

Module 1

Introduction

The BCS 321 course was developed between 2002 and 2007 by Michel Bouchard, Greg Poelzer, Heather Exner, Ludmilla Zhukova, Jeremei Gabyshev, Ken Coates, Bill Morrison, David M. Brock, Yvon Csonka, L.I. Vinokourova and Aileen A. Espiritu. Originally, the course included 12 modules. Because of the increasing developments in the Arctic, the BCS Committee of the University of the Arctic decided in 2009 to revise the curriculum and bring these courses up to date. In spring 2013, Marit Sundet from The University of Nordland, as project leader and academic lead, in cooperation with Sander Goes; University of Nordland, Peter Haugseth; UiT – The Arctic University of Norway and Natalia Kukarenko; Northern (Arctic) Federal University named after M.V. Lomonosov, reviewed, edited, rewrote and consolidated the original curriculum into 8 modules. Part of the text of the modules were reviewed by Alf Ragnar Nielssen; University of Nordland. Final reviewer, Diddy Hitchins, Professor Emerita, University of Alaska Anchorage.

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Course objectives

The objective of the first module is to identify the natural environment of the circumpolar north and examine the primary societies that lived in this region prior to contact with European colonial powers (the pre-contact period). Since this module is intended to be an introduction, the concept of critical thinking will be discussed in the next section, providing you with some valuable scientific skills necessary to complete this course successfully. The following sections will also review the history of colonization and discuss the origin and spread of colonialism in the north including the impact of colonization and assimilation on traditional livelihoods of indigenous peoples. Moreover, major historical trends will be reviewed to illustrate how the north was integrated into states and how northern territories became internal colonies under the domination of more populous southern states, or cores of the states. At the end of this module, you should be able to better understand the social and cultural composition of the circumpolar world and the factors that shaped its present-day social and political composition.

Upon completion of this module, you should be able to:

1. acquire a broad and basic understanding of the histories and experiences of the peoples of the circumpolar world, as well as the development of northern cultures;
2. develop an understanding of the similarities and differences of indigenous peoples and cultures, their adaptations to change, and their roles as agent of change;
3. gain an appreciation of the cultural diversity of the circumpolar north;
4. hone your critical thinking;
5. learn to write and evaluate academic papers and assignment essays.

Introduction

The northern circumpolar world stretches around the North Pole, crossing different states and oceans. Though this region is inhabited by diverse peoples, with diverse cultures, they do share many similarities. The northern latitudes are inhabited by indigenous populations that were colonized by more populous southern people and left as indigenous minorities within

larger states. The indigenous peoples of these northern territories inhabited tundra and boreal/taiga ecosystems, territories that were not suitable for extensive and intensive agriculture.¹ The exception was northern Norway where the Sami in some areas could start animal husbandry and some agriculture in the southern areas of their territory. Many territories were coveted mainly for their natural resources: first, fur, fish, walrus teeth, seal and whale blubber; later wood, oil, gas, and – even more recently – diamonds. Long marginalized, the indigenous peoples across the circumpolar north began to organize themselves politically in order to secure their rights, such as their inherent right of access to their traditional homelands. During their long political struggle, a struggle that is far from complete, the indigenous peoples began to seek the tools necessary for their cultural survival. As a result, there has been a cultural renaissance across the circumpolar region wherein indigenous peoples withstand pressures to conform and assimilate, and instead, decide to promote their languages, values, and cultures. The study of these processes is the core of this and the following course (CS 322: Peoples and Cultures of the Circumpolar World II).

Applying critical thinking

Before discussing the geography and indigenous peoples of the Arctic, we start this first lecture by explaining an essential attitude that will help you evaluate information and make scientific decisions: critical thinking. Science is not only based on analytical or logical thinking: while analytical thinking, for instance, focuses attention on how to deconstruct a problem in several parts, critical thinking is regarded as a more self-reflective and self-correcting approach, helping us to examine theories, facts and opinions in a more purposeful, and responsible manner. Thinking critically can help – not only to discover hidden strategies and in distinguishing facts from values – but also to strengthen your own arguments. For instance: how did your ideas develop? What have you learned from this course? Such techniques also help you to recognize the reliability or unreliability of sources: who is making these judgements? Somebody argues that his approach is good, but for whom? Cunningham (2004:13) identifies several basic steps in relation to critical thinking. Though there is some

¹ The term ‘indigenous peoples’ has been adopted by governments and society as the best catch-all term available to incorporate consideration for their rights into international law. Rather than defining indigenous peoples, the UN’s approach is to identify these people based on self-identification at the individual level (UN Indigenous Peoples, Indigenous Voices).

overlap between the issues identified in each step, Cunningham discusses some of the most essential questions that you will find useful during your study.

- Identify and evaluate premises and conclusions: Are the claims being made supported by evidence, and if so, what kind of evidence? What kind of conclusions could we draw ourselves based on this evidence? Remember that although a particular claim might be correct, the conclusions drawn from those claims may not be.
- Recognize and clarify uncertainties, vagueness and contradictions. Is there one or more explanation for the terms being used?
- Distinguish between facts and values.
- Recognize assumptions. Is there any hidden strategy behind the claims being made? Does the person or organisation in question have a political or personal agenda in this issue?
- Distinguish source reliability or unreliability. For example, what qualifies the experts on a particular issue? Is the information he or she presents true? Where did he or she get the information?
- Recognize and understand conceptual frameworks. What are the general beliefs and values of a particular individual or organization and how do these beliefs and values affect the claims these individuals or organizations make?

Identifying the circumpolar north

The South Pole is covered by a land mass, namely the continent of Antarctica, the North Pole is covered by a frozen ocean. The circumpolar north begins at the North Pole and is shaped by the way the earth spins around its axis. The earth completes one rotation over the course of a day; this happens every day of the year. However, the relationship between the sun and the earth changes subtly over the year as earth completes its annual trek around the sun.

During the summer months, the earth's North Pole is tilted towards the sun and the northern latitudes receive solar energy constantly. The sun, therefore, never sets during summer months in the north. At the same time of year, at the South Pole, the sun does not rise. In the winter months, the North Pole is tilted away from the sun, leaving the north in darkness. At the North Pole, the sun does not set for the six months of summer and does not rise once it

sets for the six months of winter. Moving south from the North Pole, the days of light or darkness are less complete. At the Arctic Circle (66.5622°), the sun does not set for one day on the summer solstice (June 21 or 22) and does not rise on the winter solstice (December 21 or 22). South of the Arctic Circle in the northern hemisphere there are no days of complete light or darkness. Moving towards the equator, these extremes of summer day and winter night fade away, and at the centre of the planet, day length equals night length throughout the year, with little noticeable variation.

The lack of sunlight at the poles affects the climate. Left in darkness or with little direct sunlight for half of every year, the poles are much colder than the area around the equator. Temperatures, however, are not dictated solely by sunlight. Warm and cold ocean currents regulate our climate by redistributing surplus heat from low latitudes to high latitudes. Much of the circumpolar north is far warmer than it would be without the influence of ocean currents. This is certainly the case for Scandinavia where the Gulf Stream carries warm water from the Caribbean to northern Europe. All of northern Europe benefits from this movement of water, as warm air is pushed from the southern latitudes to the north, keeping the north of Europe much warmer than it should be given its latitude.

As will be discussed later in this module, the earth has undergone a succession of ice ages, more precisely glacial ages. Though it is not clear what exactly initiates a period of glaciation, once the process has been initiated, the growth of glaciers and the greater snow cover leads to more solar energy being reflected off glaciers and snow and being lost in the earth's atmosphere, leading in turn to cooler temperatures and glacial expansion. A mere 10,000 years ago, a massive sheet of ice covered most of Canada, and a large glacier was centred in Scandinavia. During periods of glaciation, the Gulf Stream was pushed southwards, off the coasts of Spain and Portugal, leading to a much colder and ice-bound northern Europe, which in turn led to colder temperatures and increased glaciation in North America. Thus, each glacial age saw a reduction in the temperature of the earth's surface and atmosphere resulting in the formation and spread of glaciers that covered much of the northern hemisphere. When during intermittent warmer periods the glaciers retreated and the ice melted, global temperatures increased. As the earth warmed, ecosystems moved northwards; the tundra shifted north, following the retreating glaciers, and forest replaced lichen and grasses as the boreal and deciduous forests pushed north.

The Arctic waters are also warmed by the inflow of warm Pacific water through the Bering Strait. As is the case in northern Europe, the flow of warm current leaves certain regions of the Arctic much warmer than their latitudes would normally allow. This is certainly the case for the Aleutian Islands, the Kamchatka Peninsula, and much of coastal Alaska and the northwest coastal regions of British Columbia. These areas benefit from the warmth of nearby waters that make for milder – though quite often very foggy and rainy – weather. Even the coastal areas of the Arctic Ocean benefit from the warmth radiated by water. Though the Arctic Ocean is covered by ice most of the year, it is not completely frozen, and the waters below the ice radiate heat through the ice. As a consequence, the air is often much warmer on the ice in the Arctic Ocean, as opposed to territory farther inland that does not benefit from heat coming from the ocean.

The treeless landscape in high mountain areas or in the far northern or southern latitudes is called the tundra. Because of a very short growing season and cold and harsh winters, the tundra has low biological productivity, low diversity and low resilience. Most of the year, for instance, the soil is completely frozen, preventing roots from deep growth. Between 45° and 60° latitude, the environment can be identified by stretches of coniferous boreal forests (taiga) or northern coniferous forests. The most dominant conifers are pine, hemlock, spruce, cedar, and fir. The taiga of Northern America, such as Alaska's Chugach Mountains – identified by its sparse, black spruce forest – form a ragged border with the tundra. The boreal forest stretches from the interior of Alaska, across the Yukon and most of northern Canada: it is also found in the northern highlands of Scotland and of Scandinavia, and in northern Russia. It is in the boreal forests that some of the coldest winter temperatures have been recorded, particularly in the Russian Far East where temperatures below -70° C have been measured and winter temperatures routinely range from -50° C to -60° C. The same is true of Canada, where it is in the continental interior – far from oceans – that winter temperatures tend to dip down farthest. In both regions, winter temperatures are shaped by mountain ranges that block the movement of warm air onto the continent. In the Russian Far East, high mountain ranges block the movement of warm air from the Pacific in the east, and other mountain chains block the movement of warm air from the west and the south. As a consequence, these territories exhibit continental weather patterns: very intense cold winters, followed by short but very hot summers. In the Russian interior, temperatures can range more than 100 degrees in the course of one year, from -70° C in the winter to exceeding 40° C in the summer. The north-eastern part of Scandinavia has a tundra climate characterized by its cold winters and little

precipitation whereas the temperature in the north-western part due to the North Atlantic Current is relatively warm, compared to similar latitudes elsewhere in the world.

Though summers can be quite hot, much of the soil remains frozen. This frozen soil, or permafrost, is an integral part of the northern landscape and its ecosystems. In the far north, permafrost and climate do not permit the growth of trees, with Scandinavia and the Kola Peninsula as the exception. In these locales, a thin layer of active growth will insulate the frozen soil below. The dominant floras in these areas are various mosses, lichens, and dwarf species of trees, such as dwarf willow. The permafrost does not allow water to seep into the soil – as it would in more southern locales – so, pools of water are kept at the surface during the short summer months, leaving the territory covered by a maze of shallow lakes, ponds, and marshes. Though the boggy terrain makes the movement of humans difficult during summer months, it provides rich nesting grounds for numerous species of waterfowl that migrate north to breed. The northern terrain is also the prime summer grazing territory for caribou and reindeer that trek north to get relief from a variety of insects (mosquitoes and flies) and to calve. Both woodland caribou and moose – the dominant ungulates of the Canadian boreal forest – live alone most of the year, with the exception of cows with their calves, and only rarely will a cow give birth to twins. Not only do terrestrial animals move into the tundra and northern terrain in the summer, maritime species also migrate north. Many species of whales, for example, swim into the rich northern waters, during the summer and swim out to warmer waters in the fall. Likewise, species of fish, such as salmon, swim up coastal rivers far inland to spawn.

In the boreal forest, the permafrost is widespread but discontinuous. The permafrost in Russia predominates in the territories east of the Ural Mountains but is insignificant in the northern territories to the west of the mountains. In North America and in parts of northern Europe, (north Greenland and Svalbard), permafrost is found, and discontinuous patches of permafrost stretch to the south. The boreal forest, or taiga, maintains itself in such areas; the needles that fall to the soil acidify the soil, killing off potential rival species, such as grasses, that would otherwise compete for light and nutrients. Still, the boreal forest is not long-lived. As the forest matures, dead wood accumulates, and the highly combustible resins of the boreal forest lead to forest fires that consume the forest every 75-400 years, depending on the type of boreal forest and its composition. Certain species even require forest fires to reproduce: jack pine has cones that are ‘serotinous’ and will not open unless they are exposed to intense heat

of at least 50° C – as in a forest fire. Jack pines help to spread forest fires as its resinous bark and needles serve to spread the fire up into the canopy and through the forest. After the fire clears the forest, certain species of trees, like aspen, will thrive in the burnt landscape before being replaced by species like spruce and pine, which will predominate in the mature forest cover.

Before we discuss the indigenous populations of the circumpolar north in more detail, it is important to understand the role of glaciation (the ice age) in shaping the peopling of the circumpolar world. The next section, therefore, discusses the history of the major regions of the circumpolar north so that you will have the necessary facts to put the existing peoples of this region in their longer historical perspective.

The history of the circumpolar north: Glaciation

This section looks at the most recent ice age of the Pleistocene epoch, approximately 2.5 million years ago, by reviewing the changing landscapes of the final period of the last ice age as well as the coming of the Holocene epoch and the geology behind global cooling and warming periods. After reading this section, you should be able to trace the expansion limits of glaciers in the different prehistoric epochs and point out approximately when and where there are signs of peopling in the Arctic. Finally, this section identifies several features that may be found on the site of a retreating glacier.

The Arctic and circumpolar world were shaped by the ice ages that are characteristic of the Pleistocene epoch. Existing glaciers in mountain areas are remnants of the last ice age. By studying existing glaciers, scientists learn much about ice movement during past periods of continental glaciation. It was only in the last 10,000 years (at the beginning of the Holocene epoch) that the glaciers have gradually retreated, with the largest remaining glaciers located in the Antarctic and in Greenland. Other glaciers across the North are located in mountain ranges and other northern locations; these are remnants of much larger glaciers that once covered much of Europe, North America, and northern Russia. The retreat of the glaciers took many thousand of years. Much of the northern territory has only recently – in geological terms – been freed of ice, making it possible for humans to move into territories where in many locations the ice had been more than two kilometres thick.

There were four distinct periods of major glaciation (glacial periods) during the Pleistocene epoch – interrupted by periods of global warming when the sheets of ice retreated to the poles (interglacial periods). The Pleistocene epoch was not the earth’s first global ‘ice age’; in the last billion years of earth’s geological history there were a number of periods of significant glaciation, and some were much more intense than others, with the ice pushing much farther south. Figure 1.1 shows the peak of glaciation when glaciers covered approximately 30 per cent of the earth’s surface (as opposed to the current 10 per cent coverage).

The peak of glaciation witnessed the fusion of a number of glaciers. In North America and the Canadian Arctic, the glacial poles were the Cordilleran ice sheet and Laurentide ice sheet. At the peak of glaciation in North America, the glaciers pushed southwards to 40° N latitude. In Europe, the glacial poles included the Alps mountains, Scandinavia, and the northern British Isles. The Greenland ice sheet, the only remaining ice sheet in the North, still covers most of the island of Greenland.

The last 10,000 years have been marked by significant periods of warming and cooling that played a major role in the history of humanity. These periods of global warming and cooling attest to the continued instability of global temperatures. In effect, the ice age may not be over: perhaps the last 10,000 years have been an interglacial interval to be followed at some point by another pulse of glaciations, during which the ice caps will push southwards. A lesser glacial stage, the so-called ‘little ice age’, began in the sixteenth century until the 19th century when significantly colder temperatures saw the glaciers expand once again in the Northern Hemisphere causing crop failures throughout Europe (Mann 2002:1).

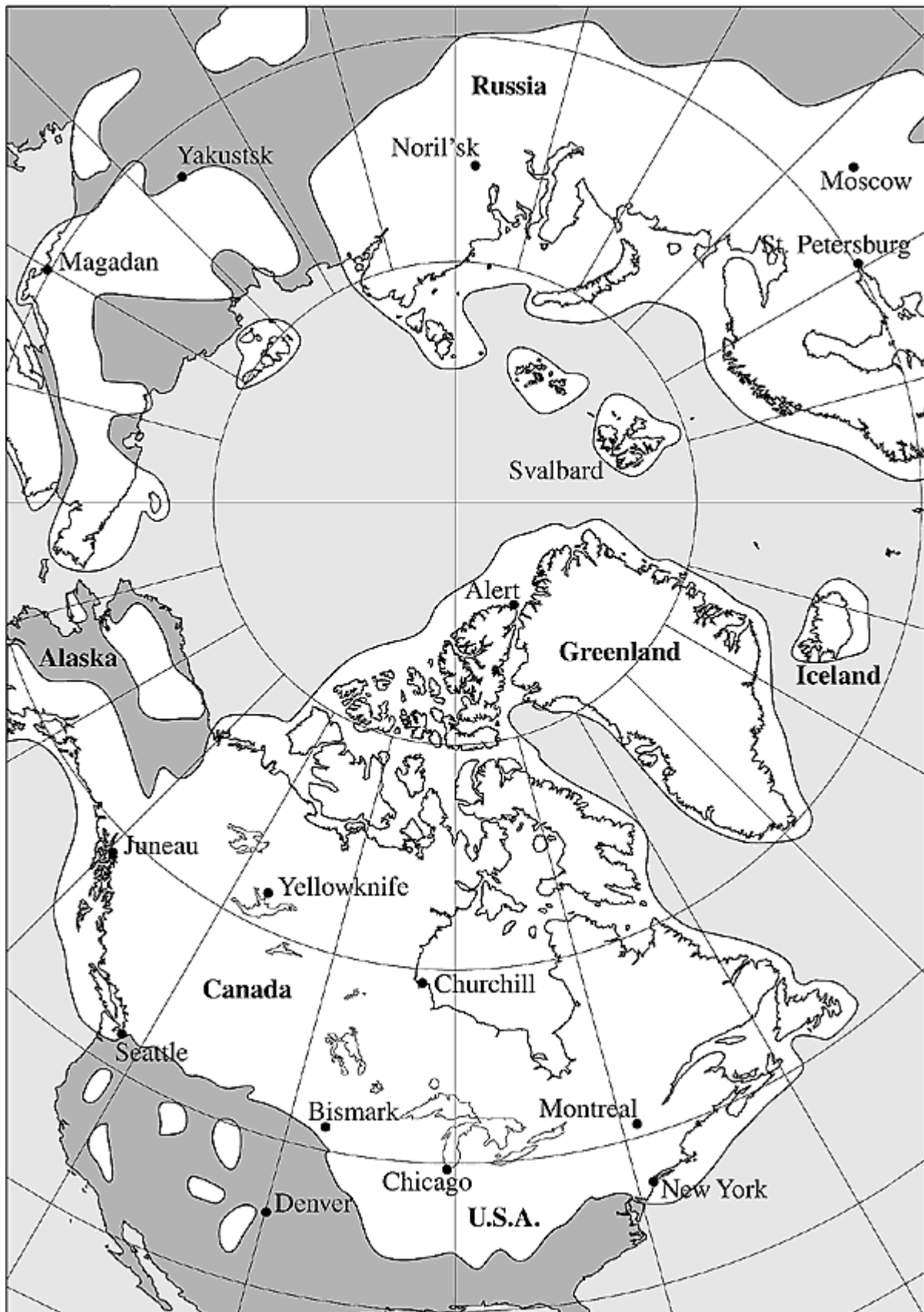


Figure. 1.1 Peak glaciation, approximately 18,000 years ago. Source: Adopted from *Geological History of Jamestown, Rhode Island*, under glaciation. <http://www.jamestown-ri.info/glaciation.htm> (Retrieved January 17th 2014).

In essence, a glacier begins to form when more snow falls in the winter than melts over the summer. If the snow begins to melt in the summer and freezes before the snow melts away completely the snow will turn into ice and, over a period of 25-100 years, will eventually form glacial ice. A glacier exists when a mass of ice that has thus been formed is capable of motion: as the ice accumulates, the mass of the ice becomes incapable of keeping its shape, and the ice moves through a process of plastic deformation. Assisted by gravity, the mass of the ice pushes down on the glacier and pushes the glacier out at its margins, allowing a continental glacier to 'flow' outwards, even over hills and through river valleys. Aided by a downward slope, a mountain glacier can flow over valleys and hills as the pressure exerted at the centre of the glaciers, which can be more than two kilometres deep, pushes them forward. The flow of the ice shapes the terrain: the ice scrapes off soil and softer deposits down to the bedrock and displaces these geological sediments southwards. The moving ice will even erode the bedrock, leaving long scratches (glacial striations). Some of them are still visible today.

Terminal moraines mark the limit of glaciers, that is, where they stopped advancing and started to retreat. These ancient deposits of rocks and unstratified sediments (also known as glacial till) had been scraped off the northern lands by glacial drift and deposited at the edges of massive mountains of ice. Other geological features that are visible in the modern landscape include the following:

- Till plains: relatively flat accumulations of till produced when an ice sheet detached from the main glacier melts in place.
- Erratics: large boulders transported great distances and haphazardly 'dropped' into place as a glacier melts away.
- Eskers: beds of sand and gravel deposited in long, twisting ridges.
- Kettle holes: glacier-created depressions that fill up with water, forming lakes or boggy terrain.
- Drumlins: hill-shaped deposits of till.
- Loess: windblown silt that accumulates in front of ice sheets.

Though four major periods of glaciation have been identified, the geological record is much more complex. Over the past 1.8 million years, there have been at least eighteen periods of

glacial expansion. Much of our present knowledge of these periods of intermittent glaciation and warmer interglacial periods come from the study of deep sea cores: the oxygen found in ocean water is composed of two isotopes (-16 and oxygen -18) whose relative concentrations vary depending on the spread of continental glaciation. The oxygen isotopes are incorporated into the skeletons of foraminifers – one-celled micro-organisms that have a calcareous shell – and are deposited on the ocean floor when the foraminifers die. The analysis of the fossilized remains of these foraminifers reveals prehistoric levels of the two oxygen isotopes and consequently provides a chronology of glaciation and glacial melting.

The spread and retreat of glacial ice changed the world's ecosystems. The global systems that exist today were also present at the height of glaciation, but they were flattened closer to the north and south poles. With the spread of glaciation, the regions of northern species of flora and fauna moved southwards, while during periods of warming, the regions of species moved northwards. The movement of ecosystems was assisted by cataclysmic events such as massive fires that burned off stretches of forest and grassland, facilitating the spread of better-adapted plant species into new territories.

The glaciation of the earth also had an effect on the world's oceans. With much water being trapped on earth's surface in the form of ice, the sea level dropped, and the quantity of water in the ocean diminished over time with the spread of glaciers. However, the weight of the ice pushed down on earth's crust, leaving certain areas much lower than they are today. Many areas rebounded when the glaciers melted. Certain areas of Sweden have risen by 100 metres since the end of the last ice age and continue to be pushed up as the continental plate continues to recover from the untold weight of the glacier that had pushed it down millennia ago (Swedish Commission on Climate and Vulnerability 2007:14).

The indigenous people of the circumpolar north

The variations in the ocean levels certainly played an important role in the peopling of the circumpolar world. During the maximum extent of the ice sheets, much of north-eastern Russia, Alaska, and parts of the Yukon were free of ice whereas the European northwest was one of the last territories to be liberated from glacial ice. The end of The Ice Age, and the resumption of the Gulf Stream – one of the best-known ocean currents – led to warmer temperatures across Europe. As temperatures increased, ecosystems migrated northwards. Reindeer, notably, migrated northwards with the tundra while forest reclaimed the lands of the northern European plain. In all likelihood, the ancestral Finno-Ugric and Samoyedic populations would have migrated northwards (Rootsi et al. 2007). This would have included the ancestral Sami and other related groups (Ibid). These related populations would have been foragers, relying on the hunting of seals, wild reindeer, fishing and gathering to ensure the survival of their communities.

In northern Europe and Russia, herders maintain large reindeer herds and move with their herds hundreds of kilometres from the taiga to their summer pastures on the tundra where they find respite from insects. In other regions of the Russian Far East, herders use smudge fires and smoke to drive away biting insects. Reindeer herding was never practised in North America, though attempts were made to introduce the practice to indigenous populations of Alaska (Fienup-Riordan 2000:253). Reindeer herding, however, as it is practised in much of northern Scandinavia and Russia, is not necessarily an ancient practice; until a few centuries ago, indigenous populations relied on the hunting of wild reindeer for their subsistence. Some scholars have hypothesized that herding intensified with colonization (Hansen and Olsen 2006).

In the boreal forests of Canada and central Alaska, indigenous populations relied on careful foraging for their resources. There were no large communities – cities or towns – in the circumpolar north and social organization consisted of family units working together to ensure the well-being of the group. In the boreal forests of Canada, extended families would congregate during the summer when fish were plentiful. During such periods, groups of a hundred or two hundred people would gather for short periods, cooperating in fishing and

hunting, friendships and alliances would be reinforced, and marriages conducted. In the fall, these large groups would break into smaller kin groups – usually centred on one nuclear family – that would spread over the territory to pass the winter. Sometimes, however, large groups of extended families gathered on the ice during winter time to hunt seals. The relative abundance of seals and the benefits of communal hunting encouraged the concentration of the population into larger groups during the course of the winter. Similar patterns were followed elsewhere in the north, though the times of congregation would vary. Among the Sami in northern Scandinavia, for instance, the main gathering of people took place in the winter camp, while smaller groups of hunters spread over the area in spring and summer.

In the circumpolar north, power was neither centralized nor hierarchical, and status was achieved and could be easily lost. Though groups had recognized traditional territories, the exact composition of groups could change over time. In the Arctic, for example, one of the common responses to conflict between individuals was to have larger groups break apart into smaller family units and to have the parties in conflict move away from each other. Such fluidity in social units militates against the emergence of stratified societies where power and authority could be exerted over individuals. Leadership throughout the circumpolar world tended to be achieved and impermanent, as opposed to inherited and entrenched. An individual could achieve status and command respect based on acknowledged skill, experience, or wisdom, but this authority had to be maintained. An individual could not easily impose authority on others, as decision-making tended to rely on social consensus, and dissenters could leave to join other social units where they shared ties of kinship. Political power, unlike that in a state or an emerging state, was not centralized; the authority of an individual would rarely extend farther than a particular community, or in the case of the Aleuts, farther than one island.

The question remains as to the origins of the peoples of the northern circumpolar world. In certain cases, the peopling of a given region is well known. This is certainly the case for Iceland in the late 800s AD, where both written and archaeological sources agree on the question of when the peopling of the island took place: most of the colonists came from Norway. In other cases, the archaeological material and written records provide a less precise account of the peopling of a given area. The spread of the Thule 1000 years ago, the ancestors to the modern Inuit, is relatively well documented in archaeological records. The origins of the North American First Nations, however, are still under debate. Until quite recently,

archaeologists believed that the ancestors to North American First Nations had crossed the Bering Strait on foot roughly 12,000 years ago – following big game – and these hunters would quickly have spread over the continent. However, in recent years, the archaeological, geological, and genetic evidence has become more complex. There is evidence that there were people in the Americas prior to 12,000 years ago, but exactly how long ago is not clear. Some researchers hypothesize that the first people did not walk across the Bering Strait but rather followed the coast, using boats to sail down past the glaciers to the ice-free lands to the south. Recent discoveries of skeletal material have blurred the evidence, suggesting that there were several migrations into the Americas. The one thing that is clear is that the ancestors to the modern Inuit and First Nations crossed into the Americas from northeast Asia.²

The colonization of the indigenous people of the circumpolar north

By 1,000 years ago, the circumpolar north was fully populated and inhabited by the ancestors of the indigenous peoples that live in the north today. In the centuries to follow, the populations of the circumpolar north suffered the spread of colonial power and the expansion of European empires into their territories. Prior to the fifteenth century, the circumpolar regions were inhabited by primary societies in which indigenous populations maintained economies that were focused primarily on foraging, hunting and gathering. These societies tended to be quite egalitarian and did not feature the emergence of centralized and hierarchical states. The 14th Century marked a northern and eastern push of the Rus.³ Starting in the fifteenth century, a first wave of European colonization moved northwards. In this

² In glacial periods, the shallow waters of this narrow strait would have dried up; as water was trapped in glaciers, waters would have dropped, exposing the floors of shallow ocean areas, such as the Bering Strait and much of the territory surrounding Great Britain and Iceland. A land bridge would have united the two continents of Asia and North America, allowing the movement of plant and animal species between the two areas of the world. Many species that are common to Eurasia actually originated in the Americas, and these include the camel and the horse. It was also presumed that humans would have crossed from Eurasia into the Americas. However, though there is little doubt that the interior of Alaska and the Yukon were hospitable throughout the ice age, the question remains as to how humans would have crossed the continent. It is known that a land bridge existed between the two main glaciers and at times would have allowed the free movement of animals across this corridor. The problem with the presumed ice-free corridor is the fact that at the time when humans would have allegedly crossed this corridor, geological records indicate that the landscape would have been quite inhospitable, with few animals and other sources of food to maintain a human population, even one that was moving through on its way south.

³ At the end of the fourteenth century, a Russian missionary – Stephen of Perm – sent out to convert the Finnic North (also called Bjarmeland). Today most of this territory is covered by the Arkhangelsk oblast.

period the European populations expanded north along the coast of the Gulf of Bothnia and also to Finnmark in the northern part of Norway. Later on, in the sixteenth century, European expansion began in the Americas; the French and the English pushed into northern territories in pursuit of fur-bearing animals and other natural resources.

Even today, many Arctic populations remain dependent on traditional sources of livelihood. Traditional activities such as hunting, fishing, trapping and gathering are important for the well-being of indigenous people in the Arctic in terms of cultural maintenance, self-determination and economic self-reliance. These ecologically sustainable activities define to a large extent the traditional livelihoods of indigenous men: the skills and resources required for making their living.

The recognition of indigenous rights such as the 1989 International Labor Organization (ILO) Convention no. 169, the 1992 UN Convention on Biological Diversity and the 2007 UN Declaration on the Rights of Indigenous Peoples, is essential for the realization of equal opportunity, cultural preservation (tradition, knowledge, practices) and access to natural resources. Access to natural resources is essential because their traditional self-supporting economic system – subsistence economy – relies on these resources in the absence of industrialization or economic surplus, that are central features of other economic systems. A 2010 UN report addressing traditional livelihood and access to natural resources, states that these internationally established rights to natural resources are essential to secure the sustainability of livelihoods for indigenous peoples who were deprived of their land, fisheries, and other resources through processes of colonization.⁴ Article 14 of the ILO Convention 169, for instance, recognized ‘*the rights of ownership and possession of the peoples concerned over the lands which they traditionally occupy*’ and their right to continue to use resources on territories which they may not occupy, but traditionally use ‘*for their subsistence and traditional activities*’ (Ibid). However, despite international agreements such as those presented above, cultural diversity and traditional livelihoods remain threatened across the circumpolar world, not only due to colonization and assimilation but also because of environmental pollution and the global demand for more natural resources. Changes in arctic ecosystems will inevitably affect livelihood diversity of communities. The vulnerability of

⁴ For more information, see ‘*Indigenous peoples, their livelihoods and fishery rights in Canada and the Philippines: Paradoxes, perspectives and lessons learned*’. The United Nations-Nippon Foundation Fellowship Programme 2009-2010. Division for Ocean Affairs and the Law of the Sea Office of Legal Affairs. UN: New York, 2010.

traditional livelihood across the north is also linked to other factors, such as unequal land distribution and restrictions on the migration and movement of people and livestock, increased marine shipping across an increasingly ice-free zone and existing trade barriers. The following modules will discuss some of the efforts made by indigenous peoples to enforce their rights, and to prevent their cultures, knowledge and practices from vanishing.

Though there are many differences, the pattern of Russian and Scandinavian colonization in the north is similar to what occurred in northern Canada and Alaska. As was the case in Russia, the first stages of colonization occurred in a period that is best described as that of mercantilism. European kingdoms were expanding outwards looking for territories, gold, silver, and other goods for trade and commerce. European powers such as France, England, and Spain established colonies in the Americas and controlled the commerce of goods from the colonies to the advantage of the metropolitan centre, be it Paris, London or Madrid. In this early period, France and England competed in North America for control of the northern fur trade. Paddling out from New France on the Saint Lawrence River of North America, French traders and voyageurs were criss-crossing the continent, trading for furs that could be sold in Europe at profit. Territories were not only colonized because of fur. In Canada, for example, the Saint Lawrence valley and territory near the Great Lakes were colonized for agricultural exploitation.

In the early stages of colonialism, however, the European colonies in North America, which were secondary societies established long after the indigenous peoples had developed their communities in North America, were in a position of relative weakness. The Europeans did not have the necessary military power to control the entire continent, and it was to their advantage to trade with the hunters of the north. During this period, European diseases wreaked havoc among First Nations populations, but the number of Europeans in the circumpolar north was quite limited. In the boreal forests and the tundra, European settlements were limited to trading posts and forts, and on the North Norwegian coast, also fishing stations. Although the cultures of both the indigenous populations and the European settlers were impacted by contact, the indigenous people remained largely in control of their territories, even though they had entered into trading relationships with Europeans.

In the latter part of the nineteenth century, the circumpolar territories of Canada and Alaska were colonized. In Alaska, after the “sale” of the territory to the United States of America by

the Russian Empire in 1867, the United States occupied the territory militarily. There are similarities between the treatment of the Alaska indigenous groups and the Inuit of Canada. In both nations, the state strove to assimilate the indigenous populations, to make them into farmers, and hoped to eventually ‘civilize’ them by swallowing them into the mainstream culture. The reserve (Canada) and reservation (United States) were simply stop-gap measures to help indigenous populations make the transition from ‘savagery’ to ‘civilization.’ To this end, the education system was used as a tool to accelerate assimilation, which led to the creation of residential schools, usually financed by the state, but run by religious organizations. The goal of both the newly industrialized Canadian and the American states was to extinguish the status of indigenous populations and to completely assimilate them into the dominant culture. Though the attempts at assimilation failed, the indigenous communities of both nations were left dislocated and suffering from a number of social problems, such as widespread poverty and diseases.

A similar pattern was repeated in the Russian north. In the first centuries of Russian expansion, indigenous populations retained much autonomy, though they were integrated into the Russian Empire. Indigenous groups pushed north and east, moving away from Russian settlers and avoiding Russians except for the purposes of trade. In this period, indigenous populations declined quite drastically while the newcomers expanded, occupying the traditional territories of other indigenous groups. During the Soviet period, despite the early progressive policies that promoted the language and culture of indigenous and minority populations, the state promoted policies that would disrupt the lives of its northern indigenous populations. In the 1930s, the reindeer herders and their herds were collectivized, drastically changing their traditional social organization. Also in the 1930s onwards, the state encouraged the migration of workers into northern Russia and the Russian Far East, leading to indigenous populations becoming minorities even in those autonomous regions that had been set aside to protect the rights of indigenous peoples. With the establishment of gulags, large settlements were established in the north, and large numbers of prisoners remained in the north even after their liberation. Moreover, the spread of Soviet industry in the north encouraged the migration of workers seeking higher salaries and generous benefits.

In the case of Canada, colonization intensified in 1869 with the purchase by the Crown of the territories that had been granted to the Hudson’s Bay Company. These territories, renamed the North-west Territories, included all the lands to the west and north of Ontario. One year later,

the province of Manitoba was created and the westward migration of settlers, mainly from Ontario and Great Britain, initiated a new phase of colonialism that would irrevocably change the balance of power between the indigenous peoples of what is now Canada. The new Canadian state forced the indigenous people of these territories to sign treaties, and the indigenous people lost their sovereignty, as their populations were relocated to reserves. Treaties were signed when the land was considered to be of value to the interests of Canada, the last treaty signed in 1921 after the discovery of oil and gas in the Mackenzie Valley. As treaties were signed and indigenous people relocated, territories were opened to colonization and provinces were created. In all of these regions, indigenous populations quickly came to be minorities within their traditional territories, and lost sovereignty over their own traditional territories, ending up as fiduciaries of the Canadian state.

The fate of the Sami in Scandinavia and Northwest Russia was not much better than that of other indigenous peoples of the north. As elsewhere, the Sami were integrated into several states where they became a small minority subjugated to the will of larger, ethnically distinct, populations of the south. Until quite recently, there were strong pressures brought to bear upon the Sami to assimilate. Until the 1960s, being Sami was a social stigma, as the Sami identity was not valued and in many cases hidden when coming into contact with outsiders of the dominant majority. Similar to the cases of North America and Russia, southern populations colonized the indigenous areas, as settlers in search of farmland, forest for logging, rivers for damming, and minerals for mining, encroached upon their territory. All these developments reduced the Sami to small minorities within their own territory, thus undermining their political power and influence in those regions that had traditionally been inhabited by them.

The goal of this first module was to better understand the development of the circumpolar world in light of larger historical trends, by briefly reviewing the indigenous cultures that inhabited this region prior to contact and colonization. In the modules to follow, the traditional culture of the region's indigenous populations will be examined in more detail using ethnographic, historical, and archaeological accounts to better understand the traditional economy and social organization of the indigenous people of the circumpolar world prior to contact with European settlers, and after the period of colonization.

Suggested reading

Minority Rights Group, ed. 1994. Polar Peoples: Self-determination and Development. London: Minority Rights Publications.

Glossary of terms

Anthropology	a discipline that seeks to study humanity both past and present.
Boggy	adjective see Bog.
Boreal	1. of the north or northern regions. 2. of the north wind. [from Latin Boreas from Greek Boreas god of the north wind].
Calve	verb give birth to a calf; in glaciology, the fragmentation of a mass of ice from the leading edge of an ice shelf or glacier.
Cordillera	a system or group of usually parallel mountain ranges together with intervening plateaux, etc., especially as a major continental feature.
Deciduous	(of a tree) shedding its leaves annually.
Entrench	establish firmly
Forage	noun 1. food for reindeer, horses, cattle, etc., especially hay or grass. 2. the act or an instance of searching for food. verb go searching (especially for food).
Glaciers	massive sheets of ice that expand and move.
Gulf	a stretch of sea consisting of a deep inlet with a narrow mouth. For example, the Gulf of Mexico and the Persian Gulf.
Indigenous	adjective 1. (esp. of flora and fauna) originating naturally in a region. 2. (of people) born in a region.
Inhospitable	1. not hospitable 2. (of a region, coast, etc.) not affording shelter, etc.
Kin	noun family or natives
Lichen	any plant organism of the group lichens, composed of a fungus and an alga in symbiotic association, usually of green, grey, or yellow tint and growing on and colouring rocks, tree trunks,

	roofs, walls, etc.
Mercantilism	historical the economic theory that money is the only form of wealth and that a government should accumulate it by promoting exports and restricting imports.
Peninsula	a piece of land almost surrounded by water or projecting far into a sea or lake.
Permafrost	subsoil which remains below freezing point throughout the year, as in polar regions.
Stop-gap	a thing that temporarily supplies a need; a temporary substitute or solution.
Strait	a narrow passage of water connecting two seas or large bodies of water.
Trek	vb. 1. to travel on foot over difficult terrain, or to make one's way arduously, with effort. n. 2. an organized migration of a body of persons.
Ungulate	adj. hoofed. noun a hoofed mammal.

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