Pre-Roman Iron age houses at Vik: An analysis of construction, function and social significance

ABSTRACT

The excavations at Vik in Ørland, central Norway, revealed 10 longhouses and some outbuildings from the pre-Roman Iron Age. They had different form and interiors and their length varied from 5 to 30 m. With the purpose of creating a clearer chronology between the houses, the 14C analyses from the Late Bronze Age and the pre-Roman Iron Age have been subdivided into three phases, here referred to as PRIA 1–3. The phase division has formed the basis for an analysis of the changes of the longhouses’ interior and exterior shape and room division. The results demonstrate changes during all three phases. Difference in size between buildings was significant during PRIA 3. The results have finally been put into a comparative societal perspective and analyzed in relation to an increasing social differentiation of society.

INTRODUCTION

Scandinavian burials dating from the pre-Roman Iron Age often lack archaeological artefacts. Therefore, the analysis of longhouses is of great importance for the understanding of social changes during the pre-Roman Iron Age. Due to problems with two longer plateaus in the 14C curve during the pre-Roman Iron Age, it is difficult to analyse chronological changes during the period. In this chapter a method is presented that provides an opportunity to create a relative chronology between the longhouses.

The excavations at Vik revealed 10 longhouses, two outbuildings, several cooking pits and two wells dated to the pre-Roman Iron Age (Figures 1 and 2). All the postholes of the buildings have been excavated, and artefacts and paleobotanic material have been analysed. The longhouses varied considerably in construction, design and size.

In this chapter, the aim is to come as close as possible to an understanding of the spatial organization of the longhouses. In order to achieve this, a variety of architectural variables such as the position of the roof-bearing trestles, the location and shape of the hearths, and whether the longhouses had stables are examined. Finally, the results are discussed from a comparative social perspective.
Figure 1. The location of the excavated area at Vik. Map: Magnar Mojaren Gran, NTNU University Museum.

Figure 2. Overview of the excavation area with pre-Roman Iron Age archaeological features: Longhouses, cooking pits, and wells. Map: Magnar Mojaren Gran, NTNU University Museum.
DATING WITHIN THE PRE-ROMAN IRON AGE

Based on archaeological artefacts, the pre-Roman Iron Age in Norway is usually divided into two periods: Period 1, 500–200 BC, and Period 2, 200 BC – AD 1 (Solberg 2000: 38–39). At Vik, very few artefacts date from the pre-Roman Iron Age. The longhouses superimposed each other only in a few cases, and there were only single examples of postholes with a clear horizontal stratigraphy. The chronology between all buildings is therefore based solely on 14C analyses.

In line with customary practice, the Ørland project has prioritized radiocarbon dating of samples from the longhouses’ hearths (Gustafson 2005). However, only a few longhouses had preserved hearths. Therefore, most dating has been done on organic features from the postholes. The approach involves source-critical problems that have been highlighted in several works (Göthberg 2000: 19–20; van der Plicht 2005: 50; Diinhoff & Slinning 2013: 66–67, Gjerpe 2017: 63–65).

The pre-Roman Iron Age is known for the two long plateaus in the 14C curve. The longest – the Hallstatt plateau – spans the period 800–400 BC, while the second plateau spans the period c. 300–200 BC. The plateaus create problems with regard to establishing detailed chronologies between 800 BC and AD 1 (van der Plicht 2005: 46, Gjerpe 2017: 63–65). In this context, our assessment is that using Bayesian analyses do not hold clear advantages. The radiocarbon dates have been so affected by the uneven 14C curve that the individual longhouses cannot be dated more accurately than to the respective plateau.

In this chapter, the plateaus have been used to subdivide the pre-Roman Iron Age into three long periods, PRIA 1 – PRIA 3. They should not be confused with the overall phase division of the excavations at Vik (Ystgaard, Gran and Fransson: this volume). In practice, PRIA 1 corresponds to Phase 1, while PRIA 2 and PRIA 3 roughly correspond to Phase 2.

PRIA1 corresponds to the Hallstatt plateau between c.800–400 BC. The plateau spans part of the Late Bronze Age, but this should not have any significance for the interpretation of the Ørland material. The ground level at the excavated areas is generally at c.11 m asl. Recent investigations of the shoreline displacement in Ørland show that the area became dry in the period 700–500 BC (Romundset & Lakeman, Ch. 2 this volume). One would not expect a permanent settlement to have been established until the ground level was 1–2 m above the high tide level. This can be dated to c. 500 BC.

PRIA 2 corresponds to the period c.400–200/150 BC. In practice, most of the dates in PRIA 2 demonstrate a clear centre of gravity to the second plateau between c. 300–200 BC, but the distribution curves often include parts of the centuries immediately before or after the plateau.

PRIA3 corresponds to the period 200/150 BC–AD 50. The period does not include a plateau in the 14C curve, but dating from the 1st century BC can, with two sigma, include parts of the 1st century AD. The division is a method of structuring the dating material from the pre-Roman Iron Age. However, the plateaus in the 14C curve are so wide that they cover a considerably longer time span than that of a single longhouse. Studies have revealed that longhouses with roof-supporting wooden posts were unlikely to have survived longer than c.50–100 years (Göthberg 2000: 108–109; Webley 2008: 39–40; Diinhoff & Slinning 2013: 67, 74). Analyses have also highlighted the importance of social systems. During the pre-Roman Iron Age events as wedding and death, among other things, limited the longhouses to roughly a one-generational life (Herschend 2009: 157, 167–175; Holst 2010: 162, 170–172).
This means that the division of the phases does not indicate when a longhouse was built or abandoned, but rather a longer interval that included the time when a longhouse stood on the site.

Another source-critical problem is the dating of burnt straw. Large quantities of burnt straw were found in Houses 3 and 7 (Buckland et al. 2017: 43, 49). Straw has a short lifetime and should be an excellent dating material. However, straws have received early dating compared to other dated material from the same contexts. It is possible that the straw had either been exposed to a reservoir effect due to the site’s proximity to the sea, or that it came from turf that was used as fuel or as roofing material (Ystgaard, Gran & Fransson, Ch. 1 this volume, Marie-Josée Nadeau, personal com.). The uncertainty about its origin means that the dating of straw should be treated with caution.

**PRE-ROMAN IRON AGE LONGHOUSE CHRONOLOGY AT VIK**

The dates of the longhouses at Vik are compiled in two tables. Most of the houses from the pre-Roman Iron Age were excavated in Field B (Table 1). The longhouses from Field A and C are shown in Table 2.

There were seven longhouses and maybe one outbuilding in Field B. The area stands out from the rest of Vik because more than 95% of the dates from features in this field were from the pre-Roman Iron Age. This included not only all the longhouses, but also the wells and nearly all the cooking pits (Fransson 2018: 445–446, 452). In the other fields, several longhouses and cooking pits were dated to the Roman Iron Age, the Migration period and in some cases the Viking age and the early medieval period. The differences indicate that Field B was used intensively during most of the pre-Roman Iron Age, but that the area was abandoned towards the end of the period (Ystgaard, Gran & Fransson, Ch. 1).

Houses 8 and 10 do not have dates in PRIA 3 but have about the same number of dates in PRIA 1–2. They are probably the oldest houses in Field B (Fransson 2018: 375–386).

The vast majority of dates from House 3 and House 7 are covered by the plateau between 300–200 BC. However, charcoal from a hearth at the centre of the dwelling area in House 3 has been 14C dated to the Late Roman Iron Age. The remains of House 7 were overlain by a cooking pit that has been dated to just before and after the year AD 1 (Table 1). There were very few late dates in and around Houses 3 and 7. Thus, the two latest dates probably indicate sporadic reuse of the site during the Roman Iron Age (Fransson 2018: 411–431).

The analysis of the soil chemistry and palaeobotanical material showed that House 3 and House 7 were probably destroyed by fire (Buckland et al. 2017: 43). This means that the latest date should give a good idea of when the houses were abandoned. There were no dates from PRIA3 in House 3, which indicates that the house was abandoned during PRIA2. In House 7 there were later dates, but the house was also overlaid by a later cooking pit. However, a dating to PRIA2 is strengthened by the fact that 700 fragments of burnt cereal grains were found in a posthole. They were probably part of a storage that was destroyed during the fire (Buckland et al. 2017: 49). The grains have been dated to 374–197 BC (TRA-11552, 2210±30 BP) and this shows that House 7 should be dated to the second plateau.

Houses 6, 11, and 13 have similar numbers of dates in PRIA2 and PRIA3. Three hearths in House 6 were dated within the period 361–121 BC. Dates of cerealia from the house fall late in PRIA 2, or in PRIA 3. This suggests that House 6 is later than House 3 and House 7, although all three longhouses were close to each other in time. This interpretation
is supported by the fact that they were located in the same occupation area and that, for Vik, they had an unusual north-west to south-east orientation (Fransson 2018: 387–388. Fig 8.242). North-east of House 6, a rectangular construction was excavated. The construction had been damaged in modern times, and it is unsure if it is a c.12 m long house, or two or more smaller outbuildings. Charcoal from several postholes and cooking pits around and probably inside the construction gives it a date to PRIA 2.

The location, dates and orientation at a clear angle to House 6 suggest that this has been one or more outbuildings related to House 6 (Fransson 2018: 410-411).

House 11 and House 13, c.20 m northwest of House 6, were on the same farmstead (Norw. tun) and were constructed above the earlier House 8. Only a small part of House 11 remained, and the dates are very scattered. My interpretation is that the postholes in House 11 are contaminated, either by

<table>
<thead>
<tr>
<th>Late Bronze Age, 1000–700</th>
<th>House 10, Field B</th>
<th>House 8, Field B</th>
<th>House 6, Field B</th>
<th>House 13, Field B</th>
<th>House 3, Field B</th>
<th>House 7, Field B</th>
<th>House 11, Field B</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIA2, 400–200/150 BC</td>
<td>3 (402–206 BC)</td>
<td>2 (403–184 BC)</td>
<td>6 (361–121 BC) 3 from hearths</td>
<td>3 (396–93 BC) 2 from hearths</td>
<td>3 (390–208 BC) cereal grain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRIA3, 200/150–0/50 BC</td>
<td>1 (183–60 BC) cereal grain</td>
<td>3 (192–41 BC) grain from hearth</td>
<td>1 (190–55 BC) cereal grain</td>
<td>1 (206–87 BC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early Roman Iron Age, AD 0/50–200</td>
<td>2 (92 BC – AD 60) 1 cereal grain</td>
<td>1 (56 BC – AD 68) cooking pit</td>
<td>1 (26 BC – AD 322)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Late Roman Iron Age AD 200–400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 (AD 215–400) hearth</td>
<td>1 (AD 260–410)</td>
</tr>
</tbody>
</table>

Table 1. Comparison of results of 14C analyses from longhouses in Field B. The numbers of dates are listed at the top of each cell, with the total time span for all dates in the group shown in parenthesis below. Unless otherwise indicated, the dating is based on charcoal from postholes. One date from the Middle Ages in House 7 is not included.
earlier or later material (Fransson 2018:433). House 13 was also disturbed. The two earliest dates probably represent contamination from the earlier House 8. Charcoal from the two hearths in the longhouse is dated to PRIA 2. A third date, from a cereal grain in one of the hearths, is dated to PRIA 3. This later date is supported by four additional dates in PRIA 3. Of these, the two latest dates are in the range 92 BC – AD 60. House 13 should date to PRIA 3, and it is probably later than House 6 (Fransson 2018:405–406).

In Fields A and C there were fewer houses dated to the pre-Roman Iron Age. In Field A, two longhouses and one outbuilding were excavated (Figure 4). Most parts of Field A were used during the pre-Roman Iron Age. This is evident not least from the fact that cooking pits from the period are scattered throughout the area.

The earliest longhouse in Field A was House 1, for which six dates are in PRIA 1 and five are in PRIA 2 (Mokkelbost 2018b:143–145). The dates from the Roman Iron Age and the Migration Period show that the site of House 1 was reused in later periods.

Of eight dates within House 9, five or six are in PRIA 2 or PRIA 3. The latest date is in the range 166–47 BC. Although the date is comparatively late.
Table 2. The results of ¹⁴C analyses from all longhouses dating from the pre-Roman Iron Age in Field A and Field C. A late medieval date from House 18 has not been included.

<table>
<thead>
<tr>
<th>Time Period</th>
<th>House 1, Field A</th>
<th>House 9, Field A</th>
<th>House 18, Field C</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIA1, 700–400 BC</td>
<td>6 (790–408 BC)</td>
<td></td>
<td>1 (774–547 BC)</td>
</tr>
<tr>
<td>PRIA2, 400–200/150 BC</td>
<td>5 (396–203 BC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRIA3, 200/150 BC – AD 0/50</td>
<td></td>
<td>1 (166–47 BC)</td>
<td>4 (193–3 BC)</td>
</tr>
<tr>
<td>Early Roman Iron Age AD 0/50–200</td>
<td>1 (AD 82–215)</td>
<td>4 (AD 33–333)</td>
<td></td>
</tr>
<tr>
<td>(AD 82–215)</td>
<td></td>
<td>2 from hearths</td>
<td>(94 BC – AD 52)</td>
</tr>
<tr>
<td>Late Roman Iron Age AD 200–400</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Migration Period AD 400–550</td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Figure 4. Archaeological features and buildings from the pre-Roman Iron Age in Field A. Map: Illustration: Magnar Mojaren Gran, NTNU University Museum.
in PRIA 3, it is partially overlapped by four earlier dates. All dates are from charcoal, but the age and type of wood is not known in all samples. The dating of the house indicates that it may be contemporary with House 6. However, next to House 9 were several cooking pits with rather late dates in PRIA 3 (Mokkelbost 2018a:129–130, 134–136). House 9 is therefore probably later than House 6.

In Field C, House 18 was the only longhouse dated to the pre-Roman Iron Age. It lacked a hearth, but five of the six dates from the postholes are between 193 BC and AD 52. Some of the dates fall in the late part of PRIA 3, which probably shows that the longhouse was in use around the year AD 1. The dating is also supported by 10 cooking pits to the west of House 18. Most of these are dated to PRIA 3, and some had a late date, to the time around the year AD 1. The longhouses directly north of House 18 have been dated to the Roman Iron Age. This indicates that House 18 is the earliest building in Field C (Heen-Pettersen 2018:467–468, 543–545).

**THE SHAPE AND CONSTRUCTION OF THE LONGHOUSES DURING PRIA 1**

The earliest longhouses from PRIA 1 are House 8 and House 10 in Field B, and House 1 in Field A.
The Hallstatt-plateau in the $^{14}$C curve means that it is not possible to determine whether the three longhouses were contemporary, but that is not an unlikely scenario for Houses 1 and 8.

The best-preserved longhouse was House 1 (Figure 6), but the eastern part was skewed relative to the rest of the longhouse. Two reasons for this can be suggested. First, that there may have been another small building on site; second, that this part of the longhouse could have been damaged by a modern ditch. Two shards of ceramics tempered with igneous rock were found in the western part of the longhouse. There was also a fragment of a crucible. The interpretation is that the site has probably been used for forging, or that a forge had been located on the site. This assumption is strengthened by analyses of hard-burned clay from the eastern part of the building (Mokkelbost 2018b:139–142).

Despite the later disturbance, House 1 was characterized by the fact that the distance between the trestles was shorter in the central part and longer towards the gables; this was clearest towards the west end. There was also a complementary third row of roof-supporting posts along the central axis of the longhouse (Figure 6). The longhouse may have been 3.9 m wide, but this is uncertain (Mokkelbost 2018b:145).

A partially preserved clay floor was found in the eastern half of House 1. Soil chemical analyses indicate that there was originally a hearth on the floor. Remains of unburnt wood in the floor layer indicate that there might also have been a wooden floor covering the clay floor. The eastern part of the house, with the clay floor, has been interpreted as a dwelling area. This interpretation is supported by higher phosphate values in the western part of the longhouse (Figure 7), which has been interpreted as a barn (Buckland et al. 2017: 28; Mokkelbost 2018b:142). There are different perceptions of how common outbuildings were during the period (Herschend 2009: 171, Martens 2010: 242). However, several outbuildings dated to both the Bronze and Early Iron Age have been excavated at Forsandmoen in southwestern Norway (Løken 1998: 114–116, Figure 8a–c).

House 8 in Field B was disturbed in the middle and west parts, and probably only the eastern part of House 10 remained (Figures 8 and 9). Despite extensive disturbance, the three oldest longhouses had markedly similar central aisles in terms of their

<table>
<thead>
<tr>
<th></th>
<th>Orientation</th>
<th>Length and width (metres)</th>
<th>Trestle width (metres)</th>
<th>Span in the west (metres)</th>
<th>Span in the east (metres)</th>
<th>Clay floor or clay in postholes</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>House 1, Field A</td>
<td>east–west</td>
<td>c.20.5</td>
<td>1.46–1.93</td>
<td>trestle 1–7, 0.88–1.69</td>
<td>trestle 7–16, 1.09–2.96</td>
<td>clay floor in the east</td>
<td>center posts along the longitudinal axis of the housing</td>
</tr>
<tr>
<td>House 8, Field B</td>
<td>east–west</td>
<td>preserved length c.11–15</td>
<td>1.4–1.9</td>
<td>trestle 1–3, 1.4</td>
<td>trestle 3–8, 0.7–1.2</td>
<td>clay in postholes</td>
<td></td>
</tr>
<tr>
<td>House 10, Field B</td>
<td>east–west</td>
<td>heavily disturbed</td>
<td>1.7–1.8</td>
<td>Probably missing</td>
<td>1.0–1.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3. Construction details in the longhouses from PRIA 1
Figure 6. House 1, Field A. Illustration: Magnar Mojaren Gran, NTNU University Museum.

Figure 7. Spatial distribution of soil phosphate content (Cit-P) in and around House 1. Illustration: Magnar Mojaren Gran, NTNU University Museum.
Figure 8. House 8, Field B. The plan presents two alternative interpretations of the western part of the house. Illustration: Magnar Mojaren Gran, NTNU University Museum.

Figure 9. House 10, Field B. Illustration: Magnar Mojaren Gran, NTNU University Museum.
width. There were no dug pits with hearths in Houses 8 and 10. Although House 8 was disturbed, it was possible to determine that it was divided into two sections. In the eastern section, the trestles were placed significantly closer together in the western part. A number of postholes in the longhouse contained unburnt clay, but here the clay was found in the bottom levels of the postholes. The subsoil was rich in sand, and the clay might have been used as packing material to support the posts (Fransson 2018: 377–379, 382–385).

THE SHAPE AND CONSTRUCTION OF THE LONGHOUSES DURING PRIA 2

Houses 3 and 7 probably burned down and were abandoned during PRIA 2. They are the earliest longhouses with a new, and at Vik unusual, north-western – south-eastern orientation (Figure 3).

The best-preserved House 3 was divided into two sections (Figure 10). The dwelling part was in the northwest end of the house, where there were long distances between the trestles. In the southeast part, the postholes were much closer together, and there were many additional postholes. There were also three or four sparsely spaced central posts along the house’s longitudinal axis.

In the central part of the house there was a round, charcoal-rich pit. It was flanked by two smaller postholes, which indicate that there had probably been some type of structure above the cooking pit. The term “cooking pit” is probably incorrect in this context. This pit had been reused on several occasions. By contrast, most of the contemporary cooking pits excavated in Field B appear to have been used only once. The differences indicate that the cooking pit inside House 3 should be defined as a dug hearth. A few metres to the northwest, there was an oval dug hearth in the centre of the dwelling area. This hearth also seemed to have been an original part of the longhouse, but this interpretation is uncertain because charcoal from the hearth has a late date, in the early Roman Iron Age (Fransson 2018: 414–420).

The postholes being so close together in the southeastern part of House 3 can indicate a barn. In the possible barn area there were remains of a clay floor (Figure 10). However, it has been pointed out that it would not have been practical to have a clay floor in a barn, at least not in the absence of a

<table>
<thead>
<tr>
<th>House Area</th>
<th>Orientation</th>
<th>Length (metres)</th>
<th>Trestle width (metres)</th>
<th>Span in north-west part</th>
<th>Span in south-east part</th>
<th>Clay floor or clay in postholes</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>House 3, Field B</td>
<td>north-west – south-east</td>
<td>c.16</td>
<td>1.7–2.6 (1.9–2.3)</td>
<td>trestle 8–11, 1.9–2.5 m</td>
<td>trestle 1–8, 0.7–1.7 m</td>
<td>clay floor in south-east part, clay in the postholes</td>
<td>center posts along the longitudinal axis of the housing</td>
</tr>
<tr>
<td>House 7, Field B</td>
<td>north-west – south-east</td>
<td>c.14</td>
<td>1.9–2.4</td>
<td>trestle 1–3, 2.5–2.5 m</td>
<td>trestle 3–8, 1.1–1.4 m</td>
<td></td>
<td>probably center posts along the longitudinal axis of the housing</td>
</tr>
</tbody>
</table>

Table 4. Construction details in the longhouses from PRIA 2.
wooden floor. Clay was therefore more likely to have been used for floors in threshing barns (Petersson 2006: 67–68). In this case, the clay floor might indicate a dwelling area. The southeastern half of the longhouse was also lower-lying than the dwelling part, and during the excavations, the postholes were often filled with groundwater. The large numbers of postholes in this part of the house might therefore be due to problems with high groundwater levels, and not with faeces from stalled animals.

House 7 was also divided into two sections (Figure 11). The row of postholes in the northeast part of House 7 was less well preserved than the row in the south-west. However, the excavations revealed that the distance between the trestles in the northwestern part of the longhouse were longer than between those in the south-eastern part. Both the trestle width and the distance between the trestles were consistent with corresponding measurements in House 3, although House 7 was a few metres shorter. A posthole in the southeastern end indicates that House 7, like House 3, had a central row of posts, at least in parts of the building (Fransson 2018:426–427).

There appear to be no barns in Houses 3 and 7. The phosphate mapping of the filling in the postholes and the surface layers within and around the

Figure 10. House 3, Field B. Illustration: Magnar Mojaren Gran, NTNU University Museum.
houses indicate that domestic animals were kept outside the south end of the two longhouses (Figure 12). The impression is supported by the results of paleobotanical analysis. Although there were finds of carbonised grains of barley in House 3, there were no traces of meadow and/or wetland seeds in the material. This is despite the fact that there were significant amounts of straw in the samples, which suggests that the preservation conditions were sufficient for such fragile remains to survive. Meadow and/or wetland seeds should have survived to a similar degree if they had been present (Buckland 2017: 43, Figure 39, 42–43).

A large amount of paleobotanical material was also found in House 7. However, the composition of the material differed from that in House 3. It was more diverse, and included naked barley, hulled barley, oats, flax and a relatively large amount of seeds from both meadow and wetland species. The analyses indicated that the southeastern part of the longhouse was used as a threshing barn. In a posthole in the northwestern part of the longhouse, a deposit containing 700 cereal grains together with pine tar residue was found (Figure 12). This combination indicates that the grain had been stored in a now degraded container, and that this part of the
house has been a storehouse (Buckland et al. 2017: 9, 42–43, 49, Figure 39).

No ceramics were found in House 3, but seventeen shards were found in two postholes in the south-eastern end of House 7. All the shards come from vessels with a glossy surface and probably a rounded base. Most shards were tempered with asbestos and mica. The shards had no clear parallels but are likely some form of late Risvik-ceramics (Ågotnes 1986: 86, 114-116, Hop 2016: 7-10).

It is worth pointing out that Houses 3 and 7 can be interpreted as two buildings belonging to the same farm. The interpretation is not based on a similar date, since they both date within a plateau in the \(^{14}C\) curve which is 200 years long, and they cannot be dated more exactly. Instead, the interpretation is based on several other indications. The two houses were almost parallel, and the area between them stands out in comparison to the surroundings because it basically was empty of structures. The empty area can be interpreted as an open area between the two houses. This interpretation is strengthened by the fact that the paleobotanic analysis indicates that the two houses had different functions. House 7 has been used as a threshing barn and storehouse. House 3, at least in the northwest, constituted a

---

**Figure 12.** Houses 3, 6 and 7, Field B. Relative number and proportion of plant macrofossil remains and spatial distribution of soil phosphate content (Cit-P). Illustration: Magnar Mojaren Gran, NTNU University Museum.
dwellings area. Unlike the other houses, these two have also burnt down, something that may have happened at the same time.

Thirty metres northwest of House 7, House 11 was excavated. House 11 was far too disturbed for its construction to be analysed in detail, but it had the same unusual northwest to southeast orientation as Houses 3 and 7. The few preserved trestles in House 11 had also approximately the same width between postholes as found in Houses 3 and 7 (Fransson 2018:433–435). This indicates that House 11 can be dated to PRIA 2, but the interpretation is uncertain. The spread of the 14C-dates may indicate that the house is late and does not belong to the pre-Roman Iron Age.

THE SHAPE AND CONSTRUCTION OF THE LONGHOUSES UNDER PRIA 3

Houses 6 and 13 in Field B, House 8 in field A and House 18 in Field C are dated to PRIA 3. The earliest of these buildings is probably House 6, and the latest is House 18.

The dates indicate that House 6 is later than House 3 and 7, although the three longhouses were probably close in time. All these three houses also had the same unusual north-west to south-east orientation (Figure 3). However, House 6 had a different construction and layout than the earlier longhouses. There were no traces of a clay floor in House 6, and all three hearths were dug down in the subsoil. House 6 was also c.30 m in length, and the longest longhouse in Field B (Figure 13). Remains of the external walls show that the house was c.5.5 m wide at the northwest gable, and just over 6 m wide in the middle part. The width of the central aisle in relation to the external wall shows that the longhouse had a balanced or overbalanced roof construction (Table 5).

The distance between the trestles was longer in the central part compared to the two ends. This indicates that there were three sections: one longer

<table>
<thead>
<tr>
<th>Orientation</th>
<th>Length / width (metres)</th>
<th>Trestle width (metres)</th>
<th>Span length, north-west or west part</th>
<th>Span length, south-east or east part</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>House 6, Field B</td>
<td>north-west – south-east</td>
<td>c.29.5–30/5.5–6.5</td>
<td>2.7–3.3</td>
<td>trestle 1–6, 1.4–5 m (?)</td>
<td>Trestle 6–13; 1.4–3 m</td>
</tr>
<tr>
<td>House 9, Field A</td>
<td>east-northeast – west–southwest</td>
<td>c.22/5.3</td>
<td>2.7–3.05</td>
<td>?</td>
<td>1.3–1.8 m</td>
</tr>
<tr>
<td>House 13, Field B</td>
<td>east–west</td>
<td>longer than 8 m.</td>
<td>2.8–3.1</td>
<td>0.9–2.0 m</td>
<td>?</td>
</tr>
<tr>
<td>House 11, Field B</td>
<td>north-west – south-east</td>
<td>Longer than 5 m.</td>
<td>1.6–1.8</td>
<td>0.9–1.1 m</td>
<td>?</td>
</tr>
<tr>
<td>House 18, Field C</td>
<td>east-northeast – west–southwest</td>
<td>c.10.5</td>
<td>2.2–2.7</td>
<td>trestle 1–2; 3.2 m</td>
<td>trestle 2–4, 3.4–3.8 m</td>
</tr>
</tbody>
</table>

Table 5. Construction details in the longhouses from PRIA 3.
in the middle that probably constituted the dwelling section, and two smaller sections in each end. Additionally, there was an oval hearth in the centre of the dwelling area. Two adjacent postholes were found a few metres northeast of the hearth in the dwelling area. They probably indicate the position of an internal door. This in turn may indicate that the longhouse had more internal divisions than is apparent from the position of the trestles (Figure 13).

A round charcoal-rich pit with two adjacent postholes was also excavated in the southernmost part of House 6. The construction was markedly similar to the dug hearth with two postholes in the central part of House 3. House 6 also contained a similar charcoal-rich pit in the opposite north-westernmost end, but this had been severely disturbed by later ploughing. The hearth in the dwelling part had an oval form; it lacked adjacent postholes and was not as deep as the hearth in the southern end of the house (Figure 13).

In the vicinity of the gables of House 6, there were two adjacent trestles that formed two rectangles. The four postholes within these rectangles were comparatively deep (Figure 14). On both sides of the southeastern rectangular structure, there were postholes that probably represented two opposing external doors. One ‘door’ is uncertain, but the structures can nevertheless be interpreted as an entrance room, with the dwelling area to the north-west and a working area in the south-east (Fransson 2018:390–396). A deposit of ceramics was found in the bottom part of the southwestern posthole in the southern rectangle. The 26 small pieces were tempered with igneous rock and had a glossy surface. In the northeastern part of the same rectangle, a larger shard was found. It had the same temper and color as the other, smaller shards. It was deposited in a posthole that may have been a part of an outer doorway (Fransson 2018: 397, Fig 8.25).

The longhouse sections and the location of hearths indicate that different activities have taken place in different parts of the building. However, the analyses of macrofossil and soil chemical samples from the postholes did not reveal any evidence of a clear division of functions. There were also no clear examples of repairs, which are often considered to be common in barns. Instead, the phosphate distribution suggests that cattle were regularly gathered to the south and southeast of House 6. The only exception is the higher phosphate values adjacent to the southern dug fireplace (Figure 10, Buckland et al. 2017: 38, Figure 38). In contrast to the other cooking pits in Field B, mammalian burnt bones were found in this hearth. In combination with the high phosphate values, the bones indicate that this part of the house has been used for food preparation of phosphate-rich animalia (Fransson 2018: 400).

House 9 in the northern part of Field A was rather poorly preserved (Figure 15). However, it was at least 22 metres in length and had nearly the same east–west orientation as the earlier House 1. Like House 6, House 9 had a 2.7–3 m wide central aisle, but in House 9 there were also a row of centre posts along the longitudinal axis (Mokkelbost 2018a:127–129). House 9 is probably later than House 6. This interpretation is strengthened by the fact that House 9 has an east-west orientation, an orientation that is the norm at Vik from the end of the pre-Roman Iron Age and until the Migration period (Ystgaard, Gran & Fransson Ch. 1).

House 13 in the western part of Field B was oriented east-west. The longhouse was disturbed, but the preserved trestles show that its central aisle was as wide as in Houses 6 and 9. The preserved parts of the house were 8 m in length, without without clear gables (Figure 16). The area directly to the east of the building seems to have been partly destroyed in modern time, and maybe the house was once longer. However, nothing suggests that House 13
Figure 13. House 6, Field B. Illustration: Magnar Mojaren Gran, NTNU University Museum.

Figure 14. House 6, Field B, trestle pairs and posthole depth indicated. Illustration: Magnar Mojaren Gran, NTNU University Museum.
was as long as Houses 6 or 9. The preserved area probably represents a dwelling area. In the middle part were a preserved hearth and a nearby pit with a fireplace with two adjacent postholes, significantly similar to those dug hearths that were excavated in Houses 3 and 6. A few metres to the west, there were two adjacent postholes that probably marked the position of an internal door – a construction recognizable from the northern half of House 6 (Fransson 2018:407–408).

House 18 in Field C had an east–west orientation and lacks exterior walls and a dug hearth (Figure 17). Four trestles were considered to be part of a longhouse with a minimum length of 10.5 m. In the west there was a fifth trestle, but the postholes were not quite in line with the postholes in the other trestles. With a fifth trestle, the longhouse would have been about 14–15 m in length (Figure 17). However, the house had a wide central aisle of 2.2–2.7 m. The wide central aisle is reminiscent of the aisles in Houses 6, 9 and 13. Another similarity is the apparent distance of 3.2–3.8 m between the trestles (Heen-Pettersen 2018: 466-467).

**Figure 15. House 9, Field A. Illustration: Magnar Mojaren Gran, NTNU University Museum.**

**SHARDS AND CERAMICS**

There are finds of shards of ceramics in several of the longhouses at Vik. Deposits of ceramics in Norwegian longhouses dated to pre-Roman Iron
Environment and settlement

Figure 16. House 13, Field B. Illustration: Magnar Mojaren Gran, NTNU University Museum.

Figure 17. House 18, Field C. Illustration: Magnar Mojaren Gran, NTNU University Museum.
Age are few. However, beneath the floor level in a 30 m long house (House CXIX) at Forsandmoen, there were deposited both a pottery vessel and a grindstone for grinding grain. The longhouse at Forsandmoen is from the second part of the period, and the deposits have, together with the length of the house, been interpreted as an indication of higher social status (Løken 2001: 59, Figures 3a and 4).

A comparable deposit of pottery was found in the southern part of House 6 at Vik (Figure 13). Most of the shards were found in the southwestern posthole in the southern rectangle, with comparatively deep postholes (see above). Another large shard of pottery was found in one of the postholes associated with the eastern external door in the same part of the longhouse (Fransson 2018: 397, Figure 8.25). All the ceramic shards were found near the dug hearth in the southeast, and can be interpreted as waste. The fact that the former finding was made in the bottom part of the posthole, and that the shards were so crushed, suggests that they were deposited before the roof-supporting post was placed in the posthole (Fransson 2018: 397, Fig 8.25).

However, at Vik, the conditions were complex because ceramics were also found in Houses 1 and 7 (Figure 11). As in House 6, most of the shards in House 7 were found in the south-west part of the longhouse. It is also possible to interpret these finds as waste (Fransson 2018: 428–429). However, in Field B shards of ceramics were found only in the longhouses, although a large number of other structures from the pre-Roman Iron Age were excavated. This indicates that pottery have been treated differently in different context on the area. Together with the similarity between the houses and the location of the deposits in post-holes suggests that the deposits were intentional. Ritual deposits of pottery in postholes is a well-known phenomenon, but better documented in southern Scandinavia (Carlie 2004: 47–57, 65, 202–205, Figure 11.4). Unlike the conditions at Forsandmoen, there were deposits in houses of different sizes and functions at Vik. This indicates that the tradition varied between different parts of Scandinavia.

THE LONGHOUSES AT VIK AND THEIR CONSTRUCTION IN A PRE-ROMAN IRON AGE CONTEXT

The standard view today is that the pre-Roman Iron Age longhouses in Scandinavia had an east-west orientation and were rather short. Analyses have shown that there was a large group of longhouses that had a length of 6–16 m. There were larger houses, but they were no longer than 20–25 m, and 6 m wide. Both types of houses often had four, or sometimes six, pairs of trestles, and were divided into a dwelling part with clay floor and a barn (Pedersen & Widgren 1998: 416–426; Myhre 2002: 45–47, 97–99, 116–119; Webley 2008: 51–53, Herschend 2009: 171–176, 182–183).

This model is based on studies of longhouses in southern Scandinavia. The possibility that different regions in Scandinavia have partly their own traditions has been highlighted in several works. Analyses in Skåne have confirmed that there were also houses with more pairs of trestles in southern Scandinavia, particularly in the period after 200 BC (Artursson 2005: 81–86, 91–93; Webley 2008: 51; Martens 2009: 240–241, 246). The review of the longhouses at Vik shows that they also usually had considerably more than only six pairs of trestles. This fact has already been highlighted in earlier analyses of longhouses from the pre-Roman Iron Age in Trøndelag (Grønnesby 2005:99).

The two issues at Vik of clay floors and whether or not the hearth is dug down in the subsoil are important. The excavations at Forsandmoen have shown that houses earlier then 200 BC often had a clay floor but lacked a dug hearth. The hearth was probably placed on top of the clay floor, and was subsequently
destroyed by ploughing. At Forsandmoen, no clay was found in postholes postdating c. 200 BC, indicating that the clay floors had disappeared. Another contemporary innovation was that the hearths were dug down into the subsoil (Løken 1999: 53–56; 2001: 56).

A similar change can be seen in the material from Vik. All longhouses dated to PRIA 1 lack signs of dug hearths, and House 1 had a preserved clay floor. During PRIA 2, the picture is more mixed. It was now common with dug hearths, but in House 3 there was also a clay floor. It is not until House 6 in the transition to PRIA 3 that there was definitely no clay floor. Clay floors were also lacking in PRIA 3 Houses 9, 13 and 18.

It has also been emphasized that the longhouses were dominated by balanced and overbalanced roof constructions in several parts of Scandinavia during the late Bronze Age and the pre-Roman Iron Age. Between c. 200 BC - AD 200 there are, at first, occasional, and then more and more examples of underbalanced constructions. This represents a change in which the underbalanced constructions come to dominate the material during the Roman Iron Age. Simplified, this means that the central aisle in the tree-aisled houses successively became narrower in relation to the width of the entire building. This probably affected the construction of the roof (Herschend 1989: 83–84, 90–95; Komber 1989: 26, 124–131; Göthberg 2000: 20–22, 91, 121; Wikborg & Onsten-Molander 2007: 109, 114; Gjerpe 2017: 77–79, 111).

However, this change towards more underbalanced constructions is difficult to date, especially in cases where the longhouses do not have preserved remains of exterior walls or parallel internal posts. Furthermore, the dating of the earliest underbalanced longhouses implies a successive change, with variation between different regions and sometimes also within a region, as in the county of Østfold (Artursson 2005: 87, 97–98, 112, 14; Karlenby 2007: 132–133, 135–136, Figure 6-10, Gjerpe 2017: 111–113).

Few longhouses at Vik had preserved exterior walls, and an analysis must be made with caution. House 6 has such a wide central aisle in relation to the exterior walls that the construction was balanced to overbalanced. In the earlier longhouses during PRIA 1, the central aisles were not wider than 1.9 m, and during PRIA 2, at most 2.4–2.6 m. None of these longhouses had preserved exterior walls, and it is not possible to decide if they were overbalanced or underbalanced. However, they did have a narrower central aisle than House 6. None of the late houses during PRIA 3 had any exterior walls, but they had central aisles with a width of 2.7–3.1 m. It is a width comparable to House 6, even though some of these later longhouses were shorter than the ones from PRIA 1 and 2.

In underbalanced constructions, the central aisle occupies about one-third of the full width of the longhouse (Göthberg 2000:48). Nothing suggests that Houses 9, 13 or 18 were underbalanced. Instead, they should be compared to a rather short house that has been excavated at nearby Viklem in Ørland. There, House 1 was dated to the second half of the pre-Roman Iron Age. It had a well-preserved exterior wall and was c.11 m long and c.5–6 m wide (Øien 2008: 8–10, Figure 4). The length is comparable with Houses 13 and 18 at Vik, indicating that even these longhouses have been about as wide. Although the interpretation is uncertain, the change towards wider central aisles from PRIA 1 to PRIA 3 should not be neglected. After all, the ever wider trestles show that the construction of the longhouses’ roof-bearing structures at Vik changed during the pre-Roman Iron Age. In this context, the roof-supporting posts along the middle axis in Houses 1, 3, 7 and 9 should be mentioned. They represent a constructional element that may be more common than recorded. They occur
occasionally in Scandinavia during both the Bronze and Iron Age, but their function is not clear. They may have had significance for the roof-construction, but it has also been suggested that these posts have supported a ceiling, or a loft (Wikborg & Onsten-Molander 2007: 115 with references).

A BARN OR NOT

As already indicated, most of the longhouses at Vik break with the classic division into a dwelling part and a barn. This can be perceived as a radical interpretation, but it cannot be taken for granted that the livestock were kept indoors. Winter barns are not a general phenomenon in northern Europe. In the British Isles and parts of Eastern Europe, winter barns were introduced in the Middle Ages, if at all. As late as in the 1600s and 1700s, there are also examples that cattle were left outdoors for much of the winter in some regions in Scandinavia. In fact, cattle can manage to survive outdoors in very cold weather, preferably in places where the snow depth rarely exceeds 20–30 cm (Pedersen & Widgren 1999:253-256, Petersson 2007: 84, 256). For Norway, it has been pointed out that the coastal districts in the counties of Møre og Romsdal and Trøndelag have such mild winters that cattle may have been left outdoors in the winter (Myhre 2002: 79). This area includes Vik and Ørland.

However, cattle can be sensitive to moisture, which may explain why the practice of keeping them indoors was introduced in parts of Scandinavia. Other reasons that have been emphasized are that keeping cows in barns would have made milking and collecting dung easier. These explanations have, however, been questioned, because both milking and collecting dung can easily be done outside if the animals are enclosed near the house during the night. A barn was also a simple way to protect the animals against wild animals and hostile raids. A more social explanation is that the barns would have been a way to demonstrate the size of a farm’s herd, which also demonstrated wealth and status. However, if winter grazing was practised, the number of animals kept might have been greater than what can be estimated simply from the size of a barn (Løken 1998: 117–118; Pedersen & Widgren 1999: 255-256; Myhre 2002: 98-101; Petersson 2006: 60–63, 84, 256, 364–365; Martens 2010: 245-246).

Archaeologists have often been criticised for using criteria for keeping livestock in barns that are conflicting, or that only one criterion has been proposed (Petersson 2006: 64–71, 81–82; Karlenby 2007: 135). In practice, it has been difficult to determine traces of internal divisions indicative of barns in the Scandinavian peninsula. Recently, examples of internal divisions in some longhouses at Hofstad in Melhus in Trøndelag have been presented (Henriksen & Bryn 2019:182–186). Otherwise, it has been pointed out that no examples have been found in Norwegian longhouses from either the Late Bronze Age or the pre-Roman Iron Age (Myhre 2002: 98; Gjerpe 2016: 208). In other cases, it has been possible to show that the longhouses had barns. However, even when there are examples, it has been difficult to demonstrate that keeping livestock has been the dominant practice in a given area (Pedersen & Widgren 1998: 256–258). There are also examples that the practice of keeping animals indoors might have varied over time, and between different social groups. For example, in Östergötland in Sweden stables seems to have been rare during the pre-Roman iron Age. However, there were indications of a stable in a few of the longest longhouses. During the Roman Iron Age, the clearest indication comes from medium-sized longhouses. The example highlight that it changes in the role of cattle, and whether there were barns or not, can reflect differences between resources and aims of different social groups (Petersson 2006: 84–85, 92–93, 253).
According to Maria Petersson, the problem is that the debate on barns is based on the assumption that livestock were always kept indoors during winter. Instead, she emphasizes the relationship between the longhouse and animal husbandry. In principle, livestock were always present in connection with the houses, but how they were cared for varied. This approach does not contradict the interpretation that the practice of keeping animals in barns occurred during the Early Iron Age. It also seems to have been common that animals were only kept in parts of the longhouses for limited periods, for instance when they were sick or during calving (Petersson 2006: 63–64, 80–82, 87–93).

A less rigid interpretation of the divisions of the longhouses can also explain the high phosphate values south of Houses 3, 6 and 7 at Vik. In these cases the animals have not been, or have only seldom been, indoors. Instead, they have regularly been kept in outdoors enclosures just south of the longhouses (Figure 12).

**LONG LONGHOUSES AT VIK**

At Forsandmoen, longhouses considerably longer than c. 20 m did occur from around the year 200 BC. Later, about year AD 1, there were also really large houses that could be 50 m in length. The introduction of longer longhouses did not take place simultaneously in all parts of Scandinavia. Denmark was dominated by smaller and medium-sized longhouses until the beginning of the Late Roman Iron Age. In contrast, longhouses of 30–40 m have been found in Norway, and in Mälardalen and Skåne in Sweden, from the end of the pre-Roman Iron Age (Løken 1998:116–119; 1999: 54–55; 2001:59–60; Artursson 2005:91–93, 97–98; Wikborg & Onsten-Molander 2007: 119; Martens 2010: 241-242; Gjerpe 2017: 111).

One example is House 6 in Field B, but it is impossible to detect a continuous and steady development from shorter to longer longhouses at Vik. Houses 3 and 7 were, respectively, c.16 m and c.14 m in length, which is shorter than the earlier House 1. Together, the two longhouses from PRIA 2 were the same length as House 6, dated slightly later. In other words, the early 20 m long House 1, which is supplemented by a small outbuilding, that was superseded by a structure where the dwelling house, House 3, and the outbuilding, House 7, were of almost the same size. This could indicate that more functions had moved out of the dwelling house. Later, these functions maybe moved back into the larger House 6. In the latest phase of PRIA 3, Houses 13 and 18 are significantly shorter than House 6, indicating that the houses’ functions have changed again.

The fact that House 6 was much longer and had another internal architecture with a broader central aisle appears to represents something radically new. However, already in the construction of Houses 3 and 7, new ways of building houses were introduced. This is evident from, among other things, the radically altered orientation (Figure 3). It is noteworthy that a similar change in orientation also occurs at Kvenild at Tiller, south of Trondheim, in Trøndelag. Here, about 20 houses dated to 1000-100 BC were excavated. Most, but not all, were earlier than those at Vik, and had an east-west orientation. The only exception was the largest longhouse, House Q, which had a northwest - southeast orientation. House Q has been dated to the 400s or 300s BC (Grønnesby 2005: 99, 102–105), a date that can be compared with PRIA 2 and Houses 3 and 7 and maybe the slightly later House 6 at Vik. House Q is just a single example, but it suggests that reorientations of larger houses occurred in several places in Trøndelag during PRIA 2. Later on, it seems to have been important to return to an earlier orientation.

The changes of orientation should also be interpreted as intentional. Analyses from the county of Østfold in Norway, and from Denmark, have shown
that the orientation of longhouses can only to some extent be explained by the prevailing wind direction. All exceptions show that their orientation was closely related to changes in sacred or mental perceptions (Webley 2008: 56–60; Gjerpe 2017: 124).

LONG LONGHOUSES IN TRØNDELAG
House 6 is not the only c.30 m long longhouse known from the pre-Roman Iron Age in central Norway. Three longhouses of a comparable size have been excavated at Hofstad in Melhus. At that site two smaller houses were interpreted as outbuildings with large hearths or ovens, probably used in cooking (Henriksen & Bryn 2019:181–191). Previously, two unusually long longhouses, Houses I and IV, had been excavated at Søberg in Melhus (Rønne 2005: 89–93). Another comparably long longhouse was excavated at Husby in Stjørdal (Henriksen 2007: 72, Figure 3) and at Sjetnan in Trondheim municipality (Mokkelbost & Ystgaard 2015: 30–35).

These longhouses are about 25–33 m in length and are dated to PRIA 3 or the latter half of the pre-Roman Iron Age. At Valum–Hallem in Verdal municipality, a c.40 m long longhouse has been dated to 200 BC – AD 135 (Mokkelbost & Sauvage 2014: 64, 69, Table 5). A number of these dates are rather late, and the house may be dated to the last century BC or the first century AD. The interpretation is supported by analyses of houses with a comparable length in Mälardalen and Skåne in Sweden. They do not appear to be earlier than about AD 1 (Karlenby 2007: 137; Martens 2010: 242).

A similar interpretation may also be applied to Houses D and E at Hovde in Ørland. The two houses were, respectively, 28 and 33 metres in length. One ¹⁴C analysis dates House E to 360–35 BC, but the longhouse has been interpreted as contemporary with House D, which has been dated to 115 BC – AD 55. House D was overlaid and probably quickly replaced by House F, which has been dated to AD 70–310 (Grønnesby 1999: 69–71, 74–75, 77). Given that houses with posts dug into the ground rarely last longer than 100 years, Houses E and D were probably built towards the end of pre-Roman Iron Age. The oldest houses at Hovde should therefore be contemporary with House 18 in Field C, and with the longhouse at Valum–Hallem.

LARGE LONGHOUSES AND SOCIAL DIVERSITY IN THE PRE-ROMAN IRON AGE
The pre-Roman Iron Age has been treated as a period of decline, characterized by a low degree of social differentiation. This has often been interpreted as a result of unrest in continental Europe during the first centuries of the period. Another factor that often is highlighted is that Scandinavia was hit hard by climate deterioration around 500 BC (Pedersen & Widgren 1998: 246–247). Today, this particular climate change is considered to have been more gradual and to have started earlier, already by about 1000 BC. The period that followed has also been revaluated and is often described as a third agricultural revolution (Solberg 2000: 65; Myhre 2002: 76, 92–97). The importance of agriculture was also evident in funeral contexts. From about the year 200 BC, hand sickles, needles, and awls started to be included in both women's and children's burials (Petersen & Widgren 1998: 352–357; Solberg 2000: 99).

In the early pre-Roman Iron Age there are also single finds of weapons and prestigious Celtic artefacts in different contexts in southern Scandinavia (Hedeager 1990: 52–55, 195–199; Martens 2011). A gradual change towards a society with hierarchical differences became more evident in the second half of the period. In western Norway, Celtic prestigious items, single weapons and female jewellery had already been introduced in burials by around 200 BC.
The examples are few, but it is likely that they indicate the introduction of some form of chieftain (Solberg 2000: 94–103; Løken 2001: 52–53). Similar changes occurred in Sweden and in other parts of Norway during the last century of the period (Nicklasson 1997: 138; Solberg 2000: 42–48, 65). In Trøndelag the earliest burial with weapons, a spearhead and a shield boss dated to the last hundred years BC were excavated at Hø in Inderøy (Møllenhus 1973: 15, Fig. 13–14). It has also been pointed out that during the end of the pre-Roman Iron Age there were new ways of looking at property rights. A previous system, where land belonged to the community, was starting to dissolve during the end of the pre-Roman Iron Age. Instead one or a few dominant families were beginning to establish ownership rights over the land, or at least over some of the land (Herschend 2009: 170–171).

The changes in both agriculture and the social system indicate that the pre-Roman Iron Age was characterized by several parallel processes. Weapons and jewellery were used to indicate high status. Tools used in crafts and agriculture can be interpreted in the same way, especially given that they often only occur in certain graves, or together with other high status objects such as jewellery. The shape of the longhouses certainly formed part of these changes.

Archaeologists have generally neglected the internal organisation and division of functions in the longer longhouses from the pre-Roman Iron Age (Carlie & Artursson 2005: 197; Karlenby 2007: 135). Although there are some examples. In the longhouses from Husby, Soberg, and Valum-Hallem, there were probably three or four rooms or sections (Mokkelbost & Sauvage 2014: 69–70, Figure 54). Another example is the earliest longhouses at Hovde, which had hearths located in different parts of the house (Grønnesby 1999: 72–73). Recently, there has also been carried out a room analysis of the longhouses at Hofstad in Melhus (Henriksen & Bryn 2019: 191–194).

The distribution of hearths in House 6 at Vik is comparable to the longhouses at Hovde. It is obvious that different household tasks were carried out in different parts of House 6. The high phosphate values around the southern hearth suggest that the activities generated a lot of waste, which might not have been desirable in the dwelling area. In the Scandinavian peninsula, comparable rooms with hearths near the gables of large longhouses from the Roman Iron Age have been interpreted as spaces where the servants, or slaves, lived and worked (Norr 1996; Myhre 2001: 116). It is uncertain whether this was the case also in the pre-Roman Iron Age. The analyses carried out to examine evidence of social differentiation during the pre-Roman Iron Age are mainly based on material from southern Scandinavia (Herschend 2009). Our knowledge about division of labour and social and/or gender-related conditions is therefore limited in other parts of Scandinavia, especially at a local level.

An example of these local differences is the 33 m long longhouse (House 2) at Hofstad in Melhus. It has been interpreted as two smaller houses with two separate households that have been built into a larger longhouse. Two rather equal households each had their own living area in the two short ends of the longhouse, separated by a large common barn in the middle part of the house (Henriksen & Bryn 2019: 191–196, Figure 5). House 6 at Vik did not have a barn, and the living part was situated in the middle part of the longhouse. The differences indicate that there have been regional differences between the coast and inland districts in Trøndelag.

In another example, the interior of the long House CXIX at Forsandmoen was subdivided into several sections and a barn. Like House 6 at Vik, House CXIX had a larger space or room in the centre of
the longhouse. It was characterized by a centrally placed hearth and sparsely spaced roof-supporting posts. This construction is not quite comparable to House 6, but the room in House CXIX has been highlighted as an example of a hall already in use during the pre-Roman Iron Age (Løken 2001: 56–59, 69, 81, Figure 3a). Based on similar criteria, the 33 m long House D in Hovde at Ørland has been interpreted as a hall. It is not an impossible interpretation, given the location of Hovde, with a wide view overlooking the sailing routes in and out of the Trondheim fjord, and offering the possibility of exercising control over this traffic (Grønnesby 1999: 72–73, 77–78).

The halls highlighted in the literature are generally dated to the first millennium AD. The criteria also include more exceptional artefacts in glass and gold (see Herschend 1993: 182–185). In this context, it is important to emphasize that there is an ongoing and more differentiated discussion about the hall concept. Leif Karlenby has pointed out that a space defined as a hall within the longhouses has almost always been found in excavated settlements from the Roman Iron Age in Mälardalen. Such spaces could have been halls, but Karlenby argues for an increased differentiation of the concept. Instead, he argues, the larger open spaces in medium-sized longhouses should be interpreted as a room for meetings, but at a family level. This type of meeting room also has an earlier history in the pre-Roman Iron Age. Halls identified in the largest houses during the Roman Iron Age do often have a similar design and shape to the less exclusive ones, but the artefacts are more exclusive and are clearly linked to the highest social strata of chieftains and petty kings. These halls were used to create and maintain political and military relations between different groups (Karlenby 2007: 123–128, 131, 133).

The middle part of House 6 can be interpreted as a hall or at least as a place for social gathering. However, it is more uncertain whether a chief lived here. It is still not known if House 6 was built for just a single household, or if it was occupied by an extended family. Another question is how House 6 is related to the later houses, like Houses 13 and 18, which are so much smaller. These houses indicate a beginning of a new stage in Field B. The area was already abandoned during the latter part of PRIA 3. In this case Field B is not comparable with the other areas at Vik. There may have been several reasons for the abandonment, but the area does not appear to have been used for settlement during the rest of the Iron Age or the Middle Ages. This indicates that the site was no longer considered suitable for housing. It is also possible that the abandonment had a background in a changed view of property rights, in line with what has been propounded with regard to southern Scandinavia in general (See Herschend 2009). In order to better understand these changes, the material from the pre-Roman Iron Age should be compared with that from the Roman Iron Age, a task that lies beyond the scope of this article.

On the other hand, these discussions and research results demonstrate the potential in an analysis of longhouses from the pre-Roman Iron Age. In the Scandinavian peninsula, more exclusive jewellery and weapons were introduced in burials during the last century BC. Houses 3, 7 and 6 were earlier. The size and the orientation of the houses may just be one part of a larger picture. A precursor to the hall, an incipient division of labour inside the longhouses and depositions in different parts of the buildings surely can be other traces of important changes. Together they indicate that during PRIA 2 longhouses already constituted a significant way of expressing social, sacral and mentality differences.

CONCLUSION
The purpose of this article was to investigate the longhouses from the pre-Roman Iron Age at Vik.
The longhouses have been divided into three different chronological phases, PRIA 1-3. The earliest buildings, Houses 1, 8 and 10 belonged to PRIA 1 (700-400/350 BC). All the longhouses were oriented in an east-west direction. In the best-preserved House 1, there were remnants of a clay floor in the east, where traces of a fireplace show that this was a dwelling area. In the western half, elevated phosphate values show that this part was used as a barn.

Houses 3, 7 and maybe 11 belonged to PRIA 2 (c. 350/300–200 BC). Unlike the earlier houses, the hearths had been dug into the subsoil. Both House 3 and 7 were divided into two sections and were oriented in a northwest to south-east direction. Analysis show that House 3 constituted a dwelling house but lacked a barn. House 7 was probably a combination of a threshing barn and a storage building. The two houses were probably in use simultaneously and together they constituted the buildings of a farm.

The latest group belonged to PRIA 3 (200 BC–AD 50) and included Houses 6, 9, 13 and 18. The date of House 6 was probably close in time to Houses 3 and 7. The three houses had the same orientation, but House 6 was c. 30 metres long and 6 metres wide. The later Houses 9, 13 and 18 were smaller, but like House 6 they all seem to lack a barn. All the houses in the latest group had wider central aisles than the earlier houses.

Overall, PRIA 2 appears to have marked the beginning of an eventful period. With Houses 3 and 7, the older preference of orientation of the houses was broken, while the previous multifunctional longhouse was split up and functions divided between two longhouses. Later during the opening phase of PRIA 3, the larger House 6 was built. Later, the houses were shorter, and the houses were once again laid out in the earlier west-east orientation. This orientation dominated the later building tradition at Vik throughout the Roman Iron Age. The changes in size, shape and orientation of the longhouses at Vik also give a good indication of the value of analysing longhouses in order to better understand the changes in society during the pre-Roman Iron Age.

ACKNOWLEDGEMENTS
A special thanks to Marie-Josée Nadeau, Associate Professor and Leader of the National laboratory for Age Determination at NTNU University Museum in Trondheim, for good advice and source-critical remarks about the $^{14}$C method.
REFERENCES


Løken, T. 1999: The longhouses of Western Norway from the Late Neolithic to the 10th Century AD: Representatives of a common Scandinavian building tradition or a local development? In: Schjelderup, H. & O. Storsletten (Eds.): Grindbygde hus i Vest-Norge. NIKU-seminar om grindbygde hus. Bryggen Museum 23-25. 03. 98, pp. 52–64. NINA-NIKU Stiftelsen for naturforskning og kulturarvenesforskning. NIKU temahefte 030. Oslo.


