time proved to be correct. In the 1970s, prehistoric buildings were also found with the aid of area stripping by machine at Oddernes (Rolfsen 1976) and Augland (Rolfsen 1992) in Kristiansand, Vest-Agder, and at Bernem in Overhalla, Nord-Trøndelag (Farbregd 1980). The method therefore had a slow start, and had been employed several times before the great breakthrough took place (Løken et al. 1996).

The Second Golden Age in Norwegian settlement-site research was also introduced in Rogaland, in this case at Forsand in the 1980s. Under the direction of Trond Løken, the topsoil was removed from wide areas, and a number of well-defined and dated buildings of the Bronze and Iron Ages were excavated and published (Løken 1987b; 1988; Løken and Særheim 1990; Løken 1991; 1997; 1998b; 1999; 2001b; 2020). This made it clear that the method has immense potential, even in Norway. For this method to have become internalized, it was perhaps equally important that those involved in the project determinedly disseminated their knowledge in respect of practical fieldwork. As a student from the year 1994 and a field archaeologist from 1996, I now realize that they were virtually evangelizing for this method. Their *Maskinell flateavdekking og utgravning av forhistoriske jordbruksboplasser: en metodisk innføring* [Open area stripping by machine and the excavation of prehistoric agrarian settlements: a methodological introduction] (Løken et al. 1996) is still standard literature for this method of excavation in the case of Norway. During the 1990s, as a result, open-area excavation by machine stripping was internalized in Rogaland, and gradually over the rest of Norway, much later than it had been in Denmark (Becker 1966) and Sweden (Säfvestad 1995). It is thus only in the case of Norway that this period can be described as a Golden Age (Martens 2004). In a wider Scandinavian perspective, I would rather describe the last 20 years in Norwegian settlement archaeology as a desperate attempt to retrieve the neglected, not only with regard to full engagement with the source evidence but also in terms of theoretical development. The number of excavated buildings from prehistoric agrarian contexts has certainly multiplied many times over, but the corpus of evidence is still slender compared with that in Sweden and Denmark. Open-area

stripping has not led to any substantial increase in the number of medieval buildings known in Østlandet either (Martens 2004).

Iron-age settlement in Østlandet

Prior to 1991 very few buildings from agrarian contexts of the Iron Age were known in Østlandet. Even fewer had been thoroughly investigated, dated and published (Østmo 1991). Trond Løken's excavation at Opstad (1978) confirmed, however, that three-aisled buildings with earth-fast posts but with no visible wall banks were present in Østlandet too. A well-dated and firmly identified ruin was excavated at Tingvoll in Sarpsborg in 1990 (Andersen 1991) but not published until much later (Bårdseth 2006). In 1989–90 Iron-age buildings were found for the first time in Østlandet via the use of area stripping by machine, at Korsegåden, Akershus (Uleberg 1990b; 1990a). Individual elements such as post-holes, hearths and other structural traces had previously been found at several sites but no clear building plots had been identified (Hagen 1954; Johansen 1955; Skre 1985; Hernæs 1989; Pedersen 1990b: for additional unpublished excavations see Østmo 1991; Helliksen 1996b). The finds did, therefore, provide information on the location of early settlement but could not be used for any architectonic details. They can also be regarded as the product of the widespread employment of inexperienced field archaeologists and excavation circumstances that were far from ideal. There is no overview of the seniority and experience of the excavation directors in respect of open-area excavations of the 1990s, but it is illustrative of the situation that in 1996 I was appointed director of an excavation in cultivated land with a total of three weeks' experience of this technique, on a site that had already been stripped when I arrived (an experience that was not unique to me: pers. comm., Unn Pedersen). The result of the excavation was more or less as one might have predicted, and in retrospect I am relatively sure that a three-aisled longhouse, perhaps with evidence of ironworking, was missed.

Alongside the remains of buildings that were discovered more or less by chance, aerial photography was used to search for buildings in ploughed land. Round or oblong cropmarks were assumed to show building plots. The oblong cropmarks, such as those that were excavated in part at Virik in Sandefjord, have since been identified as definitely parts of a three-aisled building with wall trenches (Haavaldsen 1983). The cropmarks at Korsegården also proved to derive from three-aisled buildings and other settlement-site activity (Jacobsen 1990; Skre in Østmo et al. 1990:40; Uleberg 1990a; 1990b).

The first regular open-area excavation which revealed buildings around the Oslofjord was, as noted, carried out at Korsegården in Follo, Akershus, by Espen Uleberg (1990a; 1990b). The internalization of the open-area technique coincided with periods of massive development activity and led to a radical growth in the number of known building plots, from the Iron Age and other periods. The major surge in the number of Iron-age buildings is well illustrated by the fact that Jes Martens (2007) found 54 radiocarbon-dated three-aisled longhouses that had been excavated down to 2002 in the Museum of Cultural History's area of responsibility (Østlandet and Agder). In my own research, which does not cover Agder or western Telemark but perhaps has less strict criteria, the quantity is around three times greater just a decade further on (Ch. 6), while the number has increased further in 2021, amongst other things as a result of the excavations at Dilling in Østfold, where more than 130 buildings or parts of buildings have been excavated. The great majority of these were of the pre-Roman and Roman Iron Ages but some were also from earlier and later periods. Martens (2007) found eleven buildings of the Late Iron Age while Eriksen (2019) found 24 probably or possibly dated to the Late Iron Age in this region. Several major excavation projects in which Iron-age buildings constituted a significant part of what was found were published in the Museum of Cultural History's Varia series or similar publications (Berg 1997; Helliksen 1997; Bårdseth 2007a; 2007b; 2007c; Gjerpe 2008a; 2008e; Simonsen and Martens 2008; Gjerpe and Mjærum 2012; Mjærum and Gjerpe 2012; Gundersen 2016). All of the excavations from the period 2001–06, both with buildings and without, were published together (Ystgård and Heibreen 2007; Bergstøl 2009; Berg-Hansen 2015). Buildings are also noted in several volumes of the Varia series whose main topic is some other type of ancient monument (Bergstø 1997:16–26; Ballin 1998:100–14), and some buildings have been published in articles, often in local historical or other periodicals, that have not been subject to peer review (Uleberg 1990b; 1990a; Risbøl 1997; Guttormsen 1998; 2002; 2003; Berg-Hansen 2010a; Reitan 2010; Rødsrud 2011). Far too many of the management-directed excavations in Østlandet remain unpublished. The research-directed excavations, by contrast, have for the most part been published (Skre 1998; Gustafson 2000; 2001; 2005a; Pilø 2005). In 1993, a possible cult building or hall of the 7th century was found a little to the south of

Lillehammer (Haraldsen 1994). It was subsequently excavated, but no information from this fieldwork is available. This building thus does not exist in a scientific context and so cannot be afforded further attention. All accessible reports down to 2014 are, however, included in the collection of data.

SUMMARY: FROM ONE GOLDEN AGE TO ANOTHER?

Allowing for a degree of simplification, the increase in the number of excavated buildings in Norway and in Østlandet can be divided into three periods. The first of these began in 1907 and lasted to the Second World War. In this period, it was ruins with surviving wall banks that were excavated. Research was focused on building practices and the buildings as housing, and much less upon the buildings as part of the farm. This was possibly due to the fact that the majority of the buildings were found in southern Vestlandet, in areas which were regarded as marginal at the time of excavation. In this period, knowledge of the buildings grew massively, and the scholarship gradually established itself as commensurable with that in Denmark and Sweden even though Swedish building excavations, for instance, were undertaken 20 years before the first in Norway (cf. Petersen 1933:1). I have therefore labelled this the First Golden Age in Norwegian settlement-site research.

The increase in the number of excavated buildings in Gudbrandsdalen and in Østlandet in this period was quantitatively and perhaps also qualitatively weaker than it was in Sørlandet and Vestlandet. After the Second World War there was more or less an end to major, research-directed excavation projects in Norway. At the same time, the grip of continuity scholarship hardened (Ch. 3). As open-area excavation by machine progressively became integrated into Swedish and Danish archaeology, Norwegian settlement research gradually became less compatible with that in the rest of Scandinavia. I consequently regard the long period from the Second World War through to the 1990s as an interval in the 'pause' position. During this period, very few buildings were excavated in Østlandet. In the 1990s, however, open-area excavation by machine was internalized in Norwegian archaeology too, and entirely new evidence, qualitatively and quantitatively, was produced, this also applying to Østlandet. Nevertheless, Norwegian settlement-site research remains at the time of writing only slightly commensurable with that in Denmark and Sweden. The collected source material is also much poorer. All the same, we have many reasons to suggest that this will become the Second Golden Age. The increase in new evidence is great, but the buildings must be published, or made accessible to researchers in other ways. This study will contribute to that, but it is vital that it is followed up by others.

3 THE CRITICAL HISTORY OF A CONCEPT: A BREAK WITH CONTINUITY SCHOLARSHIP

…It is stability rather than social change that needs explaining

(Shanks and Tilley 1987:212)

In this chapter, I offer an overview of the main lines of Norwegian settlement studies up to the present. I shall show:

1. How a specifically Norwegian research tradition came about.
2. That this has taken little account of the primary settlement evidence.
3. How current questions can no longer be answered in the framework of this model.
4. That internationally oriented settlement studies have also been conducted in Norway, parallel with the specifically Norwegian tradition.

The history of research in Archaeology concerned with human settlement is closely bound up with the history of the subject of History. This is naturally connected to the fact that the first to take up the issue of prehistory in Norway were not archaeologists but inter-disciplinary scholars of the Humanities. Academics such as Oluf Rygh, Christian Magnus Falsen, Gerhard Schønning, Peter Andreas Munch, Magnus Olsen and Rudolf Keyser made use of both archaeological and historical source material. Even after Archaeology became a separate discipline, theory and methods from History were widely used in settlement research. I shall argue that some key premisses for current settlement research — the 'paradigm' or the 'discourse', if you like — were established already by the 1814 generation of Norwegian historical scholarship (where I include Schønning, who strictly was of an earlier generation). Important foundation stones of Norwegian settlement scholarship were therefore laid around a hundred years before Shetelig undertook the first Norwegian excavation of prehistoric buildings (Ch. 2). Since historians have been at the heart of the development of the retrogressive method, there is a research history that irradiates studies otherwise shedding light on the Middle Ages and which have been of major methodological influence on Iron Age research.

Reviewed in this chapter is that field of previous research which concerns the farms, the farmers, the agriculture, and their role in Iron-age society in Østlandet. Theories and questions concerning immigration, diffusion and ethnic groupings are considered less significant to my research foci but are noted briefly where relevant. I shall firstly review the origin of settlement scholarship's firm belief in continuity, and then show how this faith in continuity was a key part of the development of a specifically Norwegian form of the retrogressive method. I shall also show that although this approach has dominated Norwegian settlement research, it has not monopolized the field, or been without its critics. The largest part of this chapter is concerned with a general, national history of research, but at the end I shall take a closer look at a number of important works which are concerned with the evidence from Østlandet, where I place particular emphasis on results that diverge from what I have labelled continuity scholarship.

The growth of History, and somewhat later of Archaeology, as distinct academic disciplines in Norway coincided substantially with the nation-building of the 19th century. Arnfrid Opedal (1999) has shown how, far into the 20th century, archaeological research on farms can be viewed in the light of the construction of a Norwegian identity. Wenche Helliksen (1996a) has shed light on how evolutionism has marked Norwegian archaeology. Together with other circumstances, this, according to Lars Pilø (2000; 2002; 2005), led to a specifically Norwegian history and tradition of research. He demonstrates how much of Norwegian farm research from c. 1920 onwards can be understood in light of the 'primeval farm model' (*Urgårdsmodellen*), and that the archaeology and history of settlement have largely been written on the basis of the distinctly Norwegian version of the retrogressive method. Helliksen, Opedal and Pilø provide a welcome insight into aspects of settlement research in Norwegian archaeology (and for other approaches to the research history, see Henriksen 1994; 1999; Olsen 1997; Martens 2004; Guttormsen 2013) — but by studying continuity rather than evolutionism, nationalism or particular models, it is possible to see a clear thread running

from the 1814 generation through the primeval farm model into contemporary scholarship. By following this thread backwards in time it becomes possible to see that continuity was a basic premiss for an enormous amount of Norwegian settlement research. It may be objected that I too am using backward-looking or retrogressive methods in my own history of research — a method that I am otherwise critical of. I shall put things more precisely, therefore, in explaining that my criticisms are directed primarily at the specifically Norwegian version of retrogressive analysis, in which continuity is an underlying premiss while concurrently the method is used to shed light on periods with weak or no primary evidence (see Ch. 3.1.3 for the relationship between retrogressive and retrospective methods). In my view, the method may indeed be employed to explain how the situation from which one is looking back has come about. Retrogressive methods can therefore be used to explain a contemporary settlement pattern. But the contemporary settlement pattern cannot be used as a starting point for a retrogressive study to explain the settlement pattern of the 4th century AD (for example). No event can be explained by something that happens later.

CONTINUITY AND RETROSPECTION — FROM 1814 TO THE PRESENT

The 1814 generation in Norwegian historical scholarship was preoccupied with the population of the land area, the unification of a kingdom, democracy, property (*óðal*) rights, governorship (*lensvesen*) and aristocracy (for the most important contributions, see Schøning 1771; 1773; 1781; Rothe 1781; Falsen 1815; 1821; for an overview, see Dahl 1990:15–40). Their ideas were enshrined by the Norwegian School of History, to which P. A. Munch and Rudolf Keyser were central. Presented below are four concepts which I believe formed the bases for practically all later settlement research.

The 1814 generation and the Norwegian School of History

The historians who formed the Norwegian School of History wanted to demonstrate "the Importance of Norwegian Nationality in Prehistory and Nordic Authenticity in the Present" (Munch 1874:II:28 [translated]), and must of course be understood in light of the fact that Norway gained its own constitution in 1814 when it broke free from Denmark, while in the second half of the 19th century there was a movement to gain full independence from Sweden. They were also committedly cross-disciplinary. According to Munch (1852a), "the so-called modern School of History in Norway" based itself upon historical sources, philology, archaeology, geography and anatomy. The latter was significant because it showed the differences between human races and their particular anatomical characteristics. Keyser and Munch were internationally orientated, and drew inspiration from German and especially Danish historians (Andersen 1960). It is four of their notions in particular that have left their mark, even though the ideas themselves have long since ended up on the scrapheap of History. They believed that Aryan invaders (from the east or the north) settled here in a colonization of an unpopulated Norway. Since these colonists came to an unpopulated land, there was no indigenous population to exploit as slaves or sharecroppers and so no basis for a nobility. Norway "in the olden time" — which in Munch's case (1852b:467) meant before Harald Finehair — was consequently viewed as a democratic society of free, equal, landholding farmers with no aristocracy or unfree peasants, in contrast to Denmark and in part to Sweden. Property rights and the right of undivided succession ensured that the farms were not sub-divided into smaller units but remained whole. Finally, either race — the supposed fact that Germanic settlers of Norway were not mongrelized with an indigenous population, unlike the Swedes and the Danes — or special ecological or topographical circumstances, promoted and maintained a distinct conservatism in settlement and subsistence, a sparse aristocracy, and a class of free farmers (Falsen 1815; 1821; Keyser 1843; Bull 1920:53; Andersen 1960; Dahl 1990:53; Kjeldstadli 1992:58–9). These beliefs gradually generated the framework for research into the farms. The major settlement-phase farms, the primeval farms (*urgård*) in Pilø's terminology, were, according to this tradition, established immediately following colonization. Legal protection via the right of óðal and ideological protection produced by the conservatism of the population stood in the way of change. The result is strong continuity in the physical bounds of the farms. Such changes at farm level that did come about were divisions that can be reconstructed by using the retrogressive method. At a more general level, marginal areas were occupied if the population grew, and the farms which were founded there were also the first to be abandoned if the population fell.

The distinctness of the Norwegian people

The origin of 'Norwegianness' was a matter of long dispute — but not the fact that there was such a thing. Was Norwegianness produced by the fact of a distinct Norwegian race or was it created through adaptation to the distinct Norwegian natural environment (Hesjedal 2001:52)? In 1868, Ludvig Kristensen Daa gave "a funeral address for the Norwegian colonization theory" and argued that the people of Norway had invaded from the south and so did not differ from the Swedes or Danes in respect of race (Daa 1869; Grundtvig 1869; Dahl 1990:80). Daa was influenced by new currents in ethnography and geology, and abrupt events such as migrations or natural disasters were for him no longer important as explanations. Rather, he explained the cultural characteristics of individual peoples as the product of long-term processes; several historians stressed that a national spirit was the result of common European trends (Dahl 1990:126–9, 142–4). The distinctiveness of the Norwegian people was thus explained partly through the natural conditions in which they lived and partly by the level of culture they had achieved, itself partly through internal development and partly under influence from other populations. The thesis of an independent Norwegian farmer — through to the age of Harald Finehair, at least — was preserved by later historians such as Ernst Sars and T. H. Aschehoug. According to Aschehoug (1866) and Daa (1869) it was the special characteristics of the land — the lack of arable — that yielded a sparse aristocracy and therefore a stronger farmer class. Ernst Sars had similar views, and somewhat later on concluded that the clear thread that runs through the history of Norway was formed by a social order based upon the farmer class (Worm-Müller 1920:20; Dahl 1900:152, 163). Sars (1877) was, according to Jacob S. Worm-Müller (1920:30–1), influenced by the doctrine of evolution, and particularly in Herbert Spencer's Social Darwinistic mode, and consequently saw the formation of nations as a product of natural conditions and historical development. He therefore dismissed the idea of a particular, racially rooted, national spirit. Since then few have explicitly claimed that the distinctiveness of Norwegian agrarian settlement when compared or contrasted with that of Denmark and Sweden can be linked to race (although Andreas M. Hansen is an important exception: Ch. 3.1.4). For a long time, a pressing question, particularly for archaeological scholarship, was rather whether the expansion and contraction of settlement was due to immigration or emigration (Herteig 1955a).

The retrogressive method was also employed in the study of building practice. Research on the buildings themselves was initially conducted without direct primary evidence. Keyser (1847) wrote on this topic on the basis of the written sources, particularly the Icelandic sagas. Nicolaysen (1849:313) criticized that article and posited that building practice was static and so can be traced back using the stave churches and contemporary rural buildings as starting points. It was certainly a long time before the first Norwegian excavation of any prehistoric building ruin was carried out, even though it was known that such sites existed (Neumann 1842; Nicolaysen 1862–6:313; de Fine 1870 [1745]:109–10).

The retrogressive method and the Institute for Comparative Cultural Research

To draw conclusions concerning earlier, more obscure, situations from historically known circumstances was a common practice throughout the 19th century. Such back-projections were possible in light of the strong assumed continuity and conservatism in settlement. Around 1930, however, this way of approaching things was developed into the retrogressive method as we know it today. A major part of this methodological development came about in the Institute for Comparative Cultural Research. This institute was established at the University of Oslo in 1922 on the initiative of Professor Fredrik Stang. The key idea behind the Institute was internationally collaborative scholarly research, and in the inter-war period the Institute was an important research centre for both Norwegian and international scholars. A number of key works representing various disciplines were published in the Institute's series.

In Norwegian and Scandinavian archaeological literature, retrospective and retrogressive methodology are frequently treated as synonymous. In strict terms, however, they are two rather different methods, even though time-depth is crucial to both (Baker 1968; Friedman 1996; Pilø 2005:8). The retrogressive method or *la méthode régressive* was developed by historians, starting from later periods or the present with a view to understanding earlier times. The restrospective method or *geographie humaine retrospective* was developed by cultural geographers, using the geographical structures of earlier periods in order to understand later situations. *Retrospektiv* is a firmly embedded term in Norwegian and Danish archaeological literature, and is also used where 'retrogressive' would strictly be correct in relation to international literature. I have opted to

use the internationally recognized term, even if that risks confusion (cf. Thrane 2006). Swedish readers, however, will be able to follow the text (Widgren 2000; Karsvall 2013).

The retrogressive method is best known internationally through Marc Bloch's *Les Caractères originaux de l'Histoire rurale française* (1931), published in English as *French Rural History: An Essay on its Basic Characteristics* (Bloch 1966). The French version was published in the Series B Texts (*Serie B Skrifter*) of the Institute for Comparative Cultural Research, and is based to a great extent on a set of lectures held at the Institute. It is in any event also partly a product of Bloch's period as a research fellow at the Institute, cooperation and correspondence with the historian Edvard Bull, and influence from other Norwegian and overseas historians (Bloch 1966:xxiii; Baker 1968; Friedman 1996; Iversen 2004:51; Imsen 2010). The method which Bloch described as *la méthode régressive* thus had predecessors both in Norwegian and other countries' historical and archaeological research (Meitzen 1895; Widgren 1997; Rønneseth 2001), but in the present context those appear less relevant to the development of a uniquely Norwegian variant.

Asgaut Steinnes (1927) took elements from previous Norwegian and Swedish scholarship in his dissertation *Leidang og landskyld* (Leidang and Land Tax), where the retrogressive method was defined in narrower detail for the first time in Nowergian historical study (Holmsen 1942; Dahl 1990; Kjeldstadli 1992). The retrogressive method thus was used and developed before Andreas Holmsen in many ways perfected the method for use in studies of the development of the farm and application in a considerable number of local histories (Bull 1927; 1929; Bull et al. 1929; Steinnes 1929; Holmsen 1930; Steinnes 1930; 1932; Holmsen 1942; Steinnes 1953; Holmsen 1976). Holmsen (1977) has been a major influence on History students for generations through his textbook, first published in 1939. In keeping with the heritage of the 1814 generation, Holmsen (1942:32) declared that "structural geographical units are often quite autonomous and have their own particular nature, which are consistently greater the further back in time one goes" [translated]. In other words, the further back one goes, the higher the likelihood of continuity there is. Since the primary evidence is also steadily more slender the further back in time one goes, this allows one to draw conclusions from known historical situations concerning earlier periods which are otherwise difficult to shed any light upon. Thus the unknown prehistory becomes more like the better known and later prehistory.

Holmsen used the term 'structure' in his methodological article, but provided no references and does not indicate that he knew of Bloch's 'méthode régressive' either: in contrast he referred to a number of Norwegian scholars and one from Sweden (see also Imsen 2010, with refs.). Bloch's version was much more sophisticated in terms of source criticism; he emphasized, amongst other things, that to presuppose continuity is a serious error, and also that the structure of agriculture was the product of many small changes and a small number of revolutions (Bloch 1966:xxix–xxx). The germ of the peculiarly Norwegian version of the retrogressive method may indeed reside in Holmsen's lack of reference to Bloch.

In what may have been the most influential Norwegian archaeological work of this time, *Det norske folk i oldtiden* (The Norwegian People in Prehistory), Brøgger used the retrogressive method extensively without explicitly referring to it as such (Holmsen 1942:34). He did, however, explain on what basis the method could be employed: what, in other words, continuity relies upon. The initial premiss was a distinct Norwegianness, which nevertheless varies between the different economic zones: the psyche of the forest and fell is different from that of the coast and the sea (Brøgger 1925a:53, 170–1). The natural conditions in Norway, with marginal agricultural areas, meant that hunting, trapping and fishing were more important than in comparable agrarian regions, which in practical terms meant Sweden and Denmark. Norwegians were not unaffected by influences from European currents either, but those they adapted to the Norwegian circumstances.

The natural conditions, economic realities, and external influence also co-acted to form a distinctly Norwegian mentality, or as Brøgger himself (1925a:217) wrote: "… that right from the very first arrival of people in Norway, the natural constraints of the land were bound to make them Norwegian" [translated]. As he saw it, this mentality was necessarily conservative, and there have also been few changes to the agrarian settlement pattern from its foundation. Brøgger did not view Norway's prehistory in terms of different chronological periods but rather in terms of different subsistence strategies conforming with the ecological contexts and yet as almost unvarying adaptation through centuries if not millennia (Brøgger 1925a:28). He argued that the hunting and pastoral culture had an almost unbroken tradition from the Palaeolithic far into the Iron Age and in some cases as late as the 19th century. In caves and shelters in Vestlandet flint and schist tools have been found in association with pottery of the

Migration Period. For Brøgger, this indicated the use of flint and schist implements in the Migration Period and thus an extremely conservative material culture. He was quite clear that this interpretation was in conflict with the common Three Age System but did not regard that as important (1925a:44–5). Nowadays it seems obvious that the flint and schist are from much earlier times than the pottery. These finds are thus no argument for a conservative material culture of tools but rather for the recurrent use of the same site in different epochs.

In a speech marking *Universitetets Oldsaksamling*'s centenary, Brøgger viewed research into Iron-age settlements as an element in the basis for understanding contemporary farms (Brøgger 1930:14). An especially important factor in Brøgger's perception of the farm is that it was the product of colonization in (practically) unoccupied regions. As a result, the major primary settlement-phase farms — the primeval farms — could have been founded in the course of the Roman Iron Age and the Migration Period (Brøgger 1925a:211; 1925c:23–4). The Norwegian farm had a distinctive profile because extensive livestock farming was supplemented by cereal cultivation and hunting, in contrast to Denmark, for example, where arable farming was most important. The locally owned óðalland was the foundation of the farm, which in turn provided the basis for a democratic system (Opedal 1999:38–9). On the whole, Brøgger preserved the heritage of the 1814 generation in the Norwegian Historical School quite intact.

Eldrid Straume (1986) perceived the difference between Brøgger and the other leading archaeologist of this period, Haakon Shetelig, as being so clear that she distinguished Shetelig and Brøgger 'schools'. For the European Shetelig, it was external impulses that shaped the prehistory of Norway, even if the position and character of the land were undoubtedly significant. For Shetelig, too, Norway was a natural part of Scandinavia, and although Scandinavia was distinct in many respects, similarity with the remainder of Europe was also present (Shetelig 1925:2–3; Hagen 1970; Marstrander 1979; Helliksen 1996a).

Brøgger gave few bibliographical references in *Det norske folk i oldtiden*; *Sigd, ljå og snidill* or *Veid og vær* [The Norwegian People in Prehistory; Sickle, Scythe and Leaf-hook; Hunting and Weather] so that it is difficult to show what he was influenced by beyond Andreas M. Hansen's works, and in particular Hansen's (1904) *Landnåm i Norge* [The Primary Settlement of Norway]. Brøgger and Shetelig were, however, members of the Institute for Comparative Cultural Research, and must have discussed ideas there with both Norwegian and international scholars. In this light, it is interesting that the sociologist and ethnographer Marcel Mauss, the historian Marc Bloch, and the anthropologist Franz Boas — all of them in time hugely influential in their own fields — were connected with the Institute (Kyllingstad 2008:3). The international lecture series of the Institute were organized from 1925 onwards, the same year that Brøgger published *Det norske folk i Oldtiden* and Shetelig *Norges forhistorie* [The Prehistory of Norway]. Boaz declared that ethnological phenomena were the product of humans' physical and mental capabilities and their development under the influence of the physical contexts (Boaz 1974:63), and is reported later to have stated that "…I recognized the importance of studying the interaction between the organic and the inorganic, above all the relation between the life of a people and their physical environment" (Zumwalt 1988). Brøgger's view of history was clearly rooted in the Norwegian Historical School, but elements of his arguments were common with Boaz, Mauss and Bloch, who will certainly also have had some influence on his historical perspective (Andersen 1960; Helliksen 1996a; Østmo and Bergstøl 2004).

The links between French and Norwegian historians that were established through the Institute for Comparative Cultural Research were maintained after the Institute lost a greater part of its importance towards the end of the 1930s. Bloch eventually became a central figure in the *Annales* School, and his ideas progressed and developed in the direction of a history of cognition. The theoretical basis for retrospection was reinforced further by Fernand Braudel's work (1949). He viewed history as three processes of different duration, which operate partly in parallel and partly shape one another. He distinguished between individual events (short-term *événements*), conjunctions (medium-term *conjunctures*) and enduring structures (long-term; the *longue durée*). Braudel's ideas became current again in Norwegian farm scholarship in the 1990s, particularly, then, at the University of Bergen and its Vestland Farm Project (*Vestlandsgårdsprosjektet*).

Andreas Martin Hansen — race and settlement pattern

Andreas Martin Hansen was strongly committed to immigration as an explanatory model, a position that has recently gained a new relevance (Prescott 2012; Prescott and Glørstad 2012). Hansen, however, conformed to an ideological framework that

is unacceptable nowadays. His great influence on settlement archaeology generally, and on Brøgger in particular, has consequently largely been passed over in silence in the post-War era (although see Haavaldsen 1984; Hesjedal 2001; Pilø 2005:10). To make clear what Hansen's influence on research concerned with agrarian settlement in South Norway was, I have dedicated some space to his work even though he is now discredited within the academy. Hansen combined geology, toponymics, archaeology, history, anthropology and psychology. He died in 1932 but his books came to be printed as late as 1943. Nowadays he is perceived first and foremost as a representative of phrenology, the doctrine of a connexion between human capacities and characteristics and the outer form of the skull or the head. This branch of physical or biological anthropology has now been stripped of any scientific status, and the close links between phrenology and racial ideologies make it outdated in the extreme. Hansen was, as a result, rarely referred to following the Second World War and yet he was a recognized if still controversial scholar in his own time. He was an important quaternary geologist and demonstrated that the coastlines in the valley systems of Østlandet were the product of dammed up glacial lakes, and that the thickness of the ice caps during the Ice Age led to uneven land-rise. He became a State Research Fellow in 1908, in order to study the history and anthropology of the Norwegian population, and a member of the Christiania (Oslo) Scientific Society (*Videnskabsselskabet*) in 1910 (Kyllingstad 2004:58). He also used land-rise to date Stone-age settlement sites and distinguished between hunting rock carvings and farming rock carvings, while his theories concerning immigration and the Arctic Stone Age have been of major significance, directly and indirectly, in Norwegian archaeology. His conclusions concerning prehistoric settlement are still remarkably relevant in many areas, while in the preface to *Veid og* Vær, Brøgger (1925b) expressed his admiration of Hansen. Brøgger also (1917) emphasized Hansen's book *Landnåm i Norge* as the "clearest, the most deep and thorough, that has been written on our earliest settlement history" [translated]. This is in stark contrast to how it was received in historical circles. "It is at war with seven sciences," is what Gustav Storm is recorded as saying (translated, quoted from Bull 1920:63).

Hansen's starting point was that Norway had an original population of non-Aryans (*anariere*) who supported themselves by hunting, gathering and fishing, and that agriculture came to Norway with immigrant Aryans — the very opposite of the view of the Norwegian School and the 1814 generation. Hansen further believed (1899) that the two populations — or races — had different physical and mental capacities, and claimed, in line with the phrenology of his time, that there was a connexion between the form of the skull and mental characteristics. The original population was brachiocephalic or round-skulled, with the width of the skull being more than 80% of its length. The immigrant agrarian population was long-skulled or dolichocephalic, with the width of the skull being less than 80% of its length. There were other physical differences between the races too. The round-skulls were shorter, had rounder faced, wider noses and darker skin, hair and eyes than the Aryans. According to Hansen (1904:114), when the long-skulled Aryans arrived in the land around 1200 BC, they seized the good agricultural land and subordinated the round-skulls. The round-skulls are first found as slaves, and in later periods as dependent tenant farmers, coastal squatters, household hands and unfree farmers subject to the aristocracy of Vestlandet. The long-skulls conversely were conquerors and warriors, possessing their own extensive farms with no aristocratic overlay (Hansen 1899:70). The separate farm was the preferred settlement-type of the long-skulls, but this presupposed that the subordinate population was extremely weak or non-existent. This meant that the Aryans could settle in free, independent households, with each family colonizing its own land and no need to worry about defence. Where the hostile original population was numerous, by contrast, the Germanic folk sought mutual protection with one another, and settled in villages. Hansen saw relic traces of the villages, inter alia, in the clustered settlements. He thus assumed that there had been villages in Iron-age Norway long before any such was excavated for the first time at Forsand (Løken 2020). Hansen's assumption that an immigrant population introduced agriculture to what is now Norway is to a large extent supported by recent science. Christopher Prescott and Eva Walderhaug argue that agriculture involving livestock, cereal cultivation and two-aisled buildings were introduced to southern Vestlandet by an immigrant agrarian population (Prescott and Walderhaug 1995; see also Prescott 2012). Significantly, though, Prescott (2012) postulates a smaller group whose ideas were adopted by the extant population rather than a large-scale invasion. Although Hansen's conclusion is acceptable in this light, his mode of reasoning is unsustainable by contemporary standards.

After Brøgger

Most archaeological and historical settlement studies concerning Østlandet down to 2012 are heavily based on the retrogressive method, as Pilø has shown. Even after the revelation of incompatible evidence from Forsand (Løken and Særheim 1990), and Pilø's own refutation of the theoretical basis (2000; 2002; 2005), the method has continued to be used by several scholars (e.g. Iversen 1999; 2004; Øye 2005; Iversen et al. 2007; Hobæk 2008; Ødegaard 2010). Despite a growing quantity of excavations with quite contrary results, the retrogressive method and a belief in strong continuity in settlement is still firmly held to in both historical and archaeological circles (Salvesen 1982 with refs.; for an overview, see Pilø 2005:10–16; Orning 2006). Like Pilø, I wish to draw attention to the fact that Jørn Sandnes (2000:205), one of the leading exponents of the Norwegian deserted farm project, wrote "Quite generally, I would otherwise assert that one can learn more about the old Norwegian clan system by reading, for instance, *Juvikfolket* [The People of Juvik] by Olav Duun or *Gamalt or Sætesdal* [Heritage from Sætesdal] by Johannes Skar than by studying American ethographers' and anthropologists' theories, often based upon non-European, primitive cultures" [translated]. Knut Helle (2009), another Nestor of History in Norway, followed up the critique of the use of social anthropological models in his article 'Den primitivistiske vendingen i norsk middelalder forskning' [The primitivistic turn in Norwegian medieval research]. Helle's primary objective was in fact to emphasize the necessity of strict source criticism. He nonetheless reveals preferences for continuity and the retrogressive method, and little faith that social anthropological models can offer much new. The primitivistic turn is also often alluded to as the anthropological turn, and both the usages and the argumentation can be recognized in much earlier debates in Norwegian archaeology (see, e.g., the discussion following Odner's article in *Norwegian Archaeological Review* 1974).

While Norwegian settlement research was long integrated within Scandinavian and European practice, possibly even in the vanguard at times, it became more isolated in the post-War period down to the 1980s. Petersen's (1954), Odmund Møllerop's (1958) and Wencke Slomann's (1971) works are examples of settlement archaeology that embedded continuity as its underlying premiss. Oddmunn Farbregd's (1983; 1984) and Håkon Hovstad's (1979; 1980) analyses of farm boundaries can to some extent be said to presuppose continuity even if the historian Hovstad, in particular, saw the Viking Period as the earlier limit of such a sequence. In processually inspired studies too, continuity appears as a basic premiss, for instance in Harald Jacobsen's (1984) thesis on Iron-age settlement in Ringerike, Ellen Anne Pedersen's (1989) thesis on Hadeland, or Birgitta Wik's (1982) study of Trøndelag. Likewise in the multi-disciplinary *Vestlandsgårdsprosjekt*, based at the University of Bergen, it was assumed that modern farm boundaries have very long histories, even though the project was open to changes in how they were operated (Julshamn et al. 2002:18–19).

THE CRITIQUE OF THE RETROGRESSIVE METHOD AND THE CONTINUITY MINDSET

The retrogressive method, as already noted, involves drawing conclusions from historically known situations regarding earlier times. In archaeological studies, especial significance is attached to grave monuments, stray finds and historical evidence in preference to direct settlement evidence in the form of prehistoric buildings (Pilø 2000; 2005). This may be due to the fact that, until recently, relatively few prehistoric buildings were known, although there is also a clear tendency for the few that were known to be neglected in studies of settlement history (as Eriksen 2019 has shown in respect of the Late Iron Age). Settlement is commonly studied at widely varying scales. In a micro-perspective, details of the construction of the building are examined; at a macro-level it is the long lines or enduring structures that are considered. The latter have gradually turned into an argument in favour of the retrogressive method (Iversen 2004). Both the method and the evidence mean that only stable components are illuminated at a macro-level. Additionally, conclusions are drawn from the macro-level to the micro-level, and studies based upon the retrogressive method have, as a result, developed no interest in detailed analyses appropriate to the exploration of the micro-level. Archaeological settlement material that does not fit a hypothesized straight line from known present-day settlement structures back to those of prehistory is commonly ignored or explained in an ad hoc manner (Pilø 2005:14). The Norwegian variant of the retrogressive method was used by Norwegian researchers in the Nordic Deserted Farm Project. The employment of this method was, however, strongly criticised by Swedish and Danish historians (Gissel 1976; Österberg 1977; Porsmose 1982; Salvesen 1982) but that critique was largely ignored (Sandnes 1978:18; 2000). The reason why this method has shaped Norwegian historical — and I would add, archaeological — scholarship is, in

the words of Jørn Sandnes (1978:17, translated), "the great stability and continuity which characterized the Norwegian farming community and farm history in earlier times." Once more, the inheritance from the 1814 generation and the Norwegian Historical School is manifest. Ole-Jørgen Benedictow (1992:42) has pointed out that the rejection of the critique bordered on sectarianism, while in one case reference was made to non-existent documents to refute it.

The many retrogressive studies consistently avoid the areas on Jæren with so many recorded farmsteads. It is typical that Brøgger mentions the excavated building remains on Jæren only in passing, while Shetelig (1925:169) treated them solely as houses not as part of the farm. On Jæren, it is clear that the historically known farm boundaries often cut across the settlements or through stone walls of the Early Iron Age. Hovstad (1980) quite logically, therefore, concluded that the boundaries cannot be traced back ealier than the Viking Period. Little attention has been paid to these observations, however (e.g. Skre 1996; Iversen 2004; Ødegaard 2010).

The retrogressive method is also employed in the rest of Scandinavia, although without the Norwegian variant's trust in continuity. The distinctively Norwegian application of the method is particularly striking when one compares it with, for instance, the Swedish approach. "When Swedish geographers use the retrogressive method it is done to find differences between the 18th-/19th-century landscape and earlier landscapes — not to demonstrate continuity" (Widgren 2000:42, translated). The retrogressive method was likewise used in connexion with empirical evidence to refute Meitzen's ideas of continuity in German scholarship in the 1950s, not to reveal continuity (Widgren 2000:41).

As noted, nation-building was at the core of much of Norwegian settlement scholarship (Opedal 1999). The young state needed a prehistory which made it different from the neighbouring Denmark and Sweden. Norway's landowning and free farmers provided just such a premiss, that has both underlain the narratives and been reinforced by them (Skre 1998:23–7). At the same time, it was important to emphasize that the young nation had ties back in time to a rich and proud prehistory. One consequence of these factors has been the centrality of the retrogressive method. That method can only be used to study a phenomenon where there is a certain continuity, and is difficult to use to identify breaks if the source material is slender. The farming settlements were thus assumed to have remained on the same spot since the farm was founded or its lands were marked out. Earlier buildings should not be found, therefore, because the theory dictated that they should be lying underneath the building of the next generation. An unexpressed and unanswered question in Norwegian settlement history, as a result, is "Why do we find housing of the Iron Age at all, then?" This question can itself be split into two. To begin with, why did the settlement that we do find come into being? And then, why was it abandoned? Initially, our answers were usually that the farms excavated were marginal, and only in use when the population level was higher than normal. They were not real farms, therefore, but marginal smallholdings. Gradually, as an increasing number of abandoned farmsteads were revealed in what are now the central agrarian areas with no direct links to contemporary farms, the answers changed a bit, and the division of farms was introduced as an explanatory element (Iversen 2013).

Most recently, historians have propounded a fundamental critique of the scope for using the retrogressive method. Amongst other things, it has been pointed out that stability in property conditions has been much lower than assumed by core retrogressive analyses (Weidling 2003; Dybdahl 2008; Weidling 2008). The medieval concept of ownership was essentially different and more complex than that of the present day, while property relations cannot be separated from relations of political power (Dørum 1994; Iversen 2001). All the same, a virtually ahistorical use of the concept of property remains at the base of the retrogressive analyses (Iversen 2001:79–82). In pre-state societies there is no central authority that preserves a hypothetical property right; in practice, therefore, the right to property is just as strong or weak as the level of self-defence the landowner can demonstrate. Unbreachable boundaries such as those described in the medieval laws were thus more ideal than real. In the 14th century there was a string of disputes between the Church and farmers over ownership. These disputes have crucial implications. In the first place, the Church was introducing a new form of property right; secondly, the Church was gradually establishing the principle that written documentation of property carried more weight than oral testimony (Iversen 1996; Emanuelsson 2005; Orning 2006). The Church was thus introducing both a new form of property right and a new mode of recording it. It would appear logical that the Church benefited from the new approach, and so also that property relations themselves were fundamentally altered as late as in the 14th century. Several archaeologists, in critical studies, have recently pointed out how the retrogressive method, and to a certain extent continuity

scholarship, have exercised influence beyond settlement studies too, and still influence interpretations of both individual objects and of society as a whole (Axelsen 2012; Berg 2013).

ALTERNATIVE VOICES

Although the idea of continuity has been a starting point for much archaeological research, Norwegian archaeology has not been lacking in alternative views. I would draw particular attention to Harald Egenæs Lund, Ottar Rønneseth, Knut Odner and Bjørn Myhre. In 1936, Harald Egenæs Lund (1937) excavated a barrow of the Late Roman Iron Age and discovered hearths, post-holes, charred birch bark, charred twigs and daub underneath the mound. In the post-holes were preserved remains of roof-bearing posts of oak that were rectangular in cross-section. The daub and charred twigs meant, for Lund, that the walls had been woven withies of alder 10–25 mm in diameter, plastered with clay 20–40 mm thick on both sides, while he supposed the bark to have come from the roof. He inferred that these were the remains of a small building, measuring about 3x3 m. Whether that interpretation is correct or the remains were part of a larger building is of minor relevance here. It is, conversely, a matter of huge interest that on the basis of this discovery he concluded that buildings with daub-covered walls and wall posts supporting the roof must also have been found in Rogaland. From the evolutionary perspective of that time, he concluded that buildings without wall banks must have been earlier than the then known Rogaland buildings which had such banks. He also supposed that buildings of the Bronze Age without wall banks must surely be found in Rogaland (Lund 1937; 1939). Such buildings were first discovered considerably later, through Egil Bakka's excavations in Sunnmøre, and in Rogaland after the introduction of open-area stripping (Johnson and Prescott 1993; Løken et al. 1996). Lund's deductions stimulated a dawning awareness of a more complex settlement history, but his ideas were largely ignored.

In the post-War period too, certain studies stand out. Anders Hagen (1953) did not take continuity for granted, and would emphasize rather the importance of considering the farm as a component of its contemporary context. Social anthropological models were applied to understandings of settlement somewhat later, initially by Knut Odner (1969; 1973; 1978) and subsequently by Bjørn Myhre (1978) and Bjørn Ringstad (1992). Myhre (1973a; 1974; 1978) saw a break in settlement around AD 200, a further break around AD 500 and a final break around AD 1350. In the context of Scandinavia, cultural geographical methods were applied to evidence from Jæren quite early on by Ottar Rønneseth (1966; 1974). Of these four scholars, however, it was Myhre who could be said to have had a crucial influence on Norwegian settlement scholarship. Rønneseth was subject to severe criticism (Myhre 1966) and was largely ignored, a situation which may partly be due to personal considerations. Although this is unmentioned by Myhre, it may be down to the fact that Rønneseth was on the 'wrong side' during the Second World War, took his doctorate at a German university, had the German Herbert Jankuhn as supervisor, and published his thesis in German (Stylegar 2001:9–10; Solberg 2014:617). All of these together were not well received so soon after the Second World War. Jankuhn had been a member of the SS, a key figure in Himmler's cultural and propaganda organization *Ahnenerbe*, and denounced Professor Brøgger to the German political authorities and so contributed to Brøgger being arrested (Hagen 1986:269). It is, perhaps, typical that it was a Swede who noticed the potential of Lund's evidence (Stenberger 1953:58). New and foreign ideas appear to have been linked to individual scholars whom one preferred to distance oneself from. Explicit opposition to foreign and innovative lines of thought appear to have afflicted Odner's use of social anthropological models: the vocabulary is rather harsh and hostile (see 'Discussions' in *Norwegian Archaeological Review* 1974 7(2); especially Blindheim 1974). Myhre, however, gained great influence over settlement archaeology in Norway, and is frequently cited — although in my own view, this is the case to a large extent in relation to those of this works which rely less upon social anthropological models (Myhre 1972; 1980; Gjærder et al. 1982; Myhre 1982; 1983; 2002). Myhre's use (1978) of the chieftainship model and identification of the breaks in settlement is one of the few Norwegian studies concerning settlement history that have had an international impact more recently (although not the only one: also Skre 1998).

In the 1990s, landscape analyses inspired from Swedish Cultural Geography and English theoretical trends provided a new view of the agrarian landscape, and indirectly of settlement. Some important studies of this kind are discussed in greater detail along with settlement research around the Oslofjord (Ch. 3.5). Trond Løken, moreover, in connexion with the excavations at Forsandmoen, has both directly and indirectly pointed out a number of aspects of the settlement there that are to some extent in conflict with the idea of continuity, and in part are of such a

character that they could not be revealed by the retrogressive method (Løken and Særheim 1990; Løken 1991; 2001b; 2020) — albeit without having had a fundamental impact on the continuity mind-set. Siv Kristoffersen (1993) has interpreted Modvo in Sogn as part of a model labelled a 'decentralized farm structure'. Although certain principles from continuity scholarship can still be recognized — for instance that burial mounds are linked to the marking of property rights (Kristoffersen 1993:201) — she lays the ground for an approach to understanding Iron-age structures in the mountainous areas in terms of the social, economic and political systems they belonged to while they cannot be uncritically interpreted in terms of the historically known shieling system (Kristoffersen 1993:199). Kjetil Skare (1999) was as far as I am aware the first Norwegian archaeologist who, starting from Anthony Giddens's structuration theory, discussed social conditions using buildings as his primary evidence. Amongst other things, he stressed that building practice in the Roman Iron Age and Migration Period in Rogaland reveals changes moving in the direction of more durable property holding. Most recently, several scholars have been critical of continuity scholarship, and have explored topics that lie outside the bounds of traditional settlement research. In this way, they have contributed to the understanding of issues which cannot be investigated through the retrogressive method, and the results are, in part at least, incompatible with continuity scholarship. Marianne Hem Eriksen (2019) studied the interwoven relationship between architecture, social praxis and the conceptual world, and has contributed much to an understanding of the farm of the Late Iron Age in terms of prehistory's suppositions. Two related studies show that there may have been conscious ideas behind the abandonment of a farm and these demonstrate, therefore, what is lacking from continuity scholarship (Amundsen 2013; Amundsen and Fredriksen 2014).

FARM RESEARCH INITIATIVES

Several initiatives or programmes concerned with research into the farm have either been proposed or partly carried through since Shetelig's first publication of a prehistoric building ruin in Norway around a century ago. The key role of the Institute for Comparative Cultural Research in the many excavations of prehistoric buildings and farms is relatively little known (see, however, Opedal 1999). In 1928, after extended informal discussions, the Institute agreed "to launch comparative investigations into the patterns of development of the farming society as part of its programme" (Stang 1931:113, translated; note the evolutionist premiss), and this was known as the Farming Society Programme. Both Shetelig and Brøgger were associates of the Institute, and very familiar with the discussions, while they also probably knew that the Institute was quite well funded. The Institute had fully 160,000 kroner at its disposal annually from 1925–30: a significant sum at the time when the average annual income was around 2,500 kroner (http://www.ssb.no/histstat/aarbok/ht-0901-lonn.html) (Amundsen 1972:131; Kyllingstad 2008:3, 478, 523). Thus the Institute had an academic programme which archaeological questions matched nicely, as well as having substantial reserves to make use of. It can hardly be coincidental, then, that the first meeting of archaeologists at Universitetets Oldsaksamling in Oslo in 1927 discussed a similar programme of work (Mowinckel 1928:91–8, 104–5). Altogether eight fields of research were presented, and four were prioritized. The building remains panel, comprising Shetelig and Grieg as well as Petersen in the chair, proposed four topics for further investigation:

I. To supplement the portrayal of culture with daily practical objects from the building ruins and the study of the form of the structure itself.
II. The style and form of the settlements in different periods.
III. Population trends; the questions of depopulation, emigration and new settlement.
IV. Connexions with place-names.

The work was to be organized through the individual museums and carried out by individual specialists, albeit using common methods and in close cooperation. The goal was a collected, edited publication with contributions from the various archaeologists. No collected publication ever appeared but a number of major and minor individual contributions did, of which Petersen's (1933; 1936) and Grieg's (1934; 1938) are the best known. In 1943, along with Shetelig, Brøgger drew up a new programme in which, amongst other things, the farm as a sociological and economic unit would be a focus of research (Brøgger 1943; Hagen 2005). Once again there was a close relationship to the Farming Society Programme of the Institute, although the latter now had much less funds available. It ceased financing archaeological work around the same time as the archaeological farm excavations began (Kyllingstad 2008:589). The efforts of the Institute were directed more and more towards the collection of data concerning the existing cadastral

farm. At the same time, the German occupation put barriers in the way of research. The programme was taken up again after the War, but the research was then funded through Norway's General Scientific Research Council (*Norges allmenvitenskapelige forskningsråd*: NAVF). Bjørn Hougen's *Fra sæter til gård* (1947) [From Sheiling to Farm] and Anders Hagen's excavations at Sostelid are the most familiar outputs of this archaeological initiative. In 1950, it was noted in Universitetets Oldsaksamling's *Årsberetning* (Annual Report) that the topic was to be taken up again over its full range, with NAVF providing funding. The money was used, amongst other things, for recording, which was later to be followed up by excavations — but the latter did not come about to any great extent (*Universitetets Oldsaksamlings Årbok* 1951:188–9; Hagen 2005).

Anders Hagen's excavations at Sostelid, Åseral, Aust-Agder, of 1946–49 were clearly inspired by Shetelig's, Grieg's, Petersen's and Gjessing's investigations of building ruins in southern Vestlandet. Hagen discovered little new about the buildings themselves, however, and in many respects these excavations closed this phase. Those investigations of the complete farm unit with fields, walls and graves, and the doctoral thesis which followed, did point the way forward nonetheless. Hagen emphasized that a holistic and detailed understanding of the farm, covering building-types, the use of the fields and the livestock, were fundamental to understanding social and economic conditions of settlement and farm history. Perhaps his most important contribution was that he set the farm in a wider European context on a broad empirical basis, and rejected Brøgger's idea of the farm as the product of some distinctively Norwegian sequence of development (Hagen 1953:11, 113, 118, 196–7). Both Graham Clarke and Gordon Childe were referred to in the dissertation, and Hagen later emphasized (1997:229) how stimulating Childe was in a period of Norwegian archaeology when style history was more important than those social and economic matters that he was immediately interested in.

After that, there was a long period with no major, national initiatives concerned with Iron-age settlement, even though important regional research projects such as the Ullandhaug excavations, the Forsand excavations, the Åker Project and the Vestland Farm Project were carried out (Myhre 1980; Løken 2020; Pilø 2005; Øye 2012). More recently, a new national initiative has been launched. On the basis of St. meld. nr. 15 (2007–2008) Tingenes Tale—Universitetsmuseene [Parliamentary Report no. 15: What Things Say—The University Museums], in 2009 Håkon Glørstad submitted an application to the Norwegian Research Council that was subsequently successful. The application was concerned with 'Research in Partnership' (*Forskning i Felleskap*), under which the five university museums would work together (Sak nr. 2008/16036 in the Museum of Cultural History's Archive). In the application, the need for research into the mass of material that had been produced by heritage management excavations was underscored, and the dissertation which this book is based upon can consequently be seen as part of a wider national initiative.

THE HISTORICAL NATIONAL RESEARCH FRAMEWORK

The deserted farms of the Roman Iron Age in southern Vestlandet had permanent manured fields, farmsteads comprising houses and byres, droveways from the byre out to the pastures, and several other features which have led many to see similarities between the Roman Iron-age farm and the historically known cadastral farm. The similarities have made it easy to focus upon the economic aspects of the Roman Iron-age farm and the prehistoric farm generally. There are also similarities in the most basic tools of the Iron-age famer and his 19th-century counterpart (sickle, scythes, leaf knife, axe, spade, ard and subsequently the plough), domesticated livestock (cattle, sheep, goats, horse and pigs), and varieties of cereal (oats, wheat and barley). Because the farmer's working environment in these two periods had clear similarities, it has implicitly been assumed that the farmer's motivation and reasoning were also alike.

The rational farm or the ethnographic pitfall

In such a conceptual framework, the farm is treated first and foremost as rational mode of organizing agriculture. The famer is presented as a rational economic agent and the highest possible level of production is assumed to be the farmer's only, or at least definitely his most important, motive. In such a conceptual framework, which Janken Myrdal (2013) has labelled the 'ethnographic pitfall', meaning that everything resembles the 19th century, it becomes quite automatic that property relations are also like those of the 19th century. Greater population pressure, apparently an important driver of change, leads, in this perspective, not to change or restructuration of the existing settlement but to the establishment of new, marginal farms, which are abandoned when the pressure falls. It may be noted in addition that the population level, in

broad terms, is calculated on the basis of the number of deserted or newly established farms, so the likelihood of circular argumentation is high (cf. Myhre 1982; 1983). It is therefore, so the argument goes, only new technology which brings about changes in the working methods and farm structure. Since the technology is well known and changes very little after the introduction of iron, there was no reason to change the working practices or farm structure. Although it is true that the working methods of the Early Iron Age and those of the modern period have much in common, the farm structures were not necessarily so similar (Mjærum 2012b).

THE CADASTRAL FARM — UNIT OF DOCUMENTATION OR UNIT OF ANALYSIS?

I have already demonstrated that belief in the stability and continuity of the farm has been strong and pointed out that open-area excavation was introduced to Norway quite late (Ch. 2), maybe precisely because of the powerful belief in stability. Even though some works have sought to challenge the view of the farm as a stable unit, these have had little success until recently (Grønnesby 2019). In my view, one of the reasons for that is that the cadastral farm is used as a unit of documentation in Norwegian archaeology, and that the unit of documentation is rather uncritically used as a unit of analysis in research. Maps that recorded ancient monuments were not produced for a long time (Skjelsvik 1978). Mapping at a scale that supports the plotting of ancient monuments, which means at a scale of 1:5000 or even greater, was fully introduced only in 2002, even if central areas were to a great extent mapped in the course of the 1970s. As a result, the ancient monuments were located using farm and holding numbers and then according to ecclesiastical parishes, something which made it possible to gain an overview of the ancient monuments and finds, initially for researchers and gradually for heritage management too. To begin with, the connexion between the historical cadastral farm and the prehistoric remains found there was taken for granted and not subject to discussion. The cadastral farm was thus the automatic unit of analysis. When better maps became available they were used primarily to illuminate the connexion between known farm boundaries and topographical contexts (e.g. Hovstad 1979; 1980; Farbregd 1983; 1984), and so little used to challenge the perception of the cadastral farm as a geographical unit with its roots in prehistory (but cf. Myhre 1972; 1973a). Even in works with a critical stance towards continuity, the cadastral farm is used to some extent as the unit of analysis (Pilø 2005). In Skre's work (1998), where the influence from European approaches is clear, the cadastral farm continues to be the fundamental unit of analysis. In the Bergen school too, the cadastral farm was the basic unit of analysis, even though several of the works emanating from Bergen point out that an objective was to investigate the age and origins of the farm. When the cadastral farm is the primary unit of analysis it is difficult to challenge the perception of continuity. Virtually all ancient monuments associable with agriculture are sited on a cadastral farm and it appears to be an underlying and sometimes unexpressed premiss that the age of these agrarian ancient monuments determines the age of the farm.

The farm-names

Along with the revision of Norway's 'cadaster' [*matrikkel*] or property register, a Commission for the Revision of the Names in the Cadaster involving Oluf Rygh and others collected information on farm-names, first and foremost in order to standardize spellings. The Commission set about its task with thoroughness and collected not only the earliest known name-forms but also the contemporary pronunciation of the names, and thus gained commendable insight into the historical sources for each individual farm. In the context of the printing of the collected data in *Norske gaardnavne* vols. I–XVIII Rygh had also wanted to explain what the farm-names meant and to assess their age (Rygh 1898:vii–xiv, 7–10). Rygh (1898:4–8) had a clear and explicit view on the relationship between farms and farm-names, and pointed out that farm-names could disappear, new farms could emerge, and that farms could change their names. This source evaluation is much less evident in Olsen's influential Ættegård og helligdom (1926) [Ancestral Farm and Sanctuary], which in many ways set the standard for the perception of the relationship between farm-names and farms even though Olsen himself (1939) was clear about the source-critical problems.

Farm-names are still used to date cadastral farms in some cases. Certain classes of names, such as farm-names that end in *-land*, are essentially dated by means of archaeology (Brink 1984; Vikstrand 2013:28–9), while historians have also concurred in allowing the datings of toponymic types to follow suit when archaeological finds mean that the antiquity of settlement is extended (see 'Diskusjon' in Salvesen 1990:32). Archaeological finds date the

name-sets, in other words, and those in turn date the cadastral farm, and the farm-names are then used to corroborate the fact that the archaeological finds do correctly date the cadastral farm. The relationship between archaeological and place-name scholarship can thus be characterized as "a scientific circle with vague contours" (Gräslund 2010:46, translated). What is much needed at present, therefore, is a critical investigation of the relationship between farm-names, farm boundaries and archaeological finds. This is a key reason why farm-names are not included within the present study.

SETTLEMENT RESEARCH AROUND THE OSLOFJORD

I have outlined the national research history up to this point, and to conclude I shall look more closely at previous research into evidence from the specific area under scrutiny in this study. The history of settlement in Østlandet has also to a large extent been written on the basis of indirect settlement evidence (Pilø 2005) and very much in accordance with the national framework sketched above. This is, in part at least, due to the fact that until quite recently few settlements of the Iron Age had been investigated around the Oslofjord (Østmo 1991; Løken 1998a; Bårdseth 2006; 2008; Martens 2007; Gjerpe ed. 2008). However in Østlandet too, three-aisled buildings with earth-fast posts and no wall banks of the Bronze and Iron Ages had been discovered by the 1970s (Løken 1978) and the early 1980s (Haavaldsen 1983). These had little impact on settlement history, even though Trond Løken (1978), even before the end of the 1970s, suggested that settlement in Østlandet had aspects in common with the situation in Sweden and Denmark; that observation did not really leave much of an impression.

In Pedersen's works (1990a; 1990b; 1999), Lil Gustafson's (1995), Gro Jerpåsen's (1996) and Ingunn Holm's (1995; 2004), the principal sources of evidence were remains of cultivation. Their studies can be seen as the first attempts to break free of the idea of continuity in relation to Østlandet (for an introduction to the models of the 1980s and 1990s and the debate around farm continuity or mobile farmers in Østlandet, see Henriksen 1994; 1995; Løken 1998a). The methods, especially those of Pedersen and Jerpåsen, were inspired by Swedish Cultural Geography. The methodology and source material produced results which do stand apart to a certain extent, not least with the reduced attention to continuity.

Pedersen's studies concerned with the investigations of fossil remains of cultivation at Hørdalsåsen in Sandefjord, Vestfold (1990a; 1990b; 1999), are based, *inter alia*, on Stefan Höglin's thorough recording in the style of Swedish cultural geographical methods. She finds evidence of extensive farming to start with and subsequently intensive cultivation in the Early Iron Age. Her results have since been nuanced and corrected through excavations and detailed archaeometric analysis, but the main lines remain valid (Mjærum 2012a). Jerpåsen (1996) combined the landscape analysis of a major area with detailed studies of cultivation evidence in a smaller region. She perceived the landscape as a process, and emphasized that even though earlier structures often lay out a pathway for later ones, sudden events can cause breaks in the pattern. She also added subtlety in relation to several different elements of the landscape (1996:14). Thus she did not presuppose continuity, and also found a number of breaks in the use of the landscape in her landscape analysis. Both Pedersen and Jerpåsen examined areas within the central agricultural lands which, however, have not been cultivated since the mechanization of agriculture. Ingunn Holm (1995) compared the picture which is produced by studies of the traditional sources for settlement history (burial monuments, stray finds and place-/farm-names) with the picture that comes from studies of clearance-cairn fields. She found that the conventional settlement history produced too narrow a view of settlement (1995:58). Here, we see the first steps taken towards a critique of the idea of continuity.

There are also some studies which made use of the buildings which from 1990 onwards were excavated with the aid of mechanical area stripping. Skre (1998) was the first to use building ruins as a source in a Norwegian doctoral thesis. He emphasized that not all farms were run by independent farmers but often by subordinates in a sort of patron-client relationship. At the same time, he held a more traditional view of continuity, with the cadastral farm as the fundamental unit of analysis and funerary monuments as important sources. In this way, the social situations become comparable with those of Denmark and Sweden while the settlement pattern itself remains relatively distinctly Norwegian. This perspective is also maintained after a fashion in *Østfolds historie* (Stylegar and Norseng 2003). As late as the end of the 1990s the debate around stable farm settlement versus mobile farmers died away (Pedersen 1999). In its place, the discussion turned rather to the forms of settlement and the degree and form of stability. This came about, indeed, because of the large number of building ruins that

were progressively found both in what are now the central and in the marginal agrarian regions, together with the quantity of macro-fossil analyses which yield details of agriculture such as what sort of cereal was being cultivated and what weeds it was associated with. In several works, Torgrim Guttormsen has made use of buildings uncovered by open-area stripping at Moer in Ås. One of his articles was strongly inspired by English landscape studies (Guttormsen 2002). In a more popular scientific article, he pointed out how the evidence just cannot be reconciled with Trygve Vik's detailed studies representing the primeval farm tradition (Guttormsen 1998). He discussed the problems concerning the dating and interpretation of buildings, farm boundaries and farm-names, and the possibility of a central place associated with well-recorded buildings at Veien, Ringerike, Buskerud (Guttormsen 2000; 2001; 2005a; 2016). Pilø (2005) has used Iron-age building ruins primarily to show that the primary settlement-site evidence is incongruent with the dominant idea of continuity. His thesis was first and foremost a critique of the primeval farm model and the peculiarly Norwegian application of the retrogressive method. In the remainder of this work, I draw inspiration both from the alternative voices (Ch. 3.2.1) and Pilø's critique, and aim to find an approach which allows me to research both continuity and breaks in settlement — or maybe every possible grade of continuity and discontinuity.

SUMMARY

Empirical archaeology is often used by researchers long after the theoretical and methodological approaches the data originally pertained to have become obsolete. At the same time, new empirical evidence in settlement research has had extraordinarily little impact on settlement studies. It looks as if the excavation and publication of building ruins became more or less an end in itself. As we have seen, the history of settlement has commonly been written on the basis of archaeological evidence other than the primary settlement material (the buildings), and grave finds have been particularly significant. Influential Norwegian archaeologists' and historians' choices of theory and methods in settlement scholarship in the post-War period differ ever more clearly from those of other Scandinavian specialists. Simultaneously, the situation in respect of sources has been different, a state of affairs which again, in part at least, is due to the faith in continuity in Norwegian settlement scholarship. Norwegian settlement research may thus to a certain extent be said to have been trapped in a hermeneutic circle to which continuity and Norwegian distinctiveness have been key premisses. The premisses have not been affected by apparently contrary data; rather, those data have been explained away ad hoc or neglected. The result is that in certain key areas Nowegian settlement history diverges from that of the remainder of Scandinavia.

It is difficult to divide settlement scholarship up into chronological periods. The widely used partition into cultural history (1900–60), processual (1960–80) and post-processual archaeologies (1980–present) (e.g. Olsen 1997:29–72) is not, in my opinion, at all productive in understanding how continuity has held its ground as a premiss. The belief in continuity and various forms of retrospection have remained dominant since the 19th century even if the explicitly retrogressive method was first developed and clearly articulated at the end of the 1920s. It was initially rather implicitly assumed that the cadastral farm could be traced back to prehistory, and more weight was progressively attached to arguing for such continuity, as one of the bases for the specifically Norwegian application of this method. The free, independently land-holding Norwegian farmer has, as we have seen, been a crucial foundation stone of the construction of the nation, at least from the 19th century and far into the 20th. It was supposed that the owner and the operator of the farm were one and the same person, although he [*sic*] might have had slaves as part of the farm's property. In the 1990s, the view of the farmer as a free landholder was challenged, and this no longer predominates in settlement archaeology. The focus has turned instead to the residence of the lord and collections of farms (Iversen 1997; Skre 1998; Iversen 1999; 2004). The specifically Norwegian version of the retrogressive method has also been subjected to severe criticism (Pilø 2000; 2005; Widgren 2000). This criticism has been largely ignored rather than countered or considered. Parallel with this principal current of development, individual researchers have been influenced from other quarters, and particularly by social anthropological models or cultural geographical methods (Rønneseth 1966; Odner 1969; 1973; Rønneseth 1974; Myhre 1978; Ringstad 1992).

I have not done much to place settlement scholarship in the context of much more general trends in the history of ideas and philosophy. This is because for the most part such ideas reach Archaeology only via other disciplines, while in the present context it would be too much of a digression to give an account of those currents. It is nonetheless clear that certain fundamental modes of thought, such as romanticism, national romanticism, nationalism, Scandinavianism

and perhaps above all evolutionism have played crucial roles in the shaping and maturation of the Norwegian method in settlement scholarship. In this context, what is more interesting to me than how those ideas themselves emerged, or what impact they had on society more widely, is how the ideas have left their mark on Archaeology. I have shown how a peculiarly Norwegian research tradition was born of a belief in the Norwegian people's particular conservatism and the use of a distinctly Norwegian version of the retrogressive method that was developed to make use of conservatism. Alongside that, known prehistoric farmsteads were defined as marginal and so could largely be ignored in research into the settlement patterns. Although several archaeologists have identified aspects of the archaeological evidence which have a poor fit with continuity scholarship, their observations have been widely ignored.

4 THE CRITICAL EVALUATION OF THE SOURCE MATERIAL

The evidence upon which this study is based, a total of 311 buildings from 107 different sites, may be regarded as relatively extensive in archaeological terms, and so to be suited to statistical analyses. There are, however, some source-critical problems with such an approach, and in this chapter I shall give a brief account of how various source-related matters have affected the archaeological material that is fundamental to the present work, prior to presenting my own method (Ch. 5) and my evidence in detail (Ch. 6). I frequently draw attention to the fact that I am engaged in subjective evaluations and that openness is conscious choice. It is hoped that this will make it easier for the reader to maintain a critical connexion with my decisions while my own awareness of these choices is heightened (Kalberg 1980; Bourdieu and Wacquant 1996). The objective is to assess whether or not the process of data collection has produced a random sample. If the sample is random, a relatively low number of buildings may be sufficient to afford a good impression of building practice (Wallis and Roberts 1962:122–3). I discuss, first and foremost, circumstances which affect knowledge of the three-aisled hall, the major part of the evidence. At the same time, I summarily point out certain factors which may have led to other types of building being under-represented. In other parts of this study I look at how the history of research has influenced the collection of data (Chs. 2–3). Here, I discuss whether the research history and other source-related issues have led to skewedness in the evidence. I shall do so by addressing four questions:

1. Building technology: were the prehistoric structures of such a kind as to be identifiable through archaeological excavations? (Ch. 4.1, 4.2).
2. Post-depositional factors: is the place where the buildings were put up accessible to archaeological research? (Ch. 4.6)
3. Management: have archaeological investigations been undertaken at the sites at which these structures stood? (Ch. 4.7)
4. Field archaeology: are the correct methods being used? (Ch. 4.3, 4.4 and 4.5).

If all of these questions could be answered with an unqualified 'yes', we should have complete and consequently representative evidence. That is quite clearly not the case, and I shall attempt, therefore, to demonstrate potentially systematic biases so that I can make allowance for them in my interpretations. The source-critical issues are tightly interwoven, and even though the discussion is based upon the questions outlined above those questions do not structure it. It is also a goal of mine to search for a chronological and spatial pattern, and when the evidence is divided into blocks that could shed light on more limited geographical regions, there will be fewer buildings in each block.

What are usually designated 'buildings' both in the present volume and in archaeological literature generally consist in practice of groups of cut features. Like most archaeological evidence, the buildings of the Iron Age around the Oslofjord are only fragmentarily preserved and are difficult to date precisely. It is often uncertain whether or not the cut features really are from buildings. Moreover some areas and periods appear to be better represented than others. In this particular chapter I shall demonstrate how various source-related factors influence the archaeological evidence at not only the micro-level — in other words, in the recognition of individual buildings — but also at the macro-level: namely the distribution of archaeological evidence in relation to time and space. In reality, archaeologists themselves can affect the micro-level, while at the macro-level the evidence is largely shaped by administrative and bureaucratic circumstances beyond archaeologists' control. Through looking more closely at certain source-critical issues I hope to gain a clear view of the limitations of the evidence, and by taking these limitations into account I hope to identify patterns that are representative of the society that produced the archaeological evidence rather than the society which has collected that evidence. Before proceedings with these critical questions between the micro- and macro-levels, I shall briefly outline what may influence our ability to identify prehistoric buildings more than anything else: namely the building practice of prehistory itself.

BUILDING TECHNIQUE AS A CRITICAL FACTOR FOR EVIDENCE

Elements of built structures that were cut into the ground are, as noted, essential for machine-stripping of cultivated land to be able to find any buildings that once stood in that area. There are therefore several types of building which cannot be identified if this technique is used. There are a number of examples which show that roof-bearing posts were not always sunk into the ground but rather were placed upon stones, slabs or the like (Myhre 1980; Herschend 2009; Grindkåsa 2012a). If all of the roof-bearing posts had rock foundations the building would not be uncovered by machine-stripping. Nor would lafted buildings be revealed. When it was that earth-fast pots were superseded by the laft technique or other styles of building in the agrarian settlements of Østlandet is a matter of debate. It is possible that lafted buildings came into use in the Late Iron Age, to function alongside buildings with earth-fast posts into the Medieval Period (Christophersen et al. 1994; Zimmermann 1998; Weber 2003). Smaller buildings without earth-fast posts or with only shallowly sunk posts are known from the Viking Period at Kaupang (Pilø 2007) although these cannot be linked to an agrarian context. In 2010, furthermore, small building foundations with no earth-fast posts of the Early Iron Age were examined close to a contemporary field in core agricultural areas of Vestfold (Mjærum 2012c). These structures were small, and no artefacts were found even though the method of excavation should have made it more likely than usual when machine-stripping is employed to find any such objects. The fields in which these buildings lay were small, and apparently had not been manured. The absence of artefactual finds, the smallness of the buildings, and the unmanured soils, indicate that the residents of these two structures were of low economic status — like that which occupants of, for instance, sunken feature buildings (*Grubenhäuser*) may have had (Herschend 2009). The combination of the building style and the state of preservation may, then, lead to settlements of low economic standing and settlement of the Late Iron Age being under-represented.

THE IDENTIFICATION OF BUILDINGS: CALLING TO ACCOUNT THE CLAIMS OF THE IDEAL

No standing, three-aisled buildings with earth-fast posts of the Iron Age have been preserved, although there are some parts of buildings such as those at Elisenhof on the western coast of Schleswig-Holstein in northern Germany that are extraordinarily well preserved (Bantelmann 1975). Apart from the very lowest parts of a few posts no major building components of organic material are preserved in Østlandet (e.g. Pilø 2005). The pit that was dug for the post can, however, be recognized by archaeologists because it is filled with soil and other materials of different colour from what is around it. Sometimes the shape of the post itself can be recognized if it had rotted in place and the void it then left was also filled with material of different colour from the fill of the post-hole otherwise (Løken 2020). The evidence used in this study is, as a result, not buildings in a strict sense but rather a collection of cut features in the ground which archaeologists interpret as building foundations if they form specific patterns; in other words, an extremely simple form of analogy. In the great majority of cases, such interpretations are formed by the archaeologists in the field (Løken et al. 1996:27–8). The pretexts for interpreting such features as traces of buildings are first and foremost other, similar, patterns (Carlie and Artursson 2004:165). What are inferred to be well-preserved building foundations thus present complete plans, the highest goal we aim at. To use Henrik Ibsen's expression from *The Wild Duck*, we are aiming at 'the claims of the ideal' (*den ideale fordring*), in the same way that Gregers Werle wanted to call to account and thus to liberate humanity through a ruthless confrontation with the truth (Ibsen 1884). Archaeologists can call the claims of the ideal to account by ruthlessly confronting the re-filled holes we find in the field with the truth as it is available through already published patterns. Field archaeologists are thus often striving to realize certain idealizations: building foundations that are already known. Even though the circumstances of building technique predetermine certain pathways for how a building can be constructed, roof-bearing structures, exterior walls, partition walls, hearths, floors and other elements that form the buildings may be combined in an almost infinite variety of ways, and it is probably very far from all the varieties of prehistoric building-types that are known.

If the patterns of cut features are misinterpreted and the evidence is pressed into patterns that it does not actually have, we lose a real understanding of prehistory. Concurrently, rigid demands for equivalence between idealizations and new finds will lead to variance in building practice being ignored. My subjective impression from a review of excavation reports and publications is that quite generally there is a high level of awareness of the problems with identifying the buildings but that there is inevitably

no guarantee that the interpretations are 'correct'. Gulli *hus* 2 in Tønsberg k., Vestfold, demonstrates some of the problems involved in the identification of a building. The structure is quite well dated to the pre-Roman Iron Age, but only post-holes from four roof-bearing posts and one hearth were discovered (Gjerpe 2008b). Some charred grains were found within the post-holes. As hearths and macro-fossils are rarely if ever found with four-post structures, the building traces were interpreted as part of a three-aisled structure. It may the case that the claims of the ideal were called upon at Gulli: if we do not believe that there are any four-post structures with a hearth and macro-fossils we cannot possibly find them.

THE ELEMENT OF SOURCE-EVALUATION DURING EXCAVATIONS

The discovery of building foundations by archaeologists in the field and the consequent interpretation of those remains is probably the most crucial critical challenge concerning the identification of buildings. It is not always easy to determine which post-holes, hearths and other cut features form part of the footprint of a building. It can also be difficult to ascertain which elements of a building were in concurrent use, as many buildings were rebuilt or repaired. Beyond that, there is a difference in whether or not the structural components have been sunk into the ground, and, if so, how deeply. Finally there are post-depositional factors that govern how much of the cut features can be discovered (Ch. 4.6). The capacity of archaeologists to identify the patterns and the structures plays a part too. From personal experience, I know that the recognition of patterns that represent buildings in an apparently chaotic swarm of post-holes is by no means automatically easy (see also, e.g., Løken et al. 1996), even if drawn plans in publications and reports may give this impression (Solli 2008). An experienced field archaeologist will, as a result, very probably be able to recognize a pattern more easily than a relative novice, all other things being equal (Løken et al. 1996:8, 10). The practice of the Museum of Cultural History in the 1990s, when extremely inexperienced archaeologists were sent out to lead excavations in cultivated fields at sites that had been completely stripped before the excavations began (Ch. 2.4), will very probably have led to buildings being missed. It may have generated geographical skewedness as well. In northern Vestfold, little cultivated land has been developed with the exception of the construction of a new four-lane motorway and a new railway line in the 1990s (Fylkesmannen 2014). The practice of using inexperienced site directors at that date may have led to large areas of cultivated land being built upon with no more than one building being identified (Hansen 1996). Structural conditions have thus very probably caused buildings to be missed even though machine area-stripping was used at sites where three-aisled buildings were thought to have been preserved.

It is also the case that the potential for recognizing patterns is dependent upon the conditions at the particular sites. It is easier to identify a single-phase building with no alterations that is standing on its own in natural subsoil of sand or gravel than a multi-phase building which overlaps other structures on a subsoil of clay and with lots of stones. I have not, though, seen any sign that this has produced systematic biases that affect the outcomes of my own analyses. The great majority of area excavations have produced finds of post-holes that do not form part of any recognized pattern. We just do not know if these post-holes are components of types of building with a ground plan that we are not aware of; parts of poorly preserved buildings; parts of buildings for which the great part of the structure was not sunk into the ground; or quite simply are from structures other than buildings. All of the post-holes with no secure building context remind us, however, that archaeologists do not find *buildings* but rather find cut features that form patterns; and that at the overwhelming majority of sites there were buildings and activities that we have not picked up evidence for.

RADIOCARBON DATING AND PERIODIZATION

To date, there is no building typology for Østlandet, while concurrently little in the way of datable finds is found in the buildings. It is also uncertain that firm traditional building chronologies or typological schemes could be generated (Martens 2005a; 2007). The dating of the buildings is consequently based to a high degree on radiocarbon datings of charcoal or macro-fossils from hearths, post-holes, wall-trenches and -slots. Chronological resolution will therefore be relatively coarse, and the buildings are dated primarily to periods. Although radiocarbon datings are a good way of assigning buildings to chronological contexts, critical factors in respect of the context and 'own age' of the samples can lead to datings being earlier, and occasionally later, than the event which one is trying to date (Ranheden 1996; Dincauze 2003:108–118; Gustafson 2005a; Gjerpe 2008d; Loftsgarden et al. 2013). Most of the buildings are dated by means of radiocarbon, but the context of the sample, the type

of material dated, and the number of dates obtained vary. If several samples from one building have been dated it is relatively common for not all of the dates obtained to fall within a coherent period of time, and authors of reports will emphasize different considerations to try to ascertain which date or dates best reflect the actual date of the building. There is also variance in whether or not authors focus on dating the construction of the buildings or the period in which they were used, even if it is usually difficult to differentiate between those. My own emphasis is on the date of construction of the buildings. I have also undertaken an evaluation of the datings in every case, and as a rule my own assessment concurs with that of the authors. In those cases where that is not so I have based myself upon my own judgment in undertaking further analysis. The dates of the buildings are presented in a variety of ways: e.g. in the 'absolute' terms of calendar years or according to a range of chronological systems, and I have 'translated' both of those styles into the relative-chronological system I use in this study (Ch. 1.1.2). My impression from reading reports and publications and from my own experiences in the field is that there is relatively high awareness of how to take samples and of the selection of material for dating. It is most common for multiple samples to be dated from each building, and when these produce an approximately consistent result it is inferred that the results of dating can be relied upon. If my impression is that the dating is unreliable, for instance where there is inconsistency between a number of results, I have assigned the building a low 'identification score' (Ch. 4.5) even if the building has otherwise been clearly defined.

There are also particular problems with the method of radiocarbon dating itself which archaeologists have to take account of when using the results returned from the laboratories, although they cannot have any impact on those results. Both the method and its issues have been described thoroughly (Michels 1973; Aitken 1990). The C^{14} isotope occurs in the atmosphere, but the level of this isotope varies. The age of a dated sample is given in C^{14} years which then have to be 'translated' into calendrical years. For this purpose, a calibration curve and computer programs such as OxCal have been developed. A calibrated radiocarbon date consequently provides a statistically probable dating in calendar years. This calibrated date is most often presented to one or two standard deviations of probability, i.e. 1 or 2 σ (*sigma*). Dating to 1 σ is 68.2% probable, but will involve a shorter period of time; at 2 σ the dating is that within the range of 95.4% probability and will involve a longer period of time. This has certain consequences for archaeologists which it is valuable to note. In a statistical perspective, one date in twenty should actually lie outside the given interval of time at 2 σ — in simple terms, it will be incorrect (Ramsey 2009). Another point is that it is important to maintain a consistent and sustainable use of either 1 or 2 σ. The greatest challenge, however, is linked to the calibration of samples. The level of carbon isotopes in the atmosphere has never been constant. The calibration curve thus cannot be a smooth exponential curve but will contain a number of flatter sections or 'plateaux' (Ramsey 1994; 2001). This is a particular problem at the transition from the Bronze Age to the pre-Roman Iron Age. Radiocarbon samples from c. 2450 BP ('Before Present', where 'Present' = AD 1950) will calibrate to the period 800–400 cal BC, which fundamentally means they are very imprecise (Becker 1993; van der Plicht 2005). Consequently some buildings from the end of the Bronze Age may be included with the evidence of the pre-Roman Iron Age. At the transition between the Roman Period and the Migration Period, and in the periods c. AD 700–930 and 1050–1200, the curve is flat (Reimer et al. 2004).

It is possible for new calibration of the dates following statistical processing of the results to give more precise datings for some buildings (Rundberget 2012:206–39; Herschend 2016). I have not, however, made it a priority to re-assess the radiocarbon datings because the time-consuming work involved would not really make any difference to the chronological sequence. In the main, I conform to the periodization of the Norwegian Iron Age as it was summarized by Bergljot Solbert (2000) although I adjust a little in light of the limitations of the radiocarbon method. In some cases the transition from the Bronze Age to the pre-Roman Iron Age (BA–pRIA, c. 800–400 BC) is dealt with as a separate phase, although the period of 800–500 BC is usually included in the pre-Roman Iron Age (pRIA, c. 800 BC–0),[3] which thus is a little longer than usual (i.e. 500 BC–0). This does not mean that I am making a case for changes in the conventional periodization; only that I am responding to the practical challenge of imprecise radiocarbon dates. I have also opted to treat the transition between the Roman Iron Age and the Migration Period (RIA–MigP, c. AD 350–450) as a separate

3 In our calendar, there is no year 0, and so '0' here must be understood as the boundary between 1 BC and AD 1. In the mathematical radiocarbon calendar, however, there is a year 0 between the last and first years labelled BC and AD.

phase, partly because of the plateau in the calibration curve which means that a large number of datings fall across both the earlier and the later period, and partly with a view to making it easier to understand the transition between the Roman Iron Age and the Migration Period. Otherwise, though, I maintain the traditional division into the Roman Iron Age (c. 0–AD 400), Migration Period (MigP, c. AD 400–550), Merovingian Period (MerP, c. AD 550–800) and Viking Period (VikP, c. AD 800–1050). There are some buildings that cannot be dated more closely than to a transitional phase between the Viking and Medieval Periods. It is possible, as a result, that my data-set includes some buildings of the Medieval Period (MedP, AD 1050–1537) notwithstanding the limitation of this study to the Iron Age. In an ideal situation, this transitional phase would also be dealt with as a separate phase, but because of the small number of buildings and the uncertain dates, these will in some cases be discussed along with the Viking-period buildings. Because of the relatively wide span of the datings, the evidence will not be extensively sub-divided into phases such as the Early and Late Roman Iron Age. The term 'earliest part of the period' is used instead, as a means of drawing attention to the imprecision that affects the datings in most cases.

AN IDENTIFICATION SCORE

In order to make the basic critical issues clear, I use the term 'identification score' to represent a cumulative assessment of the information value of the remains of a building in respect of building practice. This assessment has to be based upon the recorded traces of the roof-bearing structure, walls, hearths, an entrance, and the dating evidence (Gjerpe 2008a). The assessment is made on the basis of drawn plans. The level of preservation would ideally be based upon every single building's original construction, but for obvious reasons that is not possible. At some sites structures are found which only had walls around part of the structure, looking like structures under a half-roof (Ethelberg 2003; Vikshåland et al. 2007:123–6). Such buildings will promptly be considered poorly preserved given that the expectations are that a well-preserved building of the Early Iron Age will have surviving traces of roof-bearing posts, walls, entrances, hearths and possibly also internal partition walls. With the knowledge that we now have available on building practice in Østlandet, it is difficult to escape these presuppositions when the buildings are identified and their identification score worked out.

Four-post structures are an exception. They probably had no walls, entrances or hearths, and can be considered well preserved even though they consist only of four post-holes. The degree of identification is scored on a scale of 1–4. A score of 1 indicates that only parts or fragments of the building have been identified or that the dating is extremely uncertain. These buildings offer little as sources for building practice although they may be important in delimiting the extent of a settlement both spatially and chronologically. A score of 2 means that the basic elements of the roof-bearing structure have been identified: e.g. if the building is two- or three-aisled. Variables such as length and width may also be observable. A score of 3 means that length, width and the roof-bearing structure have been identified, and that the building is relatively securely dated. A score of 4 means that length and width, an entrance, hearth and the roof-bearing structure have been defined, while the building in question is also well dated. These criteria make it easier to assess which buildings can shed more detailed light on building practice and which only provide information on the extent of individual settlements.

POST-DEPOSITIONAL FACTORS — AGRICULTURAL ACTIVITIES AND REDEVELOPMENT

Buildings from the Iron Age in Østlandet rarely have elements which are still visible above the modern ground surface. The great majority of the buildings have consequently been found by means of machine area-stripping. Open-area stripping only became a common method in the context of heritage management/rescue excavations in the region for which the Museum of Cultural History is responsible at a relatively late date (Ch. 2). As a result, areas which saw development prior to c. 1990 were not investigated for prehistoric buildings, while even from 1990 it took time before machine-stripping trenches came to be used systematically to examine whether or not there were settlement traces in the areas to be built upon. The majority of the buildings excavated before 1990 were therefore either in marginal areas or were discovered underneath burial mounds when the latter were being excavated (Østmo 1991). These practices unquestionably led to a large number of prehistoric building foundations being removed with no archaeological excavation, especially in the contexts of redevelopment and the levelling of land. Meanwhile, normal agricultural work also affects the preservation of settlement traces in cultivated land.

For these reasons I shall briefly discuss if it is likely that prehistoric buildings in certain areas, or from particular periods of prehistory, are less accessible than others to archaeological investigations.

There is no overview of levelling work at a provincial level, but it has been suggested that down to 1986 around 40,000 hectares [ha] had been levelled in Norway, around 40 per cent of which (17,000 ha) were in Akershus (Njøs 2005) even though Akershus accounts for only 5 per cent of the farmland in Norway (Snellingen Bye and Løvberget 2014). It was especially steeper-sided valleys and other areas with a clay sub-soil that had been levelled. Ground-levelling affects not only the valley itself but also relatively large areas around it which in many cases were very probably well suited for prehistoric settlement. It is therefore probable that a higher proportion of buildings have been lost through ground-levelling in Akershus than elsewhere. It is also possible that in some periods settlement was located closer to the steeper valleys or other hilly areas with clay sub-soil than in others. If so, a higher proportion of the evidence from that period would be removed by levelling. Some examples, but no systematic investigations, may indicate that settlement was more often located over clay in the pre- and the early Roman Iron Age, and into the Migration Period, than at other times (Bårdseth 2008; Simonsen and Martens 2008; Grindkåsa 2012b; Gjerpe 2019). There is reason to believe, therefore, that ground-levelling has removed a greater proportion of buildings in some geographical areas, such as Akershus. Similarly some periods, like the pre-Roman Iron Age, may have been affected to a greater degree than others.

Agricultural activities also affect the survival of settlement traces. Some types of activity such as the cropping of green vegetables and potatoes require deeper working of the soil than others, with the consequence of a higher likelihood of the settlement traces being removed. Green vegetables are grown mostly on morainic soil and potatoes also on flat claylands. Other aspects of farming — joining fields together, topography, different tools, erosion, and not least the size of agricultural equipment — also probably have an impact on how deep the ploughing is every year (Skøien 2009). There is reason to believe, then, that modern farming affects some geographical, climatic and topographical situations more than others, and thus also, perhaps, certain archaeological periods. In her study of buildings from the Late Iron Age, Eriksen (2015:202) has shown that the location of the settlements in the terrain varies according to status. There is a basis for supposing, then, that agricultural activity has produced distortions in the survival of traces of buildings in terms both of date and of the types of settlement. It is beyond the scope of this study to explore that systematically, but I shall merely note that the lack of identified hearths and walls in Hedmark (Ch. 6) may be due to the fact that ploughing has been deeper here than elsewhere in the region which this study examines.

Expansion around towns and settlement foci in the 20th century has probably caused a large number of buildings to be removed with no archaeological excavation. In the study region, expansion has been particularly large-scale around Fredrikstad and Sarpsborg, much of Oslo and Akershus, Drammen and the Lier area, and around the towns of Vestfold. This has manifestly meant that fewer buildings are preserved in these locations, although precisely because the development has been so extensive it is quite unlikely that some periods are more poorly represented than others as a result.

The landscape in the study region is characterized by dispersed settlement, roads and other developments of more recent times even outside the foci of settlement. On the whole these developments are unlikely to have produced any serious skewedness in preserved buildings. One possible exception is that the extreme paucity of investigations within extant farmsteads has led to buildings of the Late Iron Age being poorly represented, while this lack of excavations has also meant that it is difficult to determine if the modern settlement has continuity back to the Iron Age (Martens et al. 2009). The lack of fieldwork is due not only to the obvious factor, that there are already standing buildings on the spot, but also to the fact that a range of changes could (or can) be undertaken in farming without applying for planning permission (*Statens landbruksforvaltning* 2012). As a result, many such plans have never come to the attention of the cultural heritage management authorities. The lack of (any scope for) excavations at extant farmsteads means that it is difficult to investigate continuity. It was previously assumed that virtually all settlement of the Iron Age was sited in some close association with the historically recorded farmsteads (Pilø 2005; Chs. 6–7). If that is the case, it creates a major distortion in the evidence, as settlement of Late Iron Age will be under-represented. It is difficult to determine, therefore, whether or not the absence of buildings of the Late Iron Age is due to the fact that modern farmsteads do mostly represent continuity running back the Late Iron Age or is a result of a fundamental change of building practice involving a greater use of lafting. Nevertheless, there have been some

excavations in farmsteads and underneath standing buildings, and I shall return to these in Chapter 7.

ADMINISTRATION AND MANAGEMENT

I have already drawn attention to a distinctly Norwegian approach that has generated a different history of settlement in Norway than in Sweden and Denmark (Ch. 3). This particular national approach has also had an effect on the collection of evidence itself: archaeological fieldwork. The most visible feature is the fact that open-area excavation came into use later than in Sweden, and especially than in Denmark, and it took a long time before it was to become established as an automatic element in cultural heritage management (Ch. 2). Notwithstanding its late start, cultural heritage management has still investigated a high proportion of the known settlement evidence — most of the excavations have been initiated in this area of the overall sector, with the exception of Veien (Gustafson 2016), the Åker area (Pilø 2005) and Romerike (Skre 1998). It is consequently worth taking a closer look at how cultural heritage management has affected the collection of core evidence.

Administratively initiated archaeological investigations are not evenly distributed geographically. Major development projects add to the geographically skewed distribution of buildings. The great majority of large-scale developments over farmland have taken place in Østfold, Akershus and Vestfold, especially in the context of major infrastructural developments. Since the majority of archaeological excavations are the product of administratively initiated investigations, a building has to lie within an area that is going to be developed if it is going to be examined. When that is the case, it is scholarly and bureaucratic considerations that decide if a development will involve excavation. The officialdom of the local authorities plays a key role. There is no study of possibly varying practice amongst the local authorities (*fylkeskommuner*) in the area covered by the Museum of Cultural History in respect of recording, recommendations of dispensation or required protection.[4] There is reason to believe, however, that there are differences, and it is probably of fundamental significance that local authority archaeologists' specialist advice can be over-ruled, either administratively or by politicians (Groseth 2006; Diinhoff 2013). It is the local authority that determines whether an area is to be registered or not. If settlement traces are recorded it is by no means automatic that they will be excavated. The local authority participates in the decision about whether this happens or not. The developer may also choose not to proceed with the project. Major projects are relatively inflexible, particularly roads and railways: a four-lane motorway will not be made to curve around a settlement site. Altogether the scope for granting ancient monuments formal protection is reduced. The developers in the case of major projects are also more inclined to accept the costs of an archaeological excavation because those will be a small proportion of the huge total budget. These factors are also reflected in the archaeological evidence. A truly enormous proportion of the buildings studied in this work were found through administratively initiated investigations in advance of the construction of roads, a railway, and the airport at Gardermoen. There is probably also a greater likelihood of finding buildings through a major infrastructural project than through ten small extensions even if those involve the same area overall. The spatial distribution of buildings (Ch. 6) is therefore more a product of modern development, the practices of cultural heritage management, and the business of archaeological excavation, than of Iron-age settlement. It also appears probable that these practices have led to a significant distortion in the representation of different periods.

AN OVERALL EVALUATION OF THE REPRESENTATIVITY OF THE ARCHAEOLOGICAL EVIDENCE

This section contains an overall assessment of the representativity of the archaeological evidence on the basis of the evaluative and critical factors discussed above.

Spatial distribution: The agrarian settlements of the Iron Age can be assumed with a high degree of confidence to have been sited in association with the cultivated land. The many and large areas that lack any finds of buildings should therefore pose no question in respect of representativity as by far the greater part of the area of study is unsuited to cereal cultivation. Rather, the relationship between cultivated land and buildings is able to indicate how well the buildings are represented in the evidence from the different

4 After a recent re-organization of the cultural heritage protection agency, larger, conjoined administrative districts have been given greater responsibilities and additional duties in respect of cultural heritage management, but this has no effect on the material that this study is based upon.

Table 4.1 *The geographical frequency (in square kilometres of cultivable land per building). The figures for the area of cultivable land are taken from the Central Office for Statistics (Statistisk sentralbyrå, Snellingen Bye and Løvberget 2014).*

Fylke	**Østfold**	**Vestfold**	**Akershus og Oslo**	**Buskerud**	**Oppland**	**Hedmark**	**Telemark**	**Total**
Buildings	93	58	98	7	19	23	13	311
Culitvated land (km^2)	740	414	782	516	1024	1056	252	4784
Km^2 Culitvated land per building	**8**	**7**	**8**	**74**	**54**	**46**	**19**	**15**

administrative provinces, or *fylker* as they were before the recent reform. What determined cultivable land was different in the Iron Age from nowadays, but I am nonetheless of the view that a low level of correlation between what are cultivated areas now and the number of Iron-age buildings implies that such buildings are better represented than when the correlation score is high (areas of cultivation derived from Snellingen Bye and Løvberget 2014). Vestfold, Østfold and Akershus are thus the best represented (Tab. 4.1). Concurrently, the highest numbers of buildings have been found in these provinces. However only one building has been investigated per 7 or 8 square kilometres even in these provinces with the highest number of buildings per square kilometre of cultivated land. The administrative provinces with what is inferred to have been the highest level of loss of prehistoric buildings as a result of agricultural activity and development before machine area-stripping was introduced (Ch. 4.6) are also those with the highest number of buildings in proportion to the area of cultivation. This is most probably because even after the introduction of open-area stripping these areas saw the highest levels of development and therefore also the majority of archaeological excavations. There may very well have been more buildings constructed per square kilometre of cultivated land in Vestfold in the Iron Age than in Buskerud, but not ten times more.

Chronological distribution: The different archaeological periods are also unevenly represented, and there were geographical shifts over time. It is the case that the Early Iron Age (500 BC–AD 550) is more than twice the length of the Late Iron Age (AD 550–1030) but only 15 of the 151 well-identified and dated three-aisled buildings and 29 of the 246 buildings datable to a single period are of the Late Iron Age. There are also certain patterns in the spatial distribution of the various periods. To begin with, the large number of buildings from the pre-Roman Iron Age in Østfold really stands out. There are fully 37 buildings of this period from Østfold but only 12 or fewer in Akershus and Vestfold. Conversely there are fully 48 buildings from Akershus dated to the Roman Iron Age or Migration Period against only 30 from Østfold. A total of 31 buildings from Vestfold are dated to the Roman Iron Age or Migration Period, more than 50% of all the buildings known from this province. Relatively few buildings of the Late Iron Age have been excavated; some possible explanations for that have already been outlined in this chapter (Ch. 4.1, 4.3, 4.6) and these will be examined more closely in Chapters 6, 7 and 9. The geographically skewed distribution of buildings of different periods is not easy to explain. It is probably due to a combination of preferences in the selection of a dwelling site having varied through prehistory and the fact that the relatively few administratively initiated excavations do not provide a comprehensive coverage of the locations that were preferred at different times. This factor is also discussed in Chapters 6, 7 and 9.

The total excavation of large-scale settlement sites is essential for an understanding of the relationships between buildings, or between buildings and graves, cooking pits or other structures. In order to discuss the development of settlement in an area in detail, all of the traces of buildings should be known — a very rare situation in Norway. The majority of area excavations have been, as noted, initiated for heritage management purposes. This means that the area of excavation is, with very few exceptions, limited by the developer's plans and not by the extent of the settlement. The investigation of 1.45 hectares at Ringdal, Larvik k., Vestfold, is a relatively large-scale excavation by Norwegian standards (Gjerpe and Østmo 2008). All the same, it cannot be perceived as anything but a small area of settlement compared with the size of sites in Denmark, and then only if the area of excavation is coincident with the extent of the settlement. Practically no settlement sites in Østfold have securely defined limits, and so only parts of possibly extensive settlements have been excavated. The evidence we have available at present does not, then, allow for a detailed understanding of the organization of the settlements in time or space. In Denmark, the size of Iron-age settlements ranges from 1 to 50 hectares: 55% of them lie between 5 and 25 hectares and

18% between 20 and 50 hectares (Jørgensen 2001:72). There is no corresponding excavation in Norway, and it is not known how large the settlement areas really were. The fieldwork at Forsand in Rogaland is one Norwegian example of how understanding can change fundamentally if a wider area is investigated. Here a larger, coherent, area was examined, and it thus became possible to see that there were several contemporary buildings and farms standing at about the same place, and the settlement was interpreted as a village (Løken 1987; 2001). More recently c. 60,000 m^2 with a total of six areas with settlement traces, and areas more or less void of finds in between them, have been excavated at Dilling outside Moss in Østfold (Gjerpe 2019; Ødegaard et al. 2018; Gjerpe ed., in prep.). There was practically continuous occupation from c. 300 BC to AD 200, while from c. 200 BC at least to the birth of Christ and perhaps to c. AD 150 the settlement can be regarded as a village (Gjerpe 2019). If only smaller portions had been excavated it would have been difficult if not impossible to understand that the buildings at Forsand or Dilling were parts of villages.

Despite the critical problems that I have identified above, the evidence is well suited to a discussion of the key question for this research project. What are needed, though, are methods that take account of the representativity of the evidence, and awareness of the fact that this material is in strict terms *qualitative* evidence, especially in respect of the Late Iron Age.

5 METHODOLOGICAL APPROACH

This chapter explains how the analysis of the archaeological evidence will proceed. In the Introduction, I noted my wish to understand how Hørdalsåsen came to be deserted, and indicated that this was due to property relations and other social circumstances rather than being a straightforward economic adjustment. In Chapter 1 I have put the case for a reflexive relationship between buildings and communities that means that a world-view and social values are reflected in the buildings and the sites at which they are constructed. In simpler terms, I premise that the organization of rights to land can be studied through stability and change in building practice and the settlement pattern.

The objective of the analyses is to show patterns in time and space that will be fundamental to a discussion of rights to land in Chapter 9. My aim is to demonstrate these patterns by means of an analysis of building practice at two levels. In the analysis of building technique I take a more detailed look at the buildings in themselves (Ch. 6) and in the analysis of the settlement pattern I focus on the site at which the buildings are located (Ch. 7) – or, more precisely, the history of that site before and after its establishment as a settlement site (Christensen 1995:15–18, 134–50). I look particularly at variables that are able to assist in defining different types of building, settlement and site. In these analyses, I anticipate the discovery of dynamic trends with variation in both time and space. In consequence of the fact that the farmsteads are viewed both as settlements and as sites with a history both before and after their settlement, the variables include some factors that are not necessarily directly related to the use of the site for settlement.

Here, I wish to give an account of the combinations of qualitative and quantitative methods I make use of to bring out the patterns of settlement, both spatially and temporarily. These patterns will constitute the material basis upon which a discussion of rights to land can be based. By combining quantitative and qualitative methods in a two-stage analysis I aim to bring out quantitative patterns from and within what is, strictly speaking, qualitative evidence. The evidence comprises a series of buildings which I divide, first, into categories from their width, alignment, roof-bearing construction, type of entrance and the like, and from combinations of those categories. Following that, I examine how their capacities and combinations of capacities are distributed in time and place. This means that each category becomes restricted, and the representativity of the evidence makes the analyses more qualitative than quantitative: a single building may have a high impact in some categories. The methods are used iteratively and connectedly in the analyses but are described separately. The analyses have mostly been undertaken using the GIS program ArcGis and the database program MS-Access.

THE COLLECTION AND PREPARATION OF THE DATA

There is no comprehensive database of excavated structures or buildings from the Oslo area. The information on the buildings is based, therefore, on a review of a large number of published and even more unpublished reports in the archive of the Museum of Cultural History (the search was brought to an end in January 2014). On the whole, I keep to the buildings as they are identified in the excavation report or publication. The majority of the buildings are dated by means of radiocarbon dating, a situation that poses a number of challenges (Ch. 4.4). I attach particular weight to the period in which a building was raised. I have undertaken an evaluation of the dating in every single case, and as a rule my assessments of the results agree with those accepted by the authors of the reports. Where that is not the case, I have used my own conclusions as the basis for the analyses. The most common reason for datings to differ is that I am prioritizing the building's date of construction while the authors focus on the period of use. The datings of the buildings are presented in various forms, e.g. in calendrical years (absolute dating) or according to a range of chronological systems, and I have 'translated' both absolute and relative datings to the relative-chronological system I employ in this study (Ch. 4.4).

The administrative provinces are used as the units of spatial analysis without any implication that these entities had their origin in the Iron Age. These regions are, however, of practical value as analytical units as the number of buildings, at least from Østfold,

Akershus and Vestfold, is high enough for statistical analysis. These provinces can also be claimed to be, to some degree, topographically and geographically distinct units.

THE QUANTITATIVE METHOD

In order to draw out relevant trends in the evidence that form patterns I shall employ simple statistical methods with data that are countable or measurable (Wallis and Roberts 1962:1, 24; Drennan 2009:3). Quantitative analysis will be used first and foremost with a range of morphological and structural elements of the buildings, which are divided into geographical and chronological sets. In order to establish different groups chronologically and spatially I shall also divide the evidence up into qualititative groups, such as three-aisled buildings. I shall then produce general values or characteristics such as, for instance, length or alignment, in order to explore whether or not the buildings within the group have additional shared features.

THE QUALITATIVE METHOD

In the analysis of the settlement pattern, I look upon the settlements as sites. There is a qualitative analysis of the site before, during and after the settlement phase; in other terms, the sites' biography. The first element is a simple qualitative analysis that is focused on change through time. The analysis is modelled on the *chaîne opératoire* (Dobres 2000) and the objective is to demonstrate various ways in which a settlement site is prepared, used and abandoned. The focus lies first and foremost on what happened at the site before it was brought into use as a settlement, and then on what happened after the settlement site was deserted, and less on the settlement phase itself.

That settlement phase is then analysed to look for patterning in the spatial, internal, organization of the settlement site. The aim here is to identify types of settlement site, and possible chronological and spatial patterns.

THE VARIABLES AND THE TERMINOLOGY

Here, I shall summarily define and describe the variables within the qualitative and quantitative analyses. The variables within the analysis must naturally come initially from what is observed, and the source-critical circumstances, as noted, impose certain limitations in this respect (Ch. 4). The height of the buildings, for instance, must have been of importance in the Iron Age but the evidence does not allow this to be a variable (despite various attempts to calculate heights: e.g. Jørgensen 2002). The conditions of preservation and excavation also impose certain limitations on the weight that can be attached to the absence of observable variables. Traces of walls, for example, have only been identified at a minority of the buildings examined. This can hardly be due to the fact that all the other buildings had no walls, but rather that the walls were constructed in such a way that no traces were left which archaeological excavation could find. It is also shown by the analyses in Chapters 6 and 7 that several of variables that are noted here were investigated without patterning that appears to be relevant to this study being revealed. Knowledge of how the buildings were treated after they went out of use could have provided a basis for discussing the biographies of both the buildings and the settlement sites. However it is only in a few reports that there is any attention to whether the buildings rotted away, burnt down, or were demolished.

The buildings

The overall impression of the buildings is based upon a qualitative assessment of post-holes, walls, hearths and other cut features. Some buildings give a 'solid' or 'strong' impression, with substantial post-holes and clear walls, while others give a 'lighter' or 'airier' impression. The overall impression may thus be influenced by the thickness of lines used in recording and planning. All the same, I believe that this consideration does have value, especially because it is employed with care, and in combination with other features or trends in the evidence.

The central aisle is formed by the roof-bearing posts of the building and the gable posts are not included. The shape of the central aisle may be straight (two parallel rows), V-shaped (wider at one end), convex (widest in the middle) or concave (narrowest in the middle). If none of these terms fits, the central aisle is described as 'uneven'. The width of the central aisle is ideally measured between the centres of the post-marks, but since such are rarely observed the measurements must in practice be taken between the centres of the post-holes. The width of the central aisle is always measured between the widest hurdles.

The walls can be observed in the form of wall trenches or wall posts. No attempt has been made to separate out different wall structures such as wattling or horizontal planking. In a number of cases it is difficult to distinguish between wall trenches and

wall (drainage) ditches around the building, while in some cases the cut features may have served both functions.

The gable ends are a clear example of building components which it is difficult to observe. Emphasis is attached primarily to separate gable posts because these are commonly regarded as a typical feature of the Late Roman Iron Age and Migration Period (Løken 1997). Separate gable posts are composed of a pair of heavy posts at a greater distance apart than the (majority) of the central aisle otherwise, located at the ends of the building. The post-holes are usually of the same size as those in the central aisle. The separate gable posts probably carried some of the weight of the roof and helped to form a gable which would also look different from other forms of gable end from the outside (Herschend 1989).

The length of the building is measured in the centre of the structure from the outermost recognized structural component belonging to the building at either end. The gables of the building are, as noted, not always visible; nor does it appear to have been the case that both gable ends were consistently the same. Consequently no attempt is made to calculate the inferrable length of a building by reconstructing a mirrored image or anything of the sort in those cases where only one gable end has survived.

The width of the building is given in two forms, both of them measured perpendicular to the long axis of the structure. The measurable width is the greatest distance between surviving components of the building. These measurements are taken from the outer edge of roof-bearing posts or door posts but from the centre of a wall line. Surviving wall ditches are also used to calculate the width of a building, with the measurements then taken from the inside edge of the ditch. If a wall or wall trench is preserved on one side, a mirrored image of the building is produced around the long axis and a width taken as if the building were symmetrical, be that visible or not. If both the walls are preserved where the building is inferred to have been widest, the width is calculated in the same way as a measurable width. A width calculated from the distance to a wall ditch has to be understood as the maximum possible width.

The outer shape of the building is based upon the form of the wall line, and will be described as straight (two parallel rows), V-shaped (widest at one end), convex (widest in the middle), concave (narrowest in the middle) or uneven.

The location of entrances is regarded as of great importance in building practice. Herschend (2009) distinguishes between southern Scandinavian entrances that were positioned in the middle of the building, and were shared by people and beasts, and mid-Scandinavian entrances at the ends of the buildings, with separate entrances for people and beasts. Ann Severine Beck (2011) has further sub-categorized the entrances in southern Scandinavia according to their position. Eriksen (2015) extends her categories by applying them to Norwegian building evidence of the Late Iron Age, and I make use of her categories in addition to one further defined type (Ch. 6.1).

The alignment of the buildings is given in two ways, with varying precision: the starting point is the alignment of the building in relation to the north. No attempt is made to identify the residential or byre sections, and for reasons of simplicity the alignment is always given as the northernmost one. In general terms, building alignments are divided into three sets: N (315–45 degrees), E (45–90 degrees) or W (270–315 degrees). The more precise alignments of the buildings are also given from the northernmost reading, and there are nine different categories (Fig. 5.1). By presenting the alignment with varying degrees of precision this element is made comparable with other, often rather imprecise, reviews of alignments, while the necessary degree of precision is retained (Lindström 1997:112).

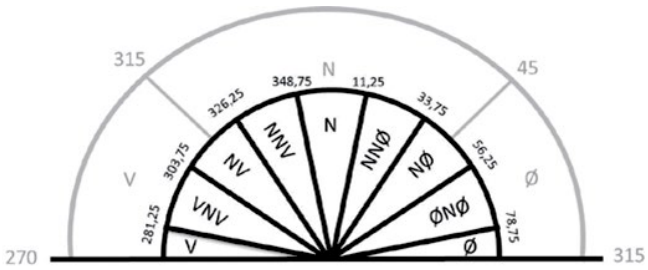


Figure 5.1 *The starting point for the determination of the buildings coarser (grey) or finer (black) alignment. The figures represent degrees around the compass. Drawn by Elise Naumann.*

The hearths are important in identifying residential buildings, rooms that were occupied and activity spaces, and so also are part of building practice. The identification of hearths always depends on decisions made in the past, how deeply the hearths were cut as features, and on more recent conditions for preservation — in practice, how deeply the land may have been ploughed (Jørgensen 2001). It is beyond the limits of this study to identify these two factors and so to investigate the praxis of prehistory. It can concurrently be difficult to identify which hearths belong to a building: hearths that are spatially connected with a building may be either earlier or later than the building itself.

Three-aisled buildings can be divided into subcategories from the distribution of the weight of the roof in proportion to the roof-bearing posts[5] and the walls (Herschend 1989:83–4). In 'over-balanced' buildings, the majority of the weight of the roof is carried by the central aisle. In 'under-balanced' buildings, it is the walls which carry a greater part of the weight of the roof. The relationship between the widths of the building and of the central aisle can really only be calculated if both sections are straight and parallel (Göthberg 2000:21). This is rarely the case, and there has therefore to be a qualitative assessment in the analysis of the building's balance. Since 'balance' is an expression of how steady a building will be sideways, I have used the maximum widths of both the building and the central aisle because I assume that this determined the steadiness of the structure. The balance of the buildings is also assumed to be a chronologically significant feature. In the pre-Roman Iron Age and the first half of the Roman Iron Age buildings were over-balanced. Under-balanced buildings were introduced in the Late Roman Iron Age and predominate in the Migration Period and Late Iron Age (Herschend 1989; Göthberg 2000).

The organization of the settlements

The settlements may consist of further buildings besides one or more houses, as well as four-post structures, graves, cooking pits, hearths, wells, rubbish pits, remains of production and other outdoor activities, together with fencing in a few cases. As noted, the objective is to discover which activities took place at the same time. There are, however, only a few sites where sufficient elements are dated precisely enough for this analysis to be meaningful, and a qualitative analysis would be problematic. The aim nonetheless continues to be to look for possible patterns in the spatial organization of the settlements.

The settlements and sites

The settlements are analysed with regard to four variables which in turn comprise multiple categories of ancient monument. The buildings show when the site was in use as a settlement. Other buildings that were probably not used for residence are regarded as evidence that the site was in use although not necessarily as a settlement. Cooking pits therefore include hearths if those are not linked to a building to a very high degree of probability. Although a distinction is usually drawn between hearths and cooking pits, they are treated as one here as it is often difficult to distinguish between plough-damaged cooking pits and hearths, while concurrently both signal the use of an area, presumably for food-preparation (Narmo 1996; Gustafson 1999; Gjerpe 2008c).

All forms of grave are assumed to have been significant in the foundation of a site. No analytical distinction is drawn between marked and umarked burials because possible visible marking is practically always removed by farming.

'Other' is a catch-all term for all activity that is not comprised under graves, buildings and cooking pits. Cultivation traces and unidentified activities account for the greatest part of this category. Datings from building contexts that are clearly of re-deposited material and not related to the building are also discussed under 'Other'.

Selection

As a starting point, all of the excavated buildings with earth-fast posts were intended to be included in the research be they one-, two- or three-aisled, four-post structures, or other residential houses or worksheds. Not all of the buildings, however, are equally well suited to all of the analyses. As a result, a number of qualitative choices were made in the course of the quantitative investigations. To a large extent, buildings that cannot be dated by period are omitted, as they have little to contribute to an understanding of changes over time. Buildings with identification score 1 are largely omitted too, usually because the buildings cannot be categorized at all readily. Thus even the categories that are used as variables in the quantitative analyses are rooted in qualitative decisions. A high proportion of the problems with the classification have been explained in the context of the source-evaluative challenges and are not the subject of further discussion here. It is, however, worth noting that this selection may make it hard to identify buildings with uneven post-settings. As I have described it, there are several source-critical issues which limit the information value of the evidence. Nevertheless there are quite a lot of buildings that are well identified and well dated, and which are able to shed light upon building practice in Østlandet. By being clear about the potential and the limitations of the evidence, I am able to avoid attaching too much

5 In this study, the term 'roof-bearing posts' is used only of the internal points even when wall-posts and end-posts, technically, are also carrying some of the weight of the roof.

weight to individual results and missing or explaining away trends within the evidence.

The criteria for the selection of settlements for the analysis of sites are that there is at least one well-dated three-aisled building at identification score 2 or more, and that there is an 'adequate basis' for assessing other activity at the site. If my subjective impression is that excavation of a larger area around the buildings and/or the datings of structures would not fundamentally change one's understanding of the site, it is viewed as adequately evidenced. If one takes account of the source-evaluative factors in the analyses, the buildings and the settlement sites that are to be analysed combine to provide a good basis for illuminating change and continuity in building practice and settlement pattern in the agrarian culture of Østlandet in the Iron Age.

6 IRON-AGE BUILDING PRACTICE IN ØSTLANDET

In this chapter I shall present and analyse the material evidence used in this study, and show what it can reveal about Iron-age building practice in Østlandet. In the first part of this chapter I introduce the distribution of the evidence, spatially and chronologically (Ch. 6.1) and then look for regional and local practices (Ch. 6.2). Following that, I investigate changes over time in the various regions, and so also any changes that may have appeared simultaneously (Ch. 6.3).

The objective of this chapter is to examine how the building technique varies in time and space. The patterns discernible within building practice, together with the more general settlement pattern (Ch. 7), will form the basis for my perception of the reflexive relationship between technology and society and so for the discussion of the principal research question (Ch. 9).

INTRODUCTION TO THE DISTRIBUTION OF THE MATERIAL IN TIME AND SPACE

Altogether, 311 buildings or parts of buildings that with more or less probability are from the Iron Age have been investigated, distributed across 107 sites (Tab. 6.1). Because more than 95% of these buildings were uncovered by machine area-stripping of cultivated land, it is on the whole only those elements cut down below the depth of ploughing that have been found: particularly roof-bearing posts.

The buildings evidence can broadly be divided into three categories on the basis of the construction (Ch. 1.1). The 225 probable or possible three-aisled buildings, characterized by two rows of internal earth-fast posts, have been found in all periods and all areas, and are, as noted, the predominant type of residential house in Østlandet in the period in question. All but one of the 11 two-aisled buildings characterized by a single internal row of earth-fast posts are of the Early Iron Age, and these are restricted to Østfold and Akershus. It is not clear whether these were residential houses or not. The only possible one-aisled building was found in Akershus and is of the Viking Period. There are also 29 excavated probable or possible four-post structures which probably served for storage. Only 15 of these are more precisely dated to a period, all but one of which are of the Early Iron Age, the exception being from the Merovingian Period. Most of them have been found in Akershus, Vestfold and Østfold, while one has been found in Buskerud and one in Telemark. A group of 45 buildings do not fit with any of the building-types noted, either because they were constructed in some other style or because the nature of the structure is unidentifiable. These buildings cannot play a major part in the analyses of building practice over the Iron Age but they are included in the discussion of the phasing of the three-aisled building (Ch. 6.3.1).

The 246 buildings that can be more precisely dated to period are not evenly distributed either chronologically or spatially (for a detailed overview of the distribution of the buildings in time and space, and of buildings of uncertain date or

Table 6.1 *The number of buildings from Østlandet grouped by fylke and date.*

Period	Total	Akershus	Buskerud	Hedmark	Oppland	Oslo	Østfold	Telemark	Vestfold
pRIA	77	12	1	2	1	2	46	3	10
RIA	63	22	3	6	8		16	1	7
RIA/MigP	41	14	1		2		7	3	14
MigP	36	12		6	2		7		9
MerP	18	5		4	2		3		4
VP	6	2			1		1		2
VP/MA	5	1	1	1	2				
IA	64	28	1	4	1		13	5	12
IA?	1							1	
Total	311	96	7	23	19	2	93	13	58

uncertain construction, see Appendix 1). By far the majority of the buildings have been found in Akershus, Østfold and Vestfold, and many fewer in Hedmark, Oppland, Oslo, Buskerud and Telemark (Tab. 6.1). There are 77 buildings or parts of buildings dated to the pre-Roman Iron Age, and it is worthy of note that fully 46 of those are from Østfold. From the Roman Iron Age 63 buildings have been found, 22 of which are from Akershus. From the Roman Iron Age/Migration Period phase there are 41 buildings, amongst which Akershus and Vestfold are each represented by 14. There are 36 buildings dated to the Migration Period or the transition between the Migration and Merovingian Periods, relatively evenly distributed amongst the administrative provinces except in that Hedmark is quite well represented with 6 buildings. There are 18 buildings of the Merovingian Period, and Hedmark is well represented again with 4 of these. There are only 11 buildings of the Viking Period or the Viking Period/Early Medieval Period, and three of those are from Oppland, a province in which not many buildings have otherwise been found. The remaining buildings cannot be dated more narrowly but are most probably of the Iron Age.

REGIONAL AND LOCAL BUILDING PRACTICES

The summary introduction of the evidence shows that there may be some variance in building practice and settlement pattern chronologically and spatially even if some of the variation in the evidence is due only to source-related circumstances (Ch. 4.2). In the work ahead, I shall lay great weight upon the identification of local and regional variations in building practice, and Chapter 5 has shown how I shall use simple statistical methods, GIS and qualitative analyses to achieve this end. I shall firstly assess whether the differentiation proposed by Herschend (2009) between southern and mid-Scandinavian building practices can be identified in a detailed review of the buildings from Østlandet. Following that I shall look for other possible features in building practice that are of regional or even more local distributions. Finally I shall explore the building practice in the individual zones. Throughout this chapter, the securely identified and more precisely dated three-aisled buildings are at the heart of the quantitative studies while the two-aisled buildings, the uncertainly classified buildings and the four-post structures are included primarily in more qualitative analyses.

Southern and mid-Scandinavian entrance-types in Østlandet

As has been noted, Frands Herschend found two different building-styles in the Roman Iron Age and Migration Period, in Denmark, parts of southern Sweden, and in the south of Norway. He inferred that the outer Oslofjord area, now Østfold and Vestfold, built according to the southern Scandinavian tradition while Hedmark and Buskerud built according to the mid-Scandinavian style (Herschend 2009:13–15, n.11, fig. 1A–C). He emphasized, however, that the evidence was slender, and was being added to. My intention here is to examine whether Herschend's distinction between southern and central Scandinavian building practices is reproducible when the building evidence from Østlandet is considered as a whole. While Herschend considered buildings of the Roman Iron Age and Migration Period, I am examining the Iron Age as a whole. The most obvious difference between the two building models is the position of the entrances (Fig. 6.1). In the model southern Scandinavian house, the entrance chamber is located around the middle of the building, dependent upon the relative sizes of the byre and the residential area. From one gable end towards the other, the sequence of zones is residential-entrance-byre. The model mid-Scandinavian house, by contrast, has two entrances, one in the byre section and one in the residential end (Fig. 6.1). These entrance spaces are located at opposite ends of the building. The byre and the residential sections are contiguous, with no entrance chamber between them.

Byre and residential sections are rarely identified in the material from Østlandet, and my division into southern and mid-Scandinavian building styles has to be based upon the position of the entrances. Entrances or entrance chambers have been identified as one or the other category in 77 cases, while 17 buildings either have both types of entrance or are difficult to assign to either of the two styles (Tab. 6.2; Fig. 6.2). In some cases posts have been assumed to be door posts; at other times a short distance between roof-bearing posts has been assumed to represent an entrance chamber. In scarce cases entrances have been identified following micromorphological analyses which have revealed areas of wear caused by repeated crossing.

The entrances of Herschend's southern Scandinavian buildings are positioned around the middle of the long sides and are labelled on Figure 6.1 as S1 on the western side and S2 on the eastern side. The mid-Scandinavian entrances are labelled

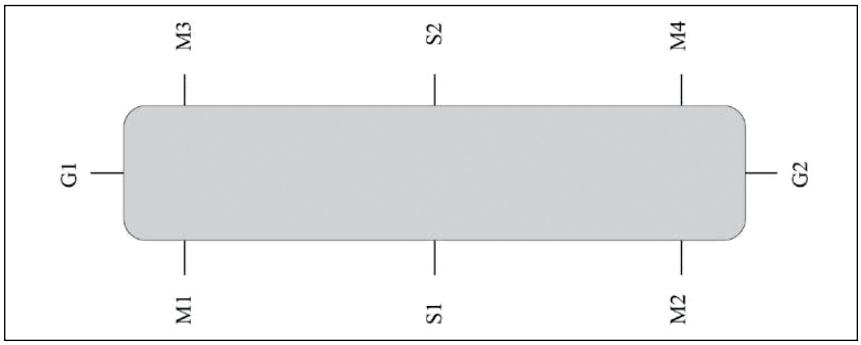


Figure 6.1 *The position of southern Scandinavian (S1 and S2) and mid-Scandinavian (M1, M2, M3 and M4) entrances. Entrances in the gable ends have also been found (G1 and G2). M1 is located in the north-western corner of the building. Drawn by Elise Naumann.*

Table 6.2 *The number of buildings with identified entrances per fylke. All buildings, irrespective of date and identification score.*

Fylke	Central Scandinavian	Southern Scandinavian	Hybrid buildings	Other	Entrance at gable end
Hedmark	7		2	1	
Oppland	6	1	1	1	
Akershus	6	8	1	1	1(?)
Østfold	15	16	3	2	3
Vestfold	10	6	1	1	
Telemark	1			2	
Buskerud	1				
Oslo			1		
Total	**46**	**31**	**9**	**8**	**3**

Table 6.3 *The number of buildings with southern Scandinavian entrances, grouped by period and by fylke. All buildings, irrespective of date and identification score.*

Period	Total	Akershus	Østfold	Vestfold	Buskerud	Herdmark	Oppland	Telemark
pRIA	14	1	12	1				
RIA-MigP	4	1	1	1			1	
RIA	5	4	1					
MigP	4	2		2				
MerP	2		1	1				
VP	1			1				
IA	1		1					
Total	**31**	**8**	**16**	**6**			**1**	

Table 6.4 *The number of buildings with mid-Scandinavian entrances, by period and by fylke. All buildings, irrespective of date and identification score.*

Period	Total	Akershus	Østfold	Vestfold	Buskerud	Hedmark	Oppland	Telemark
pRIA	8	1	7					
RIA	13	2	4	1	1	2	3	
RIA-MigP	6	1	1	3			1	
MigP	12	2	2	4		2	2	
MerP	4			1		3		
VP	1		1					
IA	2			1				1
Total	**46**	**6**	**15**	**10**	**1**	**7**	**6**	**1**

M1 and M2 on the western side and M3 and M4 on the eastern. Extremely few buildings are oriented perfectly E–W, and the entrances are consequently classified from the north, along the western side of the building and then from the north along the eastern side. Finally, the rarer gable-entrances G1 and G2 are noted. Because of the widely and consistently low identification scores, buildings with at least one M-entrance and no S-entrance are counted as mid-Scandinavian while buildings with at least one S-entrance and no M-entrances are counted as southern Scandinavian (Fig. 6.2). Thus buildings of Eriksen's (2019:fig. 4.3) types 2, 6 and 11 can be described as southern Scandinavian while types 1, 4, 5, 7, 8, 9, 10 and 12 are mid-Scandinavian. Nine buildings have both southern and mid-Scandinavian entrances, such as, for example, Eriksen's types 13–15, as a result of which these fit poorly with Herschend's categories. I treat these as hybrid buildings. Eight buildings had entrances positioned in such a way that it is difficult to judge what category they belong to.

The 77 buildings that can be assigned to a category divide into 31 buildings with southern Scandinavian entrances and 46 with mid-Scandinavian (Tab. 6.2). The geographical distribution pattern immediately seems to support Herschend's judgment that the dividing line between mid- and southern Scandinavian building styles ran north of the Oslofjord (Fig. 6.3). In Hedmark, Oppland, Buskerud and Telemark, consequently, 13 of the buildings have mid-Scandinavian entrances and only one in Oppland has a southern Scandinavian entrance. In Akershus, Vestfold and Østfold the 61 buildings with classified entrances divide quite equally between the two styles. The relationship between the building-types does not appear to change with time (Tabs. 6.3 and 6.4). In southern Østlandet both building-types occur throughout the Iron Age even though in the pre-Roman Iron Age the mid-Scandinavian type can be identified only in Østfold (with the possible exception of a poorly identified building in Akershus that might be of the pre-Roman Iron Age). In northern Østlandet no entrances of the pre-Roman Iron Age have been identified but the mid-Scandinavian type occurs in all of the subsequent periods of the Iron Age. As noted, there are also some buildings which at first glance do not appear to fit into Herschend's categories (Tab. 6.2). Nine buildings have both mid- and southern Scandinavian entrances: there are two such hybrids in Hedmark and three in Østfold, but either one or none in the remaining *fylker*. Hybrid buildings of this kind also occur in what would be expected to be the southern and mid-Scandinavian zones beyond the study area (Ramqvist 1983; Carlie and Artursson 2005:59; Diinhoff 2009a:37; Eriksen 2019: fig. 4.3). Furthermore, three buildings from Østfold and one from Akershus have an entrance in the gable end (Tab. 6.2; Ch. 6.2.3).

I shall now investigate whether anything other than the entrance-types distinguishes the buildings of the southern and mid-Scandinavian styles. Since I am studying the length of the buildings amongst other variables and a possible change over time, I shall now restrict this analysis to 69 well-identified and -dated buildings with southern or mid-Scandinavian entrances (Tab. 6.5).[6] The distribution of the well-dated and -identified buildings is rather more skewed than that of all buildings with entrances as 40 are mid-Scandinavian in style and 29 southern Scandinavian. In Akershus and Østfold the mid-Scandinavian buildings are regularly longer than the southern Scandinavian ones, as is also the case with the one southern Scandinavian building in Oppland. In Vestfold, the situation is reversed. Although the evidence from Vestfold is sparse (Tab. 6.5), this difference seems to me to show that the concept of the southern Scandinavian building-type was different in Vestfold than it was in Akershus and Østfold. The mid-Scandinavian buildings are also shorter in Østfold than in any other province. These phenomena

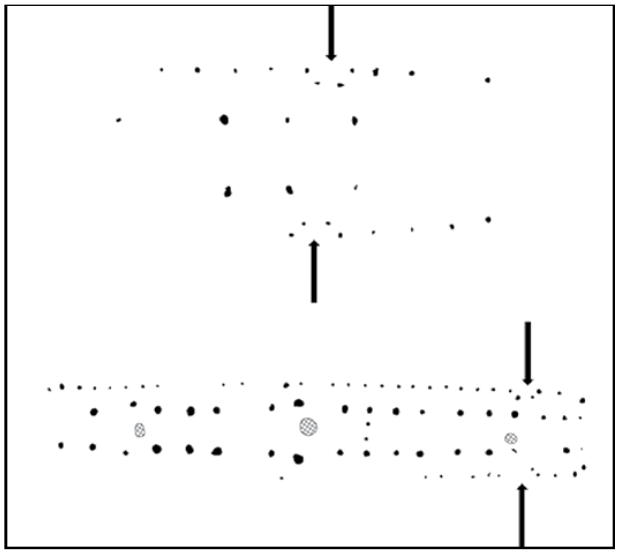


Figure 6.2 *Examples of southern Scandinavian (upper) and mid-Scandinavian (lower) building practice. Drawn by Jan Kristian Hellan.*

6 I exclude seven buildings that are not well-identified or securely dated to a specific period, and Skøyen *hus* 1 because the classification of the entrance is extremely unreliable.

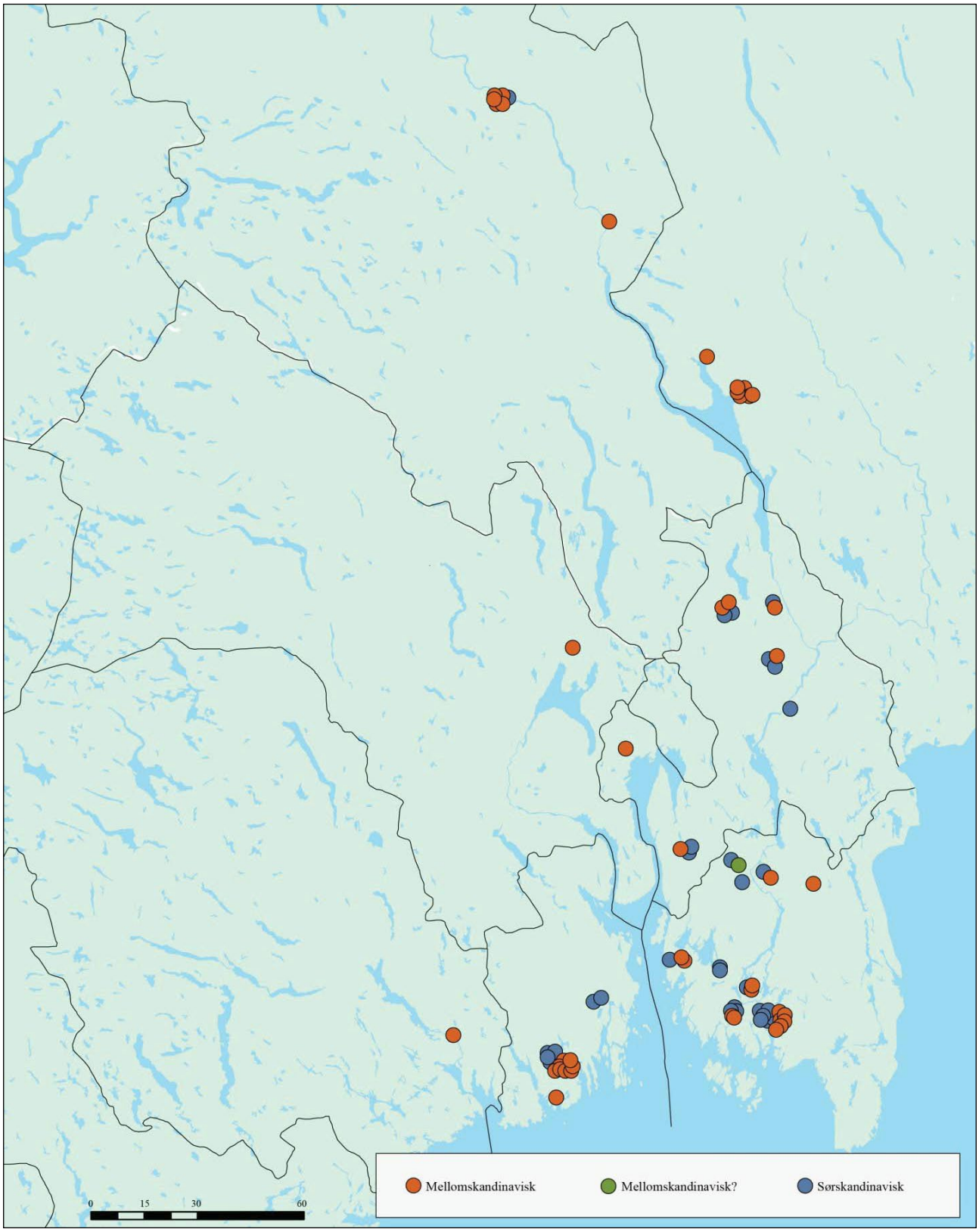


Figure 6.3 *The geographical distribution of buildings with southern and mid-Scandinavian entrances. Drawn by Elise Naumann.*

indicate the existence of a regional building practice in Vestfold, something I return to in Chapter 6.2.6.

There are no real differences between mid- and southern Scandinavian buildings in terms of wall trenches, wall posts or separate gable posts even though wall posts can be seen to occur rather more frequently in southern Scandinavian buildings (Tab. 6.6). This may in part at least be due to the fact that no walls have been identified in Hedmark, where only mid-Scandinavian buildings are found. At the

Table 6.5 *The mean length of buildings with southern and mid-Scandinavian entrances dated to a particular period and with identification scores of 2 or more. The number of buildings in brackets.*

Fylke	Central Scandinavian	Southern Scandinavian
Hedmark	27 m (6)	–
Oppland	24 m (6)	14 (1)
Akershus	28 m (6)	15 (8)
Østfold	21 m (14)	17 (15)
Vestfold	24 m (7)	28 (5)
Telemark	–	–
Buskerud	45 m (1)	–
Oslo	–	–
Total	**25 m (40)**	**18 m (29)**

same time, separate gable posts are more common in southern Scandinavian buildings in Akershus than in mid-Scandinavian ones; the opposite is the case in Vestfold, however. Altogether, around the same proportion of southern and mid-Scandinavian buildings have separate gable posts. Wall trenches occur more often in mid-Scandinavian buildings than in southern Scandinavian ones in Østfold, but otherwise it is difficult to discern any pattern (Tab. 6.6).

At a detailed level, I would stress the chronological distribution of buildings with three entrances of the mid-Scandinavian type, which are represented by a total of eight examples (one entrance at one end and paired opposite entrances at the other end of the building, corresponding to Eriksen 2019: fig. 4.3 types 8 and 9; Tab. 6.7). In Eriksen's study of buildings of the Late Iron Age (2015:fig. 4.26) these entrance-types are absent in the period AD 550–650 and it was therefore reasonable to infer that they were introduced first some way into the Merovingian Period. However, as I find such entrance-types already in the Early Iron Age — although not from the early Merovingian Period — the absence of evidence from that phase looks rather like a lacuna.

Altogether, my analysis of buildings with entrances of Herschend's southern and mid-Scandinavian types has thus demonstrated a division between the northern part of Østlandet (Oppland and Hedmark) where all of the entrances — with one uncertain exception — are of the mid-Scandinavian type and the southern part of Østlandet (Østfold, Vestfold and Akershus) where the two entrance-types were in use side-by-side. The evidence from Buskerud and Telemark is at present too slight for the patterns there to be treated as meaningful. I have also indicated that there are certain divisions within these two areas. The length-ratios between southern and mid-Scandinavian buildings, for instance, are different in Vestfold than they are in Akershus and Østfold, while Østfold also stands apart in that its mid-Scandinavian buildings usually have wall trenches. In what follows, I shall explore whether other features might corroborate these regional distinctions and reinforce the perception of more local building styles.

Table 6.6 *The distribution of the securely identified wall posts, wall trenches and separate gable posts in well-identifed and well-dated southern and mid-Scandinavian buildings in Akershus, Østfold, Oppland and Hedmark.*

	Central Scandinavian				Southern Scandinavian			
	Wall trench	Wall post	Separate gable post	Number of buildings	Wall trench	Wall post	Separate gable post	Number of buildings
Akershus	2		1	6	–	3	5	8
Østfold	6	7	2	14	2	8	1	15
Vestfold	2	3	4	7	3	2	2	5
Oppland	2	3	2	6	–	–	1	1
Hedmark	–	–	3	6	–	–	–	–
Buskerud	–	1	–	1	–	–	–	–
Total	**12**	**14**	**12**	**40**	**5**	**13**	**9**	**29**

Table 6.7 *Buildings with entrance-types of Eriksen's types 8 and 9.*

Building number	Building name	Dating	Fylke	Gable	Entrances	Entrance Eriksen	Length	Entrance_ Beck
95	Solberg nordre (Lok. 28), hus 1	pRIA	Østfold	Separate gable posts	M1M3M4	Type 8 9	30,5	Type 8 9
189	Valum hus III	MigP	Hedmark	Separate gable posts	M1M2M3	Type 8 9	37,9	Type 8 9
182	Åker hus I	MerP/VP	Hedmark	Separate gable posts	M1M2M3	Type 8 9	31,7	Type 8 9
213	Lille Børke hus 3	RIA	Hedmark	_	M1M3M4	Type 8 9	23,0	Type 8 9
192	Vidarshov A	RIA	Hedmark	Separate gable posts?	M1M2M3	Type 8 9	11,6	Type 8 9
323	Brandrud I hus 1	RIA/MigP	Oppland	Separate gable posts	M1M2(M4?)	Type 8 9	26,7	Type 8 9
149	Vister_R3_Hus1 (E18 Eidsberg)	RIA/MigP	Østfold	Separate gable posts	M1M2M4	Type 8 9	35,6	Type 8 9
104	Vøien, Hus 2	RIA/MigP	Akershus	Separate gable posts?	M2M3M4	Type 8 9	44,4	Type 8 9

The alignment of the three-aisled buildings

I shall now examine whether the alignment of the building might reinforce a distinction between northern and southern Østlandet. Not all of the more precisely datable and well-identified three-aisled buildings have the same alignment (Figs. 6.5 and 6.4; Tabs. 6.9–6.10). In Østfold, Vestfold, Akershus and Buskerud the majority of the buildings are aligned virtually N–S while in Oppland and Hedmark the majority are oriented more or less E–W. We thus have two regions with their own distinctive alignments and these nearly coincide with the two regions with, respectively, mid-Scandinavian entrances and a mixture of mid- and southern Scandinavian entrances. In both regions there are buildings which diverge from the predominant direction of alignment. The buildings in Buskerud differ in that they are mostly N–S while the only case with identified entrances is of the mid-Scandinavian type. Should future excavations produce just one building with southern Scandinavian entrances, which I consider entirely possible, Buskerud would then fit in with the southern region where both styles of entrances were in use. Alternatively, Buskerud could have its own local building style involving buildings with mid-Scandinavian entrances but mostly aligned N–S.

In southern Østlandet (Østfold, Vestfold and Akershus) there are 99 buildings aligned N–S and 26 oriented E–W. There seems, as a result, to be a degree of correspondence between alignment and length in the two regions (Tabs. 6.8–6.9). Buildings of divergent alignment are shorter than others and measure 7–18 m in length, with four exceptions. The longest buildings with divergent alignments are distinct from the other E–W buildings in other respects too. The longest building, Borgen *hus* 1 (27.5 m) is on an alignment of 47 degrees, just two degrees outside what would be counted a N–S alignment. Two other buildings with untypical alignments, Dikeveien *hus* 2 and Glemmen *hus* 2, are both dated to the transition between the Bronze Age and the pre-Roman Iron Age and may be of the former period. This could mean, then, that the standardization of alignments began in the Iron Age. If that is the case, an even clearer picture of the Iron-age buildings oriented E–W being shorter than the others emerges. Two further buildings in Akershus with divergent alignments that are more than 18 m long may disturb this picture somewhat, but these examples have identification scores of 1 and may be the product of several structures interpreted in the field as a single building. In other words, it is predominantly and possibly exclusively short buildings that can be aligned differently from the majority. In northern Østlandet (Oppland and Hedmark) five buildings out of 26 have a divergent, N–S alignment. These too appear to stand apart from the majority which are oriented E–W. The data overall are sparse, but in the periods in which buildings of both alignments are found it is those which lie N–S which are the shortest (Tabs. 6.8–6.9). The mean length of the E–W buildings is 23 m while that of their N–S counterparts is 13 m. Four of the N–S buildings are in the range of 5–18 m in length while the fifth is 23.5 m long.

The relationship between length and alignment is thus able to reinforce the identification of two regional building-styles within Østlandet, with a clear division between northern and southern zones. The buildings in northern Østlandet are primarily oriented E–W and only have mid-Scandinavian entrances. The buildings in southern Østlandet are mostly aligned N–S and have both southern and mid-Scandinavian entrances. Around 80 per cent of the well-identified and well-dated three-aisled buildings thus conform to the normative alignment. In both regions around 20 per cent of the buildings diverge in alignment

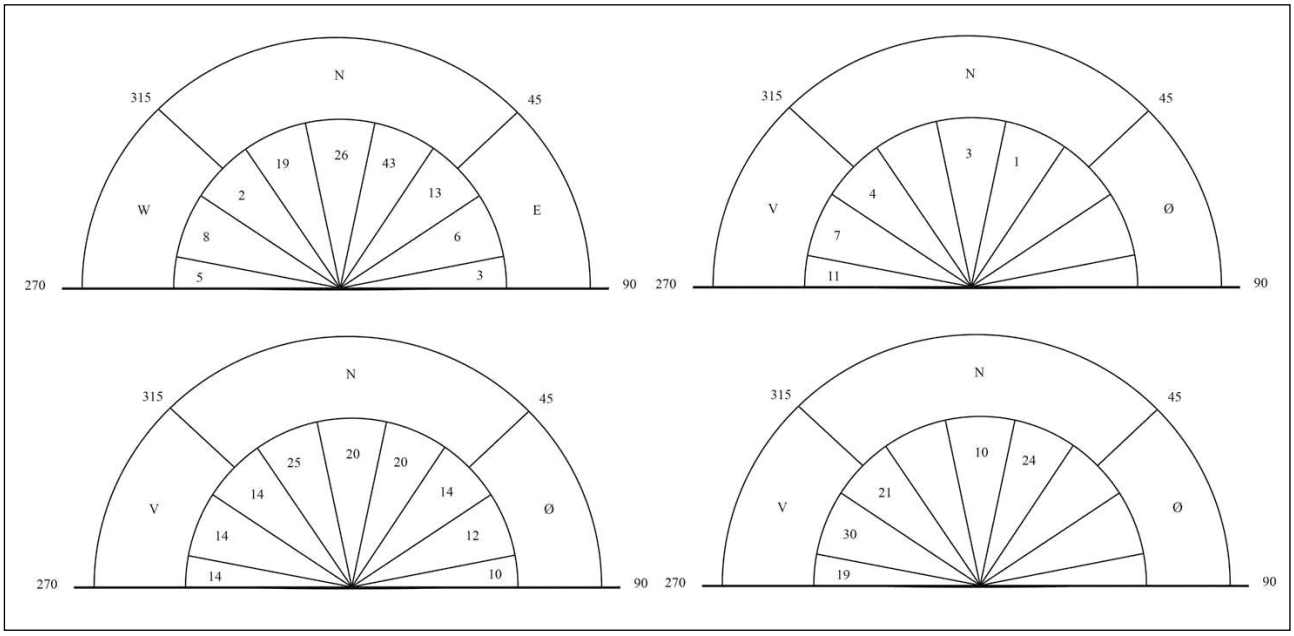


Figure 6.4a–d *The length and alignment of the more precisely dated three-aisled buildings with identification scores of 2 or more in northern and southern Østlandet. From upper left to lower right: buildings in Vestfold, Akershus, Østfold, Buskerud and Telemark grouped by finer grades of alignment; buildings in Oppland and Hedmark grouped by finer grades of alignment; mean lengths in Østfold, Vestfold, Akershus, Buskerud and Telemark grouped by finer grades of alignment; mean lengths in Oppland and Hedmark grouped by finer grades of alignment. Drawn by Elise Naumann.*

from the majority, and these structures are shorter on average. The mean length of the buildings with divergent alignments is approximately the same in both regions while the buildings with standard alignments are rather longer in northern Østlandet than in the remainder of the study area.

To this point, I have been considering a *broad* grouping by alignment, in just two categories, broadly E–W or broadly N–S. If we look at finer grades of alignment, divided into nine categories (Ch. 5.4.1), the picture becomes more nuanced (Tab. 6.10; Fig. 6.4). In Hedmark and Oppland, most of the buildings are aligned to the west, west-north-west or north-west. Those buildings aligned to the west-north-west are clearly the longest, with a mean value of 30 m. What wrecks the impression given by the broader alignments, however, is that the single building aligned to the north-north-east is a full 24 m long and thus produces the second highest mean value. The three buildings whose finer grade of alignment is to the north, however, are only 10 m long on average, which does support the impression given by the broad categories of alignment. The 11 buildings aligned to the west, moreover, have the next shortest mean length at 19 m. The buildings from Akershus, Østfold and Vestfold also produce a more nuanced picture if one considers the finer grades of alignment. Quite definitely, most of the buildings are aligned to the north-north-east, north and north-north-west, and there are only two aligned to the north-west. The buildings aligned to the north-north-west are 25 m long on average while those aligned to the north and

Table 6.8 *Mean lengths of buildings aligned N–S and E–W grouped by fylke. Three-aisled, well-identified and closely dated buildings.*

	Mean	Akershus	Østfold	Vestfold	Hedmark	Oppland	Buskerud	Oslo	Telemark
N–S	20	19	20	23	12	13	30	14	5
E–W	18	15	13	13	25	21			

Table 6.9 *The broad alignment and mean length in metres of buildings dated to specific periods and with identification scores of 2 or more.*

	Northern Østland		Southern Østland	
	Length	Number	Length	Number
E–W	23 m	21	14 m	26
N–S	13 m	5	20 m	99

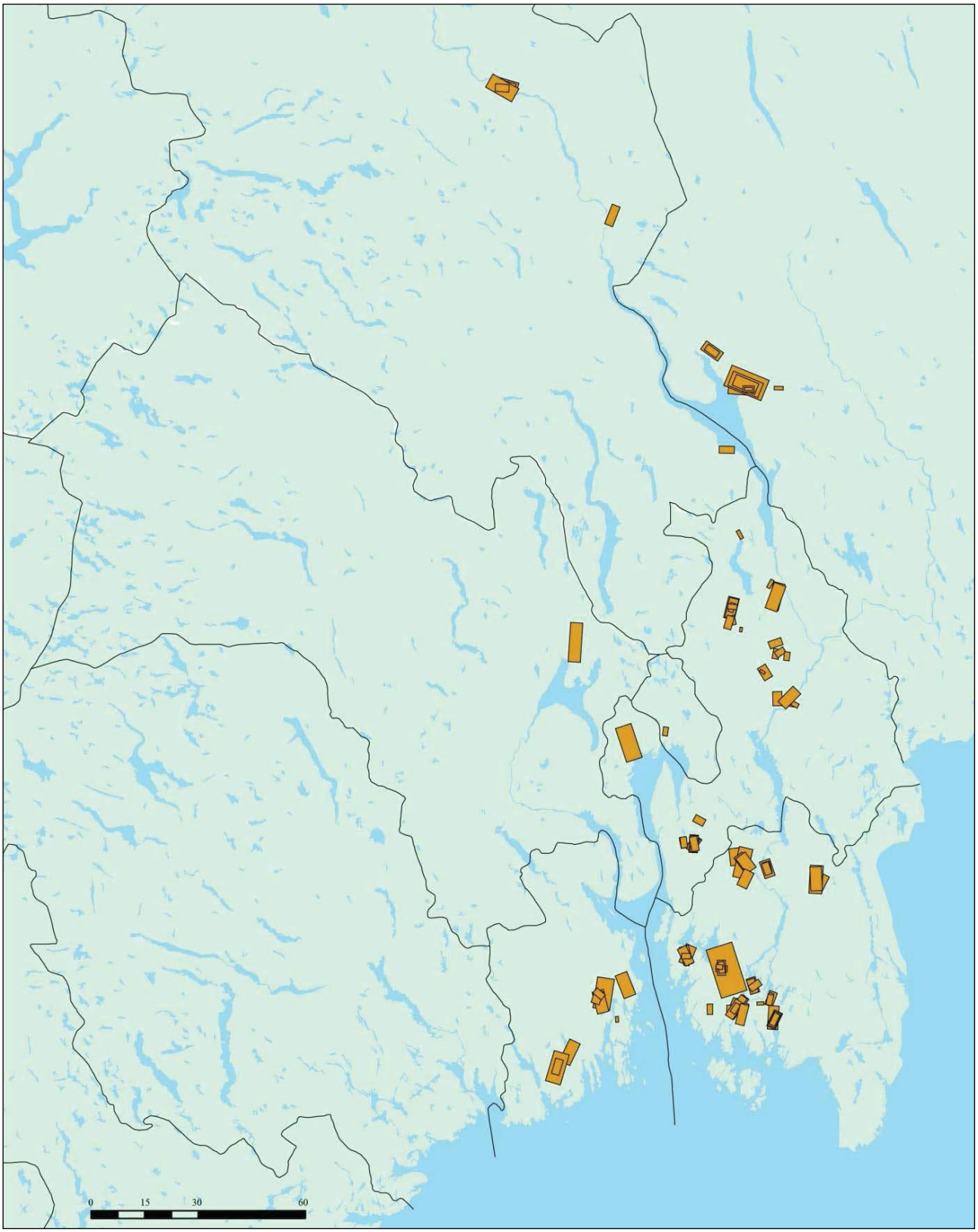


Figure 6.5 *Map of Østlandet with alignments and lengths of well-identified and closely dated three-aisled buildings. Drawn by Elise Naumann.*

the north-north-east are the next longest at a mean of 20 m. The shortest buildings are only 7 m long on average and are aligned to the north-west.

It is thus harder to reproduce the apparently clear pattern generated by the broad categories of alignment with a finer gradation of alignment. Nevertheless a certain pattern does emerge. The alignment defined to

Table 6.10 *Finer grades of alignment and mean lengths of three-aisled buildings dated to a specific period and with an identification score of 2 or more from northern (Hedmark and Oppland) and southern (Østfold, Vestfold and Akershus) Østlandet respectively.*

Alignment	**Number of Buildings**		**Mean length**	
	Northern	Southern	Northern	Southern
N	3	26	10 m	20 m
NNV		19		25 m
NNØ	1	43	24 m	20 m
NV	4	2	21 m	14 m
VNV	7	8	30 m	14 m
V	11	5	19 m	14 m
NØ		13		14 m
ØNØ		6		12 m
Ø		3		10 m
Total	**26**	**125**		

a finer degree that coincides with the greatest mean length is not the most common alignment, but the second most common in northern Østlandet and the third most common in southern Østlandet. In northern Østlandet there are eight buildings aligned closer to the north than the group with the longest mean length and 11 aligned closer to the east. In southern Østlandet there are 14 buildings aligned closer to the east than the group with the longest mean length and 93 closer to the north and west. In this way, the pattern that was so clear when the buildings were analysed in terms of broad alignment can indeed be reproduced by analysis in terms of finer grades of alignment, but the pattern becomes more nuanced. It appears that the principal alignment in northern Østlandet is west-north-west or west and that in southern Østlandet is north-north-west or north-north-east, depending upon whether one attaches more weight to the alignment of the majority of the buildings or to the alignment of the buildings with the higher mean length. In what follows, I shall assess, then, whether we can distinguish landscapes with their own building styles within these two regions, or indeed perhaps cutting across those regions. For the most part I focus on the three-aisled buildings but I shall also briefly consider the two-aisled buildings and four-post structures.

Other regional features of the three-aisled building

In assessing possible further regional or local distinctive features of three-aisled buildings, I shall primarily look more closely at the 157 such buildings that are relatively narrowly dated to period and have identification scores of 2 or more. Details such as wall structure, hearths, and the ratio between length and width will lie at the foundation of this assessment.

I shall begin with a study of the separate gable posts. In Østfold these have been found in seven of the 54 well-identified and well-dated buildings of the pre-Roman Iron Age, Roman Iron Age and the Roman Iron Age/Migration Period but not in the four well-identified and -dated structures of the Late Iron Age. None of the 22 buildings (eight well-identified and well-dated three-aisled buildings) of the pre-Roman Iron Age in Akershus and Vestfold had separate gable posts but these are, conversely, found in the Roman Iron Age, Roman Iron Age/Migration Period and Migration Period in both provinces, and also in the Merovingian Period in Vestfold. In Oppland separate gable posts remained in use in the Migration Period/Merovingian Period transitional period, and in Hedmark as late as the transition from the Merovingian Period to the Viking Period. It may therefore be considered that separate gable posts were an older feature in the south than to the north.

A distinctive feature for Hedmark is the complete absence of identified hearths in three-aisled buildings. This is very probably because the hearths have been removed by plough action or other taphonomic factors, not because the buildings had no hearths. Nor have wall trenches or wall posts been securely identified in Hedmark, although one partially excavated three-aisled building of the Migration Period at Åker may have a surviving wall trench (Pilø 2005:99–100). It is entirely likely that the buildings had both hearths and walls, but no traces have been preserved. The large number of cooking pits from Hedmark, some of them close to the buildings (Pilø 2005), may indicate that the absence of hearths is not solely due to deeper ploughing in Hedmark than elsewhere, even if

Table 6.11 *Under- and over-balanced, well-identified and closely dated, three-aisled buildings by fylke.*

	Number of buildings	Number of buildings with balance	Balanced	Overbalanced	Underbalanced
Akershus	38	16		6	10
Buskerud	4	3		1	2
Hedmark	13	0			
Oppland	13	7		3	4
Oslo	1	1			1
Østfold	65	39		12	27
Telemark	1	0			
Vestfold	22	12	1	3	8
	157	**78**	**1**	**25**	**52**

cooking pits are often dug more deeply than hearths. It is, however, probable that the hearths were only shallowly sunk, lay flat on the ground or were raised, and have been ploughed away as a result. The walls cannot have been sunk deeply into the ground either. In the other provinces there are also a number of buildings with no surviving traces of hearths or walls; what is unique for Hedmark is that no traces of that kind have been preserved.

Altogether, 78 well-dated three-aisled buildings with identification scores of 2 or more have both wall lines and internal roof-bearing post-holes preserved to the extent that it is possible to calculate the balance of the building (Ch. 5.4.1). In most of the administrative provinces about two-thirds of the buildings are under-balanced while in Oppland there are almost equal numbers of over- and under-balanced buildings (Tab. 6.11). This feature too, then, points to a differentiation between southern and northern Østlandet.

Østfold stands apart in respect of other features besides the separate gable posts. Several buildings of the pre-Roman Iron Age have a type of wall or wall trench that has not been observed in other parts of the area of study (Fig. 6.6). These walls or trenches appear only partly to have been aligned along the length of the buildings and are longer than the building itself (Dikeveien hus 1, 4, 5; Nøkleby hus 1). These may have been walls that extended into windbreaks or fences, or possibly droveways. The walls/fences with the buildings at Dikeveien 5 were identified

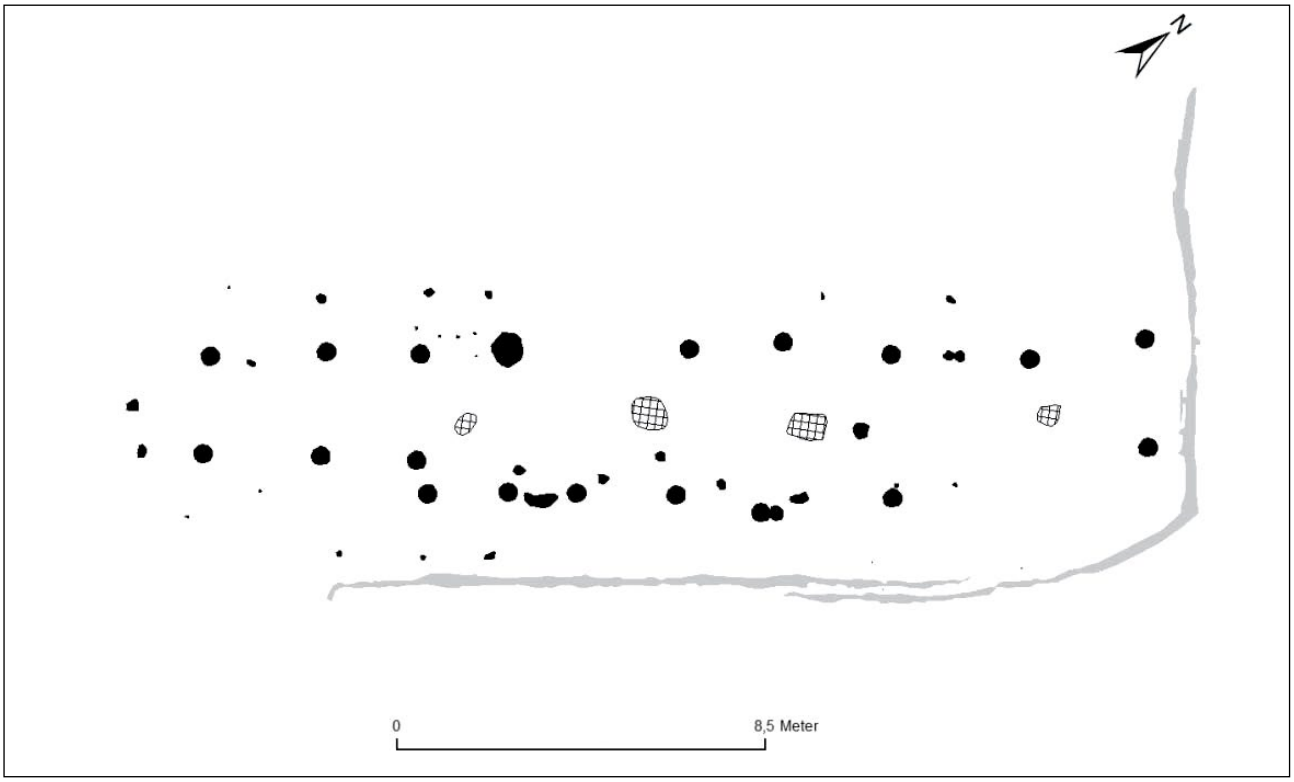


Figure 6.6 *Dikeveien hus 1, an example of a building with 'unusual' walls. Drawn by Jan Kristian Hellan.*

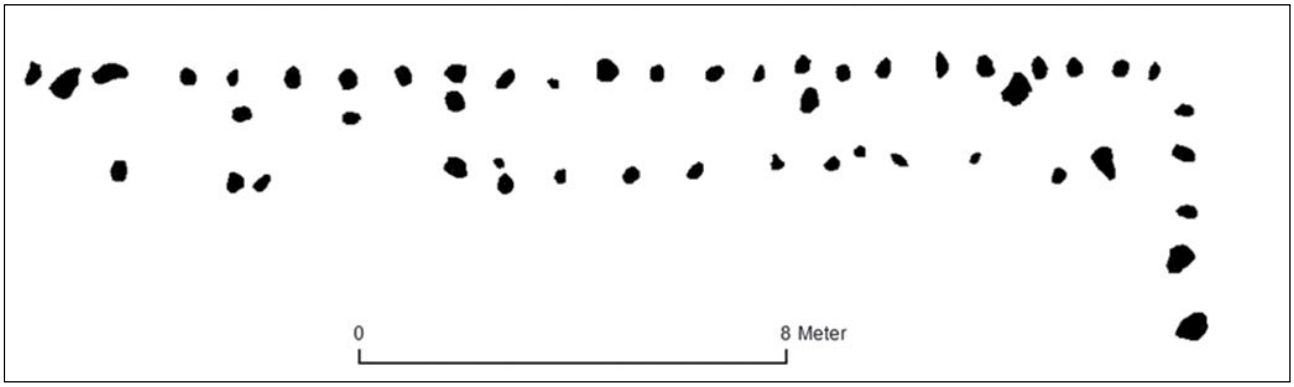


Figure 6.7 *A pent-roofed building from Østfold. Drawn by Jan Kristian Hellan.*

by wall posts and so are not drip-trenches or drains. The distance between these three sites is less than 2 km, and irrespective of whether these cut features are interpreted as walls or fences, they express a local technical choice. Such choices may in turn reflect some sort of local community or perhaps a distinctive building practice at a district level. Østfold also stands distinct from the other provinces in that there are three buildings with entrances in the gable end (Nøkleby building 1, Glemmen building 2 and Askim parsonage building 1). It is possible, too, that there was an entrance in the gable end in the poorly identified and weakly dated Nannestad building 3 from Akershus. All of these buildings are of the pre-Roman Iron Age. The only identified building with a pent roof is also from Østfold (Fig. 6.7).

My survey reveals, then, that three-aisled buildings in northern Østlandet were predominantly oriented E–W, have solely mid-Scandinavian entrances, and on average are longer than the buildings in southern Østlandet, where the buildings were aligned N–S and have both mid- and southern Scandinavian entrances. There are also aspects of building style which show quite local building practices. When the evidence is grouped by period and by province, however, each group appears relatively small, and the patterns must therefore be treated circumspectly for now. I shall examine, therefore, whether features of two-aisled buildings and four-post structures are also able to support the pattern that has appeared so far (Ch. 6.2.4, 6.2.5).

Two-aisled buildings

Five two-aisled buildings have been found in Akershus and six in Østfold; there are none anywhere else in the study area (Fig. 6.8; Tab. 6.12). Two-aisled buildings are often dated to the earliest phase of the Bronze Age or the transition between the Neolithic and the Bronze Age (Børsheim 2004).

Table 6.12 *All two-aisled buildings.*

Period	Total	Akershus	Østfold
pRIA	5	1	4
IA	2	2	
RIA	2	1	1
RIA/MigP	1		1
VP	1	1	
Total	11	5	6

There are several points, however, which indicate that the interpretation and dating of the two-aisled buildings I discuss in this study is correct. Several of the buildings stood alone with few other cut features near them. This makes their identification during fieldwork more straightforward and reduces the risk of dating evidence being redeposited, which in turn makes the dating more secure. In five of the cases, post-holes from wall posts have been recorded as well as the post-holes left by the row of posts along the centre of the building. I therefore regard the interpretation and dating of these buildings to the Iron Age as relatively certain (see, e.g., Vikshåland and Sandvik 2007 for a thorough presentation of interpretation and dating). The distribution of the two-aisled buildings thus corroborates the proposition that there was distinct building practice in Akershus and Østfold. In length, the buildings range from 5 m to 18 m and both the longest and the shortest of the group were found in Akershus. None of the buildings has a surviving hearth. Five have preserved evidence of wall posts, and four of those were found in Østfold. In width, the buildings range from c. 4 m to c. 8 m. All of the two-aisled buildings are aligned N–S. The majority of these buildings in Østfold are of the pre-Roman Iron Age and none there is any later than the transition from the Roman Iron Age to the Migration Period. There are only three dated buildings in Akershus, one of the pre-Roman Iron Age, one of the Roman Iron

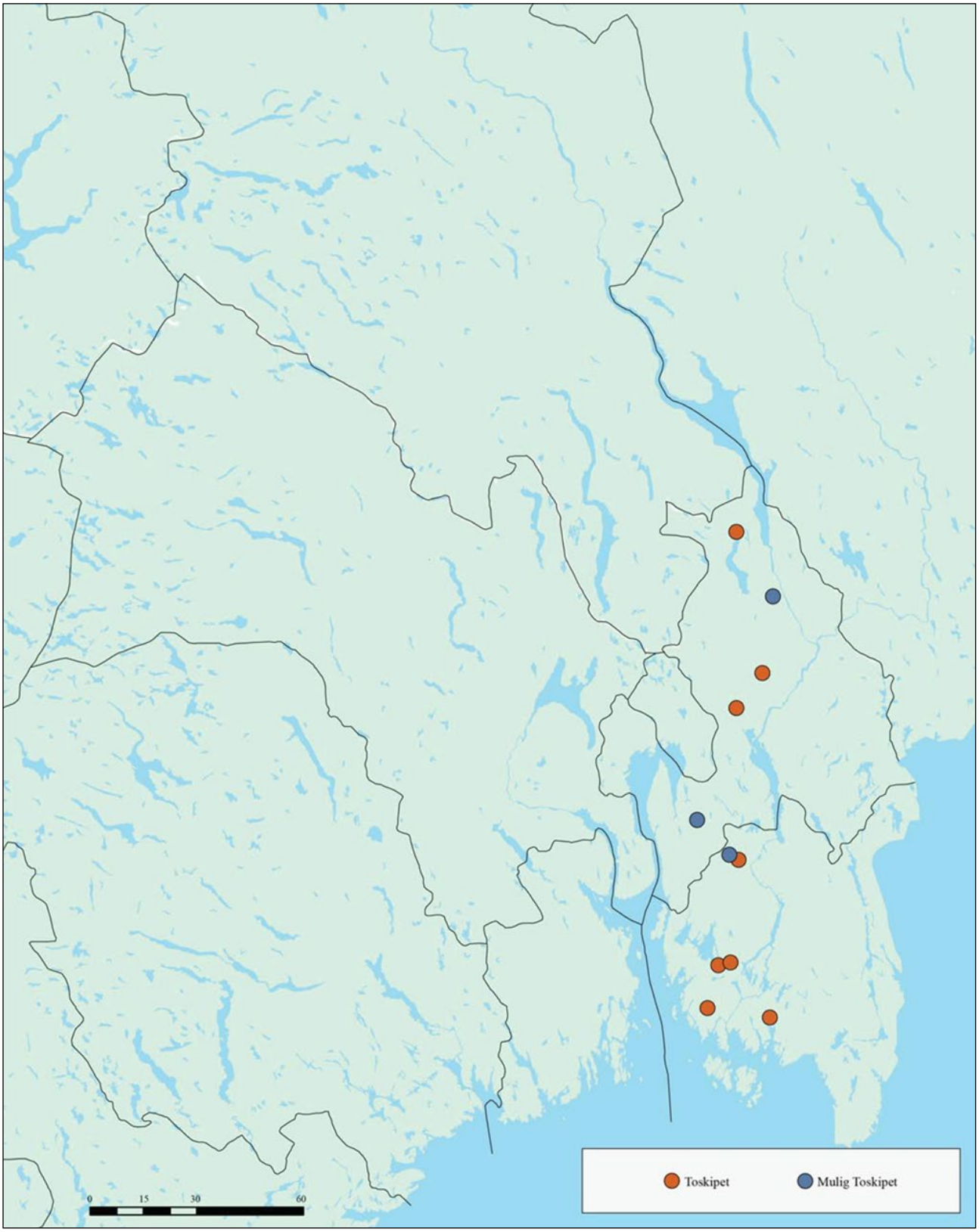


Figure 6.8 *Distribution map of two-aisled buildings. Drawn by Elise Naumann.*

Age, and one of the Viking Period. The excavator of the Viking-period building, Christian Rødsrud (2014), has pointed out that both its dating and its identification are uncertain. There are, though, Viking-period parallels in Rogaland and Troms which support his interpretation (Eriksen 2015: katalognr. 01-2, 40-10).

With such relatively limited evidence, the minor differences between Østfold and Akershus should perhaps not be over-emphasized, such as the fact that

Table 6.13 *All four-post structures.*

Period	Total	Akershus	Buskerud	Østfold	Telemark	Vestfold
pRIA	2	1			1	
RIA	2	1				1
RIA/MigP	8	2		1		5
MigP	2	1				1
MerP	1					1
IA	14	7	1	4		2
Total	29	12	1	5	1	10

the majority of the buildings with surviving evidence of wall posts are in Østfold. Nevertheless, there is a distinction between Østfold and Akershus with their two-aisled buildings and the remainder of Østlandet around them.

Four-post structures

Twenty-nine four-post structures have been excavated: small buildings which very probably functioned as storage units rather than for occupation by people or animals (Ch. 1.1; Tab. 6.13, Fig. 6.9). Only fifteen of them are dated by period, all of which are of the Early Iron Age apart from just one of the Merovingian Period. Most of them have been found in Akershus, Vestfold and Østfold, while there is also one each from Buskerud and from Telemark. Thus no four-post structures have been found in northern Østlandet. This distribution consequently reinforces yet further the differentiation between northern and southern Østlandet outlined in Chapter 6.2.

The nine four-post structures with the largest dimensions were found in Østfold, Vestfold and southern Akershus. The only four-post structure dated to the Late Iron Age is of the Merovingian Period and was found in Vestfold. There is only one of these structures from Østfold that can be dated more precisely to period, and that is from the Roman Iron Age/Migration Period transition, while two more from that province are dated to the Early Iron Age. In Akershus and Telemark, four-post structures are dated to the pre-Roman Iron Age. Vestfold thus stands clearly apart in that one four-post structure is dated to the Merovingian Period. It is unclear whether or not the minor differences are really due to the sparsity of the evidence or are concrete realities of prehistory. It is otherwise difficult to discern any pattern in the geographical distribution. It may be that the absence of four-post structures from Oppland and Hedmark, where the buildings of the most frequent alignment are longer than those in southern Østlandet, reflects the fact that the four-post structures were used for storage. If (for instance) food, fodder or equipment were stored in the four-post structures rather than in the three-aisled buildings, the space needed in the latter would be a little less. However, a hearth has been found one four-post structure at Bråte in Akershus (Røberg 2014) which may show that such structures were not exclusively storage units.

Regions and landscapes

It appears, then, that there was a clear distinction between a region to the north consisting of Oppland and Hedmark and a region to the south consisting of Østfold, Akershus and Vestfold. The evidence from Buskerud and Telemark is too slight as yet to determine where they belong (Fig. 6.10). In Oppland and Hedmark the buildings were primarily oriented E–W and the entrances were of the mid-Scandinavian type. In Østfold, Akershus and Vestfold the buildings were primarily aligned N–S and there are both mid- and southern Scandinavian entrance-types. In this area a considerable number of four-post structures have been found too. In accord with Herschend's (2009) inference of a division between southern and central Scandinavia, I have now demonstrated that the northern boundary of the southern Scandinavian building practice in Østlandet runs approximately between Akershus to the south and Oppland and Hedmark to the north (Fig. 6.10). As noted by way of introduction, the household was the central social institution of the Iron Age, and like Herschend (2009:15, 19–20) I assume that different building practices reflect differences in cultural context. The buildings analysed here all represent agrarian societies but there was a fundamental economic difference between these two regions to which I shall return.

The boundary between northern and southern Østlandet, as it can be defined through building practice, was of great time-depth (Ch. 6.3), and it is interesting to see if it can also be discovered in written sources of the Middle Ages. I shall take a closer look,

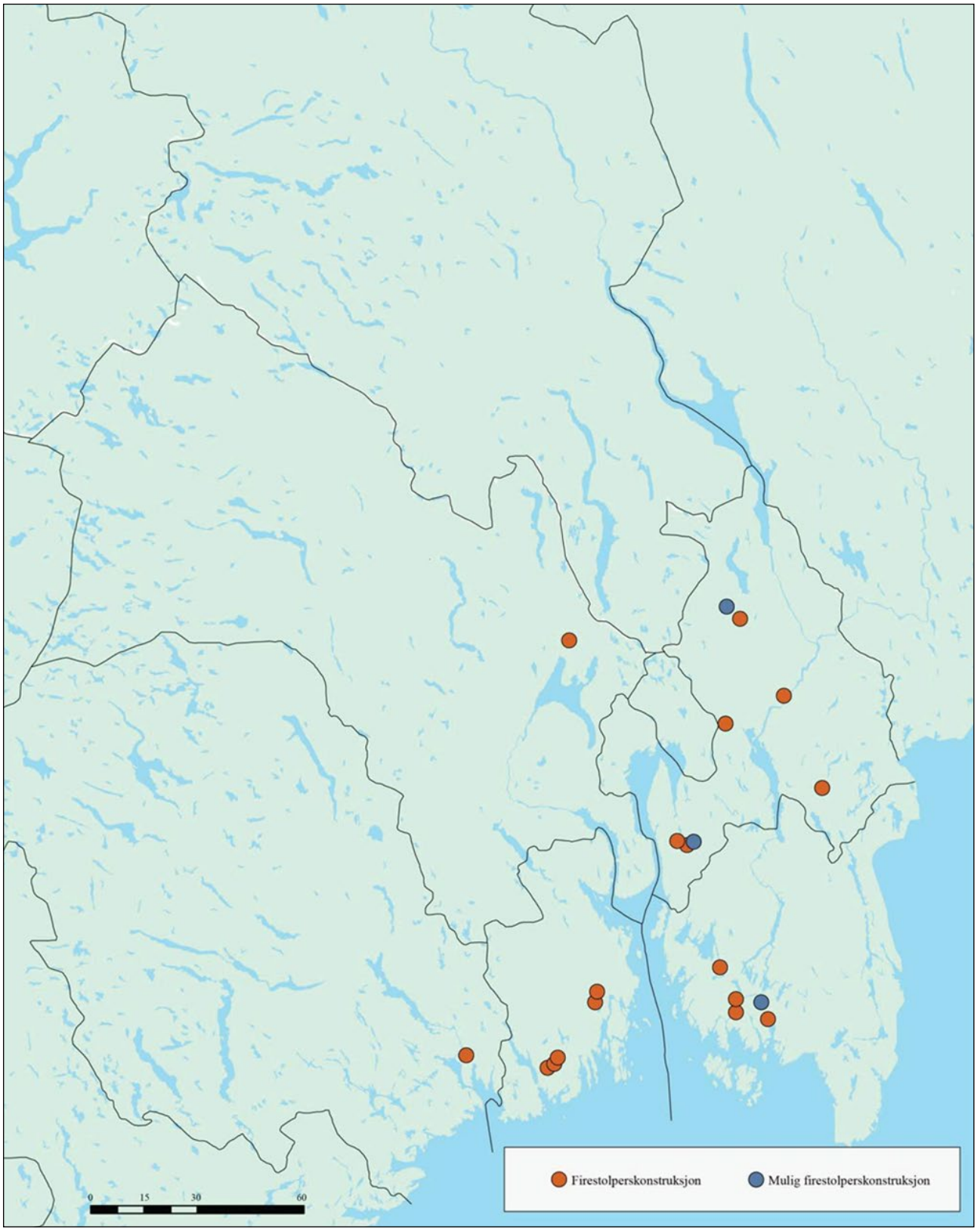


Figure 6.9 *Distribution map of four-post structures. Drawn by Elise Naumann.*

as a result, at the boundary between Viken and the Uplands and the boundary between the Eidsevating and Borgarting Law districts as those are known from medieval documentary sources (Holmsen 1979; Halvorsen 1987:37). Viken and the Uplands are two political or cultural regions. The Uplands (*Opplandene*) may be the description of Viken's hinterland and should not, therefore, be confounded with the much later *fylke* of Oppland (Stylegar 2002). The Borgarting and Eidsivating Law districts are judicial territories.

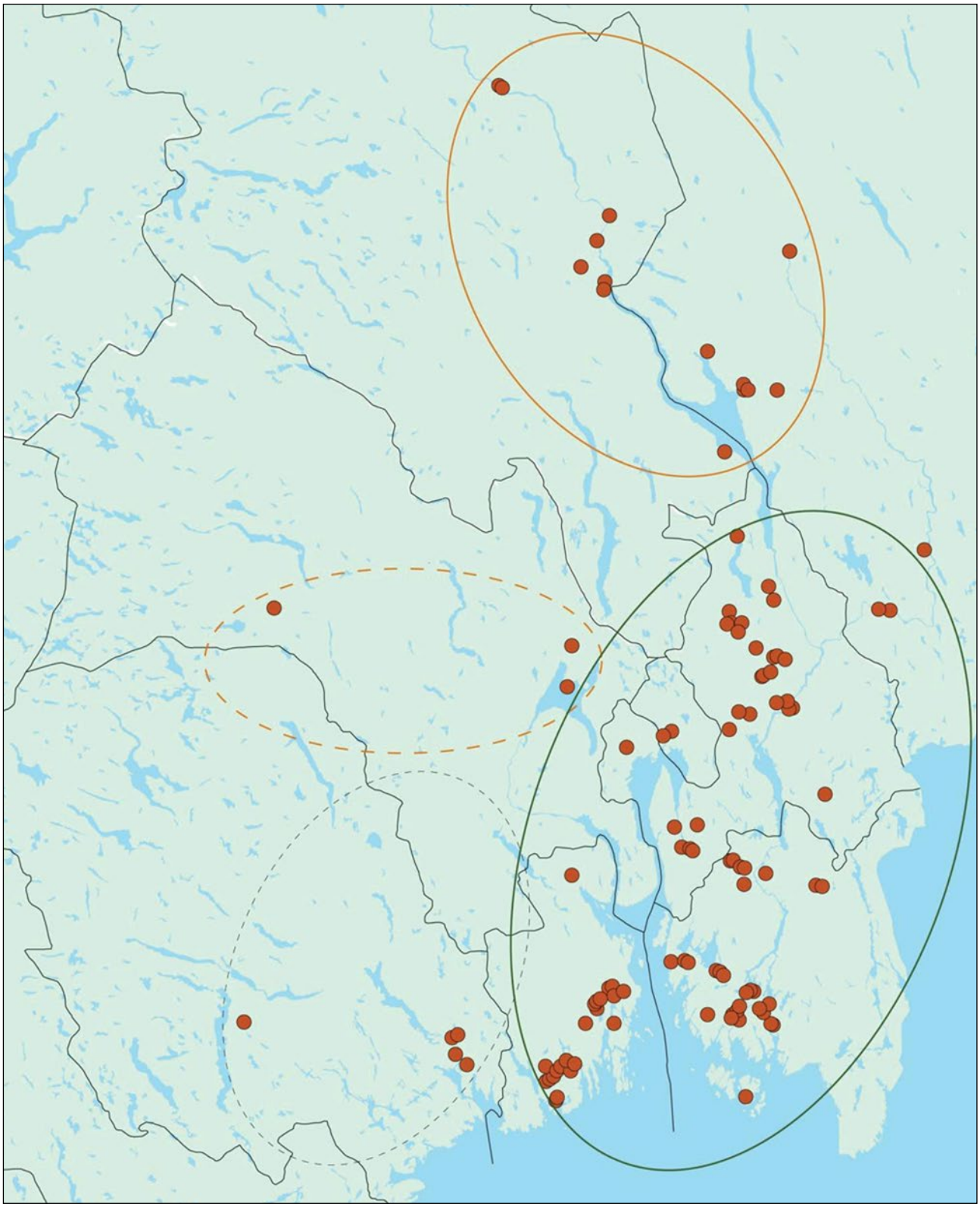


Figure 6.10 *Zones defined by building practice. Drawn by Elise Naumann.*

The Uplands and the Eidsivating territory overlap to a great extent; in the Middle Ages they included what are the modern administrative provinces of Hedmark and Oppland and also, amongst other areas, Romerike in the north of Akershus. Viken and the Borgarting territory also largely coincide, incorporaring the area around the Oslofjord south of Romeriket. My analysis of building practice has shown that the buildings in Romerike are aligned N–S and have both southern and mid-Scandinavian entrances, and so belong to the southern zone of building styles. The southern cultural and judicial regions, Viken and the Borgarting Law,

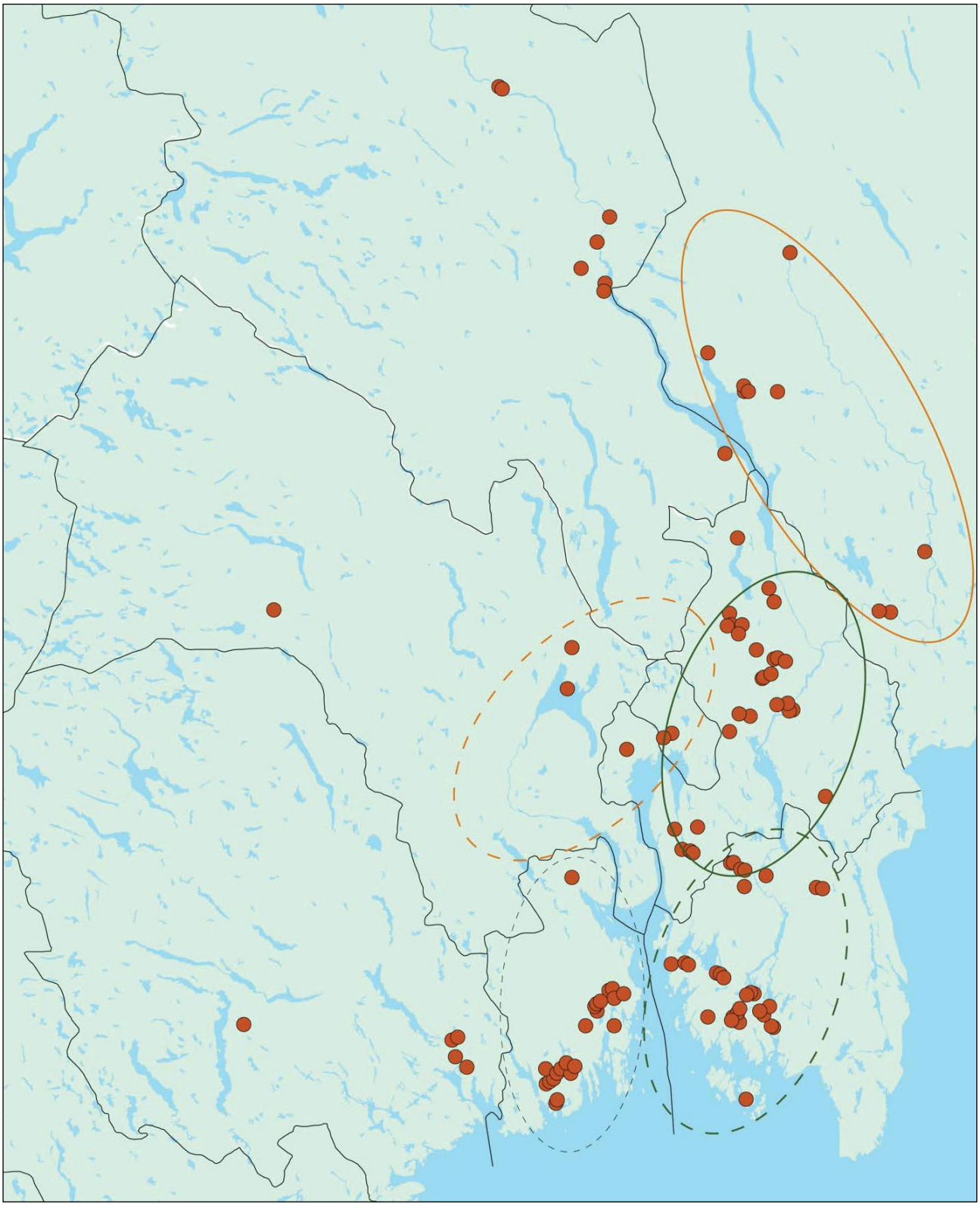


Figure 6.11 *Landscapes defined by building practice. Drawn by Elise Naumann.*

thus included parts of the southern zone of building practice in Østlandet but not all of it. Therefore neither the medieval *thing* and legal territories nor the medieval cultural or political regions of Viken and the Uplands coincide with the zones that are defined by building practice.

If we pull all the results together it also appears clearly that there are minor landscapes with local building practices within southern Østlandet too (Fig. 6.11). The building practices of Østfold and Vestfold differ from one another even though both regions lie within southern Østlandet. For its part,

Table 6.14 *The numbers of well-identified three-aisled buildings datable to period, grouped by fylke and by period.*

Period	Total	Akershus	Buskerud	Hedmark	Oppland	Oslo	Østfold	Telemark	Vestfold
pRIA	52	4	1	1	1	1	39	1	4
RIA	45	15	2	5	7		11		5
RIA/MigP	18	7	1		2		4		4
MigP	27	7		4	2		7		7
MerP	13	5		3			3		2
VP	2				1		1		
Total	**157**	**38**	**4**	**13**	**13**	**1**	**65**	**1**	**22**

Table 6.15 *The numbers of well-identified and dated three-aisled buildings aligned N–S or E–W, grouped by fylke and by period. Southern Østlandet in light grey; northern Østlandet in darker grey.*

	Period	Total	Akershus	Østfold	Vestfold	Hedmark	Oppland	Buskerud	Oslo	Telemark
N–S	pRIA	41	2	31	4		1	1	1	1
	RIA	27	9	10	3	1	2	2		
	RIA/MigP	16	7	4	4			1		
	MigP	16	5	5	5		1			
	MerP	9	4	3	2					
	VP	1		1						
	Total	**110**	**27**	**54**	**18**	**1**	**4**	**4**	**1**	**1**
E–W	pRIA	11	2	8		1				
	RIA	18	6	1	2	4	5			
	RIA/MigP	2					2			
	MigP	11	2	2	2	4	1			
	MerP	4	1			3				
	VP	1					1			
	Total	**47**	**11**	**11**	**4**	**12**	**9**			
Total		157	38	65	22	13	13	4	1	1

building practice in Akershus has both similarities and differences in relation to each of the regions of Østfold and Vestfold. It is only in Østfold and Akershus that two-aisled buildings are found. In Østfold, moreover, there is a high proportion of buildings of the pre-Roman Iron Age, and separate gable posts went out of use earlier than in Akershus and Vestfold. In Vestfold, meanwhile, no two-aisled buildings have been found. Previous studies of burial practice support the perception of differences between the various landscapes of southern Østlandet (e.g. Hougen 1924; Løken 1974; Forseth 1993; 2003; Stylegar 2004; Wangen 2009; Rødsrud 2012; Skogstrand 2014). The topographical and climatic conditions in Østfold and Vestfold are so similar that the differences in building practice cannot be explained in terms of ecofunctional adaptation. The causes must therefore be sought in cultural factors. I shall return to examine this in greater detail in Chapter 7.2, 7.3 and 7.5. There were probably local building practices in northern Østlandet as well. The lack of sunken hearths and walls in Hedmark are phenomena which may indicate such a situation, but the evidence to date is insufficient for further research into the differences.

I can conclude, as a result, that there was no uniform building practice of Østlandet but a system of both regional and local practices which are all well integrated into the general Scandinavian range in that three-aisled buildings with earth-fast posts predominate in the range.

CHANGES OVER TIME

I shall now investigate whether building practice changed over time, in particular with regard to entrances, alignments, lengths and widths, areas and separate gable posts in the various periods. Above, it has been shown that there was no one building style in Østlandet, but rather two regions and a number of landscapes of the kind that are often referred to as distinct *pays*. The study of changes over time must, therefore, start from the landscapes, for otherwise

Table 6.16 *The broad alignment of well-identified and well-dated three-aisled buildings divided between the southern and central Scandinavian zones and the Early and Late Iron Ages (EIA, LIA). Percentages in brackets refer to the proportion of all buildings of the Early and Late Iron Age respectively per zone.*

	Oppland and Hedmark		**Akershus, Vestfold, Østfold**	
	EIA	LIA	EIA	LIA
N–S	5 (23 %)	–	89 (78 %)	10 (90 %)
E–W	17 (77 %)	4 (100 %)	25 (22 %)	1 (10 %)

Table 6.17 *Mean lengths of buildings aligned N–S and E–W grouped by period and* fylke*: well-identified and well-dated three-aisled buildings. Southern Østlandet in light grey; northern Østlandet in darker grey.*

	Period	**Mean**	**Akershus**	**Østfold**	**Vestfold**	**Hedmark**	**Oppland**	**Buskerud**	**Oslo**	**Telemark**
N–S	pRIA	16	19	16	22		6	19	14	5
	RIA	23	19	31	13	12	12	38		
	RIA/MigP	25	23	25	28			22		
	MigP	20	17	21	21		23			
	MerP	18	12	12	37					
	VP	22		22						
Ø–V	pRIA	12	9	13		11				
	RIA	16	16	10	14	14	19			
	RIA/MigP	20					20			
	MigP	25	15	16	12	39	37			
	MerP	24	18			26				
	VP	18					18			

VP

Table 6.18 *All buildings with recorded alignments, including those omitted from Table 6.14, except for four-post structures. The buildings are grouped by alignments as either N–S or E–W, and by period and* fylke*. Southern Østlandet in light grey; northern Østlandet in darker grey.*

	Period	**Total**	**Akershus**	**Østfold**	**Vestfold**	**Hedmark**	**Oppland**	**Buskerud**	**Oslo**	**Telemark**
N–S	pRIA	56	8	36	7	1	1	1	1	1
	RIA	36	13	13	4	1	2	3		
	RIAMigP	25	10	6	8			1		
	MigP	21	9	5	6		1			
	MerP	11	4	3	2		2			
	VP	3		1	2					
	VP/MA	3	1			1	1			
	IA	39	19	6	8	1	1			4
	Total	**194**	**64**	**70**	**37**	**4**	**8**	**5**	**1**	**5**
E–W	pRIA	17	3	10	2	1				1
	RIA	22	8	1	2	5	5			1
	RIA/MigP	7	1		1		2			3
	MigP	13	2	2	2	6	1			
	MerP	6	1		1	4				
	VP	3	2				1			
	VP/MA	2					1	1		
	IA	10	2	2	2	2				1
	Total	**80**	**19**	**15**	**10**	**18**	**10**	**1**		**7**
		274	**83**	**85**	**47**	**22**	**18**	**6**	**1**	**11**

Table 6.19 *The broad alignments of all buildings except for four-post structures, grouped into the southern and central Scandinavian zones and into the Early and Late Iron Ages (EIA, LIA). Percentages in brackets refer to the proportion of the total per zone.*

	Oppland and Hedmark		Akershus, Vestfold, Østfold	
	EIA	**LIA**	**EIA**	**LIA**
N–S	6 (23 %)	4 (40 %)	125 (79 %)	30 (88 %)
E–W	20 (77 %)	6 (60 %)	34 (21 %)	4 (12 %)

Table 6.20 *The broad alignments of all buildings except for well-identified and well-dated three-aisled buildings and four-post strutures, grouped into northern and southern Østlandet, and into the Early and Late Iron Ages (EIA, LIA). Percentages in brackets refer to the proportion of the total per region.*

	Oppland and Hedmark		Akershus, Vestfold, Østfold	
	EIA	**LIA**	**EIA**	**LIA**
N–S	1 (25 %)	4 (67%)	49 (84 %)	4 (57 %)
E–W	3 (75 %)	2 (33 %)	9 (16 %)	3 (43 %)

major local changes might remain unobserved. I have also indicated that there are building practices that are very locally distributed, possibly at the level of small district communities (Ch. 6.2.3). The volume of evidence does not allow local building practices at that level to be researched in relation to change over time by the application of quantitative methods. As a result, I continue to use the modern administrative provinces as geographical units.

As noted, there are 157 well-identified three-aisled buildings that are relatively narrowly dated to period and these are the examples which I primarily make use of for further research (Tab. 6.13: see the criteria in Chs. 4 and 5). The well-identified and well-dated three-aisled buildings are predominantly of the Early Iron Age, with only 15 of them being Late Iron-age. I shall nevertheless attempt to describe how the buildings in the Oslofjord area changed across the Iron Age as a whole. Eriksen (2015; 2019) has recently investigated the buildings of the Late Iron Age in Norway. She did not attach a great deal of weight to regional or local differences, and it will be extremely interesting, then, to compare my local findings with her national overview.

There is a small number of elements which seem to be quite unchanging across the whole of the Iron Age. Southern and mid-Scandinavian entrances are broadly equally well represented in all periods in southern Østlandet (Tabs. 6.3 and 6.4), unless too few buildings with identifiable entrances have been excavated for any change over time that did take place to be revealed. The alignment of the buildings also appears not to change particularly over time, even though it may perhaps become more standardized in the case of well-identified three-aisled buildings and less standardized for other, or unidentifiable, types of building in the Late Iron Age (Tabs. 6.15–6.17/18?). It is possible that this progressive standardization in the alignment of three-aisled buildings and reduction in standardization in the alignment of other buildings shows traditional building practices coming under pressure in the Late Iron Age.

The three-aisled buildings

Although building practice in Østlandet may perhaps best be described in relation to regional or local frameworks, there are also certain features that are common to the whole area. As has been noted, the types of entrance and the alignments of the three-aisled buildings appear to change little over time (Tab. 6.18). There are additional general features that seem to be common for Østlandet throughout the Iron Age. The buildings are consistently shorter and narrower in the pre-Roman Iron Age than in later periods (Tabs 6.21 and 6.24) except in Vestfold where, on average, the buildings were larger in the pre-Roman Iron Age than in the Roman Iron Age. After that the buildings become longer up to a certain maximum and then progressively shorter again. In Østfold and Buskerud the maximum is reached as early as the Roman Iron Age, but in Akershus and Vestfold in the Roman Iron Age/Migration Period transition, and not until the Migration Period itself in Oppland and Hedmark. The mean length then goes down before rising again in the Merovingian Period in Vestfold and in the Viking Period in Østfold. The buildings are, moreover, consistently shorter in the Late Iron Age than their counterparts of the Early Iron Age. There are few well-identified and well-dated buildings of the Merovingian and Viking Periods but the trend towards somewhat longer buildings in the Viking

Table 6.21 *Mean length of three-aisled, well-identified and well-dated buildings.*

	Mean per period	Akershus	Buskerud	Hedmark	Oppland	Oslo	Østfold	Telemark	Vestfold
pRIA	15	14	19	11	6	14	15	5	22
RIA	20	18	38	13	17		29		13
RIA/MigP	24	23	22		20		25		28
MigP	22	17		39	30		20		19
MerP	20	13		26			12		37
VP	20				18		22		

Table 6.22 *The longest building per period and* fylke.

Period	Akershus	Buskerud	Hedmark	Oppland	Oslo	Østfold	Telemark	Vestfold
pRIA	24	19	11	6	18	31	21	35
RIA	34	45	24	31		61	8	27
RIA/MigP	44	22		27		36	17	45
MigP	28		51	37		28		32
MerP	22		34	15		17		41
VP	17			18		22		34

Table 6.23 *The longest building as a percentage of the mean length of well-identified and well-dated three-aisled buildings grouped by period and* fylke.

	Akershus	Buskerud	Hedmark	Oppland	Oslo	Østfold	Telemark	Vestfold
pRIA	171	100	100	100	129	207	420	159
RIA	189	118	185	182		210		208
RIA/MigP	191	100		135		144		161
MigP	165		131	123		140		168
MerP	169		131			142		111
VP				100		100		

Table 6.24 *The mean length of well-identified and well-dated three-aisled buildings grouped by period.*

	Akershus	Buskerud	Hedmark	Oppland	Oslo	Telemark	Vestfold	Østfold
pRIA	5.8				5.3		6.9	6.4
RIA	7.2	8.7		6.7			7.0	7.0
RIA/MigP	6.2	9.6		7.5			7.6	9.0
MigP	6.1			6.1			7.0	7.1
MerP	7.4						9.5	6.6
VP				6.3				9.2

Table 6.25 *Under- and over-balanced three-aisled buildings that are well identified and dated grouped by period. The dividing line is set at the central aisle occupying c. 50% of the full width of the building.*

	Number	Number with balance	Balanced	Overbalanced	Underbalanced
pRIA	52	29		10	19
RIA	45	20		5	15
RIA/	18	10		4	6
MigP	27	12	1	3	8
MerP	13	5		2	3
VP	2	2		1	1
Total	**157**	**78**	**1**	**25**	**52**

Period than in its predecessor appears to be confirmed by Eriksen's overview of a much larger body of evidence (Eriksen 2015:fig. 3.9). In her survey, the buildings were at their longest during the transition from the Merovingian Period to the Viking Period. A similar trend may perhaps be discernible in the particular study area here. In respect of change over time, the longest buildings of all follow approximately the same trend as that described by an average-sized building. In Østfold and Vestfold the longest building is of the Roman Iron Age, in Akershus and Vestfold from the Roman Iron Age/Migration Period, and in Oppland and Hedmark from the Migration Period (Tabs. 6.22–23).

The mean width of the buildings follows a similar course albeit with some interesting details (Tab. 6.24). The width of the buildings increases from the pre-Roman Iron Age to the Roman Iron Age/Migration Period, except in Akershus where a maximum is first reached already within the Roman Iron Age. After this, in the Migration Period, width reduces, only to rise again in the Late Iron Age. The length of the longest building in comparison with that of an average building also reaches a maximum in the Roman Iron Age, except in Vestfold where it is not reached until the Merovingian Period.[7] It is difficult to discern any pattern in the use of the wall trenches or wall posts, with the already noted reservation that no such features have been securely recorded in Hedmark (Ch. 6.2.3). Separate gable posts appear as early as the pre-Roman Iron Age in Østfold and Oppland but not otherwise until the Roman Iron Age. In Østfold they do not occur after the Roman Iron Age/Migration Period either. No separate gable posts have been found from the Viking Period but there are so few buildings of this date that it cannot be certain how representative this evidence is. In broad terms, therefore, there are many short and narrow buildings of the pre-Roman Iron Age, longer and wider ones in the Roman Iron Age and Migration Period, and fewer and shorter ones, although often quite wide, in the Merovingian and Viking Periods — perhaps a little longer in the Viking Period.

The balance of the buildings has been supposed to change over time by many scholars (Ch. 6.2.3). A similar tendency may also be discovered in the evidence from Østlandet (Tab. 6.25; for the distribution by period and administrative province, see Appendix 2). In the Early Iron Age the under-balanced building is predominant — a building characterized by the greater part of the weight of the roof being borne by the walls. In the Late Iron Age, conversely, a higher proportion of the buildings are over-balanced, with the greater part of the weight of the roof being borne by the central nave. It must be emphasized that the evidence is slight; nevertheless, this trend is the converse of what has been seen in other parts of Scandinavia (Herschend 1989; Göthberg 2000). One pattern, however, is that only two of 23 buildings where the width of central aisle occupies 40% or less of the full width of the building are of the pre-Roman Iron Age, and both of them from Østfold. Otherwise, the 23 buildings are quite evenly spread through the periods and provinces, although they may be a little over-represented in Oppland and under-represented in Vestfold.

The 'other' buildings

One of the striking features in the evidence is that there are few dated and identified three-aisled buildings of the Merovingian Period, and even fewer of the Viking Period. In this section, I shall explore whether — or to what extent — this reflects a real pattern in prehistory or if the factors of representativity and taphonomy have led to the buildings of these periods being under-represented. The building practice could have been such that the excavation techniques we use, which in practical terms means open-area stripping by machine, prevent us from recognizing the with. Alternatively the buildings may be situated in locations that we do not explore, and, not least, within the sites of contemporary farmsteads (Ch. 4). I shall first examine whether the buildings could have been of a form that goes unnoticed, and consequently shall undertake a short review of all of the buildings irrespective of identification score or type.

There are 26 buildings more or less definitely of the Early Iron Age which are not classified as three-aisled, two-aisled, or four-post structures. Most of these are indeterminable or uncertain buildings with earth-fast posts, although there are some possible U-shaped foundations and shallowly sunken foundations with no earth-fast posts. The absence of earth-fast posts could indicate that the walls bore the weight of the roof. An implication that the building style itself means that we fail to find a considerable proportion of buildings of the Early Iron Age is there, therefore, but quantitatively seems very slight.

7 Akershus should strictly be noted as an exception as the ratio is marginally higher in the RIA/MigP than in the RIA. The difference is, however, so small that it is irrelevant to this study.

Altogether there are 29 buildings dated to the Merovingian or Viking Periods or the transition to the Medieval Period. The majority are well-identified three-aisled buildings, but here I shall look in detail primarily at four of the nine buildings that are not categorized as three-aisled, which could potentially shed light on building practice towards the end of the Viking Period. The object is first and foremost to investigate whether or not there are secure footholds for proposing when the three-aisled building was passing out of use.

The nature of the building practice may be a factor in the fact that few Viking-period buildings have been excavated: this is shown by the exploration of the foundations left by Raulandstua. This was constructed in the 13th century and moved to the Norwegian Folk Museum in the 1890s (Tollnes 1973; Thun and Stornes 2007). When subjected to archaeological investigation, the site had remained untouched for nearly a hundred years, and apart from the traces of the *stua* ('lofthouse'), stones were found which had been used as foundations, a hearth, and a culture layer from Rauland II, probably a building of the Late Viking or early Medieval Period. Although this was not explicitly noted by the excavator, Roar Tollnes (1973), it is the case that none of the traces of Rauland II or Raulandstua would have been identifiable had the site been under cultivation. This building thus would not be picked up through excavations employing open-area stripping by machine of cultivated land. Few technical architectural details are known of the hall at Huseby in Vestfold, and it is not known whether or not it had earth-fast posts (Skre 2007c). It is likely, though, that the building technique was not one characterized by heavy internal earth-fast posts and therefore probable that this building would not have been noticed if it had lain in land under cultivation where mechanical area-stripping had been used.

One-aisled buildings do not occur before the Viking Period and also show that building practice was changing. Eriksen (2019) has found four of these, two of them in Østlandet. Garder *hus* 1 from Akershus has a wide date-span with radiocarbon dates running from cal AD 795–1435 (Helliksen 1997:tab. 7). Eriksen (2015:katalog nr. 29-2) has dated the building to the Late Viking Period and I have dated it to the Viking Period/Medieval transition. Helliksen and Eriksen have interpreted the building as one-aisled with earth-fast posts in the wall lines. I am not certain whether the surviving post-holes were part of the roof-bearing frames of a three-aisled building or the walls of a one-aisled building, and I have interpreted it as a possible one-aisled structure. The width of the building is in the range 5.0–5.5 m. All three-aisled buildings of the Late Iron Age with preserved walls are wider than this, even if a few buildings of the Early Iron Age, especially in the pre-Roman Iron Age, are narrower. In her much greater data sample, Eriksen (2015:katalognr. 02-1 and 09-1) includes two one-aisled buildings with well-identified walls, from Troms and Nord-Trøndelag respectively. Both are of the Late Viking or early Medieval Period, and both narrower than Garder *hus* 1. The limited width thus is no argument against Garder 1 having been one-aisled. The Viking-period building at Hedrum churchyard in Vestfold is classified by Eriksen as one-aisled (2015:katalognr 63-1) but as three-aisled by myself. This building has two or three pairs of post-holes approximately in the middle of the building lengthways and individual post-holes around the centre of the nave in the southern part. In the northern part there are no signs of post-holes inside the building, but the post-holes in the wall line are heavier than those in the other part of the structure (Berg 1998). The walls to the north may therefore have carried the roof without any internal roof-bearing posts. In the middle of the building, the post-holes may represent the internal roof-bearing posts of a three-aisled structure while the post-holes at the centre of the building may be remains of the internal earth-fast posts from a one-aisled structure. It is possible, therefore, that this building is a hybrid of one-, two- and three-aisled. When I have classified it as a three-aisled building, I interpreted the internal earth-fast posts as roof-bearing. I attached less significance to the absence of traces of pairs of roof-bearing posts in other parts of the building because I assume that that absence was the result of poor preservation.

The buildings I have referred to above were constructed in a way that implies that Viking-period builders were exploring styles of building other than the three-aisled to a greater extent than had been done before. The buildings discussed constitute nearly a third of the structures from the period, and this emphasizes the point that alternatives to the three-aisled building had become more common. The wall posts of the possible one-aisled buildings at Garder and Hedrum churchyard were earth-fast but bore the weight of the roof. The lafted building at Rauland and the hall at Huseby suggest that the three-aisled buildings were replaced or supplemented by buildings that did not necessarily have earth-fast posts. Building practice in the Viking Period may therefore have been of such a kind that the buildings will not be identified as a product of machine area-stripping

of cultivated land. The lack of long buildings with earth-fast posts in the Medieval Period does, however, appear to have been a distinctive feature of Østlandet. Both in Agder and in Vestlandet medieval buildings with such posts that appear to have much in common with the three-aisled buildings have been found (Diinhoff 2009b; Kile-Vesik 2014). This might, for one thing, be due to the laft technique being a building style that requires a lot of material, and rich supplies of timber in Østlandet making it easier to introduce this as a new way of building (Bugge and Norberg-Schulz 1990). My own view of the relationship between building practice and society as a reflexive one renders this change in practice essential to my understanding of society, something I return to in Chapter 9.

BUILDING PRACTICE AT REGIONAL AND LOCAL LEVELS IN ØSTLANDET

To this point in the present chapter, I have explored how building practice varied spatially and chronologically in Østlandet in the Iron Age. Here, I summarize the most important features. In some parts the discussion has been conducted at a detailed level, and complicated by the fact that a number of features appear at different times in various parts of study area. The variance in building tradition is a crucial element in my results so far. In order for the diversity and the changes to be maintained to the maximum degree possible in this summary too, I shall consider the geographical variance first and then the changes over time. It is also worth noting, though, that in some respects I attach less significance to Østfold because it is very different from the rest of the area studied and so difficult to incorporate in an overview.

Building practice in Østlandet had major regional and local differences but is constantly part of a whole Scandinavian picture. At a regional level I have demonstrated that there is a line of division between northern Østlandet (Oppland and Hedmark) and southern Østlandet where Herschend's mid-Scandinavian and southern Scandinavian entrance-types are found side-by-side. In Oppland and Hedmark the buildings more than 18 m in length and many shorter buildings are oriented E–W while a minority group of shorter buildings are aligned N–S. In the other administrative provinces the buildings more than 18 m in length and many shorter buildings are aligned N–S while it is a minority of shorter buildings that lie E–W. In both southern and northern Østlandet those minority groups account for around one-fifth of the building total. Buildings in Oppland and Hedmark did not reach their greatest lengths until the Migration Period, which is later than in the other provinces apart from in Vestfold where there are two long buildings of the Merovingian Period. The Migration-period buildings in Oppland and Hedmark are strikingly longer than those in other provinces. Neither two-aisled buildings nor four-post structures have been found in northern Østlandet. At a local level, building practice shows some distinctive features. The relatively limited evidence means that I have concentrated on an investigation of local building practices in Østfold, Vestfold and Akershus. Østfold stands apart from the other administrative provinces in having separate gable posts as early as the pre-Roman Iron Age, the only pent-roof building in the area of study and the only three buildings with an entrance in the gable end. Together with Akershus, Østfold is the only area in which two-aisled buildings have been found. The longest buildings in Østfold are of the Roman Iron Age while in all other provinces except for Buskerud the greatest lengths occur later. Akershus and Vestfold are distinct from both the central Scandinavian zone and from Østfold, and building practice in these two areas has a number of shared features.

Three-aisled buildings with earth-fast posts are, as has been noted, the most common form throughout the Iron Age. They are utterly predominant through to the Merovingian Period but this predominance appears to reduce in the Late Iron Age even if it is rather unclear what types of building supersede them. This holds for the entirety of the study area, although, as has been demonstrated, there are major regional differences.

Four-post structures occur primarily from the Roman Iron Age to the Merovingian Period and two-aisled buildings in the Early Iron Age. More buildings of the pre-Roman Iron Age in particular and of the Early Iron Age generally have been excavated than of the Merovingian and Viking Periods. Consequently our understanding of the Early Iron Age is greatest, while it is the case that the relatively few buildings of the Late Iron Age do reflect the fact that the building style was changing. The three-aisled buildings generally increase in length from the pre-Roman Iron Age onwards, with the longest buildings being found in the Roman Iron Age/Migration Period or within the Migration Period. After that the buildings become shorter again until length appears to increase once more in the Viking Period. Width followed broadly the same pattern. Separate gable posts were in use from the Roman Iron Age to the Migration Period or the Merovingian Period.

I have studied building practice in this chapter in isolation. It varied in time and space but can as a whole be viewed as presenting variations on a theme — the three-aisled building with internal earth-fast posts was the predominant house-type. In southern Østlandet it was supplemented in some periods by economic buildings in the form of four-post structures and two-aisled buildings.

7 THE IRON-AGE SETTLEMENT PATTERN IN ØSTLANDET

In this chapter, I shall examine the relationship between the buildings and the world around them: in other words, I shall explore the broader settlement pattern. I shall first assess the reasons for variance in building practice (Ch. 7.1) and shall then aim to shed light upon the farmstead as a site by studying how the settlements were created and abandoned (Ch. 7.2). I shall then investigate spot-continuity, or the extent to which buildings were constructed on top of predecessors or either over or below graves (Ch. 7.3). I shall also offer brief reflections on the organization of the farmsteads (Ch. 7.4) before making a summary of the settlement pattern in Østlandet (Ch. 7.5).

THE REASONS FOR VARIANCE IN BUILDING PRACTICE

In this section, I briefly evaluate some possible reasons behind the variations in the length, width and alignment of the buildings that were revealed in Chapter 6. I understand that there is a reflexive relationship between material culture in the form of the built environment and the collective ideals and ideas of society and I regard the building practice as an effective technology in a social sense (Ch. 1). I have emphasized, however, that I do not dismiss the possibility of external factors influencing the settlement pattern. I shall investigate, therefore, whether the variations in the alignment, length or entrance-types of the buildings should first and foremost be regarded as adaptations to local climatic or topographical factors, which in turn influenced or set bounds to economic adaptation; or whether such variance should be explained through cultural factors. It has been noted that the difference between functional or economic rationales and ideological or cultural options can be an artificial one (Eriksen 2019:124–35). I agree, but would equally note that these can also be real differences. One example serves to illustrate this difference. Neither bananas nor cannabis are cultivated in any significant quantity in Norway, but for two different reasons. Bananas need a temperature of around 27°C and high humidity all the year round and will not grow out of doors in Norway. Although it is now possible to grow bananas in glasshouses, the costs are high, and bananas are easily transportable. As a result, it is a rational, economic decision not to grow bananas in Norway. Cannabis, conversely, can be grown in Norway, even out of doors, but because it contains a psychoactive compound its cultivation is forbidden here even though growing it should undoubtedly be lucrative. So it is a cultural decision not to cultivate cannabis.

The alignment of the buildings — climatic adaptation?

The buildings in northern Østlandet are mostly oriented E–W while those in southern Østlandet are aligned N–S (Ch. 6.2.2). I shall now explore what the reason for this difference might be. I shall discuss, in particular, whether the buildings may have been aligned with respect to local wind-directions, in order to make use of the sun as a source of warmth, or if an explanation needs to be looked for in other cultural preferences. It is commonly assumed that the buildings are aligned in relation to the sun in order to make use of this source of warmth, and/or in relation to the local prevailing wind or topography (Myhre 1980:229; Björhem and Säfvestad 1993:280; Webley 2008:56 with refs.; Nitter 2013; Eriksen 2019:132–4 with refs.). Earlier studies in other areas, however, have shown that there is no consistent connexion between the prevailing wind-direction and the alignment of the buildings, and that graves and buildings tend to have the same alignment. Webley (2008:59–60) suggests, as a result, that the alignment is the product of a combination of functional adaptation and mythology linked with different quarters of the sky. Two examples of mythology linked to compass direction are that the road to Hel lies northwards in Norse mythology while the Æsir live to the south (Shetelig and Falk 1937:237–9; Birkeli 1943:117–19). Eriksen (2019:124–34) has recently reviewed a range of functional and ideological explanations. She emphasizes that the buildings are principally aligned in relation to the four points of the compass and proposes that this was due to ideological rather than practical considerations even though she stresses that the difference between those is largely artificial. In my attempt to explain the alignment of the buildings I attach weight to the fact that the predominant alignment of the buildings is different between northern and southern Østlandet respectively; that around

20% of the buildings in both zones have a different alignment from the majority; and that few buildings are aligned perfectly N–S or E–W (Ch. 6.2.2). I shall examine how alignment correlates with the prevailing wind-directions and the sun, and shall look at the relationship between graves and buildings in respect of alignment. Although I do not take into account how, for instance, the prevailing wind may vary over the year or that wind-directions could have changed after the buildings were put up, my investigations do produce a good basis for exploring whether or not the buildings were aligned in relation to the prevailing wind-direction.

The sun provides most warmth to buildings that are oriented E–W (Nitter 2013:226) in which respect the buildings in northern Østlandet have a more favourable alignment. The alignment of the buildings in southern Østlandet must therefore have been determined with other objectives in view than ensuring maximum warmth from the sun. It is shown by Figures 6.5 and 7.1 that there is some correlation in variation between the principal alignment of the buildings and the predominant direction of the wind nowadays — it appears that, ideally, the wind struck the gable ends and not the long side of the building. If wind-direction has not changed, this reduced the pressure on the building in a strong wind while the wind would also have cooled the building less. Nevertheless, the alignment of the buildings appears to have been more standardized than the prevailing winds were, while a significant minority of the buildings have divergent alignments. The wind-direction at Ilseng near Hamar in Hedmark, for instance, is more or less N–S while elsewhere in northern Østlandet it is nearly E–W; at Kalnes in Østfold the wind-direction is often E–W although otherwise in southern Østlandet it is largely N–S (Ch. 6.2.2). It is probable, therefore, that the aim of facing the wind at a gable end is only part of the explanation of the alignment of the buildings. It is otherwise difficult to detect any functional reasons beyond wind-directions for the buildings being aligned differently on the whole in Oppland and Hedmark than in Akershus, Østfold and Vestfold. The sun provides most warmth when it is in the south wherever you are; cereal cultivation and livestock farming were the predominant subsistence basis; and the buildings consistently have so much in common that they indicate similar ways of living.

The buildings are rarely aligned directly N–S or E–W, not even those buildings with non-standard alignments. This could reflect the fact that in prehistory, the compass directions were determined on the basis of different factors than the compass: e.g. sunrise or sunset on specific days. Throughout prehistory and into the early Middle Ages in southern Sweden the graves were predominantly oriented close to E–W, or more precisely ESE–WNW and NNE–SSW (Lindström 1997; 2005). This could be because a compass direction was determined on the basis of the point of sunrise at the autumn sacrificial festival (Lindström 2005). In the Mälar region there are also graves aligned nearly N–S (more precisely NE/ENE–SW/WSW and SE/SSE–NW/NNW). These could have been governed by sunrise or sunset at the winter solstice or Yule (Lindström 2005).

The buildings in Hedmark and Oppland are predominantly oriented E–W, like the majority of buildings elsewhere in Scandinavia; however N–S is the predominant alignment elsewhere in the study area and also across Norway in the Late Iron Age (Webley 2008:56–60; Eriksen 2019:fig. 5.8). Although the agricultural conditions are fairly similar in these two areas, 'outland' subsistence activities such as iron-production, hunting and gathering must have been much more important in Hedmark and Oppland than in Akershus, Østfold and Vestfold (Jacobsen 1997). It is conceivable that other economic facets of the community may have led to variant approaches to the compass points. Both hunting pits and iron-production appear to be coordinated with topographical circumstances and not towards any of the four principal points of the compass (Larsen 2009; Rundberget 2012; pers. comms. from Jostein Bergstøl and Bernt Rundberget 17 March 2015 and Jan Henning Larsen 18 March 2015). Might there be some connexion between the topographical-functional approach to the alignment of features linked to hunting and gathering and the alignment of the buildings in the farmsteads? Many of the three-aisled buildings of Oppland are in Gudbrandsdalen. There, a deep valley with a major river at the bottom of a vale is a characteristic feature of the topography. The typical direction of the vale is NNW–SSE, albeit with great local variation. The evidence is admittedly sparse, but it is difficult to perceive any consistent correlation between the alignment of the buildings and that of the vale. The buildings from Hedmark are mostly situated on the relatively flat agricultural region east of Lake Mjøsa, and no particular topographical factors that would make it distinctly practical to align the buildings E–W have been identified.

In general in Scandinavia, graves and buildings have the same alignment (Lindström 1997; 2005), and I shall investigate whether or not this is also the case in Østlandet. However, we do not at present have a comprehensive overview of the alignment of graves

Figure 7.1a–g *Wind-directions from seven sites in Østlandet. Form upper left to lower right: Gardermoen in Akershus; Rygge in Østfold; Ilseng-Hamar in Hedmark; Kalnes-Sarpsborg in Østfold; Lillehammer in Oppland; Vinstra in Oppland; Melsom-Stokke in Vestfold. MET Norway. License for re-use: CC BY 4.0 Downloaded from met.no, June 2014.*

throughout the Iron Age, and it lies beyond the limits of this study to produce such a summary. I base myself therefore on the little that can be found in extant publications. A close to N–S alignment of the graves predominates in Vestfold in the Viking Period, usually with the head to the N (Sjøvold 1944; Gjerpe 2005b). The burial evidence from Hedmark and Oppland consists largely of cremation burials and has almost entirely been retrieved from other than scholarly excavations. It is difficult, as a result, to determine whether these graves are aligned any differently from the remainder of the study area (Grieg 1926; Hougen 1947; Herteig 1955b). Sæbjørg Walaker Nordeide (2011) has studied a selection of graves of the Late Iron Age in various parts of Norway, including some from Østlandet. It transpires that at Ullensaker in Akershus there are five graves of the Viking Period lying close to N–S and a grave of the 11th century that may have been oriented E–W (Nordeide 2011:appendix List 3). At Lom in Oppland the only grave with a given alignment of the Viking Period was aligned N–S while at Ringebu in Oppland there is Viking-period grave that lay NE–SW (Nordeide 2011:appendix List 3). I found only two inhumation graves of the Early Iron Age for which the aligment of the grave cut is known, both at Gile, Toten, Oppland. They were aligned NE–SW and nearly N–S (Herteig 1955b:pls. I–III). This may indicate that the graves were aligned mostly N–S throughout the study area. If this is correct, Oppland and Hedmark differ from the rest of the study area and southern Scandinavia more widely, in that the graves and the buildings are aligned to different compass directions.

Is it possible that the alignment of the buildings offers an indication of what were culturally the most important contacts for their residents (Bradley 2001)? Starting from *Ynglinga saga* and *Ynglinglatal*, Bjørn Myhre (2013) discussed whether the chieftainly dynasties in Viken and central Sweden were connected via the Opplands in the Late Iron Age, but rejected the proposition because the historical reliability of *Ynglingatal* is uncertain. The buildings in the Opplands are, as noted, oriented E–W but the graves may be aligned N–S. There is no comprehensive summary of the alignment of the buildings in central Sweden. The impression I gain, though, is that more of them are aligned E–W than N–S (Kyhlberg et al. 1995; Eklund et al. 2007). In northern Østlandet and in central Sweden, therefore, the buildings are primarily oriented E–W, at the same time as (some of) the graves are aligned N–S. Both areas differ from the areas around them — to the south at least; we lack comparable studies for the areas to the north. Both areas also lie absolutely at the southern limit of the zone of mid-Scandinavian building practice (Herschend 2009). It is possible, then, that there were cultural contacts between northern Østlandet and central Sweden already in the Early Iron Age, and likewise in the Late Iron Age. This is supported to some extent by changes in the alignment of buildings in Akershus, Østfold and Vestfold. The numerical preponderance of those buildings that are not three-aisled and which are aligned N–S is lower than in the Early Iron Age but the differences may arguably be regarded as minimal. The trend is decidedly clear in both contexts.

Altogether, the alignment of the buildings can in some measure be explained in terms of them being constructed so as to have the lowest possible exposure to direct wind on the long sides. This factor, however, does not sufficiently explain the co-variance between the distribution of mid-Scandinavian buildings and buildings oriented E–W in northern Østlandet and of southern and mid-Scandinavian buildings and buildings aligned N–S in southern Østlandet. On the basis of the discussion to this point, it appears reasonable to infer that the different alignments of the buildings were due to mythological and cosmological factors and cultural leaning: e.g. that the predominant alignments were determined by sunrise or sunset on various days. In this way, varying importance attached to, for instance, the autumn sacrifice and Yule may have led to buildings varying in alignment (Lindström 1997; 2005). Common preferences in alignment may indicate that there was some form of cultural contact between northern Østlandet and central Sweden as early as the Early Iron Age. In the Late Iron Age, this contact between the Oslofjord and central Sweden via northern Østlandet contributed to some consolidation and also some undermining of the strong preference in the alignment of the buildings. The three-aisled buildings were aligned in the predominant direction even more than previously while the other buildings normally differ in alignment (Tabs. 6.19 and 6.20). It may, then, appear as if those who made use of the well-established three-aisled building technique were also tradition-bound in the choice of alignment. If one looks only at the buildings of the Viking Period, half of those from Oppland and Hedmark are oriented E–W while in Akershus, Vestfold and Østfold three lie N–S and two E–W. This shift might be a response to the major dust-veil event of AD 536 and the years with no summer that followed it (Gräslund 2007; Gräslund and Prince 2012; Arrhenius 2013; see also Ch. 9.3). Why the autumn sacrificial festival might have been more important than Yule in

northern Østlandet in the Early Iron Age and why this preference may have changed in the Late Iron Age and Viking Period cannot be investigated here. One possibility, however, is that the failure of the sun, and a fear that this would recur, made the winter solstice — the turning point to the lighter seasons — more significant.

Entrances and length — economic adaptation or cultural option?

The lengths of the buildings and their entrance-types may have varied according to the relative importance of livestock. In this perspective, the location of the entrances could illustrate what importance was attached to the animals. There was also probably a connexion between the length of the buildings or their type of entrance and the social and economic standing of the human occupants, a point I return to (Ch. 7.1.3). I shall now explore whether variation in length and entrance-types may have had practical reasons. A combination of cereal cultivation and livestock farming was the subsistence mode throughout the area and period of study, but it is possible that livestock (for instance) was more important in certain areas or specific periods.

In a southern Scandinavian building, the people and their livestock used the same entrance space, but the gap between the byre and the residential section can still be greater than in a mid-Scandinavian building. There, there was just a wall, perhaps with an opening for inter-access, separating people and beasts. In southern Østlandet both southern and mid-Scandinavian buildings are known from individual settlement sites, and if one type of entrance was reserved for a special function, that function must have been absent from northern Østlandet, which is hardly plausible. Nowadays, livestock farming is more important than cereal cultivation in Gudbrandsdalen where most of the buildings from Oppland have been found. The conditions for cereal cropping in Gudbrandsdalen are now less favourable than in the other administrative provinces, but the area is rich in pasture. It is easy to imagine that livestock farming was relatively more important in Oppland in prehistory as well. The conditions for cereal-growing in Gudbrandsdalen were described at the end of the 18th century as good but vulnerable to frost, drought and wind (Hiorthøy 1785:49). The high yields at that time may be due to good supplies of dung from animals kept in the byre. There may, thus, be a connexion between the recognition of livestock as extremely important and a preference for the mid-Scandinavian building. The buildings excavated in Hedmark, however, are situated in the good agrarian districts around Mjøsa, and it is difficult to perceive the conditions there as having been critically different than those in, for instance, the northern part of Akershus, where both types of entrance occur. Different economic and cultural significance attached to the value of the livestock thus cannot on its own explain the preferences for different types of entrance.

The length of the buildings also varies chronologically and geographically. The buildings of Hedmark of the Migration Period, for example, are much longer than those in the other provinces in that period (Tab. 6.22). Long buildings provide space for large numbers of beasts in the byre section and it is possible that livestock farming was more important in periods and areas which have long buildings. In this context, it is an interesting point that buildings with mid-Scandinavian entrances consistently appear to be longer than the southern Scandinavian buildings, even in southern Østlandet where both types are found. The buildings in Oppland and Hedmark do not, however, stand out as especially long except in the Migration Period and to some extent the Merovingian Period in Hedmark. My review of the evidence provides little basis on which to explain why it is exclusively short buildings that diverge in alignment but this is possibly connected to function. It is possible that whole buildings or parts of buildings were used for drying hay, food, or whatever. Several of these buildings have hearths, both southern and mid-Scandinavian entrances are represented, and architectonic features equally do not apparently differentiate them from other buildings.

All in all, I therefore regard it as relatively improbable that the length or entrance-types of the buildings were products of simple economic adaptation to the environment. It may rather be that the buildings reflect their occupants' cultural appreciation of cereal cultivation or livestock farming.

Social status and building practice

The connexion between social status and building practice may help to identify which differences are regional and/or represent chronological change even if inequalities in social status are not in themselves a key focus of this study. Eriksen (2019) has demonstrated a correlation between the length and entrance-types of the buildings and the status of the residents in the case of Late Iron-age buildings. She found that long buildings, buildings with more than one room with a hearth, buildings with four or more entrances and

buildings that were reconstructed several times at the same spot, were occupied by people of high status. I shall now explore whether or not that could have been the case throughout the Iron Age, and whether variation in building practice is principally due to the social status of the residents of the individual buildings.

Not all of the parameters that Eriksen examined are included in my data sample, but I shall take a closer look at long buildings, buildings with many entrances, and buildings that were rebuilt repeatedly at the same spot. 'Long' and 'many' are relative concepts here, which need to be defined in relation to something. The longest building in Migration-period Østfold, for instance, was 28 m long and thus less than the mean in Oppland and Hedmark. There are several factors which may explain this. One possibility is that social inequalities in Østfold were relatively low, or that they were not marked by the length of the buildings. The 28 m building in Østford is also 25% longer than the next longest building from this province of that period, and thus relatively long. It is also conceivable that the evidence is incomplete and that truly long buildings in Østfold just have not been discovered yet. Although far from all localities have sufficient evidence from each of the periods for a statistical approach to be meaningful I shall nevertheless try to discover possible trends in respect of length, the number of entrances, and repairs or reconstruction.

Six buildings had four or more entrances and all of these are of the Early Iron Age (Tab. 7.1). I shall examine these first. I have identified entrances in 90 buildings from across the Iron Age, so that the figure of six with four or more entrances is 7%. In her national data for the Late Iron Age, Eriksen (2019:87) found four of 43 buildings that have identified entrances to have four or more of them: around 9%. None of those is from Østlandet. The number of buildings that are distinguished with multiple entrances may thus be described as approximately the same in our studies. Multiple entrances are therefore relatively uncommon and may have been a sign of high social status in the Early Iron Age too, just as Eriksen (2015:87) proposes for the Late Iron Age. Three of the buildings with four or more entrances are more than 45 m long and amongst the very longest within the area of study. Ringdal *hus*1 measures 32 m and is the longest building from Migration-period Vestfold. Askim parsonage *hus* 1 of the pre-Roman Iron Age is 26 m long and the fourth longest buildings from Østfold of that period, 4 m shorter than the longest example. Borgenhaugen *hus* 10 of the same period and also in Østfold, by contrast, is just a little longer than the mean. All of these buildings are multi-phase, lying either above or below other buildings, or have been massively rebuilt — once more except in the case Borgenhaugen *hus* 10. Rebuilding renders it difficult to determine whether or not all of the entrances to the building were contemporary and so how many entrances the building really had. Borgenhaugen *hus* 10 stands apart in that two of the entrances have been identified on the evidence of short chambers rather than entrance posts (Grindkåsa 2009). This could mean that short chambers are ill-fitted as criteria for identifying entrances, and consequently that this building has only two entrances: one of the mid-Scandinavian type at each end. It could also mean that only forms of entrance which needed earth-fast posts could serve to mark status. (There are 14 buildings with entrances that are either in part or entirely identified on the basis of short chambers; especially the case with buildings of the pre-Roman Iron Age. If these are excluded from the discussion of entrances, the main trends of the evidence do not change.)

In periods with seven or more well-identified buildings per administrative province, the longest building is more than 1.7 times the mean, and it is only in periods where a province has three or fewer buildings that this ratio falls below 1.4:1 (Tabs. 6.14, 6.23, 7.2 and 7.3). This may indicate that both long and short buildings were constructed in all periods and all areas but that examples of the longest or shortest structures simply have not been found in

Table 7.1 *Buildings with four or more entrances.*

Building	Dating	Width	*Fylke*	Entrance-type	Number of entrances	Length	Herschend's entrance-type
Borgenhaugen	pRIA	6	Østfold	M1M2M3M4	4	17	Central Scandinavian
Askim	pRIA	6.5	Østfold	M1G	5	27	Ohter
Missingen hus 2	RIA	8	Østfold	M1S1M2S2M4	5	50	Both
Missingen hus 1	RIA	8	Østfold	6	6	61	None
Valum hus I	MigP	8.7	Hedmark	M1S1M3S2	4	47	Both
Ringdal 13 hus 1	MigP	8	Vestfold	M1M2M3M4	4	32	Central Scandinavian

Table 7.2 *Buildings more than 40 m long.*

Hus	Dating	*Fylke*	Gable	Number of entrances	Length	Calculated width
Missingen,	RIA	Østfold	Drawn out	6	61	6.5
Missingen hus	RIA	Østfold	-	5	50	7.7
Veien hus I	RIA	Buskerud	-	2	45	7.9
Skøyen hus 1	RIA	Østfold	Drawn out	3	41	
Rødbøl 19,	RIA/MigP	Vestfold	Rounded	1	45	7.6
Vøien hus 2	RIA/MigP	Akershus	Drawn out	3	44	
Valum hus II	MigP	Hedmark	Drawn out	3	51	
Valum hus I	MigP	Hedmark	Drawn out	4	47	
Sem Fengsel	MerP	Vestfold	Drawn out	2	41	9.5

all periods and all provinces. The low variance in the length of the buildings thus probably reflects a low level of representativity in the evidence rather than the actual state of affairs in prehistory.

Nine buildings are more than 40 m long. Eight of these date to the Roman Iron Age, Roman Iron Age/ Migration Period or Migration Period, and the other to the Merovingian Period (Tab. 7.2). I shall now discuss if these buildings have anything in common besides their length. Entrances have been identified for all of these structures but it is difficult to discern any pattern in the entrance-types other than that three of the examples had four or more entrances.

The five buildings with surviving traces of walls range from 6.5 to 9.5 m in width, approximately the same as found in the evidence as a whole. The two buildings at Valum are quite similar and built on the same spot with just a few centimetres' offset. The two buildings at Missingen were also built on the same site but look rather more dissimilar. Vøien *hus* 2 had a number of posts replaced and may have been rebuilt. Both Rødbøl 19 *hus* 3 and Sem Prison appear to have been single-phase buildings with no reconstruction. The building at Sem Prison had no other three-aisled buildings in its vicinity. Several long buildings but far from all of them, therefore, were reconstructed or replaced. Several of the buildings have been associated with what we call 'high-status milieux'. The cemetery at Veien, immediately adjacent to the buildings, included a number of rich burials of the Early Iron Age, amongst them a rich Roman Iron-age male grave (Gustafson 2000; 2001; 2016). The buildings at Missingen are interpreted as halls at a chieftainly farmstead linked to a craft centre producing goldwork, amongst other things (Bårdseth and Sandvik 2007; Bårdseth 2009; Maixner 2015). A grave was inserted in the central aisle of the building at Jarlsberg immediately after the building burnt down. This grave contained, amongst other things, weaponry and a shield-on-tongue buckle, and the deceased was probably of relatively high status (Grindkåsa 2012a).

There is, in contrast, little to suggest that the buildings at Vøien or Rødbøl belonged to high-status milieux of the Roman Iron Age/Migration Period

Table 7.3 *The ratios between the longest building of a period and the mean length of the buildings. Values that are higher than in the preceding period are marked in grey. The highest ratio is picked out in semi-bold typeface. The number of identified three-aisled buildings of the period in brackets.*

Maximum length as percentage of mean length (Number of identified three-aisled buildings from the period)	pRIA (incl. pRIA/RIA)	RIA	RIA/MigP	MigP (incl. MigP/MerP)	MerP	VP (incl VP/ MA)
Østfold	207 (38)	**226** (9)	138 (2)	140 (6)	121 (3)	100 (1)
Akershus	171 (4)	189 (15)	**191** (7)	165 (7)	170 (5)	
Vestfold	160 (4)	143 (5)	161 (4)	**168** (7)	111 (2)	
Oppland	100 (1)	**182** (7)	135 (2)	123 (2)		100 (1)
Hedmark	100 (1)	**177** (5)		131 (4)	131(3)	
Buskerud	100 (1)	**118** (2)	100 (1)			
Telemark	**100** (1)					
Oslo	**100** (1)					

(Gjerpe and Rødsrud 2008; Berg-Hansen 2010b; Kjos and Skogsford 2010). It is true that later on, probably in the Viking Period, a burial mound was raised immediately adjacent to the buildings of Rødbøl 19 (Gjerpe and Rødsrud 2008). A female grave of the Merovingian Period containing, inter alia, oval brooches was found in the central aisle of Rødbøl 27 *hus* 2 about 200 m further east, and an equestrian grave of the Viking Period has been excavated about 200 m to the south-west at the neighbouring farm of Seierstad (Brrathen 1989; Rønne 2007). Contemporaneity and locational proximity must, however, be the criteria for interpreting a place as a high-status context (Stålesen 2011:72–4) as the density of burials in Vestfold is high. I will conclude, then, that long buildings are often but not always from high-status milieux. This does not mean, however, that long houses were not *per se* a status symbol in the Early Iron Age too (see Eriksen 2015:58).

Adaptation or cultural choice?

This survey shows, in sum, that climatic factors had limited effect on variance in building practice in the study area. It must be emphasized, though, that no detailed studies of local climatic or topographical conditions have been undertaken. The buildings do not appear to have been aligned in accordance with locally prevailing winds and the entrance areas of the buildings and their length do not appear to be correlated with the capacity of the surrounding area for livestock farming. I shall conclude, therefore, that it was first and foremost the social status of the residents and their cultural preferences that underlay the varieties of building practice.

THE FARMSTEADS AS SITES — THE HISTORY OF THE SETTLEMENT SITES IN A LONG-TERM PERSPECTIVE

Many settlement sites were established sites of some kind both before and after their use as settlement sites. By investigating the events before and after the period of settlement I wish now to search for possible patterns in the foundation and termination of the history of the sites; in other words, I aim to provide a simplified review of the settlement sites' biography with particular focus on their conception and death (Ch. 1.4.5). Just here, then, I place equal weight on the events before and after occupation as on the buildings themselves. The study is based upon 49 sites from Akershus, Østfold and Vestfold (Fig. 7.2) that are suitable for such assessment (Ch. 5.4.4). Sites in the other administrative provinces are not included in this review. This is first and foremost due to the fact that few sites from those provinces meet the criteria (Ch. 5.4), so that cumulatively the sites provide little insight into possible changes over time. This is especially in view of the fact that building practices have revealed variance in both time and space (Ch. 6) and it is important to assess, as a result, whether or not the life of the settlement sites varied too.

The random farmstead and the marked farmstead

A systematic schematization of the events reveals certain clear patterns (Fig. 7.2). Seven sites in Akershus and six in Vestfold were founded in the pre-Roman Iron Age or the first half of the Roman Iron Age, before c. AD 200. What they have in common is that all comprise few buildings and were short-lived. There were on the whole only one or two buildings per site, and the construction of these buildings was the first event at the site. There are no earlier burials at any of the sites, although in some cases earlier cooking pits or traces of other activity are present. There are likewise no contemporary burials at any of the settlement sites. The site often, although not always, appears to have been forgotten after people moved away from it. Cooking pits are decidedly the most common signs of activity post-dating abandonment. A settlement of this category I shall label 'the random farmstead', because to a large extent such settlements were founded at sites with no history and appear to have created little history of themselves. The pattern is a little different in Østfold, and I shall return to this (Ch. 7.2.2).

Ten settlement sites in Akershus and five in Vestfold were occupied in the period AD 200–600. These settlements were usually in use for longer than the earlier ones; there are usually several contemporary or successive buildings at each site; and in some cases there were earlier burials at the site when the first buildings were raised. At some sites there are also contemporary burials. There are frequently cooking pits at the sites, which can be earlier, contemporary with or later than the buildings. In two cases, sites where very much earlier buildings had stood were built upon. This category of settlements I label 'the marked farmstead', because the site has a history, usually both before and after its functioning period as a settlement. There are cases of contemporary burials at some settlement sites of this period in Akershus and Vestfold. Vestfold is distinct, however, in that settlement sites that were abandoned in the Migration Period or the early Merovingian Period

often seem to have been closed with human burials. This can take place immediately after the site is given up, as at Rødbøl and Sem Prison, and possibly at Ringdal too, or perhaps a little later, as at Elgesem, where the graves are undated. The settlement sites in Akershus do not appear to be closed in this manner at this time.

The unknown farmstead

Few settlement sites have been excavated which are later than c. AD 600, and my term for this category is therefore 'the unknown farmstead'. Those sites that have been investigated in Vestfold and Akershus appear to be located at already established sites, usually pre-existing settlements. Several of them are also sites which were in use in the early Medieval Period even if that is not immediately evident from Figure 7.2. The discussion of any possible closing of these sites is closely bound up with the source-evaluative factors that were considered in Chapter 4. I shall therefore undertake a qualitative study of sites which may very well have had a long sequence of continuity as settlements even if no buildings have been discovered there (Ch. 7.2.3).

The pattern in Østfold is rather different from that in Vestfold and Akershus. Around half of the settlement sites there were located at sites established as early as the pre-Roman Iron Age and there are often more than two contemporary or successive buildings at the site. There are no contemporary graves and buildings at any site in Østfold, but at two sites graves were placed there a few centuries after the last building was constructed, or possibly in an interval between two settlement phases. After the year 600 it appears that new settlements were located at sites with no previous activity but by preference in the neighbourhood of more or less contemporary burials. It would thus appear that the creation and termination of the sites as settlements displays some of the same geographical distribution as the buildings themselves (Ch. 6.2 and 6.3). Østfold is distinctive while Akershus and Vestfold are more similar, but there are still specific differences, such as that burials were made after the cessation of settlement activity at several sites in Vestfold.

In depth: sites with long continuity

Some sites may have had long continuity without any buildings being discovered there. If settlement continuity runs right up to the present day the sites will only exceptionally have been examined archaeologically, for the very reason that the prehistoric structures lie underneath the current farmstead (Ch. 4.2). Moi in Agder, and Åker and Valum in Hedmark, may indicate that some settlements with contemporary activity have continuity going far back in time, to the Roman Iron Age at least (Pilø 2005; Reitan 2011). In Østfold, Vestfold and Akershus too, the three provinces I am investigating in this part of the study, there are sites with a history from the Bronze Age to the Medieval Period and into the Modern Period. I shall take a closer look at three of those sites: Hesby, Gulli and Østre Borge in Vestfold. All of them are situated close to present-day farmsteads with continuity known back to the Medieval Period; traces of buildings of the Iron Age have only been found at Hesby and Gulli. Just as Hørdalsåsen cannot be understood by means of continuity scholarship, these sites are difficult to understand without taking continuity into account. I have also examined Rør in Rygge, Østfold, in greater detail too because it is the only site in this study with buildings from the Early Roman Iron Age to the Late Viking Period. These sites have also been picked out in order to shed light on the source-critical problem already noted (Ch. 4.6): can the reason why we find few buildings from the Merovingian Period and even fewer from the Viking Period be, to some extent, the fact that they are lying underneath existing contemporary farmsteads?

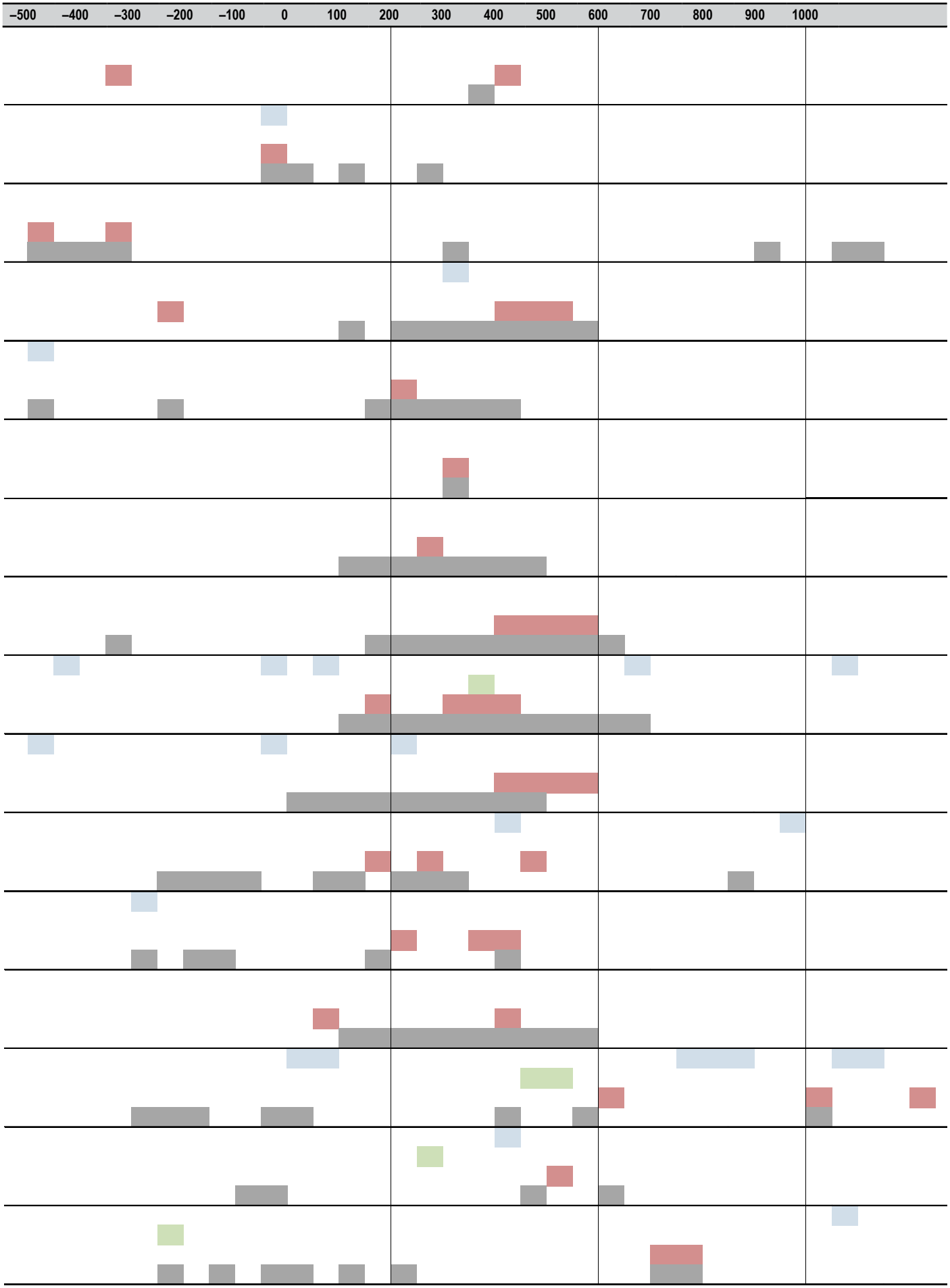
The areas investigated at Hesby lie on a gentle south-facing slope (Gollwitzer 2012a). At the top of the ridge the present-day farm settlement is found. The area became dry land in the Early Bronze Age and was grazed or cultivated soon thereafter. Evidence of manuring with settlement waste has been found by means of micromorphological analyses of the cultivation layers (Viklund et al. 2013) but no buildings of that period have been discovered. This probably implies that the settlement was situated at the top of the ridge, unless the settlement waste was transported from some other site to be used in manuring. The situation is more or less the same in the pre-Roman Iron Age, but in addition cooking pits were created. The only building from the site is dated to the Roman Iron Age while there were also wells, remains of craftwork and a number of cooking pits of this period. It then appears that activity ceased: there is no sign of activity in the Migration Period. In the Merovingian Period activity apparently recommenced (unless, in fact, it had continued). Cultivation layers with traces of settlement waste, grazing and at least one well are dated to this period. It is possible that cultivation became less intensive towards the end of the period. One grave is dated either to the

Merovingian or the Viking Period and three to the Viking Period. A ring-ditch with no preserved grave is very probably of these periods too. Wells were built in the Viking Period, alongside cultivation and grazing. The latest dated well was constructed early in the Medieval Period, a period in which cultivation appears to have been intensified. The graves were robbed in the Middle Ages and it is likely that grave markers in the form of barrows were cleared. Hesby is recorded in historical documentation of the Medieval Period and it is probable that it was indeed the settlement on the ridge top immediately north of the excavated site that this refers to. In more modern times the settlement has been where it now stands. Although the buildings are lacking, it is probable, as a result, that the ridge at Hesby has been a settlement site from the Bronze Age to the Modern Period with a hiatus in the Migration Period.

The areas examined at Gulli were a few metres east of the contemporary farmstead and largely at the same elevation (Gjerpe 2005b; 2008a). At Gulli there are scattered traces of activity, possibly settlement or cultivation, from the Bronze Age, c. 1500 BC. Around AD 200 activity intensified: a number of cooking pits and cultivation layers derive from this period, while a three-aisled building from the period immediately before the birth of Christ confirms that there was settlement here for at least some parts of the period. The building, however, lies about 180 m from the contemporary farmstead. Around AD 500 activity reduced, before the site became a cemetery from the 8th century to c. AD 950. In the Late Viking Period, grain provides evidence of cultivation, and some post-holes possible evidence of settlement, although these post-holes cannot be joined up to form buildings. A smithy is dated to the Medieval Period and implies settlement, while concurrently Gulli is referred to in medieval written sources. The site at Gulli

Fylke	Site	Sortering	Events
	Borgen	1	Other
	Borgen	1	Grave
	Borgen	1	Building
	Borgen	1	Cooking pit
	Onsrud	1	Other
	Onsrud	1	Grave
	Onsrud	1	Building
	Onsrud	1	Cooking pit
	Svarstad	1	Other
	Svarstad	1	Grave
	Svarstad	1	Building
	Svarstad	1	Cooking pit
	Åmål og Hol	1	Other
	Åmål og Hol	1	Grave
	Åmål og Hol	1	Building
	Åmål og Hol	1	Cooking pit
	Dønnum	1	Other
	Dønnum	1	Grave
	Dønnum	1	Building
	Dønnum	1	Cooking pit
	Hurdal skole lok 2	1	Other
	Hurdal skole lok 2	1	Grave
	Hurdal skole lok 2	1	Building
	Hurdal skole lok 2	1	Cooking pit
	Huseby	1	Other
	Huseby	1	Grave
A	Huseby	1	Building
K	Huseby	1	Cooking pit
E	Nannestad Videregående	1	Other
R	Nannestad Videregående	1	Grave
S	Nannestad Videregående	1	Building
H	Nannestad Videregående	1	Cooking pit
U	Nordre Moer	1	Other
S	Nordre Moer	1	Grave
	Nordre Moer	1	Building
	Nordre Moer	1	Cooking pit
	Nordre Moer 05	1	Other
	Nordre Moer 05	1	Grave
	Nordre Moer 05	1	Building
	Nordre Moer 05	1	Cooking pit
	Søndre Moer	1	Other
	Søndre Moer	1	Grave
	Søndre Moer	1	Building
	Søndre Moer	1	Cooking pit
	Trollerud	1	Other
	Trollerud	1	Grave
	Trollerud	1	Building
	Trollerud	1	Cooking pit
	Vøien	1	Other
	Vøien	1	Grave
	Vøien	1	Building
	Vøien	1	Cooking pit
	Garder	1	Other
	Garder	1	Grave
	Garder	1	Building
	Garder	1	Cooking pit
	Nannestad prestegård	1	Other
	Nannestad prestegård	1	Grave
	Nannestad prestegård	1	Building
	Nannestad prestegård	1	Cooking pit
	Ullensaker prestegård	1	Other
	Ullensaker prestegård	1	Grave
	Ullensaker prestegård	1	Building
	Ullensaker prestegård	1	Cooking pit

Figure 7.2 *Events at the settlement sites before, during and after the settlement stage. Drawn by Elise Naumann.*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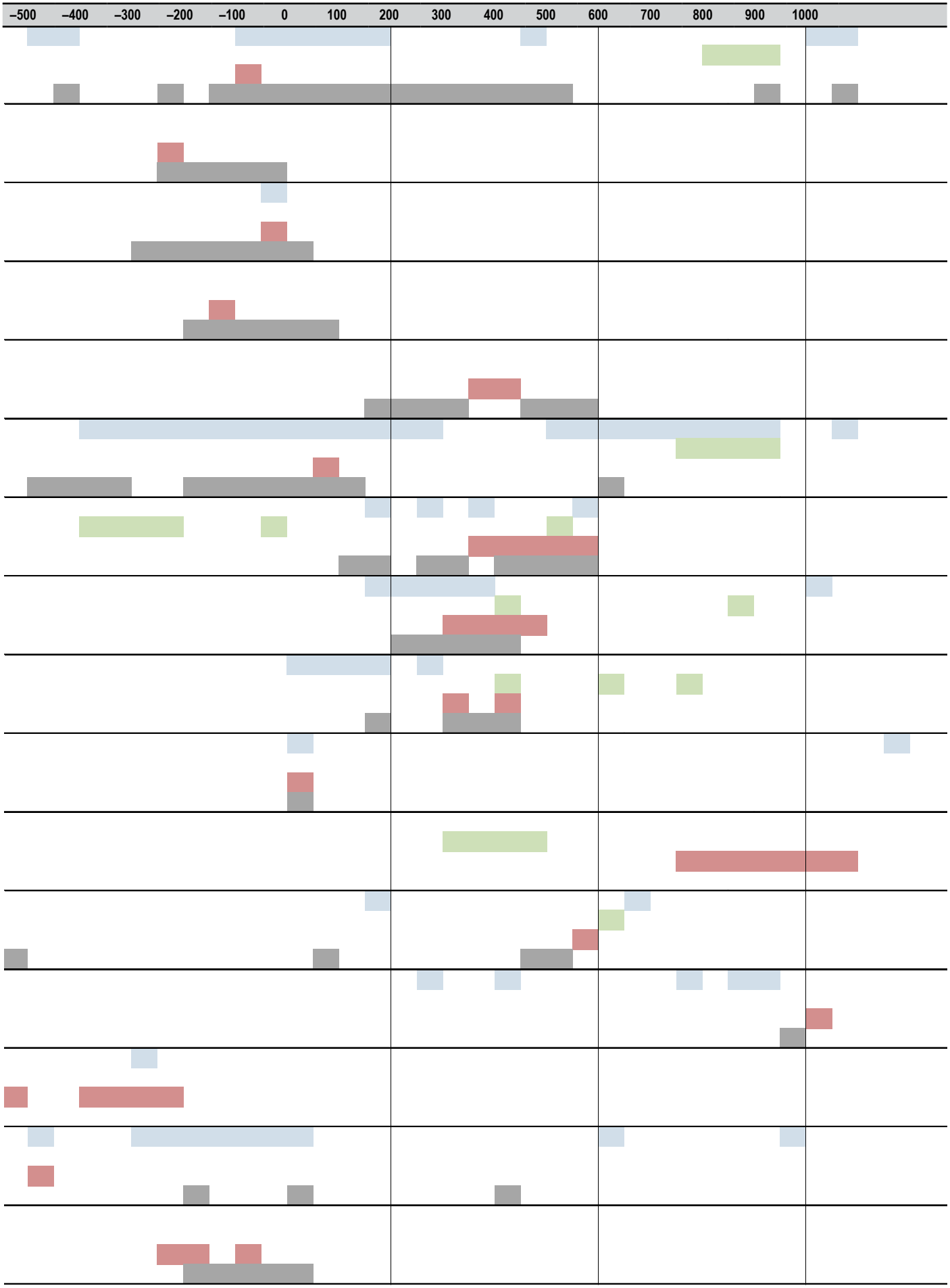
thus has deep continuity, initially from the pre-Roman Iron Age to c. AD 500 and then from c. AD 700 onwards. No traces of settlement of the Late Iron Age have been discovered, not prior to the very end of the Viking Period at least. There is, however, an opening running through the Viking-period cemetery which could have been a routeway. It is aligned towards the contemporary farmstead and may indicate that the farmstead of the Viking Period was in the same place. It is possible, then, that the buildings of the Late Iron Age, and indeed of the Early Iron Age, are lying underneath the present-day farmstead, immediately west of the area of excavation.

At Østre Borge, the areas excavated were situated about 60 m south-south-east of the contemporary farmstead, somewhat lower than it (Storrusten and Østmo 2012). There was agricultural activity here as early as the transition from the Neolithic to the Bronze Age, and activity intensified around 1100 BC. Cooking pits, furnaces, wells and a series of other traces of activity and artefacts from the period between c. 1100 BC and the Migration Period have been found. Micromorphological analyses show that the area had imported settlement waste (Viklund et al. 2013) but despite that, and the finding of isolated post-holes, no building has been found here. No signs of activity in the Migration Period have been found at the site notwithstanding the dating of more than a hundred radiocarbon samples. Nor have sherds of bucket-shaped pottery been found here, an artefact-type which is very common at Migration-period settlement sites, Vestfold included. Pollen analyses additionally show a clear reduction in cereal cultivation in the 5th century (Svensson and Regnéll 2013). In the 7th century evidence of activity re-appears, particularly in the form of signs of cultivation, while one pig bone and a layer of brewing stones (potboilers) are dated to the Viking

Figure 7.2 *Events at the settlement sites before, during and after the settlement stage. Drawn by Elise Naumann.* (cont.)

Fylke	Site	Sortering	Events
VESTFOLD	Gulli	1	Other
	Gulli	1	Grave
	Gulli	1	Building
	Gulli	1	Cooking pit
	Nøtterøy golf	1	Other
	Nøtterøy golf	1	Grave
	Nøtterøy golf	1	Building
	Nøtterøy golf	1	Cooking pit
	Slagen kirkegård	1	Other
	Slagen kirkegård	1	Grave
	Slagen kirkegård	1	Building
	Slagen kirkegård	1	Cooking pit
	Vølen	1	Other
	Vølen	1	Grave
	Vølen	1	Building
	Vølen	1	Cooking pit
	Elgesem 46	1	Other
	Elgesem 46	1	Grave
	Elgesem 46	1	Building
	Elgesem 46	1	Cooking pit
	Hesby	1	Other
	Hesby	1	Grave
	Hesby	1	Building
	Hesby	1	Cooking pit
	Ringdal	1	Other
	Ringdal	1	Grave
	Ringdal	1	Building
	Ringdal	1	Cooking pit
	Rødbøl 19	1	Other
	Rødbøl 19	1	Grave
	Rødbøl 19	1	Building
	Rødbøl 19	1	Cooking pit
	Rødbøl 27	1	Other
	Rødbøl 27	1	Grave
	Rødbøl 27	1	Building
	Rødbøl 27	1	Cooking pit
	Åmot	1	Other
	Åmot	1	Grave
	Åmot	1	Building
	Åmot	1	Cooking pit
	Huseby	17	Other
	Huseby	17	Grave
	Huseby	17	Building
	Huseby	17	Cooking pit
	Ölfvin	1	Other
	Ölfvin	1	Grave
	Ölfvin	1	Building
	Ölfvin	1	Cooking pit
	Hedrum prestegård	1	Other
	Hedrum prestegård	1	Grave
	Hedrum prestegård	1	Building
	Hedrum prestegård	1	Cooking pit
ØSTFOLD	Borgenhaugen	1	Other
	Borgenhaugen	1	Grave
	Borgenhaugen	1	Building
	Borgenhaugen	1	Cooking pit
	Glemmen	1	Other
	Glemmen	1	Grave
	Glemmen	1	Building
	Glemmen	1	Cooking pit
	Askim prestegård	1	Other
	Askim prestegård	1	Grave
	Askim prestegård	1	Building
	Askim prestegård	1	Cooking pit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Period. Cereal cultivation appears, however, to fall in the Viking Period before increasing again from around the year 1000. In the Medieval Period there is evidence for cultivation from pollen analyses but no other signs of activity of this period have been found in the archaeological evidence. Notwithstanding a range of traces of activities and of manuring with settlement waste, the actual buildings have not been found. This could be because they lay on the small hill where the present-day built settlement is, partly lower down and partly outside of the area of investigation which was determined by heritage management protocols. Four farms in the Borge cluster — Borghom, Ellingsborghom, Olbiarnaborghom and Tantaborghom — are mentioned in medieval documentary sources. It is not inconceivable that these correspond with modern Østre, Vestre, Mellom- and Tuten-Borge [East, West, Middle and Tuten Borge] even if it cannot be certain which of the medieval names goes with which of the contemporary names. The site of Østre Borge was thus in use from the Bronze Age to the end of the Roman Iron Age and from the Merovingian Period to the present. The buildings of this period are lacking, but they may lie beneath the current farmstead immediately adjacent to the area of excavation, and it is therefore not inconceivable that there has been settlement at this site in parts of the period if not throughout it.

At Rør in Østfold, two sites separated by a crossroads have been excavated (Berg 1997). There was activity here as early as the Neolithic, while in the Bronze Age there was probably settlement and farming going on in the vicinity, although no buildings have been identified. In the pre-Roman Iron Age cooking pits were created, and the first building was raised at the beginning of the Roman Iron Age. From then to c. AD 600 four further three-aisled buildings were put up. A sunken feature building was constructed around the year 800, and four post-holes dated to the early Medieval Period may

Fylke	Site	Sortering	Events
	Bjørnstad (Eidsberg)	1	Other
	Bjørnstad (Eidsberg)	1	Grave
	Bjørnstad (Eidsberg)	1	Building
	Bjørnstad (Eidsberg)	1	Cooking pit
	Borge vestre	1	Other
	Borge vestre	1	Grave
	Borge vestre	1	Building
	Borge vestre	1	Cooking pit
	Bustgård lok 32-36	1	Other
	Bustgård lok 32-36	1	Grave
	Bustgård lok 32-36	1	Building
	Bustgård lok 32-36	1	Cooking pit
	Dikeveien	1	Other
	Dikeveien	1	Grave
	Dikeveien	1	Building
	Dikeveien	1	Cooking pit
	Gonsgrinda	1	Other
	Gonsgrinda	1	Grave
	Gonsgrinda	1	Building
	Gonsgrinda	1	Cooking pit
	Kjenne	1	Other
Ø	Kjenne	1	Grave
S	Kjenne	1	Building
T	Kjenne	1	Cooking pit
F	Lundeby	1	Other
O	Lundeby	1	Grave
L	Lundeby	1	Building
D	Lundeby	1	Cooking pit
	Melleby	1	Other
	Melleby	1	Grave
	Melleby	1	Building
	Melleby	1	Cooking pit
	Nøkleby	1	Other
	Nøkleby	1	Grave
	Nøkleby	1	Building
	Nøkleby	1	Cooking pit
	Solberg lok 28	1	Other
	Solberg lok 28	1	Grave
	Solberg lok 28	1	Building
	Solberg lok 28	1	Cooking pit
	Årum	1	Other
	Årum	1	Grave
	Årum	1	Building
	Årum	1	Cooking pit
	Missingen	1	Other
	Missingen	1	Grave
	Missingen	1	Building
	Missingen	1	Cooking pit
	Rør i Rygge	1	Other
	Rør i Rygge	1	Grave
	Rør i Rygge	1	Building
	Rør i Rygge	1	Cooking pit
	Solberg lok 27	1	Other
	Solberg lok 27	1	Grave
	Solberg lok 27	1	Building
	Solberg lok 27	1	Cooking pit
	Vister	1	Other
	Vister	1	Grave
	Vister	1	Building
	Vister	1	Cooking pit
	Bjørnstad	1	Other
	Bjørnstad	1	Grave
	Bjørnstad	1	Building
	Bjørnstad	1	Cooking pit
	Bjørnstad (Sarpsborg)	1	Other
	Bjørnstad (Sarpsborg)	1	Grave
	Bjørnstad (Sarpsborg)	1	Building
	Bjørnstad (Sarpsborg)	1	Cooking pit

Figure 7.2 *Events at the settlement sites before, during and after the settlement stage. Drawn by Elise Naumann.* (cont.)


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have formed a building. There are only 30 radiocarbon dates from this relatively extensive excavation (fully 9,000 sq m, with 1,250 structures) and those were taken primarily from the foundations of buildings and a few post-holes that could not be associated with buildings. It is difficult, as a result, to tell whether or not the activity is principally of the same date as the periods that have been dated or if it was more evenly spread out. It is clear, too, that the excavations have covered nothing like the complete settlement site, as several of the buildings were only partly uncovered. It is likely that much of the settlement site had been destroyed by modern building works before the archaeological excavation; especially by the railway line that then ran to the north. The settlement site may therefore have continued underneath the modern settlement area north of the railway. The buildings of the Early Iron Age lie in the south-eastern extremity while the medieval building is that furthest to the north-west, with the buildings of the Late Iron Age in between. It may appear, then, that the settlement had slowly moved from south-east to north-west through time. If that were the case, it is possible that the settlement at Rør referred to in written documents from 1320 may lie even further north-west beyond the area of excavation and beneath a farmstead (Rør gnr. 2 bnr. 7). The three cadastral farms of western, northern and southern Rør have a complex history of division and recombination (Flood 1957:9–29) and this farmstead itself was founded in the 19th century. The possible settlement of the Medieval Period may lie, then, underneath one of the present-day farmsteads even though that farm was only established in the 19th century. The earlier farmstead (Rør gnr. 2 bnr. 1) is situated fully 100 m west of this site. Rør was nonetheless a firmly established site throughout the Iron Age and into the Medieval Period.

It is demonstrated beyond doubt, therefore, that some sites have been in use for a long time and that the sites themselves have long sequences of continuity. Even so, only a few buildings have been found at these sites. The 'missing' buildings may, as noted, lie beneath the extant settlement of our time. Archaeological excavations inside existing farmsteads have, however, yielded only a small amount of empirical evidence that either supports or undermines this proposition (for a number of excavations with no finds of buildings, see Martens 2009; Stene 2009; Johansson 2011). It may also be the case that only special sites have long continuity. At Hesby and Østre Borge, for instance, various forms of craftwork or production appear to have been important: a field of activity that is otherwise rarely represented in the archaeological settlement-site evidence. It is possible, then, that sites for production and craftwork more often have long continuity than other sites. Another interpretation may be that craftwork and production were not linked to agrarian settlement, so that it is not farming settlement that has long continuity.

SPOT-CONTINUITY — BUILDINGS WHICH OVERLIE OR UNDERLIE OTHER BUILDINGS AND GRAVES

In a number of cases it appears that a specific spot was of significance, not just the general site (Brink 1984). Spots of this kind may be marked in various ways. Two or more successive buildings may be put up on exactly the same plot; the buildings may be placed above earlier graves or later graves may be inserted above the buildings. My aim here is to investigate whether the younger feature was deliberately constructed above the elder. For this, I need to go into details again. In the review of the evidence I pay attention to another pattern too. Some buildings very nearly overlap: they are so close to one another that they can hardly have been standing at the same time. I shall also, therefore, investigate if it could have been deliberate that the buildings do not overlap and if there is any pattern in what kinds of buildings overlay or underlay other buildings or graves.

I consider it important to draw out any pattern that was the product of the housebuilders' conscious thoughts in respect of the re-use of earlier plots rather than being more or less a matter of chance. If several generations build in a limited area, some buildings will usually lie close to each other or overlap, but that does not necessarily mean that the housebuilders were in any way consciously involved in overlapping the structures. It may more plausibly be the site itself that was attractive. In the following review I shall attach especial weight to circumstances which it is difficult to perceive as purely coincidental, before drawing certain trends out of the evidence in conclusion. I shall first present buildings that have parallel central axes and which overlap (Ch. 7.3.1). The aim here has been to include every example. I shall then look more closely at buildings that lie at a right angle to each other or in a chevron configuration; here too I aim to present every example (Ch. 7.3.2–7.3.3). I then examine buildings that would almost have been touching if they had been contemporary (Ch. 7.3.4); this evidence, however, is unlikely to be complete. Finally I consider buildings that over- or underlie graves (Ch. 7.3.5) before finally drawing out certain trends within the evidence (Ch. 7.3.6).

Parallel successive buildings

To begin with, I consider in more detail what I have called the parallel house-over-house phenomenon (Tab. 7.4; Fig. 7.3). Parallelism here is a factor of the alignment of the central axis. Some buildings overlap practically entirely and it can even be difficult to determine whether two or more buildings have been constructed on the same plot or just one building has been rebuilt or improved. Other buildings may have minor differences in alignment, or differ either lengthways or sideways, so that it is clear that two separate buildings are present.

The buildings which over- or underlie other buildings are no different from other buildings of their period. In the pre-Roman Iron Age, however, it is only in Østfold that buildings have multiple phases or several buildings are definitely constructed on the same plot. There is one possible exception from Hedmark, but those buildings are poorly identified and weakly dated. It may also be argued that individual buildings outside of Østfold, for instance at Vøien in Vestfold, have evidence of the replacement of a single post (Grindkåsa 2010:38). In my view this represents something different from the replacement or rebuilding of major parts of the building that can be observed in Østfold (Bukkemoen 2015) and which occurs repeatedly at Dilling, a major settlement site in Østfold that has only been published in part (Ødegaard et al. 2018; Gjerpe 2019). It is worth noting that none of the many buildings at Borgenhaugen in Østfold overlap, because this shows that having a large number of buildings around the same site will not necessarily lead to them being built over predecessors. This could show, then, that the construction of one building above a predecessor was deliberate. In the Roman Iron Age, a building was put up above an earlier building at least on one occasion in Østfold and possibly at one site in Akershus. Individual buildings in Østfold, Oppland and Hedmark, however, were most probably repaired or rebuilt. It is not possible to exclude the possibility that in those three cases too there were in fact successive buildings of different lengths on the same spot. Nevertheless, there is no doubt that rebuilding and new construction on the same plot did happen outside of Østfold in this period, and buildings appear to have been lengthened on the same spot. In the Roman Iron Age/Migration Period buildings appear to have been constructed above preceding buildings in Akershus, Vestfold and Buskerud and very probably in Østfold, but not in northern Østlandet. In the Migration Period this practice is found in Akershus, Hedmark and Vestfold and possibly in Østfold but not in Oppland. In the Merovingian Period, buildings were put up over predecessors in Akershus and Hedmark. The lack of matching discoveries in the other provinces may be due to the sparsity of evidence. In the Viking Period buildings were raised above earlier ones in Østfold and possibly in Hedmark.

It emerges from this review, then, that buildings which were laid parallel above earlier buildings have been found in the majority of the provinces and in most periods but that the practice was adopted at different times. In Østfold it appears as early as the pre-Roman Iron Age but occurs only from the Roman Iron Age onwards in the other administrative provinces. The sparsity of evidence from Østlandet of the Late Iron Age renders it difficult to determine when the practice went out of use but it very probably survived as long as the use of three-aisled buildings did. Eriksen (2019) has discussed the origins of the practice but with less attention to its demise in her discussion of the much more extensive evidence from Norway as a whole. Altogether, it is clear that the later building was, as a rule, constructed soon after the earlier had been pulled down, burnt down or collapsed — even if it is rare to be able to determine exactly what happened to the earlier building. In some cases it is clear that two or three buildings had been put up in the same place while at other sites some of the roof-bearing posts were replaced. It is possible, in addition, to distinguish between three ways of raising a building on the same spot. In some cases the later structure was probably a copy of its predecessor and the roof-bearing posts are just repositioned by a few centimetres along the long axis.

The practice of putting up multiple, identical buildings on the same spot has only been found in northern Østlandet but it is not impossible that some cases in southern Østlandet have been misinterpreted as the replacement of posts. In other cases the later building is repositioned a few centimetres to one side or the other so that it is clear that they are separate buildings. In some cases buildings of different length and form but with parallel and often approximately equally wide central aisles lie one over the other, usually repositioned by some amount along the long axis. If the walls do not survive it is usually difficult to distinguish between this mode and the replacement of posts. There are no buildings with different alignments that overlap in parallel except in the case of one building of the pre-Roman Iron Age at Borge vestre in Østfold. This corroborates the inference that overlapping was not a matter of chance.

Table 7.4 *Successive parallel buildings. Sorted by period and then by* fylke. *Pilø (2005) dates the buildings from Åker to the Merovingian or Viking Period and Eriksen (2019) to the Viking Period. As I treat the period in which a building was constructed rather than its period of use as important, I date them to the Merovingian Period.*

Site **Parallel superimposed buildings**	**Buildings**	**Notes**
Borge vestre, Østfold	Building 8 (pRIA) over Building 7 (BA–pRIA) Building 5A over or under Building 5B (pRIA)	Two-aisled buildings. Repair; not two buildings?
Nøkleby, Østfold	Building 1 (pRIA), Building 2 (pRIA), Building 3 (pRIA?), Building 4 (pRIA?)	All four buildings overlap and cannot have stood at the same time. Buildings 2 and 3 may be phases of one buidling but Buildings 1 and 4 (shorter) are two different buildings.
Askim prestegård, Østfold	Building 1 (pRIA) over Building 2 (pRIA)	May be two phases of one building.
Bjørnstad, Østfold	Building 1 (pRIA) over Building 2 (pRIA)	
Missingen, Østfold	Building 2 (RIA) over Building 1 (RIA) Building 3 (EJA) over or under Building 1 (RIA) og 2 (RIA)	
Bustgård (lok. 33), Østfold	Building 1 (RIA) over Building 2 (EJA/pRIA?	Not fully parallel central axes; Building 1 twice the length.
Skøyen, Østfold	Building 1 (RIA)	Very probably alterned, may be two buildings.
Borgen, Akershus	Building 1 (RIA) over Building 5 (pRIA)	Central aisles do not overlap.
Lille Børke, Hedmark	Building 2 (RIA) over Building 1 (RIA)	Central aisles do not overlap and are not fully parallel.
Vidarshov, Hedmark	Building A (RIA) over Building B (RIA)	Probably two phases, not two buildings
Leikvang, Hedmark	Building 2 (EJA) over Building 1 (pRIA). Isolated postholes may indicate a building either above or below Building 1 (pRIA)	Just a few centimetres overlap at the end. The postholes are not connected to the building, not dated
Brandrud IV, Oppland	Building 2 (RIA) over Building 3 (RIA)	Most probably two buidlings but may be two phases of one building.
Vister, Østfold	Building 1 (RIA/MigP) and Building 2 (RIA-MigP) may overlap	Central aisles do not overlap but the side aisles may.
Nordre Moer, Akershus	Building 2B (RIA/MigP) over Building 2A (RIA)	
Trollerud, Akershus	Building 2 (RIA/MigP) over Building 1 (RIA)	
Veien, Buskerud	Building IV (RIA/MigP) over Building II (RIA)	
Rødbøl 19, Vestfold	Building 4 (RIA-MigP) over or under Building 5 (RIA- MigP)	Building 5 poorly identified.
Kjølberg, Østfold	Building 1 (MigP) over or under Building 8 (MigP)	Central aisles not parallel, Building 8 poorly identified. Might also be fan-shaped (Ch. 7.3.3).
Søndre Moer, Akershus	Building 3 (MigP) possibly over Building 1 (RIA)	Both buildings poorly identified; the neds may overlap.
Ringdal, Vestfold	Building 6 (MigP) over Building 17 (MigP) Building 4 (MigP) over Building 10 (EJA)	Building 10 poorly identified.
Valum, Hedmark	Building 3 (MigP-MerP) over Building 1 (MigP) and Building 2 (MigP)	Very probably three different buildings built on the same spot. Indeterminable if Building 1 or Building 2 is the earliest.
Nannestad, Akershus	Building 6 (MerP) over Building 5 (MigP) and Building 4 (RIA/ MigP)	
Valum, Hedmark	Buildings I–III are three approximately equivalent buildings built on the same plot in the MigP	
Åker, Hedmark	Building I, Building IIA and Building IIB built successively on the same plot in the MerP. Lates phase may be of the VP.[18]	
Bjørnstad søndre, Østfold	Building 1 (VP) over Building 2 (MerP)	

[18] Pilø (2005) dates these buildings to the Merovingian or the Viking Period and Eriksen (2015) to the Viking Period. As I stress the period in which the building was constructed rather than its use, I date them to the Merovingian Period.

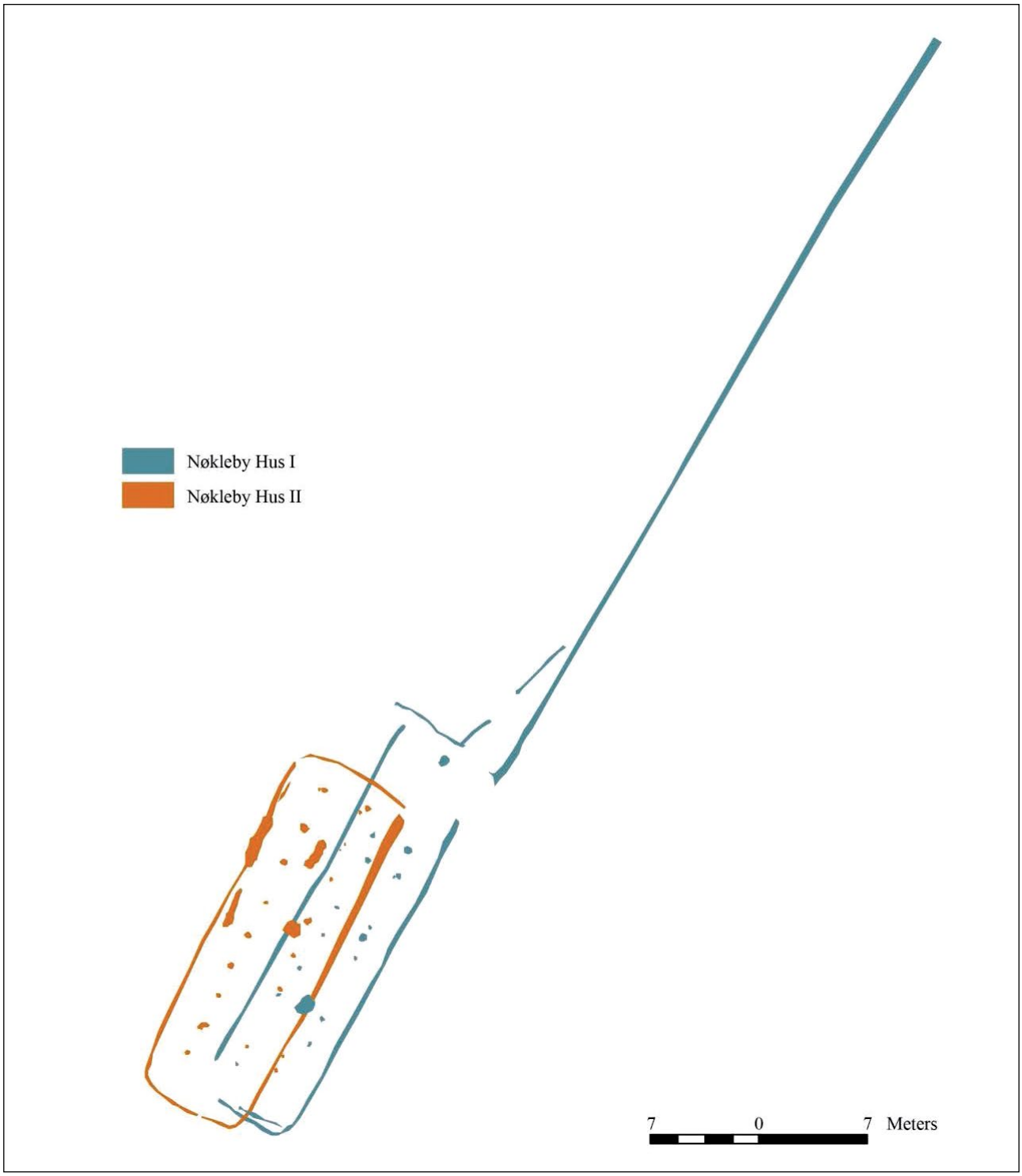

Figure 7.3 *An example of the parallel house-over-house phenomenon at Nøkleby. Drawn by Elise Naumann.*

Successive buildings at right angles

In a few cases a building was constructed over a predecessor at a right angle so that it is the central aisles that overlap (Fig. 7.4; Tab. 7.5). Once again Østfold stands out with examples of this as early as the pre-Roman Iron Ages. There are, however, many more examples of buildings lying at a right angle to each other and with (the presumptive) wall lines crossing or at least touching (Tab. 7.5). It appears, as a result, that these buildings were commonly built so close together that they could not have been standing at the same time and yet nearly always without the central aisles touching. This could show that there was a conscious idea behind the placement of the later building in relation to the earlier.

Table 7.5 *Successive buildings at right angles. Sorted by period and by* fylke.

Site Overlapping buildings at right angles	Buildings	Notes
Dikeveien, Østfold	Building 1 and Building 2 (pRIA) over Building 3 (BRA– pRIA)	**Central aisles på Building 1 and Building 3 overlapper partially,** but only the side aisle/end chamber in Building 2 and Building 3.
Borge Vestre, Østfold	Building 4 (pRIA) over Building 7 (slightly earlier)	**Central aisles fully overlapping.**
Brandrud IV, Oppland	Building 3 (RIA) partially over Building 4 (pRIA)	Only the side aisle/end chamber overlap.
Grytting 1, Oppland	Building 1 (RIA) over Building 2 (RIA) Building 1 over Building 4	Walls overlap **Central aisles *may* overlap. Uncertain.**
Ringdal, Vestfold	Building 1 (MigP) over Building 8 (RIA)	**Central aisles fully overlaping.**
	Building 9 (MigP) and Building 5 (MigP) over Building 16 (RIA)	The side aisles/end chamber just about touch.
	Building 5 partially overlapped by Building 4 (MigP)	The side aisles/end chamber just about touch.
	Building 2 (MerP) over Building 1 (MigP)	The side aisles/end chamber just about touch.
Totenvika, Oppland	Possibly Building 1 (VP) partially over Building 2 (MerP)	Unclear where the walls ran. Central aisles do not overlap.
Søndre Moer, Akershus	Building 1 (RIA) and Building 2 (RIA)	**Central aisles probably fully overlapping,** but the buildings are so poorly identified that it is hard to say for certain.
Søndre Moer, Akershus	Building 3 (MigP) over Building 2 (RIA)?	The identification makes it hard to be certain.
Hol, Akershus	Building 3 (MigP) over Building 1 (RIA) and Building 2 (RIA)	The central aisle in Building 1 touches the central aisle of Building 3, while only the walls of Building 2 and Building 3 overlap.

Successive buildings at a chevron angle

In a few cases, later buildings were constructed over predecessors at various, more acute angles of alignment, often in such a way that the central aisles overlap at one end (Fig. 7.5). Successive buildings in a chevron configuration are quite infrequent, however: nonetheless there is one observed case in Akershus (Korsegården *hus* 4, RIA/MigP lay either over or below the undated *hus* 6); one in Vestfold (Ringdal *hus* 1, MigP, partly overlying *hus* 8, RIA); and possibly one in Østfold (Kjølberg *hus* 1, MigP, above or below *hus* 8, MigP) — those might also be two parallel buildings (Ch. 7.3.1). In the case of Korsegården it is hard to decide if this was done deliberately or not, but there is such a short time-interval between the buildings at Kjølberg that it seems reasonable to suppose it was quite intentional.

Buildings that are nearly touching

Several buildings had been constructed so that their wall lines could have touched one another if the buildings were contemporary, or are so close together that it is impractical for them to have been standing at the same time: it would, for instance, have been anything but practical to pass in between them. These buildings can be at right angles, end-to-end, or in a sort of chevron configuration. Buildings like this occur in the majority of the administrative provinces and periods in which large numbers of buildings have been excavated. It is difficult to discern any pattern apart from the fact that Østfold stands out with several examples of this kind from the pre-Roman Iron Age. This is probably a direct consequence of the fact that only Østfold has several buildings at settlement sites of that period. At several sites a considerable number of buildings were constructed within a short period of time with it being regular for the buildings to be as close to each other as possible without the central aisles touching (e.g. Habberstad and nordre More in Akershus; Rødbøl 19 in Vestfold; Kjølberg in Østfold; and Brandrud and Grytting in Oppland). It is possible that there are practical reasons for buildings to lie close together without overlapping. It may, for instance, have been desirable to construct a new building as close to the old farmstead as possible with the old house still occupied while construction was in progress. It could have been a major effort to clear the old plot.

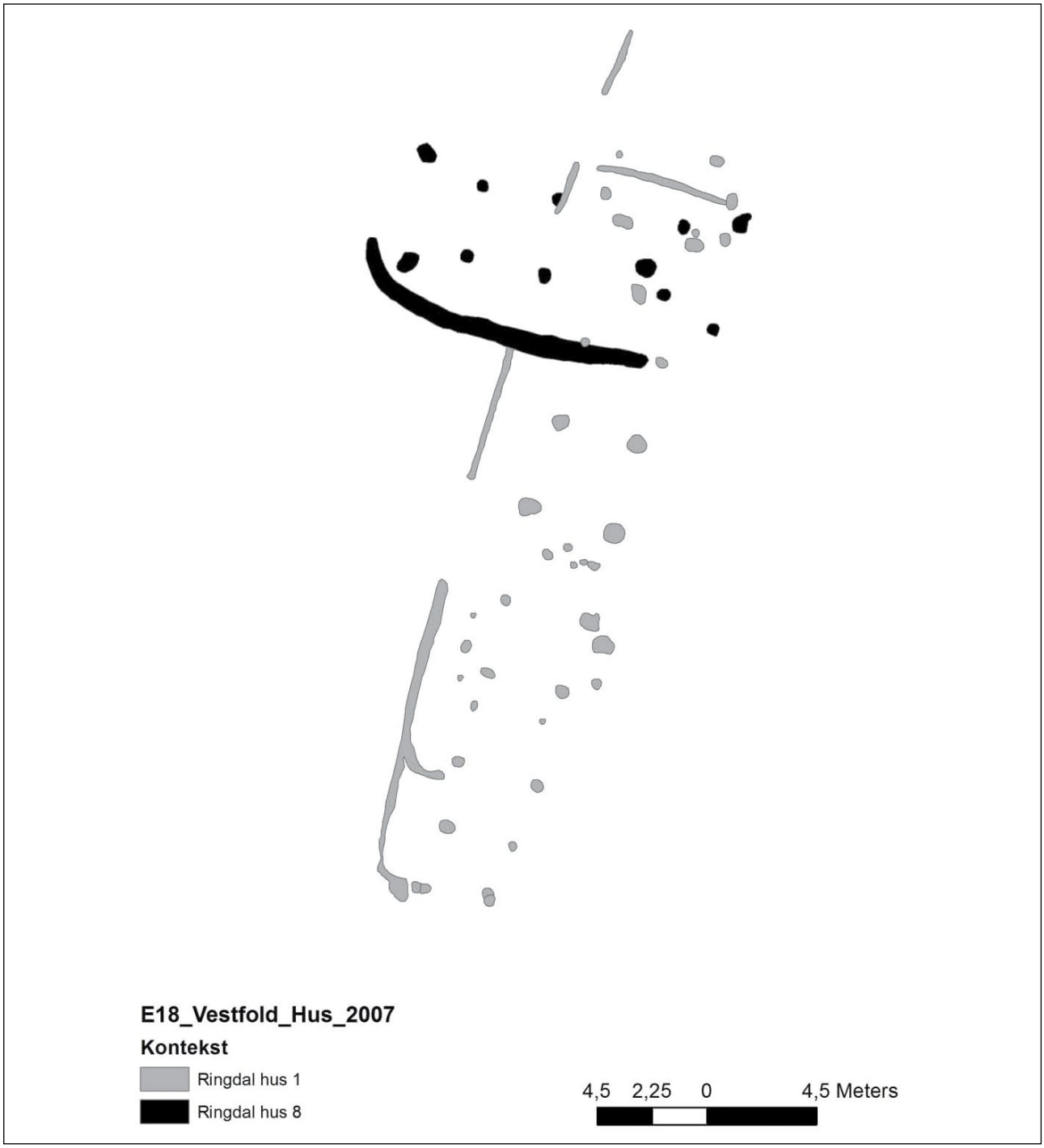

Figure 7.4 *Successive buildings at right angles at Ringdal. Drawn by Lars Erik Gjerpe.*

Buildings beneath and above graves

A relatively small number of buildings lay above or below graves (Figs. 7.6–7.7). In most of these cases it is probable that the earlier component was visible when the later one was put in place and there is reason to believe that the latter was deliberately positioned over the former; these are the cases that I shall concentrate on in detail. In a few cases, as at Ringdal, there may have been contemporary covariation in positioning (see below). In her review of buildings of the Late Iron Age above or below graves, Eriksen (2019:194–200) identified three examples (Åker, Huseby, and Hedrum parsonage) of buildings overlying graves, and two (Sem Prison/Jarlsberg and Engelaug) of graves overlying buildings in Østlandet. I have found a further example of a Late Iron-age grave above a building from the end of the Early Iron Age at Rødbøl (Rønne 2008) and one example of a building of the Early Iron Age having been built above graves at Ringdal (Gjerpe and Østmo 2008).

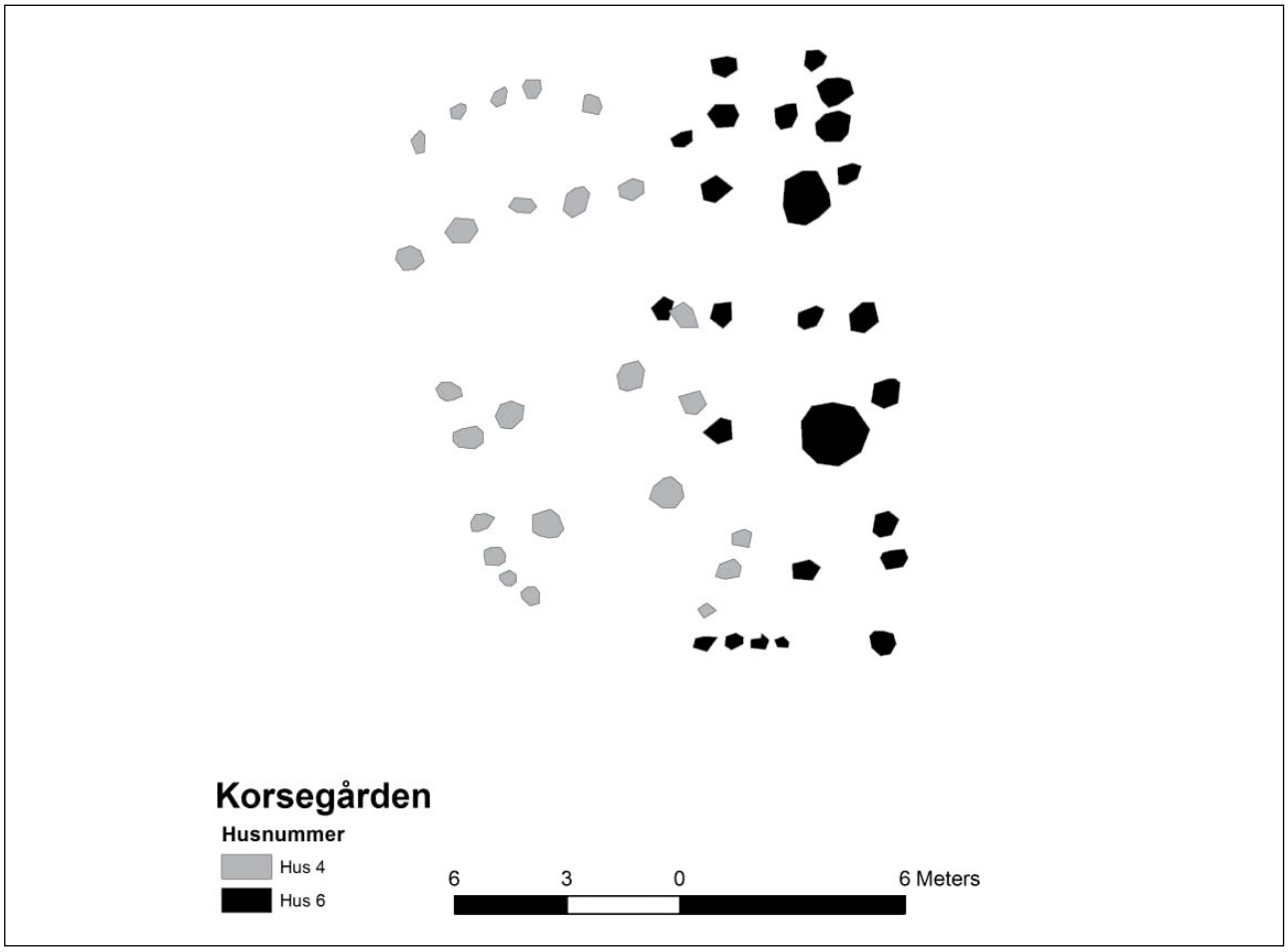

Figure 7.5 *Examples of successive buildings in a chevron configuration at Korsegården. Drawn by Lars Erik Gjerpe.*

At Åker, three overlapping three-aisled buildings of the Merovingian Period stratigraphically overlie an undated grave. This grave contained cremated bone but no grave goods and may have had a visible marker. The grave could also be considerably older than the buildings and in my judgment it is difficult to determine if the collocation was intentional. At Huseby one or more successive hall buildings of the Late Iron Age lay over a flattened burial mound (Skre 2007c). The barrow was probably of the very late Roman Iron Age and both glass and amber beads were found, along with parts of a comb, a spindle-whorl and cremated bone, scattered in the remains of the barrow. It seems likely that the barrow was levelled in order to prepare the plot for the raising of the hall but it is difficult to determine whether or not the barrow was a readily accessible spot in an ideal location or if what mattered most was to build over a funerary mound. At Hedrum parsonage a building of the Late Viking Period partially overlies a grave from about a century earlier with a preserved ring-ditch (Berg 1998). Both the building and the grave are radiocarbon dated. Neither the building nor the grave was visible before the topsoil was removed in the excavation, and the stratigraphical evidence provided no secure testimony of the chronological relationship between the grave and the building.

No datable finds were made that can be considered most probably to have come from the burial mound. Although the datings rest on slender foundations, it nonetheless appears as if the grave was fully or partially removed when the building was put up only about a hundred years after the burial was made. It is therefore most likely that the building was intentionally sited over the barrow. At Ringdal, an urned burial with no grave goods of the pre-Roman Iron Age (grave 2) lay in a pit with cleaned cremated bone from the transition between the pre-Roman and Roman Iron Ages (grave 1) both in the entrance chamber and approximately along the wall line of *hus* 1 of the Migration Period (Fig. 7.6; Gjerpe and Østmo 2008). It is unclear whether these graves originally had visible markers but no sign of anything like that survived to be found by excavation, and markers do not appear to have been usual in Vestfold in the pre-Roman Iron Age (Hougen 1924; Nybrugget 1978). I regard it as rather improbable therefore that the building was deliberately constructed over graves at least 400 years old.

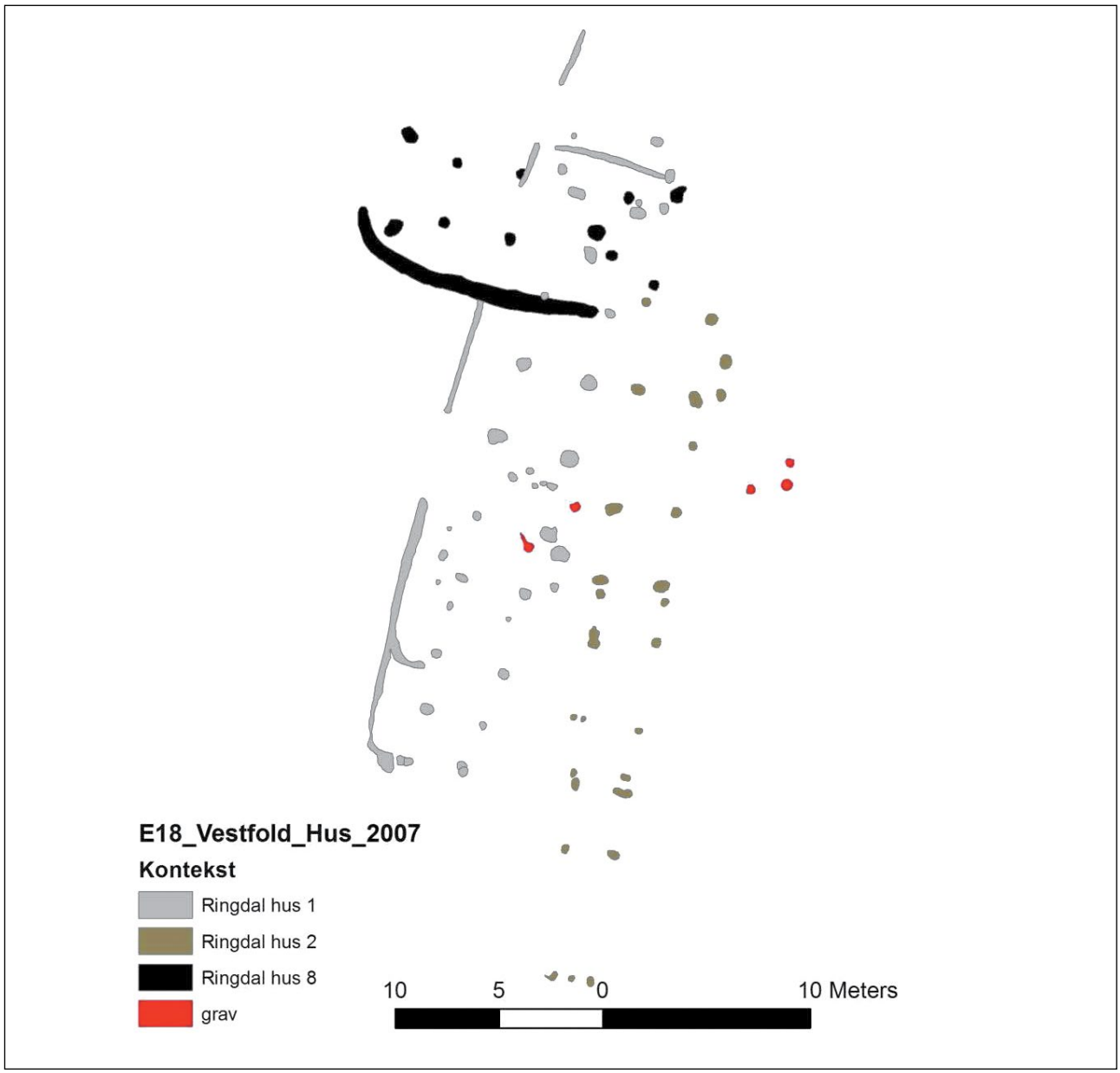

Figure 7.6 *Example of a building overlying a grave at Ringdal. Drawn by Lars Erik Gjerpe.*

At Rødbøl 27, a woman's grave of the 8th century was placed in the central aisle of two overlapping buildings of the Roman Iron Age and the Migration Period respectively (Rønne 2008). The buildings were still visible when the excavations took place. It is probable, then, that the grave was intentionally placed even though there was quite a long time from when the building had been in use to when the burial was made. This inhumation grave was marked with a low cairn and contained rectangular brooches, 35 glass beads, a knife, a firesteel, key and an awl. At Sem Prison, a grave was placed in the diagonal between the two southernmost pairs of roof-bearing posts of a three-aisled building (Grindkåsa 2012a). This building had been raised at the beginning of the Merovingian Period and burnt down shortly afterwards. The burial is dated to the first half of the 7th century and contained burnt material from the building. The short interval between the fire and the burial, the inclusion of burnt material in the grave, and its position in the diagonal between two pairs of posts, indicate to me that this grave was deliberately located over the building. The grave was relatively well furnished, including a sword, a seax, a shield, a shield-on-tongue buckle and a horse's head. There was no surviving trace of any possible grave marking. Five ring-ditches have been excavated at the site. One of them cut the Merovingian-period grave and must therefore have been later. The other ring-ditches cannot be dated either relatively or in absolute terms other than that ring-ditches in Vestfold usually post-date c. AD 200 and are no

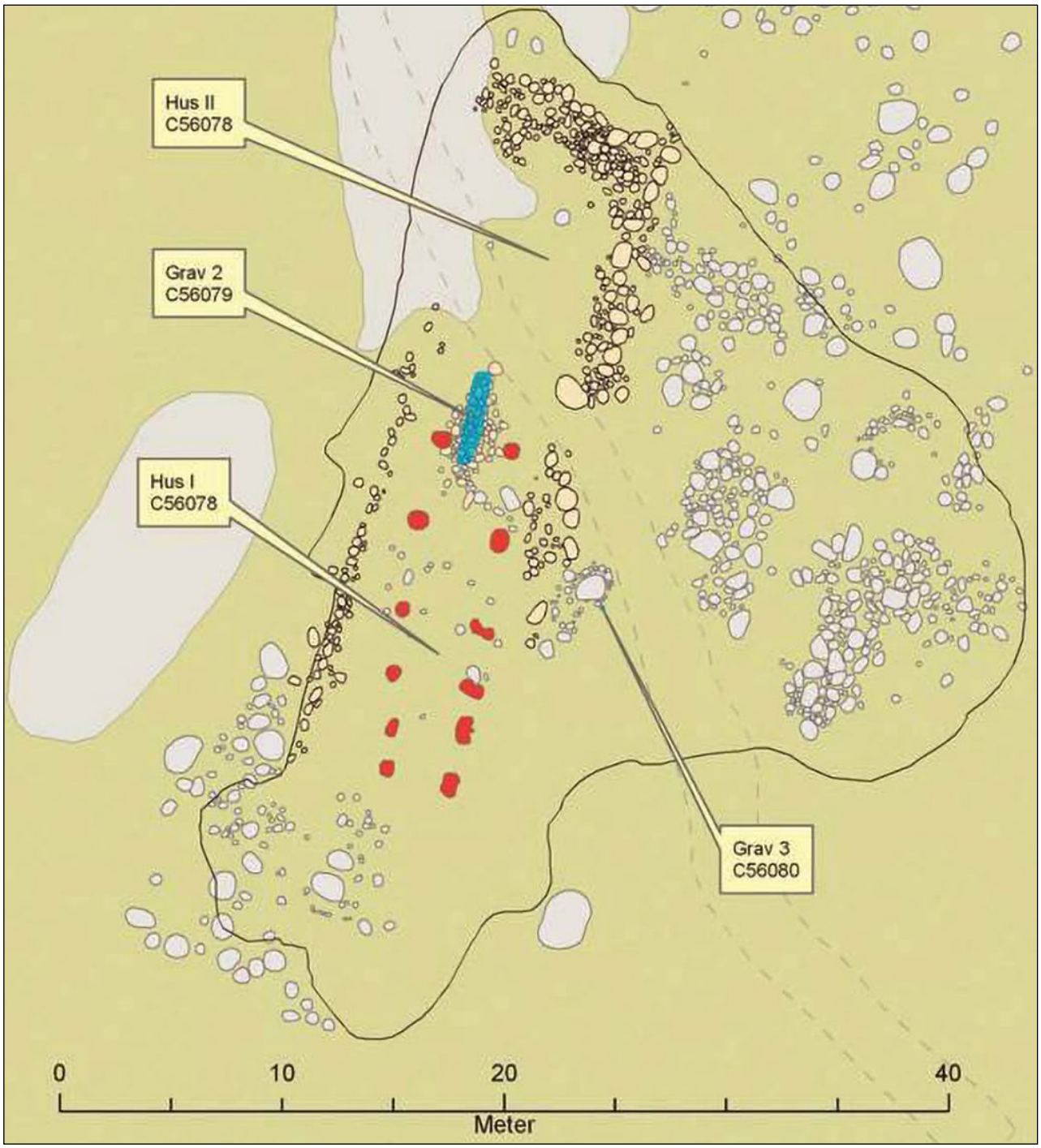

Figure 7.7 *Example of a grave overlying a building at Rødbøl 27. Drawn by Magne Samdal.*

later than the Viking Period (Løken 1974; Gjerpe 2005a).

At Engelaug, a grave of the Viking Period was placed over a building of the late Merovingian Period or perhaps the Viking Period (Risbøl 1997). This cremation burial was marked by a cairn and furnished with a spindle-whorl and a knife. The cremated bones may have come from a relatively young adult woman. Grave mounds that apparently overlie buildings of the Early Iron Age have been excavated at, amongst other sites, Oppstad and Kulås Park, Østfold. These buildings are only poorly identified and datable (Helliksen 1996b; Løken 1998a) and it is difficult to determine if these were cases of a more or less chance re-use of a location or the deliberate construction of graves above buildings. At Hørdalen in Vestfold a round, stony barrow of the Roman Iron Age overlies what was very probably a building dated to the end of the Bronze Age or beginning of the pre-Roman Iron Age (Mjærum 2012e). After occupation and before the burial was made, however, there had been a period of cultivation, and it is scarcely likely therefore that

the grave was deliberately located above the building. The evidence is sparse, but in my view there is reason to accept that the conscious construction of buildings over graves or graves over buildings is above all a phenomenon of the Late Iron Age. This appears to be the case in some other parts of Scandinavia too (Thäte 2007; Dahl 2016).

In those cases within the study area where the artefacts within the graves or the osteological remains allow us to determine the sex/gender of the deceased, and the collocation of the building and the grave appears to have been deliberate, there are two women's graves (Engelaug; Rødbøl 27) and one man's grave (Jarlsberg/Sem Prison) which have been placed on top of buildings, while there is one example of a building constructed over a woman's grave (Huseby). The evidence is obviously very slight but it does, overall, appear as if women's graves are often involved in this sort of re-use in Østlandet, as is the case in Rogaland (Dahl 2017). Thäte (2007:118) suggests that two groups could be buried within buildings. If the building had been burnt and the burial took place soon afterwards it was most probably one of the occupants of the building who was interred there. If there is a long interval from the abandonment of the building to this re-use the new settlers may purposefully use the building to establish a connexion with the previous occupants: the grave is conceived as a new high-seat. In such a case it is — perhaps a little surprisingly — the woman's grave at Rødbøl 27 that makes a connexion with the previous occupants while the man's grave at Sem Prison and the woman's grave at Engelaug represent the occupants of the building itself. The grave in the central aisle of the building at Sem Prison was, as noted, disturbed by a later ring-ditch. Traces of four further ring-ditches were found, probably the remains of a burial ground that comprised more than six barrows (Nicolaysen 1862–66:183). None of these ring-ditches is dated and the chronological relationship between the disturbed grave, the later ring-ditch which affected it and the four other graves is necessarily uncertain. Another example from Vestfold, however, may indicate that the disturbed grave was one of the earliest. At the cemetery of Gulli, 3.5 km north-east of Sem Prison, a grave was disturbed by a later ring-ditch (see also Ch. 7.2.3 and 9.4.1). This disturbed boat grave contained a sword amongst other things, is dated to the 8th century, and has no surviving trace of visible marking. When excavated, the cemetery at Gulli had been ploughed over, and only those features that were cut below the plough-horizon survived. Thirty-six ring-ditches were excavated, 13 of which had surviving graves. Six graves without ring-ditches were excavated in addition. With the exception of the grave of the Merovingian Period referred to, all of the dated graves were of the Viking Period, and the Merovingian-period grave was the only one that was disturbed by the interment of later graves. These two cemeteries thus have several common features. The earliest burials were made in the Merovingian Period (the 8th century at Gulli; the 7th century at Sem Prison), neither had evidence of visible grave markers, and both were disturbed but not completely obliterated by the digging of a later ring-ditch. At both Gulli and Sem Prison it appears, therefore, as if the primary graves at the site were erased and subsequently a new cemetery was established at the same location (Gjerpe 2020).

Spot-continuity — a summary

When the results given above are brought together, it emerges clearly that in Østfold buildings were replaced on the same plot and with the same alignment, repaired or reconstructed, already in the pre-Roman Iron Age. In the Roman Iron Age buildings were repaired or reconstructed in Hedmark and Oppland too. In Akershus there are two buildings on approximately the same plot but their central aisles do not overlap. In the Roman Iron Age/Migration Period buildings were reconstructed or repaired in Akershus and Buskerud, and possibly in Vestfold. In the Migration Period this was done in Vestfold, Hedmark and possibly in Østfold and Akershus, and in the Merovingian Period in Hedmark. In Akershus buildings were put up partially above earlier ones in that period, but again their central aisles do not overlap. One Viking-period building in Østfold partially overlies a Merovingian-period predecessor but their central aisles do not entirely overlap. The latest of three buildings at Åker in Hedmark may be of the Viking Period.

As early as the pre-Roman Iron Age, then, buildings are reconstructed on existing plots in Østfold, or the buildings were extensively reconstructed, possibly repaired. This trend is clear at Dilling. Nevertheless the effort was made for a building to stand in the same place for a longer period — this first appears in the Roman Iron Age and sometimes even later in the other provinces. In some sites up to three generations of a building were raised on the same spot. It would appear that it was primarily buildings aligned N–S in southern Østlandet and E–W in northern Østlandet that were repaired or reconstructed in this way. It may also appear as if it was long buildings whose occupants

were of high status that were rebuilt (e.g. Missingen, Veien, Åker). At some sites overlapping buildings were raised without giving the impression that it was important that the later building was standing on the same spot as its predecessor. Already in the pre-Roman Iron Age, buildings were put up at a right angle to predecessors, in such a way that their central aisles overlapped, in Østfold and possibly in Hedmark. This apparently does not occur otherwise until the Roman Iron Age or later. It is relatively uncommon for the central aisles of buildings at right angles to overlap; it is most often only one of the side aisles of the one building which overlaps the area between the gable end and the first pair of roof-bearing posts of the other. It is still important to remember that re-use of building plots and overlapping buildings are, on the whole, the exception; most buildings appear not to have been repaired or reconstructed, nor do they overlie earlier buildings. At some sites the buildings stand so close to one another that they cannot realistically have been standing at the same time while in some cases their side aisles must have overlapped but not the central aisles. There may be practical explanations for this: it was desirable to construct the new building as near to the existing farmstead as possible, or it was difficult, or laborious, to clear and level the old plot. Viewed in connexion with the fact that buildings at some sites were pulled down and the plots cleared before what were very similar buildings were constructed on more or less the same site, it is likely that this was done by choice. Although it is difficult to recognize possible patterns in which buildings were raised over predecessors, it seems that continuity was more important to those who were constructing long buildings, which can in turn be linked to high status, in the common era AD in any event. At the transition to the Late Iron Age a new phenomenon was introduced with graves located over abandoned buildings and buildings raised over graves.

SOME REFLECTIONS ON THE ORGANIZATION OF THE FARMSTEADS

Above (Ch. 7.2), I have researched the settlement sites as localities before, during and possibly after the period of occupation and the dynamism of change through time. In this section I shall reflect briefly on and around the organization of contemporary components of the farmstead. I have also already shown that the datings are often imprecise (Ch. 4.4) and that the areas excavated are usually too small for all settlement traces that belonged together in time and space to be uncovered (Ch. 4.8). The situation is further complicated by the fact that far from all of the activities or constituent parts of the farmsteads under investigation left traces that are recognized in archaeological excavation. Fences can in some cases be useful aids to delimit the farmsteads, whether they are well preserved and stone-built as in Rogaland, for example, or discovered as sunken foundations as, for example, in Jutland or Trøndelag (Myhre 1972; Grønneby 1999; Holst 2010). In Østlandet, however, no farmstead-boundary fences of the Iron Age have been found. Either there are clear limits to what the evidence can show, or the absence of such evidence in this case does reflect the fact that fences were rarely constructed — or were built in such a fashion that we do not find them. Few settlement sites outside of cultivated land have been examined, but at Rødbøl 27 in Vestfold, for instance, any stone walls should have been discovered (Rønne 2008). The fences, or perhaps boundaries or markers, of small field plots of the Early Iron Age at Hørdalsåsen and Unnerstvedt and Ragnhildrød in Vestfold indicate that those fences were constructed with a single layer of stones which cannot have blocked the movement of animals (Mjærum 2012c; 2012d). At some sites traces of earth-fast posts or stakes have been found which might have formed part of fences: e.g. at Missingen and Nøkleby in Østfold (Bårdseth and Sandvik 2007; Sæther 2011) but none of those appears to be a farmstead boundary. Despite the evidential problems, the objective is to draw out certain basic images that characterize particular periods. Very broadly, these show that there were two forms: buildings which stood alone and buildings which stood in pairs, either more or less at right angles or more or less parallel. In a few cases, as at Ringdal in Vestfold, three or more three-aisled buildings may have been standing at the same time.

Buildings standing on their own occur in all periods and all of the administrative provinces, but it is, except in a few cases, difficult to determine whether or not this is due to the limitations of the evidence or really reflects farmstead organization in the Iron Age. Two or more contemporary buildings that may have been part of the one farmstead are sometimes found. Østfold stands out for having farmsteads with two contemporary buildings as early as the pre-Roman Iron Age. These buildings stand either at right angles or in a chevron configuration. In the Roman Iron Age, farmsteads with two contemporary buildings are probably also found in Akershus, Østfold, Vestfold, Hedmark and Oppland. It appears that these buildings stood either at right angles or in chevron configurations even though some of the

provinces have only one farmstead with two buildings. In the Roman Iron Age/Migration Period there are farmsteads with two buildings in Østfold, Akershus and Vestfold; in the Migration Period in Vestfold, Akershus and Hedmark; in the Merovingian Period in Østfold and Akershus; and in the Viking Period in Akershus alone. It is not possible to discern any pattern in the position of the buildings relative to each other in these periods, but that may be a product of the paucity of examples.

THE SETTLEMENT PATTERN IN ØSTLANDET: THREE TYPES OF FARMSTEAD AND REGIONAL PATTERNS

I shall now summarize the most important trends in the settlement pattern of Østlandet based upon the discussion in Chapter 7.2–7.4. I have identified, there, three different types of farmstead which in their turn constitute a social chronology (Rødsrud 2012:2, 13; Amundsen and Fredriksen 2014). This social chronology can only be constructed from the evidence from southern Østlandet; the evidence from northern Østlandet has not allowed for any comparable assessment.

The random farmstead is characterized by buildings having been constructed in places with no previous activity, and there are few buildings at each site. There are no contemporary graves at any of these settlement sites, while the sites appear often to have gone out of use when they are abandoned as settlements. The buildings of this period are single-phase and do not appear to have been reconstructed or repaired to any particular degree. The farmstead also appears to have consisted of a single building. This settlement-type occurs in the pre-Roman Iron Age and the earlier Roman Iron Age in Akershus and Vestfold but not in Østfold.

The marked farmstead is characterized by buildings that were usually constructed at sites with signs of previous activity, often in the form of cooking pits and in some cases also burials. The settlement sites were usually in use for an extended period and there are often several contemporary or successive buildings at each site. Within that period, buildings were often put up on earlier building plots. In some cases the foundations of the buildings overlap in such a way that it cannot have been a matter of coincidence, and some of these sequences may have been the result of several generations of buildings standing at approximately the same spot. Concurrently, it appears that in some cases people deliberately avoided having the central aisles of the buildings overlapping. At some sites there are also contemporary graves. This settlement-type occurs as early as the pre-Roman Iron Age in Østfold and from the later Roman Iron Age through to the Merovingian Period in Akershus and Vestfold.

The unknown farmstead is heterogeneous, and few buildings of this type of settlement have been excavated. To the extent that any pattern can be found, it is primarily that the buildings are located at sites which were already established, usually as settlement sites. The reason why so few buildings of this period have been found is probably twofold. The three-aisled building with earth-fast posts appears gradually to have been superseded by other types of building which are less easy to recognize with the methods currently in use. Concurrently it appears that these settlement sites more often became permanent and had been founded in the vicinity of the historically known farmsteads of the present day. This settlement-type occurs from c. AD 600 onwards in Østfold, Akershus and Vestfold.

In this chapter and the one before it I have demonstrated how building practice and settlement patterns in Østlandet vary chronologically and geographically, and have attached especial significance to the three types of farmstead. This is the first of three stages towards understanding how rights to land were organized in the Iron Age. In the following chapter I progress to the next step by looking at various ways of organizing rights, and focus particularly on alternatives to territorially rooted rights. As the social chronology has been determined for southern Østlandet, this zone will occupy a major place in the discussion in Chapter 9.

8 FOREIGN FARMING LANDSCAPES

It is said that the history of peoples who have a history is the history of class struggle. It might be said, with at least as much truthfulness, that the history of peoples without history is the history of their struggle against the State. (Clastres 1989:218)

The background to the further research exploration I shall now undertake is the three different categories of farmstead identified in the previous chapter: the random farmstead, the marked farmstead and the unknown farmstead. These appeared successively, and are not compatible with any real continuity in property rights across the Iron Age. In the present chapter, therefore, I investigate different modes for the organization of land rights. Amongst other things, I shall attach particular importance to understanding how rights to land can be organized without defined territorial property boundaries. Continuity scholarship has drawn inspiration from a historically familiar agrarian society in its attempt to understand prehistory. Geir Grønnesby (2019) has recently shown how fruitful it is to derive models and inspiration from other sources, in order to challenge the existing understanding of the agricultural economy and of the establishment of the historical farmstead. I shall consequently draw analogons and analogies from other quarters than continuity scholarship has habitually considered — from foreign places.

Rights to occupation cannot be approached separate from the society as a whole (Berg 2021). Rights to land, perhaps the most important resource of an agricultural community, must therefore quite naturally be understood in light of the society as a whole (Skre 1998; Grønnesby 2019; Berg 2021). Some members of Iron-age society had greater access to the communal goods than others, and this is often explained through control over land or personal rights either to cultivate it or to take the produce of specific, geographically bounded areas — usually referred to as landed properties or farms. I wish to emphasize, however, that a surplus can also be collected by means of direct control over people and resources other than land. Heritable, territorially based property rights to land that can be exercised by others with the aim of the owner receiving portions of the surplus nevertheless do appear to be a precondition for greater wealth to be accumulated. This in turn increases the opportunity for durable hierarchical structures and appears to be a precondition for state-formation (Earle 1997; 2000). For me, then, it is crucial that the Iron-age society around the Oslofjord was stateless, for much of the Iron Age at least, and that this may have been what the population there wanted. In this chapter I shall examine some general characteristics of stateless societies which I believe may help to explain property relations and the settlement pattern in Østlandet in the Iron Age. In the following chapter I shall link these features up more closely to the archaeological evidence and specific historical aspects of Iron-age society.

That the rights to land were not necessarily based upon defined properties shakes the existing understanding that a modern property structure may be traced far back into prehistory — at least to the Early Iron Age — to the core (Skre 1998; Pilø 2005; Iversen 2008; Ødegaard 2010). By way of introduction, then, I shall briefly present the backdrop to my interpretations of the relationship between people and land in the Iron Age, and show amongst other things that this was not necessarily a matter of people's right to exploit the land (Ch. 8.1). In the conventional interpretation of that relationship, *óðal* is absolutely central. This concept, defined as 'the male right to inherit land', is inconceivable without some form of territorially defined property right. The reigning view is that *óðal* in this sense emerged in the Early Iron Age (Zachrisson 1994; Skre 1997a; 1998). This view is an underlying postulate which, until now, has left it difficult to discuss alternative modes of organizing rights to land. This premiss has not, in my view, been sufficiently tested, and I shall therefore critically assess the emergence and contents of the concept of *óðal* (Ch. 8.2). Following that, I show how rights to land may be rooted socially (Ch. 8.3) and how a stateless society can be maintained without anyone succeeding in laying claim to heritable rights (Ch. 8.4). Finally I shall present a provisional model of a stateless, hierarchical society with socially based rights to land (Ch. 8.5).

PEOPLE AND LAND — A COMPLEX RELATIONSHIP

Land is the most important productive resource of an agricultural society, and an understanding of the

distribution of rights to land is therefore crucial to understanding an agricultural society such as that of the Iron-age population of Østlandet. In modern societies, the rights to land are often regarded as a series of formal or technical structures which govern economic relationships (Brink 2013:36; Souvatzi 2013:23). An example of such a structure is the farmstead in Østlandet of the Modern Period. The land is divided into geographically bounded parcels with one, or in a few cases more than one, owner. These have more or less total right of disposal over the farmstead or the estate, and may run it themselves or let others do so for a payment. The owners can also sell the farm, although laws and regulations limit to whom they can sell it and what price they can get. The farm as known from the Modern era, then, is an example of territorially or geographically rooted rights. Absolute right of ownership of land such as we know it in more recent times can hardly have existed in Østlandet in the Iron Age, though (Dørum 1994; Skre 1998; Iversen 2001). It is assumed rather that individuals had various geographically rooted residences or rights — for instance to farm the land or to receive payment from it (Myrdal 1989:35; Skre 1998:16–18). It is also suggested that the right of ownership in pre-state societies was first and foremost the possibility of excluding others from the exploitation of an area (Pipes 1999:84). The relationship between people and land is, concurrently, a complex combination of relationships that intertwine social, economic and ideological spheres which is strongly determined by historical circumstances (Pottier 2005; Salisbury 2012). Land is therefore more than just a means of production, and rights to land are more than solely an economic function (Zachrisson 1994; Souvatzi 2013:23; Grønnesby 2019). In this study, the term 'territorially embedded' property rights will be used, therefore, to refer to a person's or a group's right to control, at least in part, a specific area of land. This right of control may be limited or voided through agreements and through the rights of others, but, as a basic rule, the right of property gives the holder the right to decide who will make use of the land and on what conditions, and to keep other potential users out.

The relationship between people and their surroundings can be viewed as a complex network involving mutual influences that leads to unique, historically specific landscapes being formed in the interplay between people and their environment (Dincauze 2003:18–19; Salisbury 2012; Barrett 2013). The relationship between people and animals on the one hand and land on the other can also be viewed as a set of interconnected obligations or influences rather than a set of rights (Nadasdy 2002; Oma 2020). When land is treated solely as a resource for rational agents within an economic system, important facets of society and of the land come to be ignored since just one part of the economy is studied with no grasp of how the economy is anchored in society as a whole. The ability to produce is undoubtedly an important characteristic of land but it need not be the only one. Land can also have magic qualities, be prestigious or be aesthetic (Malinowski 1922:58–9; 1935:12, 56; Bradley 2005:88–9 with refs.). That is how things could have been in Scandinavia too; when Anskar came to Birka in central Sweden in the year 852 he was told that the land belonged to the gods (Robinson 1921:ch. 26). To own land could also be regarded as impossible or even immoral (Nadasdy 2002). Control over land has no economic value in itself but is rather a means of securing for oneself all or some of what is produced from the land, whether one farms it or exploits it in some other way oneself or permits others to do so for a charge. There are, however, other ways of getting hold of a surplus. Profits from raiding or theft, protection money and tolls on other means of production besides land, such as seed corn, breeding stock, draught animals or equipment, are a range of examples that are independent of control over land. The simplest means of all of gaining access to a surplus, however, is direct control over other people (Odner 1973:71–2, 136, 158).

ÓÐAL AND BURIAL MOUNDS: A CRITICAL LOOK AT TERRITORIALLY DEFINED LAND RIGHTS

The term *óðal* has been indissolubly connected with property rights in Norwegian and to some extent throughout Scandinavian Iron Age scholarship (Zachrisson 1994; Skre 1997a; 1998; Iversen 2008). A number of historians have proposed, nevertheless, that the óðal-right emerged as late as in the 12th and 13th century, in order to protect heirs' traditional rights when land began to change ownership via sale or gift (Helle 2001:119–20 with refs.; Norseng 2005:208–10 with refs.). The difference of opinion is partly due to the fact that historians and archaeologists use different source evidence but also to the fact that what the term refers to is difficult to grasp (Zachrisson 1994; 2007). The concept of *óðal* very probably had its origin in the Early Iron Age, but it appears to have shifted, in terms of what it meant, over time. Because *óðal* is central to the understanding of property rights, while concurrently the historical meaning of the term is a matter of contention, I shall now discuss when *óðal* in

the sense of a preferential human right to inheritance and an implicit property right became a fundamental force in the agrarian society. It will also be essential for me to examine and date various meanings of the concept.

Óðal was apparently originally used in the sense of 'the best of something', or 'the best of the field; that which was cultivated,' and only later was the term used in the sense of 'inherited land' (Skeie 1934:1; Gjerdåker 2001:11). In the narrowest sense *óðal* is often used of a family's right to inherit a geographically defined landed property (Robberstad 1981) and is unthinkable, therefore, without some form of territorially defined property right. *Óðal* also, though, has a broader sense. It was closely interwoven with an ancestor cult and linked the living with the dead, while social identity and legal status were formed through the same association (Zachrisson 1994; 2017). In their influential studies, Zachrisson (1994) and Skre (1997a; 1998) have argued that *óðal* and property rights over land became established in the Roman Iron Age or the Migration Period. Both propose that it was primarily men who held the right of inheritance and that the burial mound (barrow) was a physical manifestation of the óðal. In what follows, I shall go critically through their premisses and challenge their conclusions concerning the date at which *óðal* developed and the relationship between the burial mound and this concept. I shall then investigate to what extent it is possible to distinguish between *óðal* in its most precise form as the right to inherit land and in a broader sense as something intertwined with an ancestor cult.

Both Zachrisson (1994) and Skre (1997a) take the *óðal* clauses in the Norwegian Provincial Laws as their starting point to argue for the existence of *óðal* from the Roman Iron Age or Migration Period. The Provincial Laws had their origins in the late Viking or early Medieval Period (see below). Zachrisson also refers to Swedish runestones and to burial evidence in central Sweden, and attaches especial significance to the fact that *óðal* as the name of the o-rune appeared in the Roman Iron Age, while Skre argues on the basis of runestones and documentary evidence from Norway and of burial evidence from Romerike in Østlandet. They show that *óðal* is explicitly referred to on Viking-period runestones, probably in the sense of having the right to inherit family land (Zachrisson 1998; Skre 1997a; Sawyer 1999). There are also several runestones which identify named individuals as owners of one or more farms or villages, while in one case it is stated that a farm had been bought (Zachrisson 1994:225). *Óðal* and the right to property are also clearly present in the Eddic poem *Rígsþula* (Zachrisson 1994:221). This includes the story of the owner of eighteen farms which have '*óðal* fields' and 'ancient settlements' (*óðalvellir, aldnar bygðir: Rígsþula*, after Holm-Olsen's translation, stanzas 36 and 38). This may be a Viking-period poem or at least have a historical core from that period even though some scholars would assign the poem to early in the Medieval Period (Amory 2001, with refs.). Óðal is significant in the earliest Provincial Laws, of the Frostathing and the Gulathing, and it is very clear that óðal was a legal right to buy or take possession of land which had been in the hands of the family (Robberstad 1981; Zachrisson 1994; Skre 1997a; 1998). The textual evidence shows, therefore, that *óðal* was a firmly established concept in the late Viking Period or early in the Medieval Period. Zachrisson and Skre's ideas about *óðal* in the Roman Iron Age and Migration Period consequently are based upon a retrogressive or restrospective analysis (Ch. 3) that is strongly rooted in later sources.

If, however, the emergence of *óðal* is examined alternatively from behind, as it were, moving forwards in time, the outcome rapidly turns into something very different even if textual sources such as Tacitus's *Germania*, Caesar's *Gallic War* and *Beowulf* are accepted as starting points. This led Frands Herschend (1997a:71; 2009:277) to suggest that in the Early Iron Age *óðal* was a human right to establish one's own household, a right which was lost in the Late Iron Age, being superseded by individual control over specific areas of land — a proposition that is shared by other scholars. Gerritsen (1999:146) gives a much earlier dating of the transition to territorially defined rights in the Netherlands while Hansen (2015:145–6) concluded that this transition took place around the year 600 on the island of Fyn and in adjacent areas of Denmark.

Stefan Brink (2008c:94–6) has argued that there was a fundamental change in place-names around the year 600: in the Early Iron Age the place-names refer above all to a hierarchical social scructure in which the identification of people rather than places is at the core. From around AD 600 place-names start to refer to a territory rather than just to points within the topography, and it was thus only from the beginning of the 7th century that delimited territories became important. In the Viking Period or early in the Medieval Period the names show that the territories also have clear boundaries or markers. I regard these circumstances as the motivating factors for a critical assessment of the relevance of the Provincial Laws to the state of affairs further back in the Iron Age.

The origin of the Norwegian Provincial Laws is difficult to date (Brink 2008a). Historians with their background in the Germanist School have pointed out that the extant versions of the Provincial Laws have earlier features, possibly with roots far back in time, while historians of the Romantic School stress newer elements, inspired inter alia by European law-giving; the disagreement between these two positions is now much less polarized than it once was (e.g. Iversen 2005; Tamm 2005). The Gulathing Law is known first and foremost from a manuscript of around AD 1250 but historians generally consider that much of the law code was put together in the 12th century. It may have roots back in the 10th century (Rindal 1994; Brink 2000; Helle 2001:11, 47 with refs., Iversen 2001:83). The Frostathing Law took the form that is now known around 1260 but this too has considerably earlier roots even if it is unclear how far back those run (Frostatingslova 1994; Iversen 2001:83). Several scholars have pointed out that the documentary evidence from the Medieval Period is barely suitable for shedding light on prehistoric burial evidence (Svanberg 2003; Aannestad 2004; Axelsen 2012; Berg 2013; 2015; Moen 2021). I myself, in fact, would draw attention particularly to Bergljot Solberg's (1985) study of the origin of the Laws. She examined the social structure of the Merovingian and Viking Periods making use of the burial evidence, and compared that with the social classes described in the documentary sources — especially the Provincial Laws. Several similarities between social classes as they are represented in the later textual sources and as they may be perceived in the burial evidence emerge. The laws show that an individual's social and legal status was closely linked to the land held by the individual and his or her family. The social and legal status of men is defined in the laws by the weapons they are obliged to have, and several of the weapon-sets in the laws can be paralleled in graves of the Merovingian and Viking Periods. This could be an argument for the Provincial Laws, and possibly *óðal* too, having their roots back in the Merovingian Period. But there are also clear discrepancies between these sources of evidence. In general, the weapon-sets in the laws correspond quite well with burial evidence of the 10th century but markedly less so with such evidence from the 9th and 8th centuries. Conversely, a weapon-set comprising a sword and an axe is not referred to in the Provincial Laws but does occur in the funerary archaeology of the Merovingian Period and the beginning of the Viking Period.

Weapon-sets found in the graves of the Early Merovingian Period appear to a very limited extent in the legal sources (Solberg 1985:74; Ystgaard 2014:264). What the Provincial Laws can tell us about social groups thus decreases rapidly as one goes back in time, and dissolves completely around the year 700. It is not impossible that the changes in the weapon-sets basically reflect changes in the technique of battle, although Ingrid Ystgaard (2014) has shown that the methods of fighting and key facets of the nature of society essentially reflect one another in the period in question. Consequently, Solberg's study can be used to make the case that the Provincial Laws reflect the 10th and 11th centuries rather than the Early Viking and the Merovingian Periods. In her studies from Trøndelag, Ystgaard (2014) finds no sign of free men being obliged to equip themselves with weaponry before AD 900. Ellen Høigård Hofseth (1981), however, argued that the weapon burials in Vestlandet indicate that there was such legislation in the 10th century, although Frans-Arne Stylegar (2005a:33) rejects the proposition of a direct connexion between legally imposed armament and the range of weaponry that was deposited in graves, because weapons were exclusive grave goods, restricted to an elite. He also links the weapon graves to military organization rather than to social status. It is possible that warriors or soldiers in the Viking Period had their weaponry on loan, and returned it when their service was done (Hedenstierna-Jonson 2015:86). Herschend (2001:119) has pointed out that assigning people to moral, economic and politically defined classes is a Latin and Christian way of organizing society. Although there were social differences amongst the free in pre-Christian Scandinavia this group was not sub-divided into classes. Herschend puts it thus (2001:119): "The price we pay for being included in a Christian ideology and belonging to a group is the loss of individuality for members of this group. Membership replaces individuality." In the Gulathing Law, legal rights and social status are conjoined and can be defined in terms of class: e.g. as *hauld* or *bond*e. There is, thus, fundamental Christian influence in the Provincial Laws. Stefan Brink (2003) emphasizes, however, that the unfree could be both highly valued counsellors and administrators as well as being slave workers. This reflects a much more complex relationship between legal and social status than the definition of classes in the Gulathing Law portrays. Altogether, these considerations imply that the Provincial Laws were primarily a product of the late Viking Period or early Medieval Period and cannot just directly be assumed to have some essential ability

to shed light on society early in the Viking Period or further back in time.

There are also features of the archaeological evidence which indicate that *óðal* in the sense of the right to inherit land emerged first in the Late Iron Age. In some parts of Sweden there are several male graves of the Viking Period which overlie graves of the Roman Iron Age and Migration Period. Zachrisson (1994:230) wrote "My interpretation of this is that people during the Viking Age have felt it urgent to place their dead on top of and in direct contact with relations from the Roman Iron Age–Migration Period." She also claims that this means that the Roman Iron Age and Migration Period were key stages in the establishment of genealogies (Zachrisson 1994:232). The question, however, is whether *óðal* was present from the date of inception of the burial grounds in the Roman Iron Age or Migration Period or was introduced only with the overlying burials of theViking Period (Zachrisson 1994:227; Lund and Arwill-Nordbladh 2016). Zachrisson concluded (1994:235) that *óðal* was present, at least from the Migration Period onwards, but only became visible in the Viking Period because it was then under pressure. I agree that the runic inscriptions demonstrate that *óðal* was an established fact in the Viking Period in her study area but see several circumstances which argue against it having emerged as early as the Early Iron Age. If *óðal* were inherited by one generation of a dynasty from its predecessor through the Migration and Merovingian Periods and on to the Viking Period, the graves of the Viking Period ought also to overlie those of the Merovingian Period. In this way the place of the deceased in a long series of óðal-farmers would have been underscored. But the graves of the Merovingian Period lie rather ignored, and Viking-period burials overlie graves of the Roman Iron Age in some cases, in others graves of the Migration Period. This indicates that new ideas were emerging rather than that old habits of thought and rights were being marked. The nature of the burial grounds can thus be understood as an aspect of wider change. In the Viking Period, a new interest in history and prehistory was born across Scandinavia, the objective of which was to create a genealogy, an origin and a memory rooted in the ancient past, through the use of antiquities and the placement of burial mounds on top of earlier buildings or barrows (Sundqvist 2002; Artelius 204; Hållands 2006; Pedersen 2006; Hållans Stenholm 2012:226; Glørstad and Røstad 2015; Lund and Arwill-Nordbladh 2016). What we see in the cemeteries thus reflects changes in society as a whole: in the Viking Period, legitimacy was derived from an earlier prehistory. The Viking-period custom of placing graves above predecessors of the Early Iron Age rather than of the Merovingian Period can therefore be perceived as an attempt to establish a personal link to a distant and mystical past in preferences to the close and familiar past (Bradley 2003; Lund 2009:237). I propose, as a result, that *óðal* in its narrow sense as a preferential human right to inherit appeared in the Viking Period and was legimitized (or that was attempted) by means of roots in a long-past and mystical prehistory.

What burial mounds are understood to mean can change, and they can be used to create history, as one example is able to show. In England, natural formations and burial mounds that pre-date the Viking Age were given names consisting of Scandinavian personal names plus *-haugr* [barrow] (Fellows-Jensen 1992; Zachrisson 1994:227). In those cases, it is clear that the barrows were not raised for Scandinavians but were nevertheless named by such people. The mounds must therefore have changed name, and been annexed and adopted by Scandinavian colonists. In other words, a tradition was created or devised (Hobsbawm 1992). This shows that pre-existing barrows were actively used in the Viking Period as an instrument for creating a genealogy, and perhaps to legitimize claims. It is reasonable to imagine that similar events took place within Scandinavia. The need to draw a line straight back to the Roman Iron Age rather than to maintain one running from the Merovingian Period can be explained by it being new kin-groups that were burying their dead in the Viking Period. Kinship with those buried in the Merovingian Period was presumably still known, as that period was a relatively recent past. A possibly new dominant kin-group of the Viking Period may thus have had difficulty linking itself to the immediate past: the bluff would be easily unmasked. In contrast it is possible to imagine that kinship with those buried back in the Roman Iron Age was shrouded in mist or lost from collective memory. As a result, a possibly new group could establish itself as the heirs of the dead of that period while those of the Merovingian Period could be sidelined as an 'episode'. Like Scandinavians in England, the new group could thus create its own long history. By making the monuments of others their own, they also erased memories of the recent past from the landscape. Monuments and rituals therefore may not only create memories; they can also change or cancel them (Hobsbawm 1992; Williams 2006:121; Arwill-Nordbladh 2008; Gjerpe 2020).

There are several examples of Viking-period burials being made at cemeteries which had not been used

since the Roman Iron Age (Artelius 2004; Hållans 2006; Pedersen 2006). There are no comprehensive studies of these from Østlandet but the phenomenon has been noted at some sites in Vestfold (Østmo 2005:32–6) and at Bjørnstad in Sarpsborg k., Østfold (Rødsrud 2007). To root, justify and base one's claim in history is a well-known tactic, and the barrows of the Roman Iron Age and Migration Period could have been used in such a manner in the Viking Period. In a society to which genealogy mattered, striving for a genealogy is striving for power. It is possible that divine descent was core to the self-perception of the aristrocracy as early as the 7th century, and a convincing link with a divine origin may have been a requirement for one to claim the right to rule (Andersen 1977:274; Hedeager 1996; 1998; Skre 1998:291; Steinsland 2000:54; Opedal 2005:97). People generally could not be descended from the gods but the perception of the rulers as members of divine kin-groups was an integral feature of the Viking-period ideology of lordship. To put it another way, we have to distinguish between real genealogy and ideal genealogy (cf. Pedersen 2009). Myths and legends are important in constituting non-state societies and thus are an important ideological resource (Mann 1986). Hard-set myths or stories about ritual praxis have been handed down in the form of material culture and written sources (Hedeager 2001; 2011). Myths can also be seen as models for belief, morality and social structure (Malinowski, quoted by Steinsland 2005:89). In this way, those in power could shape and use the myths to confirm their own position (Lincoln 1999; Steinsland 2005:93, 393). The Norse myths of lordship that survive to our own time may largely have been formed in the 6th century, in a period when society changed dramatically. It has been argued that the new myths were produced by Scandinavian elites inspired by Christian European lordship (Fabech 1994; Näsman 1994; Hedeager 1996; Herschend 1997a; Hedeager 1998; Fabech 1999; Hedeager 2003; Steinsland 2005; Herschend 2009). Norse sagas and poetry reflect the elite's preferred interpretation of reality and so not, necessarily, an actual, more or less harmonically hierarchical, society. The author of *Konungs skuggsjá* ['The King's Mirror'] did not, for instance, hide the fact that he was writing for the courtly overclass (Orning 2004:15) and the gap between the ideal social order that is described, in the Norse laws for instance and in certain poems such as *Rígsþula*, and the reality that was portrayed in sagas or can be described using archaeological evidence is often great (Brink 2012).

The Provincial Laws and the evidence of the runestones indicate that it was primarily men who held the right to inherit and the right to possess land, although women could also inherit (Sawyer 2014). Zachrisson and Skre argue that the burial mounds were raised over the earlier owner's grave by the heirs in connexion with their assumption of the *óðal* (Zachrisson 1994:231; Skre 1997a; 1998:201, 208–9). That means that a high proportion of the dead should have been men. However women's graves dominate the Viking-period material from Romerike, which is central to Skre's study (1998:figs. 4–58). For a long time it was common to suppose that many more men than women were buried in the Viking Period in Norway (e.g. Solberg 1985). It is still the case that many more male graves are known than female ones, but Frans-Arne Stylegar (2007:82; 2010) has shown that this is largely down to source-critical factors and can hardly reflect the relative number of women who were buried in the Viking Period. Extremely few graves in Østlandet have preserved osteological material that can be sexed and it is therefore not biological sex but social sex or gender that is identified. This is done from artefacts or combinations of artefacts interred with the dead as grave goods. The ratio between known male and known female graves thus corresponds with the proportion of men and women who were buried with what are supposed to have been sex-specific artefacts that archaeologists are able to recognize. Amongst professionally excavated graves, 30–50% of the sexed burials of the Viking Period are female graves (Stylegar 2010). Per Holck's osteological studies of cremated bodies of the Iron Age as a whole (1986:tab. 11) emphasize that the ratio between the sexes is more or less balanced. The large preponderance of known male graves of the Viking Period is due to graves that have been discovered in other ways than through systematic excavation: put simply, it is easier to spot a sword that is ploughed up than an oval brooch (cf. Skre 1998:210). Trond Løken (1974:118–20, tabs. 10. 17, 18) explicitly discussed graves marked with barrows in Outer Østfold, Outer Vestfold and Hedrum in Vestfold, and showed that round barrows contained slightly more women's graves than men's in the Early Iron Age but many more men's graves than women's in the Late Iron Age (Løken 1974; Damlien 2002:144). As there are so few burial mounds of the Merovingian Period, making it difficult to process the evidence statistically, Løken (1974:49) took the undivided Late Iron Age as a unit of time. It is therefore difficult to determine precisely when the proportion of men buried in barrows became higher than that of women. It may be

detectable, however, that the proportion of women amongst the known burials — irrespective of the style of burial — was higher in the 9th century than in the 10th. This picture is probably influenced by the fact that oval brooches, one of the most common artefact-types associable with women, passed largely out of use in the 10th century without being replaced by equally conspicuous items. At the same time, we have more properly excavated graves of the 10th century than of the 9th (Stylegar 2007:82; 2010:76). The result is that male graves dominate the recorded Viking-period evidence as a whole, even though the ratio of the sexes in the burial record is indeed numerically more or less equal, at least down to around the year 900. If the barrows were raised in association with the determination of inheritance while it was also most often men who inherited, the great majority of those buried under barrows ought to be male. This was certainly not the case in the Oslofjord area in the Early Iron Age, and as the foregoing discussion shows it was very probably not the case either throughout the Late Iron Age. Round barrows with male graves are not regularly larger than round graves with female graves, and the location of the male graves in the landscape does not appear to have been different than that of the female graves (Løken 1974; Moen 2010). To sum it up, there was little difference in the visible marking of male graves and female graves. If burial mounds marked the right of ownership and óðal, this right must have been equally shared between the sexes, at least until the Late Iron Age and very probably into the Viking Period. The burial mounds in Østlandet therefore cannot be seen as a physical manifestation of the *óðal* right in the sense of the right to inherit land, preferentially by men, as Zachrisson and Skre have supposed.

The documentary sources thus foreground male rights to inheritance and *óðal* while the burial mounds, which may have been interpreted as physical manifestations of the *óðal* right in the Iron Age, were just as frequently raised in memory of women. This discrepancy opens the way for a re-assessment of the development of the concept of *óðal* in the Iron Age. In my view, there is no reason to deny that women had the same rights to land as men did; however, female rights of inheritance undermine the evidential value of the documentary evidence, where that is conspicuous in its absence. The textual sources imply that family relationships in the early Medieval Period and the Viking Period were counted on a bilateral basis: through both the mother's and the father's kin-group (Skre 1998:13–14; Hansen 1999; Opdahl 2004). In the Icelandic *Landnámabók*, which deals with the Viking Period but was written down in the 13th century, it can be seen that the purpose of genealogy is to be able to count important characters amongst one's ancestors (Jesch 2014). To achieve this, opportunistic shifts of focus between female and male ancestors are employed in order to get back to someone of importance (for an example, see Jesch 2014:281). If the burial mounds were raised over individuals who were important because of their descent, that could explain the more or less equal division between the sexes. I suggest, then, that the burial mounds mark *óðal* in its broader sense: i.e. kinship and genealogy with a focus on an ancestor cult. There is no absolute connexion between how one reckons one's genealogy and how inheritance is passed on. In a bilateral kinship system male heirs might have preference in inheriting, shall we say, land, but need not do so (Hansen 1994; 1999). To regard the burial mounds as markers of bilateral genealogy thus is not incompatible with male heirs having a preferential right to land; nevertheless the interpretation of these barrows as a direct token of *óðal* is weakened.

A consequence of interpreting the burial mounds as markers of óðal-right in the sense of a male right of inheritance in respect of land is that farms with no burial mounds have been interpreted as farms worked by those who did not enjoy óðal. These farms may, then, have been parts of larger composite estates (Skre 1998; Iversen 2008). In Østlandet there are, however, cemeteries in which burials were made much more frequently than one per generation. Mari Østmo (2005) has studied cemeteries in Vestfold and, in addition to their size, attaches significance to the frequency of use and to the fact that several of these were located on communication routes, which she interprets as district burial grounds at which the dead from several farms were interred. Farms without graves may therefore be due to their deceased having been used to embody district communality through burial. To this point, I have not explored the existence of *óðal* and a right to property towards the end of the Viking Period. There are circumstances, however, which indicate that territorially defined rights were by no means the only system in force then, either. Anders Andrén (1987) has noted how terms such as *sýsla*, *sokn* and *herað* changed in sense from socially to territorially defined units during the Middle Ages. The term *sokn*, for instance, comes from 'to seek', and originally meant social attachment through churches' members and the church's patron. The term gradually transformed to denote geographically bounded territories (Andrén 1987:25). *Óðal* and the right of property are formulated in the Provincial Laws, as noted, but it is

possible that they actually reflect the legislators' desire to push through or legitimize new conditions. To incorporate older customary right, such as different social classes' rights and the obligation to have weapons, could have been one strategy for getting newer and more controversial regulations accepted (Fenger 1977:57; Solberg 1985). In the same way, the large number of runestones which refer to *óðal* and property may be regarded as an insistent argument of the case for new and conceivably controversial conditions. It has also been suggested that the runestones are concerned first and foremost with kinship, and to a much lesser degree with property rights (Jesch 2011). It is possible that the named farms and the settlement pattern we know of through the documentary evidence were basically products of the Middle Ages (Brendalsmo and Stylegar 2001:13–14). As noted, a number of historians have argued that the right of *óðal* was first introduced in the 12th century, and very probably later (Helle 2001:219–20 with refs.; Norseng 2010), while influence from Roman Law and the Catholic Church is easy to find in the early medieval laws: it is not certain that the laws have the roots in Iron-age society that are often taken to be fundamental (Fenger 1977:57; Eriksen 2012). The primary settlers did not take the right of *óðal* with them to Iceland, which could suggest that it was not established in Norway at the date of this migration in the late 9th century (Gjerdåker 2001:12). Per Norseng (2005:218–19) emphasizes that *óðal*-right had little significance for the conditions of ownership before the 15th century. That was when óðal-right became important for the farmers, who used it to block the nobility's buying up of land. If óðal-right and the right of an heir to buy land back emerged as early as the Iron Age, it is difficult to explain why the farmers held only about a third of the land around 1300, and why partial ownership was so widespread (Bjørkvik and Holmsen 1972). *Óðal* was also used in another sense besides the right to inherit farmland even in the Middle Ages. In a letter of 1404 the phrase 'inheritance and óðal' [trans.] is used of a bath-house in Bergen: in other words, an urban property which was not subject to *óðal* in the traditional sense (Iversen 2001:92; Norseng 2005:213).

I shall pull the threads together by proposing that *óðal* had three different senses which were introduced at different times and so were used in parallel. To begin with, *óðal* meant the 'the best land' or 'the infield'. This use of the term may be basis of *Rígsþula*'s 'ancient *óðal* fields'. In that case, it signifies quite straightforwardly that Rígr possesses an infield of high quality that had been cultivated for generations. It is difficult to make any suggestions about when this sense developed. Secondly, *óðal* was used in the sense of an ancestor cult, and this appears to have been the most widespread sense (Baudou 1989). It is tempting to suggest — although difficult to prove — that the óðal-rune was first used in this sense of the word. It is also possible to view the burial mounds as a physical manifestation of the ancestor cult; if so, the introduction of this sense can be dated to c. AD 200, the period when barrow burial came to be widespread over much of the area under study here (Solberg 2000:77). Thirdly, *óðal* was used in the sense of a male right to inherit land. This sense appears to have been introduced only in the Late Iron Age, probably towards the end of the Viking Period. It is possible that this sense of the word only became general in the Medieval Period, or that it was only then that the word started to be used for actual rather than aspirational social relations.

An understanding of *óðal* as an ancestor cult thus allows for a new interpretation of the function of the burial mounds. Heiko Steuer (1989:116) has interpreted the large number of rich 'row graves' as an element in the struggle for rights to land precisely because land was not heritable. He emphasizes that when heritable rights to land and positions were fixed by law, burial mounds ceased to be used. The burial mounds were thus deployed in the conflict over rights to landed property that was not heritable. They therefore symbolize the battle for rights to land, or maybe clashing preferences concerning how rights to land were to be organized.

Like Skre and Zachrisson, then, I interpret the burial mounds as betokening óðal, but unlike them I understand *óðal* broadly as a feature of an ancestor cult, for much of the Iron Age at least. The burial mounds may, in my judgment, be regarded as tokens of heritable social status and genealogy but not of the right to inherit land. They are therefore political rather than juridicial instruments. The dead must thus be regarded as active participants in the distribution of goods and duties in the same way as the living were, a state of affairs which can be termed 'necropolitics' (Jopela and Fredriksen 2015; Fredriksen 2016). It is this understanding of burial mounds I treat as a foundation from here on.

SOCIALLY ROOTED RIGHTS TO LAND

If *óðal* in its narrower sense emerged first in the Viking Period, it is possible that rights to land were quite differently organized in prehistory in comparison with the historically attested farming society in

which the owner had full rights of alienation over geographically bounded areas. In this section, I take a closer look at how the right to land may have been socially rooted (Gluckman 1965:78, 104; Sveaas Andersen's comments in Myhre 1990; Pottier 2005). In his Gallic War, VI:22, Gaius Julius Caesar wrote of the *Germani* that:

> They do not pay much attention to agriculture, and a large portion of their food consists in milk, cheese, and flesh; nor has any one a fixed quantity of land or his own individual limits; but the magistrates and the leading men each year apportion to the tribes and families, who have united together, as much land as, and in the place in which, they think proper, and the year after compel them to remove elsewhere.
>
> (trans. McDevitte and Bohn)

Caesar thus denies a right of ownership over land, and indicates that social status was decisive for access to land. The value of Caesar's account as a historic source is disputed. The report can serve, nonetheless, as a model (Ch. 1.4.4) and I shall show that rights to land were socially rooted in many historically recorded societies, and then that there are traces in the historical record which may show that this was also the case in Østlandet.

Starting from a number of ethnographic examples, I shall demonstrate that agricultural societies can function with no territorially grounded rights or delimited properties. In Burkina Faso, individuals have 'traditionally' never had the right to own land but do have the right of usage as long as it is under cultivation. When a period of cultivation is over and the land is left fallow it returns to the *chef de terre*, who has the power to redistribute uncultivated land (Hagberg 1995:66). From Hawai'i we know of a combination of collective property right and private right of usage. There, men were assigned the right of usage over one or more parcels of land in return for work on the chieftain's land. The right of usage could be inherited but could also be either wholly or partially confiscated if the labour service was not carried out (Earle 1997:81–2). On Ponam, an island that is part of Papua New Guinea, the right of ownership and the right of usage are two different, although closely intertwined, entities (Carrier 1998:91–3). The land was owned by men and passed through inheritance from father to son or to other male relatives if there were no sons. Women could not own land. Land could not be sold, although in rare cases it was given away in compensation. However, land could be lent. Such a loan was not for a specific period of time but continued until the donor resumed the land.

The right of usage over borrowed land was also heritable, and after a certain amount of time it was difficult to demand land on loan back. Lent land could also be lent on to others. The result was that very few men owned all of the land they were cultivating. Some farmed partly their own and partly borrowed land while the majority of households only cultivated land on loan. The repeated processes of lending also meant that the pattern of usage was constantly changing. The right of property thus was, in a formal sense, heritable, and the right of usage was heritable in practice, and yet along two separate lines. The complicated conditions of usage and ownership led to similarly complex social relationships and genealogies. In the 1980s, for instance, only one in three households was led by a man with patrilinear descent — i.e. through the father's line — from the owner three generations earlier. Even though both the original owner and the original recipient had died several generations past, the land was linked to both of those. The present user could only claim the right of usage through his descent from the original recipient of the loan. Both the property conditions and the social context were complicated yet further by the fact that although women could not own land, unmarried women did have the right to cultivate their father's land while married women had the right to cultivate their husband's land. It was furthermore not unusual that women married to men with little land borrowed land from their fathers. This land loan could then be inherited by the woman's children. This meant that one in three households was led by a woman even though formally land-ownership was restricted to men.

The case of Ponam is relevant to the situation around the Oslofjord for three reasons. It shows that exclusive male rights of inheritance and especial emphasis on genealogy do not necessarily lead to stable farm boundaries. It also shows that different kin-groups may be based in the same land. The state of affairs on Ponam shows additionally how great the difference between formal and actual property and inheritance rights can be. While land is formally owned by men and is passed on from father to son, women do in practice have the right to control land.

In *Germania*, 26:2, Tacitus wrote that "Lands in proportion to the number of tillers are occupied one after another by them all together, and then divided among them according to rank" (Rives 1999:87): essentially, much as Caesar wrote more than a century

earlier although Tacitus is clearer that the rights to land were socially rooted. Around AD 97, Tacitus criticised what he saw as decadence amongst the Romans by contrasting them with the non-degenerate natural folk: the *Germani*. In this way *Germania* can be seen as a literary reflection of Roman society and its ethnographic and historical value as a source is low (Fuglevik 2007; Lund 1993:231–2). Others stress that the work does contain valuable information despite this (Hedeager 2011:30). It is also uncertain that Tacitus' descriptions fit with Østlandet even if they were correct for the areas he was writing about. Those were located on the Continent, not as remote as Scandinavia and perhaps especially close to the Roman Empire, and must have been influenced by contacts with the Roman world.

All the same, Tacitus described a society in which temporary individual rights to land were continually redistributed according to rank; not an egalitarian collective with equal rights, nor a society in which kindreds or clans shared out the land amongst themselves (Widgren 1995:11). As Herschend has noted (2009:161–3), what Tacitus wanted to do was to describe a different society: the inverse of the civilized Roman society. As a result, he based his description of Germania on older sources. His information was out-of-date in consequence, and his accounts fit better with Germanic society before it came into contact with the Roman Empire than with the situation of his own time. Herschend's assessment was made from a southern Scandinavian viewpoint but it can appear reasonable to believe that influence from the Empire was considerably less in Østlandet. Geir Grønnesby (2019), meanwhile, has pointed out that Tacitus's and Caesar's descriptions do reflect a reality, and argued that the population of Trøndelag in the Early Iron Age did have a pastoral ideology with a high level of mobility and which attached great (ideological) importance to livestock farming and much less to cereal cultivation and the occupation of land. In the slightly later poem *Beowulf*, individual property rights were clearly an established concept, but new enough in practice that they were not institutionalized (Herschend 1997b:71). In its surviving form, *Beowulf* portrays events in Scandinavia, apparently in the 6th century, and was completed in England in the 8th century and probably committed to writing some time in the period AD 700–1000 (Hedeager 2011:29; Gräslund 2018). This poem was directed at a contemporary public and indicates that the right to property was established in the 8th century even if the epic itself is concerned with events of the 6th. *Germania*, the *Gallic War*, *Beowulf* and Anskar's report from Birka thus testify in various ways that the right to own land did not exist in the Early Iron Age or early in the Late Iron Age.

There is a range of examples showing that rights can be both collective and individual, even in societies with a well-developed right of private property. Norwegian Common Law, for instance, allows anybody at all to pick berries or fungi in the outland irrespective of who owns the land they are growing on. The owner, conversely, has an exclusive right to exploit most of the other resources, such as pasture, hunting or timber. Collective rights will not necessarily be for all as in the case of the Common Law but may be restricted to some clearly defined group (Widgren 1995; Stenseth 2005; Oosthuizen 2013). From the historical period we know also of other modes of blending collective and individual rights. In 17th-century Västergötland the right to cultivate land was individual but there was a collective right to graze after harvest (Lindgren 1939; Widgren 1995). The so-named *Byggningabalken* [Settlement Code] of 18th-century Swedish law stipulated that the rights to the common possessions of the village had to be distributed according to the needs of each household. As a result, a household with a large family would receive more than a household with few members, while a rich person would get no more than a poor one. Access was therefore not regulated according to how much land the household had (Lönn 2015:362).

In Denmark in the High and Late Middle Ages, the rights within a single forest were shared between farmers and the estate owner (Fritzbøger 2004). The owner had the right to the 'overwood', which in practice meant the large beech and oak trees that could be sold as timber. The farmers had the right to cut wood and fencing material in the underwood. The complex situation in respect of rights is further emphasized by the fact that the farmers had to pay a fee to allow their swine to feed on oak or beech mast if it was lying on the ground and in the underwood. The basis was that the nuts were the fruit of the overwood. An example from Ireland exemplifies a two-part system. In the 9th century, the aristocracy in some cases enjoyed what was practically a personal right of land-ownership, with the opportunity to sell or buy it, while the common people owned land collectively (Gibson 2008). Iron-extraction in the late Viking and early Medieval Periods was one of the most important economic aspects of all, but it was anything but regulated in terms of geographically defined properties (Rundberget 2012:286, 321). Iron production is rather an example of how even crucial economic resources can be organized according to social or other

principles even if the most important goods, bog iron and wood, are in fact geographically located in the first place. Bog iron and wood in that sense are no different from pastures or arable land. Commons as they are known from, inter alia, Norway and Sweden in historical times, are examples of how many people may have had the right to exploit the same resources — such as the pasturage — in a given area (Solem 2003). The area itself is often naturally bounded, and the management of the resource is governed by the rights-holders collectively (Reinton 1981). Grønnesby (2019) has proposed that in the Early Iron Age it was not only pastureland and waste but also the arable land that that was organized according to the same principle as the commons.

Several people may therefore have enjoyed rights to the same limited resource. For a long time it was supposed that common rights to the same resource would lead to over-exploitation — 'the tragedy of the commons' (Hardin 1968; Feeny et al. 1990). In recent years, more and more scholars have, conversely, shown how collective rights can be well maintained by a group, especially in societies with close social ties and strong social control, or where the group has means of sanctioning individuals (Lindholm et al. 2013; Oosthuizen 2013; Stene and Wangen 2017). It is, in other words, more or less the same conditions which prevent someone from appropriating the right to shared land and stop someone taking another person's land.

There are some terms which seem to have changed their sense or meaning so that in the Middle Ages they quite unambiguously refer to territorially based rights although they had originally been defined in social terms. The term *dróttinn* is used in the Provincial Laws in the sense of 'landowner' or 'slave owner' but originally meant 'war-leader' or 'warlord' (Iversen 1997:48). This can be interpreted as indicative of the basis of status, power or income having shifted from an individual's capacities to an individual's rights or property. The term *går*d has also changed in meaning, as I noted in Chapter 1.3.3. Here, I shall summarily recall that Per Sveaas Andersen (referred to by Myhre 1990:136) emphasized the possibility that *bær*/*býr* was used for the farm (*gård*) in the Viking Period and earlier precisely because the sense of space was social rather than economic, and that the term *gård* gained the sense that it has nowadays only in the Viking Period or early in the Medieval Period as a result of the rigorous territorial divisions that took place only then. The Tune runestone is the earliest written documentation of property and inheritance in Østlandet and is dated to c. AD 400. It refers both to the raising of a memorial to a deceased person and to a dispute over inheritance. Ottar Grønvik (1998) interpreted the inscription as 'I Wiw after Wodurid, he who guarded the bread, produced runes, presented the stone to Wodurid. Three daughters made the funeral feast splendid, as the most beloved of heirs.' In Terje Spurkland's interpretation (2001:46:53) the text is read as 'I, Vi, in memory of Vodurid, bread-lord, produced runes. I presented the stone to Vodurid. Three daughters prepared the funeral feast, the most beloved/most divine of the heirs.' In both cases the inscription can be read as documenting inheritance, and it also provides evidence that daughters had the right of inheritance at the end of the Early Iron Age. Spurkland presupposes that Vi, who raised the stone, was an heir equally with the daughters. That would mean he must have been the direct male grandson of Vodurid, because in the earliest known Provincial Laws the sons have a preferential right to inherit and Vi would have preceded the daughters had he been the son. Spurkland's interpretation rests on two premisses: first, that only heirs would trouble to raise a runestone in memory of someone who had died; secondly, that the inheritance rules of the Provincial Laws can be taken back to the beginning of the Migration Period. If we liberate ourselves from the retrogressive method and its limitations, we can rather discern the outlines of a different system of inheritance in which it is the personal capacities of the heirs that determine who should inherit. The three daughters are indeed emphasized as being the most beloved or most divine of the heirs.

Long before, Tacitus had emphasized that personal capacities could be determinative in the distribution of inheritance (Rives 1999:90). In the Germanic tribe of the Tencteri, the horse goes to the most skilful warrior amongst the sons rather than to the eldest, as 'household property and the rights of succession' do. What that involved is uncertain. Tacitus used the Latin term *familia et penates* of the remainder of the inheritance. The expression refers very probably to the house or the household with its contents and occupants of slaves and family, or to property generally. It cannot be ruled out, however, that it is to be understood in terms of landed property (Rives 1999:255). J. B. Rives (1999:255), however, is sceptical about the historical content of this passage. There is much that suggests that women also had a right to inherit. According to Tacitus's general description of the *Germani*, it was children, and not explicitly those children called sons, who inherited (Rives 1999:85). It might be claimed that Tacitus said 'children' but actually meant sons. Rives (1999:208) suggests, however,

that unmarried daughters were heirs on an equal basis with sons amongst the Romans and that if the situation had been different amongst the *Germani* Tacitus would specifically have commented upon that. The description of the female right to inherit as it appears in the general account is incompatible with male inheritance rights amongst the Tencteri. Rives (1999:255) attaches greater weight to the account of female inheritance rights and takes the view that the possible historical value of the inheritance system amongst the Tencteri lies in the implication of some form of will, or the possibility of diverging from the normal sequence of inheritance. It is therefore far from inconceivable that male priority in the inheritance of land, as is found in the medieval laws, was the product of a general trend in western Europe from as late as the 11th century (Helle 2001:137). The right to inherit can also be viewed in light of the practice described in the saga narratives. The word *arfr* in the sense of 'inheritance' is used in *Ynglinga saga* in more or less the same way as in the Provincial Laws — meaning the transfer of a deceased person's property. It was first and foremost relatives who inherited but there are some exceptions. In one case the phrase 'to inherit' is used as the equivalent of receiving war-booty. "…but if we are victorious, then you shall inherit from those who now are fighting against us, because some of them will fall, and others will flee, and whether they do the one or the other, they have forfeited all their property" (Sturluson 1968:448).

There are thus many examples of how rights could be socially anchored in genealogy or personal qualities. In order to underpin the framework I have presented up to this point, I shall examine whether socially rooted rights are able to explain the organization of Nørre Snede, one of the labile or 'wandering' villages in the centre of Jutland. This site was founded in the Roman Iron Age and moved around within a topographically defined landscape until it reached its current location at the end of the Iron Age or early in the Medieval Period (Holst 2010). The village comprised a varying number of houses, separated by fences. The enclosed areas including buildings are probably the feature that also appears in the later Danish Provincial laws as the 'toft' (Hoff 1997). The word 'toft' refers to a fenced area containing the main buildings of a single farm. Toft could be translated as 'plot' (Norw. *tomt*) but 'farmstead' [Norw. *gårdstun*] may be a term that covers it better, even though the toft also includes areas for gardening or growing crops. The farmsteads and the structure of the settlement appear to have been strictly regulated throughout the life of the village. Holst (2010) suggests that the size of the tofts, or the fenced areas, reflects the rights of the holder. Around half of the farmsteads were at c. 750 or 1,500 sq m, which could represent full or halved rights to land (Holst 2010:fig. 11). Each household thus had the right to cultivate a defined area outside of the settlement, and that is reflected in the size of the toft. Holst has also shown how the movement of the village was not in single, simultaneous shifts but that individual farmsteads or tofts relocated when new households were founded. Transfers through inheritance and the formation of couples led to the splitting of farms and some portions being added to others because new households were created, while if there were no heirs the farm was deserted. This meant that the farms underwent almost continuous change throughout the Iron Age (Holst 2010:171, fig. 10).

On the basis of Holst's exhaustive analyses I shall show how the rights to land at Nørre Snede can be seen as socially rooted. Holst has demonstrated that new buildings — in some cases after a change through inheritance — were raised on unbuilt-on areas. The settlement nevertheless adhered to rigorous norms: it does not appear that anyone used the process of relocation to fence in a large area when they moved. Over the centuries, relocation also appears to follow a single direction, so that the distance from the originally cultivated field area gradually increased. If the right to cultivate a certain amount of land and to build a farmstead of a specific size was based in the status of the household rather than in a concrete, geographically delimited holding, it may explain how many households moved their buildings around. Or, as Caesar wrote: "but the magistrates and the leading men each year apportion to the tribes and families, who have united together, as much land as, and in the place which, they think proper." It was not, therefore, right to land — or ownership — that gave status, but rather status that gave a right to land. Herschend (2009:170) has pointed out that Caesar's report does not imply that all land was redistributed annually but that new claims from new households were received at annual assemblies. Such a perspective upon heritable rights can explain how ten generations of successive inheritance at Nørre Snede did not produce a concentration of property rights with one or a few farms growing much larger than the others (Hansen 2015:116).

HIERARCHICAL SOCIETIES WITHOUT LAND-OWNERSHIP?

I have now demonstrated that rights to land can be socially rooted, and not based solely upon geographically defined landed properties as those of the historically known agrarian society are. Recognition of this is fundamental to this study. Territorially embedded rights have been discussed thoroughly in extant scholarship (Skre 1998; Iversen 2008) but socially rooted rights have been afforded far less attention. Socially rooted rights to land require a different social order than geographically founded ones do. Before I can discuss the trends that I have observed in the archaeological evidence (Chs. 6 and 7) I must therefore lay out an understanding of such societies (Ch. 8.4.1–3) that I regard as 'stateless' rather than 'pre-state'.

Just as Timothy Earle (1997:2) is of the view that the personal advantages of leadership are sufficient for all types of society to have individuals who will seek dominance over others, I believe that the disadvantages of being subject to a leader are so great that in all types of society there will be people who seek to hinder or limit the leader's power. The capacity and will of these two groups to bring force behind their objectives determine what sort of society will be shaped. I am of the opinion, then, that it is crucial to illuminate the relationship between what I shall call the honourable warrior and the powerless chieftain in order to understand why concentrations of power did not lead to state-formation until early in the Medieval Period.

A rooted agricultural economy

Socially rooted rights to land require, as noted, a different social order than geographically founded ones do. My starting point in this section is to seek to understand how and why society may have been organized. The connectedness of settlement, economy and politics, and the specific historical situation, is a fundamental to this study (Ch. 1.4). Settlement must therefore be considered in connexion with agriculture, social organization, and the ideologies of the society. In order to understand settlement, then, it is necessary to provide a sketch of the society that both formed and was formed by it. I attach especial significance to the fact that Iron-age society was hierarchical and stateless, and that the economy was 'embedded', or to put it another way, rooted and constrained by external social institutions (Granovetter 1985; Hodges 1989; Myrdal 1989; Skre 2008). Iron-age society also possessed a substantivist rationality in Weber's sense (Kalberg 1980:1155). A substantivist rationality evaluates actions on the basis of a collection of values. For either parts or the whole of Iron-age society, the core value was that of honour (Ólason 1989; Meulengracht Sørensen 1995; Hanisch 2002). It is implicit within this approach that the maximization of benefits in a traditional, materialist sense does not come about — it is not the one who dies with the most possessions who is the winner. It is rather the one who dies with the greatest honour or prestige who has won.

A rooted economy can only be understood as an integral part of the society it is constrained by. I shall consequently draw out certain facets of Iron-age society that I believe to be crucial, and show how these can be understood as aspects of the interplay with an agricultural economy with no territorially bounded properties. It will be particularly important to understand how a stateless, hierarchical society with major economic and social differentiation can both emerge and be maintained. The society of the Iron Age was not static: there were major and fundamental changes between the pre-Roman Iron Age and the end of the Viking Period (e.g. Hedeager 2011; Ystgaard 2014; Grønnesby 2019; Berg 2021). The reflexive relationship between the three-aisled building and society means that I am looking especially for social changes which may reflect the changes demonstrable in the settlement evidence. In Chapter 7, it was shown that the settlement pattern underwent changes around AD 200 and at the transition between the Early and Late Iron Ages. The settlement evidence suggests that these changes took place over time, which in turn suggests that they should be regarded as processes rather than responses to sudden events. This does not, though, exclude the possibility that access to Roman prestige goods (Lund Hansen 1987), the massive dust veil of AD 536 (Gräslund 2007; Gräslund and Price 2012), or the silver influx of the Viking Period (Hårdh 1996), did influence social, economic or ideological structures, and the settlement pattern along with that. Iron-age society around the Oslofjord was, as noted, hierarchically structured, with concentrations of wealth that far exceeded what one family could produce. It is overwhelmingly probable that surplus agricultural production provided a key part of the wealth. I shall therefore examine how an agricultural surplus can be collected and gathered without being based upon the ownership of large landed properties that are worked by others. The right to own land is, as noted, not necessary to the creation of social and economic inequalities, not even in an agrarian society. In concord with the view of the economy as

'embedded', I shall present a model of the economy in which personal ties and mentality played key roles.

A fundamental premiss for this understanding of the economy is that large resources were mobilized already in the Early Iron Age. Raknehaugen in Romerike, for example, is an impressive monument — one of the largest in northern Europe — which needed a major investment of labour and high level of organization (Skre 1997b). Skre (1997b:27) concludes that 30–60 men worked for four months to fell and transport the timber that was used in the core of the barrow and that 450–600 men worked for half a year to build the barrow itself. Additionally, a large number of people may have been involved in preparing for the works, and I shall proceed on the basis that 600 individuals were working on the construction of the barrow for half a year. It seems likely that practically the entire local population was involved in the task, and Skre (1998:320) suggests that Romerike as a whole was involved in the construction. Starting from Skre's calculations of the amount of work and the manpower involved, I shall take a closer look at how wide the areas from which this workforce came could have been. In my calculations, I shall focus primarily on the costs of having 600 men working for half a year. In doing so, I am not considering the needs of the draught animals for pasture and feed, and the consequences the felling of the timber for the barrow, fuel and building the construction camp must have had on the landscape. The costs otherwise were first and foremost food. It is not easy to reckon how much the workforce may have consumed, but at a conservative estimate they may have consumed 72 tonnes of grain during the period of construction, or a third of the total production of Romerike in 1665. This underlines with absolute clarity the point made by Skre, that the building of Raknehaugen required social organization capable of mobilizing a massive investment, far greater than one could expect from the immediately local population alone. In Skre's model (1998:326), the barrow was raised by a major landed lord who ruled the aristocracy throughout Romerike. I shall show, however, that even societies without territorially embedded rights to land can organize such an effort.

Stateless societies

> […] individuals and groups do not give up autonomy except when compelling power is exerted to make them submit. (Earle 1997:70)

States are characterized by the monopolization of power and a centralized, formally hierarchical structure (Weber et al. 1946:77; Service 1971; 1975). Stateless societies in their purest form are characterized conversely by not having distinct organs of power: in essence, power is not separated from the society as a whole (Clastres 2010:164). It thus appears reasonable to regard the Iron-age society of Østlandet as stateless (Skre 1998). Taken to an extreme, societies with no monopolization in the exercise of power, centralization of power, or formal institutions, can also be called anarchies. Anarchy is a socio-political system with no durable, formal authorities or governing powers where decisions are taken with general acceptance (kok 2020:257). The absence of formal organs of power does not mean that the society lacks authority or authorities. Authority in a stateless society involves an order being observed because both the individual giving it and those who accept it automatically recognize the hierarchy and their places within it (Arendt 1961:92–3). Power, in other words, can be understood as 'embedded', just like the economy. Michael Mann (1986) stressed what is unique about various historical societies but concurrently observed common features of societies that grew into states, and identified four sources of power: economic, ideological, military and political resources. Mann regarded these four sources as an overlapping network which will be tightly integrated in non-state societies. In this section, I shall explore whether the dominant ideologies of the Iron Age may have hindered the formation of permanent hierarchies and states through the exploitation of economic, military and political resources. Politics thus means first and foremost the question of what ideologies were dominant. In this regard, I would maintain that the warrior ideal and the house as the central focus of society were the most important poles opposed to statehood in the Iron Age. I shall also show in this section how the ideologies found expression in interactions, which in turn were manifested in the settlement structure. Continuous interactions centred upon ideologies are definitive of the society of the Iron Age around the Oslofjord in many ways. According to the legend, the background to the migration to Iceland was that a number of men could not tolerate the restriction of their freedom that the kingship of Harald Fairhair brought with it. As a result, they migrated to Icleand, and established there what might be described as their ideal society, a society with no overriding power (Ólason 1989:281). In Iceland, then, a decentralized society with 'democratic' elements was established that blocked the growth of the state and the restriction of the freedom of at

least the leading individuals until far into the 12th century (Borake 2019:71, with refs.). Stateless societies are often represented in archaeological and older anthropological studies as pre-state, a term which more than implies that stateless societies are relatively unsophisticated and form an evolutionary stage on the path towards the state — which consequently is understood both as inevitable and as a higher stage on the evolutionary ladder of types of society (Clastres 1989:189–90). The path from stateless society to state is often illustrated by Scandinavian and Norwegian archaeologists by means of two theoretical models: the chieftainship model, inspired by evolutionary social anthropology, and the comitatus-based state inspired by historical research into Frankish state-formation (for a summary review of the research history, see Ystgaard 2014:43–8). In an extremely simplified form, the chieftainship model is based upon a chieftain garnering resources by demanding tolls, payments or tribute from a geographically defined territory to some central place (Service 1971; Myhre 1978; 1987; Skre 1998; Näsman 2006). This model has been critiqued for being (neo-)evolutionist, and in broad-brush terms it offers a tale of hierarchical chieftainships of the Early Iron Age developing into state societies in the Medieval Period (Grønnesby 2019:53).

In a society with political symmetry, the chieftain or leading man will be accepted as long as he does not attempt to impose power but rather shares out goods such as ale or food or arranges warfare with the opportunity of winning honour (Clastres 1989:27–47; Andersson and Herschend 1997; Halsall 2003:27). The chieftain uses some of the surplus to exchange for prestige goods from other chieftains, and redistributes some parts of the surplus in the form of gifts (Sahlins 1963; Mauss 1995). The redistribution of resources can also be seen as a way of preventing the leader from becoming over-powerful while it also makes it less attractive to be a leader (Borake 2019:64). The chieftain's power therefore is based upon the fact that he has lordship over a territory but not that he is master of certain farms or properties. In the comitatus-based state, the king's power is based upon personal relationships (Steuer 1982; 1987; 1989; 2006). The king binds a warrior band to himself through gift-giving and presenting landholdings. The rights to use or to receive the produce of a landed property were originally personal but gradually developed to become matters of heritable property.

The term 'chieftain' is only one of several that are used of leaders in pre-state societies, and prior to further discussion I shall briefly discuss what term is best suited to a leader within the Iron-age society of Østlandet. The term 'chieftain' [Norw. *høvding*] is widely used, although it is also problematic precisely because it is used with different senses (Svenningsen 2002; Grønnesby 2019:51–2). To begin with, 'chieftain' (or just 'chief' in English) is used as an analytical term in social-anthropological models, and in archaeological literature particularly of the leader in a chieftainship. In the second place, *høvding* is a historical term that appears in Norse sources of the Middle Ages. In the documentary sources this term is used of military, political and religious leaders in many, sometimes quite dissimilar, senses, and of people with markedly different status. In a critical review of the use of the chieftainship model, Grønnesby (2019:40–61) has pointed out that it is in fact the neo-evolutionist interpretative framework itself which has rendered it possible to fuse these two concepts into one in Scandinavian archaeological research. A person was either accepted as a chieftain by the subordinate population or appointed as chieftain by superior powers; the status was personal and dependent upon personal capabilities rather than heritable (Angelbeck and Grier 2012). It was, then, also possible to lose the status of chieftain. In the period 1160–1280 the term shifted from denoting a general leader to apply to the pinnacles of society (Svenningsen 2002). In the Iron Age, religious, political and military leaders at various levels probably had specific titles which varied both from period to period and place to place (Norr 1998; Brink 1999; Sawyer 2000:176–84; Sundqvist 2003; Sonne 2014). It appears as if only some of those have come down to us: there are, for instance, few if any terms for female leaders even though there are more women's graves than men's from some parts of the Iron Age (Løken 1974). If richly furnished graves or monumental funerary monuments reflect the power of the deceased, the women buried at Oseberg in the Viking period or at Ommundrød in the Migration Period must have been very powerful (Shetelig 1917; Dybsand 1956; Pedersen 2008a). The terms for a leader cannot, though, be looked for in the artefactual evidence, while in the textual sources men predominate as leaders. This is probably due to the fact that the latter very largely reflect the Christian society in which they were written down, not the societies they are supposed to be describing. The differences between the sexes were, meanwhile, greater in the Late Iron Age than they had previously been (Wiker 2001). Michael Enright (1996) has noted that leaders during much of Germanic prehistory were not single individuals but rather pairs within which a man and a woman had definite and different,

although equally important, roles. In this study I shall therefore primarily use the general and gender-neutral term 'leader', while the term 'chieftain' refers to the central character of the chieftainship model.

There was barely any sort of state-formation in Norway until late in the Viking Period or early in the Medieval Period (Sawyer and Sawyer 1993:51–8; Sigurðsson 1999:62–77; Bagge 2010), and the strategies to counter state-formation must have succeeded to some extent, although that has had little study in a northern European context. The forerunners of state-formation and the establishment of hierarchies in Iron-age society around the Oslofjord have, however, been well illuminated (e.g. Skre 1998). It has been shown that the lords presented themselves as god-descended in order to legitimize their role, and offered their subordinates protection in return for subject status and labour or military duties.

I would make it clear that for the subordinate, the lord was a cost; he appropriated the surplus of others rather than producing anything himself. The costs of having a lord have received little emphasis in recent research, where the focus falls mostly on the fact that the lord offers protection in return for reciprocal duties. What or whom the lord was offering protection against has not been discussed to any real extent. The subject probably needed protection first and foremost against violence and shortage of food. Ironically, the greatest threat of violence probably came from the lord himself, and the duties to the lord would, strictly considered, increase the likelihood of food shortages whether those duties took the form of labour, the supply of agricultural produce, or some other transfer of goods that could be exchanged for food. The relationship between the lord and the subject thus has more of the character of exploitation than of a voluntary relationship for mutual benefit (Gilman 1995). A relationship of that kind is precisely what a potential subordinate would want to avoid, as a result of which strategies to prevent or to reduce lordship were developed. People around the Oslofjord were in contact with the Roman Empire in the first centuries AD (Shetelig 1925; Lund Hansen 1987; Gustafsson 2016) and should then, at the latest, have gained a knowledge of the state as an idea or a form of government. The state may already have been known in the pre-Roman Iron Age through contacts with the Continent and the Greek states. Later in the Iron Age the state would also have been known through the Frankish realm and the kingdoms within Britain and Ireland (e.g. Slomann 1956; Bakka 1971; Burenhult 1999:162–86). Nevertheless, state-formation reached the areas around the Oslofjord only in the Viking Period when the Danes claimed overlordship of Vestfold or Viken and the first attempts at unification emerged from local leaders (Rau 1955; Andersen 1977; Sawyer and Sawyer 1993:52–8; Sigurðsson 1999:62–77; Skre 2007b; Bagge 2010; Orning 2011:92–110).

State-formation in Norway is usually conceived of as a long and implicitly evolutionary process that began in the (Early) Iron Age and was completed in the (Early) Medieval Period (Orning 2011:107–10). From here on in this study I shall rather treat states as failed stateless societies, where society's defence against the state has not succeeded, with the result that it was possible to remove power from society and to concentrate it in separate organs of power (Clastres 1989). Ideology that resists the formation of hierarchies and state-formation should, in my view, be taken into account in the discussion of settlement and agriculture around the Oslofjord in the Iron Age.

Chieftains without power, honour-laden warriors and dirty farmworkers

The warrior ideology and the concepts of honour it was linked to may have contributed to sharing out power to various different individuals, and to have hindered the concentration of properties, and so to have obstructed the growth of powerful dynasties and ultimately state-formation (Keesing 1985). The social anthropologist Pierre Clastres (1989) has treated states as failed 'primitive' or stateless societies in which social resistance to the state has not worked. As a result, some have been able to remove power from the society and to concentrate it in separate organs of power. Clastres regards the warrior ideology and opposition to subordination as central components in stateless societies' active resistance to the state. Warmaking itself may be a means of creating similarity and reducing centralization, and so counter the consolidation of the embryonic state (Angelbeck and Grier 2012). Several origin myths record that Germanic tribes were originally led by twins or two brothers (Kristiansen 2004), possibly a ritual leader and a military leader or some other structure that separated the organization of warfare from, for example, the organization of agriculture (Andrén 2014:82). In a pre-state society, two such leaders would provide an effective binary division of power (Andrén 2014:184). Another way of maintaining a balance of power and so obstructing state-formation is the opportunistic changing of sides during conflicts (Skre 1998:290; Barth 2008). These opportunistic changes do not involve, as in more recent times such as in

the Second World War, individuals, groups or states linking themselves to the victors. On the contrary, people withdrew from the victor and turned to the loser precisely in order to counter the accumulation of power and to maintain a stateless society. Clastres (2010:165–6) regards the chieftain as society's external spokesman: he involves himself and re-negotiates alliances with friends and declares war on enemies on society's behalf. In contrast to the leader of a state, the chieftain does not take decisions: he presents them. Within the society it is the role of the chieftain to arbitrate in conflicts rather than to decide them. The chieftain is chieftain because he is in a position to articulate the consensus of the group and in return the chieftain gains prestige. The power of a chieftain can be defined as the power to organize those who voluntarily follow the chieftain but not as control over major organizations or areas, or power to compel people to do anything they oppose (Grier 2006). In a society which opposes subjection, the chieftain or big man, as noted, is accepted as long as he does not attempt to exercise power but rather shares out goods. Because this role comprises elements of leadership, namely the presentation of decisions and leadership in negotiations, but concurrently lacks the power to take decisions on behalf of the community, I classify this figure as a leader without power. Such a social organization is an effective means of preventing the concentration of power and incipient state-formation, or incorporation within existing states (Angelbeck and Grier 2012). An example can be drawn from the colonial period in what is now Myanmar (Scott 2009:212). The British abandoned the attempt to take control of small independent villages because the overlordship recognized in the leader of a wider area was not recognized by the leaders of the individual villages. Each separate village thus had to be 'conquered', and if one occupant did not like what the village leader had decided he would build himself a house somewhere else. In practice, then, every single person had to be 'conquered'. The colonial powers thus attributed the leaders with greater power than they actually had because they did not understand the political system. To put it another way: where they could not identify a chieftain, they created one (Peters 2004:306). Leaders without power or weak leaders were therefore so impractical or incomprehensible in the view of the colonial powers when they set about subordinating new territory that they had to create a chieftain. It is tempting to suggest that powerless or weak leaders in prehistory have equally been incomprehensible or impractical in the view of archaeologists and historians so that they too have had to create chieftains and chieftainships in attempting to take control of prehistory.

Another route to prestige is to gain honour by risking death through dangerous individual feats in battle and being a specialized warrior (Rygh 2007; Clastres 2010:279–316; Ystgaard 2014). Power in society was thus primarily founded upon personal qualities — the chieftain's wisdom and articulacy and the warrior's spirit and skill in warfare. At the same time, both the chieftain and the warrior depended upon (prominent) persons regarding them as wise and articulate, or bold and skilful. I shall explore the roles of the chieftain and warrior in several further contexts, and examine whether that could contribute to an understanding of Iron-age Østlandet.

The spectrum involving an honourable warrior and the chieftain is well illustrated in the poem *Waltharius*, probably of the 9th or 10th century (Stone 2013). Walter, Hagen and King Gunther are resting after a battle, and in keeping with the Germanic drinking ritual Walter's female partner serves drink. Hildegund first serves *athleta bonus* (the honoured warrior) Hagen, then Walter, and finally King Gunther, who had proved coward in the battle (Enright 1996:13). Hildegund prioritizes the honourable warrior and treats the cowardly king with scorn, and the scene shows how little value formal power had when challenged by honour. In periods of warfare, an honoured warrior amongst the aristocracy could be 'elected' as war-leader, referred to by Tacitus as *dux* (Hedeager et al. 2001) — in accordance with anarchistic principles of leadership. The powerless condition of leaders in Germanic society is well summarized by Tacitus, c. AD 100: "But the kings do not have unlimited power without restriction…" (Rives 1999:80). How does one describe or imagine a leader without power, a chieftain with no possibility of making decisions over the heads of a society? The story of Arminius, the Germanic war-leader who defeated the Roman army led by Varus in AD 9 and so put an end to the Romans' attempts to conquer more of Germania, illustrates how things can go with a leader whose ambitions are too high. The Germanic Arminius was in many ways a naturalized Roman, but in the end he chose the Germanic side. He had served in the Roman army, and so was very familiar with both Roman military tactics and state-formation. He made use of his knowledge of military strategy to defeat the Roman troops in the Teutoburger Forest but at the same time saw the advantage that a leader had from a Roman state structure and consequently attempted to appropriate such power in the Germanic world. When the *Germani* had no more use for his military

capacities his attempt to accumulate power was no longer tolerated, and he was deposed and killed (Andersson and Herschend 1997:12–13; Hedeager et al. 2001:100). Around the year 650, King Ingjald Ill-counsel of Uppsala likewise sought to undo the old model of leadership, but failed and died in the attempt (Norr 1998:72, 221).

The tales of Arminius and Ingjald Ill-counsel show very clearly how the idea of the state was known, and that the desire for personal power was present, but also how this idea was unacceptable to those who would be made subject. Leaders could also be replaced for other reasons. When the sons of Gunnhildr were in power in the first half of the 10th century, for instance, so much snow fell in the middle of the summer that the animals had to be fed under cover. The sons of Gunnhildr were blamed because they had had the sacrificial sites destroyed (Schreiner 1972:71). The perception of good years as the result of the king's rectitude may, however, reflect a Christian mindset rather than Norse paganism (Schumacher 2005:77), although the story of the sons of Gunnhildr does have parallels to the much older story of Arminius. It shows that leaders are only tolerated, and obeyed, as long as they appear to be good. Moreover the killings in these stories look more like collective, consensus decisions than the actions of a lone assassin. Although the Iron Age can hardly be conceived of as a period of regular democracy, the narratives emphasize that the leaders were acting on behalf of 'others', and that these others could depose the leader if the job were not being done properly.

In materialist terms, war is viewed as a (rational?) way of gaining booty and conquering land (Halsall 2003). The view of the social role of warfare, however, has changed over recent years (Price 2002; Ystgaard 2014). Warfare may be an end in itself, because it provides warriors with the opportunity to carry out bold and perilous individual acts and to challenge death, which then produce honour (Keeley 1996:60–1; Hedenstierna-Jonson 2006; Otto et al. 2006; Sigurðsson 2008:86–7; Clastres 2010:279–316). If there is plunder, it is regarded first and foremost as honour in material form and secondarily as wealth. In those directions, however, there appears to be agreement that men's social status at least in pre-state or non-state societies is often linked to their role as a warrior (Green 1998:67; Hedeager et al. 2001:146; Halsall 2003:1–19; Clastres 2010:237–314; Ystgaard 2014). The state of warfare was probably the normal state of affairs for the folk around the Oslofjord in the Iron Age, not only in the sense that at least a very high proportion of the men and at least some of the women had weapons, and the will and ability to use them, but also in the sense that violence and armed conflicts were frequent occurrences and in some people's cases how they wanted things to be (Andrén 2014:90–102). This was the state of affairs in at least many other stateless societies of Iron-age Europe and in other comparable societies (Keeley 1996; Price 2002; Halsall 2003; Helbling 2006; Steuer 2006; Clastres 2010). Honour was not exchangeable for material goods or economic advantages but could be transferred into respect and attraction as a sexual partner or spouse. The respect for the warrior was laid down in narratives that live longer than any person can do, and most definitely longer than the warrior himself, who would ideally die in battle before he grew old (Clastres 2010). Honour cannot be won once and for all, but has to be renewed through ever braver, death-defying challenges. To seek honour was therefore to join a one-way motorway leading to death, all of the exits from which lead to dishonour. A warrior thus had only two options: to die an honourable death attempting some impossible feat of courage or to end up without honour.

An honoured warrior is thus in principle a dead warrior. This is reflected in the myth of Valhalla, where only warriors who died in battle came — warriors who remained honoured for ever (Birkeli 1943:120; Ström 1993:218). According to Norse mythology, the battle god Óðinn decided rather haphazardly who was fated to die in battle (Steinsland 2005:179). To be bold therefore is to rely upon Óðinn and to accept one's destiny: if the god has decided that the warrior will live, boldness will not lead to death. The fate of warriors who did not follow the path to its end is well illustrated in the saga of Egill Skalla-Grímsson, the once honoured warrior who is scorned by all because he can no longer follow up his honourable feats (Bagge 2001:266; Lie and Larsen 2003; Sigurðsson 2008:197; Skogstrand 2014:214). How important honour was, not merely for the warrior himself but also for those closest to him, is also evidence in how women egg conflicts on — even into conflicts that the warrior cannot win. Rather a dead son or husband than to be associated with a man without honour (Sigurðsson 2008:84). The courageous feats of the warrior may produce prisoners of war or slaves, cattle, gold or other apparently valuable items. What gives them their value is the way they have been obtained, not their material worth. The war-booty sacrifices can be understood as a fundamental aspect of this tradition, showing how objects only become valuable in correct usage, as through some form of conspicuous consumption (Veblen 1970; Weiner 1992; Hedeager

2011:170). The war-booty sacrifices, in which valuable assemblages in the form of weaponry, military equipment and personal accessories were thrown into water, is an example of how material gain was not the most important motive for war. There are no known war-booty sacrifices from Norway but hoards of gold from the Migration Period and silver from the Viking Period (Hedeager 2011:164–5; Amundsen 2021) may reflect the same mentality: objects do not necessarily have an intrinsic value.

An honourable warrior will not accept orders or subordination while a soldier obeys orders within a hierarchical military structure (Keeley 1996:43). I regard this as a crucial difference, even though Charlotte Hedenstierna-Jonson (2006:11) has noted that the distinction is too sharp in practice. The soldier appears to have become an important feature of society around the Oslofjord no earlier than the Late Iron Age. The notion of the soldier may indeed have been well known, probably as a result of having served as soldiers in the Roman army, and possibly through battles with that army. The weapon sacrifices in Denmark are taken as evidence that there was an army with three hierarchical ranks in Norway (Carnap-Bornheim and Ilkjær 1996; Ilkjær 2000) but it has since been demonstrated that this is constructed upon too ready an acceptance of textual sources and a particularly compliant interpretation of the Norwegian burial evidence (Fuglevik 2007). The egalitarian retinue, the *comitatus*, was gradually superseded on the Continent by hierarchical structures, probably in the time of the Merovingian Period, and something similar may have taken place in the Oslofjord area (Enright 1996:19 with refs.; Skre 1998; Steuer 2006). The early death encountered by an honourable warrior is an effective barrier to his accumulation of valuable material goods. The warrior thus cannot assemble a fortune and use it as the basis of power, and the rationale of warriorhood is thus an effective defence mechanism for a non-state society. In the course of the Late Iron Age, however, this mentality changes (Ystgaard 2014). Better military organization made it harder to undertake individual honourable feats — a warrior did not have to die before he had made some progress upon the path of honour, while concurrently the focus on the material value of booty increased. The warrior consequently largely disappeared, to be superseded by the soldier.

Although Iron-age society was a society at war and a society in which free adult men bore weapons, not all adult men were necessarily warriors fighting to gain honour. Pierre Clastres (2010:312–13) tells the story of a man with scars and long battle experience who would not define himself as a warrior and had consciously avoided being dedicated as a warrior. The man, who apparently was not afraid of battle, thought it was too dangerous to be a warrior. The proportion of the population in stateless agrarian societies who die as a direct consequence of warfare could be extremely high (Keeley 1996:31, 86–97, tabs. 32.32, 32.33 and 36.32; Ilkjær 2000; Holst 2014b). The warrior's one-way route to death would itself mean that not everyone would want to define themselves as warriors. These individuals would do what the warrior scorned, including farmwork. Agricultural products such as meat, hides, wool, milk and grain were necessary both for subsistence and to gain friends and allies. But it still was not honourable to produce them. Farmwork such as animal herding, storage and ditch-digging was normally associated with thralls and with dirt, and the scorn of the warrior and the aristrocracy for thralls and their tasks is well documented, for instance in the sagas, the Eddic poems and especially in *Rígsþula* (Holm-Olsen 1985; Iversen 1997:122; Bagge 2001:191, 268). The wealth that was generated by work could be used to gain friends, but because farming was not the source of honour, farmers' power was limited. The warrior mentality thus became a practical means of keeping society stateless. According to Lotte Hedeager (2001:101), the roles of rex and dux fused into one leader role in the earliest centuries AD as a result of long periods of continuous warfare with the Rome. The Roman policy of expansion does not appear to have been equally evident in Østlandet, and cannot have been a determinative factor in such a merger of the roles. In the 4th century, Visigothic groups are reported to have been led by a chieftain and a temporary leader but, as it should have been, the chieftains won the battle for power (Andrén 2014:184). There may also be a case for precisely such a division of power in the archaeological evidence. Ingunn Røstad (2021) has shown how identity was marked locally or regionally through dress-accessories. She has also demonstrated that areas with a common identity do not coincide with politico-economic centres of power: the chieftainships of the Migration Period or the petty kingdoms of the Merovingian Period. In my view this may reflect power being divided between two different although partly overlapping institutions (Norr 1998; Löfving 2001:37; Fuglestad 2006; Herschend 2009:185; Holst 2014a). This society may possibly, therefore, better be understood as a heterarchy or possibly an anarchy than as a hierarchy. Heterarchy does not exclude hierarchy but attaches greater weight to privileges and to the right to take

decisions being shared amongst the members, and the fact that power-relations can be reversed (Crumley 1995). Anarchy, for its part, is based upon a set of dominant principles, emphasizing the automony of both individuals and groups, voluntary associations and organization in networks, and not least maintaining decentralization and active resistance to centralization at its core (Angelbeck and Grier 2012). While hierarchies are traditionally illustrated as pyramids comprising more or less permanent leadership at the apex, a rather more populous middle rank and a large base with the workers at the bottom, anarchic societies can be figured as an 'inverted pear'. An upper, 'respectable' or noble class with history and genealogy and access to education and knowledge constitutes the greater part of the society while 'commoners' and possibly unfree labour form a minor group. People with wealth and appropriate personal accomplishments from the respectable class function in various situations as leaders on a temporary basis (Angelbeck and Grier 2012, referring to Suttle 1987).

A PROVISIONAL MODEL OF A SOCIETY WITH NO PROPERTY BOUNDARIES

To this point, I have shown that rights to land do not have to be rooted in territorially bounded areas, i.e. in properties. The basis for that has been examples taken from social anthropological studies of places outside of Scandinavia, and historical sources either from or about Scandinavia and other Germanic societies. I have proposed that the right to use land or to receive its produce could have been socially rooted and linked to heritable or personal status. I have also argued that the economy was embedded, or rooted, in the wider society. On that basis, I shall now present a provisional and ahistorical model of how an agrarian society with no territorially founded rights can function and be maintained. This model will serve as an alternative to the current model of defined and stable properties. The reservations and refinements that are crucial to an understanding of an Iron-age society will be under-communicated for the present. The model will also serve as a starting point for a more nuanced discussion of the principal question for this monograph, the historical emergence of property boundaries in Østlandet. In Chapter 9 I shall consider this model in light of the three identified types of farmstead and sketch out the historical growth of property rights in Østlandet.

In my model, the land initially belongs to the community, and is not 'owned' in a modern sense. I also suggest that all households or people had a basic right to cultivate land and to establish their own household. A group of leading individuals or representatives of the existing households collectively determined how much and what land a household can or must cultivate while the leader presents the offer. The basis of the decision was first and foremost the status of the household, which could be both heritable and personal, while it is also possible that skilled farmers would receive more or better land than others. Heritable rights could be marked in the form of burial mounds and an ancestor cult, while personal status may be gained through honourable actions in war or the gift of eloquence. Some of the agricultural surplus would have been collected in, and consequently households or individuals could also build up their own status through redistribution or by getting hold of prestige objects. The surplus may have been collected up by a warlord as payment for protection either from the lord himself or from external foes, or by a leader who was to some extent chosen on the basis of his personal capacities and ancestry. The basis of wealth in either case was personal qualities and not inheritance, even though genealogy might be one of the conditions. Personal qualities appear to have been important in any event, especially in the Early Iron Age, while genealogy became especially important in the Viking Period (Sundqvist 2002; Herschend 2009:175). Power in society was thereby shared between the honoured warrior, the powerless leader and perhaps also the productive farmer in a society that is better represented as a heterarchy or anarchy than as a hierarchy (Bratt 2008:166). This informal distribution of power and resistance to subjection ensured that no party could change the rules, seize power, and create a heritable basis of power for itself in the form of property. I would point out that the short-lived buildings with internal roof-bearing posts were well adapted to such a society. The buildings had about the same life-span as people, and each generation was more or less obliged to build a new one. In this way a mode of discontinuity was maintained, even in a society for which continuity and history were significant.

To this point, I have not taken up a position on how extensive the areas comprised in a community were. The investment of labour committed to the construction of Raknehaugen indicates that that area was quite large, that several areas worked cooperatively, or that one individual or household was dominant and was able to call in resources from several areas. In a society with constant armed conflicts it is likely that the land-community also cooperated for defence. The size of the warrior bands may therefore reflect the size

of the area that cooperated over land (cf. Ystgaard 2014). It is clear, if so, that such areas varied throughout the Iron Age. It is possible that the size of the area can be grasped through the imprecise concept of a 'district' [Norw. *bygd*]. A district comprises a number of households in a social and economic community within a specific area, normally topographically bounded (Brink 2008b). How many households or people belong to such a district is dependent both upon economic and social organization, and on the residents' perception of distance (Nyqvist 2001:83). The size of what can be called topographically bounded agricultural areas in Østlandet varies. Raet in Vestfold, for instance, is a largely coherent area with no clear topographical boundaries between it and adjacent areas; certainly not with Stokke to the east or Lågen to the west, 20 km as the crow flies, and arguably not within the whole area between Borre in the east and Mølen in the west, a distance of 50 km (Hougen 1937). This large area with no topographical boundaries must have comprised a number of districts. In such a landscape, areas left fallow, areas rewilded, newly cleared areas and the relocation of farmsteads would have meant that pasturelands and woodland areas that could have served as boundaries would be constantly shifting. As generations passed, new districts could thus have formed. Cooking pits in waste areas may have been meeting and resting places for herdsmen, and such sites are linked to constant negotiations over the exploitation of the pasture (Petersson 2006; Gjerpe 2008c; Munkenberg 2015). I wish to suggest that negotiations or distributions of arable land may have taken place at specialized cooking-pit sites (Gjerpe 2001). The varying size of specialized cooking-pit sites indicates that the districts consisted of different numbers of households, and households could have shifted affiliation over time. The districts can hardly have wanted to differentiate themselves from their neighbouring districts and so risk isolation, while each individual district would concurrently have needed to construct a community (Nyqvist 2001:84). It is most likely, as a result, that it is through minor details of building or burial practice that the districts can be distinguished. Mari Østmo (2005) has picked out around forty cemeteries in Vestfold which she believes may have functioned as the burial grounds of a district. These cemeteries had different periods of use, and not all were being used at the same time. Many burial monuments in Vestfold have also been lost without record, so the quantity of contemporary district burial grounds may well have been higher than forty. How large a community shared out the land within itself is something that probably varied both spatially and chronologically. In the next chapter, I shall return to the core question.

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 then 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

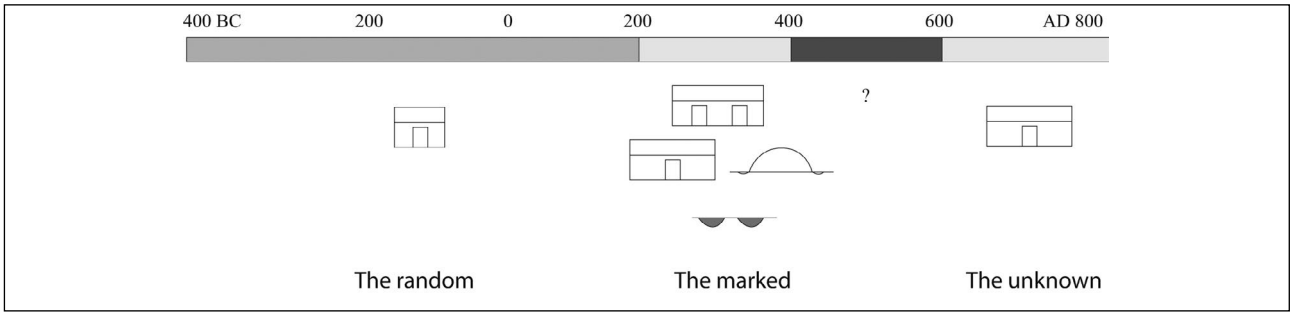

Figure 9.1 *The chronology of the The random farmstead / The marked farmstead / The unknown farmstead. Drawn by Elise Naumann.*

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 COMMUNUNITY

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 infields and outfields with the help of stone walls, and stone-walled droveways 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 Mälar 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; Ersland 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 Regnéll 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 (Bjørgo, 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 Mälar 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; Baar-Dahl 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.

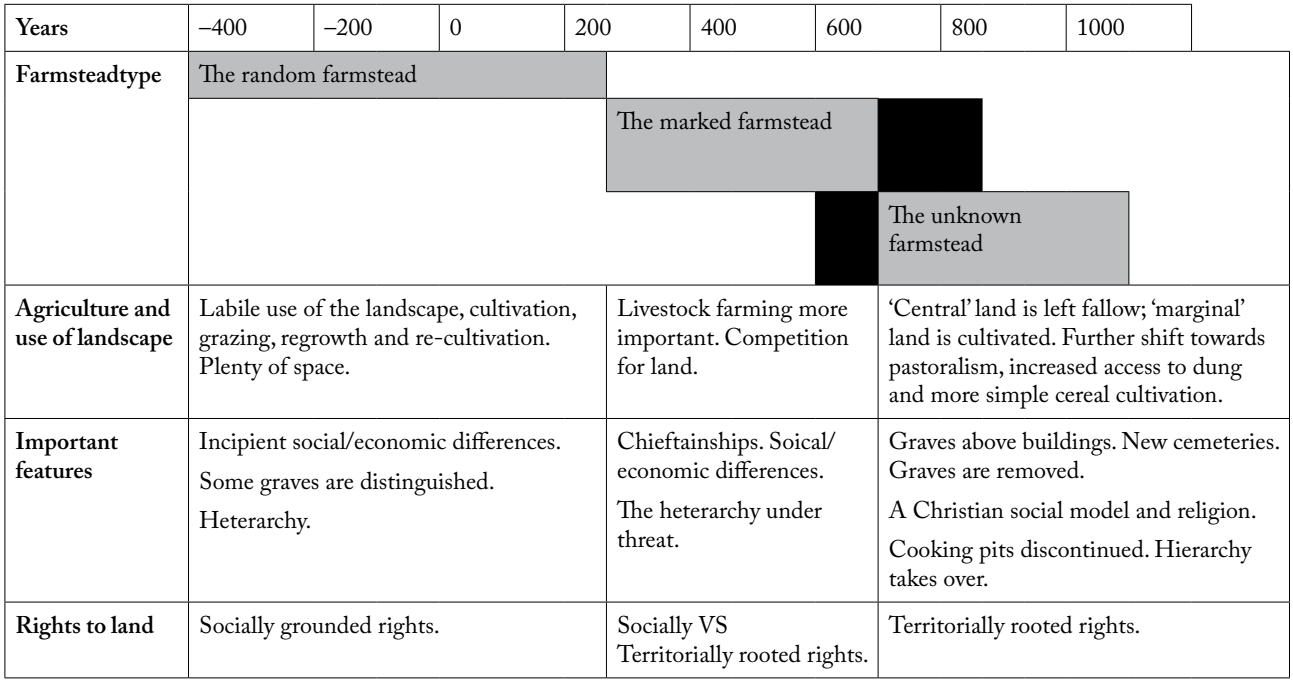

Figure 9.2 *The three types of farmsteads and the growth of property boundaries. The black box cover the period when The marked farmstead disappear and The unknown farmstead appear, and the archaeological evidence diminish. This may have been caused either by a fall in population or a changed settlement 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; Gräslund 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 kyrri] (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 silversmithing 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.

10 CONCLUSION AND CONSEQUENCES: THE PROPERTY BOUNDARIES OF ØSTLANDET IN CONTEXT

ØSTLANDET AND ITS SURROUNDINGS

The dating of territorially embedded property rights to the Late Iron Age at the earliest and possibly as late as the Viking Period not only diverges from the conventional perception of circumstances in Norway but also from widely held ideas in other parts of northern Europe, such as the Low Countries and the neighbouring southern Scandinavia (Hedeager 1990; Gerritsen 1999; Herschend 2009; Løvschal and Kähler Holst 2014). I would note, though, that my own conclusions may not be so radically different from those of other researchers who have worked primarily from building evidence (e.g. Pilø 2015; Hansen 2015; Eriksen 2019; Grønnesby 2019). This could corroborate Pilø's (2005) proposal that the development of settlement can be studied best through what he called 'direct settlement evidence', namely the buildings. Concurrently, a much later introduction of property rights in Østlandet than in southern Scandinavia is consistent with the archaeological evidence and a genuine state of affairs in Prehistory, as will be demonstrated here. A common view is that the division and partition of the landscape in southern Scandinavia began as early as the end of the Bronze Age and progressed throughout the pre-Roman Iron Age until the concept of property was conclusively introduced in the Roman Iron Age (Hedeager 1990; Herschend 2009; Løvschal and Kähler Holst 2014), even if the extant settlement structure on Fyn cannot be traced back any earlier than c. AD 600 (Hansen 2015). Hedeager (1990:180–1) linked the development of farm boundaries to the separation of infield and outfield. In the Danish evidence which she considered, she found a process that began in the 3rd century and was completed in the 5th century. This is supported by Herschend (2009:216–17), who considered that larger buildings and reconstructed buildings were foreshadowings of an incipient restriction of the right to found one's one household with associated pastures and arable land. They also betokened that the distribution of land was no longer undertaken by the community or by leading individuals, who were losing their function or their power. In southern Scandinavia, this process was initiated towards the end of the pre-Roman Iron Age and it was completed around AD 500 when it became possible to own land without living on it (Herschend 2009:258–9, 393). In Østlandet, the process started with larger and reconstructed buildings in the Roman Iron Age, several centuries later, except in Østfold where this practice appeared as early as the pre-Roman Iron Age. I believe, therefore, that, apart from Østfold, the growth of property rights came about up to 500 years later in Østlandet than in southern Scandinavia. On its own, this may appear remarkable, given that there is geographically a relatively short distance between these two areas, and probably also no great cultural gap (Solberg 2000; Myhre 2002; Jensen 2004; 2006).

A quick glance at the archaeological evidence and the process behind the emergence of property rights, however, makes the substantial chronological discrepancy more plausible. Already at the end of the Bronze Age, defined and clearly bounded and marked fields, the so-called Celtic fields, were under cultivation in Denmark (Løvschal and Kähler Holst 2014). There are no such fields in Østlandet. The marking of the fields at Hørdalsåsen in the pre-Roman and Roman Iron Ages, the clearest boundaries known in Østlandet, was slight and low, and the individual fields show no signs of standardization (Mjærum 2012a; 2012b). In the pre-Roman Iron Age, the position of the buildings in the villages of Denmark can be seen to be the result of regular plot-division even though few fences of this period have been found there (Løvschal and Kähler Holst 2015). Such features are also absent from Østlandet. In the pre-Roman Iron Age, the buildings in Denmark are continually rebuilt on the same plot, a phenomenon that is not seen in Østlandet before AD 200. Østfold, however, is an exception in this respect too, where that process began as early as close to the end of the pre-Roman Iron Age (Bukkemoen 2015). There is little doubt, therefore, that Østfold is quite distinct from the rest of Østlandet. I would suggest further that there is greater similarity between Østfold and southern Scandinavia than between anywhere else in Østlandet and southern Scandinavia.

The absence of finds of fences in Østlandet may be due to the methods of construction and source-critical

factors, but the increasing continuity of settlement early in the pre-Roman Iron Age in Demark and in the second half of the Roman Iron Age in Østlandet indicate that the process of dividing up the landscape began much later in the latter region. I associate the specialized cooking-pit sites with assemblies of equally ranked folk, and suggest that it may have been precisely there that the land was distributed. The cooking-pit sites fell pretty much completely out of use in the pre-Roman Iron Age in Denmark (Löwschal and Holst 2014) but did so only at the transition between the Early and Late Iron Age in Østlandet (Narmo 1996; Gjerpe 2001; Gustafson 2005b; Henriksen 2005; Martens 2005b; Gjerpe 2008c; Baar-Dahl 2012). It would appear, then, as if the process of dividing up the landscape took place with an interval of around 500 years, first in Denmark and later on in Østlandet. There are also major differences in burial practice in the Late Iron Age between Østlandet and Denmark, with the latter, for instance, having far fewer richly furnished graves or graves marked by a barrow. There is also a wide range of aspects, such as equestrian graves, chamber graves, wagon graves, plus the Trelleborg sites and other fortifications, which testify to the presence of a centralized authority and an organized army in the Viking Period in Denmark (Jensen 2004:335–99). Some of these features, such as the equestrian graves and the chamber graves, are found in Østlandet as well, but they appear far less standardized (Braathen 1989; Eisenschmidt 1994; Stylegar 2005b; Pedersen 2014:207). A lower level of standardization in the grave furnishings and the complete absence of major defensive fortifications appear to me to reflect the absence of a central authority in Østlandet in the Viking Period.

While the development of a right to hold property seems to have come about later in Østlandet than in southern Scandinavia, it does find parallels further north. In a series of studies, Geir Grønnesby (2005; 2013; 2015; 2019; Grønnesby and Heen-Pettersen 2015) has shown that the historically recorded farmsteads in Trøndelag were founded in the 7th century. He argues that at that time cereal cultivation took over the role that pastoralism had previously played as the most important element in farming, both in social terms and economically. Along with that, continuous settlement close to permanent fields developed, and livestock was no longer the most important resource and embodied form of value of the society. Arable land became so instead, and the right to own land was either introduced or reinforced. Grønnesby thus dates the appearance of the historically known farm to around the year 600 and he and I are therefore very much in agreement even though I would assert more firmly that in Østlandet this was a process which began around the year 600 but may not have been completed before the Viking Period.

CONSEQUENCES AND THE WAY AHEAD

This research has shown how the agricultural economy of the Iron Age was rooted in a society for whom other ideals than economic profit were decisive. With that, the idea of the Iron-age farmer as a rational economic agent whose objective was the greatest possible economic gain becomes untenable. My understanding of property rights in the Iron Age differs from the hitherto predominant view according to which property rights are seen as stable, at least from the Roman Iron Age or Migration Period onwards. This has major consequences for the understanding of non-state or pre-state society, and the development of the state in Østlandet. Although the consequences of my views will not be fully investigated here, I do want to note certain areas that are ripe for further research.

This work has opened up the prospect for a new understanding of the variations that characterized the farms and the agriculture in the Iron Age. If the farms were not permanent settlements but moved around the landscape at intervals of just one or a few generations, the large number of deserted farms can be re-interpreted as representative of their context rather than as marginal farms that were worked only in periods when there was an excess in the population. The abandoned settlement sites thus become a source of evidence for Iron-age society to a much greater extent than is usually supposed. There is reason to believe that lands were left unused without being marginal and being worked only in relatively brief periods of high population pressure. These results clear the way for new studies of why those farms were deserted, with a firmer focus on social explanations.

The conclusions also make it possible that the Viking-period military expeditions and emigration can be understood as the result of social and economic factors rather than excess population. The density of population in the Viking Period can hardly have been greater than it was early in the Medieval Period, but because a lot of land was used as pasture by the elite, there was still a shortage of proprietorial arable. The foundation of new households could only happen in the wake of subjection to a landlord. Some people found subject status acceptable, others did not. The uneven distribution of land thus resulted

in emigration to Iceland, raiding expeditions, and eventually expeditions of conquest in Britain and Ireland, amongst other places, and social stratification within Østlandet. In other words, the introduction of property rights and the consequent imbalance in access to land was a catalyst for profound changes in Europe.

I have demonstrated that changes in building practice are an integral and crucial aspect of the change of religion and also a precondition for state-formation. Knowledge of chronological differences between the emergence of territorially based rights in Østlandet and in southern Scandinavia thus renders a new understanding of corresponding differences in state-formation possible as well. An understanding of agrarian settlement and of settlement as embedded also permits settlement studies and studies of religion, cult and identity to illuminate one another to a much greater extent than has been the case up to now.

Much of the knowledge of the non-state or pre-state societies outside of Europe that I have used for guidance was originally collected in a purposeful manner to contribute to European states' colonization, and that knowledge is therefore Eurocentric. In the effort to decolonialize these histories, researchers have pointed out that the transition from customary rights or 'traditional' law to written laws not only favoured the colonial power but that some local groups were strengthened at the expense of others (Pottier 2005). That perspective appears intensely relevant for us to be able to understand the marked changes that occurred in Scandinavia in the Late Iron Age. I am of the opinion, as a result, that studying the transition from non-state or pre-state societies to states, and from heathen to Christian societies, in the North as a process of colonialization may be fruitful, for instance in decolonializing ethnographic texts such as *Germania* and the *Gallic Wars* and in distinguishing more effectively between 'authentic' and 'false' history and memory in Scandinavian historical sources.

My survey and critique of a set of postulated premisses for the retrogressive method, my critique of the view that burial mounds marked óðal in the sense of a preferential male right to inherit land, my understanding of the Iron-age agricultural economy as rooted in a society for whom the primary goal was honour rather than the maximization of an economic surplus, my demonstration of marked variance in settlement in time and space, my understanding of Iron-age society as heterarchical and maintaining a balance of power between warriors with honour, chieftains without power and productive farmers, and not least my understanding of the Iron Age as a dynamic period of constant struggles for power and shifts in power, and the restructuring of settlement and society at the transition between the Early Iron Age and the Late, make it difficult to make use of conditions known from later documentary sources, maps or property relations and the retrogressive method to shed light on earlier, prehistoric periods. My findings emphasize, by contrast, the need to use the retrogressive method in order to identify and to understand both the differences and the similarities between the Iron Age and later periods. I shall conclude, therefore, that the retrogressive method in combination with rigorous source evaluation is suited to research into — for example — the roots of the historically known farming structure. On the other hand I argue strongly that the method is not suited to research into or the demonstration of historically specific features of Iron-age society. We can, to put in another way, employ the retrogressive method in order to understand ourselves but not to understand the aliens of the Iron Age.

The new knowledge of change and continuity in Iron-age agrarian settlement is also relevant to the present day. We are living in a period of major changes. The new understanding of the agrarian settlement of the Late Iron Age as a long, progressive process which finally produced a radically new settlement pattern and a new society may perhaps be used to undertand what long-term consequences the changes in contemporary agropolitics are going to have.

My research questions have been focused upon change in time and space, and I have been concerned with social and economic variations in building practice to a lesser degree. It would be of interest if fresh research into functional divisions of the buildings making use of artefacts, macrofossils and architectural solutions could show whether certain sorts of social and economic status were over- or under-represented in the settlements that had longer continuity, or if detailed studies of the macrofossil evidence could show differences of changes in the agrarian economy. The settlement evidence from Østlandet has yielded up nothing like all of the information it holds.

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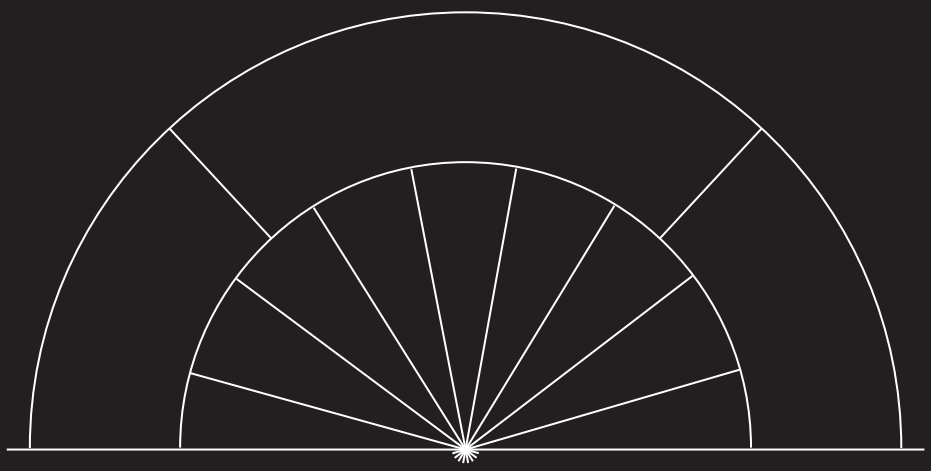
This book examines property rights, settlement structure and social organization in Norway's Østlandet in the Iron age (500 BC–AD 1050). Inspired by ethnographical and anthropological studies, a model of a stateless, agrarian and hierarchical society with socially based rights to land is presented. In this model, where there are no territorially embedded rights, society is better represented as a heterarchy or anarchy than as a hierarchy. Power in society was shared between the honoured warrior, the powerless leader and perhaps also the productive farmer. This model differs from that presented by standard Norwegian research, where the retrogressive method is combined with a belief in the stability and continuity of the farm. A critical study of Norwegian research history is therefore an essential part of this book.

This study has also been able to make use of new and extensive settlement evidence gained from machine-stripping of topsoil from large areas in the past thirty years; this has shed new light on the issues discussed in the book related to building practices and the settlement pattern.

The archaeologist Lars Erik Gjerpe is an associate professor at the Museum of Cultural History, University of Oslo. His research depart from an interest in models of society and research history combined with in-depth knowledge of Iron Age and Viking Age settlement and burials, which he acquired as manager of large-scale excavations. He is an experienced editor, and has published several articles such as *The 536 Dust Veil Event and the Long 6th Century* and *Iron Age Building Traditions in Eastern Norway: Regions and Landscapes*.



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