

RURAL SETTLEMENTS IN MEDIEVAL NORWAY, AD 400–1400

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The paper gives an overview of the functional and formal development of the main house on the farm in Norway in the Middle Ages. Related issues are briefly discussed - the functional arrangement of the farm, the question of nucleated settlements, and the development in building techniques. As an introduction changes in the focus of Norwegian Settlement Archaeology are sketched.

In the 5th and 6th centuries the three aisled longhouse with a byre and a living section appears to dominate on rural settlements in all regions. From the 7th century onwards the diversity is greater. In northern Norway the longhouse is still built in the 10th century. In eastern Norway the functional fragmentation of the longhouse advances step by step until the domination of the two roomed timbered livinghouse from the 12th century onwards. In western Norway this fragmentation also occurs, but the longhouse without a byre also continues to be built, probably until modern times. Alterations in building techniques probably played a limited role in these developments.

Introduction

The focus of attention in Norwegian Settlement Archaeology has changed markedly over the years.¹ The main shifts in focus are reflected in the history of investigation into the settlements from the Migration Period - the classic period in Norwegian Settlement Archaeology. Until 1950 interest was mainly focused on the remains of the houses themselves. Nearly all excavations took place in southwestern Norway. Because of the local practice of building outer walls in stone, the remains of Migration Period buildings were first discovered in this area. The first excavation was conducted by Haakon Shetelig in 1907 (*Shetelig 1910*). In the years 1917-21 Helge Gjessing excavated several sites which were published after his death by Sigurd Grieg, who also conducted some excavations (*Grieg 1934*). Jan Petersen is the last of the central persons in settlement archaeology of the 1920's, 30's and 40's (*Petersen 1933; 1936; 1938a; 1938b; 1944; 1952; 1954*). Petersen excavated remains of 75 buildings. The discussion in this period centred around questions regarding chronological and technical development of the buildings and, on the basis of the finds, cultural history in general (*Henriksen 1994, 10-12*).

Following Anders Hagen's important excavations on the farm Sostelid, in Vest-Agder, southern Norway in 1946-49 (*Fig. 1:22; Hagen 1953*) the focus in settlement archaeology changed from the house to the farm. Central problems of this time were the organisation of the houses, grave mounds and fields (*Henriksen 1994, 13-17*). Questions on subsistence and economy also became more explicit. This approach was further devel-

¹ In preparing this paper I have benefited greatly from unpublished works by Espen Uleberg and Lars Pilø at the University of Oslo, and Trond Løken and Olle Hemdorff at the Archaeological Museum in Stavanger. I have also had useful communications with Trond Løken and Lars Pilø, and with Ingvil Øye at the University of Bergen, Anne Berg at the Norwegian Institute for Cultural Heritage Research, and with Einar Østmo and Perry Rolfsen at the University of Oslo. English revised by Sheila Coulson, University of Oslo. *Figure 1, 2, 3, and 4* drawn by the author.

oped in the 60's and 70's, especially by *Hagen (1962)*, *Ottar Rønneseth (1955; 1959; 1960; 1961; 1966; 1968; 1974)*, *Oddmund Møllerop (1957)*, and *Bjørn Myhre (1966; 1972; 1973; 1974; 1985)*.

In later works, mainly based on his excavations on Ullandhaug, Jaeren, southwestern Norway, Myhre turned his interests to the buildings themselves (*Fig. 1:23; Myhre 1975; 1980; 1982a; 1982b*). We find this change in interest in other works from the same time, for example Irmelin Martens' analysis of farmhouses in the mountain regions of southern Norway (*Martens 1973*), and Rolfsen's works in southernmost Norway (*Rolfsen 1976; 1977; 1984*).

In the 70's the social approach, including an economic and environmental approach, held a strong position in Norwegian archaeology. This is also evident in several works on settlement archaeology from this period (for ex. *Myhre 1978*) but this tendency is even more obvious in the 80's. In 1983 Myhre published a paper with a new approach to the farmsites, enlarging the scope of analysis from single farms to an entire district. By calculating the areas of the living-quarters on a number of farms he estimated the number of people on the different farms and drawing on the vast number of known sites, he calculated the size of the population in a part of the region of Jaeren in the Migration Period (*Myhre 1983*). The same problems were confronted by Olav Sverre Johansen in his investigation of population size in Viking age Vestvågøy, northern Norway (*Fig. 1:1; Johansen 1982*).

The economic and environmental approach has a long tradition in Norwegian Archaeology, and in the 1970's and 80's it gained a new momentum. In settlement archaeology the focus was especially centred on the kind and importance of subsistence and cash crop production in different regions (*Kaland 1979; Randers 1981; Bertelsen 1973; 1985; Bertelsen - Lamb 1995*).

This broad social approach has become the hallmark of Norwegian Settlement Archaeology in the 1980's, and is still so in the 90's. Problems centred around building history and development are still discussed, but often from new viewpoints (e.g. *Komber 1989*). At present a new generation of settlement archaeologists are finding their positions between this solid tradition and their own innovations. Several new excavations have been and are being conducted. Among these the investigations on Forsand in Rogaland, southwestern Norway is by far the most important (*Fig. 1:5; Løken 1983; 1984; 1987; 1988a; 1988b; 1991; 1992a; Løken et al. 1990*). In addition the reanalysis of extant collections from old excavations have produced new results (*Kristoffersen 1993; Larsen 1995*). In eastern Norway some archaeologists have been working with the agricultural exploitation of the landscape by analysing remains like clearance cairns and fossil fields (*Pedersen 1990a; 1990b; Jerpåsen 1993; Holm 1995*), and in the last 6-7 years new methods have been applied in the search for rural settlements (for ex. *Pilø 1993*). While the settlements in southwestern Norway were previously located by their highly visible stone walls, remains of settlements from the Bronze and Iron Age are now found throughout all parts of the country which were formerly cultivated. Few of these are as yet published, and I will only be able to include some of them. When the new generation of settlement archaeologists, in a few years time, manage to synthesise this vast new material, our knowledge concerning rural settlements will be much broader and deeper than today. It is my belief that the tradition for working with problems related to economy and society will prevent Settlement Archaeology from being isolated within the discipline, and facilitate its integration into the general archaeological debate on Prehistoric and Historic societies.

As the social and economic approach in settlement archaeology will be the theme of the next meeting in this series of congresses, I will not deal with this issue here. I will instead concentrate on the other central theme in Norwegian Settlement Archaeology, the formal and functional development of the main house on the farm in Medieval Norway.

The Migration Period, ca. AD 400-600

The structure of the farm in the Migration Period is best known from southwestern Norway, where house walls and fences were made of stone. Here it is possible to identify a larger part of the farm structure (*Fig. 2:A*). A longhouse, and in some cases some smaller buildings, were built in close connection to the infield. A fence connected to the barn surrounded the infield, and a cattle pen led from the byre to the outfield. Grave

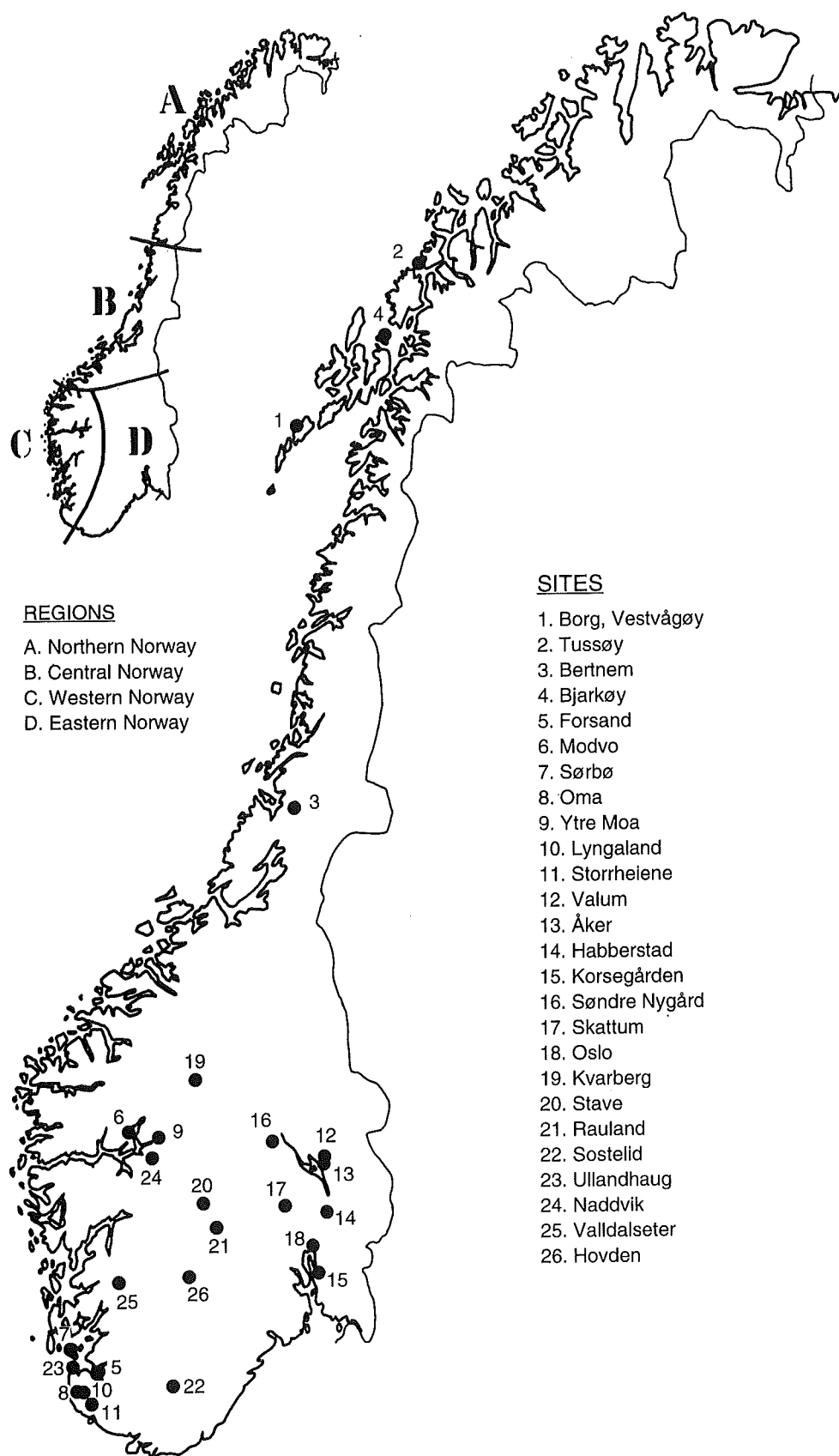


Fig. 1. Sites and regions mentioned in the text.

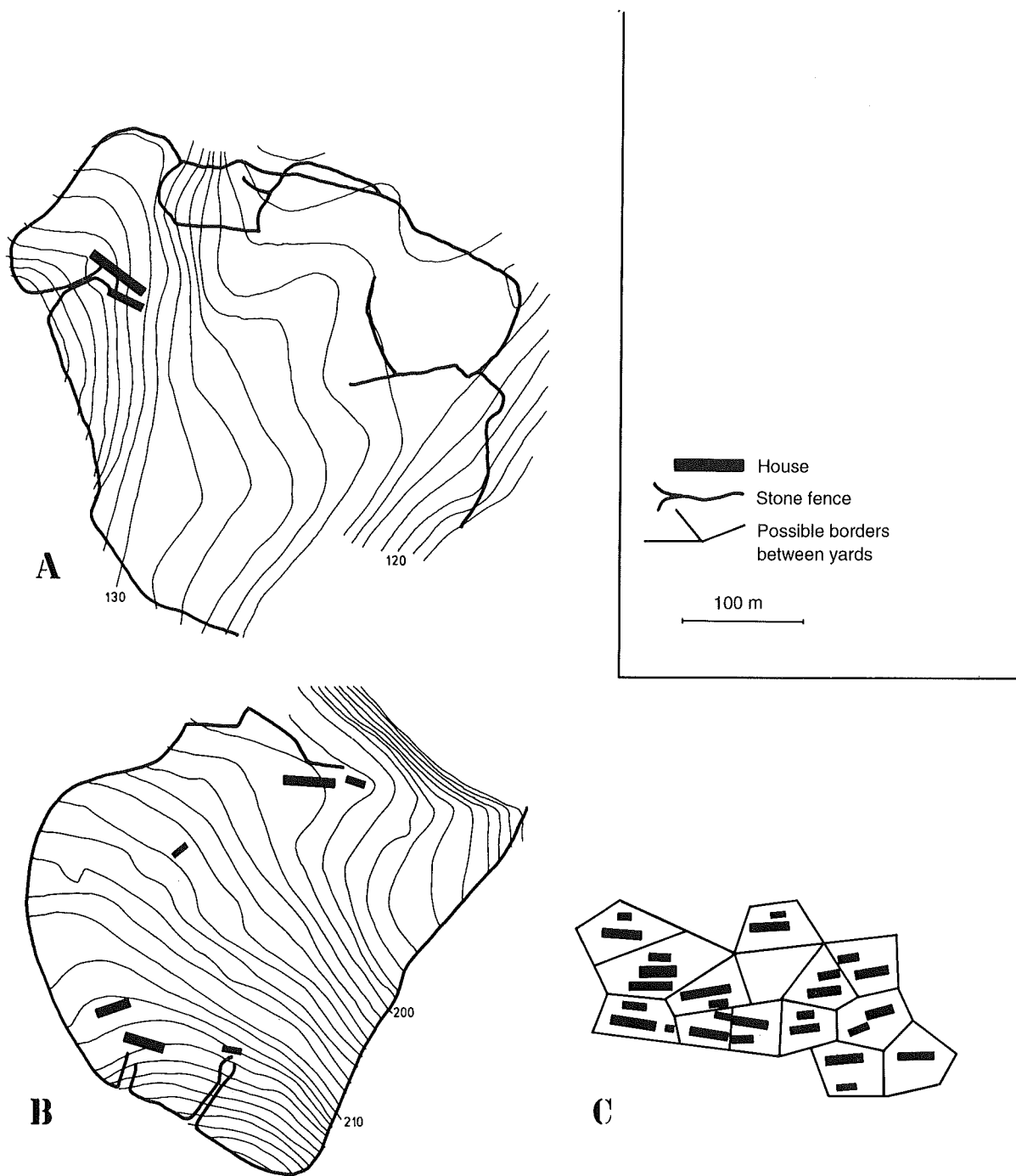


Fig. 2. Single farm (A), nucleated settlement (B) and village (C) from the Migration Period, AD 400-600. A. Lyngaland, Jaeren, southwestern Norway. The fence encircling the innfield is interrupted in the southern and central eastern part by modern activity (after *Petersen 1936*, fig. 59). – B. Storrsheien, Jaeren, southwestern Norway (after *Petersen 1933*, fig. 60) – C. Forsand, southwest Norway (after *Løken et al. 1996*).

mounds and clearance cairns were scattered on the infield, which normally was about 25 acres in size (*Myhre 1972*, 14). Most farms appear to have only been inhabited by one household, often in addition to slaves, but nucleated settlements also occur. In these nucleations several households, each occupying a separate longhouse, shared the same infield. The individual longhouses in these nucleated settlements were normally positioned some distance from the others, connected by the fence surrounding the infield (*Fig. 2:B*). However, in one instance, at Forsand, in Rogaland, southwestern Norway, a proper village has been found, with 13 longhouses, each surrounded by a small courtyard bordering on the next (*Fig. 2:C*).

We as yet lack general analyses into the structure of the settlements in the rest of Norway. Since fence remains are normally not found in these regions, it has not been possible to reconstruct any connections between the farms. However, nucleated settlements, and maybe also villages, may have been more common than has been formerly assumed.

The longhouse

As mentioned earlier, the Migration Period main house from southwestern Norway is well known. Until recently the layout and the construction of the houses in the central eastern region of Norway has been an open question. During the last 5-6 years a number of important, but as yet generally unpublished excavations, show that the main buildings on the farms are of the same type found in the southwest (*Uleberg 1990; Pilø 1993; forthcoming; Skre 1996*). Results from the relatively few excavations from other parts of the country indicate that the main buildings also in these regions were of generally the same kind as those found in the southwest. Although, as we shall see, there are some variations.

The main houses from the Migration Period seem to have been of varying size but, with some geographical and chronological variations, were generally of the same form. They were three aisled longhouses. The roof was supported by pairs of posts and the walls were constructed of wood or wattle-and-daub, sometimes covered on the outside by gravel, stone or turf. These covering layers would have provided extra isolation. The stone walls must have been filled with soil - otherwise they would have no effect (*Komber 1989*, 29f). The roof was probably first covered with birch bark, then with turf (*Komber 1989*, 36f). Some of the variations in the building type are illustrated by the examples presented in *Fig. 3*.

On Forsand in southwestern Norway, over the last 15 years Trond Løken has excavated the remains of 235 houses stretching over a period of 2000 years, ending in the Migration Period. Two of the longhouses on Forsand show some of the important features in buildings in the late Roman Iron Age and Migration Period (*Fig. 1:5; Fig. 3:A; Løken 1983*, 84-87; *Komber 1989*, 18-21). The inner length of the two houses are 30.4 and 32.2 m respectively. The walls are curved in both structures with the maximum width in the northern building being 8.8 m and 6.7 m in the southern.

The rows of internal posts are also curved. The distance between the posts in the same pair is 60-70 cm greater in the central part of the houses than at the ends. The distance between the pairs in the same building also show some variations. In the western part of both buildings the distance is between 4.4 and 6.3 m, and in the eastern around 3 m. In the largest interval between the pairs we find the hearth in both buildings.

In both houses the construction of the walls indicate that the roof has been supported not only by free-standing posts but also partly by the walls. Both houses have two entrances in the western section, one on the northern and one on the southern wall. This appears to be normal in Norway, as opposed to Denmark and northern Germany, where entrances are in the central part of the building (*Hvass 1982*, 136). The southern building in addition has two entrances in the eastern part. In this building there is also a hearth in the eastern section. This building has probably had living-quarters at both ends, possibly with a small byre in the centre. The northern building probably had a byre in the entire eastern section.

The second example is from the farm Bertnem in Trøndelag, central Norway (*Fig. 1:3; Fig. 3:B; Farbregd 1980*, 62-65; *Løken 1992b*). On this site three main houses were built successively through the Migration Period. One of the main buildings on the site was about 40 m long. We find many of the same features here as were found in the Forsand houses: the distance between posts in the same pair is larger in the central section than at the ends, the distance between the pairs is larger in one end of the building than in the other. Some differences are also found. The distance between the posts in the central pairs is greater. In one of the three houses it is 4.75 m, which is the greatest I know of in a Migration Period house in Norway. The

hearth also seems to have been placed differently, not between the second and third pair of posts in the western section of the building, but rather in the central part.

On the farm Valum, Hedemarken, in eastern Norway, excavations by Lars Pilø have resulted in the detection of 3 main buildings, all from the Migration Period (*Fig. 1:12; Fig. 3:C; Pilø 1993; forthcoming*). The largest was 52 m long and 9.5 m wide. The central features of the building are much the same as in Forsand and Bertnem. The distance between the posts in the same pair, and between the pairs, vary in the same way. The walls appear to have been made of wattle-and-daub.

While the buildings on Forsand, Bertnem and Valum have several traits in common, the next longhouse to be discussed, from the farm Modvo, Sogn, western Norway, differs in several respects (*Fig. 1:6; Fig. 3:D; Bakka 1976; 1993; Kristoffersen 1993*). This house was about 40 m long and about 10 m broad. It was cut into a slope on the northern side, and rested on an artificial terrace on the southern. The distribution of finds and hearths shows that the northern side has been a byre, separated from the living area by a ditch, and possibly by an inner wall, of which no remains were found. The house has been rebuilt several times. This resulted in a very complicated site, and it has not been possible to connect the different postholes and hearths to the phases. At the time of excavation, in the early 1960's, the knowledge concerning housetypes and excavation techniques was poorer than today. Therefore it is difficult to rely heavily upon the functional division of the Modvo house. A reinvestigation of the documentary evidence from the excavation in the light of the present knowledge of house types may change the interpretation of the remains.

These four longhouses have a length varying between 30-52 m. On smaller farms, far smaller longhouses have been excavated. On Korsegården, Follo, eastern Norway, Espen Uleberg has excavated the remains of 8 longhouses from the Roman Iron Age/Migration Period. They vary from 10 to 17 m in length (*Fig. 1:15; Fig. 3:F; Uleberg 1990 and 1993*). I have excavated two sites on small farms, Habberstad and Kvernås, Romerike, eastern Norway (*Fig. 1:14; Fig. 3:E*). On Habberstad the remains of 5 houses were found, on Kvernås 2, each house following successively after the other on each site. The houses were between 15 and 21 m long, and have probably been divided between living-quarters and a byre (*Skre 1996*).

As we see, there are both functional and formal contrasts and similarities in the wealth material from longhouses from the Migration Period in Norway. When analysing these buildings, we must bear in mind that we only know of a small portion of the houses which once existed. We have a firm base for the assumption that the longhouse was the normal main house on regular farms. But the range of functional and formal variation in this building type might have been much greater than we know at present, especially in regions other than southwestern Norway. The building from Modvo provides a reminder, regardless of the uncertainties connected to the interpretation of this site.

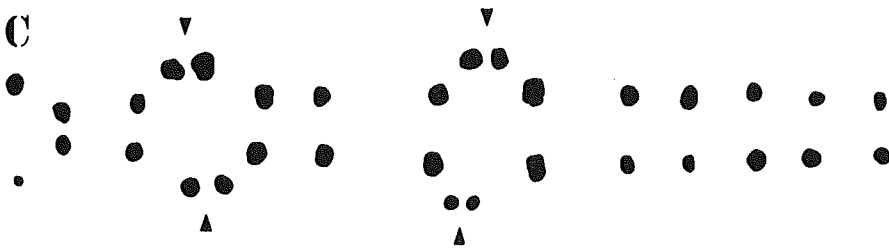
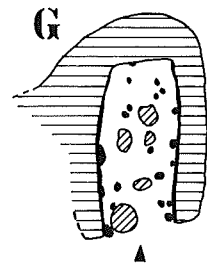
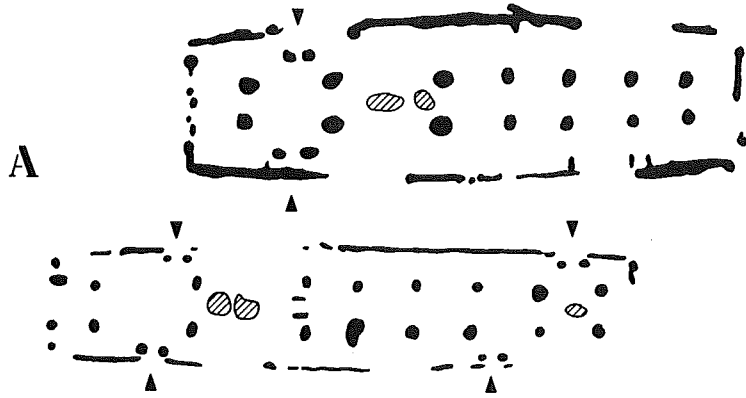
Other types of living houses

Longhouses dominate on the regular farms all over the country in this period. But on other types of settlement, a different kind of main building appears. In the mountain regions in southern Norway we find small three aisled houses, which functionally differ from the longhouses (*Fig. 3:H; Fig. 1:24*). They do not appear to have been divided by inner walls, they have a central hearth, and normally they have the entrance in the end of the house. The houses seem to have been built for habitation only (*Martens 1973, 5-18; Kristoffersen 1992, 178-183, 254-257, 277-281*).

The same kind of building also appears on the circular shaped settlements in the lowlands. Twenty two settlements of this type are known. These are found primarily near the coast in the southwestern and in the

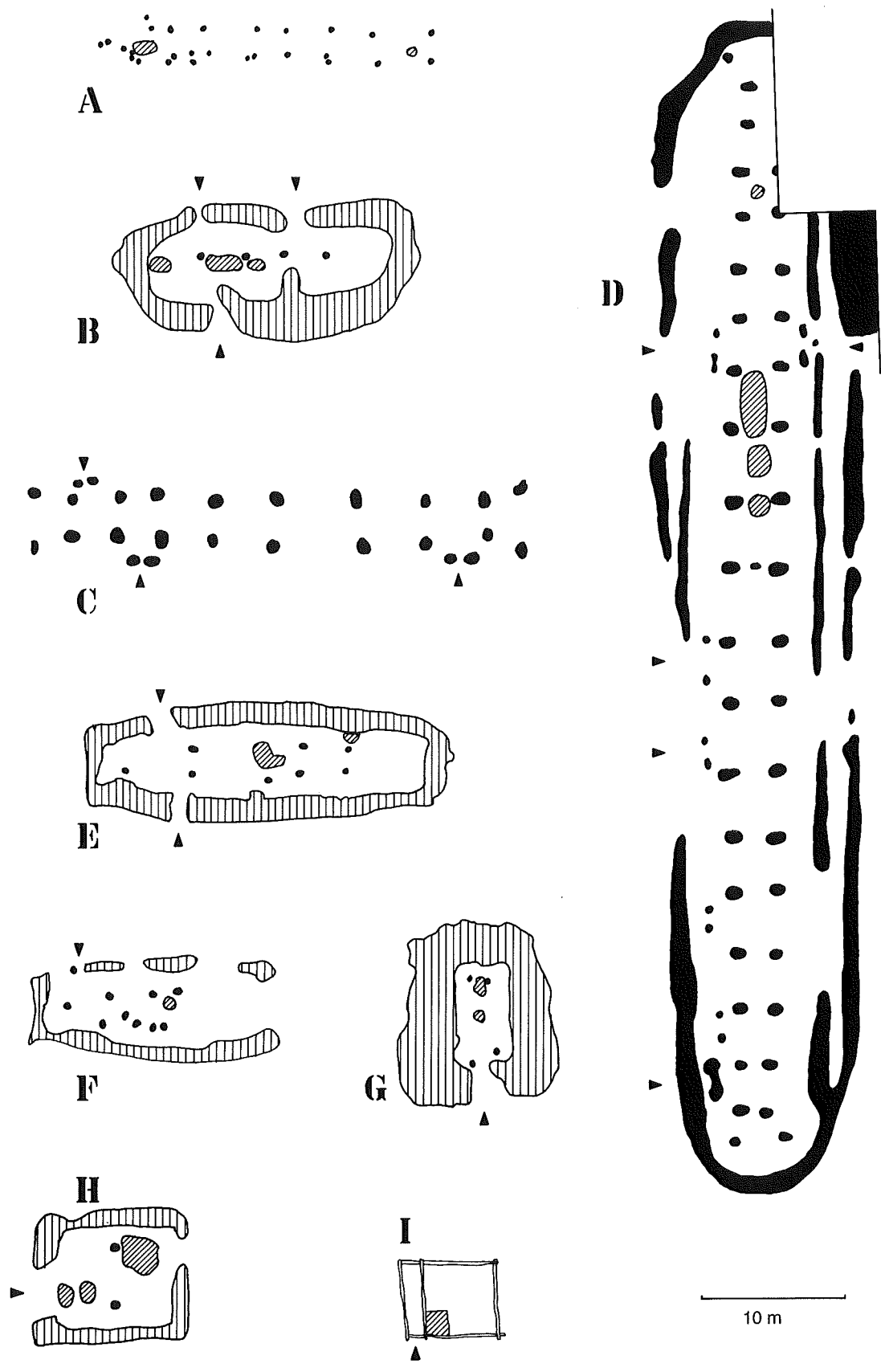
Fig. 3. Longhouses (A-F) and single roomed houses (G-H) from the Migration Period, AD 400-600.

A. House II phase 1 (upper) and house III (lower) from Forsand, Rogaland, southwest Norway (after *Løken 1982, fig. 4*). – B. House from Bertnem, Trøndelag, central Norway (after *Løken 1992b, 26*). – C. House from Valum, Hedemarken, eastern Norway (after *Pilø forthcoming*). – D. House from Modvo, Sogn, western Norway (after *Bakka 1993, fig. 9*). – E. House I from Habberstad, Romerike, eastern Norway (*Skre 1996*). – F. House IV from Korsegården, Follo, eastern Norway (after *Uleberg 1993, fig. 13*). (Possibly Roman or late Pre-Roman Iron Age.) – G. House I from the circular shaped settlement with 16 houses on Bjarkøy, Troms, northern Norway (after *Johansen - Søbstad 1978, fig. 2*). – H. House from the mountain settlement on Naddvik, Sogn, western Norway (after *Kristoffersen 1992, fig. 130*). Houses G and H have remains of wooden walls inside the outer turf- and stone walls. Legend: 1. Stones. 2. Hearth. 3. Postholes. 4. Wall trench. 5. Stone wall. 6. Trench. 7. Turf wall.



	Stones
	Hearth
	Postholes
	Wall trench
	Stone wall
	Trench
	Turf wall

10 m



more suggestions have been forwarded. We do not want for imaginative suggestions, but in my opinion, we lack any empirical basis for choosing among them.

The functional arrangements of the farms

Myhre has analysed the function and room division on several excavated farms from southwest Norway, most of them with one or more houses (Myhre 1975; 1980; 1982a). The empirical basis for his interpretations is the distribution of finds, and features in the buildings, such as doorways, hearths, and the remains of floors and walls. He found that normally the longhouse was divided between three rooms: a byre, a central

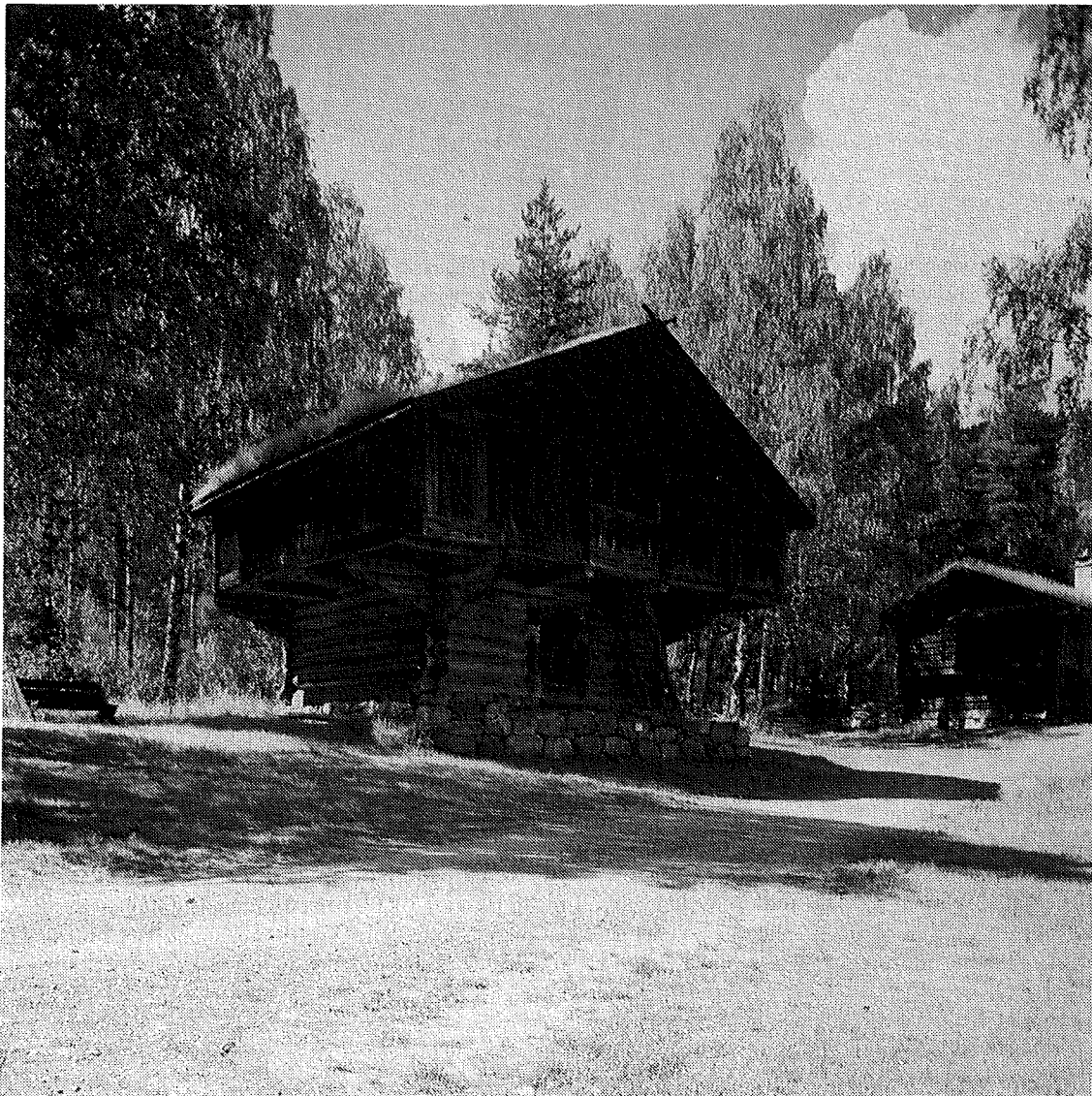


Fig. 6. The loft from Stave, Ål in Hallingdal, eastern Norway, now at Hallingdal Folk Museum, is dendrochronologically dated to AD 1295 (Berg 1990, 28). This type of building was used for housing guests and storing precious clothes, etc. The oldest preserved lofts date from the last decades of the 12th century. The loft was normally built on large and medium size farms in central and southern Norway from the 12th century onwards, possibly also earlier. (Illustration from Berg 1989, 179).

living-room with a large central hearth, and a living-room without a central hearth. However, we also find some longhouses with more rooms, and some with less.

On the farm Ullandhaug Myhre found three houses in addition to the longhouse. The longhouse was divided between two separate living-rooms with central hearths in the middle section, a byre at one end, and living-quarters without hearths in the other end. The second biggest building consists of a feasthall with a hearth in the southern half, and a sheep barn and storage room in the northern section. The third building was probably a living area, and the last a hay barn.

In the Forsand village no fences or ditches are preserved between the individual farms, but nevertheless it is possible to draw probable borders between them. The normal farm consisted of two buildings: the longhouse and a smaller three aisled building. This secondary house was normally 15 m long, and 4.5-5 m across. This building was in Løken's opinion probably used for the production of tools, textiles, etc. (Løken *et al.* 1996).

The same kind of secondary buildings were found on Valum and on Bertnem, both south of and approximately 20 m from the longhouse. On Bertnem a sunken hut was found in the eastern outskirts of the yard between these two buildings.

The 7th to the 14th century

For many years Late Iron (7th to the middle 11th century) and Middle Age (middle 11th to 15th century) Settlement Archaeology has had a low priority among Norwegian archaeologists. Although house remains and objects from this period have been discovered, the focus of interest remained with the comparatively homogenous and richer materials of the Roman Iron Age and Migration Period. But in 1978, Myhre showed that the existing material from southwestern Norway had been underestimated. He pieced together the information from many of the old investigations, drew on results from recent local investigations, and was able to draw interesting conclusions about the house and farm in the Late Iron and Middle Age (Myhre 1982a, 200). For the eastern part of the country Einar Østmo has recently made a similar study (Østmo 1991, 130-131). Since then even more sites have been excavated. But, as I emphasised when dealing with the Migration Period, the empirical basis is still weak. The existing material is more meagre, and reveals more regional variation than earlier. The need to show great caution when generalising is, therefore, even more pressing than for the earlier period. And the Medieval Period, that is from the middle 11th century onwards, is still a dark era in Norwegian Settlement Archaeology. But since we have some preserved buildings from this period, I will, nevertheless, try to trace some lines in the development of the house and farm into the Late Medieval Period.

Concerning the building technique, a major change occurs, probably in the 11th and 12th centuries. The old technique of using posts as a basic construction element, is gradually more or less replaced by corner timbering. In this new technique, logs are joined together in the corners, the walls support the roof, and the inner area is unencumbered by supporting posts (Figs. 6 and 7).

However, the post technique does not disappear, but is, probably in the same period, developed into the stave technique. There are two elements in this development. Firstly, the posts are now lifted from holes in the ground and placed onto sills resting on stones. Secondly, the posts are integrated in the outer walls. In some stave churches from the late 12th and early 13th century posts also stand freely in the nave, but in secular buildings posts are, as far as we know, always integrated in the walls. To date, freestanding posts have yet to be found in secular buildings younger than AD 1100. Although posts on sills are known from walls of the Migration Period longhouses, with the advent of the stave technique posts in the walls are now found to support the roof without the assistance of freestanding posts in the room.

The two aspects of this development, the posts moving from holes to sills and from the room to the walls, did not occur totally in parallel. In several 11th and early 12th century churches, and on one secular site, Valldalseter I dating from the 12th century, posts in the walls are positioned in holes in the ground (Fig. 1:25; Martens 1973, 20-29; Myhre 1980, 328-331).

One difficulty in interpretation arises for the archaeologist with the disappearance of the earthdug posts. Frequently the only trace of the essential wall is now a simple row of stones, as is found in the main building

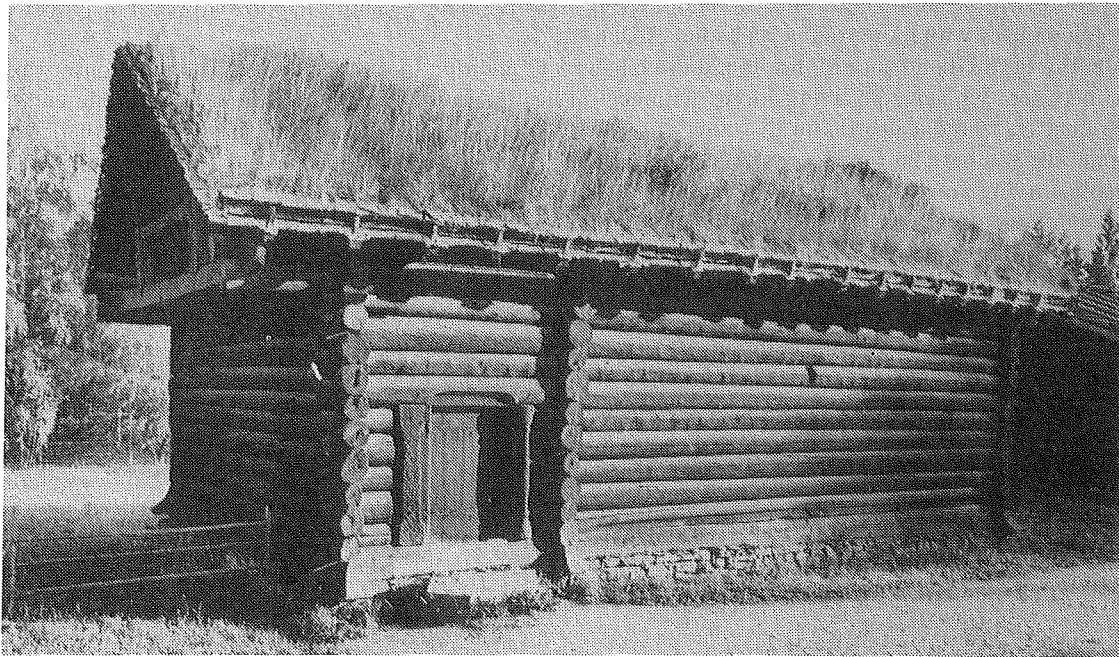


Fig. 7. This stove from Rauland, Uvdal, eastern Norway, now at the Norwegian Folk Museum, Oslo, is dated by a runic inscription and the style of the decorated doorways to 1250-1350 (*Berg 1990*, 116-125). The building has a three room plane with a main room of 58 m² and a hearth in the corner. Above the two small rooms just inside of the entrance there is a small loft with an external gallery. Excavations on the original site indicated that this house was preceded by a single roomed stove with a hearth in the corner. A radiocarbon determination from the hearth indicates a dating to the 10th/11th century. (Illustration from *Berg 1989*, 157.)

at Hovden, Telemark (*Fig. 1:26; Martens 1973*, fig. 27). Now there are few possibilities to decide whether the walls were made by corner timbering or by the stave technique.

These technical changes occur at different times throughout the country, and probably in various types of buildings and in different social strata. Corner timbering, which requires a ready supply of long straight logs, is most common in eastern and central parts of Norway where coniferous wood is abundant. Yet this technique gradually dominates in central and southern parts of the country; at least in the case of buildings made for habitation. In the late parts of the Middle Ages the stave technique virtually disappears, with the exception of some parts of the country where it has survived in simpler forms until the present day (*Gjaerder 1982*).

The structure of the settlements are well known from the later parts of the period only, that is the 13th century onwards. Single farms certainly existed in the whole period. But nucleated settlements of different sizes, from 2 to 12-14 farms are not uncommon in any part of the country. Some of these settlements may originally have been a single farm, later split by the division of inheritance. But the origin may vary, and we can not exclude the possibility of some of the settlements being nucleations from the time of foundation.

Turning now to the development of the main house on the farm, we can trace two lines in the development in this period. The first line runs from the large multifunctional longhouse of the Migration Period to the single or dual function buildings of the 13th and 14th centuries. This development may be called the functional fragmentation of the longhouse, and it appears to have taken place gradually over several centuries, from the 7th to the 12th. It does not, as was earlier assumed, coincide with the gradual domination of the use of corner timbering, which probably occurred in the 11th and 12th centuries.² The result of this development towards buildings with one function only, is the large quantity of houses in each settlement in the Late Middle Ages, as in the reconstruction of Kvarberg, northern Gudbrandsdalen, eastern Norway. In this settlement with two farms, there were approximately 40 buildings in the 18th century, and probably about the same in the 14th (*Fig. 5*).

² Evidence from the medieval town Oslo indicate that corner timbering was introduced in the early 11th century, and dominated from this century onwards (*Fett 1989*, 81). The situation is the same in the other Norwegian medieval towns, but this development may differ from the rural areas.

There is also a second line in the development, a line of continuity. The multifunctional longhouse continues to be built in some regions, in northern Norway almost without alterations as late as the 10th century, and maybe later - in southwestern Norway it persisted in a developed form up to modern times.

Although it is acknowledged that the archaeological evidence is scant I will attempt to provide a regional survey.

Southwestern Norway

From *Myhre's* (1982b, 116) analysis of 11 buildings from the coastal and mountain regions in southwestern and western Norway, he finds the parallels between the longhouse in the Migration Period and in the Viking Age and later periods striking. Furthermore the development up to the Late Medieval Period is characterised by small steps rather than dramatic leaps. Three aisled longhouses were built in the 9th and 10th centuries. From the 7th and 8th centuries only one house is known, from Sørbo, Rennesøy, and this is a three aisled longhouse (*Fig. 1:7; Fig. 4:A; Hemdorff 1990*).

The most dramatic change from the Migration Period to the Later Iron Age is that the byre is no longer normally a part of the longhouse, but is built as a separate building. This is evident both in the house from Sørbo, and in the house from the Viking Age, excavated on the farm, Oma (*Fig. 1:8; Fig. 4:E*).³ Nevertheless, the internal division of the living-quarters in the longhouse shows a continuous development from the Migration Period to the later periods. The longhouse is now normally divided into two or three rooms. Two rooms, one with a central hearth and one without, are both living-quarters. The third room may have been used for storage. With the exception of the barn, the similarity to the Migration Period longhouse is striking (*Myhre 1982a; Randers 1981; Kaland 1979; Sognnes 1974; Martens 1973*).

Among the excavated building remains from the 12th and following centuries we also find longhouses (*Myhre 1982a*), but the number of excavations is low. Few if any medieval buildings are preserved from this region, but from more recent times we know that the longhouse was the main building on some farms, especially in the southwestern part of the region. In the 19th century the main sections of the longhouse in this area were corner timbered (*Myhre 1980, 391*). We must also entertain the possibility of different parts of the longhouse being built using different techniques, as is known from modern times from other parts of the region (*Brekke 1982*). Even though we lack conclusive knowledge about the development of the buildings in the 12th to the 16th century, the archaeological evidence and younger preserved buildings indicates that the multifunctional longhouse in this region has a continuous history from the Bronze Age through to recent times (*Myhre 1982a, 211-214; Stoklund 1974; Løken 1988b; Brekke 1982; Laerum et al. 1990*). But the development of the stave technique and the question of when corner timbering gained a foothold in this region, is still unanswered (*Fig. 4*).

The longhouse is not the only form of main building in this region in the 9th to the 14th century. In the Viking Age, and in a greater number in the 11th century onwards, we find smaller houses with only one room as the main house on some farms. Those from the Viking Period have posts carrying the roof, those from the later period were built by corner timbering or the stave technique. On the Viking Age farm of Ytre Moa, Sogn, the living-houses in several phases from the Viking Age, were one roomed three aisled houses. The walls were made of wooden planks and the entrance was at the end; the three other walls were covered by a stonewall (*Fig. 1:9; Fig. 4:G; Bakka 1965; 1976; Larsen 1995*). This is not a new type of building. Buildings with the same features from the Migration Period have, as previously noted, been found in small dwellings in the mountain regions and in circular shaped settlements. Examples from the Later Iron Age in the mountain regions are also numerous (*Kristoffersen 1992, 164-169, 170-172, 188-196, 197-201, 208-213, 234-238, 242-243*). However, the new development on Ytre Moa is that this type of building is the main building - the living-quarters - on a big farm, not the single building on small dwellings in marginal areas.

3 There may be one possible exception to this, the 12th and 13th century longhouse from the mountain farm Hovden Telemark, southern Norway (*Martens 1973, 45*), and more exceptions will probably arise as the evidence increases. Regardless, the general development towards a separate cow barn seems evident. However, as *Myhre (1982a, 206)* points out, longhouses with a cow barn are still known from recent times. We must allow for this occasionally being the case in the preceding centuries too, particularly on smaller farms.

As yet, too little is known about the main buildings on the larger farms from the Later Iron Age and onwards. Most excavations have been undertaken in marginal areas and on smaller farms. The only two exceptions, the single roomed building on Ytre Moa and the three roomed building on Oma, reveal two very different types of buildings. The evidence is fairly conclusive concerning the byre being separated from the main building some time in the 7th or 8th century. There also appears to be a tendency to construct single roomed buildings for purposes that earlier would have been sheltered in longer buildings with more rooms. Still the old form of living-quarters, the longhouse with two or three rooms, are built on many occasions, probably right up to recent times. Generally there seems to be a greater diversity in the housebuilding from the Viking Age, with different types of buildings being erected for the same purposes through several centuries.

These changes in the layout and function of buildings do not seem to be directly connected to changes in building techniques. The functional division of the longhouse from the Migration Period had already advanced a step or two when corner timbering was introduced and the roof-carrying posts were moved onto sills. This probably occurred in the 11th and 12th centuries. The longhouse without a byre appears to integrate the changes in building techniques without changes in the functional concept of the building. And the occurrence of a single roomed building as the main house on the farm predates the occurrence of corner timbering.

Eastern Norway

There are few sites from the 7th to the 12th centuries in eastern Norway, but the ones we know show several of the same characteristics noted in western Norway. The longhouse appears to have been in use, but there is a more uniform tendency towards distributing the functions of the longhouse between several buildings. Outside the medieval towns we have virtually no excavations of settlements from the 12th century and later. Preserved buildings take over as our main source of knowledge about farms and buildings. The oldest of the preserved buildings were erected in the latest part of the 12th century, and of the nearly 150 preserved buildings from the 13th and 14th centuries, most are from eastern Norway (*Figs. 6 and 7*).

None of these buildings are longhouses, and no information from written sources indicate that the longhouse was in use in eastern Norway after the 11th century, as opposed to the southwestern part of the country. This development has been attributed to the corner timbering technique, which supposedly favours buildings with walls with a maximum length of one log. Older excavations of Viking Age farms in eastern Norway seemed to indicate that corner timbering was common in the Early Viking Age housebuilding (*Grieg 1938*). Results of recent reinvestigations of these older excavations demonstrate that this was not the case (*Komber 1989*). The supposed central role of the corner timbering in the splitting up of the older longhouse must, as we shall see, be seriously questioned.

The only known longhouse with a byre from the Later Iron Age in southern Norway was discovered in 1994 at Åker in Hedemarken, eastern Norway (*Fig. 1:12; Fig. 4:C; Pilo forthcoming*). The building was first thought to have been constructed in the Migration Period, due to its likeness to buildings from this period. However, the radiocarbon datings from remains of roof-carrying posts show that the correct date is the 8th and 9th centuries. Recognising this fact, some differences from the Migration Period buildings in the same region may be interpreted as chronological. The distance between the pairs of posts in this building is greater in the eastern part, which could indicate the location of the living-quarters. The byre would have been located in the western part. The building has entrances on both sides in the western section. In Migration Period buildings the entrances are built exactly opposite each other, but in this structure we see they are placed between adjacent pairs of posts. This may be a development that occurred over time, maybe in the 7th or 8th centuries.

In western Norway the byre seems to have been a separate building at this time. This is probably not the case in the building from Åker. More excavations are needed before we know whether this is the norm in eastern Norway in the Early Viking Age.

The following two sites are slightly younger than the Åker site, and they are substantially different from the Åker-building. The dating is hard to determine, but the houses have probably been used between the 9th and the 12th century (*Hagen 1953, 183; Martens 1973, 77; Rolfsen 1984*). As is found in western Norway in the same period, the byre is no longer a part of the main house. The remains on both sites were earlier inter-

preted as remains of corner timbered buildings, but as *Komber* (1989, 142-154) has shown, these buildings most probably had posts carrying the roof. In some cases the posts were placed in holes in the ground, and in some instances they were integrated in the walls, either in holes or on sills. Posts are not necessary in the corner timber technique, where the roof is carried by the walls themselves. Here the walls must have been built using another technique; most probably planks standing or lying between posts and sills. The building from Søndre Nygård, Gudbrandsdalen, has distinct similarities to the contemporary building from Oma, in southwest Norway. The hearth lies in the middle of the building, which was probably divided in two or three rooms, like the buildings from the southwestern part of the country (*Fig. 1:16; Fig. 4:F*).

The remains from Skattum, Hadeland show a hearth in the corner and postholes. Probably the main building was built in some kind of stave construction (*Fig. 1:17; Fig. 4:H*).

These new analysis of the old excavations revitalise the discussion on the dating of the corner timbering technique. In Norway the oldest known examples of this technique are from the grave chambers in the Viking ship burials from Oseberg and Gokstad, which are dated by dendrochronology to 834 and AD 900-905 (*Bonde 1994*). This was earlier thought to prove the total domination of the corner timbering in the Viking Age house building in eastern Norway (*Grieg 1937*), but this can no longer be considered to be the case.

We will now turn to the existing buildings, dating from the late 12th century and onwards, and to the remains from the medieval towns of the same kind of buildings going back to around AD 1000. Most of the preserved buildings are found in eastern Norway, because the climatic conditions in parts of the region are excellent for the preservation of wooden structures (*Berg 1989, 93*). Most of them are storage buildings, in Norwegian called *loft*. These are most often corner timbered, and the top floor in most instances has an external gallery in stave construction. The ground floor was normally used for storing meat and cereals. The top floor was originally also used as a feast hall and for housing guests, but later on it was predominantly used for the storage of precious clothes, etc. This building type appears to have taken over some of the functions earlier located in the longhouse. The *loft* does not have a hearth (*Fig. 6; Fig. 1:20*).

The preserved living-houses, in Norwegian *stove*, normally have a two room plan. In addition to the main room which contains a hearth, there is a smaller room in the end of the building. This room is sometimes furthermore divided in two, and in some instances there is a small loft. The entrance to the building, normally placed on one of the two longest walls, gives access to the small room at the end, from which a door leads into the main room. A low bench running along the three outer walls - at the end of the room surrounding a large table - is the normal furniture. The hearth is either situated in the centre of the room, or sometimes in the corner.

Remains of the numerous medieval buildings excavated in Oslo, eastern Norway, may shed some light over the development of this type of building (*Fig. 1:18; Fig. 4:I*). Here the two roomed *stove* with a hearth in the corner of the main room is the normal living-quarters in the 12th to the 14th century. In the 11th century *stove* in Oslo the hearth is normally built centrally on the floor, and the house has only one room. The corner timbering technique is rather primitive in the early part of the century, but in the later part, more refined joints between the logs have created a more stable construction. Tryggve Fett concludes that the corner timbering seems to be a new technique in housebuilding in this region when introduced in Oslo by the time of foundation of the town in the early 11th century (*Fett 1989, 81 f.*).

We have only one excavation of the remains of a *stove* in rural areas from this period, from Rauland, Uvdal (*Fig. 1:21; Fig. 7*). The building is now preserved at the Norwegian Folk Museum in Oslo. The original site was excavated by Roar Tollnes in the years 1970/71. He found that before the existing building was erected, a corner timbered single roomed *stove* with a hearth in the corner was standing on the site. Coal from the hearth was dated to AD 920-1140. In the late 13th/early 14th century the existing two roomed *stove* was built (*Berg 1990, 116-125; Tollnes 1973; Fett 1989, 82-83*). The development of building types on this site conforms fairly closely to the development in Oslo, but with only one example from rural areas it is obviously not possible to deduce a general trend. The development may have been different and the variation in building types may have been broader in the rural areas than in the towns. It is possible that the narrow parcels in the towns favoured the erection of several small buildings rather than long ones, and that the towns founded in the late 10th and early 11th century, led the way in the fragmentation of the longhouse observed in the 11th and 12th centuries. Corner timbering was well suited for building this kind of house, and the towns may have been the main arena for the early development of this technique.

Not having substantial data on the possible development from the one roomed to the two roomed *stove* in rural areas in the 11th/12th century, we must also point to the possible continuity from the longhouse without a barn in the 9th and 10th century to the two roomed *stove* in the 12th. There is a clear functional likeness between these two types of buildings. The two roomed building in southwestern Norway and on Søndre Nygård, with the main room with the hearth and the small storage room at the end, has a strong func-

tional resemblance to the room division in the corner timbered buildings, even though the construction technique is radically different. Nevertheless, the second room is smaller in the corner timbered building, and some of the earlier functions of this room must have been moved to other buildings. The introduction of the corner timbering does not constitute a break in the functional development of the main house, rather it paralleled one of several smaller functional developments from the 7th to the 13th century.

To summarise, the corner timbering totally dominates in the main buildings on farms in eastern Norway from the 13th century onwards, probably also in the 12th. The main building on the farm, the *stove*, normally had two rooms, with only one of them having a hearth. This building has a functional resemblance to the few known main buildings from the 8th to the 10th centuries, when they were built using the post technique or possibly the stave technique. The evidence from the 11th century, especially from medieval Oslo, may indicate that the introduction of a one roomed *stove* with a central hearth provides a break in the development from the longhouse to the two roomed *stove*. But the existing evidence from rural areas is too scant to draw a general conclusion.

The multifunctional longhouse which existed at least as late as the 8th century, is totally lacking among the buildings known from later times. The functional division of the longhouse into different buildings appears to be a parallel to the development in the western part of the country. But the continuous development in western Norway of the longhouse from the 12th century onwards does not seem to be paralleled in eastern Norway. Here, the longhouse does not seem to survive into the 12th century.

The introduction of corner timbering seems to have played only a minor role in this development of the layout and function of the buildings. However, the details in the functional fragmentation of the longhouse are still obscure, as is the chronology in the transition from posts in the ground to stave technique and corner timbering. The overall picture of this development may be modified by new excavations. This also applies to the apparent domination of the corner timbering in rural areas from the late 12th century onwards, as the number of preserved main buildings is so small.

Northern Norway

The limited number of investigations in central Norway, or Trøndelag, obscures any hope of following the development of the houses and the farm in this area. Fortunately, the situation in northern Norway is somewhat better. The main part of the known buildings date from the first part of the period, that is the 11th century and earlier. As the excavations in settlements remains from the younger periods have not focused on building construction and layout, the development in the 12th and later centuries is virtually unknown. The main construction technique also in the later period seems to have been some sort of stave construction with external turf walls (*Bertelsen 1973; 1985; Bertelsen - Lamb 1995*).

Since 1983 excavations have been conducted on the chieftain's farm of Borg, Vestvågøy (*Fig. 1:1; Fig. 4:D; Munch et al. 1987; Munch 1991; Henderson - Holand 1992*). The main building on the farm has been erected on the same spot from the 5th to the end of the 10th century. The oldest of these buildings was 55 m long, the youngest 83 m. To my knowledge this is the largest house from the Later Iron Age in Scandinavia.

The youngest of these buildings has a byre in the northern end, and various living-rooms in the middle and southern end. The entrances were placed opposite each other, as was found in the Migration Period buildings in southern Norway. Just south of the middle of the building we find the large feasthall. On Borg the functional fragmentation of the longhouse, observable in all locations in southern Norway in the Viking Age, does not appear to have occurred. The same applies to most other changes in the buildings observed in the south. The house has a strong likeness to the Migration Period longhouses of southern Norway. This seems to be a general trend in the longhouses from the Later Iron Age in northern Norway (*Munch, J. 1973; Johansen 1979, 108; Jørgensen 1988; Munch, G. 1983*).

As in southern Norway during the Later Iron Age, we find variations in the house types in northern Norway. One example will be presented here. In the 1970's a longhouse from around AD 700 was excavated in Tussøy, Troms (*Fig. 1:2; Fig. 4:B; Binns 1983*). The house was divided between a byre and the living-quarters, as is normal in this region. However, atypically, the roof was supported by just one row of posts, creating a two aisled building; a feature as yet unknown in southern Norway. Also in the houses from the Migration Period in northern Norway there appears to have been a greater variety of building types than in southern Norway. Here can be found two, three and four aisled buildings (*Munch 1965, 20-22*).

This concludes our tour of the rural settlements in Norway. As I mentioned in the beginning of this paper, my intention was to present a general overview of the development of the main building on the settlements. What I have only briefly discussed are the reasons behind the development we have observed. In my opinion, as stated earlier, changes in building techniques have played a minor role in the development. Likewise, the reasons can only to a limited extent be functional - that is connected to the practical needs of the people on the farm. Probably these needs could have been filled throughout this period by the type of longhouse built in the Migration Period. The changes observed should, I think, be discussed in light of a broad cultural and social context, and I am happy that this will be possible in the next meeting in this promising series of congresses.

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