Module 3

People of the Coast

Contents

Course objectives

The objective of this module is to describe the traditional livelihood of the people of the coastal zone, including sea mammal hunting, fishing, and commercial fishing. The coastal indigenous populations that will be discussed in this module are: the Aleut and Iñupiat of Northern Alaska, the Yupiit and Chukchi of the Russian Far East, the Inuit of Nunavut, the Isertormeeq, Kalaallit and Kujataamiut of Greenland and the coastal Sami people of the European Far North. This module will also briefly describe the environment, flora and fauna, and discuss some geographic and geological features of certain coastal regions in the Arctic. In the final section of this module, we also discuss the impact of commercial fishing by southerners on the inhabitants of the coastal circumpolar world.

Upon completion of this module you should be able to:

1. describe the traditional livelihood of the inhabitants of the Arctic coastal zone;
2. compare changes in different states across regions;
3. analyze the complexity of the use of local resources;
4. explain the difference between subsistence and commercial fishing;
5. discuss the impact of commercial fishing and whaling by southerners on the traditional livelihood of indigenous people living of the coast.

Introduction

The phrases 'peoples of the sea' and 'peoples of the coast' refer to the two major ways of life that existed in the Arctic before contact with European settlers from the south.[1] The first was focused on the land. The second on the sea: from the shores of the Russian Far East across the Arctic to Greenland, a group of related peoples turned to the sea for their livelihoods. Hunting on open waters using kayaks or umiaks, or hunting on or through the ice, these people relied upon the rich maritime fauna for food and fuel (blubber that was burned in oil lamps). The term 'subsistence' is often used in order to emphasize that it is not just about making a profit, hunting is also a fundamental part of social relations among humans (Bodenhorn in Freeman 2000:133). Whereas groups living inland focused on caribou, as for instance in Northern America or reindeer herding as in the Russian Far East and Northern Europe, the main resources for indigenous peoples living on the coast were fish, whales, walrus, and seals. The reliance on the sea produced a very distinctive material culture as represented by a variety of boats for travelling on the sea (kayaks and umiaks) and a number of techniques and instruments required for hunting marine mammals (harpoons and a variety of floats); techniques which were developed over the centuries.

This module discusses several indigenous peoples that live in the coastal areas of the Arctic and subarctic. The Iñupiat are indigenous people living in the northern and north western coastal tundra plain of Alaska. Iñupiat means 'real people', in the Inupiaq language – a language quite distinct from the language of the Yupiit inhabitants of western coastal Alaska or the Russian Far East. The Iñupiat have been living in this region for at least 2,000 years, and had a population of 13,500 in 2007. The Iñupiat are known for hunting sea mammals,

[1] The archaeological data in this module is drawn mainly from R. McGhee (1996), *Ancient Peoples of the Arctic*.

such as the bowhead whale and walrus, and generally define themselves as whalers (Bodenhorn in Freeman 2000:131).

In Alaska, the term Eskimo is used to refer to both the Inupiaq and Yupik speakers. The Inupiaq language is strongly related to the Aleut language of the inhabitants of the Pribilof Islands in the Bering Sea – the Aleuts. Because of their excellent hunting skills, they served under two colonial regimes, first under Tsar Russia and later under the United States. The Aleuts – or Unangan in their own words, meaning 'the coast' – are believed to have migrated across the Bering land bridge from Asia around 13,000 years ago (Corbett and Swibold in Freeman 2000:1). At the time of contact, the Aleut population was estimated to be around 25,000. Today only 2,200 are left, of whom fewer than 100 speak their native language.

The Chukchi and Siberian Yupiit constitute the two most numerous native groups of the Chukchi Peninsula, lying in the Chukotka Autonomous Okrug of the Russian Federation. The numbers of Chukchi and Yupiit living in this region today are estimated to be around 15,908 (2010 Census) and 1,700 respectively (2010 Census).[2] The term Chukchi has been introduced by Russians, probably referring to the Chukchi term for 'reindeer' whereas the term 'Yupik', the singular form of Yupiit, refers to yuhyt, 'people' or yupikhyt, 'real people'. The Chukchi language belongs to the Chukotko-Kamchatkan language family whereas the Yupiit speak a Yupik dialect of an Eskimo language. There is an ongoing discussion whether it was the ancestors of the Chukchi or the ancestors of the Yupiit who were the first to arrive in this region (Schweltzer and Gray in Freeman 2000:19). Like the Iñupiat and the Aleuts, the Chukchi and the Yupiit were excellent hunters, hunting mainly on walrus and several species of seal, whales (bowhead whale and gray whales) and sometimes a polar bear.[3]

The terms 'Inuit' or 'Eskimo' are often confused: in Canada the ethnonym Inuit is preferred rather than the term Eskimo, considered derogatory as it was thought to condescendingly mean 'eater of raw meat'. 'Inuit' refers to speakers of Inuktitut who include several groups of native peoples in the Arctic and subarctic regions of Canada, Greenland, Alaska, and north eastern Siberia. The Canadian Inuit can be found in Nunavut – a 735,000 square miles tundra area in northern Canada sometimes referred to as 'polar desert' (Rigby, MacDonald and Otak

[2] Although some Chukchi also live in the Sakha Republic to the west and the Magadan Province to the south of the Chukotka Autonomous Okrug.
[3] Further inland, reindeer herding has long been the major economic activity.

in Freeman 2000:95). Iqaluit, the capital, is the territory's largest community with a population of 6,699 (2011). Most of the population are, however, scattered in coastal areas, because of their marine mammal subsistence hunting activities for such animals as walrus, seal, and sometimes whale (beluga and narwhal), but also fish and shellfish.

In Greenland, the indigenous populations of the coastal area are known as the Isertormeeq, Kalaallit and Kujataamiut peoples. The Isertormeeq are an Inuit people residing in Isertoq, a village on the eastern coast of Greenland, with a population of 93 individuals (2010).[4] Their ancestors most likely arrived in the area during the thirteenth or fourteenth century (Hovelsrud-Broda in Freeman 2000:151). The language spoken by the Isertormeeq is similar to that spoken by the Inuit of Nunavut. The only land mammals found around the village are polar bears, but the sea is rich in different species of seals (ringed seal, hooded seal, bearded seal and the harp seal), walrus, narwhal and salmon, and the polar cod. Seals have always been important, not only for their meat, but also for their pelts.

The livelihoods of Kalaallit in the coastal areas of western Greenland are based largely on fishing and hunting of sea mammals, and to a lesser degree sheep. The Thule are seen as the ancestors of the contemporary Kalaallit and set foot on Greenland about 1,000 years ago. As there is almost no vegetation on Greenland, its inhabitants developed hunting techniques and became skilled hunters. Prior to contact with European colonists, and even until World War II, seal hunting was the most important activity. Since the 1950s, however, commercial fishing, especially for cod and shrimp has become the most important activity for Greenland's economy, not only because of changing climate conditions, but also because of import bans on seal products in Europe and North America (Caulfield in Freeman 2000:183).

The third indigenous population of Greenland that we briefly discuss in this module are the Kujataamiut of Southwest Greenland with the settlements of Qassiarsuk and Igaliko as the main centres. The population is currently not more than 144 individuals (2010). The climate in this region is warmer compared to other parts of Greenland providing grass and dwarf vegetation with good odds to survive and making sheep farming possible. As in several other regions of the circumpolar world, however, self-sufficiency and traditional hunting and

[4] The total population of Greenland was in 2013 56,000 people. The capital Nuuk is the biggest settlement with a population of 16,000 inhabitants (2013).

fishing activities gave way to reliance on trade goods obtained from the colonists, resulting in a growing dependency on outsiders (Rasmussen in Freeman 2000:116-117).

The coastal Sami of Northern Europe is the last group of indigenous people that command our attention in this module. In general, the Sami population is spread over four different nation-states: the Russian Kola Peninsula, Norway, Sweden, and Finland. However, the coastal Sami are mainly resident along the northern coast of Norway. The Sami have adopted their traditional livelihood to the environmental conditions of their land and to the colonization processes of national governments. Whereas saltwater fishing together with animal husbandry is an important traditional economic activity for the coastal Sami, large-scale intensive herding of tame reindeer is commonly seen as the subsistence activity for which the Sami are known to the rest of the world.[5] But reindeer herding is mainly an inland activity, although some reindeer herders are also using coastal areas for the feeding of their herds.

The appearance of coastal adaptations in the Arctic

Between 3,000 and 4,000 years BCE, truly coastal adaptations were emerging in Beringia. In Alaska and the neighbouring regions of Russia, the indigenous peoples were pursuing seals over ice and open water. Though the seals were supplemented with a number of other species – caribou, birds, and fish – the economy focused on the sea and its resources, and these traditions maintained themselves over time; the region is marked by continuity. The tools and the techniques of the contemporary Inuit, for example, can be traced back to the Thule, a tradition that emerged in the archaeological record roughly 1,000 years ago. The Thule, like the modern Inuit and Aleut, had a broad economic base that included the hunting of whales, caribou, and seals.

Seal Hunting

Two of the most abundant and widespread mammals in the Arctic waters are the ringed and bearded seals. The hunting of seals during the winter is founded upon one basic principle: seals are mammals that need to breathe air in order to survive. During the winter when the Arctic Ocean is covered by ice, seals spend all of their time under water, yet they maintain a

[5] Seasonal combination of both activities also occured, requiring the migration between settlement areas.

series of breathing holes that allow them to breathe during the winter. As the ice begins to freeze, the seals keep a series of holes open throughout the winter: they dive down to catch the fish that they eat to survive and swim up to their breathing holes to breathe.

Much of traditional Inuit subsistence in the central Arctic was founded upon this simple fact and, by training dogs to find breathing holes (by finding the telltale scent of the seal) and by having a group of hunters patiently waiting at breathing holes, seals could be harpooned and recovered even when the ice covered the Arctic Ocean. The seal would provide food, and its thick layer of fat (blubber) would provide both nourishment and heat, as the melted fat would be primary fuel used to light and heat homes in the Arctic. This would have been the only practical option, as there would not have been any driftwood readily available to burn – the only other source of fuel in the Arctic prior to the modern period. The sealskins could also be prepared to form floats – buoyant 'balloons' that could be used in hunting in the open water: a mammal harpooned from boats would be kept afloat by these sealskin floats and could then be towed to the shore. Sealskin has one important characteristic: it is impermeable, or water-proof. It was used when a waterproof skin was required as opposed to insulation for warmth. The skin of ringed seals was used for traces, lines, boot soles, boat covers, and a variety of other similar goods. The skin of other sea mammals, such as walruses, was used to cover umiaks. The Thule would have hunted seals – even if whales could have provided all the food that a community required to survive – if only to obtain the sealskin they required. Likewise, both the Thule and the modern Inuit would have hunted caribou for their hides, without which life in the Arctic would have been impossible.

In Scandinavia, on the other hand, with no sea ice, the coastal Sami hunted seals on the small islands and skerries along the coast in the spring breeding season. Sealing did not play such a crucial role in the economy in this subarctic area, but seal blubber and oil was an export product from Norway to Great Britain and the European continent already in the Medieval period. Seal hide was used locally to make waterproof shoes, and the dried skin which was extremely strong, was also used to make ship ropes.

Whaling

People relied on seals for their subsistence when and where the sea ice was frozen for much of the year. In periods of warmer global temperatures and along the southern coasts of Alaska,

open waters allowed for the hunting of whales. Whales, like seals, are mammals that require oxygen to survive. Though they can dive down to great depths, they must surface to breathe air; otherwise they would drown. Unlike seals, whales cannot rely on breathing holes for their survival, and when the ice freezes, they migrate to an open ocean. As noted, Thule expansion occurred at a time of global warming when the Arctic Ocean did not completely freeze over in the winter, as is now the case. In this much warmer period, the Thule hunted large ocean mammals, such as the bowhead whale (*Balaena mysticetus*), which can reach 90 tonnes in weight, and the slightly smaller right whale (*Balaena glacialis*), which can attain a weight of 50 tonnes. The successful hunt of a single whale would have provided an entire community with a large mass of meat to eat and a substantial quantity of blubber for their soapstone lamps. One whale would have been enough to ensure the survival of four or five families over an entire year. The quantity of meat that successful whale hunting provided is evident in classic Thule habitation sites: Thule 'villages' comprised a number of large semi-subterranean habitations with thick piles of refuse indicating that they were inhabited for much, if not most, of the year. In these permanent villages dating back to the classic Thule period, ice cellars are usually found. These are holes dug into the ground where meat could have preserved. Because of the permafrost meat stored in these cellars would have remained frozen and edible throughout the year. In Alaska, indigenous peoples continue to hunt whales, an important component of their subsistence.

The coast Sami of North Norway hunted small whales with harpoons from their boats. Drift whales which eventually stranded on beaches, were also an important resource both for them and their Norwegian neighbours.

Other animal resources: the caribou

Even if whales could have provided most of the food, other species were also hunted such as seals and caribou. In the case of caribou, the great importance of this animal in the lives of the Inuit and their ancestors did not lie in the meat, but in the hides. Hunters of caribou were most effective when they either hunted from kayaks in rivers during the migration as the caribou crossed rivers, or when they herded it into locations where hunters waited in ambush to kill the caribou. Whereas the marine mammals rely on a thick layer of blubber (fat) to keep warm, caribou have a layer of thick fur – or hollow hairs – that provide excellent insulation. In communities which hunted whales, the skin was prized for culinary reasons (eaten as mattak,

or muktuk) as opposed to its use in clothing. The beluga whale could only provide soles for mukluk (boots traditionally made of seal- or reindeer skin). Nonetheless, the Inuit could not have survived without the caribou, as caribou fur provided the most important source for clothing and bedding. If the people of the coast could not obtain a sufficient quantity of caribou hides (or, in Russia, reindeer hides) – as was the case for the north Alaskan Inupiaq or the Siberian Yupik – they invariably traded with neighbouring inland groups to obtain the necessary hides. Caribou were not central to subsistence, given the migratory nature of the animal. In the summer, caribou move north to the tundra of the Arctic; but in the fall they tend to migrate to more southerly regions. Lacking a thick layer of fat, caribou alone did not provide all of the oil required to heat and light homes during winter months: and the proportion of meat to bones is much smaller in caribou than in sea mammals.

Thule hunting skills and techniques

Archaeologists find a rich diversity of tools and artefacts in Thule sites: harpoons, lances, spears, darts, throwing boards, bows, and arrows – a diversified set of implements that would have been used for hunting both on sea and in open water. Harpoons would have been toggled and barbed to facilitate the hunting of mammals in the ocean. On land, a mammal that is speared and dies can be found: its carcass will lie on the land and a good hunter can follow a trail of blood left by a wounded animal and then find the animal when it dies. A marine mammal that is wounded will either swim away, never to be found, or will sink when it dies (actually, the largest whales remain afloat whereas the smaller ones sink after they had been killed). A toggled harpoon makes it possible to successfully hunt marine mammals. The harpoon head is barbed and fixed to the shaft in such a way that the harpoon head will easily be released when it pierces the animal; yet the harpoon will remain fixed in the animal's body because the barbs in the harpoon trap the projectile in the flesh. This can be achieved in two ways: either a harpoon head will have a closed fore shaft socket – a deep hole drilled into the harpoon – and a line tied directly to the harpoon; or it will have an open socket, whereby the harpoon head will have a deep groove cut into it, allowing a piece of fore shaft to be fixed to the harpoon, tied in place with sinew or baleen. Either option produces the same result: a harpoon attached to a line that can be used to tow the hunted animal back to shore.

Central to Thule existence was the umiak, a large boat capable of carrying a crew of 4-7 hunters. The umiak was constructed using a driftwood frame and was covered with the skin of

the bearded seal. In the spring, when whales were migrating, a crew of hunters would have paddled out to the whale pods and would have harpooned a whale. As noted, the harpoon would have been fixed to a sealskin float. The whale would have struggled, but the floats would have made it difficult for the whale to swim and dive, and exhausting the wounded whale. Once the whale died, the floats would have kept the whale from sinking, and crews of Thule hunters could have towed the whale to shore where it could be processed and its products preserved to feed a number of families through much of the year.

The emergence of contemporary coastal peoples

It is the onset of the 'Little Ice Age' – a period of global cooling that we reviewed in the first lecture – that would have forced the Thule of the central and eastern Arctic to shift their attention from whales to seals and to hunting seals on the ice. Throughout this entire period, fish would have been an important source of food not only for humans, but also for the dogs of the coastal people. In the short growing season, a variety of plant foods and materials would have been gathered. Nonetheless, whaling continued. The coastal peoples of Northern Alaska continued to hunt whales using traditional Thule methods well into the twentieth century. Ethnographic accounts from the nineteenth and twentieth centuries describe the hunting of whales from late March until as late as early July. After the spring whaling season, they would hunt bearded seal from the ice edge and caribou in September and October when the pelts were at their prime for making clothing.

Identifying coastal peoples of the circumpolar world

This section provides a more in-depth overview of a few of the circumpolar coastal peoples. We shall focus on four different groups of native people: the Aleut people from Alaska, the Yupiit of the Russian Far East, the Inuit of Nunavut and finally the coast Sami of North Norway. Much of their history, techniques and ways of life that are discussed below are representative of indigenous populations in other parts of the circumpolar world.

The Aleut of Alaska

The Aleut inhabit a chain of islands stretching from the Alaska Peninsula far into the Pacific encircling the Bering Sea.[6] The territory inhabited by the Aleut has a relatively moderate climate: there is no permafrost, and ocean ice is only found on the Alaska Peninsula, the eastern edge of the traditional Aleut territory. No trees grow on the Aleutian Islands, and high mountains mark the interior of the islands. However, the Aleut would have lived on the coast and relied on the resources of the sea. The Aleut speak a common language, one distantly related to the Inuit languages. However, the islands were clustered with wide straits and riptides, making travel between the islands difficult; and this separation led to the emergence of a number of dialects, which are divided into eastern and western branches of Aleut.

A traditional Aleut house was a semi-subterranean, windowless dwelling that housed a number of related nuclear families. The house was rectangular or oblong and was sunk more than a metre (3-4 feet) into the ground. The framework of the house was built of driftwood logs. The house featured two rows of posts that formed an inner rectangle; rafters were built over this foundation. Over this framework was spread skins or grass, and the entire structure was then covered with sod. Two large holes were located in the roof for light and also served as an entrance with a notched-log ladder leading to the living area below. The inhabitants of the house would sleep in mat-covered trenches at the edge of the house. Curtains would have been draped over this space delimiting families. Houses were usually located next to a stream emptying into a bay that allowed for easy travel.

Given the very damp conditions – poor for drying – that predominate in the Aleutian Islands, and the relatively abundant food supplies, little food was stored, except for festivals. The Aleut relied on the sea for most of their food. Traditionally, the Aleut hunted all of the local whales (except the sperm and killer whales), in addition to other sea mammals, such as sea lions, fur seals, sea otters, and the occasional walrus. In addition to sea mammals, the Aleut fished a number of marine species and fish that would swim into nearby rivers to spawn:

[6] This module's ethnographic descriptions for the Aleut, Siberian Yupik, and Inuit of the central Arctic are partly drawn from *Handbook of North American Indians Volume 5 Arctic* edited by W.C. Sturtevant, gen. editor and David Damas, vol. editor (1984), in particular the chapters 'Aleut' by Margaret Lantis, 'Siberian Eskimo' by Charles C. Hughes; 'North Alaska Eskimo' by Robert F. Spencer; 'Iglulik' by Guy Mary-Rousselière; as well as 'Central Eskimo: Introduction' and 'Copper Eskimo' by Damas, and 'Netsilik' by Asen Balikci. You are encouraged to read this text for further information on the territory and environment, settlement patterns and housing, subsistence methods, clothing, socio-political organization, and religion of the peoples studied in this module.

salmon, halibut, cod, flounder, herring, and sculpin. Ethno historical accounts describe how the Aleut fished using long lines made of seaweed with hooks tied to this strong and durable line. Such lines could be used to fish marine species such as halibut and cod. Freshwater fish were caught using bag-like dragnets made of whale sinew. They also collected a number of invertebrates, including sea urchins, clams, limpets, and mussels. Mammals were rare in the territory of the Aleut: besides fox, larger mammals could only be found on the Alaska Peninsula and on Unimak Island. Seals were essential to the Aleut. Nineteenth-century accounts describe how the Aleut believed that without seal oil they might starve or become ill – regardless of how much fish they had. Seal oil was added to dried roots, shellfish, and other food sources to make them more palatable; it was considered a necessary condiment.

The Aleut do not seem to have had the large open umiaks of the Alaskan Inuit, but they made extensive use of kayaks, some of which had two hatches (openings where kayakers would sit). Unlike the Inuit of Alaska or the Canadian Inuit, the Aleut did not rely on harpoons and floats to hunt whale and drag the carcass onshore. The whales were hunted using poisoned points, and the carcass would then drift to shore. As a consequence, not all hunted whales were recovered; some would drift to distant and inaccessible locations. Nevertheless, the Aleut whale hunters could secure 10-30, or more, whales per year. Moreover, the Aleut were expert hunters of the sea otter, a skill that attracted the attention of Russians who conquered the region for the prized pelts of the sea otter. Aleut hunters would form an arc, and when they spotted the sea otters, the hunters would circle the otters, harpooning the animals when they came to the surface to breathe. When hunting was not successful, edible roots supplemented the diet of meat. A number of greens and berries were gathered, including cow parsnip, cranberries, crowberries, and anemone. Some greens were available along the shores all year around. In addition to mammals and berries, Aleut hunters would take sea birds as prey and collect their eggs. A hunter would either climb down a cliff or, when appropriate, would be lowered down by rope, where a great quantity of eggs could be gathered along the crags.

As noted, the Aleut inhabited houses that contained a number of related nuclear families. A number of such houses could be found in a village. The families were related through the male line: the extended family might include an elder male, his brothers and sons, their wives, and any unmarried children. Because a groom had to offer his services to the bride's family – called 'bride service' – a young man might live and work with his bride's family for one or two years, and in some cases would continue living with his father-in-law after the completion

of the bride service. The preferred partner was a cross-cousin (usually a young man's mother's brother's daughter). Among the Aleut, parallel cousins (a first cousin who is the child of a mother's sister or a father's brother) were considered siblings in kinship terminology and were treated as such, whereas cross cousins were not considered direct kin and were potential spouses. There is some evidence that the traditional rules of descent were matrilineal, but it cannot be proved.

Aleut society was marked by degrees of status and ranking. Whale hunting was a high status activity and seems to have been limited to a number of families, with whale hunting privileges being inherited. A village, or deme, would have one 'chief,' or tukux, who would be responsible for protecting his kindred's hunting grounds, and would police the behaviour of kin to ensure that they did not raise the ire of neighbouring groups and, when necessary, would lead the group in times of war. Authority was not by any means absolute: a chief had to rely on personal qualities to ensure the allegiance of friends and relatives. Also, before deciding a punishment or going to war, it was necessary to gain the approval of the 'honourables'. A regional leader was often chosen, but his position relied upon the continued support of other chiefs. Likewise, the authority of one individual never extended farther than one island. The colonization by the Russians unfortunately had an impact on the political organization of the Aleut people. The Russians established a system of first, second, and third chiefs; and they defined and supported their authority. These offices came to be hereditary, especially that of the first chief.

The Yupiit of the Russian Far East

The Yupik speaking people of the Russian Far East are a small population when compared to the larger Inuit populations to the east and the neighbouring Chukchi populations; but they, along with the Inuit populations of Saint Lawrence Island, are an integral part of a cultural tradition that stretches across the coasts of the Chukchi Peninsula to eastern Greenland. Not only do they speak related languages, their ways of life and culture have much in common with other populations located across the Bering Strait. Unlike the inland Chukchi, the Yupiit people do not herd reindeer. Instead, they are focused on the sea and its resources. In this respect, they have more in common with the coastal Chukchi, who certainly were influenced by their neighbours. In fact, both groups depended upon each other, at least economically,

because the reindeer herders were in constant need of sea mammal fat and hides, and the coastal residents sought reindeer meat and hides (Schweltzer and Gray in Freeman 2000:20).

The traditional winter house among the Yupiit of the Russian Far East was a large, communal, semi-subterranean structure that housed a number of families. In the nineteenth century, such houses were abandoned in favour of another type of dwelling modelled after the Chukchi winter tent. This structure was constructed of plank siding; the roof was covered by walrus hide. Sod was piled up around the walls for additional warmth. The summer house consisted of a walrus-hide tent stretched over a wooden framework.

The clothing of the Yupiit of the Russian Far East was similar to that worn by the Inuit across the Arctic. Men wore sealskin underpants, a hoodless shirt of reindeer hide, reindeer-hide trousers, and sealskin boots. The summer shirt had one layer of hide with the fur on the inside. A sealskin belt was worn, decorated with white reindeer hair. A parka was worn in the winter for added warmth, though among the Eskimo of Russia, the parka did not usually have a hood. Both men and women would wear fur caps and mittens. Women's clothing included fur underpants and fur overalls. Traditionally, bird skin parkas were worn, until reindeer hide supplanted them. The Yupiit obtained reindeer hides for making clothing through trade with the Chukchi and occasionally by hunting.

As is the case with the Aleut and the Inuit farther to the east, the Yupiit of the Russian Far East depended upon sea mammal hunting. Fishing, gathering, and the hunting of reindeer, and birds supplemented the traditional subsistence-economy. Skins were used for clothing and footwear and used in the construction of houses. Blubber was used in heating and lighting homes. The walrus not only provided meat, blubber, and skin; walrus intestine was used to make waterproof parkas. Walrus were effectively hunted in the spring when they could be spotted resting on drifting icebergs. Like the Inuit to the east, the Siberian Yupiit used kayaks and umiaks for hunting and transportation. The umiak was constructed with a covering of walrus hide stretched over a wooden frame. The umiak was propelled using oars and sails and could transport several tons. It was well adapted for hunting in the Arctic Ocean: it could be easily pulled onto ice floes and dragged across with tough walrus skin, which was resistant to tearing. Hunters pursued the walrus and harpooned them from the umiak, with inflated sealskin floats attached to the harpoon head. The walrus would then be killed with a lance and dragged to shore. Another method of hunting walrus was to drive walrus that swam close to

shore to land using a flapper to imitate a killer whale, which – other than humans – are the only enemy of the walrus; and the walrus would then be killed by hunters waiting on shore. Traditionally, clan members would work together in the hunt, under the direction of a boat captain. However, the product of the hunt – meat, blubber, and hides – would have been distributed equally among clan members, including the children of deceased clan members. In the nineteenth century, with the increasing commoditization of the hunt, the hunts became less egalitarian, but the composition of hunting parties on the boats remained based on clan membership.

Though Soviet ethnographers argued that the Yupiit clans were originally matriarchal, the ethno historical material describes the social organization of the Russian Eskimo as patrilineal clans. Each clan had its own residential area in the village, its own meat-drying racks, and its own location for docking and tying its boats. However, clans did not have specific rights to hunt on specific locations (i.e., a particular shoreline). Each clan was headed by one senior member – usually an elderly man – who directed hunting and other subsistence activities, and he would lead trading expeditions to the Chukchi reindeer herds to trade for skins. He would also lead religious ceremonies among clan members and work with other clan leaders to settle disputes. Though clan leadership was often transmitted from father to son, a particularly powerful and respected clan leader could be chosen to lead an entire village, but authority was based on the continued support of other clans.

The Inuit of Nunavut

Amongst the Inuit of Nunavut whale hunting long ago, and then seal hunting became more predominant in central and eastern Arctic. The Inuit abandoned the semi-subterranean winter houses that were common to the Thule and the indigenous peoples of Alaska in favour of the igloo (a snow house) that was located on the frozen ocean. For much of the year, they lived on the ice, hunting seals. In the spring, when the ice began to melt, they moved to the shore and spent much of the summer hunting terrestrial mammals.

The igloo was a domed winter dwelling that featured a long passageway entrance and a porch. These features minimized the loss of heat. Small cubicles were built along the passageway and on the outside to store meat, clothing, and other goods. Inside the igloo, beds and tables were carved out of the snow. A large igloo would be 4–5 metres in diameter and 3–4 metres

high. Transparent slabs of ice were used for windows to let in light, and a ventilation hole was cut to allow air to circulate and cool the igloo. The Inuit used a long snow knife made of caribou antler to cut out the blocks of packed snow required to build the igloo. Snow shovels made of thick pieces of wood and carved antler were lashed together with caribou sinew. Those shovels were also used for a variety of other purposes, including covering the igloo in a layer of snow for improved insulation. The igloo was heated using soapstone lamps that burned seal oil for fuel. Given the efficiency of snow as an insulator, the inside of the igloo could be kept comfortably warm with an oil lamp. In some cases, the Inuit would line the igloo with skins suspended from the roof. The skins would trap cold air and keep the inside surface of the igloo cool, minimizing the melting of the snow in the igloo. The temperature inside a lined igloo could range from 10 to 20 degrees Celsius and would drip as snow melted. The sites chosen for the settlements were bays and inlets where seal hunting would be best.

The Netsilik (Natsilingmiut or 'people of the ringed seal') – a group of native people predominantly living in settlements within the Nunavut territory – were skilled seal hunters and capitalized on the seal's use of a limited number of breathing holes that allowed it to breathe under the thick ice. The hunter had a number of implements with him when hunting seals. This included a thrusting harpoon. The harpoon point was made either of carved antler or bear bone. It was attached to a shaft made of several pieces of antler lashed together and reinforced with sealskin thongs. When the harpoon struck the seal, the point would detach from the shaft and a line fixed to the harpoon point would prevent the seal from sinking into the water. In addition to the harpoon, the hunter would carry with him a number of implements necessary for the hunt. Once the dog had found the site of the seal's breathing hole, the hunter would use a long, thin snow probe made of bone to find the breathing hole itself – which usually was covered with a layer of snow. A bone snow knife and ice scoop was used to clear away the snow to see if the breathing hole was still in use. A down or horn indicator was used to reveal the presence of a seal at the breathing hole. A down indicator, a small piece of down, tied to a small anchor that would be pushed in the snow, would flutter as the seal breathed through the hole. This indicator was protected from drifting snow with a sealskin cover. A thin probe would be used to determine the orientation of the breathing hole so the hunter would know how to aim and thrust the harpoon. When a seal was harpooned, the hunter used an ice pick to enlarge the hole so the seal could be pulled out into the ice. The seal hunt would reach its peak near the end of May, when the ice was free of snow. At this time, women, and older children participated in the hunt. Hunters would wait at a breathing hole

while others would use a stick to push seals back from breathing holes, forcing the seal to search out another breathing hole – hopefully one under the vigilance of a harpooner. The cooperation of a number of hunters would improve the chances of success. In order to find the breathing holes, the Netsilik used dogs that used their sense of smell to locate the breathing holes under the snow.

In the winter, dogs were also used to pull sleds over the snow and ice. In some regions of the Arctic, driftwood was so rare that other materials had to be used in the making of sleds. Frozen fish wrapped in skins could be used to make runners; they would be lashed together using pieces of antlers. Runners, whether of wood, whale bone, or other materials, would be coated with a layer of ice mixed with crushed moss and polished, allowing the sled to run smoothly over the terrain. Dogs harnessed in a fan formation and driven with the help of a whip and various commands would pull the sled. Travel was easiest in the winter, as frozen terrain of ice and snow did not impede movement as much as the summer landscape where the permafrost left the land riddled with lakes and bogs that made movement difficult. In the late spring when the ice melted boats were used for transportation. The most important form of water transportation was the sealskin kayak. Open skin boats – the umiak – would also have been in use in various Inuit communities.

Once the ocean ice had melted and the hunting of seals was no longer possible, the Inuit moved inland. They would spend the spring and summer in skin tents made of sealskin. In the fall and early winter before moving out onto the ice, the Netsilik lived in transitional dwellings made with walls of snow and a roof covering of skins. The Netsilik hunted caribou in the summer and fall when they were migrating. The caribou wintered in the forest and moved north to the open tundra in the spring and summer before returning south in the fall. The caribou could be driven between two converging lines of larges piles of stones spread over a long distance, or stakes waving pieces of skin or clothing, to waiting hunters. The Netsilik would occasionally hunt muskox with the help of dogs. When sensing danger, muskox form a circle with the males protecting the periphery. Netsilik hunters would shoot arrows at a bull, and when it charged, dogs would keep it at bay while Netsilik hunters would kill the isolated animal with spears. Small mammals, such as fox and hare, were occasionally snared in summer – in addition to birds. Birds were hunted in the spring and summer. Ptarmigan were killed using blunt arrows, and a number of species of water birds were caught bare-handed or were stoned when they were moulting. In addition to the flesh of these birds,

the birds' eggs were collected; gull eggs were gathered in early June. The Netsilik would rarely hunt polar bear. When a bear was hunted, it would be in the spring at the end of its hibernation. The bear would be driven out of its den using spears and, then, while dogs would keep the bear from attacking the hunters, the Netsilik would shoot the bear with arrows and finally attack the bear with barbless harpoons and spears.

Inuit fished throughout the year, though rarely in mid-winter. In early August, Arctic char would swim upstream. The Inuit used stone weirs to catch the fish, and hunters then speared them using three-pronged leisters and then strung the fish onto a line. Several extended families would congregate at the weirs during the summer fishing season. Once ice had begun to form, the Netsilik would cut holes in the ice, attracting the Arctic char, which could then be speared. These two fishing techniques were the most productive, but other fishing techniques included the use of fishing harpoons with detachable points, the use of hooks, and the placing of baited gorges in shallows.

The caribou hunts were essential to Inuit survival, not only for food, but also for clothing. Inuit men scraped and softened the caribou hides, and the women sewed them into clothing using bone needles and caribou sinew. Hides were not tanned, and so the insulating hairs of the caribou were retained on the prepared skin. In some circumstances, sealskin was substituted for caribou hide when making parkas, but caribou hide was generally preferred because it more effectively kept a person warm in winter. The basic piece of clothing was a caribou skin, hooded parka with the fur on the inside. This parka could be worn in the winter, and a second parka with the fur on the outside would cover the inner parka for increased warmth. The parkas would usually feature a long flap in the back and a shorter flap in the front. The parkas would be decorated with fringes; and the inner parka was often decorated with beads or other decorative elements. A woman's parka would have a larger and deeper hood – with a pouch to accommodate a baby or a small child – and wider shoulders and sleeves so a woman could move a baby to a comfortable breast-feeding position without having to expose the baby to cold air. In addition to the parkas, trousers (or long stockings) and boots would be worn, also made of either sealskin or of caribou skin with sealskin soles. Both men and women also wore mittens.

Regarding the social organization of the Inuit, the smallest unit was the nuclear family. A married Inuit couple and their children would work together as a collaborative unit, but the

nuclear family would often be incorporated into a larger, extended family. On the ice, a number of igloos would be clustered together and joined, linking an extended family. The extended family would usually comprise a father, his sons and their wives, and children. When the father died, the family would split into new extended families. At other times, other kin relations were used to constitute an extended family: for example, two unrelated men married to two sisters. The extended family – usually 15–20 individuals – lived and worked together in the hunting of caribou and the fishing of Arctic char. Rules of sharing meat governed the redistribution of game and fish within the extended family: each nuclear family/individual would receive a share of the hunt. When, for instance, a seal was killed the distribution of the meat and blubber was predetermined. Within the extended family, food was shared and the distribution of food was under the guidance of the eldest woman. At the head of the extended family was usually an older hunter who decided when and where the family would move: chose hunting sites; and advised younger men on hunting and fishing techniques. However, this headman did not have absolute authority: orders were not given; and nuclear families were free to move away from an extended family and join other family units. In the winter, a number of families would congregate to hunt seal. The number of individuals living together on the ice in clusters of igloos could number as many as 100. There was no clearly defined leader in these larger groups: the opinions of older and respected hunters would carry more weight than those of other members of the group, but these people could not impose their will on others.

Given the egalitarian nature of Netsilik and Inuit society, social control was maintained informally through ridicule and mockery though care was taken to ensure that the individual was not provoked to retaliate. Other forms of conflict resolution included public fist fights, song duels and in extreme cases murder. However, most conflict was resolved through conflict avoidance: when conflict could not be resolved, groups could always split, move apart, and form new groupings.

Finally, with regard to religion and spiritualism, the Inuit lived in a rich spiritual world. The Netsilik believed in a variety of supernatural beings including personal souls, name souls, human ghosts, animal souls, and special spirits – amulet spirits – who helped hunters. Among the Inuit of the central Arctic, humans were seen as having a number of souls: within the body the Inuit had a soul represented as the breath of life; and one also had a soul proper. One's name was also a form of soul inherited from an ancestor. The souls of seals, caribou, and

bears in particular had to be ritually placated after being killed by a hunter. The soul of an animal that was killed would inhabit a new body, so it was important that respect be shown to the soul of the animal that was hunted and killed, lest the soul be offended in its new reincarnation.

A number of spirits inhabited the landscape, including spirits that could bring harm to humans. Some were bloodthirsty and the Netsilik feared them. Netsilik cosmology featured a number of deities, including Nuliayuk, a goddess living at the bottom of the ocean and reputed to be the mother of all land and sea mammals. Also, Sila – the giant babay – was the master of wind, rain, and snow. The one deity that helped humans was Tatqiq, the Moon spirit. Tatqiq was particularly important in ensuring the fertility of humans. His sister was Siqiniq, the Sun. On the whole, however, the spiritual world was filled with a number of spiritual entities that were dangerous to humans. In this larger spiritual universe, the shaman played an important role in maintaining spiritual harmony, acting as a necessary intermediary between the community and supernatural forces. In order to become a shaman, a novice had to be initiated by an established practitioner. The novice would then seek the power of shamanism through exposure, solitude, and fasting. Often, the novice had to symbolically die before being reborn as shaman. The power of the shaman, however, depended on the helper spirits that assisted the shaman. Special articles of clothing, such as a special belt, signalled the shaman's status. The shaman would be called upon by the community in times of misfortune to influence the weather, to find game, to recover lost souls, and to fight against malevolent spirits and supernatural forces. In such circumstances, the shaman would enter into a trance and communicate with protective spirits, summon protector and helper spirits. The cause of misfortune would invariably be a taboo that had not been respected: i.e., important rites of passage such as life and death, or taboos surrounding the birth of a child or hunting by men. The shaman would elicit public confessions of taboo transgressions and then expiate the infringement of the taboo to relieve the community of its misfortune. A shaman could be called upon when a person became ill. Instead of entering into a trance, a more passive form of shamanism was often performed in the case of illness, which required lifting the patient's head with a thong and interrogating a helper spirit.[7]

[7] See the chapter by Guy Mary-Rousselière, 'Iglulik,' in Damas (1984:431-446) for a fuller explanation of the practice of head-lifting.

The Coastal Sami of Northern Europe

The Sami have populated large parts of Scandinavia and Finland as far back in history as we can identify ethnic groups in this area. Their main coastal settlement has traditionally been in the area which today is the northern half of Norway, but the Sami originally also lived all over the Kola peninsula. The oldest archaeological traces which can be characterized as Sami or pre-Sami, date back to the last millennium BC. During the Iron Age, the picture becomes clearer, and by the end of the 9th century, the Norwegian chieftain Othere who made a voyage to the White Sea, reports about a Sami population who were fishermen and fowlers, along the coasts of North Troms, Finnmark and the Kola peninsula.

But the Coast Sami also lived further south, at least as far as to the coast of Trøndelag. In the southernmost parts of this area the climate is much milder than in the north, the vegetation is different and to some extent so are also the marine resources. This led to differences in the economic adaptation between north and south in the Coastal Sami area. Especially those who lived south of Finnmark lived in close contact with their Norwegian neighbours.

The Coastal Sami, and to some extent all Sami, had relations with their European neighbours at a very early stage. One can hardly speak of a "pre-contact period" in the history of the Sami, which is a common concept used when historical relations between aboriginal peoples and their neighbours in other parts of the Arctic are described. Since trade and cultural exchange in North Scandinavia took place from a very early stage, the development of the Coastal Sami economy and society was continually influenced by the opportunities arising from the trade with their neighbours. Furs were the main trading item up until the High Middle Ages (1001-1300) and in this period the skills of the hunter were most important for the Sami. But when dried cod became the main trading item from North Norway, the Coastal Sami swiftly adapted to commercial fisheries, and they began to participate in the main cod fisheries that were conducted especially in Lofoten and on the coast of Finnmark.

During the High Middle Ages (1001-1300) the Coastal Sami of the southern districts changed their economic activities from hunting to fishing and farming. They settled on farms and lived from animal husbandry (cows and sheep), and they cultivated grains like barley and oats on their farms. They also had special land-owning rights (in common for the Coastal Sami living south of today's Finnmark). They participated in commercial fisheries and were also fishing

for their own consumption. They continued hunting both at sea and on land, although this commerce declined in importance for them. In the North, the more typical hunting society continued, but around 1600 AD a more sedentary existence based on farming and fishing took over there, too.

The fisheries and the fish trade developed further during the latter part of the Middle Ages and on into the 16th century with fishing villages being established all along the northern coast of Norway as far as Varanger the 1500s. Tradesmen and representatives of the towns of Bergen and Trondheim also settled in fishing villages, with proximity to the Sami fishermen of the north extending trading opportunities.

Most of the Sami population lived in fjord districts. This gave them access to pine timber as a resource, the preferred building material for boats. Boat building seems to have developed into a specialized Coastal industry for the Sami in Northern Norway. The Coastal Sami even built the bigger transport ships, *jekts*, which were used to bring the dried cod, fish oil and other goods to Bergen and Trondheim. The Sami boat building industry lasted for centuries – especially in the 18th century the documentation is overwhelming. One must have in mind that the demand for fishing boats must have been immense and continual, when one thinks about the regularity and popularity of the commercial cod fisheries all over North Norway.

The Coastal Sami were actually more prosperous than their Norwegian neighbours in the 18th century. Studies of probate material from the Sami districts of Tysfjord, Ofoten, Vesterålen and Alta all give the same picture: the Sami were the most prosperous among common people. There is no other explanation than that this was a consequence of a more varied economic activity among the Sami – who engaged in boat building and hunting in addition to farming and fishing. These activities gave an extra income which the Norwegian fisherman-farmers were lacking. It even appears that the Sami executed a more varied fishery effort, as it included river- and lake fishing in addition to fishing at sea (Nielssen 1996:21-41; Hansen 2009:37-58).

In the 18th century the Russian Pomor trade, conducted by tradesmen from the White Sea area who visited North Norway in the summer period, became important for the Coastal Sami. While the Norwegian traders were only interested in the dried cod which was caught and processed in late winter and spring, the Pomor trade opened a new market for fresh fish

caught during the summer, which was immediately bought and salted onboard the Pomor ships. The commercial fisheries of the coast Sami developed further in consequence.

During the 19th century, the Coastal Sami culture nevertheless began deteriorating, first in the south. Initially, Norwegian immigration into these areas caused a diminution of the Sami settlement areas. Then the Coastal Sami began to be assimilated into the Norwegian population, first by inter-marriages with Norwegians, and thereafter by a harsh assimilation policy introduced by the government from about 1850. The Coastal Sami met with discrimination in many fields, and were hindered from participating in the modernization process which accelerated in this period. From having been a well-to-do and respected population in earlier centuries, most of the Coastal Sami became much poorer and were discriminated against both by the government and the local people. In the long run the consequent assimilation policy put both the language and culture under heavy pressure.

In North Troms and Finnmark the Coastal Sami culture survived better, well into the 20th century. The policy of Norwegianization, however, also continued to subdue Sami language and culture in the north. In 19444, during the Second World War, all settlements in North Troms and Finnmark – towns as well as farms – were burnt down by the German army. Rebuilding started shortly after the war, but the characteristic differences in the cultural landscape between Norwegian and Sami, disappeared. This speeded up the assimilation process.

Under the more positive world-wide climate for aboriginal peoples during the last decades, also extent in Norway, there has to some extent been a cultural revival among the Coastal Sami, and together with the Inland Sami, they are fighting for Sami rights. Modernization has also come to Sami fisheries, but it is still on a small scale. There is an ongoing debate about special rights for Sami fisheries in North Troms and Finnmark based on traditional use among the Coastal Sami but so far Sami claims have yielded only minor results (Eythorsson 1993:133-142).

The impact of commercial fishing on native people

This chapter discussed the social and nutritional need of fishing activities (in addition to herding and gathering) for indigenous populations living on the coast. The last section of this module briefly discusses the impact of commercial fishing on native people, although commercial fishing is only one of several issues that threaten the traditional livelihood of the indigenous people of the Arctic North, such as environmental pollution, climate change and import-bans on seal fur. But, as we also have seen in the last section, aboriginal people, like the Coastal Sami also have been participating in and profiting from commercial fisheries from a very early date.

Sustainable management of natural resources and access to fishing activities are both fundamental to securing the continuation of the traditional livelihood, and the cultural diversity, of the people living on the Arctic coast. A way of life is considered to be sustainable if people are able to maintain or improve their standard of living and ensure that their activities are compatible with maintaining the natural resource base. Sea fishing, as this lecture has shown, is important – not only for food and clothes – but also in terms of social activities and well-being of those involved. Fishing activities should not only be understood from an economic perspective, but also from a social and cultural perspective. A traditional livelihood requires human capital (skills, knowledge) but also the rights of access, use and management of natural resources. Short-term unsustainable fishing methods or unequal resource access, such as a lack of access to the decision-making process or to participation in the planning and implementation of fisheries management, has a direct impact on the fishing activities and therefore the livelihood of indigenous people of the Arctic.

As fishing activities gradually become more important and begin to provide a more significant part of their income for groups that were originally hunters, the subsistence economy – though still important – does not generate the cash necessary to purchase gear, ammunition and other equipment in order to be able to continue fishing and hunting activities and to provide food on the table. As a result, the indigenous people become more and more vulnerable to external influences. Fisheries are being transformed from a subsistence-activity to a commercial activity where those participating – both indigenous and non-indigenous – are subject to control and regulation by local, regional and national authorities and to stock-exchanged listed

multinationals operating in a global market. The global restructuring of fisheries, the balance of competition between different species and different fishing areas are good examples of how the effects and influences of global processes are increasingly felt in all aspects of social, economic and cultural life by people living in the Arctic today. The fact that there are few other ways to earn money in many Arctic communities underscores the dependency of the inhabitants on fishing activities.

Supplementary readings

NFB: Films about Inuit & Netsilik – NFB. Retrieved 28. January 2014 from: http://www.nfb.ca/subjects/inuit/netsilik

Glossary of terms

clan	**1** the basic social and political organization of many aboriginal societies, consisting of a number of related groups and families. **2** a group of families with a common ancestor. **3** a large, close-knit family.
mukluk	boots traditionally made of seal- or reindeer skin.
patrilineal	of or relating to, or based on kinship with, the father or descent through the male line.
probate material	a description of what a particular person owns (boat, summerhouse, furniture etc.)
umiak	a large, open, flat-bottomed boat made by stretching an animal hide over a wooden frame.

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