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The *Umialit-Kariyit* Whaling Complex and Prehistoric Thule Eskimo Social Relations in the Eastern Canadian Arctic

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カナダ東部極北地域における「船長=儀礼用家屋」捕鯨複合と
先史チューレ・エスキモーの社会関係

ジェームズ・サベール

The investigation of social relations amongst prehistoric Thule Eskimo bowhead whaling societies in the eastern Canadian Arctic has traditionally been based upon ethnographic analogies drawn from historic Eskimo societies in this region. However, these historic Eskimo societies engaged in comparatively little bowhead whaling, and were generally much smaller, more mobile, and less logistically and institutionally organized than we can expect Thule whaling societies to have been. Accordingly, it is suggested that the North Alaskan Eskimo *umialit-kariyit* whaling complex provides a far more appropriate analogy. This paper describes the *umialit-kariyit* whaling complex as ethnographically documented in northern Alaska, defines its associated archaeological correlates, and applies these correlates to three Thule whaling sites on Somerset Island in the eastern Canadian Arctic.

カナダ極北地域の先史チューレ・エスキモー捕鯨社会における社会関係の調査は、これまで同じ地域に住む歴史期のエスキモー社会から引き出された民族誌的なアナロジーに基づいて行われてきた。しかしながら、これらの歴史期のエスキモー社会は、私たちがチューレ社会はそうであったらうと予想することができることと比較すれば、ホッキョククジラ猟に従事することはほとんどなかった。そして通常はより小規模で、より移動性に富み、生活や制度の上で組織性に欠けていた。したがって北アラスカ・エスキモーの「船長 (*Umialit*) =

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キーワード : チューレ文化, 社会関係, 船長=儀礼用家屋, 先史捕鯨

儀礼用家屋 (*Kariyit*)」捕鯨複合のほうが、東部極北地域の歴史期のエスキモー社会の複合よりもはるかに妥当なアナロジーを提供するといえるだろう。本稿では、北アラスカにおいて民族誌的に記録された「船長=儀礼用家屋」捕鯨複合を記述し、その複合に関連する考古学的相関物を確定し、これらの相関物をカナダ東部極北地域のサマーセット島にある3つのチュール捕鯨遺跡に適用することによって社会関係を復元する。

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The vast increase in research on prehistoric Thule Eskimo whaling societies in the eastern Canadian Arctic (ca. A.D. 1000-1600) during the past 20 years has resulted in a situation where archaeologists are now addressing what McCartney (1980) has described as ‘second phase’ objectives. That is, following on from the prior and necessary development of local and regional chronological frameworks — the ‘first phase’ objectives — research is now beginning to focus on such issues as site formation processes, subsistence-settlement systems, and, of primary concern to the present paper, social relations.

During ‘first phase’ cultural-historical research on Thule culture, interpretations of social relations were typically generic characterizations based very loosely on ethnographic analogy. ‘Second phase’ research which attempts to address in detail social relationships, however, must necessarily develop explicit models of these relationships which can then be tested against the archaeological record. In this regard, several previous studies have inferred Thule social relations on the basis of analogies drawn from eastern Canadian Arctic Inuit societies (e.g. McGhee 1984; Park 1997). However, it is becoming increasingly apparent that historic eastern Arctic Inuit societies were generally much smaller, more mobile, and decidedly less logistically and institutionally organized than Thule whaling societies in, at least, the ‘core’ whaling area¹⁾. Instead, historic North Alaskan Eskimo whaling societies, from which Thule whaling societies are directly derived (see below), offer far more appropriate analogies.

A number of recent studies of Thule social relations have explicitly recognized this direct relationship, and their interpretations are based on analogous historic North Alaskan whaling societies. These include, for example, McCartney’s (1991) examination of Thule social characteristics from the perspective of wealth-based

social hierarchies, Savelle and Wenzel's (1996) and Grier's (1996) examination of Thule corporate group structure, and Savelle's (1996; 2000) examination of Thule information processing systems. Certainly the most innovative and sophisticated treatment, however, is that by Whitridge (1999a), who approaches Thule social relationships from the perspective of social asymmetries within and between households resulting from corporate whaling group structure.

One commonality, implicit or explicit, of the studies cited in the above paragraph is the recognition of the centrality of the 'men's house' or *kariyi* (plural *kariyit*) in the physical and institutional structure of Thule whaling societies. While such features form the core of historic North Alaskan Eskimo whaling societies, amongst eastern Canadian Arctic Eskimo societies, while often present, they were typically temporary and had no formalized ownership or membership (see e.g. Taylor 1990). Thus, it can be argued that a reliance on eastern Canadian Arctic Eskimo societies for Thule analogies potentially leads to a lack of the conceptual tools required for *kariyit* recognition, or at any rate, for an understanding of the broader social implications that such features would suggest. Accordingly, this paper a) briefly summarizes the physical, social and symbolic nature of the *kariyit* institution as developed among historic Alaskan whaling societies, b) discusses approaches to the recognition of *kariyit* and related features, and c) provides examples of how eastern Canadian Arctic Thule site characteristics can be interpreted in the context of social relations associated with *kariyit*-based societies.

1 *Kariyit* and the North Alaskan Whaling Complex

Village Organization. Prehistoric and ethnographically-documented historic North Alaskan whaling societies, as noted by Sheehan (1997: 1), represent an extreme form of hunter-gatherer society. Subsistence was based on the acquisition of large game, in particular the bowhead whale (*Balaena mysticetus*; Figure 1), by "highly coordinated and cooperating task groups", living in large permanent settlements, and involved in extensive regional trade and warfare.

Kariyit and whaling village social organization are discussed in detail by, among others, Vanstone (1962), Spencer (1959; 1984), Burch (1981), Sheehan (1985; 1997), Larson (1995), and Whitridge (1999a). Briefly, whaling village social relations centred on the *umialik* (plural *umialiit*), or whaling captain/boat owner (although note that not all boat owners were *umialiit*). Typically, high status whaling captains recruited individuals through the widest available social means, such that crews, which typically averaged 6-9 individuals, included kin and fictive kin (as represented by, for example, joking partners or spouse exchange partners; see Whitridge 1999a: 99). Whaling crew members provided the *umialik* with labour, and in return received whale and other food products and gifts, and were

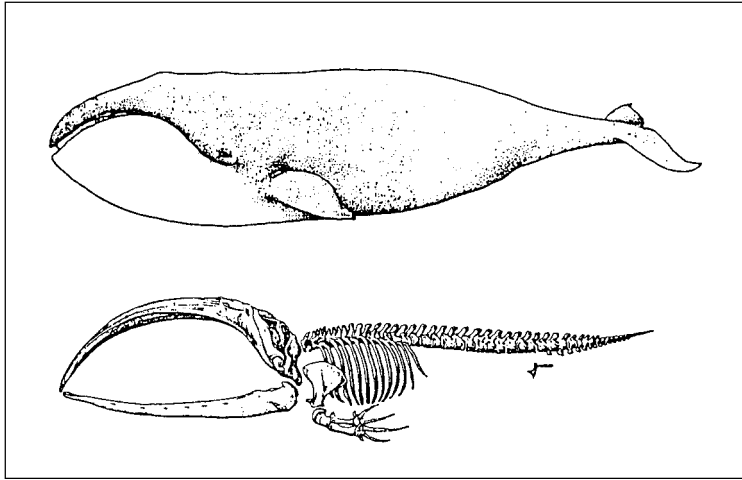


Figure 1 Bowhead whale plus skeleton (Source: Savelle and McCartney 1991).

generally provided for throughout the year by the *umialik*. In addition, *umialiit* held feasts, controlled exchange within and between villages, maintained alliances, and if necessary directed war parties. While there was no formal organizational level above the *umialik*, statuses among *umialiit* varied, the most important (successful) *umialiit* in larger whaling villages being referred to as the “great *umialiit*” (Murdoch 1892: 430, cited in Whitridge 1999a: 101). Furthermore, the whaling villages were not simply a series of autonomous units of related whaling crew members and families. Instead, and while kinship was an important consideration at one level (Burch 1981), the non-kin members (fictive kin) within most whaling crews ensured that the village represented a “mutually dependent sphere of interaction” (Cassell 1988: 106).

***Kariyit* Physical Characteristics.** The physical manifestation of whaling crew, and indeed village, cohesiveness was the *karigi*. In smaller settlements there was usually only one *karigi*, but in larger settlements, there were several, with a maximum of 6-7 reported at Point Hope (Larson 1995: 208-209). In each case, the *kariyit* were owned by the most important *umialiit*. As summarized by Larson (1995), *kariyit* served variously as centres for whaling crew organization and whaling preparations, workshop activities, celebrations and feasts, shamanic performances, games and competitions, social regulation, and what Larson (1995: 213) refers to as ‘communal cultural transmission’ (i.e. intergenerational communication of stories, songs and traditions). Thus, as noted by Whitridge (1999a: 105), “it’s preeminent effect... was to produce the social bonds and shared body of meaning, knowledge, and experience that allowed a whaling crew to function as a cohesive unit in the whale hunt, as well as in arenas of social competition and conflict.”

Kariyit could be permanent, semipermanent, or temporary (Spencer 1959; Larson 1995). Permanent *kariyit* were solidly-constructed semisubterranean dwellings similar to winter dwellings, and although size varied considerably, were typically larger (see e.g. Table 4-7 in Sheehan 1997: 158). Furthermore, the tunnel entrance was shorter (see e.g. Spencer 1959: 182-183), or in some instances, *kariyit* entrances were on the surface (see e.g. Sheehan 1997: 155). Semipermanent *kariyit* were similar to the permanent variety, but were constructed above ground with a basic wall structure that ‘might when needed be roofed over with ice blocks and skins’ (Spencer 1959: 182). Finally, temporary *kariyit* were typically in the form of snow houses, upturned *umiaks* (whaling boats), or large skin tents.

In addition to size and plan form, there were a number of other important structural characteristics that differentiated *kariyit* from regular dwellings. Rather than a raised rear sleeping platform, *kariyit* typically had a low bench constructed along several or all walls (Rainey 1947: 244; Spencer 1959: 184-184). Furthermore, although construction materials varied according to availability, the use of whale bone, especially mandibles, seems to have been characteristic of the construction of at least some, if not all *kariyit*, even when driftwood was available in abundance. This was the case for 19th century Point Hope *kariyit* (Rainey 1947: 247), and at Utqiagvik, although contemporaneous dwelling roofs were constructed primarily from wood planks, the entire superstructure of the prehistoric Mound 34 *karigi* was constructed from whale bone (Sheehan 1997: 156-157).

***Kariyit* Symbolic Dimensions.** The symbolic dimensions of the use of whale bone in *kariyit*, and house construction generally, have been discussed in detail by Patton (1996) and Sheehan (1997), among others. Briefly, the dwelling itself represented a whale, hence the extensive use of whale bone, and the dwelling was entered through the whale’s mouth — and thus the title of Sheehan’s (1997) study, ‘In the Belly of the Whale’. Lowenstein (1993: 33) describes the specific use of mandibles in *kariyit* in Point Hope, noting that “the main room of each [*karigi*] had two bowhead jaws mounted in the walls or the ceiling. *Umialiks* [*umialiit*] thus sat, danced, sang and exchanged gifts within whale jaws that the founding *qalgi* [*karigi*] owners had built around them.” In addition, Sheehan (1997: 149-153) describes what he terms “buried symbolism,” wherein specific artifacts or faunal materials, such as a baleen toboggan, bird wings, bowhead cervical vertebrae and caudal vertebrae, and composite animals (walrus and bear limbs arranged as a single animal) were deliberately placed such that following completion of the construction of the *karigi*, these items would never be visible. Instead, as he notes, “from a villager’s perspective, the buried features were intertwined with the building’s visible parts” (Sheehan 1997: 150). The symbolic dimension of *kariyit* and dwellings is particularly well demonstrated in the North Alaskan Eskimo myth of the raven and the whale:

“A Raven, out at sea and in search of land, finds a whale and flies through its jaws. Inside Raven finds a brightly lit *iglu*; a young woman on the sleeping bench tends a lamp. The woman greets the Raven and warns him not to touch her lamp. Now and then the woman disappears and then returns. Raven asks her why she is so restless. ‘Life,’ she answers, ‘life and breathing.’ The next time the woman leaves Raven goes out and the young woman falls dead in the *iglu*. In the darkness the Raven starts to suffocate and lose his feathers. The young woman was the whale’s soul. She had left the *iglu* each time the whale breathed. The lamp was the whale’s heart. Raven eventually escapes and floats with the whale and feeds on its skin. When a skinboat paddles near Raven transforms himself into a man and cries out to the crew, ‘I killed the whale!’ Thus he became a great man among the people.” (Lowenstein 1993: 41; italics added)

As Lowenstein (1993: 42) explains, “... the woman is herself the whale soul... she lives in an *iglu*... [and] the whale *is* her *iglu*” (emphasis in original).

Village Layout With Respect to *Kariyit*. As noted by Larson (1995: 213), *kariyit* not only formed the focal point of social relations within whaling villages, but they were also “spatially organizing force[s] in residential patterning.” Specifically, each *karigi* centred a cluster of residential dwellings (Figure 2). Although there is some difference in the assessment of the social composition of these groups, that is, whether the residents were primarily kin-related extended families or *ilaqiit* (the largest of which were referred to as *amilraq*, or expanded “extended families” [Burch 1981]) or included both kin and non-kin (see e.g. Spencer 1959), they nevertheless identified with the *karigi* and associated whaling crew(s). As noted elsewhere (Savelle 2000: 77; see also Whitridge 1999a), between 4 and 6 households would likely be required to provide sufficient members for a typical whaling crew of 6 to 9 individuals.

An additional feature of village spatial patterns were large open areas designated specifically for open air *Nalukataq* celebrations, referred to as *mannixsak* (Spencer 1959: 350). Each *karigi* had its own *mannixsak*, and these were usually located adjacent to the *karigi* itself (Figure 2), or some distance away, as at Point Hope. *Nalukataq* celebrations took place immediately following the spring whaling season, and as noted by Spencer (1959: 350), during these celebrations, the “functioning unit ceased to be the crew by itself and became the *karigi*, the crews in each *karigi* coming together to carry on the festival.” Activities carried out during the celebrations included feasting, singing, dancing, and various athletic activities such as contests of strength, tugs-of war, foot races, and kick-ball. Finally, the celebrations ended with the blanket toss.

The *mannixsak* is of particular interest in terms of material manifestations, in that each *mannixsak* incorporated whale mandible arches, and the blanket toss area itself incorporated four sets of permanent bone ‘tripods.’ Although Spencer (1959:

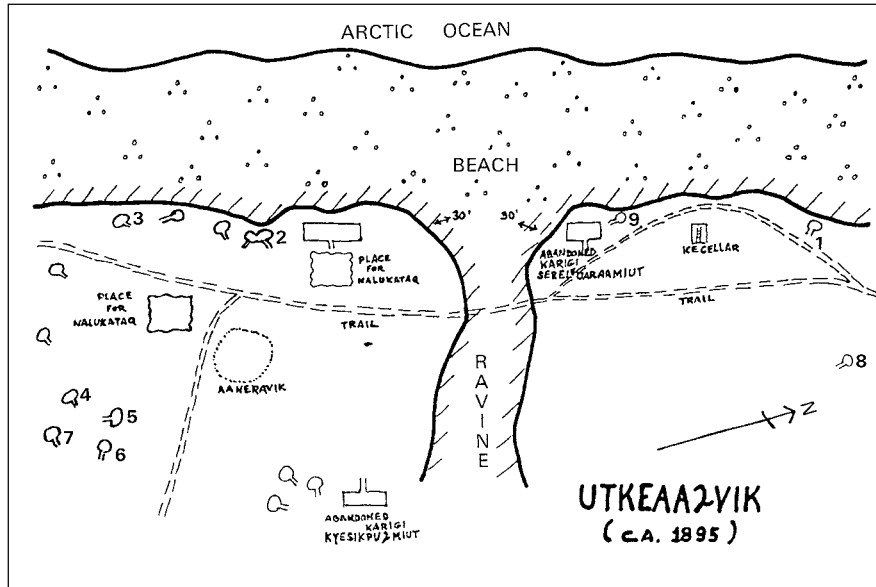


Figure 2 Sketch map of Utqiagvik, ca. 1895, showing the distribution of dwellings, kariyt, and mannixsak for Nalukataq celebrations (Source: Spencer 1959).

350) and Lowenstein (1993: 34) refer to the ‘tripods’ as being composed of whale ribs, personal inspection of these features by Savelle and McCartney in 1996 (Tigara Feature 2 in Savelle and McCartney 1998) indicate they were constructed from whale mandibles, as are the tripods at the two new *mannixsak* at the modern village of Point Hope (Figure 3).

Umialik Rank and Dwelling Construction. Thus far the discussion has focussed on the *kariig* and related structures. However, the characteristics of the *umialik*’s dwelling itself was also a function of the social relations that obtained in the context of the North Alaska whaling complex. Sheehan (1997: 158, Table 4-7), for example, notes the large size of the historic *umialiit* dwellings at Nuwuk, and suggested that this larger size relative to other dwellings may relate to the fact that they tended to have larger households, and also on occasion hosted dances.

In addition to dwelling size, however, and probably much more important from a symbolic and social ranking perspective, is the relative amount and type of whale bone incorporated in these dwellings. Most telling in this regard is the description of traditional Point Hope dwellings, in which “the entrance-passage consisted almost entirely of whalebone: mostly ribs, jaws [mandibles], vertebrae and scapulae. These were articulated into a passageway, the height and length of which varied according to the builder’s status as a whale hunter” (Lowenstein 1993: 329).



Figure 3 Field photograph of one of two mannixsak currently in use at Point Hope, Alaska, showing bowhead whale mandible arches and ‘tripods.’ Betty Smith provides scale.

Given that passageway (tunnel) height and length would be primarily a reflection of bone length, certainly mandibles would be by far the most valuable (see also Savelle 1997). This is corroborated by Rainey (1947: 261), who notes that there was a selection for mandibles because of both their structural and symbolic value, and by Lowenstein (1993: 161), who notes that mandibles, ribs and vertebrae were taken by the first *umialik* to strike a whale that was subsequently successfully killed and landed.

The combination of large dwelling size and the use of large numbers of whale bones high in both architectural utility and symbolic value in dwelling construction as indicators of high status amongst *umialiit* can be considered in many respects a display of ‘conspicuous consumption’ (Trigger 1990: 124-125). At the prehistoric and historic (now abandoned) village of Nunagiak, for example, a probable indication of such conspicuous consumption can be seen in the erection of mandibles from large adult bowheads (probably in the 16-18 m range) atop one of the largest mounds at the site (Figure 4). These mandibles are clearly visible for a number of kilometres, and given that the vast majority of mandibles found at prehistoric and historic sites in Alaska derive from bones of much smaller (7-9 m) whales (Savelle and McCartney 1998; 2000; see also McCartney 1995 for a discussion of small whale selection by historic North Alaskan Eskimos), they would appear to be an obvious display of status/prowess, even if originally erected as part of a storage rack or other utilitarian feature²⁾.



Figure 4 Field photograph illustrating the ‘conspicuous consumption’ display of adult bowhead whale mandibles at the abandoned site of Nunagiak, Alaska. Amanda Crandall and Allen McCartney provide scale.

2 Material Correlates of *Kariyit* and the *Umialiit*-Based Whaling Complex

The above discussion has focussed on the spatial and structural components of *kariyit* and the *umialiit*-based North Alaskan Eskimo whaling complex. Obviously a number of additional characteristics could be discussed, for example differences in ceremonial item manufacture and use, and gender-related differences. For the purposes of the present paper, however, such characteristics will be dealt with at a general level only, unless warranted during the application to the eastern Canadian Thule culture contexts.

Following the comparative scheme employed by Sheehan (1997: 155-163), *kariyit* and *umialiit*-based social relations as manifested in material/spatial correlates in the archaeological record are summarized in Table 1.

Table 1 Suggested archaeological correlates of kariyit, umialiit, and regular residential dwellings

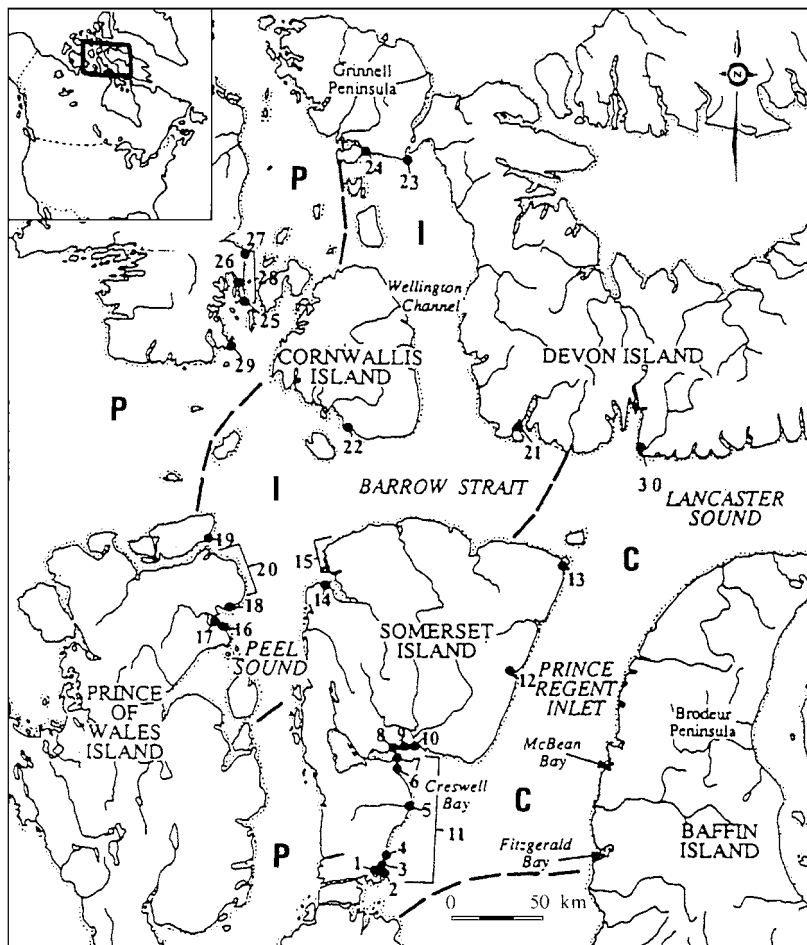
Characteristic	<i>Kariyit</i>	<i>Umialiit</i> dwelling	Other dwelling
<i>Size</i>	large	intermediate	smallest
<i>Interior</i>	seating benches	sleeping platform(s)	sleeping platform(s)
<i>Visible symbolism</i>	yes	yes	yes
<i>Buried symbolism</i>	yes	no	no
<i>Bone 'consumption'</i>	conspicuous	conspicuous	less conspicuous
<i>Spatial characteristics</i>	centres dwelling group	in group centred on karigi	in group centred on karigi
<i>Mannixsak</i>	direct association	indirect association	indirect association
<i>Associated artifacts</i>	over-representation of manufacturing/high status	over-representation of domestic/high status	over-representation of domestic
<i>Permanent</i>	yes (winter)	yes (winter)	yes (winter)
<i>Semipermanent</i>	yes (winter and seasonal)	yes (seasonal)	yes (seasonal)

Note that 'seasonal' refers to late spring and summer tent ring camps and fall qarmanq (shallow semisubterranean dwellings lacking substantial superstructures). Furthermore, the comparisons are relative between the three categories. For example, while all three types may have a majority of manufacturing-related artifacts/debris, these would be highest in kariyit, second highest in umialiit dwellings, and lowest in 'other' dwellings.

3 Application to Eastern Canadian Arctic Prehistoric Thule Eskimo Contexts

Although there is much uncertainty surrounding the specific location(s) and timing of the initial development of indigenous Arctic whaling, most would place its origins in the Bering Strait-Chukchi Sea region, and certainly by the time of the emergence of Punuk culture in this region (ca. 1200-700 B.P.), whaling as a primary subsistence activity was well established (see Whitridge 1999b for an extended review of the origins and development of Inuit and Yupik whaling). Shortly after A.D. 1000-1100, whaling spread into the Canadian Arctic and Greenland through the migration of Thule Eskimos from northern Alaska. In Canada, the major prehistoric whaling villages are found primarily in the Lancaster Sound-Barrow Strait region and adjacent channels of the eastern Canadian Arctic (Figure 5). The major period of occupation of these villages was approximately A.D. 1200-1450 (although not necessarily all were occupied contemporaneously), a period which has been referred to as 'Classic' Thule by McCartney (1977). Following this period, there was a decline in whaling as a subsistence activity, and by approximately A.D. 1600 the area was abandoned completely.

The author visited most of the Thule sites identified in Figure 5 in 1988 as part of a site survey and whale bone analysis project with Allen P. McCartney as



1. Qariarqyuk, 2. Ditchburn Point South, 3. Ditchburn Point North, 4. Hazard Inlet North (PaJs-13), Hazard Inlet South (PaJs-4), 5. Cape Garry, 6. Idlout Point South, 7. Idlout Point North, 8. Learmonth, 9. Near, 10. Quoak, 11. 'Beach sites', 12. Batty Bay, 13. Port Leopold, 14. Aston Bay South, 15. Aston Bay North (6 sites), 16. Back Bay 2, 17. Back Bay 3, 18. Back Bay 1, 19. Cape Walker, 20. 'Beach sites', 21. Radstock Bay, 22. Resolute, 23. Porden Point, 24. Port Rufuge, 25. Brooman Point, 26. Deblicquy, 27. Black Point, 28. 'Beach sites', 29. Cape Evans, 30. Fellfoot Point

N.B. 'Beach sites' consist primarily of bowhead whale flensing locations and caches. C-inferred 'core' whaling area; I-inferred 'intermediate' whaling area; P-inferred 'peripheral' whaling area.

Figure 5 Map of the eastern Canadian Arctic showing locations of prehistoric Thule whaling sites visited in the course of this study (Source: Savelle and McCartney 1994).



Figure 6 Field photograph of unexcavated whale bone dwelling at the Diblicquy site (site 26 in Figure 5), showing extensive use of bowhead whale mandibles and maxillae/premaxillae in its construction. Allen McCartney provides scale.

co-investigator (Savelle 1989), and the remainder during several later survey and excavation projects. Much of this research has been reported elsewhere and will not be discussed in detail here, other than to note that all sites investigated contain varying quantities of whale bone (see e.g. Figure 6) and are considered to have been active whaling villages. For purposes of the present study, three sites in particular will be examined, since they best illustrate the archaeological correlates of the *umialik-karigi* whaling complex discussed above.

Quoak Site (site 10 in Figure 5). The Quoak site was first described by William E. Taylor, Jr., who conducted limited test excavations there in 1961 (Taylor and McGhee 1979). The site was subsequently visited by McCartney in 1978 during a whale bone biometrics project (McCartney 1978), and by the author in August 2001, who conducted limited site mapping and midden excavations. Analysis of data from the 2001 excavations is currently in progress, but preliminary observations on dwelling structure and dwelling and whale bone spatial patterning are pertinent in the context of the present study. Although considerably disturbed, primarily by whale bone carvers in the recent past (see e.g. McCartney 1979a; 1979b), there is nevertheless still substantial preservation of site features, primarily due to the permanently frozen nature of all but the upper few centimetres of matrix.

The site consists of 22 large whale bone, stone and sod dwellings, and a number of smaller features. The dwellings are arranged in three distinct rows of,

Table 2 Dwelling area (square metres) and crania and mandibles recorded for the 22 dwellings at the Quoak site

Feature	Crania	Mandible	Area	Comments
h1	2.00	12.00	17.00	
h2	.00	6.00	13.20	
h3	3.00	17.00	17.50	
h4	1.00	2.00	14.00	
h5	4.00	6.00	30.75	two lobes
h6	7.00	37.00	33.75	two lobes
h7	7.00	15.00	21.75	two lobes
h8	.00	6.00	16.00	
h9	.00	3.00	25.00	
h10	1.00	.00	27.00	two lobes
h11	.00	11.00	29.25	
h12	1.00	6.00	30.25	
h13	2.00	4.00	18.00	
h14	.00	7.00	22.00	
h15	1.00	19.00	26.25	two lobes
h16	4.00	38.00	60.00	
h17	1.00	3.00	33.00	two lobes
h18	1.00	1.00	24.75	
h19	.00	6.00	25.00	
h20	1.00	1.00	24.75	
h21	2.00	3.00	25.00	two lobes
h22	1.00	1.00	30.00	

Note that between McCartney's original bone counts in 1978 and the 2001 site excavations, approximately 30-40 mandibles had apparently been removed from the site. Accordingly, we use McCartney's (1978) counts for any obvious discrepancies, including those for dwelling 6.

from north to south, 5, 10 and 7 dwellings respectively (Figure 7, although note that only 3 of the 5 dwellings in the northern row are visible). As discussed previously by Savelle and Wenzel (1996), and given that it is unlikely that all dwellings were occupied contemporaneously, these three rows are consistent with three separate *ilaqit* groupings. For each dwelling, area (note that these are rough estimates, based on mid-wall to mid-wall measurements) and the number of associated bowhead whale crania and mandibles, are listed in Table 2. Immediately apparent is that

dwelling 16, which contains the largest number of mandibles (38), is almost double the size (60 m²) of the next largest dwelling (dwelling 6-33.75 m²). This structure is situated near the west end of the middle row (Figure 7), is rectangular in shape, and lacks any obvious sleeping platforms (Figure 8). Although it was not excavated, there are definite indications of what appear to be the remnants of seating benches adjacent to much of the interior wall. Accordingly, the overall size, internal structure, and copious use of mandibles in its construction, all point to this feature as being a *karigi*. In addition, immediately west of the middle dwelling row are the remnants of what may be mandible ‘tripod’ structures (Figure 9) similar to those presently used at Point Hope (Figure 3). That these structures occur at the west end of the row (i.e. in an ‘open’ area), and in close proximity to dwelling 16, the *karigi* (Figure 7), strongly suggests that the area immediately west of the middle row served as the *karigi*’s *mannixsak*.

Finally, note that in addition to the *karigi*, dwelling 6 (Figure 10) also contains an inordinately large number of mandibles (37) relative to other features at the site, and along with dwelling 7, the largest number of crania (7). Note also that dwelling 6 has the second largest area (33.75 m²) and is associated with a much larger ‘open’ space relative to other dwellings (Figure 7). Although the structure was tested, but not excavated, the presence of apparent platform supports and an apparent kitchen or storage alcove suggest that it served primarily as a residential dwelling. Accordingly, the suggestion can be made that the dwelling was occupied by one of the more, if not the most, powerful *umialik*, and is an example of the display of status through the ‘conspicuous consumption’ of whale bone in dwelling construction. Dwelling 15, in the middle row, contained the third highest mandible total for the site (19). Although not a large structure (26.25 m²), the high mandible total and its position immediately adjacent to the *karigi* and presumed *mannixsak* suggest it may have been occupied by an *umialik*. There is no obvious candidate in the northern row for an *umialik* residence, but again, the dwelling pattern suggests that this row was occupied by a separate *ilaqiiit*.

In summary, then, the nature and patterning of the various features and contained whale bone suggest that the site was probably occupied by three *ilaqiiit*. At least one *karigi* and associated *mannixsak* were used, and there is evidence for relatively higher statuses for one, and possibly two, *umialiit*.

Hazard Inlet (PaJs-13) (site 4 in Figure 5). The PaJs-13 site was first visited by McCartney in 1978 (McCartney 1978) during his whale bone biometrics project noted above. Savelle subsequently visited the site in 1980 and 1988, and conducted excavations there in 1990-1991. Some of these results have been reported in Savelle (1987), Habu and Savelle (1994) and Savelle (1997).

The site consists of 11 large semisubterranean whale bone, stone and sod dwellings, and a number of less obvious probable dwellings and other features, as

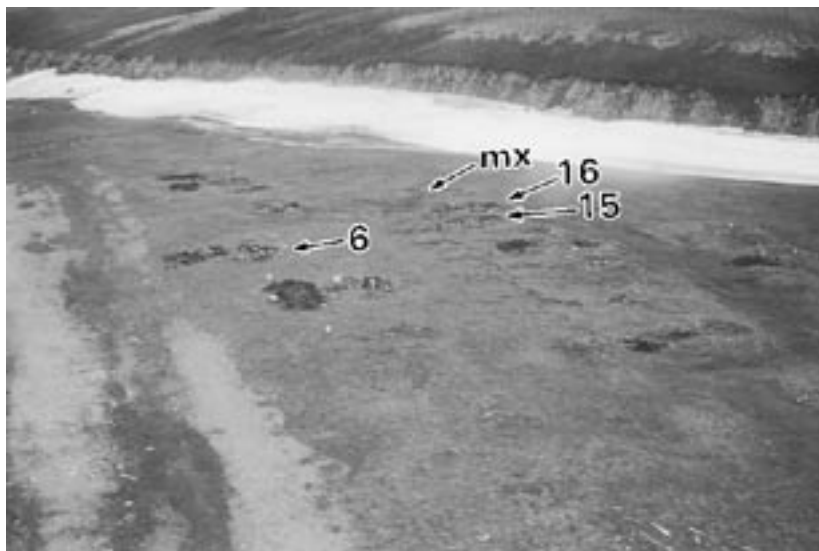


Figure 7 Aerial view of Quoak site (site 10 in Figure 5) looking west, showing overall site layout (although dwellings 21 and 22 in the northern row are not in view). Features discussed in text are indicated. Seven midden excavations (dark patches) were being conducted at the time the photograph was taken.



Figure 8 Field photograph, view east, of feature 16 at the Quoak site. Note rectangular plan, lack of sleeping platforms, copious use of bowhead whale mandibles (visible primarily as proximal articular ends). Peter Outridge provides scale.



Figure 9 Field photograph, view north-east, of possible mannixsak area at the Quok site, showing remnants of two possible bowhead whale mandible 'tripods.' Peter Outridge provides scale.



Figure 10 Field photograph, view north, of feature 6 at the Quok site during excavation of associated midden. Note the two upright bowhead whale mandibles in the center and foreground, and bowhead whale crania on the left, forming an alcove. Melanie De L'Etoile and John Beaten provide scale.

originally identified by McCartney (Figure 11). A total of 5 of the large whale bone dwellings (dwellings 2, 3, 4, 9 and 10 in Figure 11), and a smaller dwelling adjacent to dwelling 2, were excavated. All features except dwelling 9 display structural characteristics typically associated with residential dwellings. Note that feature 9 was subsequently renumbered 5 during the excavations (see e.g. Habu and Savelle 1994; Savelle 1997); however, since I have not yet published a detailed site map, to avoid confusion with the original designation by McCartney (1978), the designation M9 will be used in this paper. Dwelling M9 is approximately 36 m² in area as determined from mid-wall to mid-wall measurements, approximately the same size as the other large dwellings at the site. However, it was selected for excavation because of the impressive, and unusual, entrance structure composed of 6 bowhead crania (Figure 12). Junko Habu, then a Ph.D. student at McGill University, directed the excavation of the feature in 1991.

As discussed in Habu and Savelle (1994), subsequent excavation of the feature revealed that it lacked a sleeping platform, and instead contained a solidly paved floor and the remnants of what appeared to have been a seating bench surrounding the interior of the wall (Figures 13-15). In addition, the excavations revealed that a thin layer of grease, baleen and skin had been laid down on the perimeter of the flagstone floor during the construction of the dwelling; that is, it was overlain by the sod wall and structural whale bone, and therefore could not have resulted from activities during dwelling use. Furthermore, the 'pit' illustrated in the centre of the flagstone floor (Figure 14) extended into the sterile preoccupation layer and may indicate the original placement of a vertical structural component, since dislodged or removed, or a receptacle for symbolic items placed there during the initial dwelling construction (i.e. 'buried symbolism'). The artifact assemblage recovered from the dwelling comprised 68.2% of manufacturing debris, 14.4% male-related manufacturing and hunting items, while 'domestic' artifacts accounted for only 4.2% (Habu and Savelle 1994). In contrast, assemblages from the other dwellings typically consisted of less than 25% manufacturing debris and 15% or more 'domestic' items (Savelle, unpublished data).

Taken together, the structural characteristics and artifact assemblage strongly suggest that the dwelling functioned as a *karigi*. As discussed above, side benches in place of a sleeping platform(s) are characteristic of such structures, and the artifact assemblage is consistent with a male-dominated activity centre. In addition, visible symbolism is immediately evident in the use of 6 whale crania in the construction of the entrance ('entering through the mouth of the whale') while the substantial main room superstructure consisting of abundant vertebrae and ribs in addition to other crania and mandibles (see Figures 14 and 15), strongly suggest the body of the whale. In this regard, the central pit may have anchored a lamp stand, representing the 'heart/soul' of the whale. Oil lamps with supports flanked the entrance well at the Point Hope *karirit* (Spencer 1959: 184), and were placed on a central pillar in

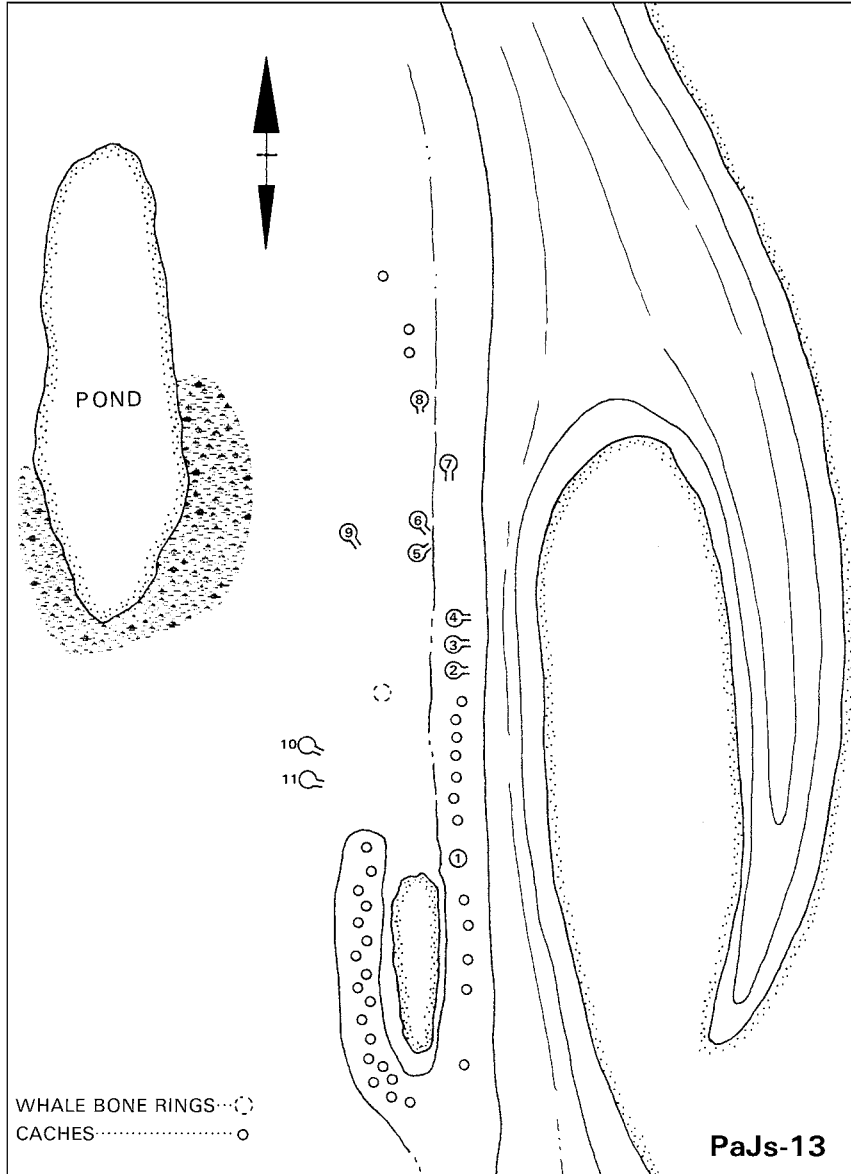


Figure 11 Sketch map of site PaJs-13 (site 4 in Figure 5), north of Hazard Inlet. Numbered features indicate major whale bone dwelling features. The karigi described in the text is dwelling M9 (Source: McCartney 1978: 88).



Figure 12 Field photograph, view northwest, of dwelling M9 at the PaJs-13 site prior to excavation. Note the entrance composed of bowhead whale crania and abundant visible whale bone lining the dwelling periphery. Junko Habu provides scale.



Figure 13 Field photograph, view northwest from the entrance, of dwelling M9 at PaJs-13 during excavation, showing circular paved floor, seating bench remnants, and abundant bowhead whale ribs lining the dwelling periphery. The central floor pit, partly hidden, is indicated by the arrow.

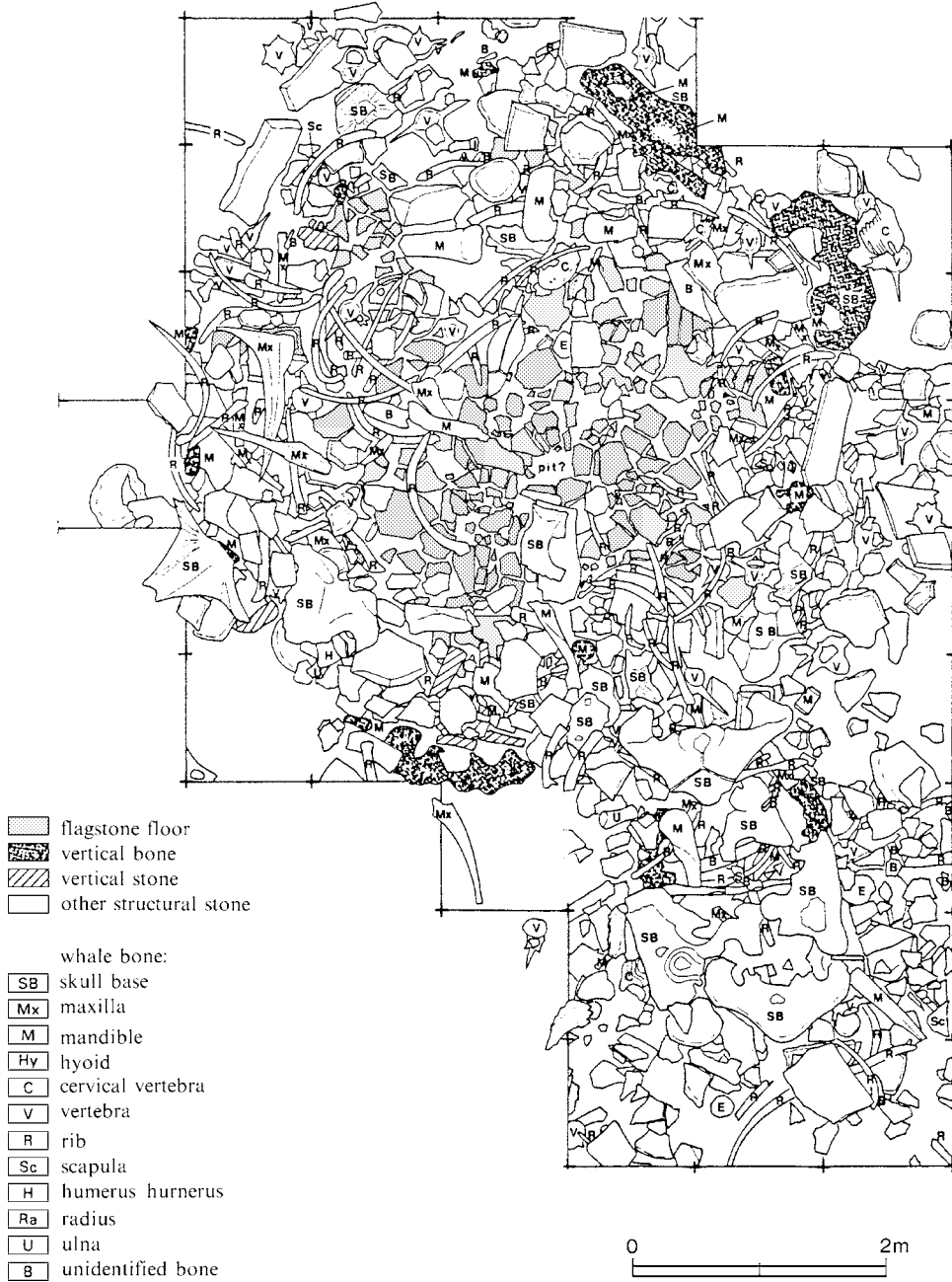


Figure 14 Diagram of structural element of feature M9 at PaJs-13, including those that were very likely included in the original roof supports prior to dwelling collapse (Source: Habu and Savelle 1994: 6).

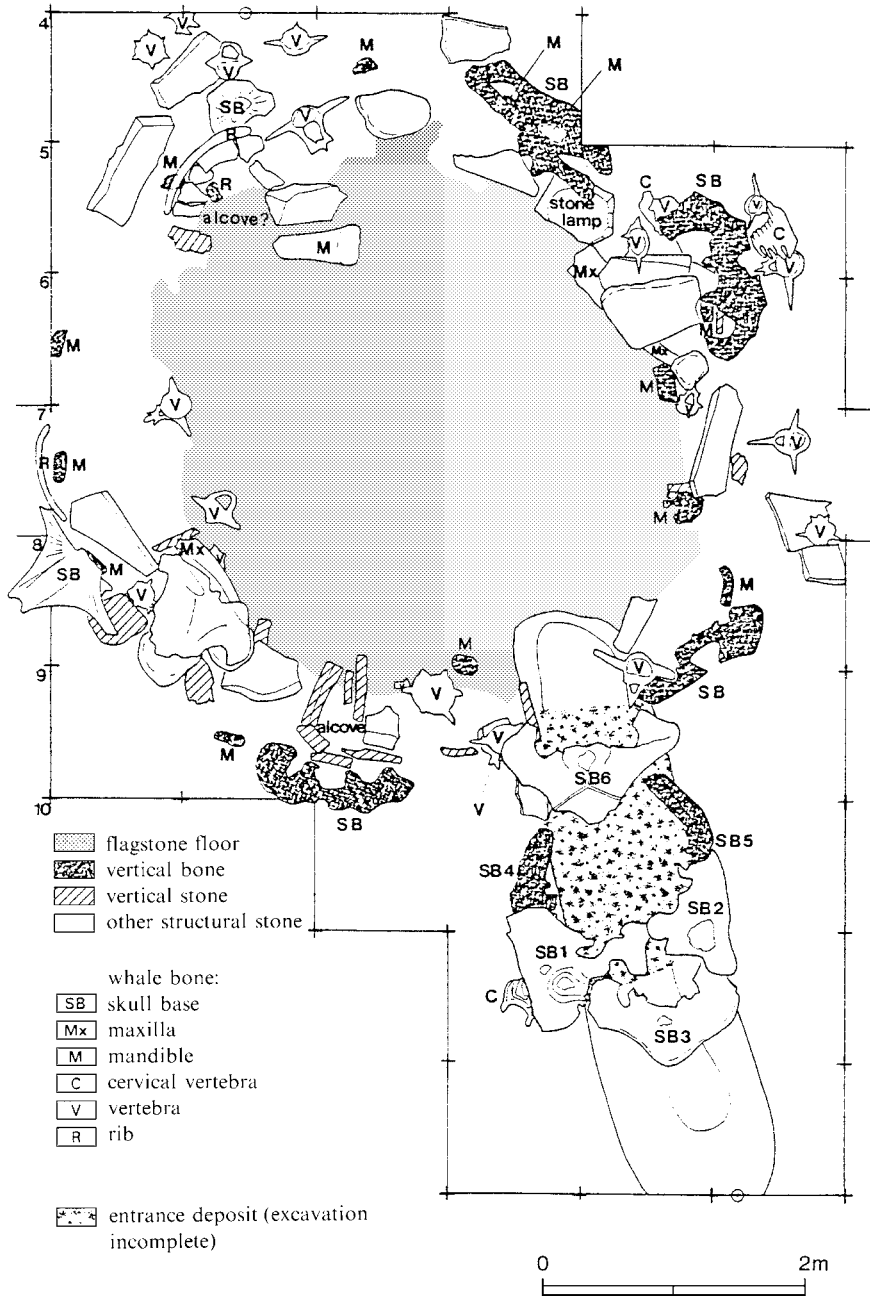


Figure 15 Diagram of major structural supports of feature M9 at the PaJs-13, following removal of collapsed roof and wall supports (Source: Habu and Savelle 1994: 7).

the Labrador Eskimo *kariyit* (Taylor 1990).

Buried symbolism, on the other hand, is suggested by the grease, skin and baleen layer overlying the perimeter flagstones and underlying the wall sod and structural wall whale bone. Historically, there were many taboos relating to North Alaskan Eskimo whaling (see e.g. Lantis 1947; Spencer 1959; Huntsman 1963; Sheehan 1997), one of which stipulated that “the whale dislikes things that are associated with or come from the land” (Huntsman 1963: 107). As noted by Habu and Savelle (1994: 15), since the grease, skin, and baleen layer underlies the structural whale bone and overlies the flagstone floor perimeter, this might indicate that the whale is being symbolically separated from the land. In this regard, Whitridge (1999a) has noted a similar structural relationship in a *karigi* he excavated at the nearby Thule village of Qariaraqyuk.

Finally, the location of the dwelling within the site is consistent with the interpretation of the feature as a *karigi*. Specifically, although overall the site features are relatively dispersed, dwelling M9 is one of the most isolated (Figure 11). This is consistent with the location of *kariyit* in ‘open’ areas whereby the adjacent area may have served as a *mannixsak*, although no features similar to the apparent whale bone ‘tripod’ remains noted at the Quoak site were identified at PaJs-13.

Again, given the fact that not every dwelling would have been occupied contemporaneously, the site probably represents at least one, and possibly two *ilaqit*. Note however, that many of the other smaller features contain whale bone, though not in abundance, and thus the maximum village size may have been greater than 10 family units. Regarding the identification of possible *umialiit* residential dwellings, dwelling M4 displayed a similar whale bone arrangement to dwelling M9, with the entrance being constructed from 8 crania, but this is the only dwelling other than M9 to have had an inordinate amount of crania used in its construction.

Hazard Inlet South (PaJs-4) (immediately south of site 4 in Figure 5). The PaJs-4 site was first visited by McCartney (1978) during his whale bone biometrics project, and Savelle subsequently visited the site in 1980 and 1988, and conducted excavations there in 1989-1990. Briefly, the site is comprised of the remains of approximately 60 *qarmang*, (shallow semisubterranean dwellings lacking substantial whale bone or other superstructure and entrance tunnels; Figure 16) and 2 definite, and a possible third, *kariyit*. *Qarmang* were characteristic of spring and fall occupations by many historic Eskimo groups, and in the present instance represent the remains of a fall whaling camp (see e.g. Savelle 1987; Savelle and Wenzel 1996). This discussion will be restricted to the probable *kariyit* only; a detailed description of the site, based on Savelle and Wenzel (1996), is presently being prepared for publication.

Of the two structures positively identified as *kariyit*, one (Feature 12) was



Figure 16 Field photograph of qarmat at PaJs-4, a fall whaling camp (approximately 6 km south of site PaJs-13). Note lack of entrance tunnel, shallow construction, and lack of original whale bone superstructure. Feature measures approximately 3×2.5 m.

excavated in 1990. Even prior to excavation (Figure 17), the feature was identified as an obvious *kariyi*. That is, it was the largest feature, having at least 2-3 times the area of the various *qarmang* at the site and was, with the other definite *kariyi*, isolated from the *qarmang*. The *qarmang* are located downslope from the *kariyit*, and are grouped in 5 to 6 clusters of 5 to 7 *qarmang* each. Feature 12 is rectangular in plan, measures approximately 8×8 m, and consists of a substantial wall of stone slabs, a solidly paved floor, and a seating bench ringing the entire interior of the structure (Figure 18). In addition, in the approximate center of the feature is a collapsed bowhead vertebrae lamp stand (Figure 18), analogous to North Alaskan Eskimo and Labrador Eskimo *kariyit* lamp stands.

The artifact assemblage recovered from Feature 12 differs substantially from those recovered from the 11 *qarmang* that were excavated. The assemblage consisted of several hundred pieces of bone debitage (i.e. manufacturing debris), and of the 89 identified items or fragments, only three (3.8%) related to ‘domestic’ activities. The combined assemblages from the residential *qarmang*, on the other hand, consist of approximately 20% debitage, while approximately 15% of the identified items relates to ‘domestic’ activities (Savelle, unpublished data).

Thus, the PaJs-4 site is consistent with an *umialiit/kariyit*-based social structure. That is, there are obvious *kariyit* vis-a-vis residential structures (*qarmang*), which are in turn spatially isolated from the *qarmang*, presumably to provide for



Figure 17 Field photograph of karigi (Feature 12) at PaJs-4 during initial field survey. Note large size relative to qarmang (Figure 16) and seating platforms protruding through sod overlay. Carol Dignam provides scale.



Figure 18 Field photograph of karigi (Feature 12) at PaJs-4 after excavation. Note solidly paved floor, side seating benches, and probable collapsed bowhead vertebrae lamp platform (indicated by arrow). Sheila Gregory (left) and Don Albright provide scale.

the establishment of one or more *mannixsak*, and the artifact assemblage associated with the one excavated *karigi* indicates male-centred activities. In addition, visible symbolism is evident in the collapsed lamp stand of bowhead vertebrae, the lamp itself, in addition to providing heat and light, being also symbolic of the *karigi*/whale's soul. Finally, the spatial nature of the *qarmang* at the site — 5 to 6 clusters of 5 to 7 *qarmang* each — suggests an amalgamation of 5 to 6 *ilaqiit* during the fall whaling season.

4 Implications for Thule Archaeology

The recognition of *kariyit* and high status *umialiit* residences, and by inference complex logistical and social organization, is obviously critical to an understanding of the nature of prehistoric Thule whaling. For example, as previously discussed by Whitridge (1994; 1999a) and Savelle (2000), examination of site size frequency of winter villages in the study region (Figure 19) reveals a pattern that strongly suggests single or multiple *ilaqiit* groupings, similar to the situation at the PaJs-13 fall whaling camp. That is, taking into account that not every dwelling was necessarily occupied simultaneously, there are definite size peaks of 4-5, 9-13, and 20-26 dwellings, which would equate with 1, 2-3, and 4-5 whaling crews respectively. If this is indeed the case, then clearly, interpretations of intra- or intersite social relations that did not take this into consideration would be seriously compromised.

Consideration of the role of the *umialiit*-based whaling complex is also potentially critical in addressing the Thule culture decline and abandonment of the study region (if indeed it was a population exodus as opposed to a population die-off), and the decline of whaling by Thule societies in adjacent regions. The 'decline/abandonment' has traditionally been interpreted as a result of declining whale availability due to deteriorating climatic conditions beginning approximately

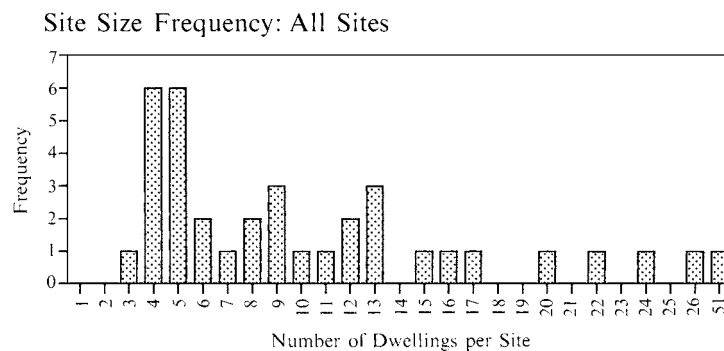


Figure 19 Frequency of site sizes of documented Thule winter villages (excludes *qarmang* sites and obviously eroding sites) within the study area.

A.D. 1200, eventually culminating in the ‘Little Ice Age’ from approximately 400-100 years B.P. (see e.g. McGhee 1969/70; McCartney 1977). However, why Thule whaling societies in the study region did not simply shift their subsistence focus from whales to smaller marine mammals and terrestrial resources, as they did in adjacent areas where whaling was less critical, rather than abandon the region, has never been adequately explained. Consideration of the *umialiit*-based whaling complex may be instructive in this regard. For example, Whitridge (1999b: 134) has suggested that a breakdown in extensive regional trade networks, which were necessary to sustain *umialiit* status, may have been related to the Thule whaling decline in adjacent regions. That is, as opportunities to exchange the surpluses generated through whaling for high status and necessary goods decreased, the rationale for intensive whaling ceased to exist. Similarly, Savelle (n.d.) has suggested that the relative logistical and social inflexibility of the *umialiit*-based whaling complex in the face of changing environmental conditions led to a collapse of the system and subsequent abandonment/die-off.

The above are just two of a number of examples that could be provided in which consideration of the *umialiit*-based whaling complex can significantly inform approaches and interpretations of Thule culture in the eastern Canadian Arctic. Some may question the interpretations and suggestions made in this paper on the grounds that the site and feature characteristics described are unique, and that ‘typical’ Thule sites elsewhere in the study region are instead palimpsests randomly generated by smaller, less logistically and socially organized groups. While in the more peripheral regions this may have been the case, it can be anticipated that, at least in the ‘core’ whaling area, many of the larger, multi-*ilaqiit* sites will also contain *kariyit* and obvious *umialiit* dwellings. This has already been demonstrated at the large (57 dwellings) Qariaraqyuk site (site 1 in Figure 5), where Whitridge (1999a) has excavated one *kariyi* and identified 5 others, at Cape Garry (site 5 in Figure 5), where McCartney (1980) excavated one *kariyi*, at Ditchburn Point (site 2 in Figure 5), where Savelle and Wenzel (1996) and Patton (1996) have identified two probable *kariyit*, and at Resolute (site 22 in Figure 5), where McGhee identified one *kariyi* (personal communication to Peter Whitridge cited in Whitridge 1999a: 197). Savelle (unpublished data) recorded at least 4 *kariyit* similar to those at the PaJs-4 site at several other fall whaling camps in the Hazard Inlet region, while possible ‘conspicuous consumption’ *umialiit* dwellings have been identified at the Learmonth, Radstock Bay and Deblicquy sites (sites 8, 21 and 26 in Figure 5) by Savelle (2000). Note that in a much more sophisticated analysis than presented here, Dawson (2001), using principal components analysis, identified a number of dwellings with inordinately higher numbers of mandibles at the Deblicquy site. Although he did not rule out scavenging and reuse toward the latter part of the site occupation, he did suggest that these differences may also be related to social status. Elsewhere in the Canadian Arctic, *kariyit* have been identified in the northern

Hudson Bay region by McCartney (1977), on northeast Ellesmere Island by McCullough (1989), in northern Labrador by Fitzhugh (1994), and at a protohistoric Caribou Eskimo site in the barren grounds by Friesen and Stewart (1994). It is evident, then, that the feature and site characteristics described in this study are not unique. As would be anticipated on the basis of appropriate analogies, Thule whaling societies throughout much of the eastern Canadian Arctic would very likely have been organized along the *umialiit*-based corporate group structure described in this paper.

It is acknowledged that much of this paper is exploratory in nature, and that some of the archaeological correlates of *umialiit*-based whaling societies could also result from other processes (such as ‘conspicuous consumption’ dwellings merely being the end result of generations of bone scavenging, as noted above). Overall, however, the evidence strongly supports the suggestion that in the case of most prehistoric Thule Eskimo whaling societies in the eastern Canadian Arctic, social relations were embedded within the *umialiit-kariyit* whaling complex. It is only with reference to that complex that an increase in an understanding of prehistoric Thule whaling societies can be expected.

Acknowledgments

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Notes

- 1) See Savelle and McCartney (1994) for distinctions between core, intermediate and peripheral whaling areas.
- 2) At this time the exact history of the mound is unknown, but the use of whale mandibles in the context described is consistent with status-based conspicuous consumption.

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