

## The Development of Indigenous Whaling : Prehistoric and Historic Contexts

著者(英)	James M. Savelle
journal or publication title	Senri Ethnological Studies
volume	67
page range	53-58
year	2005-02-18
URL	<a href="http://doi.org/10.15021/00002660">http://doi.org/10.15021/00002660</a>

## The Development of Indigenous Whaling: Prehistoric and Historic Contexts

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### 1. INTRODUCTION

Maritime resources in general have been exploited only relatively late in human history. With the exception of a few sites, such as the Middle Stone Age Klais River Mouth cave, South Africa, at 80,000–90,000 B.P. [KLEIN 1974], the vast majority of known prehistoric sites with archaeological evidence of early substantial maritime resource use date to the early-mid Holocene (see e.g. OSBORN [1977: Table 4.1]). As noted by Yesner [1980: 728], “[m]aritime hunter-gatherers—those that in some manner exploit the seas—are a specialized subset of hunting and gathering peoples.” Hunter-gatherers who engage in whaling, then, are an even more specialized subset. In this short paper, I will very briefly summarize the origins, contexts and consequences of prehistoric whaling.

### 2. EVIDENCE FOR PREHISTORIC WHALE USE

#### 2.1. Scavenging and 'Low-level' or Opportunistic Whaling

Typically, the earliest archaeological evidence of prehistoric whale use in most areas relates to whale bones that occur in very small numbers with little or no other evidence to suggest whaling. These include, for example, various Mesolithic sites in Europe (see e.g. CLARK [1947]) and many of the earliest (ca. 8000–6000 B.P.) North Pacific and Bering Sea sites (see e.g. WHITRIDGE [2000: 109]). Such occurrences have traditionally been viewed as the result of the scavenging of whale bone and perhaps other whale parts from recently stranded carcasses or skeletons. Even the “Old Whaling” culture site at Cape Krusenstern, Alaska, dating to approximately 3400–3300 B.P., originally interpreted as a whaling site, is now generally viewed

as one whose inhabitants scavenged whale bone and perhaps other whale parts (see e.g., MASON and GERLACH [1985]; SAVELLE and MCCARTNEY [2003]).

The amount of whale bone at these sites is typically very small. However, this is not to suggest that scavenging cannot result in substantial whale bone accumulation. For example, Smith and Kinahan [1984] describe seven dwellings at a site in South Africa constructed from whale bones, and suggest that the bone was derived from mass-strandings of live animals, which were subsequently butchered and used for food as well as architectural materials.

It is tempting to see development of intermittent low-level or opportunistic whaling as a natural outcome of whale carcass/whale bone scavenging (note that I use the term 'low-level' here following Whitridge [2000] who defined it as sporadic hunting of whales, as opposed to 'active' whaling for those societies in which whales, especially large baleen whales, constituted a focal resource). While in some instances this may have been the case, it is more likely that the impetus to engage in low-level whaling resulted from the fact that much of the requisite technology, and perhaps forms of co-operation, had already been developed for other sea mammals. Thus, as Whitridge [2000] has pointed out, we can imagine that much low-level whaling in, for example, the Arctic and Subarctic regions, probably occurred for several thousand years before the advent of 'active' or intensive whaling.

## 2.2. 'Active' Whaling

Although maritime-adapted societies arose at many locations throughout the world during the early and middle Holocene, obviously not all of these societies developed into what can be considered 'active' whaling societies. Amongst ethnographically described 'traditional' active whaling societies (see e.g. SPENCER [1959]; BURCH [1980]), several characteristics are evident and/or prerequisite, as suggested by Bocstoce [1986] and summarized in Whitridge [2000]. These are as follows:

- 1) economic security: that is, a sufficiency of alternative resources to allow the diversion of labour to the high-risk procurement of whales;
  - 2) the presence of whales within the hunting range: this may sound self-evident, but it is important to note that typically whales are highly seasonal in any given region, and thus must not only be present within the hunting range, but also seasonally predictable;
  - 3) adequate whaling technology: various whaling technologies have developed over time, from simple drives using nets or *kayaks* for smaller cetaceans such as dolphins [HIRAGUCHI 1992] and beluga whales [MCGHEE 1974; FRIESEN and ARNOLD 1995], *kayak*-dart whaling, typically using poisoned slate blades (e.g. CROWELL [1994]), to the well-know *umiak*-float whaling systems of various Arctic groups;
  - 4) large populations: that is, sufficient populations to organize the minimum number of individuals to successfully crew whaling boats (*umiaks*, *kayaks* or other types); and
  - 5) the capacity for co-operative hunting.
- To this list might be added:
- 6) relatively low residential mobility and high logistical mobility; and
  - 7) the capacity for long-term storage. Many of these characteristics are, of course, interrelated, and will be dealt with below.

### 3. ACTIVE WHALING IN THE ARCTIC

While the development of active whaling arose independently in several areas, for the purposes of this discussion I will concentrate upon active whaling in the Arctic, since this is the area where it became most elaborated, and hence has been most studied. However, it should be noted that even within the Arctic there were probably several independent centres of development. Two questions will be addressed: a) why did active whaling come about, and b) what were the social-cultural consequences?

#### 3.1. Origins of Active Whaling

In the Arctic, the development of active whaling begins approximately 2000 B.P. in the Bering Sea/Bering Strait region, spreading outward, primarily eastward and northward from that region by approximately 1000 B.P. Any number of theories, or combinations thereof, have been advanced to explain its development. The development of the *umiak*-float complex at approximately this time is certainly critical, as the *umiak* allowed a number of hunters to approach large baleen whales in relative safety, while the float apparatus slowed and quickly tired the whale; it is certainly no coincidence that this technology coincides with a significant increase in whaling intensity. Additional factors may have included changing climate (e.g. MASON and BARBER [2003]), and population pressure, although in the case of the later, whaling intensification itself would have led to increased populations. Certainly the rapid expansion of active whaling from Alaska across the Canadian Arctic and into Greenland approximately 800 B.P. through the migration of Thule Inuit can be attributed, in part, to population increase and favourable environmental conditions of the Medieval Warm Period (which resulted in an increase in population and range of the primary whale prey species, the bowhead whale).

#### 3.2. Socio-Cultural Consequences

The following is a brief summary only, and it is recognized that socio-cultural consequences and processes varied locally. Much of this section derives from Whitridge's [2000] excellent study of the prehistory of Inuit whale use.

With the intensification of whaling, villages where whales became focal resources become progressively larger (from typically 4–5 to 15–20 or more), there is an elaboration of whaling related artefacts, whaling ceremonialism and whale bone architecture, and warfare becomes common.

In addition, there is clear evidence for incipient social complexity in the form of high status whaling crew leaders. Briefly, and using North Alaskan Eskimo whaling societies for analogy (see e.g. SPENCER [1959]; BURCH [1980]), 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 whaling crews, averaging 6–9 individuals, including kin and fictive kin (as represented by, for example, joking partners or spouse exchange partners). Whaling crew members provided the *umialik* with labour, and in return received whale and other food products and gifts, which were generally provided through the year. *Umialiit* also held feasts, controlled exchange between within and between villages, maintained alliances, and if necessary,

directed war parties. Although there was no formal organizational level above the *umialik*, statuses among *umialiit* varied, with the most important (successful) being referred to as the 'great *umialiit*' (MURDOCH [1892] cited in WHITRIDGE [1999: 101]). Finally, it should be noted that whaling villages were not considered simply a series of autonomous 'whaling' units, but can be considered to have been a "mutually dependant sphere of interaction" [CASSELL 1988: 106].

Accompanying the development of large *umialiit*-controlled whaling villages was the intensification of inter-regional exchange systems. This increase in exchange systems in turn was possible through the accumulation of whale product surplus to the immediate community needs. These exchange networks provided raw materials, food products and prestige goods. As noted by Whitridge [2000: 126], these exchange systems "provided a means of converting a local surplus in whale and whale products into other useful or desirable commodities, and could solve serious scheduling conflicts by providing an alternate means of acquiring some critical resource, thus motivating and facilitating increased whale harvesting."

Thus, with the eventual expansion of this system across the Canadian Arctic and into Greenland, we essentially have a regional system of large whaling villages stretching from eastern Siberia to Alaska, across Arctic Canada and into Greenland, generating considerable surpluses, and involved in extensive inter-regional/inter-social interaction. Note that there were certainly local gaps in this system, especially in the whale-poor south-central Canadian Arctic, but nevertheless the overall picture is one of an Arctic-wide system.

This system did not last, of course. Decreasing bowhead stocks due to European and Euroamerican whalers (in the eastern Arctic, initially caused by deteriorating summer ice conditions—see e.g. DYKE et al. [1996]), introduced disease and other events led to a collapse of most parts of the system, and changes in those parts that remained.

#### 4. DISCUSSION

This brief discussion of the prehistoric and historic context of indigenous whaling may seem somewhat out of place in a volume dealing with contemporary marine resource management and conservation issues. However, it hopefully illustrates several points that may be useful to consider when examining contemporary indigenous whaling.

First, when examining the historical basis of contemporary whaling in a given area, prehistoric whale remains in that area in and of themselves do not necessarily imply prehistoric whale hunting, but rather whale product use. Second, there were, and are, various 'scales' of whaling, with intensive whaling very likely much more restricted than 'low-level' whaling, or even scavenging of stranded whales (live or otherwise). Third, historically whaling was rarely conducted in isolation. That is, a whaling village (society) was typically very much a part of a much wider intersocietal system. Finally, among historic and prehistoric whaling societies, the social context of the whaling activity itself, especially the associated prestige and use/exchange of generated surpluses, is at least as important to consider as the purely dietary context.

## ACKNOWLEDGEMENTS

I would to extend my sincere appreciation to Professors Kishigami and Ishige for the very kind offer to participate in the symposium, and for the very generous funding that allowed me to attend. Note that this paper differs substantially from that presented at the conference, with the latter concentrating instead upon the archaeological correlates of prehistoric whaling societies.

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