EVENT OR CONJUNCTURE? SEARCHING FOR THE MATERIAL RECORD OF INUVIALUIT–EURO-AMERICAN WHALER INTERACTION ON HERSCHEL ISLAND, NORTHERN YUKON

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ABSTRACT

During the 1890s, northern Yukon saw sustained and intensive interaction between local Mackenzie Inuit, foreign commercial whaling crews, and between whaling crews and Alaska Iñupiat at Pauline Cove on Herschel Island. The historical record for this period is rich, leading to an expectation that Inuit activities dating to this period should be well represented in the archaeological record. However, three field seasons of archaeological survey and excavation did not reveal the expected density of Inuit occupations dating to the 1890s. Instead, only two atypical and in some ways ambiguous components were encountered that could be confidently dated to this period and related to Inuit activities. In this paper, these two components are described and reasons for their rarity are discussed.

KEYWORDS: Herschel Island, Inuvialuit, interaction, whalers, ethnicity

INTRODUCTION

This paper is about looking for hard archaeological evidence for a key "event" in Inuvialuit history: the brief but critical period during which Inuit, Euro-American whalers, Athapaskans, and people of many other backgrounds interacted in the Mackenzie Delta region during the 1890s. Based on the prominence of this period in Inuvialuit histories, as well as its great weight in ethnographic and ethnohistoric studies of the region, this was a pivotal period and should be clearly manifested in the archaeological record. This is particularly true for Herschel Island, located in the Beaufort Sea on the Yukon north coast, which contained a natural harbor that served as the epicenter of whaler activities in the region (Fig. 1). However, despite the extremely high visibility of this period in the historic record, it proved very difficult to isolate archaeologically. After outlining the historic background and describing the relevant archaeology, I will discuss the reasons for and significance of this disjunction between archaeological expectation and reality.

THE WHALER ERA IN INUVIALUIT HISTORY

The Mackenzie Delta region generally, and Herschel Island specifically, have been occupied by Inuit since the Thule migration, currently dated in this region to around AD 1200 (Friesen and Arnold 2008). Extensive archaeological research shows an unbroken development from early Thule through the complex and diverse Mackenzie Inuit societies of the nineteenth century, as described by Franklin (1828), Petitot (Savoie 1970), Richardson (1828), and others. In essence, Mackenzie Inuit were the easternmost "Western Eskimos," more closely related to their Iñupiaq relatives in what is now Alaska than to the Central Inuit societies to their east. However, their cultural and social trajectory was influenced by relative isolation—no doubt some contact with the west always existed; however, it seems unlikely that it was ever particularly strong before the late eighteenth century (Morrison 1991).

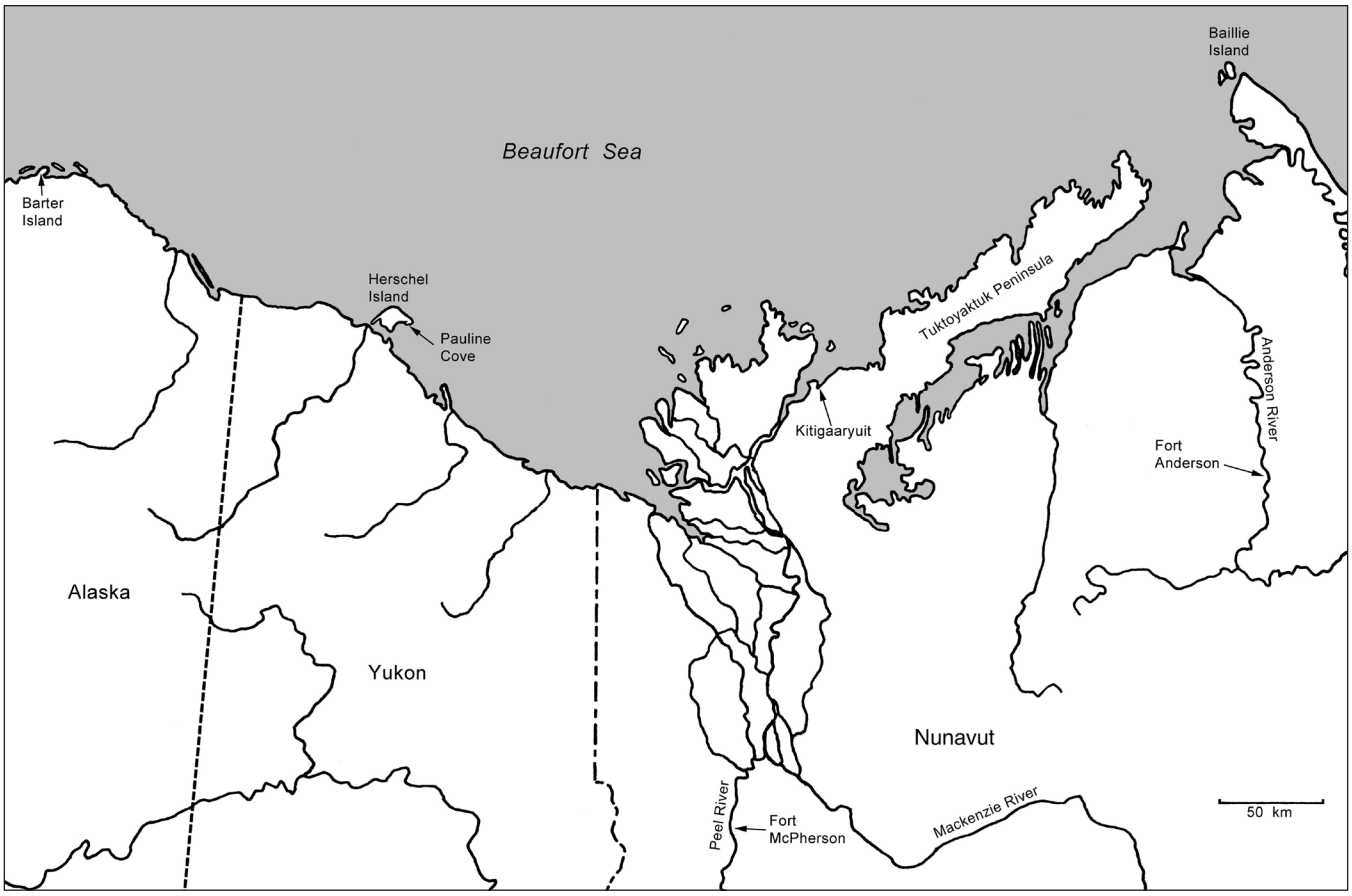

Figure 1. The Mackenzie Delta region, showing important locations mentioned in text.

Participation by Mackenzie Inuit in the expanding world economy appears to have increased gradually. From earliest Thule times, Mackenzie Inuit probably had knowledge of, and occasional access to, trade goods, especially iron, arriving from Asia via the Bering Strait region. In 1789, Alexander Mackenzie learned from his Dene companions that Mackenzie Inuit had acquired iron tools, probably from Russian sources via Barter Island in northeastern Alaska (Lamb 1970:191–212). The institution of regular trade at Barter Island had probably begun only a few years earlier (Morrison 1991), indicating a possible intensification of availability of Russian goods (direct contact between Russians and Alaska peoples had begun in the mid-eighteenth century).

In 1840, the Hudson's Bay Company built a trading post on the Peel River, which was eventually named Fort McPherson (Usher 1971a). The following decades saw ever-increasing access to Hudson's Bay Company trade goods by Mackenzie Inuit, initially through Dene intermediaries and eventually through direct travel to Fort McPherson and to Fort Anderson on the Anderson River during its brief existence from 1861 to 1866 (Hohn 1963). During this period, Petitot (1876, 1886, 1887; Savoie 1970) recorded the most extensive ethnographic description of Mackenzie Inuit life prior to intensive direct interaction. The late 1880s saw an increased number of direct visits to Mackenzie Inuit territory, as recorded by Bompas (Yerbury 1984), de Sainville (1984), and Lowther (Krech 1989), all of whom travelled through eastern Mackenzie Inuit territory.

Thus, before 1889, interaction between Inuvialuit and Euro-Americans, while important, was restricted to three main processes. First, occasional direct interaction occurred between Inuit and the explorers, traders, missionaries, and gentlemen adventurers who travelled through Inuvialuit territory. This process began in 1799 and continued at a low level throughout the nineteenth century, with a peak of activity related to the search for Franklin's lost third expedition (McGhee 1974). Second, there was an ever-increasing flow of Euro-American trade goods, both directly from Hudson's Bay Company trading posts such as Fort McPherson and Fort Anderson (Usher 1971b) and indirectly from Alaska Iñupiaq intermediaries who obtained goods from the Bering Strait region. Third, the

effects of epidemic disease ravaged the Inuvialuit population from at least as early as 1865 (Keenleyside 1990). The profound effects of these various processes on Inuvialuit society should not be underestimated; however, it is probably reasonable to say that as of 1889, the Mackenzie Inuit population had been reduced in number but resembled closely its "precontact" form in most aspects of society, including patterns of social organization, annual settlement patterns (often altered to include an annual visit to trading posts), house construction, and subsistence economy, which continued to be focused on resources such as beluga whales, fish, and caribou obtained for the most part through the use of indigenous technologies.

The year 1889 can be seen as a watershed in Inuvialuit history. In that year, Euro-American whalers traversed the treacherous northeast coast of Alaska to reach the eastern Beaufort Sea and Amundsen Gulf, the last refuge for the dwindling bowhead whale population (Bockstoce 1977). This was the culmination of a long-term process that saw the gradual northward expansion of the Pacific whaling fleet, reaching Bering Strait in 1848 and the western Beaufort Sea by 1873 (Bockstoce 1986). Throughout the western Arctic, Iñupiat and other indigenous peoples interacted intensively with whalers, serving as labourers and hunters (for archaeological approaches to this relationship, see Cassell 2000, 2004, 2005; Sheehan 1997). During each brief summer of the decade following the whalers' arrival in the eastern Beaufort Sea in 1889, whaling vessels plied the waters of the Beaufort Sea, and in addition to pursuing the bowhead whales, they were present at many points along the coast. From freezeup to breakup, many of these ships overwintered at Pauline Cove on Herschel Island and, to a lesser extent, Baillie Island. Because it contained the only relatively good harbor on the Yukon North Slope, whaling ships overwintered at Pauline Cove beginning in the winter of 1890–1891. At its peak in 1894–1895, Pauline Cove harbored fifteen whaling ships, with a total population of over five hundred whalers, Alaska Iñupiat, Siberian Inuit, and Dene (Bockstoce 1986). At Herschel Island, hundreds of whalers spent nine to ten months on shore, during which their ships were frozen into the harbor at Pauline Cove.

During this period, the ethnohistoric record expands rapidly in volume, with information contained in whaler's logs, Royal Canadian Mounted Police (RCMP) records, mission records, trading accounts, and autobiographies. The impact on Mackenzie Inuit society was immediate and major, with at least four main agents of change operating during the final decade of the nineteenth century. First, an increased volume of trade goods became available, with direct trade possible between Inuvialuit and whalers; prices were much lower than they were at the Hudson's Bay Company (Bockstoce 1986). Whalers also traded a much broader array of goods than did the Hudson's Bay Company, ranging from food items, such as flour, coffee, and syrup (Russell 1898:141–142) through chewing gum (Nuligak 1966:29) and apparatus for distilling whisky (Peake 1966:71), to items as large as whale boats (Ingram and Dobrowolsky 1989:150). The great variety of trade goods is perhaps best indicated by Russell's (1898:145) observation in 1894 of a group of Inuit on the mainland just south of Herschel Island:

> One of the men wore a new sombrero with a very broad brim. Others had miscellaneous odds and ends combined with their native costumes, with the effect on the beholder of having discarded a portion of their apparel and substituted an incongruous textile fabric to mark the loss. Several wore tight-fitting, red flannel drawers over their deerskin trousers.

In return for these trade goods, local Inuit exchanged fish, caribou meat, furs, and labor.

Second, increased waves of epidemic disease flowed into the Mackenzie Delta region. Although epidemics had begun to affect the region at least twenty-five years earlier, increased frequency of direct contact led to more opportunity for infection. New diseases became common (Whittaker 1937:115), and the epidemics of 1900 and 1902 reduced the population drastically (Jenness 1964:14): by some estimates, the population of indigenous Mackenzie Inuit dropped from as high as 2,500 to fewer than 150 by 1910 (Usher 1971a). Epidemics not only reduced the population, but were also responsible for the loss of much oral tradition and other cultural knowledge (e.g., Nuligak 1966:21).

Third, substantial immigration of indigenous peoples from outside of the Mackenzie Delta region occurred during this period, rapidly altering the ethnic makeup of local populations. Many Inuit, primarily interior North Alaska caribou-hunting peoples, were a part of whaling crews, and in many cases were engaged specifically to hunt caribou for food during over-winterings (Bockstoce 1986:274–275). Others, including Siberian and coastal Alaska Inuit, also arrived, and many chose to settle in the Mackenzie Delta region. In addition, large numbers of inland Dene regularly traded with the whaling ships at Herschel Island (e.g.,

Cook 1926:56–75). The impact of these immigrants on local Mackenzie Inuit populations was significant. For a society suffering enormous epidemic losses, new indigenous ideas must have hastened the changes that were already underway as a result of interaction with Euro-American society (e.g., Stefansson 1919:195).

The fourth agent of external influence was the combined effects of Euro-American religious and political ideology. The arrival of the whalers on Canadian territory led to the eventual deployment of Royal Northwest Mounted Police, who finally arrived in 1903 (Bockstoce 1986). Missionary activity also increased greatly in the period following 1892. Before that year, a few short trips had been made into Inuit territory by Petitot (1876, 1887), Bompas (Yerbury 1984), and Lefebvre (Duchaussois 1923). Steps toward a permanent mission were begun in 1892, when the Anglican missionary Isaac O. Stringer arrived at the Mackenzie Delta settlement of Kitigaaryuit and in the following year, when he visited Herschel Island for the first time. Stringer continually expanded his mission through regular visits to the coast, and in 1897 a permanent mission was established on Herschel Island (Peake 1966).

ARCHAEOLOGY OF THE 1890S ON HERSCHEL ISLAND

In sum, the arrival of the whalers in 1889 can be seen as a pivotal "event" in Inuvialuit history. Importantly, this view is not only a result of "southern" Euro-Canadian history; the whaler era, especially at Herschel Island, also looms large in Inuvialuit histories (e.g., Anonymous 1991; Nagy 1994; Nuligak 1966). However, very little archaeological research has been aimed at Mackenzie Inuit sites dating to the period after 1889, perhaps because this period is considered to be well represented in the historic record.

It was against this backdrop that I performed three seasons of fieldwork on Herschel Island between 1990 and 1992. My intent was to document and understand changes in Mackenzie Inuit culture in the centuries leading up to the whaler era. One of the central assumptions that went into fieldwork planning was that Inuit archaeological deposits dating to the whaler era would be common. Buildings constructed by Euro-American whalers still dominate Pauline Cove, and early photographs and documents (e.g., Bodfish 1936; Ingram and Dobrowolsky 1989; Nagy 1994) indicate that many Inuvialuit lived there during the whaler period. Therefore, it seemed a reasonable expectation that the archaeological record would contain numerous remains dating from the 1890s. In practice, however, samples relating to this period proved difficult to isolate.

Fifteen features at the Pauline Cove (NjVi-3) and adjacent Washout (NjVi-2) sites have been excavated over the years (Friesen 1995; Friesen and Hunston 1994; Yorga 1980). However, a great majority of the features are too old (pre-1889), too recent (1905 or later), or too disturbed to yield useful information on this period (Fig. 2). Many whaler-era buildings still stand on Herschel Island, and in 1992 we excavated the foundation of one, designated Feature 6 (Fig. 3). Predictably, although the structure was almost certainly constructed by whalers, its contents post-date abandonment and result from activities occurring after 1905 (Friesen 1994). The most general problem was that of mixed or disturbed deposits. The whaler era, and subsequent decades, have seen intensive use of Pauline Cove by both Inuvialuit and Euro-Americans. Each new group destroyed or altered evidence of previous occupations through activities such as construction of houses on top of earlier occupations, excavation of garbage or storage pits, amateur excavation to obtain artifacts, and tethering of dogs on earlier houses. These actions regularly destroyed artifacts, moved older artifacts into more recent levels, and provided the potential for deposition of recent artifacts in earlier assemblages. A number of houses were test excavated and determined to be too mixed for continued excavation. Others appeared to be almost completely sterile, possibly as a result of amateur excavation. Before my work on Herschel Island, Hunston (pers. comm. 1990) excavated one house on Herschel Island which may date to the 1890s; however, its precise chronology and its status as Mackenzie Inuit or Euro-American are unclear. In addition, in 1973 Bockstoce (1991, n.d.) excavated a house interpreted as having been occupied during the 1890s. However, because the artifact sample is very small and was destroyed in a fire, it is difficult to interpret the nature of this occupation.

Despite all of these issues, eventually two components dating to the period between 1889 and 1905 were identified and excavated. Both, however, offer challenges to interpretation.

PAULINE COVE FEATURE 8

Feature 8 is an enigmatic structure located in the south-central area of the site. It was originally visible as a low (approximately 35–40 cm high) horseshoe-shaped raised

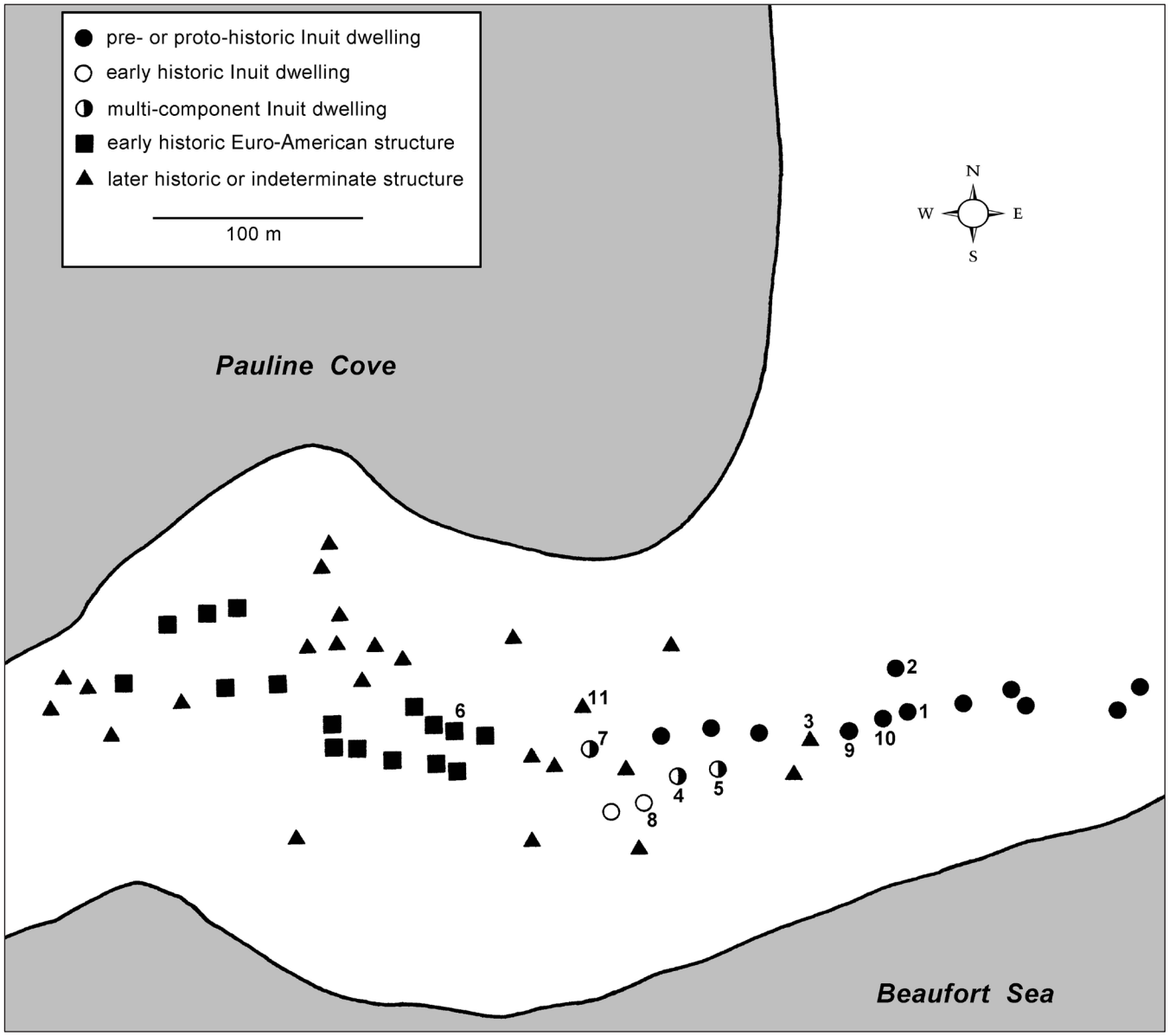

Figure 2. The site of Pauline Cove, Herschel Island, showing distribution of archaeological features and extant buildings.

rim of sod enclosing an area of approximately 3 x 3.5 m. It resembled a very small sod house in appearance, although it lacked any depression indicating an entrance tunnel. An initial test pit near the south end revealed a floor constructed of parallel driftwood logs, suggesting a traditional Inuvialuit occupation. Associated with this floor were a few historic artifacts, including a clay pipe fragment. Upon further excavation, however, it became apparent that this "floor" covered an area of only approximately 1 x 2.5 m near the front of the structure. The rest of the area enclosed by the sod rim was largely sterile (Fig. 4). Excavation beneath this limited floor area yielded a dense artifact cluster that appeared to date to the early historic period. Beneath this cluster of artifacts was another floor of almost exactly the same size as the upper one. However, the lower floor was constructed of boards, barrel staves, and packing crate ends (Fig. 5). Round nails were used exclusively in its construction.

Feature 8 does not fit readily into known architectural categories from the region, making interpretation difficult. The raised sod rim indicates insulation of some type of dwelling structure; however, it was clearly not a standard house. While the well-defined floor area in the front of the structure is underlain by a second floor, no walls, corner posts, entrance tunnel, or benches were present. The basal portions of two posts located in the middle

Figure 3. Pauline Cove Feature 6. This house was constructed by whalers during the 1890s, but was filled with midden deposits from later decades.

of the long axis of the feature probably indicate that this was in fact a tent foundation, perhaps banked with sod and with a complete or partial wood floor. It may have resembled, in some respects, the historic *qarmat* of the eastern Arctic (e.g., Stevenson 1984). Rectangular canvas wall tents that might leave a pattern such as this are visible in the earliest photograph of the Inuvialuit settlement on Herschel Island, dated circa 1894 (reproduced in Bockstoce 1986:267).

The description thus far leaves unexplained the two superimposed floors at the front of the structure and the rich artifact-bearing horizon between them. This concentration of artifacts does not neatly fit the profile of a refuse area or of a stratum of artifacts lost or abandoned under floor boards, as is common in many arctic sites (e.g., Ford 1959; Sheehan 1997). This interpretation is based on several factors, including the fact that both floors are well constructed and clearly linked to each other in a structural sense, that the concentration is situated within the house rather than outside it, and that the area contains a number of valuable items, including three labrets and many beads (Fig. 6). Thus, it seems more likely to have been a subfloor storage or cache area. Subfloor storage areas are not uncommon in semisubterranean winter houses, with particularly well-described examples from the Utqiaġvik site in Barrow, Alaska (Reinhardt and Dekin 1990); however, they are not known from lightly built structures such as Feature 8. For the moment, the precise nature of this feature must remain enigmatic.

Chronology. A number of lines of evidence suggest that Feature 8 was occupied during the 1890s and is, therefore, contemporaneous with the occupation of Herschel Island by Euro-American whalers (Appendix I). Six of the eight firearm cartridge types in Feature 8 are not chronologically diagnostic; however, two were produced for a relatively short period and therefore provide some higher resolution information. The .44 Smith & Wesson Russian was introduced in 1870 and phased out shortly after 1907 (Barnes 1989:245). The 45-125 Winchester Express was introduced in 1886, after which "it was not widely used and was discontinued after a few

Figure 4. Pauline Cove Feature 8. Upper floor, looking north.

years" (Barnes 1989:138). The cartridge was produced until 1916, but presumably in very small numbers.

Certain of the glass bottle fragments are also chronologically diagnostic. Two case bottles were produced using the dip-mold technique (numbers of bottles refer to minimum numbers of containers after refitting). This production method is generally early, with its use declining during the second half of the nineteenth century, although in many contexts it is "not useful for dating" (Jones and Sullivan 1989:26). Turn-molded bottles, represented by two specimens, generally date from the 1870s to the 1920s (Jones and Sullivan 1989:31). Finally, the technique using a two-piece mold with separate base, represented by a minimum of one specimen, was the most common type during the late nineteenth and early twentieth centuries, but was made obsolete by mechanical manufacturing techniques in the 1920s (Jones and Sullivan 1989:29).

The dating of this artifact sample to the whaler period is reinforced by more indirect evidence, namely its comparison with a sample from Pauline Cove Feature 6 (Friesen 1993, 1994). Feature 6 will not be described in detail here, but its contents are relatively securely dated to the period from around 1905 to 1920. In contrast to Feature 8, which contains all hand-blown bottles, all bottles in Feature 6 are machine made. This contrast implies a significant gap between occupations, increasing the likelihood that Feature 8 dates to the 1890s.

PAULINE COVE FEATURE 5

Before excavation, Pauline Cove Feature 5 was visible as the largest Inuvialuit house mound at Pauline Cove, standing over one meter above the surrounding land surface and covering a relatively large area (Fig. 7). Excavation revealed an Inuvialuit winter house of the form most common in the precontact period of the Herschel Island area. It had a main floor area of approximately 3.0 x 3.5 m, from which one rear and one side alcove extended. A short entrance tunnel entered the southern margin of the floor but was poorly defined. The large size of the mound apparently resulted from a relatively massive log construction and large amounts of insulating earth and sod piled against the walls. The House 5 excavations yielded large artifact and faunal samples. However, subsurface levels were severely

Figure 5. Pauline Cove Feature 8. Lower floor, looking south. Note that the floor in Fig. 4 is directly under the floor in Fig. 5, but the photos are taken from opposite angles.

disturbed, with the exception of a few small pockets of apparently undisturbed prehistoric or protohistoric artifacts.

Remarkably, the only large component that appeared to be unmixed is an early historic component recovered from the uppermost excavation layer as well as the entrance tunnel fill. The upper excavation layer consisted of the surface sod and the uppermost level of soil, to the base of active root system at a depth of 8–12 cm. Subsequent excavation of the tunnel yielded an assemblage that closely resembled that from the surface of the feature, which is incorporated into the sample listed in Appendix I.

This occupation is best interpreted as the result of a summer tent placed on the mound created by a collapsed earlier winter house. A similar placement of a historic tent floor on a house mound was recorded by Smith (1990:102) at the Utqiaġvik site in Barrow, Alaska. Such a placement probably resulted from the fact that house mounds are the highest points on an otherwise low, boggy, and occasionally inundated tundra. The dense accumulation of artifacts in the entrance tunnel probably represents a midden associated with the tent.

Chronology. Only one artifact was removed from the Feature 5 sample because it was deemed intrusive, namely a machine-made crown-cap lip fragment from a brown glass bottle that appears to be a recent beer bottle. This specimen was located very close to the surface. The remainder of the artifact sample closely resembles that from Feature 8 and does not appear to contain any recent artifacts or any typologically early artifacts from lower levels. As with Feature 8, all identifiable bottles were manufactured by hand, as opposed to automated processes. In addition, all rifle cartridge types were in use during the whaling period. One chronologically sensitive artifact consists of fragments of seven pages of the novel *The Freaks of Lady Fortune*, by Maria Crommelin (1889, 1891). This novel was originally published in 1889, with a first American edition in 1891, making it a good candidate for having been brought to Herschel Island during the 1890s. Finally, as with Feature 8, the profound differences between the Feature 5 sample and that from Feature 6 imply a significant time gap and, therefore, a chronological position within the period 1889–1905.

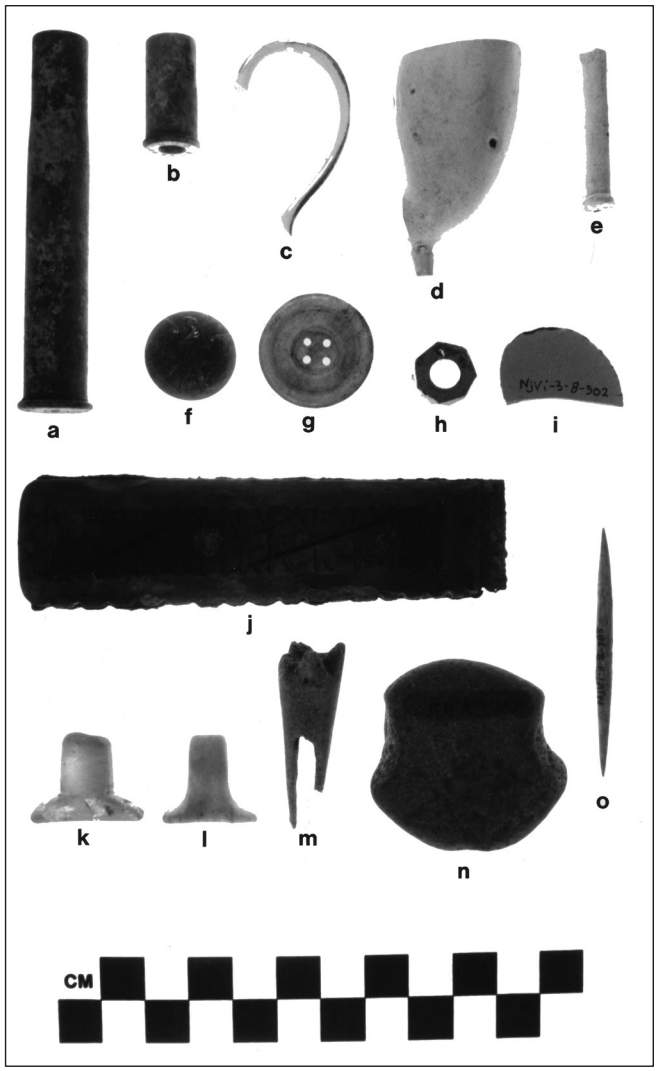

Figure 6. Pauline Cove Feature 8, representative artifacts: (a) 45-125 cartridge case, (b) .44 Smith & Wesson Russian cartridge case, (c) teacup handle, (d) clay pipe bowl, (e) clay pipe stem, (f) brass button with eagle and shield design, (g) bone button, (h) faceted blue glass bead, (i) sunglass lens fragment, (j) knife handle with incised geometric design, (k) labret manufactured from glass bottle stopper, (l) ivory labret, (m) blunt arrowhead, (n) stone net sinker, (o) gorge.

ETHNICITY

Having established that these two components were accumulated during the whaler period, it is important to determine the ethnicity of the occupants. However, this is a complex process due to the spectacularly diverse mix of people known to have been concentrated at Pauline Cove during the period. Initially, one must differentiate between Inuit and newly arrived whalers. "Whalers," in this context, included individuals from a great variety of backgrounds ranging from Americans and Europeans to Hawaiians (Bockstoce 1986). Though these groups were diverse, the Arctic was a very foreign place for all of them. They were closely tied to the over-wintering ships, and used limited amounts of locally produced material culture (with a few exceptions, such as Inuit skin clothing). Early accounts, photos, and paintings (e.g., Bockstoce 1986; Ingram and Dobrowolsky 1989) all indicate that whalers lived on board their ships and in a cluster of small frame structures on shore near the primary whaling structures. The extent of this area probably corresponds with the still-visible distribution of early historic Euro-American structures (Fig. 2). Features 5 and 8 are located over 50 m east of this cluster, consistent with their having been set apart spatially from the whalers' dwellings while in use, and thus increasing the likelihood that they represent Inuit occupations.

The form of the dwellings, and their contents, is also consistent with an Inuit, as opposed to whaler, origin. Feature 8, in particular, is best explained as the Inuit occupation of a canvas tent, banked with sod for warmth. Feature 5, on the other hand, does not contain any direct evidence for architecture; rather, the interpretation that it represents the remains of a tent on top of a house mound is based on the surface distribution and density of artifacts, and the Alaska analogue mentioned previously. The artifactual contents also argue for an Inuit attribution. Although the samples are numerically dominated by imported Euro-American items (a number that is inflated by the many broken bottles and metal waste fragments), a range of Inuit material culture across many functional classes is present (Appendix 1). A final class of material culture, consisting of the faunal remains, is not helpful. The faunal samples from Features 5 and 8 consist entirely of locally available species and both are dominated by ringed seal (Friesen 1995). While this would seem to be indicative of Inuit diet, at least one historic context on Herschel Island that can be confidently related to Euro-American lifeways is similar (Saxberg 1993); therefore the fauna cannot help in determining ethnicity. Nevertheless, all evidence points to an Inuit origin for these components.

A second, and inherently more difficult, question relates to whether these occupations relate to Mackenzie Inuit (local Qikiqtaryungmiut from the Herschel Island area, or others who travelled from farther east in the Mackenzie Delta), as opposed to Inuit

Figure 7. Pauline Cove Feature 5 during early stages of excavation. The early historic artifact sample was obtained from the surface of the house mound and from a dense midden deposit in the entrance tunnel, near bucket in center of photo.

from elsewhere, and in particular Alaska Iñupiat. Large numbers of Iñupiat came with the whalers and played many roles, ranging from providing labor for whaling crews to hunting caribou to sewing and repairing clothing. Here, the ethnohistoric record is not as much help as might be hoped. Many early accounts and secondary sources do not emphasize Inuit activities, and when they do, it is not always clear whether the Inuit referred to are Qikiqtaryungmiut and other Mackenzie Inuit (referred to as some variant of "Kogmollik" in most sources) or Alaska Iñupiat (referred to as some variant of "Nunatamiut"). Many individuals from this last group were brought to Herschel Island by whalers, and others travelled to the area by themselves (Bockstoce 1986). Importantly, interior Gwich'in (Athapaskan First Nations) also came to Herschel Island during this period, primarily to trade and to hunt for whalers' subsistence; however, their material culture is different enough that they can be ruled out as having occupied these two features.

Alaska Iñupiat culture, including material culture, was very similar to Mackenzie Inuit—very few categories of material culture can be used to differentiate the two. This is particularly true of the Qikiqtaryungmiut who lived on Herschel Island (e.g., Friesen 2006); these were the westernmost Mackenzie Inuit, many of whom travelled to Barter Island annually to trade with Iñupiat, before the arrival of whalers. However, Feature 8 did include one arrowhead, which hints at a Mackenzie Inuit origin. It is made of bone, in a form that is relatively common in the Mackenzie Delta region but rare or unknown to the west. In fact, Murdoch (1892:206) collected one of these arrowheads in Alaska where it was referred to as a "Kunmud'lin" type, the name being the Iñupiat term for Mackenzie Inuit (see Morrison 1988). When this is combined with the fact that these two features are located at some distance from the main whaler settlement, which is not what would be expected from Iñupiat closely connected to the whaling ships, it seems most likely, though not certain, that these two features represent local Mackenzie Inuit occupations.

DISCUSSION

Based on the ethnohistoric record, one of the primary expectations guiding archaeological fieldwork at Pauline Cove was that Inuit components dating to the 1890s would be common. This period was critical to the project's research goals, since it represented the "end point" of a cultural sequence documenting changes in Inuit lifeways from the precontact through early historic periods. However, after three field seasons on Herschel Island this expectation was not met. In particular, although evidence of the whaler period is common across much of Pauline Cove, and despite complete or partial excavation of fifteen features combined with extensive site surface survey, only the two components described above can be confidently dated to the whaler period *and* represent relatively unmixed results of Inuit activities.

However, neither component represents a "standard" archaeological manifestation of local Inuit society, as represented by winter semisubterranean houses or summer tents. Instead, one is a diffuse surface scatter occurring in the uppermost layer on top of a sod house but not associated with its main occupation, and the second is a tent rectangle banked with sod, with a carefully constructed double floor at its front, indicating some unclear and unusual function. To compound the interpretational issues, the attempt to determine the ethnicity of the two features' inhabitants results in a similar level of ambiguity. While the two occupations are safely interpreted as resulting from Inuit activities, and it is likely that they relate to Mackenzie Inuit (as opposed to Iñupiat) activities, the material evidence does not allow absolute certainty. Based on all of these factors, the material remains can be used, cautiously, to understand aspects of past Inuit activities during the whaling period but are not as robust as originally hoped. This circumstance raises the broader question of why the archaeological record of this period is so difficult to recover.

In his influential framework for understanding major processes in history, Braudel (1980) defined three levels of historical phenomena: events, conjunctures, and the *longue durée* (see Galloway 1997; Hull 2005; Knapp 1992 for considerations of relevance to archaeology). "Events," according to Braudel, are what traditional narrative history is built around and occur on the scale of short time spans, the actions or perceptions of individuals, and the rhythms of daily life. The *longue durée* refers to very large-scale, long-term patterns and cycles lasting for centuries or more, such as the impacts of environment and geography on the development of human societies. "Conjunctures" are intermediate—cycles and processes occurring on a scale of decades to centuries, playing a more dynamic role in human societal development than the *longue durée* (cf. Gallivan and Klein 2004), but not as ephemeral or idiosyncratic as "events." The level of the conjuncture is often at the limit of specificity with which archaeologists can understand processes and patterns of change and stability in the past (cf. Smith 1992:69). Importantly, these three categories of historical phenomena should not be seen as strictly divisible or definable in all instances; rather, they represent a continuum of historical scales (e.g., Tomich 2008).

Based on this scheme, and taken from the vantage point of the documentary record, the period of Inuit-whaler interaction on Herschel Island can be considered an event, and a pivotal one, in Inuvialuit history. It fills the pages of primary and secondary historical sources, leading to the impression that it should be well represented archaeologically. We can even begin to see aspects of this process through the eyes of individuals who participated, ranging from the shaman Kublualuk (Nagy 1994) and, slightly later, the famous Inuvialuit hunter, trapper, and historian Nuligak (1966), to the Anglican missionary Isaac Stringer (Peake 1966) and the whaling captain Hartson Bodfish (1936). When viewed in this light, the archaeology as outlined above is disappointing, having failed to yield an equally high-resolution range of information on Inuit lifeways.

However, there is another way to look at this situation: namely, that the very rarity of high-resolution components, and the unusual or ambiguous nature of those that have survived, is itself informative. Rather than observing an "event" at the moment of Mackenzie Inuit interaction with whalers, we are seeing the results of a much broader process of reorganization from Mackenzie Inuit into Inuvialuit society, with all its complex and diverse interactions between Mackenzie Inuit, Alaska Iñupiat, whalers, and others, and its radical waves of new material culture. In other words, this is a "conjuncture" in which larger scale historical cycles come together in a particularly emphatic way. When viewed in this light, each aspect of the archaeological record makes sense. The lack of high-resolution single-component contexts is now expected, and attributable to the wide range of activities occurring during the whaling period and the following decades. These activities obscured or destroyed the whaler-period components,

many of which would have been located on or near the surface of the site. Uncertainty about the ethnicity of the occupants of Features 5 and 8 becomes less important when the period is viewed as a conjuncture, because the people living here, regardless of whether they were local or nonlocal Inuit, were essentially embodying the "new" Inuvialuit society that arose as a dynamic combination of pre-existing Mackenzie Inuit with newly arriving Alaska Iñupiat. Furthermore, the fact that the two components are represented by ephemeral or unusual architecture is again explainable in terms of this conjuncture. The apparent remains of a tent on top of a house mound at Feature 5 may indicate a less formal occupation with a relatively short anticipated duration of occupation, resulting from altered Inuit settlement patterns. The odd construction of the superimposed floors in Feature 8, with a dense accumulation of artifacts between them, indicates an unusual episode of primary deposition, perhaps representing some sort of formal caching or even "hoarding" (e.g., Bradley 1996; Diehl 1998).

Finally, there are the artifacts. While their full interpretation will be elaborated upon elsewhere, it is worth noting several points in the present context. Artifacts from both features cover a wide range of activities, with both imported and locally produced items relating to food procurement, clothing, artifact production and maintenance, cooking, and other activities. Within this group, though, are interesting phenomena such as the great diversity of firearm ammunition calibers, which may indicate that the site's inhabitants were actively experimenting with new material culture during this time of upheaval. Also noteworthy is the relatively large number of artifacts relating to social activities, including liquor bottles, tobacco pipes, accordion keys, and playing cards; all of these speak of radical cultural influences. Perhaps the most profound illustration of multiple cultural strands coming together is seen in objects that bring together imported materials with local manufacturing techniques, including several scrapers made from glass, a blunt arrowhead made by placing an empty 30-30 cartridge case on a wooden arrow shaft, and a labret made from a glass bottle stopper.

In the final analysis, it is significant that the archaeological record of this period in Inuvialuit history is hard to find on Herschel Island and when found, difficult to interpret. Too many different historical trajectories were coming together, and too many "events" were occurring, to lead to neatly patterned material remains. However, the fragments of the past that do remain still tell an interesting story, even if they do not fit neatly into expected categories. That story is of a conjuncture in which Inuit were confronting the European world economy and reconfiguring their lifeways according to new opportunities and new constraints, all amid a tragic loss of life due to waves of epidemic disease. The archaeology does not easily reveal individual events in this process, but speaks profoundly to the radical change that was occurring.

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APPENDIX 1. EARLY HISTORIC PERIOD ARTIFACT FREQUENCIES FROM FEATURES 5 AND 8, PAULINE COVE, HERSCHEL ISLAND

IMPORTED ARTIFACTS	F5 (*n*)	F8 (*n*)
Land Hunting		
Bullet, .22	1	
Bullet, .44	1	2
Bullet, unknown caliber	1	1
Cartridge case, 30-30	8	
Cartridge case, 30 Army	1	
Cartridge case, .38	2	4
Cartridge case, .38 Smith & Wesson	1	
Cartridge case, 40-65		1
Cartridge case, .41 Long Colt		1
Cartridge case, .44 S&W Russian		1
Cartridge case, 44-40	23	22
Cartridge case, 45-60		29
Cartridge case, 45-70	3	7
Cartridge case, 45-125		2
Cartridge case, unknown caliber		1
Shotgun shell, 10-gauge		9
Gun grip (?)		1
Transportation		
Clasp		2
Manufacturing and Related Activities		
Knife blade, iron	1	1
Knife handle		1
Engraving tool tip, iron		3
Bolt	2	
Screw	4	3
Nail, round	20	42
Nail, square	9	78
Saw blade	1	
Window glass fragment		6
Chicken wire fragment	1	
Pail handle	1	
Spring, iron	1	
Pencil eraser, rubber		1
Pencil top, metal		1
Letter "H," iron		1
Household Maintenance and Food Consumption		
Lamp burner fragment	2	
Lamp chimney fragment	5	10
Candle		1
Coal nodule		3
Bowl fragment, ceramic	2	1
Cup fragment, ceramic	3	5
Vessel fragment, ceramic	5	20
Tray, metal		1
Bowl, iron		1
Spoon, metal		1
Can fragment	36	35
Can key		3
Bottle fragment, glass	528	234
Jar lid	1	
Lid, metal	2	
Cork	3	10
Clothing and Ornaments		
Boot insole	1	
Boot fragment, rubber		3
Belt buckle	1	1
Button	3	11
Snap		5
Button tab		1
Fabric fragment	14	8
Mitten fragment	1	1
Sunglass lens		1
Bead, glass	97	92
Bead, glass, large	3	4
Bracelet	1	1
Ring (?)	1	
Miscellaneous Activities		
Accordion parts	11	
Playing card	3	
Pipe bowl, wood	1	1
Pipe bowl, corncob	1	
Pipe bowl, brass		1
Pipe fragment, clay	12	3
Pipe stem fragment, plastic		2
Pipe stem band, brass	1	1
Pipe lid, metal		1
Pipe rim, metal		1

IMPORTED ARTIFACTS	F5 (*n*)	F8 (*n*)
Unidentified or Debitage		
Ferrous metal	63	136
Brass	5	5
Lead	1	
Other metal	2	
Glass	7	5
Plastic/Rubber	2	
Fiber		1
Paper	5	
Wood		1
Unidentified material		1

LOCALLY PRODUCED ARTIFACTS	F5 (*n*)	F8 (*n*)
Sea Hunting		
Harpoon head, Nuwuk (one with iron rivet)	2	
Darting harpoon head	1	
Land Hunting		
Arrowhead	1	1
Bola weight, bone	1	
Arrowhead, blunt (30-30 cartridge case on wood shaft)	1	
Fishing		
Net float	1	
Net sinker	1	1
Fish gorge		1
Transportation		
Swivel (swivel plate plus spindle, probably for dog harness)	1	
Manufacturing and Related Activities		
Engraving tool handle, wood		3
Bag handle (?)	1	
Whetstone	1	1
Household Maintenance and Food Consumption		
Small scraper, glass	1	1
Cobble spall scraper, glass		2
Scraper, slate	1	
Boot creaser (?)	1	
Spoon, wood	1	
Tray fragment, wood	1	

LOCALLY PRODUCED ARTIFACTS	F5 (*n*)	F8 (*n*)
Rectangular stone slab		1
Clothing and Ornaments		
Belt fastener (?)	1	
Earring, ivory	1	
Labret, glass		1
Labret, ivory	1	2
Pendant (?), ivory		1
Miscellaneous Activities		
Amulet box	1	
Whale carving	1	
Model harpoon head		1
Unidentified or Debitage		
Skin	2	1
Wood	13	13
Chert	1	
Baleen	3	
Slate	2	
Bone	8	6
Antler	6	1
Ivory	1	7
Whalebone		2
TOTAL	**961**	**878**