# A Southeastern Baffin Thule House with Ruin Island Characteristics MOREAU S. MAXWELL

ABSTRACT. A prehistoric house depression excavated on the southeastern coast of Baffin Island near Lake Harbour belongs stylistically to an early phase of the Thule Period. However, features such as the rectangular shape, interior open-fire kitchens, and initial absence of a sleeping platform are more characteristic of the early High Arctic Ruin Island phase than of developed Thule. This, and additional evidence from Foxe Basin and Frobisher Bay, suggest that a segment of the earliest Thule migration may have split from the main body in Lancaster Sound and, travelling south through Fury and Hecla Strait, reached Hudson Strait and the south coast of Baffin Island. This suggestion is in opposition to earlier interpretations of a slow penetration into the more southerly eastern part of the Canadian Archipelago from the northeastern High Arctic.

RÉSUMÉ. Une structure de creusement préhistorique fouillée près du Lac Harbour, sur la côte sud-est de la Terre de Baffine, est associée au point de vue du style à une phase ancienne de la période thuléene. Cependant, les aménagements particuliers tels la forme rectangulaire, les cuisines intérieures à feu ouvert, l'absence au début d'une plateforme de couchage, sont plus caractéristiques de la phase ancienne de "Ruin Island" en Haut Arctique que de la "phase devéloppée" de la culture thuléene. En tenant compte de données supplémentaires provenant du Bassin de Foxe et de la Baie de Frobisher, ceci suggère: qu'une partie de la migration thuléene pourrait s'être divisée de la population principale dans le bras-mer de Lancaster et, ensuite, être arrivée au détroit d'Hudson et sur la côte sud-est de Baffin en passant par le détroit de Fury et Hecla. Cette suggestion est en opposition avec les interprétations antérieures d'une pénétration lente des régions plus au sud de l'Archipel Canadien oriental à partir du nord-ouest du Haut Arctique.

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## INTRODUCTION

The configuration of House 9 at the Talaguak site (KeDq-2) near Lake Harbour was initially so confusing that in order to achieve adequate interpretation we were required to pursue a more extensive excavation than is often made on Thule houses. For this reason and because certain house features lay outside "normal" characteristics of southeastern Thule structures, a detailed description of House 9 appears warranted.

The Talaguak site (more properly spelled Talarauq according to local phonetics) lies on an arm-like peninsula separating McKeller and Itivirk bays 26 km southeast of Lake Harbour, N.W.T. (Fig. 1). Dorset, Thule and historic components on the site have been described elsewhere (Maxwell, 1973, 1976, 1978; Sabo, 1977, 1981). The site is a low grassy headland 215 x 210 m facing McKellar Bay and rising from 5-10 m above highest tide line. The headland's center is dominated by a freshwater pond (Fig. 1) and several excavations have indicated that most of the grassy terrain south, west, and north of the pond covers Late Dorset middens estimated to be 1600 to 1400 years old. Cutting through these Dorset middens are 11 Thule house depressions, all apparently having associated whalebone elements. Excavations by Sabo (of House 2 in 1977 and House 7 in 1978) indicate that Thule and postcontact occupation here bridges the period from approximately A.D. 1100 to A.D. 1960 (Sabo, 1977; Maxwell, 1978). By the end of 1979, Thule houses 2, 4, 5, 7, 9 and 11 had been excavated. This article will focus only on House 9.

It was apparent from the surface that House 9 was older than others on the site. Most wall rocks were covered with thick moss sod and willow; only the central part of the

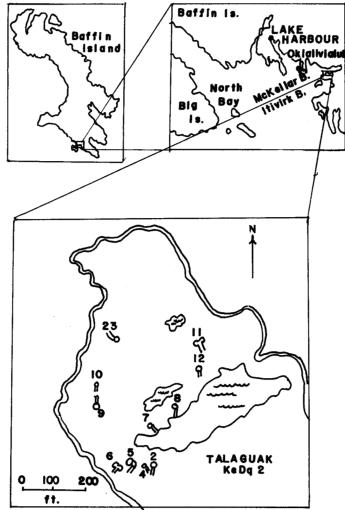


FIG. 1. Location of the Talaguaq site on southeastern Baffin Island, N.W.T. Missing numbers on this figure assigned to tent rings and gagmat.

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house pit and the entryway were depressed, and both had obviously been full of melt water for many years. House 9 and a companion House 10 are in the middle of a 50-m swale running east to west between rock outcrops. The swale descends gently from an elevation of 10 m above highest tide, then steepens just below House 9 whose

centerline, 25.5 m east of the shore, is 4 m above high tide. At the shore end the swale becomes a narrow canyon filled with larger angular boulders.

Strangely, both of these houses have entryways parallel to the coast and at right angles to the slope (House 9 faces north and House 10 faces south). Consequently the house

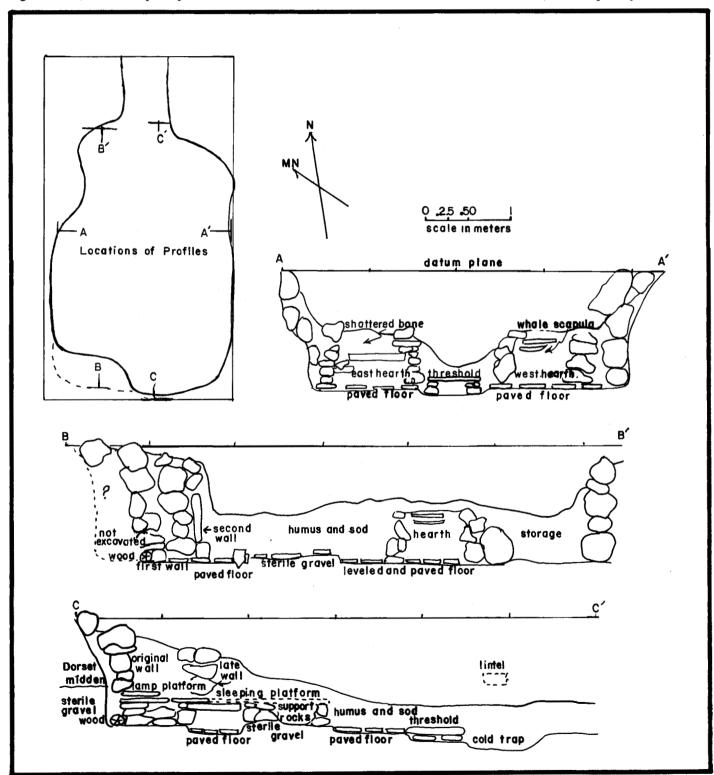


FIG. 2. Three profiles through House 9, KeDq-2, after excavation.

pits and tunnels trap all the run-off from melting snow, thawing of the active layer, and frequent summer rains. The paved entryway of House 9 is no deeper than the floor at the back of the house and therefore the house cannot drain.

We found no explanation for this illogical configuration and no indication of problems which would have prohibited re-orienting the house to provide a downslope drainage. The location of the house, however, was doubtless inspired by the thick sod and soft humus of a previous Late Dorset midden extending to 80 cm beneath the surface (Fig. 2), through which the Thule house pit had been dug. One possible explanation for the orientation is that the Thule house pit simply enlarged an earlier shallow Dorset pit with north-south axis, but we found no evidence for this.

## STRUCTURAL HISTORY

# Initial Appearance

After the vegetation had been stripped from the surface

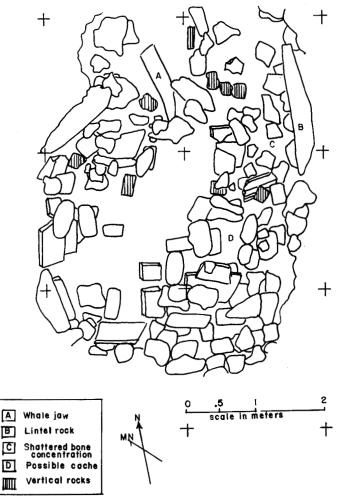


FIG. 3. Appearance of House 9 after initial removal of sod, and also configuration in Phase IV when the structure was apparently used as a storehouse.

of the house pit (Fig. 3), there was initially no discernible structure to the jumble of large boulders and frozen sod chunks. Presumably some of these had fallen inward from outer walls, suggesting that originally an outer wall of rock and cut sod had extended 0.5-1 m above the adjacent surface. Notably, a few fragments of flat, thin slabs in the southeast corner were the only indications of the sleeping platform which normally fills the back portion of Thule houses. There were some indications that the house pit had been used after it no longer functioned as a residence. The fall rocks had been used for a meat cache at the east center (Fig. 3A) and a large concentration of hard, shattered animal bone lay immediately under the sod at the northeastern corner (Fig. 3B). The entryway had been widened and a rock obviously selected for a lintel had been tossed to one side. There was no indication that this treatment of the former residence post-dated the contact period.

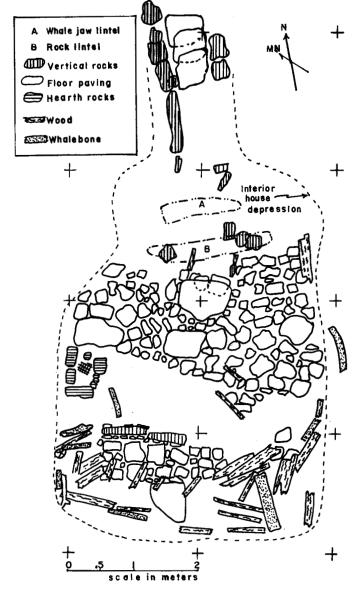


FIG. 4. House 9 in Phase I after floor areas had been paved.

The only way we were able eventually to separate original structural elements from random fall rocks was to photograph and sketch each rock in association before removing it and to continue these sketches through eight successive underlying layers of tracing film. This has enabled us to interpret the sequence of activities in constructing this carefully built house.

## Phase I: Digging and Flooring the House Pit (Fig. 4)

Initially the builders dug a rectangular pit 5.8 m long by 4 m wide and levelled out a smooth floor 1.3-1.37 m beneath the surface. It is apparent from profiles cut outside the south wall (Fig. 2) that the upper 80 cm were dug at a steep angle through a black, compacted Dorset midden and the remaining 50 cm dug vertically through disintegrating bedrock. This eroding substance is a slightly compacted sandy gravel which becomes progressively harder with increasing depth and is solid rock at a depth of 1.5 m. In those areas that were later to be paved, a rectangle in the southeast corner and the front of the house, the sterile gravel was carefully smoothed to a uniform depth of 1.37 m. Elsewhere the surface was more uneven and varied in depth from 1.3 m to 1.24 m. It is worth noting that under present weather conditions, permafrost would preclude digging much more than 0.3 m beneath the surface in a single summer, and then only in the period between late June and mid-August. If this house pit was dug in one summer the climate must have been appreciably warmer than it is today. In 1979 parts of the outer walls were still permanently frozen at the end of summer in spite of the fact that the excavation site 50-60 cm away had stood open for a full year.

At some point in initial construction the builders made a small (60 x 75 cm) stone hearth (Fig. 4) at the middle western margin of the floor. There was little charred material in this hearth, and since the rocks were covered shortly afterward by the first course of the western wall, this was presumably built only to warm the house interior while the floor was being paved.

Thin flat rocks for paving, which are scarce locally, appear to have been carefully selected. In the first building phase they were laid on a smooth surface cut into the rotting bedrock. A rectangular 1.85 x 0.6 m section of paving was set off from the unpaved floor at the southwest corner by two large rocks set vertically in trenches and chinked in place. This appears to have been a storage locker used for thawing meat. The southern margin of the paved front of the house follows a diagonal line deliberately cut 7 cm into the sterile gravel so that the eastern half of the floor is 1 m longer than the western half. Both halves extend 50 cm to the north beyond a large threshold rock set on the house's centerline, providing a 4-m<sup>2</sup> living area. North of the threshold a 17-cm deep cold trap indicates that the house was entered through the floor. Although much of the entryway had been destroyed in later use of the house, it is apparent that the tunnel entrance, paved at a surface depth of 1.3 m, was lined with vertical rock slabs 75-80 cm apart.

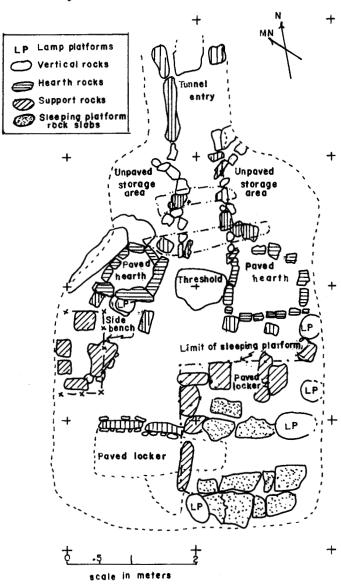


FIG. 5. House 9 in Phase II after internal features had been built over the paved floor.

## Phase II: Constructing the Internal Features (Fig. 5)

The side walls were constructed of selected rocks, flat on two surfaces, which were stacked to a vertical height of 50 cm above the floor margins. From this point the builders slanted the walls slightly outward toward the surface using large round and angular boulders interspersed with chunks of sod. In the southeast corner they laid a solid base of rectangular rocks in two or three courses on the levelled floor and capped this with thin flat slabs for a sleeping platform (Fig. 5). Although most of the support rocks remained in the house, all the platform rocks except those at the southeast end had been removed, presumably for use in other houses. The western margin of this sleep-

ing platform, which rose 21 cm above the floor, nearly follows the house's centerline and there is no indication that there was ever a sleeping platform in the southwest quadrant. The builders had originally placed a long, rectangular support rock as a low "lintel" over the eastern end of the paved locker so that the easternmost 60 cm of the locker extended under the sleeping platform. Remaining platform fragments and the clearly defined northern margin of support rocks suggest that the platform was a small one, 1.9 m wide by 2.5 m long. Underneath the front (north) end of the sleeping platform, a small (50 x 60 cm) storage box had been framed, and the floor paving had been extended to incorporate this area (Fig. 5).

Forward of the sleeping platform they constructed a well-built, paved kitchen hearth of small rectangular rocks in three courses. Two vertical pillars stood along the kitchen's south margin between the hearth and the sleeping platform. Initially this hearth was a large open box (1.25 x. 1.1 m) in which oil-soaked willow and driftwood were burned. The accumulation of garbage and charred material here suggests that this open-fire manner of cooking continued for many years; it was not until the second phase of the house that oil lamps were substituted. The 1.2 m distance from the front of the sleeping platform to the hearth would have precluded the common northern practice of cooking while sitting on the platform.

A similar open hearth, less well constructed but evidently equally ancient and long used, filled the northwest corner. This box, approximately 75 x 85 cm, also had two vertical pillars at its southern end. Both of these kitchens were accessible only from the house interior and not from the tunnel-entry.

Four lamp platforms, three along the east wall and one at the southwest corner of the sleeping platform, provided heat and light. All were at nearly the same elevation as the sleeping platform and the charred and oily residue beneath them indicated long use, although it is doubtful that lamps and open fires were all used at the same time. The residents had placed a fifth lamp platform on the paved floor at the southern center of the western hearth. This may have served a somewhat different function. As the first thin rock became embedded in the sticky congealed oil which permeated most of the western floor, a second thin platform was placed on the top of the first, and ultimately a third platform put on top of this.

From the presence of support rocks we infer that the builders constructed a small (0.6 m x 1.2 m) side bench along the western wall (Fig. 5). In front of the two kitchens, and accessible only from the tunnel entry, were two unpaved storage pits, the eastern one  $1.4 \times 1.25 \text{ m}$  and the western one  $1.0 \times 1.2 \text{ m}$ .

There was little evidence of any kind for a roof framework, which is not surprising if the house was ultimately dismantled. Although there were sizable pieces of wood in the house midden, most of these lay horizontally

near the floor margins and under the sleeping platform supports. The amount of whalebone we recovered may all have come from a single immature bowhead whale. Both right and left scapulae of the same relatively small animal came from the western hearth; a humerus with open epiphyses lay deep in the charred midden of the same hearth; and two mandibular fragments may have been right and left parts of the same jaw. A large 2.5 cm thick piece of unsplit walrus skin embedded in the northeast corner of the wall indicated the roof covering, and several large chunks of polar bear fur near the floor suggest that polar bear pelts were used for sleeping skins.

# Phase III: Reaction to Slumping Walls (Fig. 6)

After many years of occupation but well before Euro-Canadian contact, downslope earth movement caused

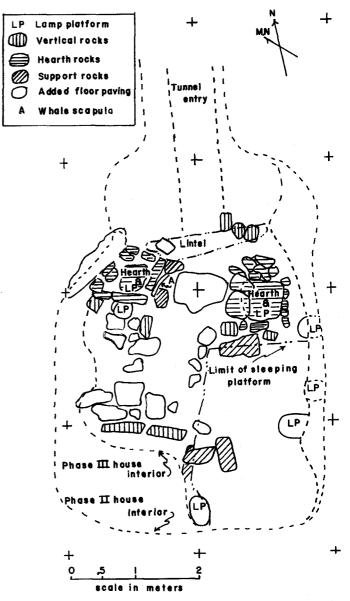


FIG. 6. House 9 in Phase III after inward slumping side walls necessitated re-structuring.

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heavy rocks in the wall to slump inward, reducing interior space 40 - 60 cm along the walls. Resetting wall rocks created hollows between early and late walls, some of which became small caches for artifacts awaiting repair. More than half of the rear storage locker floor was now covered by the new wall and the remainder became only marginally useful. Since most of the west side bench was covered it either became only a narrow angular shelf or was no longer used. The slumping side wall completely covered one of the eastern lamp platforms and partially covered a second. As a result of this change in walls the back margin of the sleeping platform was now offset 1.25 m deep into the south wall. Residents narrowed the platform but extended it by a few cm on the north end and constructed new front supports to close off the small storage locker (Fig. 6).

Presumably at this time both kitchens were restructured, made smaller and capped with large rock slabs. This changed their function from open fire hearths for burning oil-soaked willow branches to platforms for oil lamps. This appears to have begun a continuing process in which the kitchens, in constant use, were periodically capped as garbage accumulated. On one occasion the western cooking area was covered by a meat tray carved from a whale scapula.

In this second occupation phase the residents laid rock paving over the uneven rotting bedrock floor on the western half. This second uneven flooring at the right rear of the house stood 7-10 cm above the original flooring. A few rock slabs were superimposed on the earlier floor close to the kitchens where seeping grease had obviously become a hazard.

No sterile layer or break in depositional process indicated separate periods of house occupation. Evidence from both kitchen and floor middens and from the artifact assemblage suggests periodic seasonal use through a century or more. Surprisingly, even though sleeping platform size would accommodate only a small family with no more than two adults, both kitchens appear to have been used synchronously.

## Phase IV: Conversion to Storehouse (Fig. 3)

At some later time the structure no longer functioned as a residence but may have become a storehouse. The entry tunnel was completely demolished, the lintels laid to one side, and the whole entrance widened out to a 2-m wide ditch (Fig. 3). The thin, flat rock slabs of the sleeping platform, rare items in this region of angular boulders, were taken away except for those embedded in the back wall. The rear wall was rebuilt, eliminating the offset for the back of the sleeping platform, but no attempt was made to clear away the support rocks which cluttered the house interior. Presumably a skin roof remained in place during this phase.

Still later, after the roof had collapsed and before the moss sod growth apparent today, the open pit may have

sheltered occasional wandering hunters. A significant number of faunal remains and two whalebone sled shoes lay between the present sod base and the buried, frozen sod, separated from the house midden accumulation by 50 cm of culturally sterile humus. A tragic event may have taken place in this period. There were nearly 30 pounds of hard, shattered, well-preserved bones in a single deposit of small, sharp fragments lying immediately beneath the sod on top of what had earlier been the eastern kitchen. The collection included caribou, seal, fox, dog, and hare all equally shattered but uncharred. Our interpretation is that some unfortunate family caught by hunting failure gathered from old meat caches all the animal bones they could find, then smashed and boiled them for what little oily sustenance they could provide.

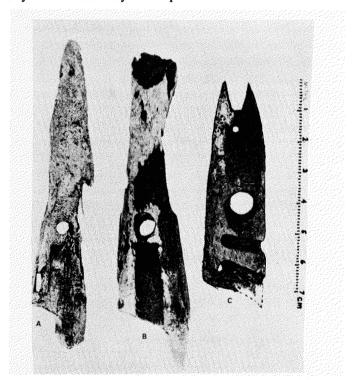


FIG. 7. Three harpoon heads recovered from House 9. A and B are of Thule Type 2 with binding slots; C is of Thule Type 3 with drilled binding holes.

## ARTIFACTS

A complete description of artifacts from this house appears in Sabo (1981). The collection includes 256 artifacts of which 86, all of stone, are unmistakably Late Dorset, estimated to date from A.D. 800-900. Sabo assesses the Thule assemblage to be early in that development, deposited between approximately A.D. 1100 and A.D. 1250. The three recovered harpoon heads suggest this age. Two (Fig. 7A, B), which lay on the earliest floor, are of Type 2 (with gouged lashing slots); the third, from higher up in the wall (Fig. 7C), is of Type 3 (with drilled lashing holes).

Dorset artifacts in the house midden and walls were undoubtedly inclusions in sod chunks cut from the earlier Dorset midden. The fact that the Thule house pit was cut through a Dorset midden is clearly demonstrated in the profile (Fig. 2C-C'), but the result inside the house is an inverted stratigraphy. In the central area of the house pit, of the 86 Dorset artifacts, 79% (N = 68) lay at datum depths of 105 cm or less, whereas 75% (N = 128) of the 170 Thule artifacts lay deeper than 105 cm.

Initially we thought this vertical distribution indicated that the entire house roof had been covered with sod. However, the horizontal distribution of Dorset artifacts (Fig. 8) does not support that assumption. Of the 86 Dorset artifacts, 67% (N = 58) lay 50 cm or less inboard of the outer walls. This suggests that sod chunks were used only

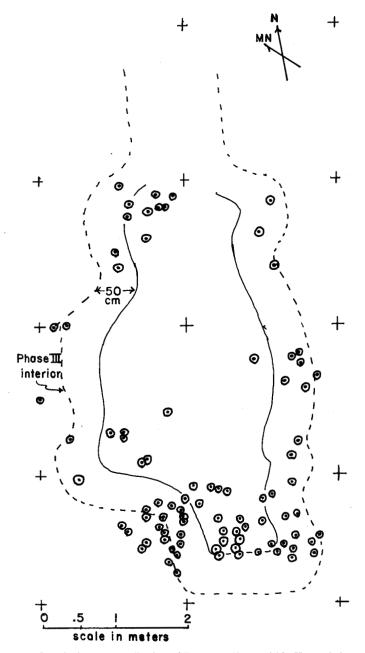


FIG. 8. Horizontal distribution of Dorset artifacts within House 9 depression.

between rocks of the outer walls and to build these walls higher, or possibly used only on part of the back (south) roof over the walrus skin cover.

## DISCUSSION

The most striking feature of this house is its interior kitchens with open fire hearths. Interior kitchens have long been considered significant features of the Ruin Island phase of Eastern Thule (Holtved, 1944, 1954). More recent work by Schledermann (1978a, 1978b) on the east coast of Ellesmere Island extends the range of this phase. On Skraeling Island he has located round and squarish Ruin Island houses with "diagnostic kitchen offshoots parallel to the entrance passages" (Schledermann, 1978a:470). Kitchens of these houses are in antechambers where conceivably the smoke from an open fire could be controlled. House 9 differs in having the kitchen fire of oil and willow twigs inside the central house enclosure. Smoke from this fire, and from oil lamps, would have been intolerable when the house was closed for winter unless large smoke holes had been left in the roof over the kitchens. An alternative suggestion is that the house was also used as a *qaqmat* in the warmer seasons with only a rain shield over the open fire and a skin roof over the residential area. In support of this point, the kitchen midden contained several bird bones, bird feathers and wings, and equipment for fishing and bird hunting. Whether an open fire was used in all seasons or only in the warmer months, both kitchens were used long enough to accumulate 25-50 cm of dense midden before they were capped as platforms for oil lamps.

In Ellesmere Island structures of the Ruin Island phase, the interior side of the kitchen antechamber was set off by low lintels (Schledermann, pers. comm.; Schledermann, 1978a: Fig. 6). This suggests that they were roofed separately from the living quarters. This does not appear to have been the case in House 9, but the two vertical pillars in front of each kitchen suggest the possibility that these are vestiges of an earlier tradition. Comparable vertical pillars associated with lamp platforms were found in the other Thule houses on Talaguaq, regardless of age.

The artifact assemblage from House 9 is of little help in relating it to a Ruin Island phase although Jordan (1979:161, Table 1) indicates that 78% of the harpoon heads from the Ruin Island site are of Type 2, as are two from House 9. On Nûgdlît, Ruin Island, and the Bache Peninsula region of Ellesmere Island there are direct associations of Norse artifacts with the Ruin Island phase. While we found nothing in House 9 to indicate such association, a small wooden effigy of a Norse man was recovered from the floor of Thule House 8 at Okiavilialuk 10 km to the north (Sabo and Sabo, 1978) and a metal-bladed ulu, possibly of Norse iron, from the floor of House 2 at Talaguaq (Sabo, 1981). These two houses appear to be of approximately the same age as House 9.

According to Schledermann (1978a:471), most of the Ruin Island phase dwellings lacked clear evidence of sleeping platforms. This raises a critical point of interpretation for House 9. In the scenario presented above we had builders constructing a foundation for a sleeping platform by building up several rock courses on top of a prepared floor. Unquestionably this was done at some point in the dwelling's history, but the original house configuration may have had no raised sleeping platform. In other Thule houses on the Talaguag site the builders did no more than level out firm, compact Dorset middens or sterile, rotting bedrock and then cap these platforms with rock slabs. This could have been done at House 9, but instead a significant amount of energy was spent digging out a large area later to be filled with rocks. To level the floor of this area, which would later have been covered by the sleeping platform, required hard digging through disintegrating bedrock. Furthermore, in a few places paving slabs and a significant quantity of driftwood were still in place on the floor under the sleeping platform supports. The scarce wood and many willow branches may have been the residue of a bedding mat directly on the floor. If in fact this house originally had no sleeping platform it would conform more closely to those of the Ruin Island phase in the High Arctic. The later small sleeping platform in one corner might then be a stage in the development toward more typical Eastern Thule structures in which the sleeping platform fills the back half of the house.

Interpreting this structure as generally contemporaneous with or slightly later than those of the Ruin Island phase correlates with the recent identification of early Sicco type harpoon heads from Naujan and Foxe Basin (Schledermann, 1979) and the early Thule Crystal II site at Frobisher Bay (Collins, 1950). This combined evidence suggests that early in the initial Thule migration, while the main body of pioneers passed through Barrow Strait and Lancaster Sound and penetrated the northern islands and northwestern Greenland, a segment of this group turned south through Prince Regent Inlet, the Gulf of Boothia, Fury and Hecla Strait, Foxe Basin and ultimately into the northern shores of Hudson Strait. This proposition modifies the hypothesis of a more gradual penetration of the southerly part of the Eastern Arctic by hunting bands moving south from the High Arctic.

The suggestion from both the Ruin Island houses and House 9 at Talaguaq that elevated sleeping platforms may have developed in the Eastern Arctic after the initial Thule

invasion should be tested in future house excavations. Often these platforms are not completely excavated since they are not likely sources of artifacts. It is to be hoped that future excavations at Talaguaq, particularly of House 10, will provide further tests of the proposition that Ruin Island-like influences appeared early in the southeastern Arctic.

## ACKNOWLEDGEMENTS

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