

## CHAPTER 8

# BOATHOUSE EXCAVATION AT SKONSVIKA

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The cultural context of boathouses in northern Norway

The remains of both prehistoric and historic period boathouses are visible in the landscape as collapsed walls of turf and rock or stacked rocks with an open-ended rectangular outline. These structures are located along present and former shorelines, river and stream banks, lakes and other bodies of water. Their openings usually face the water to facilitate boat access.

Boathouse features in northern Norway have traditionally been interpreted in relation to Norse settlement. The geographical distribution of boathouses generally follows that of Norse sites and features. It is also commonly assumed that boathouses are an integral component of northern Norwegian Iron Age farming settlements (Johansen 1979, R. Nilsen 1995, G. Nilsen 1998, Grydeland 2001, Guttormsen 2005, Wickler and Nilsen 2005).

Norse boathouses are often clearly visible in the terrain due to substantial wall remains having a linear mound-like appearance. In the northernmost part of Norway, a variety of structures interpreted as Sámi boathouses or boat shelters have also been recorded (Bratrein 1995). They are rectangular to oval in form, open-ended, narrow, trench-like features lacking the pronounced wall remains that are characteristic of the Norse boathouses.

More recent archaeological investigations have shown that boathouses are difficult to categorize into “pure” ethnic categories. In ethnically heterogeneous areas along the coast of northern Troms and Finnmark counties, boathouses display a great deal of variability with respect to construction details. Site complexes with boathouses in this region also typically include

Sámi archaeological features such as slab-lined pits (Norwegian *hellegroper*) and turf house remains (Norwegian *gammetufter*). Boathouses are also commonly associated with the ethnically complex multi-room house structures (see R. Nilsen 1995, Henriksen 1996).

The Boathouse Project and Skonsvika locality

One of two adjacent boathouse structures at Skonsvika, Berlevåg Municipality was investigated as one component of a larger research project undertaken by the authors. The principal goal of the project is to conduct excavations at selected boathouses along the coast of northern Troms and Finnmark counties. The project has targeted archaeological sites where the presence of groups with a blend of Sámi, Norse and other ethnic identities is indicated. These hybrid cultural landscapes provide a focal point for investigating the complex interaction and coexistence of these groups expressed through material culture. The focus on boathouses is also important as a means of visualizing the maritime aspects of coastal settlements in these hybrid spaces.

The boathouse at Skonsvika was selected for excavation in part because archaeological investigations of boathouse remains in the extreme northern part of Norway have been minimal. Although there are a substantial number of slab-lined pits and turf house remains in Berlevåg Municipality and in the vicinity of Skonsvika as well, none of these are directly associated with the boathouses at this locality. The boathouses are located in close proximity to one of the largest known multi-room house structures, however. The distribution, chronology and characteristics of multi-room houses are discussed in detail elsewhere

in this volume and will therefore not be addressed directly here. Although a total of 29 boathouse / boat shelter features have been recorded at 10 of the 22 multi-room house localities recorded thus far, excavations in the form of limited test pitting had only been carried out at two of these structures prior to our excavation at Skonsvika. The previously excavated boathouses are from the site localities of Tofteelva, Laukøya and Gammelvær, Loppa and date to the late medieval period (Myrvoll 2002, 2003). Although boathouses are commonly associated with multi-room houses in the west, they are rare in the east of Finnmark (Amundsen et al. 2003). Boathouse remains outside of Skonsvika in Berlevåg Municipality are restricted to a single structure at the Kjølnes locality.

The boathouse at Skonsvika investigated as part of our project is situated c. 20 m west-southwest of the multi-room structural complex that was partially excavated in 2002, 2003 and 2004. A direct association between the boathouses and the multi-room structure is suggested by their close proximity. The position of the boathouses within the landscape would also have made them readily accessible both as a boat landing at the mouth of the river and for the occupants of the multi-room house complex.

The boathouse is located within a swale that gradually slopes westward to the mouth of the river flowing into the southeastern bay at Skonsvika. The remains of a second smaller boathouse lie directly to the north-northwest of the feature we excavated. The lower seaward portion of this boathouse appears to have been eroded by wave action in the past and was therefore less promising for excavation.

On the surface, the structural remains have the general appearance of a long and narrow rectangular “Norse” boathouse with walls on three sides and an opening facing the ocean. (see Rolfsen 1974). A majority of the northern wall makes use of a natural bedrock outcrop thus eliminated the need for construction of a free-standing wall. The use of naturally sloping landscape features for boathouse walls is also found in typical Nordic structures (G. Nilsen 1998). The “Norse” appearance of this boathouse combined with its apparent association with an ethnically complex multi-room structure made it an interesting research object within our project framework. The multi-room house at Skonsvika is one of the largest and most complex of those presently documented. It is also one of two such structures where extensive excavations were undertaken as part of the multi-room house project in 2002 and 2003. The data from these excavations provides a solid empirical base for comparison with

the boathouse material and an opportunity to assess for the first time the relationship between these two types of commonly associated structures.

### Boathouse excavation

The excavation at Skonsvika was carried out from July 3-9, 2006 by the authors with the assistance of archaeologist Jørn Henriksen who also participated in the multi-room house excavations.

The excavation methods employed at Skonsvika have been used by the authors in the excavation of boathouse structures elsewhere in northern Norway. These include sites on the island of Vestvågøy in the Lofoten Islands and individual boathouse features on the island of Spildra and at Flatvollen, Lyngen in northern Troms County. One or more trenches are excavated perpendicular to the long axis so that both the floor and walls are revealed in profile. This enables documentation of the wall construction sequence and stratigraphic relationship between the walls and floor. The trenches have been at least 1 meter wide and usually positioned near the midsection or towards the opening of the boathouse. Our experience indicates that this approach enables a reliable interpretation of use history (see G. Nilsen 1998, Wickler and Nilsen 2005).

The excavated boathouse structure has an exterior width of approximately 7 m and an interior width of 2 m between the walls. The interior length is 14 m making the length to width ratio quite high for this type of structure. An excavation trench was placed perpendicular to the long axis of the boathouse approximately 4 m below the inner back wall (Figure 8.1). The trench was 8 m long and 1.5 m wide, extending from the top of the northern bedrock outcrop wall to about 1 meter beyond the outer southern wall. This provided a broad exposure of the floor and both walls.

As is also the case with the multi-room house complex, the boathouse was filled with wind-blown (aeolian) sand deposited after abandonment of the structure in the medieval period (Figure 8.2). The sand deposit varied in thickness from 80 – 100 cm in the floor area and 40 cm above the central southern wall. This sand layer has numerous thin, laminated bands with variable amounts of silt interspersed with lenses of pure sand indicating a series of depositional episodes over time. The presence of a buried peat / turf stratum within the wind-blown sand above the southern wall suggests a period of stability leading to incipient A horizon development.

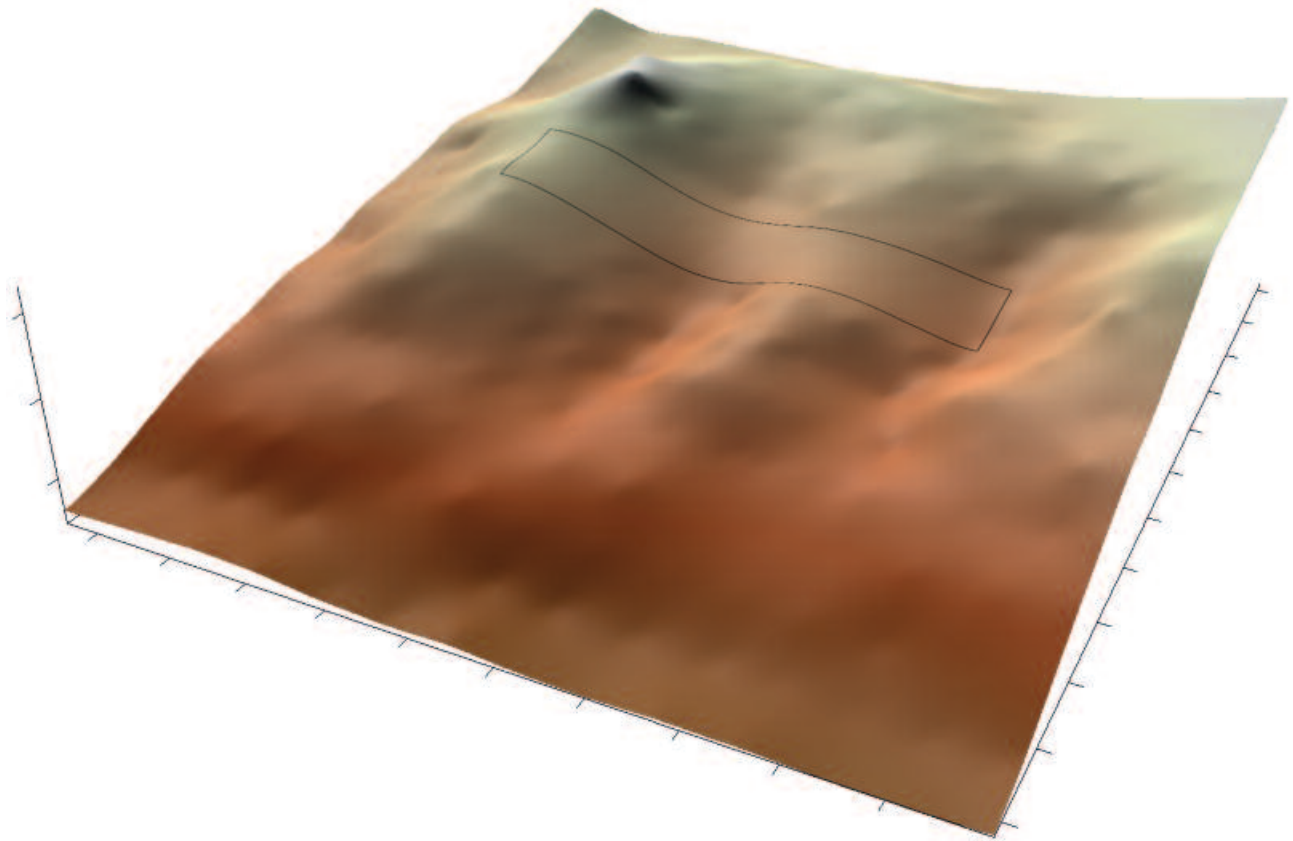


Figure 8.1 Digital terrain model of the Skonsvika boathouse showing excavation trench location, view to northeast.

The boathouse excavation at Skonsvika was conducted in mechanical levels having a maximum thickness of 10 cm within natural stratigraphic units. Material was collected from spatial units with a maximum size of 50 x 50 cm within the trench. Spatial units of more restricted size were utilized within the south wall cultural deposit where there was a high density of faunal remains. Significant finds were plotted and drawn *in situ*. Depths below datum were recorded at 50 cm intervals over the entire trench at the surface and base of the turf layer. This was also done at contact with the upper cultural deposit, the lower cultural deposit and at the base of excavation where additional spot elevations were also recorded (Figure 8.3). Plan views of the trench were drawn at seven levels, three of which are presented in Figure 8.3. The plan view of the upper cultural deposit was drawn when the initial layer of rocks under the wind-blown sand deposit had been exposed in the wall and floor area. The plan view for the lower cultural deposit was drawn following removal of the initial layer of rocks in the wall and floor areas. The basal plan view was drawn when only the rocks forming the foundation of the southern wall were remaining.

### Construction and depositional sequence

A bedrock face with a step-like profile was utilized for the northern boathouse wall and extends 1.5 m above the floor. The southern wall consists of free-standing stacked rock built up 30 cm above the original ground surface (see Figure 8.2). The southern wall extends 60 cm above the floor level and appears to have been built on a 30 cm high mound-like base of culturally sterile fill. The fill was potentially excavated from the floor area during boathouse construction. The total width of this linear “mound” forming the southern wall foundation is approximately 3 m.

The initial phase of wall construction consisted of a layer of water-rounded boulders up to 60 cm in diameter placed on a level fill surface (Figure 8.4). The alignment of boulders forming the outer wall margin was clearly visible at the base of excavation (see Figure 8.3). The inner wall margin was more difficult to define due to the presence of rocks fallen from the wall onto the floor following abandonment of the structure. Additional layers of rock were stacked on the boulder wall foundation. A sandy silt matrix between the rocks was a component of the wall fill. This sediment had such a high density of faunal bone

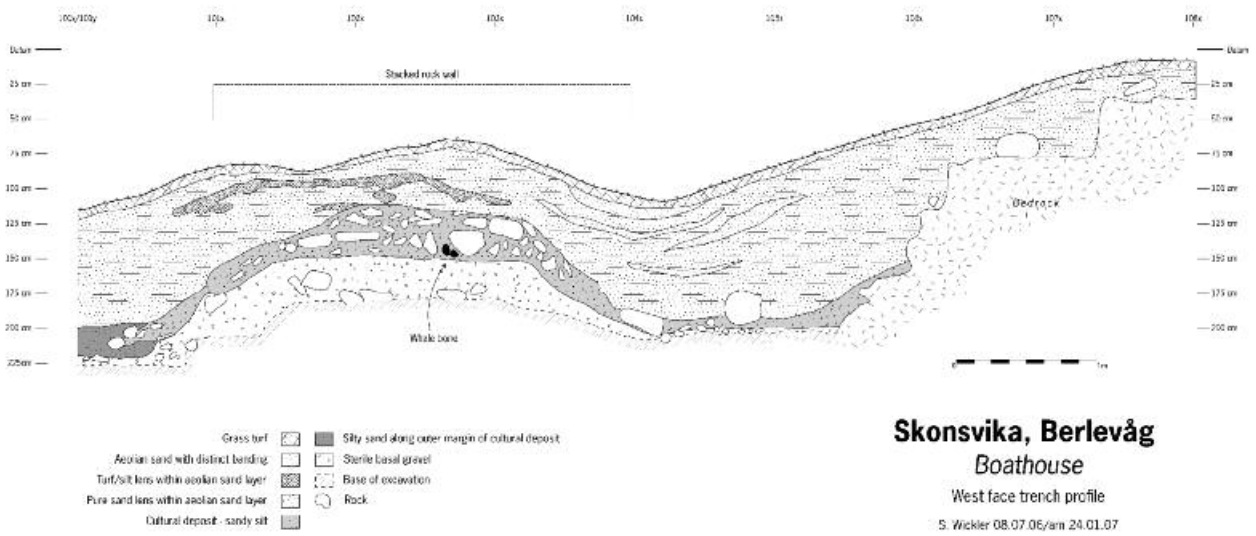


Figure 8.2 Stratigraphic profile of the boathouse excavation trench, west face.

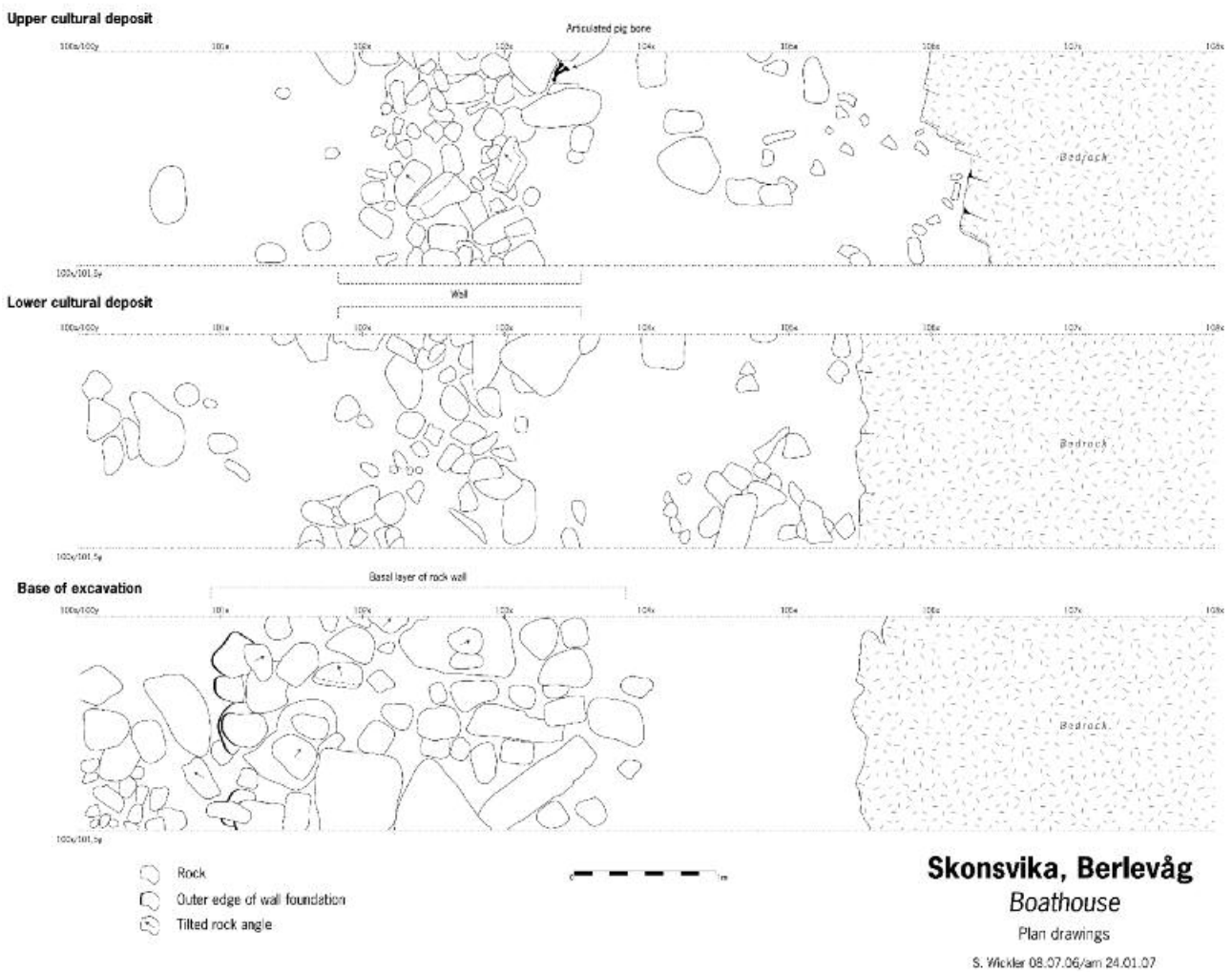


Figure 8.3 Plan drawings from the boathouse excavation trench.

remains that it was interpreted as a cultural deposit with midden-like attributes. It is unclear if the wall was built up as a single event or in multiple phases. The distribution of rock and cultural remains in the midden-like wall deposit does suggest that it was built up over a period of time, although there was no evidence of internal subdivisions in this stratum. During excavation, plan views were drawn of the upper and lower cultural deposit (see Figure 8.3).

The cultural deposit within the southern wall extended inward across the floor area and also covered the lower portion of the sloping bedrock that formed the northern wall. The deposit in the floor area was 10 cm thick on average with no evidence of internal subdivisions. Several clusters of larger rocks were found on the floor. These appeared to have been displaced from the southern wall rather than representing formal sub-features such as hearths or post supports. The quantity of cultural remains, and faunal bone in particular, in the floor area was significantly lower than in the southern wall deposit. This pattern suggests that refuse from the floor may

have been disposed of within the wall fill.

Following abandonment of the boathouse structure by the close of the 14<sup>th</sup> century, wind-blown sand filled the structure and surrounding swale area. There is evidence of limited secondary short-term use within the wind-blown sand deposit above the central floor area. A diffuse charcoal scatter covering an area of 100 x 50 cm was located adjacent to the inner southern wall at a depth of 50 cm below the present ground surface. About 10 cm above this scatter in the same location, two 20 x 20 cm triangular-shaped arrangements of thin wood fragments 50 cm from one another were exposed parallel to the southern wall. These may represent the remains of post supports although posthole evidence was lacking. A boat nail and an unidentifiable piece of iron were found in close proximity to the wood remains. A radiocarbon date from the charcoal scatter produced an age estimate suggesting activity sometime during the past two centuries. This also suggests that a significant portion of the wind-blown sand deposit was deposited in the recent past.



Figure 8.4 View of the excavation trench with east profile and southern wall foundation.

## Artifact assemblage

The recovery methods at Skonsvika have also been employed by the authors elsewhere for the boathouse project. The primary objective was to maximize recovery of cultural remains in a consistent manner that insured comparability between localities. The entire excavated matrix with cultural remains at Skonsvika was wet sieved through 4 mm mesh. After removal of rocks and coarse gravel, the material remaining in the sieve was bagged for sorting in the laboratory at Tromsø University Museum. This approach greatly enhanced recovery of small artifacts and bone as well as saving time in the field where adverse field conditions made sorting difficult and unreliable. Systematic sieving has only been carried out in a small fraction of the boathouse excavations in northern Norway, and to our knowledge, none of the excavations have employed water sieving in the field.

Both the quantity and variety of artifacts recovered from the excavation were limited, which is not unusual in boathouse excavations. A majority of the finds were fragmentary iron objects. Apart from (boat) nails, most of these were unidentifiable. Iron artifacts with sufficient potential were X-radiographed to assist with identification.

Waste material from the manufacture of bone and antler artifacts was also recovered. This included waste “shavings” of reindeer antler, pieces of worked mammal and fish bone, and unfinished / discarded artifacts. Examples of the latter include a segment of whale bone with holes cut near both ends. The collective evidence demonstrates that the boathouse was utilized as a workshop area for the production of bone artifacts. In other words, this structure was a multifunctional entity where boat storage was just one aspect.

## Faunal bone analysis

Faunal bone remains were analyzed by zoo-archaeologist Colin Amundsen who also analyzed the bone from the Skonsvika multi-room house complex (see Chapter 17).

A majority of the material (c. 80 %) was composed of fish bone. The principal fish species represented include *Gadus morhua* L. (cod), *Melanogrammus aeglefinus* (haddock), *Hippoglossus hippoglossus* (halibut) and *Brosme brosme* (cusk). Minor species include *Pollachius virens* (saithe), *Anarhichas lupus* (wolffish) and *Sebastes mentella* (redfish). These are all locally accessible deep water species. Evidence for

processing of fish is limited. There are some cut fish ribs and one cod surpacleithrum had a single shallow knife cut mark possibly associated with beheading.

The identifiable bird remains were primarily from gull species. At coastal sites it is quite common for gulls to be found in the deposits as intrusive species unrelated to subsistence behaviour. Terrestrial mammals include *Sus scrofa* (pig) and *Rangifer tarandus* (reindeer). None of these showed any signs of butchery, such as knife cut marks. The articulated limb bones of an adolescent pig were recorded *in situ* within the upper cultural deposit of the southern wall (see Figure 8.3). Some of the reindeer bone and unidentified long bones showed signs of being cracked while still green, possibly for the extraction of bone marrow. A majority of the marine mammal remains consisted of whale bone, including a large rib and other bone fragments extending into the northern trench profile near the base of the southern wall (see Figure 8.2). A single canine from an unidentified seal species was also recovered.

Although evidence for food preparation such as burning and butchering is limited, there is ample evidence of artifact production. Specifically, reindeer antler showed clear signs of being worked. Several pieces of reindeer antler appeared to be waste material from the final stages of artifact manufacture. There were also antler “blanks” which had knife cut marks. In addition, the cleithrum from haddock also showed signs of being worked. The more robust portion of the cleithrum was intentionally removed and possibly prepared for further work. According to Amundsen, the modification of haddock cleithrum has also been recorded at Viking Age sites in Iceland such as Hofstadir for the production of gaming pieces.

Compared to the multi-room house complex, the faunal material has some common characteristics in terms of behaviour such as evidence for artifact production and the species represented. This strengthens the assertion that the boathouse is directly associated with occupation of the multi-room house. The boathouse also represents an activity area associated with the multi-room house where craft production was taking place. It is not clear what was being produced but the similarities to the multi-room structure are compelling. The limited evidence for food preparation, in contrast to the main occupation site, strengthens the conclusion that this was a separate work area.

## Radiocarbon dates and chronological sequence

Four charcoal samples from the boathouse were

submitted to the Radiocarbon Dating Laboratory at the University of Waikato, New Zealand (Table 1). All of the samples were identified to taxa by botanist Helge Høeg prior to submission. Only short-lived species were submitted for dating, consisting primarily of birch (*Betula sp.*) but also including minor amounts of willow (*Salix*) and aspen (*Populus*). An appreciable amount of pine (*Pinus*) was present in three of the samples and spruce (*Picea*) was identified in the fourth. These are long-lived species that most likely represent driftwood used as fuel and can contribute to producing dates that are much earlier than their archaeological context. Following the removal of coniferous charcoal, three of the samples were so small that AMS dating was necessary.

The radiocarbon dates indicate that the boathouse was in use during the 14<sup>th</sup> century with abandonment by 1400 AD. Initial use may date to the late 13<sup>th</sup> century although it is difficult to provide a more precise estimate within this period. Some mixing and disturbance of the cultural deposit in the south wall is indicated by the inversion of dates from the basal level (cal. 1340-1400 AD) and the main cultural deposit (cal. 1250-1320 AD) which do not overlap at two sigma. This may be explained by the larger area from which the upper dating sample was collected (1 x 1 m) compared to the other dates which are from 50 x 50 cm units, reflecting a greater degree of mixing and less secure context. This is supported by the more comparable ages of the dates from the basal portion of the wall and the floor. The radiocarbon dates match those from the multi-room house structure where the main occupation period is from the 14<sup>th</sup> century (Amundsen et al. 2003, see Chapter 16).

Limited secondary use of the floor area within the boathouse is dated to sometime within the past two centuries (cal. 1790-1940 AD). This date is from a charcoal scatter with overlying wood fragments and associated iron artifact fragments. The nature of secondary use is unclear but it may be linked to brief or sporadic use where protection from the wind was provided by the depression that still existed above the original floor.

### Interpretation of results

In what ethnic context should the boathouse at Skonsvika be interpreted? The excavation results support a direct association with the adjacent multi-room structural complex in terms of chronology (14<sup>th</sup> century occupation), construction techniques (free-standing stacked rock walls) and cultural materials

(artifact assemblage and faunal bone). It is therefore reasonable to anticipate that the boathouse reflects a hybridized expression of ethnic complexity in the same manner as the multi-room house. Evidence from the multi-room house structures documents the presence of Sámi, Norse and Novgorodian-Karelian influences. Potential connections between the boathouse feature and each of these groups are reviewed below as a means of untangling the complex strands of influence that can be revealed by the archeological evidence.

One interesting aspect of relevance to the question of ethnicity is the general appearance of the boathouse structure which is extremely narrow relative to its length. This is also a trait of the trench-like boat houses/shelters found along the coast of North Troms and Finnmark that have been interpreted as Sámi features. However, the latter are usually dug into the ground and lack evidence for walls. It is noteworthy that the long and narrow Sámi river boats still in use on the Tana River and elsewhere in Finnmark would be well suited to the Skonsvika boathouse. One example at the National Maritime Museum in Oslo from Nordreisa in North Troms was built around 1920 and is 9.37 m long and .86 m wide. This is not intended to imply that the boathouse was used for river boats from an entirely different context but simply to highlight the possibility that Sámi watercraft *may* have been housed in this structure.

Does the Skonsvika structure display any of the characteristics commonly associated with the archaeological signature of a 'typical' Norse boathouse? The general appearance of the boathouse on the surface is not unlike that of structures in the core Norse area of northern Norway. This includes a rectangular outline with substantial wall remains. Norse boathouses such as those found on the island of Vestvågøy in Lofoten display standardized wall construction features. These include parallel rows of stacked rock of uniform size with turf placed in between. Turf is also stacked along the outer wall to provide additional support and insulation. The presence of postholes indicates that the roof was supported by an inner row of posts (G. Nilsen 1998, Wickler and Nilsen 2005).

Although bedrock outcrops are sometimes used as natural walls in the construction of Norse boathouses, the free-standing stacked rock wall at Skonsvika built without turf is distinctive and differs substantially from the standard wall construction technique in the core Norse area to the south. It does, however, bear a striking similarity to the wall construction technique

in multi-room houses. The extreme narrowness of the Skonsvika boathouse is also unlike Norse boathouses. This is especially true of medieval boathouses which often have a lower length to width ratio, including large structures such as the c. 30 x 16 meter structure from Kinsarvik in western Norway (Stylegar and Grimm 2005:259). The Skonsvika boathouse is too narrow to fit most modern clinker-built boats. This would also be the case for the Viking Age Bårset boat from northern Troms, one of the most complete pre-modern vessels known from North Norway. This boat has a standard maximum width to length ratio of 1:4 with an estimated width of 2.7 m and length of 12 m (Wickler 2004:63).

It is also necessary to assess the possibility that the boathouse was used for watercraft associated with Russian activity at Skonsvika. While it is likely that Russian-Novgorodians and Karelians would have employed larger vessels that were suitable for long-distance open sea voyages, the possibility that smaller craft were also in use cannot be ruled out.

The overall impression from the Skonsvika excavation is that differences outweigh similarities when comparing this boathouse to others we are familiar with in northern Norway. This is not unexpected since it represents the first excavation of a boathouse associated with a multi-room structure extending beyond limited test pitting. The most distinctive elements, such as narrow width, free-standing wall construction and the presence of significant amounts of bone relating to subsistence and workshop activity, are all elements which must be viewed in relation to multi-room house activity.

**Multi-room houses from a maritime perspective**  
Multi-room house localities are commonly located at sheltered locations such as inlets and bays where they are difficult to spot from the sea while still permitting a view of the major sailing fairways (Amundsen et al. 2003:83-84 and Chapters 5 and 14). Although it is obvious that the location of multi-room house sites reflects a maritime orientation in which access to the sea was an essential component, this aspect has not been explicitly addressed as a research problem within the multi-room house project.

The use of ship and/or boat planks for flooring in multi-room structures has been recorded at localities such as Løkvik in Berlevåg Municipality (see Chapter 5) and Vadsø (Simonsen 1981, Niemi 1983: 122-123). These remains can provide insights into the types of vessels being used by the site occupants and potentially stored in boathouses. Boat nails are also common in the excavated structures. Boat remains such as these can shed light on ethnic associations within the maritime sphere, although detailed analysis of this material has yet to be undertaken.

Boathouses have traditionally been classified as Norse, while the narrow trench-like boat shelters in northern Troms and Finnmark are interpreted within a Sámi cultural context. Investigations of boathouses in ethnic boundary zones have revealed more variation in construction details than is the case in the Nordic core area. The boathouses in the northern Troms ethnic boundary zone and in Finnmark are also associated with different types of sites and features than those further south. This reveals a hybridization of Norse cultural expressions in boundary zones where flexibility and adaptability to other ethnic groups are key components. The boathouses associated with multi-room houses represent even more complex hybrid maritime expressions with elements of Norse, Sámi and Russian influence. At present we have far more questions than answers regarding this relationship. It will be necessary to excavate a larger sample of boathouse remains associated with multi-room house sites if we are to understand the complex processes reflected by these distinctive expressions of multi-ethnic contact in the far north.

#### Acknowledgments

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Context	Lab. Ref.	Charcoal Taxa	Sample Size (gm)	Conventional Age (BP)	<sup>12</sup> C/ <sup>13</sup> C Ratio	Calibrated <sup>14</sup> C Age (68.2% / 95.4%)*
wind-blown sand layer - above floor	Wk-22365**	<i>Betula</i>	0.4	125 + 30	-27.3	AD 1800-1890 / 1790-1940
main cultural deposit – south wall	Wk-20636	<i>Betula</i>	6.8	694 + 36	-27.6	AD 1270-1300 / 1250-1320
basal cultural deposit – south wall	Wk-22368**	<i>Betula, Salix /Populus</i>	3.3	653 + 35	-27.8	AD 1350-1390 / 1340-1400
basal cultural deposit - floor	Wk-22367**	<i>Betula, Salix /Populus, Tilia</i>	0.7	622 + 30	-25.8	AD 1345-1395 / 1290-1400
*Calibrated using OxCal v.3.10.						
**AMS measurement						

Table 1. Radiocarbon dates from the Skonsvika boathouse.