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## **Sticky structures and opportunistic builders – The construction and social role of longhouses in northern Norway**

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### **Abstract**

*The longhouse has been a turning point for research on prehistoric farming societies in Scandinavia for several decades. Yet, no comprehensive study has been made of this house type and its context, variations and social implications in the Far North. In this chapter, we present the currently available longhouse material within the three northernmost counties of Norway. The 50 longhouses that have been excavated within the administrative district of Tromsø University Museum are discussed in more detail. Our survey shows both similarities to and some intriguing variations from the longhouses in other areas of Norway and the rest of Scandinavia, concerning the chronology of various house types, building details and farm layout. All these aspects are obviously related to the particularities of the environmental, cultural and sociopolitical context in the north. However, the results are preliminary, as more thorough studies are needed, as well as more excavations employing current methodologies such as mechanical topsoil stripping, to ensure representative data.*

### **Introduction**

The longhouse has been the centre of attention for many researchers working with settlement archaeology in Scandinavia over the past century. Visible house grounds from the Iron Age have been discussed in Norwegian archaeology since the 1920s and 1930s (Gjessing 1929; 1930; Grieg 1934; Petersen 1933; 1936), with an increased focus on the economic, social and religious significance of the farms of which these houses were part from the 1950s onwards (Hagen 1953; Johansen 1978; 1990). While important excavations were undertaken during these early stages of research, the adoption of mechanical topsoil stripping as a survey and excavation method completely altered the prerequisites for research on longhouses. The method was introduced in Denmark in the 1960s (Becker 1965), but only became mainstream in Norwegian archaeology in the 1980s, following the pioneering Forsand research excavations in Rogaland (Løken *et al.* 1996). Unlike in southern parts of the country, northern Norway did not see large-scale integration of the method until the Kveøy excavations in 2008,

and, unfortunately, only a handful of similar excavations have been undertaken since then (Arntzen 2013a). Nevertheless, evidence of farm settlements of a similar character to those farther south in Norway, including the much-discussed phenomenon of the longhouse, is well known in the north. In part, this is due to the climate and other conditions, which enable structures and objects to remain visible on the surface of the ground over hundreds and even thousands of years. The size and building materials of the longhouses further aid this extended presence in the landscape.

A range of structures related to agrarian settlements have similar visibility, but the longhouses will be the focus of this chapter due to their specific economic, cultural and social associations. The origins, changes, variations in and enormous longevity of this building tradition, as well as its social and economic significance, have been the subject of several recent studies in Norway, considering longhouses from the Bronze, Early and Late Iron Ages (Gjerpe 2017; Oma 2018; Eriksen 2019). All these studies, however, either focus mainly on southern Norway or on a limited time period. In the north, no comprehensive studies have focused on the constructive details of the buildings, their landscape and social contexts, or the long-term development of the longhouse as a phenomenon. Apart from the geographical lacuna, there is good reason to investigate the longhouse and its sociocultural meaning and impact in this area in particular because of the diverging cultural, ethnic, sociopolitical and ecological conditions of the settlements here compared to southern Scandinavia.

Taking a broad chronological and contextual perspective on the development and prevalence of longhouse structures in the north, this chapter will provide a starting point for such research by introducing an updated overview of the relevant house material currently known in northern Norway, as well as suggesting some interpretations and possible strands for future investigations.

### **Surface visible house grounds in the north**

It is uniquely easy to locate prehistoric settlements in many northern Norwegian landscapes. Due to the combination of climatic conditions that result in slow soil genesis and a prevalent need for sturdy houses, as well as less area-intensive agricultural activity, gentler infrastructure and fewer invasive development projects than farther south, house grounds are often clearly visible on the surface. This includes a wide variety of house structures from

boreal times to the present, comprising Stone Age tent rings, semi-subterranean circular dwellings, large and deeply dug square and rectangular house grounds, as well as circular turf house grounds from the Early Metal Age onwards. From the Iron Age at least, the latter are associated with Sámi habitation (Olsen 1997). Various sized hearths associated with the Sámi, often dating as far back as to the Iron and Middle Ages, are also commonly encountered as surface structures. The shape, internal positioning (partly singular, partly in rows) and their placement in the wider landscape reflect different cultural and economic adaptations, such as the emergence of reindeer pastoralism in the Middle Ages (*e.g.* Sommerseth 2009; Hedman *et al.* 2015).

The surface visible structures include a variation of house types from the Iron and Middle Ages in the mainly Norse/Norwegian areas (Olsen 1997). Among these is the house that is considered most typical for Germanic/Norse farming settlements, the longhouse (Figs. 1 and 2). The longhouses are relatively substantial structures, though not unique in their size. Some visible Stone Age houses, such as the so-called “Gressbakken” houses and some rectangular house grounds at the island Træna (Gjessing 1943, 62–65; Schanche 1994), are comparable in size and rectangular shape but follow other structural principles. They are therefore not easily confused with the longhouses. Landscape setting and isostatic uplift are other criteria that help to separate house types.

Some of the house types found in the north consist of combined houses, forming large and even more conspicuous structures. So-called “courtyard sites” from the Iron Age are found along the Norwegian coast up to Bjarkøy in Troms county. They include several oblong houses connected through shared walls, placed around and with one short wall opening up to an open space – the “courtyard”. Recent research interprets them as assembly sites, primarily for thing gatherings, probably also serving related military and ritual functions (Storli 2006; 2010). Consequently, these conglomerate house structures will not be treated here as remains of farms or fisher/farmer settlements, even if it could be interesting to investigate and compare the building details to contemporary longhouses.

Over the past two decades, there has been increasing focus on the potential for settlement traces in areas of northern Norway with more discernible soil formation, as well as more extensive agriculture. In such areas, topsoil surface stripping is necessary to identify traces of prehistoric settlements. The method has so far been used to a limited extent in North Norway, though results suggest that it could add significantly to our knowledge about settlement

structure and socioeconomic variation. Recent investigations show that GPR methods may reveal new farm settlements and longhouses without the cost and inconvenience of topsoil stripping (Gabler *et al.* 2018, 29 and fig. 16). This development is promising for future studies of this phenomenon in its regional form, as well as in a comparison to studies of longhouses elsewhere in Scandinavia and Norway.

### **Studies of longhouses in Norway**

The initial studies of longhouses in Norway were based on late 19<sup>th</sup>- and early 20<sup>th</sup>-century excavations in the south-western sector of the country (Grieg 1934; Petersen 1933; 1936). Early discussions focused mainly on the structure of the individual houses. A point of debate was whether the houses were partitioned into several rooms and how and why stone was used as the main building material instead of wood. The latter was explained as a result of a change to a colder climate in the Early Iron Age than in the Bronze Age, and a lack of wood (Grieg 1934, 98, 117). Another debate focused on the presence of inner wood constructions in longhouses and whether they were a predecessor to later stave buildings (Grieg 1934, 100–101, 119). The alternative was that the roofs were carried by the outer stone walls, but excavations eventually made it clear that inner posts had been part of the supporting structure (Myhre 1975; 1980).

After the introduction of the topsoil stripping method in Norwegian archaeology, the construction details of the longhouse became clearer, affirming that longhouses did indeed have internal roof-bearing posts and that walls could also be made from wicker and wood (Løken *et al.* 1996; Berg 1997; Helliksen 1997). In northern Norway, however, stone and turf were more common wall materials in houses well into the Middle Ages, which has been explained in the same way as farther south, *i.e.* because of the isolating properties of these materials and limited access to wood (Johansen 1978, 1; Urbańczyk 1992, 94; Bertelsen 2001, 113).

From the mid-20<sup>th</sup> century onwards, researchers shifted attention from the singular houses and their construction details to the economic, social and religious significance of the farms (Hagen 1953; Johansen 1978). Recent studies of longhouses in Norway may be said to combine these aspects, as they include studies of the details of the house constructions, yet aim to understand the constructions in relation to social aspects such as human–animal relationships (Oma 2018), regional cultural traditions (Gjerpe 2016; 2017) and articulation of ritual and sociocultural frameworks for households and society (Eriksen 2015; 2019). Thus,

the longhouse material continues to be a valuable source in exploring a wide range of sociocultural issues in the farming societies in question.

### **Studies of prehistoric farmsteads in northern Norway**

Investigations of Iron Age farms began later in northern Norway than in other regions of the country. The excavation of five house grounds at the Greipstad Roman/Migration period farmstead on Kvaløya outside Tromsø in 1960–1961 marks the beginning of this type of research in the north (Munch 1965). The investigations were swiftly followed by a three-year campaign at Grunnfarnes, also a Roman/Migration period farmstead, on the island Senja in 1962–1964 (Munch 1973). From the mid-1960s until the mid-1970s, three important house grounds from the Viking and Middle Ages in the Salten area of Nordland were investigated, producing an artefact material with eastern elements associated with the Sámi in a perceived Norse/Germanic context (Munch 1967; 1983). From the mid-1970s onwards, Olav Sverre Johansen investigated several farmsteads on the Lofoten Islands, partly excavating eight house grounds (Johansen 1978). His studies and his cooperation with palaeobotanist Karl-Dag Vorren still constitute the most substantial contribution to research on prehistoric farmsteads in the region (Vorren 1976; Johansen 1978; Johansen and Vorren 1986).

Writing in the late 1970s, Johansen reported that there were approximately 50 recorded Iron Age farmsteads in northern Norway (Johansen 1978, 97). One criterion for recording a site as a farmstead was the presence of a “typical house”, meaning a longhouse. While the number of recorded longhouses has increased substantially since then, the distribution of farms of this sort known today confirms the established picture of the outer coast of northern Nordland and Troms counties as being the most attractive areas for prehistoric farming. This includes Lofoten, Vesterålen, southern and outer Senja, outer Kvaløya, Helgøy and other islands outside Tromsø (*e.g.* Arntzen 2013a; Arntzen 2012; 2015; Jensen and Arntzen 2016).

Based on artefact material from excavated Iron Age burials as well as surveys of surface visible burials and farmsteads, it was originally suggested that Germanic impulses, including the longhouse tradition, arrived in northern Norway during the Roman period through migrating settlers from the south-western coast of Norway (Gjessing 1929; 1930). Although a generally accepted hypothesis for 40 years, the shift in the 1970s away from migration as a dominant explanation of cultural change led to research focusing on internal developments leading the way (M. Myhre and Myhre 1972). Palynological data, though scarce, has since the 1970s been interpreted as indicating grazing and cereal production in northern Norway

reaching into the Late Neolithic (Jensen 2012). Firm multidisciplinary evidence of agrarian settlements appears only during the last millennium BC (Sjögren and Arntzen 2013).

Though generally similar to farmsteads farther south, the northern Norwegian Iron Age farms lack some features that are seen as typical of this kind of settlement, especially in the Rogaland area. The northern Norwegian farms seldom have leading fences for cattle from the byre to the grazing lands or a fence between inland and outland areas, and visible clearance cairns or headlands are rare (Johansen 1978, 106–107). It must be emphasized, however, that, when larger excavation units and/or topsoil stripping have been used, both clearance cairns and headlands do occur, although they are not visible on the surface (Arntzen 2012, 186; 2013). The variation in farmstead structure and layout obviously reflects landscape use and economic adaptations. Pollen investigations show that cereal production was part of the farms in the north too, but extensive grain cultivation has been difficult to maintain, and agriculture was mainly based on animal husbandry (Vorren 1976; Jensen 2012). Both this and other factors related to resources, culture, and society are likely to have influenced not only the farm layout but also the way singular houses were structured. While the longhouse has been seen as emblematic of Norse farm settlements, in opposition to the round and semi-subterranean turf houses that are generally considered to be indicative of Sámi settlement, it should be kept in mind that house structures vary considerably in size and form within Norse contexts too, depending on function and location. Thus, it is not viable to define specific house shapes as unanimously representative of one cultural or chronological context without further investigation (Olsen 1997, 192).

### **Longhouses in northern Norway**

Based on the Norwegian database for cultural monuments, *Askeladden*, we have compiled an overview of recorded visible house ground sites with longhouses in the three northernmost counties of Norway. To keep the list representative even for areas with which the authors are less familiar, we have made as few manual additions and corrections as possible. *Askeladden* is made for and is used daily by heritage management authorities and is not specifically geared towards research. This meant that querying the database for sites with longhouses required broad search terms and rigorous manual evaluation and filtering. Our results exclude sites without exact location data and present data at the site level, rather than the single house level. One site can consist of up to 12 house grounds, and others of only one. The inconsistently detailed data present in the *Askeladden* database has made it impossible to give

a definite number of houses per site, but it is possible to give a reliable picture of the geographical distribution of sites with longhouses. The total number of localities is 133, of which 94 are situated in Nordland county, 35 in Troms county, and four in Finnmark county (Fig. 3).

With the exception of a few sites in the Salten region and one in southern Helgeland, all longhouses are located on the coast. Furthermore, the regions of Vesterålen and Lofoten contain 46 and 29 sites respectively, making up more than half of the total. Moving north, the island of Senja in Troms hosts 17 sites, with 19 sites distributed farther north, between the islands of Kvaløya and Loppa, just across the border to Finnmark county. The three other sites in Finnmark are included because of their morphological traits, but these should be treated with caution considering their geographical distance from the central areas of the longhouse settlement. This precaution is also relevant for some of the northernmost sites north of Kvaløya. In addition to the above-mentioned, it is worth noting that only 10 sites lie south of the Salten area, making the mentioned Lofoten and Vesterålen regions the midpoint of this site type's geographical distribution, with a gradual decline in number both north and south. To some extent, this may be because of the frequency of investigations in different areas.

Bearing in mind the clear limitations of the data presented above, we have chosen to focus the rest of this study on the house grounds that have been investigated further and where more information about chronology and construction details is available. A common definition of the longhouse is a house that is at least twice as long as it is wide (Trier 1969). We have diverged somewhat from that in our overview, as we have included all houses that have been understood by excavators as longhouses, even if the length/width ratio strictly speaking is less than 2:1. A total of 50 such houses within the administrative district of Tromsø University Museum have been excavated (Fig. 4), *i.e.* within the current counties of Finnmark, Troms and Nordland north of the Saltfjellet mountain range. Of these, 12 houses are not longhouses in the strict sense, but they have been perceived as such by excavators. Seven houses have insufficiently reported measurements to suggest a length/width ratio, leaving us with 31 houses with a confirmed length/width ratio of 2:1 or more (see Table 1 for details).

The excavations have been performed within 22 different archaeological projects (Table 2). Only four projects involved large-area topsoil stripping, six were limited to trenches of varying layout, while seven were fully manual open-area excavations. In addition, a hybrid approach was employed for six of the projects, where a mechanical excavator was used to

remove the top turf layer, while the rest of the excavation was performed as manual open area. Considering that the projects span from 1960 to 2017, there are unavoidable discrepancies concerning methodology and documentation. The quality of the latter is highly variable, and the same goes for building details. We have therefore focused on some key features in the houses that should be comparable between the projects regardless of the methodology employed.

### **Longhouse chronology in northern Norway**

The present material is limited, but the chronological distribution retains some significance (Fig. 5). A recent study of the investigated longhouses from the Late Iron Age in the whole of modern-day Norway found that most of the houses were dated to the Merovingian period or the Viking Age, with an emphasis on the latter. This is due, of course, to the chronological framework of the study (Eriksen 2015, 52, fig. 3.3). In the northern Norwegian material of excavated houses, most are from the Early Iron Age, with a total of 26 houses. Of these, four are dated to the pre-Roman Iron Age (500–1 BC), one to the Roman Iron Age (AD 1–400), and two to the Roman Iron Age/Migration period, while 19 date to the Migration period (AD 400–550). Collectively, this constitutes 52 per cent of the excavated houses. The Late Iron Age material amounts to only 26 per cent, with 13 houses dated to the Merovingian period (AD 550–800) or the Viking Age (AD 800–1050). In comparison, a relatively high number – six houses, or 12 per cent – are dated to the Early or High Middle Ages (AD 1050–1300). So far, only three houses are dated as early as the Late Bronze Age (1700–500 BC), while two investigated houses have insufficient datings to establish their phase of use. It is notable that all three houses from the Late Bronze Age and three out of four houses from the pre-Roman Iron Age stem from excavations utilizing mechanical topsoil stripping and that all projects took place after 2006. None of these houses have had any surface visibility, suggesting that especially the earliest period of the longhouse presence in northern Norway is underrepresented because of methodological bias.

Since the longhouses during the Migration period were dominantly built with stone and turf (Table 3), leaving them visible above ground up until our time, it is not overly surprising that a relatively large amount of them would be recorded and investigated. We do not dismiss that the high number of longhouses in the Migration period reflects an actual increase in farm dwellings in the north during this time (*cf.* Sjøvold 1962, 118–121), but the total number of



houses in our investigation is too low to provide statistically significant data and determine to what extent the increase reflects reality or visibility and preservation conditions.

Assuming the relatively high number of houses dating to the Migration period reflects a reality, this may be due to a distinct drop in farm settlements in the subsequent Merovingian period. This could be related to the much-discussed catastrophic event of AD 536–540, when at least two large volcanic eruptions led to devastatingly bad climate and harvests for many years in a row (Gräslund 2007; Gräslund and Price 2012). It has been claimed that northern Norway was less affected by this crisis, possibly because of a varied subsistence pattern, where fishing and other marine resources were as important as, and less affected by, the crisis than land-based agriculture (Bertelsen 1983; Johansen 1990; Gräslund 2007, 112). However, there seems to be a significant decrease in both object finds and graves in northern Norway in the transition from the Early to the Late Iron Age (Sjøvold 1974; Holand 1989), though these estimates are hampered by some source critical issues (Johansen 1990, 36-47). Pollen evidence, though relatively scarce, also suggests a drop in agrarian activity in northern Norway during the Merovingian period (Sjögren and Arntzen 2013, table 5). Despite some discussion about what effect the catastrophic event in the mid-6<sup>th</sup> century had on society, it is evident that it led or added to an agricultural change in Scandinavia, and possibly a short- or long-term crisis. This must have affected northern Norwegian farms as well, as these based their subsistence at least partly on cattle and, to some extent, crops. This subsistence pattern was culturally, as well as economically, important. The lifestyle such farming entailed would have been affected by bad harvests, potentially leading to many of the farmsteads being abandoned.

There are several other possible explanations for the abandonment of Early Iron Age longhouses. It has been suggested that the introduction of sails in Scandinavia in the 8<sup>th</sup> century caused a significant rise in the demand for wool, eventually resulting in a reorganization of farmland (Jørgensen 2012; Stylegar 2016). Pollen analyses and radiocarbon dates from graves in south-western Norway suggest that farms thought to have been abandoned in the mid-6<sup>th</sup> century were, in fact, in use well into the Viking Age, though we have less evidence of houses from the later time period (Myhre 2002, 179–180). The abandonment of Early Iron Age longhouses may be related to a shift in land ownership from many small farms with mixed farming in marginal areas to larger and more centrally located farms that took over the marginal areas for sheep pastures (Stylegar 2016).

It has been thought that the livestock that was kept indoors in the longhouses in northern Norway consisted mainly of bovines, as sheep could be kept outdoors all year round (Johansen 1978, 108–109). This is probably a too-generalized view when discussing farm settlement in the wide chronological perspective included here. The north Norwegian longhouses rather appear to be related to sheep husbandry from the Late Bronze age onwards (Jensen and Arntzen 2016). We have limited representative zooarchaeological material, but a study in the 1980s of an Iron Age farm mound in Andøya, Vesterålen, indicated sheep or goats to be the dominant domestic animal from the Roman Iron Age to the Viking Age (Jørgensen 1984, 115–117). As sheep (or goat) bones are introduced in graves in northern Norway only in the Late Iron Age (Klokkervoll 2015), this may indicate an increase in the economic importance of these animals. It would not be surprising if the introduction of sails changed both economic and political structures, as well as the farm and estate structures, in the decidedly maritime and boat-dependent societies of the north.

It has been assumed that houses in the north, as farther south, became more specialized between AD 1100 and 1300, so that byre and living quarters, as well as other functions, were separated into singular houses instead of being gathered in one longhouse (Simonsen 1980; 1991). However, it has been noted in previous studies that longhouses seem to occur later in the north than elsewhere in Norway and Scandinavia (Olsen 1997, 191; Solli 2006; Mikalsen 2008). There is still a somewhat surprising number of longhouses in our material that date to the Early and High Middle Ages. Various explanations have been proposed for the prolonged use of longhouses in northern Norway. It has been suggested that this building tradition was maintained longer on the largest and wealthiest farms because the massive houses were seen as admirable symbols of wealth and power, possibly at a time when traditional power relations in the north were in play. The placement of the medieval longhouse Borg III on a hilltop seems to have few advantages other than making it more impressive, though it does not have the size and luxury finds that characterize the wealth and power of the previous chieftains in the larger longhouses at Borg. Instead, it mimics the previous grandeur in terms of the house position and outward appearance, placement and orientation (Solli 2006, 265–266; *cf.* Andreasen 1981).

Another more pragmatic reason for the prolonged use of the longhouse building practice in northern Norway is the practicality of building and maintaining one large house with supporting and isolating stone and turf walls instead of the series of smaller houses that became common on farms farther south where wood was more abundant. As agriculture in the

north was limited and subsistence was based more on husbandry and fishing than grain cultivation, farms would also have different needs for specialized buildings. The boathouse was probably the most important separate house (see below; Mikalsen 2008, 68–69; Wickler and Nilsen 2012).

Furthermore, the combination of climate, available building materials and the peripheral status of the north may simply have resulted in somewhat slower changes in cultural practices, including building techniques. Even in Vågan, the first urban site in northern Norway, there is a relative delay in changing building practices, with stave constructions with outer walls of earth and stone being the predominant housing style until the 13<sup>th</sup> century. Only in the 16<sup>th</sup> century are houses in Vågan built from wood alone, without isolating or supporting stone and turf walls (Bertelsen 1991, 237–241). This is also the century when notched wood building began to be imported to the north from southern Norway (Henriksen 2008). The lingering of a long-lasting building tradition is not unique to northern Norway, as there are also examples of longhouses from the Middle Ages in peripheral areas of southern Norway (Martens 1973, 19–20, 73–74; Eriksen 2015, 51–52), perhaps due to some of the same reasons.

### **Longhouse morphology in northern Norway**

The categorization of the material discussed here follows traditional divisions, which first of all define longhouses according to the number of aisles. For 19 of the longhouses presented here, this information is not available. Of the houses for which the information is available in reports or publications, one house, or possibly two, have only one aisle. Both houses, the somewhat uncertain no. 26, Stauran 3, in Skånland, southern Troms (Urbańczyk 2002), and no. 20, Borg III, Lofoten (Solli 2006), date to the Middle Ages. While the length of the Stauran 3 house is not recorded, Borg III is certainly a longhouse at 40 m in length and 5 m in breadth, a ratio of 8:1.

Five or six houses where this is recorded have two aisles. As the oldest longhouses in northern Norway are dated to the Late Bronze Age, after the three-aisled houses were introduced around 1500 BC, this fundamental difference in construction is not related to overall chronology. Somewhat surprisingly, the dates of the two-aisled houses cover the pre-Roman Iron Age, the Migration period and even extend into the Merovingian period. As expected, based on evidence elsewhere in Scandinavia, the number of aisles is not related to the size of the house, as exemplified by the Greipstad house II (no. 42) being 36 m long, while several three-aisled houses are quite short, the shortest longhouse (with a length–width ratio of min.

2:1) being 10 m long and 4 m wide (no. 47, Sandvika 1). Thus, the choice to build with two or three aisles was rather related to function or cultural preference.

Kristin Armstrong Oma has argued that the initial change from two-aisled to three-aisled houses was related to the secondary-products revolution, when people began to keep sheep because of their milk and the wool. This meant the animals had to be handled more often, which in turn made it preferable to house the animals indoors. This was easier in three-aisled longhouses, which consequently made this building style increasingly popular (Oma 2018). Another indication of a change in economic adaptation is that the two-aisled Bronze Age houses feature significant amounts of cereal grains in postholes, whereas three-aisled houses do not (Oma 2018, 54). Yet, the two-aisled houses have also been interpreted as housing both humans and animals in separate spaces (Oma 2018, 93–94). Examples in our material are no. 22, Greipstad II (Munch 1965, 26); no. 48, Tussøy (Støren 1978, fig. 46); and possibly no. 29, Kveøy 3 (Arntzen 2013a). Hence, the choice of building two-aisled houses into the Late Iron Age in northern Norway may have more complex reasons than variations in animal husbandry.

Of the 50 houses in our material, 23 are recorded as having three aisles, of which 12 are dated to the Early Iron Age. Frands Herschend has defined two main types of three-aisled longhouses in the Early Iron Age based on the number of entrances and entrance rooms. This indicates the number of rooms the house is divided into even when partition walls cannot be identified. He concludes that one house type is typical for South Scandinavia and the other for Central Scandinavia, which in his opinion includes the building style along the northern Norwegian coast (Herschend 2009, 13, 27, footnote 1 and fig. 1A-C). The South Scandinavian type is described as having one entrance room with a door on each side through the long walls of the house. The entrance room divides the house into a dwelling room on one side and a byre on the other. The Central Scandinavian house, on the contrary, has two entrance rooms farther towards each end of the house. The entrance rooms separate a dwelling room from a storage room at one end of the house and a byre from a storage room at the other end. The dwelling and byre in the middle of the house are separated only by a wall, not a room (Herschend 2009, fig. 1A-C). This type of house will consequently have a total of four entrances.

None of the houses in our material have this number of entrances, though no. 19, Borg I:1, has five recorded entrances (Herschend and Mikkelsen 2003), and no. 17 Arstad may have more

than three (Munch 1983). Most often, only one entrance is recorded (seven houses), though two entrances are nearly as equally common (five houses). Three entrances were found in two or three investigated houses (Fig. 6). In a surprising amount of houses, entrances are not recorded at all, presumably because they were not discernible during excavation. Similarly, the actual number of entrances may well have exceeded what has been noted during investigations of the houses. In some cases, such as Kveøy 3, Kvæfjord (no. 29), the noted partition into two rooms suggests there was at least one more door than the one that was recorded during the excavation. Thus, the number of rooms can suggest a number of entrances for the houses that do not have any information about this. It is interesting that so many of the houses that have recorded entrances feature only one such entrance.

Some of the houses discussed here have also been included in Marianne Hem Eriksen's study of Late Iron Age houses, where she defines nine categories of relevant houses in modern-day Norway (Eriksen 2015, 61–64, 84). Eriksen's analysis includes the northern Norwegian houses from the Late Iron Age, but it may be interesting to see how her categories correspond with material from other time periods. The present study has not gone into detail that allows a direct comparison, but we note that seven houses in our material fulfil most of her criteria for type 1, having a width/length ratio of 4:1 or more and being between 20 and 83 m long. These houses are chronologically dispersed, with four dating to the Migration period, one to the Merovingian/Viking period, one to the Viking Age, and one to the Middle Ages. The criteria of wood constructions in Eriksen's type 1 is hardly relevant as all the houses in the northern Norwegian material are built from stone and/or turf, apart from three, which may have been wattle and daub (Table 3). A total of 18 houses would fit her category 2, being more than 15 m long and having a length–width ratio of less than 4:1. These houses are also from all time periods, with no clear chronological difference. As mentioned above, this suggests that the house types and chosen building style have more to do with functional and cultural criteria than chronology and geography (*cf.* Olsen 1997, 192).

### **House types, definitions and social organization**

Written sources indicate several house types in Norse contexts in the Iron and Middle Ages, partly related to the social status of the owner. In *Rigstula*, different terms are used for the houses of the earl (*salr*), the farmer (*holl*) and the thrall (*hús*). In other sources, it seems both *salr* and *holl* label houses or rooms used by the elite for social gatherings. Lars Lönnroth has stated that *holl* is employed exclusively for such rooms used by the king (Lönnroth 1997, 33–

34; *cf.* Gansum 2008, 203), while Lydia Carstens notes that both terms may be used in the same text and even about exactly the same house. The difference is that *salr* is more often used in poems and *høll* in prose texts, suggesting that the former was an older term, while the latter is used more frequently from the 12<sup>th</sup> century onwards (Carstens 2015, 23). In the 13<sup>th</sup> century, it is repeatedly mentioned in, for instance, *Hákonar saga Hákonarsonar* that the king had banquet halls built in different parts of the country, including in Steig (modern-day Steigen, Nordland) (*cf.* Brink 1997, 242–243).

Carstens argues that, when the term *høll* was introduced in the Viking Age, probably from the British Isles, it came with a new conceptualization of this room, not only as a centre for “worldly dominance and power” but as a universal “centre of the world” directly associated with cult and economy. Furthermore, written sources state that only the king was allowed to build such a *høll* – or *salr* (Carstens 2015, 23–24). The words *langhús* and *skáli* appear to be used for similar rooms for social gatherings on the farms of chieftains on lower levels or big farmers (Lönnroth 1997, 33–34; *cf.* Gansum 2008, 203; Carstens 2015, 24). In addition, early medieval written sources use the terms *hørg* and *hof*, which indicate ritual activities (Olsen 1966; Brink 1997, 260).

How these house types are to be identified in an archaeological record represents a typical source critical dilemma in how to combine things with texts (Andrén 1997), especially when applying terms from early medieval texts on archaeological material going back into the Early Iron Age or even the Bronze Age. The discussions above indicate that a straightforward division interpretation of archaeological finds into specific linguistic categories is complicated because the use of different words may have varied over time. In addition, it may be that the definitions reflect different conceptualizations of houses, rather than their physical attributes.

Several researchers have still nevertheless attempted to define the hall in archaeological terms. Frands Herschend lists the following archaeological characteristics of a hall: (1) they belong to big farms, (2) they consist of one room with a minimum of posts, (3) they are singled out by their position on the farm, (4) their hearths are not used for cooking and do not facilitate a handicraft, and (5) the artefacts found in the houses are different from those found in the dwelling part of the main house on the farm. In Herschend’s opinion, the hall is an expression of social, political, military and ideological changes in the Early Iron Age, leading to a centralization of power and systems of dependencies in a feudal fashion (Herschend

1993, 182–183, 191). Thus, hall buildings are highly indicative of a specific sociopolitical order and cultural context.

The hall in Early Iron Age southern Scandinavian farms is a separate house, but, in some cases, the hall may also be a separate room in a longhouse that, from the 5<sup>th</sup> century onwards, was particularly associated with economic and military leadership (Herschend 1998, 16). The large house at Borg in Lofoten is a prime example. In the Viking Age house phase, an entrance room at Borg separates an ordinary living space from a room characterized by the mixture of luxury goods and handicrafts that was typical of the southern Scandinavian “embryonic hall” in the Roman Iron Age. This room is consequently interpreted as a hall room (Herschend 1993, 190; Herschend and Mikkelsen 2003).

Apart from the iconic house at Borg in Lofoten, none of the longhouses discussed here can be defined as hall buildings or can be said to contain space that seems designated for a similar function according to Herschend’s definition. The lack of identified halls or hall rooms in other longhouses in northern Norway is in great part a question of what can be said based on the archaeological material available, with particular regard to the low use of mechanical topsoil stripping within the region, as this method has produced much of the evidence of hall buildings in other parts of Scandinavia. If taken to be representative, however, the lack of hall buildings or rooms may indicate that all the farms known to us today were inferior to Borg. It may also reflect that power relations were different, or enacted in a different way, in northern Norway compared to societies farther south, or that other types of buildings or rooms could be a hall, or serve the same purpose as a hall.

In previous research, central farms have been deduced from other and more visible remains, such as large gravemounds, large boathouse remains, and from the courtyard sites described above (Storli 1984). Recent research indicates that the latter are not spatially related to singular chieftain farms but situated in outland between several farms. This underlines the communal use of these structures, probably related to an early thing institution, including ritual and military aspects (Storli 2006; 2010). Similarly, there may be reason to consider large boathouses not only as an expression of chieftain power and the presence of a large farm but possibly also as related to a communal military organization, a predecessor to the medieval *leidang* (e.g. Stylegar and Grimm 2005). That does not deny that such structures indicate places of central power in the North Norwegian landscape on a larger scale. Such

central farms may be assumed to have had “hall functions” even if houses are not recorded or do not follow the archaeological criteria listed above.

### **Longhouse geography in northern Norway**

As mentioned, the general distribution of longhouses known today does not change the impression that, on an overall scale, Bronze and Iron Age farm settlements were mostly placed on the outer coast in northern Nordland and Troms counties (*cf.* Johansen 1978, 97). The 12<sup>th</sup>-century source *Rimbegla* claims that the Malangen fjord was the border between the Sámi and the Norse population (*Pa er fjordr er Malangr heitir, hann skilr Finnmark vid bumenn, cf.* KLN 4, 281), but archaeological finds indicate that there was a farming population farther north, along the outer coast on the large island Kvaløya from the Bronze Age onwards, and later in the Iron Age, also north of this, in Karlsøy municipality (Jensen and Arntzen 2016). In addition, there are examples of Germanic/Norse-type burial monuments in the north-eastern sectors of Troms county, on the islands Spildra, Arnøy and Vorterøy (Nilsen 2014; Bratrein 2018, 57, 177–178).

In the early phases of research, the conditions for growing cereals were considered to determine a northern limit for the northern Norwegian farm settlements (Fjærvoll 1961; Sjøvold 1962; Munch 1973; Støren 1978). This limit has fluctuated over the centuries, with the climate in the Iron Age and medieval period presenting more favourable conditions for cereal growth in northern Troms, while the northern limit in the 16<sup>th</sup> and 17<sup>th</sup> centuries appears to have been the Malangen fjord, south of Tromsø. In the 18<sup>th</sup> century, on the other hand, the cereal ripened even in Alta in Finnmark (Fjærvoll 1961; Bratrein 2018, 54). Cereal production north of the Arctic Circle has, however, always been marginal, and the crops exceedingly vulnerable to yearly climatic variation.

As pointed out by Audhild Schanche, the postulated northern limit for cereal growth does not explain why favourable areas in the inner fjords of southern Troms do not have traces of a Norse Iron Age settlement (Schanche 1989, 174). Instead, she suggests that a territoriality based on ethnicity maintained the inland, inner fjords, and also inner areas of larger islands along the coast as primarily Sámi areas in the Iron Age, explaining the lack of typical Norse graves and farm settlements here (Schanche 1986, 1989). On a large scale, the farmstead and longhouse material presented here seems to confirm the distribution of Norse settlements in the areas outlined by Schanche. It should, however, be noted that, in many areas, Norse and Sámi settlements have existed relatively close to one another, for instance on the larger



islands, where it appears that the coastland was used by Norse farmers, while the inland had a hunting-gathering Sámi population (Schanche 1989). Furthermore, the contact between the Norse and the Sámi in the inland areas is well documented in historical sources in terms of Norse trade with and taxation of, or collection of tribute from, the Sámi, as well as signs of intermarriage between the two groups (*e.g.* Hansen 1990; Storli 1994; Hansen and Olsen 2014). It has been argued that, as long as these activities were the privilege of the regional chieftains in the north, *i.e.* before the consolidation of the Norwegian Kingdom in the Early Middle Ages, the described border between the Sámi and the Norse settlement areas was maintained partly because the Norse had an interest in the Sámi continuing their subsistence based on hunting and fishing. Products from these activities were then incorporated into the Norse redistributive chieftain economy as highly sought-after goods, such as furs (Hansen 1990). At the same time, the coexistence of the two groups on a local and regional scale must have led to a variation of cultural adaptations within both groups. Studies of depositions and burials in northern Norway in the Iron and Early Middle Ages reveal that border areas had population groups which included both Sámi and Norse cultural traditions in their social practices, underlining the ethnic complexity of the region (Spangen 2005; 2010; Bruun 2007).

Still, the persistent main ethnic boundaries in the north are definitely broken only in the Middle Ages, when Norwegians settled in larger numbers in what was previously “Finnmark”, Sámi land. This is probably related to a shift in how the two cultural groups interacted, as the Norse population had been Christianized and incorporated into the Norwegian Kingdom, removing them culturally and socially from the Sámi population. At the same time, new trade systems and markets for fish appeared, giving an economic incentive for establishing fishing villages along the northernmost coast (Bertelsen 2011).

This is not to say that Norse chieftains had not held an interest in the predominantly Sámi areas before this time. The island Loppa, just across the border to Finnmark, stands out as the northernmost example of a typical Iron Age Norse farm settlement, with burial cairns, boathouses and a total of three longhouses, one of which was partly excavated in 1964 (Munch and Munch 1964; here no. 50 Eidet, Loppa). The house is situated on an isthmus some distance from the other structures on the island. The original excavation revealed one entrance and a hearth, as well as a few iron fragments and charcoal features. In 1994, a small bulk sample containing sandy soil mixed with humus and charcoal was retrieved from a new test pit in the house ground (Bratrein 1994). The sample was radiocarbon dated to 1230±255 BP (GX-20314). The original report states that the calibrated date is AD 790, which is the

median of the then calibrated dating span. This Viking Age date was later reiterated in both popular and academic literature. However, the calibrated age range within  $2\sigma$  is AD 261–1278 (calibrated by the present authors using Calib 7.10 and the Intcal13 calibration curve; Stuiver and Reimer 1993; Reimer *et al.* 2013). Considering the uncertain context and poor quality of the sample, the standard error of 255 years and the lack of control samples, the house cannot be concluded to be from the Viking Age. Graves on the island do testify to Norse presence during this time period, but we have chosen to list this house's age as "not determined" until further investigations can be performed.

During the same 1994 campaign, a larger sample was retrieved from a charcoal layer in a test pit in one of the other longhouses on the island (Mevær/Bekkevoll, Bratrein 1994). This was radiocarbon dated to BP 1895 +/- 65 (GX-20315) and calibrated to AD 10–320, suggesting the site already had a Norse settlement in the Early Roman period. A new calibration by the present authors gave an age range of 41 BC–AD 314 within  $2\sigma$ . This house is not further investigated, and therefore not included in our general overview, but it presents interesting evidence for the endeavours of the Germanic/Norse inhabitants in the Far North. Loppa Island is situated 3 km off the mainland in a very strategic position to control the fairway along the coast (Bratrein 2018, 177). While some archaeologists see the island as the northern limit for the general distribution of Norse settlement traces (Storli 2018, 16), others have defined it as a Norse satellite settlement (Olsen 2011, 29). Historian Håvard Dahl Bratrein interprets this presumed permanent Norse settlement not as an ordinary farm but as a military and administrative outpost (Bratrein 2018, 57, 93). These aspects do not necessarily have to be mutually exclusive.

There are signs of Norse activity farther north-east in Finnmark, with Norse weapon burials on Sørøya, Ingøy, Magerøy and Lille Tamsøy (Bratrein 2018, 57). In the overview of surface visible longhouses (Fig. 3), we have included another three possible longhouses in Finnmark, but, as mentioned, these need to be treated with caution because of their geographical and cultural contexts. They will have to be investigated further to conclude whether they really represent the kind of settlement traces that interest us here.

### **The local context of longhouses in northern Norway**

Our investigation for this chapter has not gone into detail for all the excavated longhouses, but, unsurprisingly, they are often found together with other house types within the farmsteads. These different houses served specific purposes for the same household; hence,

the combination of different houses is crucial for understanding the economic, cultural and social context of the singular farm. Other factors that affect the composition of houses are local climate, topography, soil conditions and other resource availability.

These aspects still need to be studied further in northern Norway, but one house type is clearly an integral and crucial part of any coastal farm in the north: the boathouse (Nilsen 1998; Storli 2006; Wickler and Nilsen 2012). The boat was enormously important both to the singular farms and in a broader sociocultural perspective. It is no surprise that northern Norway holds the majority of known prehistoric boathouses in Scandinavia. In other sectors of the Norwegian coast, research has focused on the possible military function of large boathouses in connection with the royal levy (*leidang*) system (e.g. Stylegar and Grimm 2005), which has been a topic even in the north. In our areas, however, there is also a large amount of smaller boathouses, most likely related to household fisheries in both Norse and Sámi contexts (Wickler and Nilsen 2012). Both on a household and a larger social scale, the importance of fisheries and hunting marine mammals can hardly be exaggerated and include trade in marine products such as whale oil and walrus ropes from the Iron Age onwards, with the Sámi as crucial suppliers (Henriksen 1996; Nilsen 2017).

Workshop or storage buildings are common both in the Late Bronze Age and through the pre-Roman Iron Age in south-western and western Norway (Løken 1998, 173; Diinhoff 2005), and there is also some evidence for such buildings on the northern Norwegian farms. The pre-Roman farm at Kveøy (loc. 13) consisted of at least two houses, where one (house 2) is a locale for production of some kind (Arntzen 2013a, 27). The basis for this interpretation is the small size of the building and the remains of a poorly preserved oven feature. A better-preserved clay-built oven was also documented in the same area, although not related to visible house remains. Macrofossils of barley could hint at some grain-related activity.

At Hunstad outside of Bodø (loc. 5), six buildings were documented in addition to the two longhouses included in our main material (Chruickshank 2002). Two of these were square semi-subterranean pit houses, dated to the transition between the Viking Age and the Early Middle Age. They measured 4 x 4 m and were constructed with a large posthole in each corner and lined with smaller postholes along the walls. A robust stone-lined fireplace in the corner of one of the houses suggests some special function – Chruickshank proposes a sauna. Based on evidence from Iceland, Milek (2012) argues that this type of building functioned primarily as women's work rooms for all stages of woollen textile production. This

interpretation is strengthened by geoarchaeological evidence. This unfortunately does not exist for Hunstad, but architecturally the buildings are very similar to Milek's material. Such constructions may also be present at the Stauran farmstead (Urbańczyk 2002). This type of pit house has previously been interpreted as part of other industries, and it has been speculated whether they were occupied by slaves (Sørheim 2016, 193).

Despite similarities, there is reason to believe there have been differences in agricultural structures between the north and the south in the past, as in more recent days. This can be seen reflected in language use. While the "farm" term (No.: *gård*) in the south defines an entire property, this has been applied only to the farm *houses* in the High North. When including the farmland, people would rather use terms such as -ground, -field, -mound, -plain or -seat (No.: *jord, eng, voll, slett(a)* and *set(e)*, respectively), for instance in compound place names such as Håkenjorda. During the Middle Ages, farm settlements were also called *-væer*, which today is associated with fishing villages (Bratrein 2018, 56). This may indicate a more extensive understanding of what terrains and resources constituted each economic unit in the north, with the houses as a defining focus for farming versus non-farming settlements. This is transferable to a past situation where the conspicuous longhouse must have been a telling indicator of the type of settlement they represented, while such aspects as the lack of fences on northern farms as opposed to those farther south may reflect a more varied resource harvesting, and thus a more extensive and inclusive landscape view.

### **Sticky structures and opportunistic builders**

Building a longhouse is not a simple matter, and the presence of this type of house in northern Norway from the Late Bronze Age onwards must indicate close contact with longhouse-building people farther south. While the migration theory was largely dismissed in the 1980s, when focus turned to internal social development of ethnicity among groups on the coast and inland according to the contact networks they related to and the increasing cultural differences this entailed (*e.g.* Odner 1983; Jørgensen and Olsen 1988), it cannot be completely refuted that internal developments in the coastal population were combined with migration up along the coast (Arntzen 2013b). By the Iron Age, however, the longhouse was a well-known and internalized building style even in the north, carrying with it strong social and cultural associations, seen from both the outside and the inside. We may call this a "sticky structure": a framework for social agency that held cultural connotations that could not easily be changed by individuals but that continued to shape social and cultural preferences. This kind of active

materializations of social and cultural structures has proven to be valid for built environments, but also for the wider landscape perception and organization (e.g. Bourdieu 1970; 1977; Schanche 1989; Herschend 2009).

On the other hand, such ideally conceptualized structures have to be adjusted according to local conditions and practical preconditions and needs, creating some room for individual initiative within the social structure (Giddens 1984). Transporting the longhouse building tradition to the Far North is in itself a Late Bronze Age innovation that, on the one hand, carries on a well-established building- and lifestyle, and, on the other hand, entails a rearticulation of this ancient tradition based on regional and local circumstances. This would to some extent create “hybrids” of the known longhouse (*cf.* Bhabha 1994). The variation in our material indicates that there was room for individual initiatives in adapting both the building style and the layout of farmsteads to topography, weather conditions, economic pivot and social context – perhaps to a larger extent here than farther south in Scandinavia, though recent research also indicates a fair amount of variation in house types farther south (Eriksen 2015; Gjerpe 2017, 112). As discussed, further studies are needed to describe the variations in northern longhouses and farmsteads in more detail.

What seems clear is that the longhouse building tradition was not only adopted because of the introduction of farming, which could never have been the sole basis of subsistence for any household in northern Norway at the time anyway. Instead, hunting and fishing, as well as exchange and trade, and – for some – taxation of the Sámi and exchange of valuable hunting products with them, were the economic foundations for a Norse population in the north. This also influenced where in the landscape they settled (Storli 2018, 25). This does not mean that cereal growth was unimportant; on the contrary, access to barley is likely to have been essential to maintain a “correct” lifestyle within the Norse community, which had to include the brewing of beer for ritual and social occasions (Steinsland 2005, 276–278).

Thus, the introduction and maintenance of the longhouse should most definitely be seen in relation to the development of a Norse identity in the north, especially in terms of a social organization based on redistribution and personal power relations. These relationships were sustained by mutual interest in exchange, but also the interwoven social and cultic aspects that were expressed in, for instance, drinking rituals. For the higher level of society, these drinking rituals would be performed in a *salr* or *holl* of some sort, while we can assume that similar

meetings and rituals were performed on farms further down the social line in their *langhús* or *skáli* houses.

There is evidence that the same kind of rituals were performed together with Sámi people involved in this exchange system: an Old Norse loanword in North Sámi for gift is *skeanka*, which originally meant to pour a drink (Schanche 2000, 333). This could relate to Early Iron Age contact between the Norse and the Sámi, where Norse drinking rituals were part of the social interaction in a committed exchange of goods between two equal parties (Bratrein 2018, 67–68). This seems to have turned into a more asymmetric relationship during the Viking Age and especially after the Christianization of the Norse in the Early Middle Ages. Still, a poem from the 12<sup>th</sup> century express a good relationship between the saga character Sigurd Slembe and the Sámi in Ofoten in South Troms, as drinking parties were apparently held in the Sámi huts when he stayed with them during a winter when they were building him a boat (Chapter 6 of *Saga of Sigurd, Inge, and Eystein, the Sons of Harald*). This indicates a specific northern Norwegian variation in the correct context for such social gatherings and rituals that may well have affected conceptualizations of the Norse lived environment too.

The longhouses can be expected to be found in areas with a variety of subsistence options in accordance with an acceptable Norse lifestyle but with local adaptation to allow for the particular conditions in northern Norway. This is not a new thought, as it has long been observed that the farms in the north on a macro scale are placed close to marine resources, while on a micro scale close to farming resources (Johansen 1982, 47). However, previous conclusions are based on limited material, and further study of the local and regional placement of the now-known longhouses in northern Norway would be of great interest.

The excavated houses are widely distributed in the region. There is a degree of coincidence in which houses that have been investigated, as this has depended on research interests related to specific farms or local areas, as well as development projects that have initiated legally required investigations. However, the fact that many longhouses in the north are easily visible on the surface would make a more comprehensive study of their features and placement possible without necessarily having to enrol in major excavations. More archaeological studies that can provide information about chronology and building details are of course also needed.

Among interesting questions are the internal ranking of different types of longhouses, the variation in functions, resource base, and local power base, consequent variations in

household size and structure, and how these various factors influenced the choice of building style. The surprising longevity of two-aisled houses into the Migration and Merovingian periods should be investigated further, as should the occurrence of longhouse-like structures in the Far North of Finnmark, whether these represent (attempted) farming, and if so, in what time period and cultural context. The lack of hall buildings is another topic worthy of a more thorough investigation, though we suspect this is related to the methodological bias presented by the limited use of topsoil stripping. This underlines the difficulty of discussing the sociopolitical organization of the prehistoric farming societies in the north without more investigations of this kind.

As discussed above, the fact that longhouses appear to have been common in the north well into the Middle Ages may have several reasons. It may be related to practical aspects such as climate and building materials, to a strong local tradition that did not allow for rapid change, or to a nostalgia for a past grandeur and a social order that was about to become extinct. Considering how the longhouses so clearly reflect a very specific social organization, it could be questioned if the medieval longhouses are not just nostalgic remnants. They may actually tell us that the regional power networks and social organization continued to affect the political order well into an era where written sources insist that the Norwegian king had taken control of these landscapes. The houses themselves may have helped to preserve certain social relations. Perhaps the lingering longhouses are expressions of an actual prolonged resistance and persistence rather than just shadows of the past.

### **Unpublished sources**

Bratrein, H. D. 1994. *Registreringsnotat Loppa 15-26/6.1994*. Survey report, topographic archive, Dept. of Cultural Research. Tromsø: University Museum of Tromsø.

Bruun, I.M. 2007. *Blandede graver - blandede kulturer? En tolkning av gravskikk og etniske forhold i Nord-Norge gjennom jernalder og tidlig middelalder*. Master thesis. Tromsø: University of Tromsø.

Eriksen, M. H. 2015. *Portals to the past. An archaeology of doorways, dwellings, and ritual practice in late Iron Age Scandinavia*. PhD thesis. Oslo: University of Oslo.

Gjerpe, L. E. 2017. *Effektive hus: bosetning, jord og rettigheter på Østlandet i jernalder : Bind I av II*. PhD thesis. Oslo: University of Oslo.

Henriksen, J.E. 2016. *Kulturmøte og identitet på Finnmarkskysten i tidlig historisk tid: tolkninger basert på arkeologiske analyser av mangeromstuffer*. PhD thesis. Tromsø: University of Tromsø.

- Jørgensen, R. 1984. *Bleik: En økonomisk/økologisk studie av grunnlaget for jernaldergården på Andøy i Nordland*. Magister thesis. Tromsø: University of Tromsø.
- Klokkervoll, A. 2015. *Dyrenes rolle i germansk gravskikk. En analyse av dyrenedleggelsene i nordnorske jernaldergraver*. MA thesis in archaeology. Tromsø: University of Tromsø.
- Mikalsen, R.J.A. 2008. *Byggeskikken i middelalderens Nord-Norge. Fra bruk av torv, jord, og stein som byggematerialer til trehuset*. MA thesis in archaeology. Tromsø: University of Tromsø.
- Munch, G.S., and Munch, J.S. 1964. *Dagbok LOPPA 1964*. Tromsø: Topographic archives, Dept. for Cultural Research, University Museum of Tromsø.
- Schanche, A. 1986. *Nordnorsk jernalderarkeologi. Et sosialgeografisk perspektiv*. Magister thesis. Tromsø: University of Tromsø.
- Schanche, K. 1994. *Gressbakkentuftene i Varanger. Boliger og sosial struktur rundt 2000 f. Kr.* PhD thesis. Tromsø: University of Tromsø.
- Sommerseth, I. 2009. *Villreinfangst og tamreindrift i Indre Troms, belyst ved samiske boplasser mellom 650 og 1923*. PhD thesis. Tromsø: University of Tromsø.
- Spangen, M. 2005. *Edelmetalldepotene i Nord-Norge. Komplekse identiteter i vikingtid og tidlig middelalder*. Master thesis. Tromsø: University of Tromsø.
- Storli, I. 1984. *Håloyghøvdingen. Om grunnlaget for og vedlikeholdet av høvdingmakt i jernalderen, med vekt på Sør-Salten*. Magister thesis. Tromsø: University of Tromsø.
- Støren, K. 1978. *Jernalderbosetningen på Kvaløy i Troms: en undersøkelse av økologisk og sosial tilpasning i et nord-norsk kystmiljø*. Magister thesis. Tromsø: University of Tromsø.

## References

- Andreasen, C. 1981. Langhus-ganghus-centraliseret gård. *Hikuin* 7: 179–184.
- Andreassen, R.L., and Bratrein, H.D. 2011. Finnmark, between the east and the west. In: B. Olsen, P. Urbanczyk, and C. Amundsen (eds), *Hybrid spaces. Medieval Finnmark and the archaeology of multi-room houses*. Oslo: Novus Press.
- Andrén, A. 1997. *Mellan ting och text. En introduktion till de historiska arkeologierna*. Stockholm: Symposion.
- Arntzen, J.E. 2012. Jordbruksboplasser fra bronsealder og førromersk jernalder i Nord-Norge: Veien videre. In: F. Kaul and L. Sørensen (eds), *Agrarsamfundenes ekspansjon i nord. Symposium på Tanums Hällristningsmuseum, Underslös, Bohuslän, 25. – 29. maj 2011*, 284–294. Copenhagen: National Museum of Denmark.



- Arntzen, J. E. 2013a. Jordbruksbosetting i bronsealder og førromersk jernalder på Kveøya i Nord-Norge. In: S. Diinhoff, M. Ramstad and T. Slinning (ed), *Jordbruksbosetningens utvikling på Vestlandet. Kunnskapsstatus, presentasjon av nye resultater og fremtidige problemstillinger*, 19-33. Bergen: Universitetet i Bergen
- Arntzen, J.E. 2013b. The empirical basis for research on farming settlements in northern Norway 1200 BC – 0. In: D. L. Mahler (ed), *The Border of Farming Shetland and Scandinavia. Neolithic and Bronze Age Farming. Papers from the symposium in Copenhagen September 19th to the 21st 2012*, 184–197. Copenhagen: The National Museum of Denmark.
- Arntzen, J.E. 2015. Sandvika in northern Norway: The northernmost ‘Bronze Age’ settlement in Scandinavia. *Fennoscandia Archaeologica* XXXII: 3–34.
- Becker, C.J. 1965: Ein früheisenzeitliches Dorf bei Grøntoft, Westjütland. Vorbericht über die Ausgrabungen 1961-63. *Acta Archaeologica* XXXVI:209-222.
- Berg, E. 1997. *Gård og grav på Rør i Rygge, Østfold. Dobbeltsporprosjektet. Arkeologiske undersøkelser 1994-1996*. Oslo: Universitetets oldsaksamling.
- Bertelsen, R. 1983. Gårdslokalisering i jernalder og historisk tid i Lofoten og Vesterålen. In: Ólafsson, G. (ed), *Hus, gård och bebyggelse. Föredrag från det XVI nordiska arkeologmötet, Island 1982*. Reykjavik: Þjóðminjasafn Íslands.
- Bertelsen, R. 1991. Endringer i fiskeværernes byggeskikk på 14-1500-tallet. *Årbok. Foreningen til norske fortidsminnesmerkers bevaring* 145: 235–243.
- Bertelsen, R. 2001. Medieval civilization in Arctic earthen huts. In: J. R., Brandt and L. Karlsson (eds), *From huts to houses. Transformations of ancient societies. Proceedings of an international seminar organized by the Norwegian and Swedish Institutes in Rome, 21-24 September 1997*, 109-115. Stockholm, Paul Åströms förlag.
- Bertelsen, R. 2011. Tilkomsten av fiskevær, med særlig blick på kysten mellom Vestfjorden og LoppHAVET. In: L. I. Hansen, R. Holt, S. Imsen, and E. Niemi (eds.), *Nordens plass i middelalderens nye Europa. Samfunnsomdanning, sentralmakt og periferier. Rapporter til det 27. nordiske historikermøte, Tromsø 11.-14. august 2011*, 78–88. Tromsø: Orkana akademisk.
- Bhabha, H.K. 1994. *The location of culture*. London: Routledge.
- Bourdieu, P. 1970. The Berber house or the world reversed. *Social Science Information* 9(2): 151–170.
- Bourdieu, P. 1977. *Outline of a theory of practice*. Cambridge: Cambridge University Press.
- Bratrein, H.D. 2018. *Høvding, jarl, konge. Nord-Norges politiske historie i vikingtid. Ei annerledes fortelling*. Stamsund: Orkana akademisk.

- Brink, S. 1997. Political and Social Structures in Early Scandinavia. A Settlement-historical Pre-study of the Central Place. *Tor* 29: 389–437. 235-282
- Carstens, L. 2015. Powerful space. The Iron-Age hall and its development during the Viking Age. In: M. H. Eriksen, B. Rundberget, U. Pedersen, Irmelin. Axelsen, and H. L. Berg (eds),, *Viking worlds. Things, spaces and movement*, 12–27. Oxford: Oxbow.
- Chruickshank, M. 2002. Jern- og middelalderbosetning på Hundstad, Bodø k. In: P. Simonsen (ed), *Mellomalderarkeologi mellom Salten og Senja*, 27-33. Tromsø: Tromsø Museum
- Diinhoff, S. 2005. Den førromerske jordbruksbosetning på Moflaten ved Ørsta. I: Bergsvik, K.A. & Engevik A. (red.) *Fra funn til samfunn – Jernalderstudier tilegnet Bergljot Solberg på 70-årsdagen*. UBAS Nordisk. Universitetet i Bergen Arkeologiske Skrifter 1: 105-119. Bergen.
- Eriksen, M. H. 2019. *Architecture, society, and ritual in Viking Age Scandinavia: doors, dwellings, and domestic space*. Cambridge: University Press.
- Fjærvoll, K. 1961. *Korndyrkinga i Hålogaland i gammal tid. 1500 og 1600-åra*. Svorkmo: Hålogaland historielag.
- Gabler, M., Nau, E., Gustavsen, L., and Kristiansen, M. 2018. Georadarundersøkelser langs Hålogalandveien 2017. Troms fylkeskommune. Delprosjekt 4 av FoU-prosjektet «Arkeologi i veien?». *NIKU oppdragsrapport 11/2018*. Survey report. Oslo: NIKU.
- Gansum, T. 2008. Hallene og stavkirkene. Kultbygninger i en overgangstid. In: C. Prescott, J. Lund, and K. Childis (eds),, *Facets of archeology. Essays in honour of Lotte Hedeager on her 60th birthday*. *Oslo arkeologiske serie* 10, 199–213. Oslo: University of Oslo.
- Giddens, A. 1984. *The constitution of society. Outline of the theory of structuration*. Berkeley: University of California Press.
- Gjerpe, L. E. 2016. Iron Age building traditions in eastern Norway: regions and landscapes. In: F. Iversen and H. Pettersson (eds),, *The agrarian life of the North 2000 BC - AD 1000*. Kristiansand: Portal.
- Gjessing, G. 1929. Ophavet til Håløyjarlenes rike. En liten arkeologisk skisse. *Håløygminne* 10(2): 35-8.
- Gjessing, G. 1930. Mere om ophavet til Håløyjarlenes rike. *Håløygminne* 11(1): 99-106.
- Gjessing, G. 1943. Træn-funnene. *Instituttet for sammenlignende kulturforskning, serie B* 41. Oslo: Aschehoug.
- Gjessing, H. Vest-Agder i forhistorisk tid. In: H. Aall, A.W. Brøgger, E. Bull, K. Liestøl, and G. Midttun (eds),, *Norsk bygder II: Vest-Agder, første halvbind*, 33–76. Bergen: John Griegs forlag.

- Gräslund, B. 2007. Fimbulvintern, Ragnarök och klimatkrisen år 536-537 e. Kr., *Saga och sed. Kungl. Gustav Adolfs Akademiens Årsbok 2007*: 93–123.
- Gräslund, B., and Price, N. 2012. Twilight of the gods? The ‘dust veil event’ of AD 536 in critical perspective. *Antiquity* 86(332): 428–443.
- Grieg, S. 1934. *Jernaldershus på Lista*. Oslo: Aschehoug.
- Hagen, A. 1953. *Studier i jernalderens gårdssamfunn*. Oslo: Universitetets oldsaksamling.
- Hansen, L.I. 1990. *Samisk fangstsamfunn og norsk høvdingeøkonomi*. Oslo: Novus.
- Hansen, L.I., and Olsen, B. 2014. *Hunters in transition. An Outline of Early Sámi History*. Leiden/Boston: Brill.
- Hedman, S-D., B. Olsen, and M. Vretemark, M. 2015. Hunters, herders and hearths: interpreting new results from hearth row sites in Pasvik, Arctic Norway. *Rangifer* 35(1): 1–24.
- Helliksen, W. 1997. *Gård og utmark på Romerike 1100 f.Kr.-1400 e.Kr.: Gardermoprojektet*. Oslo: Universitetets oldsaksamling.
- Henriksen, J.E. 1996. Hellegropene. Fornminner fra en funntom periode, *Stensilserie B* 42. Tromsø: University of Tromsø.
- Henriksen, J.E. 2008. Mangeromstuffer på finnmarkskysten. In: I. Hage, E. Haugdal, B. Ruud, and S. Hegstad (eds), *Arkitektur i Nord-Norge*, 162–201. Bergen: Fagbokforlaget.
- Herschend, F. 1993. The Origin of the Hall in Southern Scandinavia. *TOR* 25: 175–199.
- Herschend, F. 1998. *The idea of the good in late Iron Age society*. Uppsala: Uppsala University.
- Herschend, F. 2009. *The Early Iron Age in South Scandinavia. Social Order in Settlement and Landscape*. Uppsala: Uppsala University.
- Herschend, F., and Mikkelsen, D.K. 2003. The main building at Borg (I:1). In G. S. Munch, O. S. Johansen, and E. Roesdahl (eds), *Borg in Lofoten. A chieftain’s farm in North Norway*. Arkeologisk skriftserie, 41–76. Bøstad/Trondheim: Lofotr - Vikingmuséet på Borg/ Tapir Academic Press.
- Holand, I. 1989. *Graver og samfunn. Samfunnsutvikling og -organisasjon i Nord-Hålogaland i Jernalderen, basert på endringer og variasjon i gravskikk*. Magister thesis in archaeology. Tromsø: Universitetet i Tromsø.
- Jensen, C. E. 2012. Tidlig jordbruk i det nordligste Norge - botaniske vitnesbyrd. In: F. Kaul and L. Sørensen (eds), *Agrarsamfundenes ekspansjon i nord. Symposium på Tanums Hällristningsmuseum, Underslös, d. 25.-29. maj 2011*, 184-194. Copenhagen: Nationalmuseet.

- Jensen, C.E., and J.E. Arntzen, 2016. A late Bronze Age sheep farm north of the Arctic circle? In: F. Iversen and H. Petersson (eds), *The agrarian life of the North 2000 BC - AD 1000. Studies in rural settlement and farming in Norway*, 173–202. Kristiansand: Portal Academic.
- Johansen, O.S. 1978. Jernaldergårder i Nord-Norge, *Stensilserie B* 13. Tromsø: University of Tromsø.
- Johansen, O.S. 1982. Viking Age farms: estimating the number and population size. A case study from Vestvågøy, North Norway. *Norwegian Archaeological Review* 15: 45–69.
- Johansen, O. S. 1990. Synspunkter på jernalderens jordbrukssamfunn i Nord-Norge *Stensilserie B* 29. Tromsø: University of Tromsø.
- Johansen, O. S. and K.-D. Vorren. 1986. The prehistoric expansion of farming into ‘Arctic’ Norway: A chronology based on 14C dating. *Radiocarbon* 28(2A): 739–747.
- Jørgensen, R. and B. Olsen. 1988. Asbestkeramiske grupper i Nord-Norge, *Tromura. Kulturhistorie* 13. Tromsø: Tromsø museum.
- KLNM – *Kulturhistorisk leksikon for nordisk middelalder fra vikingtid til reformasjonstid*. Oslo: Gyldendal.
- Jørgensen, L.B. 2012. The Introduction of Sails to Scandinavia: Raw materials, Labour and Land. In: R. Berge, M.E. Jasinski and K. Sognnes (eds) N-TAG TEN. Proceedings of the 10th Nordic TAG conference at Stiklestad, Norway 2009. *BAR International Series* 2399, 173–181. Archaeopress: Oxford.
- Løken, T. 1998. Det forhistoriske huset i Rogaland – belyst ved flateavdekkende utgravninger, *Bebyggelsehistorisk tidskrift* 33: 169–184.
- Løken, T., L. Pilø, and O. Hemdorff. 1996. *Maskinell flateavdekking og utgravning av forhistoriske jordbruksboplasser*. Stavanger: Arkeologisk museum i Stavanger.
- Lönnroth, L. 1997. Hövdingahallen i fornnordisk myt och saga. In: J. Callmer and E. Rosengren (eds), ‘...gick Grendel att söka det höga huset...’: *arkeologiska källor till aristokratiska miljöer i Skandinavien under yngre järnålder. Rapport från ett seminarium i Falkenberg 16-17 november 1995*. Slöinge projektet, 31–38. Halmstad: Hallands länsmuseum.
- Myhre, B.M., and Myhre, B. 1972. The concept 'immigration' in archaeological contexts illustrated by examples from West Norwegian and North Norwegian early iron age. *Norwegian Archaeological Review* 5(1): 45–61.
- Martens, I. 1973. *Gamle fjellgårder fra strøkene rundt Hardangervidda*. Oslo: Universitetets Oldsaksamlingen.

- Milek, K. 2012. The Roles of Pit Houses and Gendered Spaces on Viking-Age Farmsteads in Iceland. *Medieval Archaeology* 56(1): 85-130.
- Munch, G.S. 1965. Greipstad. Trekk av en nordnorsk gårds historie. *Ottar* 46.
- Munch, G.S. 1967. Funnene fra Eiterjord i Beiarn og Vestvatn i Misvær. *Viking* 31: 99–122.
- Munch, G.S. 1983. Et hustuftområde fra vikingtid på Arstad, Nordland. In: G. Ólafsson (ed), *Hus, gård och bebyggelse. Föredrag från det XVI nordiska arkeologmötet, Island 1982*, 133–146. Reykjavík: Þjóðminjasafn Íslands.
- Munch, J.S. 1973. Jernaldergården i Nord-Norge. In P. Simonsen and G. S. Munch (eds), *Bonde-veidemann, bofast-ikke bofast i nordisk forhistorie. Foredrag og diskusjoner fra 13. nordiske arkeologmøte i Tromsø 1970*. Tromsø Museums skrifter, 264–274. Tromsø: Universitetsforlaget.
- Myhre, B. 1975. Gårdshusenes konstruksjon og funksjon i jernalderen. *Arkeologiske skrifter* 2, 73–105. Bergen: Historisk museum.
- Myhre, B. 1980. Gårdsanlegget på Ullandhaug I. Gårdshus i jernalder og tidlig middelalder i Sørvest-Norge. *AmS-skrifter* 4. Stavanger: Arkeologisk museum i Stavanger.
- Myhre, B. 2002. Landbruk, landskap og samfunn 4000 f. Kr.– 800 e.Kr. In: B. Myhre and I. Øye, *Jorda blir levevei, Norges landbrukshistorie* 1, 11-213. Oslo: Det Norske Samlaget.
- Nilsen, G. 1998. Jernaldernaust på Vestvågøy i Lofoten. *Stensilserie B* 49. Tromsø: University of Tromsø.
- Nilsen, G. 2017. Surplus Production and Marine Resource Use in the North Norwegian Iron Age. *International Journal of Nautical Archaeology* 46(2): 231-252.
- Nilsen, R.A. 2014. *Den nordlige jernalder. Kulturminner og funn fra Malangen til Loppa*. Tromsø: Nord-Troms Museum/University of Tromsø.
- Odner, K. 1983. *Finner og terfinner. Etniske prosesser i det nordlige Fenno–Skandinavia*. Oslo: University of Oslo.
- Olsen, B. 1997. Forhistoriske hus i Nord-Norge. *Bebyggelsehistorisk tidskrift* 33: 185–194.
- Olsen, B. 2011. A Brief Outline of the Historical Setting. In B. Olsen, P. Urbanczyk, and C. Amundsen (eds), *Hybrid Spaces. Medieval Finnmark and the Archaeology of Multi-Room Houses*, 29–31. Oslo: Novus Press.
- Olsen, B., P. Urbanczyk, and C. Amundsen. 2011. *Hybrid spaces. Medieval Finnmark and the archaeology of multi-room houses*. Oslo: Novus Press.
- Olsen, O. 1966. Hørg, hov og kirke. Historiske og arkæologiske vikingetidsstudier.

- Aarbøger for nordisk oldkyndighed og historie* 1966. København: Det Kongelige nordiske Oldskriftselskab.
- Oma, K.A. 2018. *The sheep people: the ontology of making lives, building homes and forging herds in early Bronze Age Norway*. Sheffield: Equinox Publishing Ltd.
- Petersen, J. 1933. *Gamle gårdsanlegg i Rogaland 1. Fra forhistorisk tid og middelalder*. Oslo: Aschehoug.
- Petersen, J. 1936. *Gamle gårdsanlegg i Rogaland 2. Fortsettelse: Utsira, Lyngaland, Håvødl, Birkelandstølen, Hanaland*. Oslo: Aschehoug.
- Reimer, P. J., et al. 2013. "IntCal13 and Marine13 Radiocarbon Age Calibration Curves 0–50,000 Years cal BP." *Radiocarbon* 55(4): 1869-1887.
- Ränk, G. 1937. Grundprinciper för disponeringen av utrymmet i de lapska kåtorna och gammerna. *Folkliv* (2/3).
- Saga of Sigurd, Inge, and Eystein, the Sons of Harald. In: *Heimskringla: A History of the Norse Kings*, translated by S. Laing, 1907. London: Norroena Society.
- Schanche, A. 1989. Jernalderens bosettingsmønster i et flerretinsk perspektiv. In: R. Bertelsen, P. K. Reymert, and A. Utne (eds), *Framskritt for fortida i nord*. I Povl Simonsen fotefar. *Tromsø museums skrifter* 22, 171–183. Tromsø: Tromsø Museum.
- Schanche, A. 2000. *Graver i ur og berg: samisk gravskikk og religion fra forhistorisk til nyere tid*. Karasjok: Davvi girji.
- Simonsen, P. 1980. Fiskerbonden i Nord-Troms 1300-1700, belyst ved tuftgravninger. *Publikasjoner fra helgøyprosjektet* 1. Tromsø: Tromsø museum.
- Simonsen, P. 1991. Byggeskikk i Troms og Finnmark i middelalderen. *Årbok. Foreningen til norske fortidsminnesmerkers bevaring* 145(1991): 221–234.
- Sjögren, P. and J. E. Arntzen. 2013. Agricultural practices in Arctic Norway during the first millennium b.c. *Vegetation History and Archaeobotany* 22(1): 1-15.
- Sjøvold, T. 1962. *The Iron Age settlement of Arctic Norway. A study in the expansion of European Iron Age culture within the Arctic Circle 1: Early Iron Age (Roman and Migration Periods)*. Tromsø: Universitetsforlaget.
- Sjøvold, T. 1974. *The Iron Age settlement of Arctic Norway. A study in the expansion of European Iron Age culture within the Arctic Circle 2: Late Iron Age (Merovingian and Viking periods)*. Tromsø: Universitetsforlaget.
- Solli, B. 2006. Borg in Lofoten - From Early Iron Age 'cooking-mates' via Viking Age chieftains to Medieval farmers. In: J. Arneborg and B. Grønnow (eds), *Dynamics of Northern Societies. Proceedings of the SILA/NABO Conference on Arctic and North Atlantic*

- Archaeology, Copenhagen, May 10th – 14th, 2004*, 259–271. Copenhagen: The National Museum.
- Stuiver, M. and P. J. Reimer. 1993. Extended 14C data base and revised CALIB 3.0 14C age calibration program. *Radiocarbon* 35(1): 215-230.
- Sørheim, H. 2016. House, farmyard and landscape as social arena in a time of transition. In L. H. Dommasnes, D. Gutschiedl-Schumann, and A. T. Hommedal (eds), *The farm as a social arena*, 171–190. Münster: Waxmann.
- Spangen, M. 2010. Guder-makter-mennesker-ting. Om deponering av sølv som offer. *Viking* (73): 61–80.
- Spangen, M. 2016. Circling concepts. A critical archaeological analysis of the notion of stone circles as sami offering sites, *Stockholm studies in archaeology* 70. Stockholm: Stockholm university.
- Steinsland, G. 2005. *Norrøn religion. Myter, riter, samfunn*. Oslo: Pax.
- Storli, I. 1994. Stallo-boplassene. Spor etter de første fjellsamer? *Instituttet for sammenlignende kulturforskning, serie B, skrifter XC*. Oslo: Novus forlag.
- Storli, I. 2006. *Hålogaland før rikssamlingen. Politiske prosesser i perioden 200-900 e.Kr.* Oslo: Novus.
- Storli, I. 2010. Court sites of Arctic Norway: Remains of Thing Sites and Representations of Political Consolidation Processes in the Northern Germanic World during the First Millennium AD? *Norwegian Archaeological Review* 43(2): 128-144.
- Storli, I. 2018. *Ottars verden. En reiseberetning fra 800-tallet*. Stamsund: Orkana.
- Stylegar, F.-A. H. 2016. Ships and Sheep: Deserted and not-so-Deserted Farms in Viking Age Norway. In: V. Turner, O.A. Owen, and D.J. Waugh (eds), *Shetland and the Viking World*. Lerwick: Shetland Heritage Publications.
- Stylegar, F.-A., and O. Grimm. 2005. Boathouses in Northern Europe and the North Atlantic. *International Journal of Nautical Archaeology* 34(2): 253–268.
- Trier, B. 1969. *Das Haus im Nordwesten der Germania Libera*. Münster: Aschendorff.
- Urbańczyk, P. 1992. *Medieval arctic Norway*. Warszawa: Semper.
- Urbańczyk, P. 2002. Stauran: a farm in the landscape. In: P. Simonsen (ed),, *Middelalderarkeologi mellom Salten og Senja Tromsø, Tromura. Kulturhistorie* 35: 34–40.
- Vorren, K.-D. 1976. Et pollenanalytisk bidrag til spørsmålet om det eldste jordbruk i Nord-Norge. *Viking* 39: 171.
- Wickler, S. and G. Nilsen. 2012. Pre-Modern Boathouses. A maritime perspective from northern Norway. *International Journal of Nautical Archaeology* 41(1): 106-119.



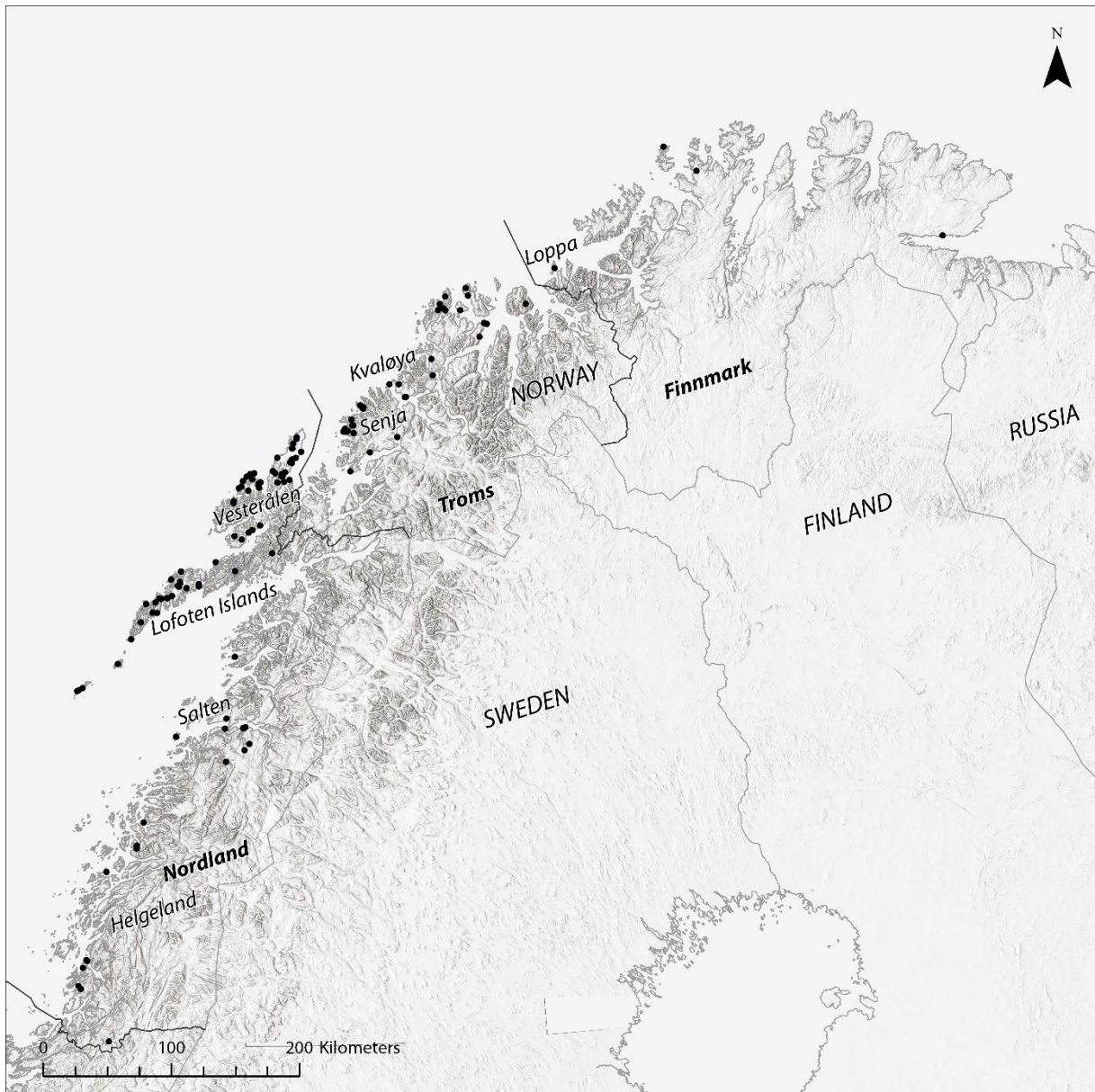


*Fig 1 Drone photo of the longhouse at Volland, Lofoten (photo: J. E. Arntzen).*



*Fig 2 Surface visible house ground at Grunnfarnes, Senja (photo: J. E. Arntzen).*





*Fig 3 Map of surface visible longhouses in northern Norway, based on the online database Askeladden, with one well-known but unrecorded house added in Kvikstadvika, Bodø (ill. J. E. Arntzen).*

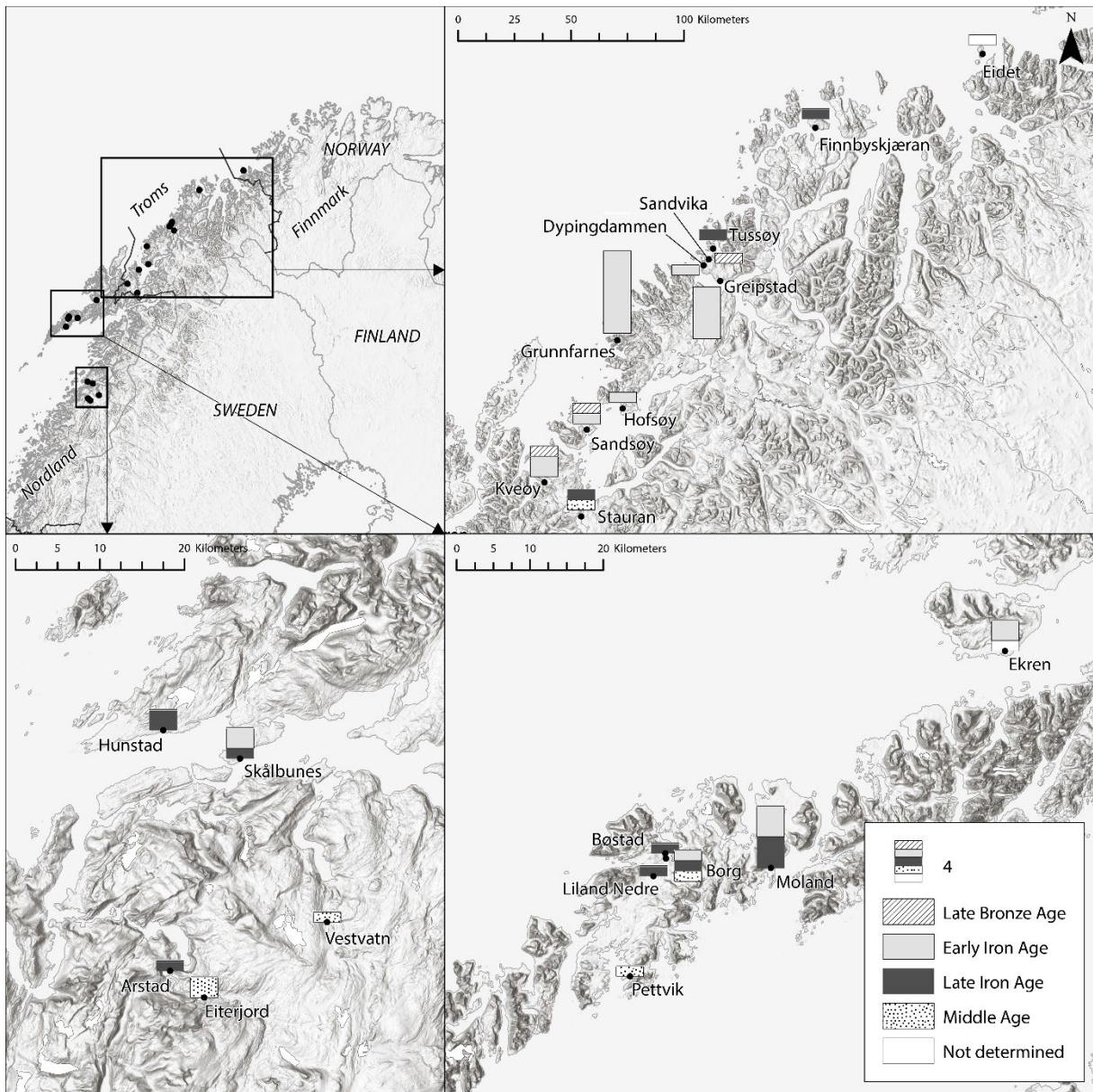
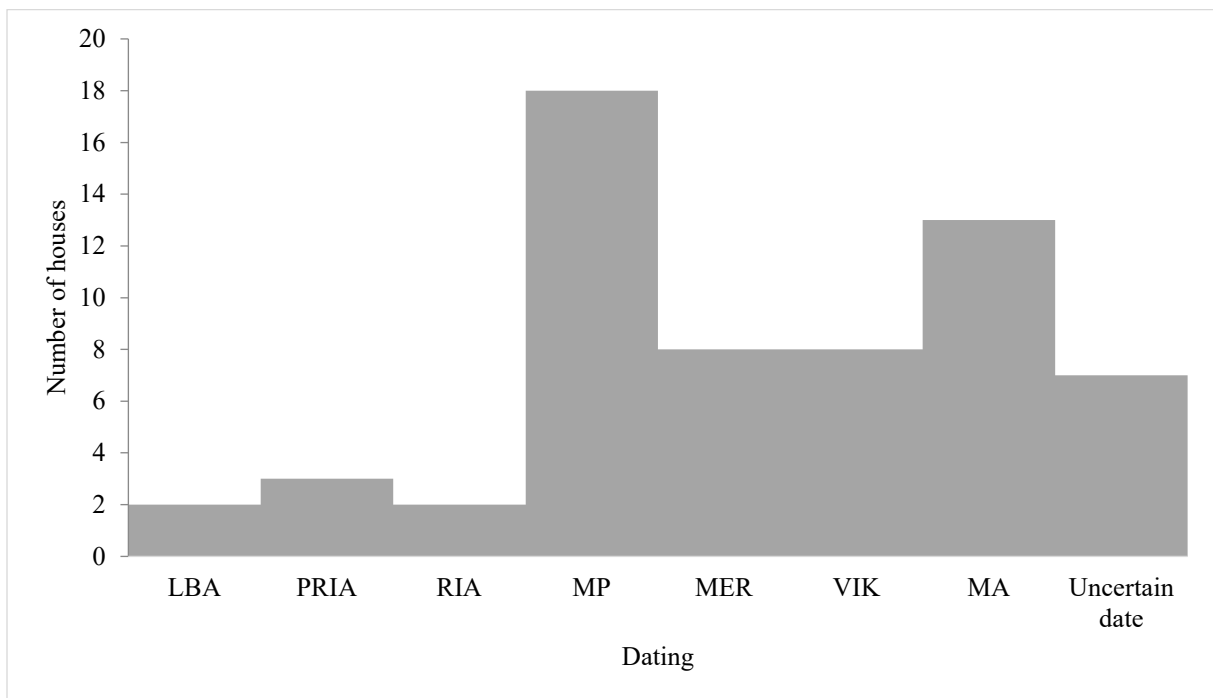


Fig 4 Map of excavated longhouses in northern Norway (ill.: J. E. Arntzen).



*Fig 5 Chronological distribution of the excavated longhouses in northern Norway. LBA=Late Bronze Age 1700-500 BC, PRIA=Pre-Roman Iron Age, 500-1 BC, RIA=Roman Iron Age, AD 1-400, MP=Migration Period, AD 400-550, MER=Merovingian Period, AD 550-800, VIK=Viking Age, AD 800-1050, MA= Early and High Middle Age, AD 1050-1300 (ill. J. E. Arntzen).*

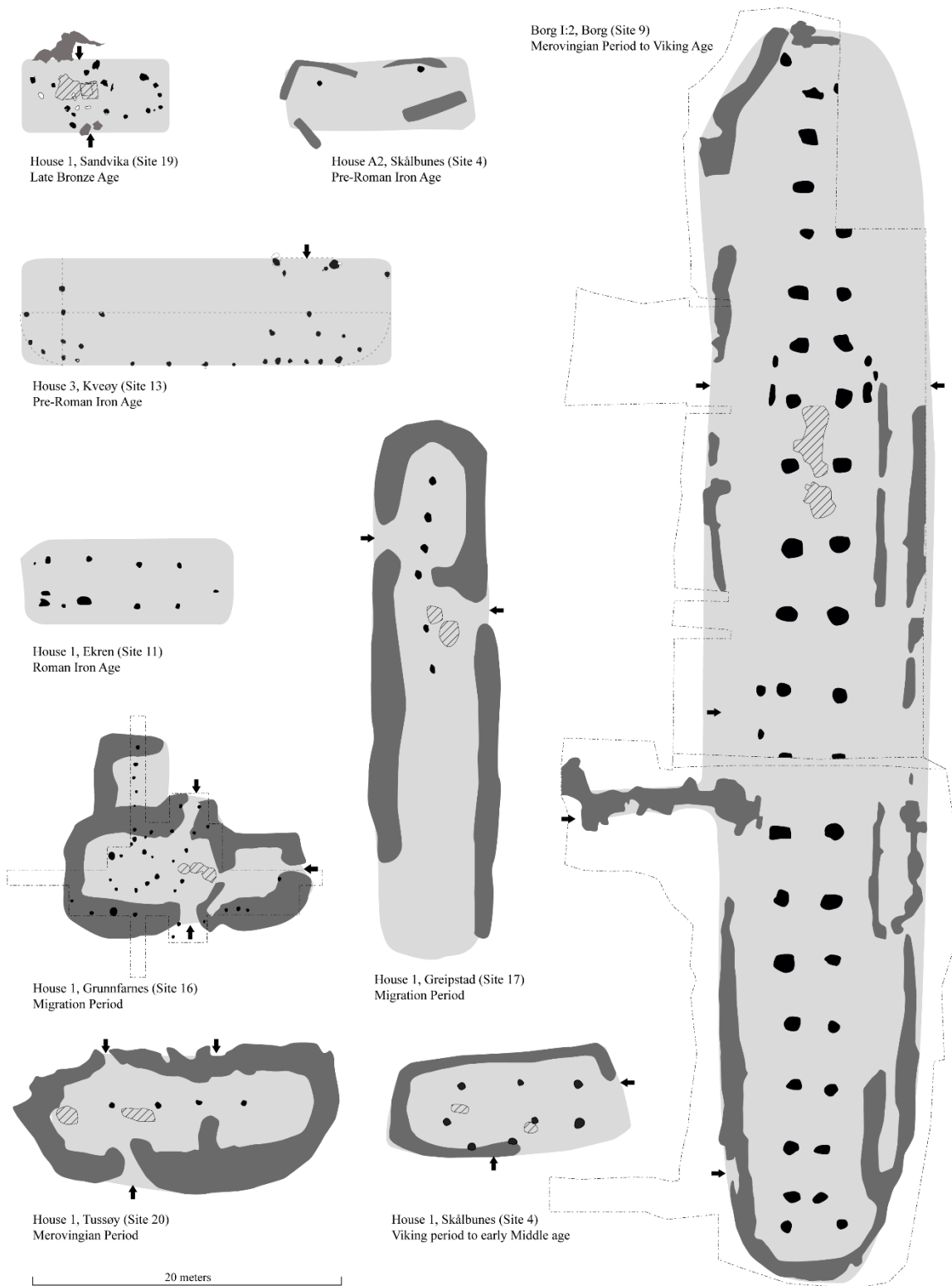


Fig 6 Selected plan drawings of excavated longhouses in northern Norway, with arrows showing recorded doorways (ill. J. E. Arntzen).





*Fig 7 Drone photo of the 2017 excavation of the longhouse at Dypingdammen, on Kvaløya outside Tromsø, with a view towards the open sea in the West (photo: J. E. Arntzen).*