

The symbolic dimension of mountains in Yukon: transformation stories, midnight hikes and glacial archaeology

*La dimensión simbólica de las montañas en Yukón:
historias de transformaciones, caminatas de medianoche y
arqueología de glaciares*

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and the “glacier stories” of the Tlingit. 11. Ice-patches and Glacial archaeology. 12. Final considerations

Abstract: This paper analyzes the symbolic dimension of mountains in Yukon and the emergence of glacial archaeology in the northwest of Canada. Traditional views on mountains in this part of the world are mostly utilitarian in nature, as expressed in names such as Rabbit Peak or Ibex Mountain, which describe the potential of certain elevations as places for hunting. The higher and less accessible mountains are perceived as places of fear and danger, which should be avoided as much as possible -especially peaks covered in massive glaciers, such as those in the coastal ranges. The foundation and purpose of the cautionary tales known as “glacier stories” is to keep people at a distance from the dangers of ice-covered peaks. Typically associated with native groups in the Pacific Northwest, the “transformation stories” describe landscape features -such as prominent rocks or mountains- as petrified ancestors. Peculiar transformation stories describe weather-controlling mountains and rocks as “menstruating”, and they become associated to young girls and their puberty rituals.

Keywords: mountains, Yukon, glacial archaeology, transformation stories

Resumen: Este artículo analiza la dimensión simbólica de las montañas en Yukón y el surgimiento de la arqueología glacial en el noroeste de Canadá. Los enfoques tradicionales sobre las montañas en esta parte del mundo son principalmente utilitarios en su naturaleza, como se expresa en nombres como Rabbit Peak o *Ibex Mountain*, que describen el potencial de ciertas elevaciones como lugares para la caza. Las montañas más altas y menos accesibles se perciben como lugares de miedo y peligro, que se deben evitar en la medida de lo posible, especialmente las cimas cubiertas de masivos glaciares, como las de las cordilleras costeras. El fundamento y propósito de los relatos de advertencia conocidos como "historias de glaciares" es mantener a las personas alejadas de los peligros de las cimas cubiertas de hielo. Por lo general, asociadas con grupos nativos del noroeste del Pacífico, las "historias de transformación" describen elementos del paisaje, como rocas prominentes o montañas, como ancestros

petrificados. Historias peculiares de transformación describen montañas y rocas que controlan el clima como "menstruantes", y se asocian con niñas jóvenes y sus rituales de pubertad.

Palabras clave: montañas, Yukón, arqueología glaciaria, historias de transformación

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1. Introduction

Located in southern Alaska and Northern Canada, Yukon is a wilderness country of forested mountains, lakes, snowcapped peaks and glaciers that are home to a vast selection of Arctic wildlife (Figure 1, next page). A few thousand permanent human residents in the region share the beauties of the landscape and the hardships of the wintertime with mountain goats, bald eagles, grizzly bears, black bears, moose, red fox, wolves, musk ox, Canadian goose, owls, hawks, porcupine and beavers. The salmon migrate as long as 2000 kilometers from the Bering Sea along the Yukon River, completing one of the longest fish migrations in the world.

As part of Beringia, the territory of Yukon is intrinsically connected to the earliest human population of the American continent. The Paleoindian hunters of mega-fauna are thought to have crossed the Bering Strait during the Ice Age, taking advantage of the land bridge formed between Asia and America. Evidence of the early Paleoindian occupation in Eastern Beringia have been found at the Blue Fish caves, dating back to 24.000 B.P. (cf. McGhee, 1989:26-30). Mining activity in the Klondike area has

led to the discovery of frozen ice age carcasses and fossils belonging to the ancient Pleistocene fauna of Beringia (cf. Zazula and Froese, 2011).



Figure 1 - Mountain landscape in Yukon (© María Constanza Ceruti)

The Beringia Center in the city of Whitehorse displays a unique mummy of a 26.000 year-old Yukon horse whose skin and hides were originally frozen. The Museum of the North, in the campus of the University of Alaska at Fairbanks, houses the world´s only mummified Ice-Age steppe bison, nicknamed “the blue babe”, which is on display in a remarkable state of preservation, together with the mummified remains of a woolly mammoth. Other examples of the extinct Beringian mega- fauna included the short-faced bear and the scimitar cat. The Yukon fossil collection in Whitehorse houses hundreds of fossils of Pleistocene Beringian fauna.

Capital of Yukon, the wilderness city of Whitehorse spreads at the foot of the Grey Mountain and on the banks of the Yukon River. The original name of the area was Kwanlin, which refers to the emerald-colored waters of the Yukon River flowing through the rocks in the riverbed near Miles Canyon. The rapids also inspired the English name of Whitehorse, since the foam of the waters was perceived to resemble the tails of horses.

The Yukon Territory was first settled by newcomers of European ascendancy during the second half of the XIX century. Some of the first European settlements and forts were founded on the grounds of important fish camps or trade rendezvous for the native people (Hare and Gotthardt, 1996). Contact between the local native population and the “white man” predates the arrival of the first European settlers and goes back to the sporadic incursions of Russian explorers and trappers during the XVIII century.

One of the oldest original buildings in Whitehorse is the old log church built at the beginning of the twentieth century by Reverend Richard Bowen, which has now been turned into a historic museum (Figure 2). The hardships in the lifestyle of the first missionaries and pioneers in the area are illustrated in the exhibits, as well as in the fact the Richard Bowen is remembered as “the bishop who ate his boots”.



Figure 2 -Old log church in Whitehorse (© Maria Constanza Ceruti)

Historically, the town of Whitehorse bloomed as a river port during the Klondike Gold Rush, when the freights and passengers traveling to the mining town of Dawson City were transferred from the coastal train to a riverboat. Paddlewheels and steamboats would travel upstream during the five months in the year during which the Yukon River remains unfrozen, until the middle of the XX century. The largest sternwheeler on the Upper Yukon River was the Klondike S.S., which has nowadays been turned into a historical site and museum. The cultural heritage of the Yukon Territory is celebrated at the Mac Bride Museum of Yukon History, with reconstructed log cabins, a miner´s saloons, a blacksmith shops, a NW mounted police cabin, a telegraph office and photographic exhibits covering the 1898 Gold Rush, the world wars, and the construction of the Alaska highway.

2. Field experiences and research

Research undertaken for this paper included visiting the Yukon Institute of Sciences at the Beringia Center and the Mac Bride Museum of Yukon History in Whitehorse, in addition to the Old Log Church Museum, the S.S. Klondike, the Kwanlin Dun Cultural Center and a guided visit to the laboratories of the Ice Patch Archaeology Project, guided by Canadian archaeologist, Dr. Greg Hare, and his collaborators. I also visited the Kluane Museum, with its collection of South Tutchone ceremonial regalia. At the laboratories of the Yukon Science Center, hosted by paleontologist Grant Zazula, I examined a bone from an Ice-Age Yukon horse, from which many ancient DNA samples had recently been obtained and processed.

As part of the complementary activities related to the III Symposium of Archaeology of the Cryosphere, we visited archaeological sites on the shores of Kusawa Lake in the company of archaeologist Ty Hefner and Champagne-Aishihik member Lawrence Joe. At the Da Ku Cultural Center near Haines Junction, within the territory of the Aishihik and Champagne First Nations, we had cultural demonstration of traditional handicraft and skills by elder Paddy Jim and his son, who presented their handmade tool collection wolf clan staffs, and infant cradles, while they introduced us to the use of fish traps, spear throwers and moose scrappers. We also enjoyed an unforgettable evening of storytelling and drumming by elder Ron Chambers at the foot of the Kluane Mountains.

Field experiences in Yukon included an alpine hike to explore archaeological sites in the area of Mount Granger and Bonneville Lakes, led by Greg Hare. Additionally, I ascended to the summit of Grey Mountain in the company of two local mountain climbers. In

Dawson city I undertook a hike under the midnight sun to the summit of Midnight Dome Mountain during a local celebration for the summer solstice. Places of cultural significance that were visited in the area included historical hotels and saloons, the pioneer's cemetery, the Jack London cabin, the Dänoja Zho Cultural Center of the Trondëk Hwëchin people, and the Dawson City Museum.

Additional field activities in Alaska included an ice-walk on Exit Glacier in Seward and an ascent to Flattop Mountain near Anchorage, in addition to viewing Mount Denali from the historical town of Talkeetna and visiting the Wrangell-St. Elias National Park. Places of cultural significance visited in the interior of Alaska included the Athabascan villages of the Tanana and the Athna tribes. At the Tetlin wildlife refuge I watched a beautiful demonstration of traditional beadwork by Cora and Silvia, members of the Tanana tribe. I also visited the Athna Cultural Center in the Wrangell-St. Elias National Park.

Additionally, I visited the Museum of the North at the University of Alaska campus, the Pioneer Museum and the Morris Thompson Cultural Center in Fairbanks. Places of historical and cultural significance visited in the area of Anchorage included the Alaska Native Heritage Center, the Eklutna Village Historical Park and the Artic Studies Center of the Smithsonian Institution at the Anchorage Museum, with its magnificent exhibits on Athabascan birch baskets and beadwork, Yupik ceremonial masks and Eskimo's Ulu knives, parkas, mittens and snow goggles. Bibliographic research was also undertaken in the personal archives of William and Karen Workman, at their house in Anchorage.

3. The volcanoes of Beringia and the Athabascan migrations

Many mountains in the Aleutian Islands, Alaskan Peninsula and the Yukon are of volcanic origin. As a consequence, the area was blanketed numerous times during the Pleistocene and Holocene, with as many as seventy *tephra* beds documented for Eastern Beringia (cf. Zazula, 2011: 20-21). Volcanic activity is permanently present in geothermal features such as the Takhini hot springs near Whitehorse and the Chena hot springs near Fairbanks.

During our visit to the shores of Kusawa Lake in Yukon, archaeologist Ty Hefner pointed at a distinctive clear layer of *tephra* which was clearly visible on the cliffs, indicating a major volcanic event that took place in historic times. It is now widely accepted among scholars that the great migration that caused the Athabascan speaking tribes to enter into the American Southwest was provoked by a major volcanic eruption in the Yukon. The arrival of the newcomers -who became known as the Navajo, Apache and Shoshone- exerted demographic pressure on the ancestral Hopi, whose own migration became the cause of the expansion of the Chichimec tribes that eventually gave origin to the Aztec empire in Mexico. Interestingly, the oral tradition of the Hwëch´in recalls the fact that people were driven away by a “fiery mountain” (Langdon, 2002: 82).

4. Tagish, Hwëch´in and South Tutchone: First Nations in Yukon

The Athabascan First Nations of Yukon include groups that speak the Southern Tutchone language, such as the Champagne–Aishihik or the Tagish. Members of the Trondek Hwëch´in reside near Dawson City. The Yukon area is also home to the Coastal and Inland Tlinglit. The Na Dene linguistic family comprises the

Athabascan and Tlingit groups of first Nations, who reside in the southeast of Alaska and the Yukon Territory of Canada.

The traditional way of life of the Yukon First Nations is based on fishing, hunting and trapping. Spring is the time of harvesting vegetables and trapping smaller mammals. Summer is devoted to fishing and smoking the salmon. Caribou, moose and mountain sheep are hunted during the late summer and fall. In the wintertime, people trap for fur and fish lingcod through the ice (Gotthardt, 2000). In the old day, the inland groups used to have traditional fishing camps at the confluence of rivers, which also served as trade rendezvous with the Tlingit from the coast.

The Navajo-Dine, the Apache and the Shoshone are among those Athabascan speaking tribes that are also members of the Na Dene family, but migrated southwards, into the American Southwest, nearly seven hundred years ago. Athabascan-speaking communities that remained in Alaska include the Dena'Ina in Anchorage, the Tanana in Fairbanks and the Athna, in the Copper River valley (whereas the southeast coast of Alaska is home to the Yakutat Tlingit).

Distinctive cultural traits among the Athabascans are food caches, dome shape caribou tents, and the use of birch bark to make bowls, baskets, infant cradles and even canoes. Their people have traditionally worn carefully tailored clothing and moccasins made of moose hide, complemented by the use of beaver skin hats in wintertime. Beadwork was an important type of ornamental art. About one thousand years ago, copper was widely used for arrowheads, ornaments and instruments.

The South Tutchone, Tagish and Inland Tlingit honor moiety divisions into Crow and Wolf clans, which parallel the Raven and Wolf (or Eagle) moieties among the coastal tribes in the Pacific

Northwest (cf. Ruddel, 1995). These divisions acquire particular importance in certain ritual contexts, such as during the funerals, when the preparation of the body of the deceased is to be performed by a member of the opposite clan.

The corpses of the dead are buried -or their ashes deposited- under distinctive colorful wooden houses that resemble the cabins of the living (Figure 3). Such indigenous cemeteries are famous in the village of Eklutna, near Anchorage; and they are also present in Whitehorse, where one third of the population is of First Nations ascendancy. Although most of the graves are constructed as houses, some of them are meant to represent boats or canoes. The Tlingit believe that the spirit of disease travels in a “canoe of sickness” carrying the souls of those who have died in epidemics (Laguna, 1972: 817).



Figure 3 - Funerary miniature wooden houses (© María Constanza Ceruti)

5. Mountains in Yukon and their “Transformation Stories”

Traditional views on mountains in Yukon are mostly utilitarian, rather than sacred in nature. Names such as Rabbit Peak or Ibex Mountain describe the potential of certain mountains as places for hunting, one of the few activities for which mountains may be approached and climbed (Figure 4). The higher and less accessible mountains are perceived as places of fear and danger, which should be avoided as much as possible -especially those peaks covered in massive glaciers in the coastal ranges. Such is the foundation and purpose of the cautionary tales known as “glacier stories”, which are popular among the Tlingit.



Figure 4 - Rabbit Mountain (© María Constanza Ceruti)

Typically associated with native groups in the Pacific Northwest, the “transformation stories” describe landscape features -such as prominent rocks or mountains- as petrified ancestors. The Inland

Tlingit and the Tagish have peculiar transformation stories that describe weather-controlling mountains and rocks as “menstruating”, and associate them to young girls in puberty. In their narratives, girls themselves may become petrified; or alternatively, such a transformation may be attributed to the gaze of a menstruating woman (Laguna,1972: 820).

6. Cry Mountain or Rabbit peak: a legendary elevation for the Champagne Aishihik

Rabbit Mountain rises sharply from the shores of Kusawa Lake, in an area that was traditionally used for seasonal mobility and migrations. At the foot of this majestic peak, we listened to a traditional story narrated by a member of the Champagne Aishihik First Nation, a wise man named Lawrence Joe. In the old days, a hunter was stranded on the summit of Rabbit Mountain. He could not come down but he was able to notice that his wife was leaving him and floating on a raft going downriver. The situation made him very sad and he could not help crying. That is the reason for the other name that the Mountain carries, which is “Cry Mountain”. Eventually, the distressed husband managed to jump off the peak; survived the challenge and was able to divorce his wife. Interestingly, stories about mountains in which “marital conflict” is present, are very common in the Circum Pacific area, not only among the Pacific Northwest tribes but also among the Miwok of California and different groups in Polynesia, such as the Hawaiians and the Maori.

7. Grey Mountain and the mythical Animal Mother of the Tagish

Grey Mountain is a small massif that rises 4,500 feet above sea level, overlooking the Yukon River valley and the city of Whitehorse (Figure 5). It is also known as “Canyon Mountain”, due to a small canyon that forms between the two summits of the peak. Oftentimes climbed by local outdoor enthusiasts, all necessary precautions need to be exercised -including carrying whistles and bear-spray-, since its slopes are home to numerous grizzly bears. I had a chance to hike to the top of Grey Mountain in the company of two residents from Whitehorse and, as a matter of fact, on our way to the summit we spotted a grizzly mother and her cubs frolicking on the shores of a small lake.



Figure 5 - On the summit of Grey Mountain in Yukon (© María Constanza Ceruti)

A Tagish legend says that Animal Mother gave birth to all the animals in the Yukon by hanging a swing between four mountains, one of which is identified as the Grey Ridge near Carcross. After each kind of animal had danced on the swing and sung a *yeik* song, the female spirit who is the owner of the animals assigned them their distinctive characteristics and instructed them on what to eat and how to behave. An old Tagish man reputedly witnessed the creation and learned all the animal songs; consequently, shamans became empowered to call animal spirits during their trances (Mc Clellan, 1975: 90).

8. “Menstruating” mountains and rocks of the Inland Tlingit

Athabaskan groups -including the Apache of the American southwest- share beliefs that symbolically connect mountain spirits with young women. In fact, the Apache celebrate puberty rituals for girls in which candidates are honored by masked dancers representing the *ghan* spirits of the sacred mountains (Hirschfelder and Molin, 2001).

The Tagish and Inland Tlingit recognize “menstruating rocks” and “menstruating mountains”, known as *wtedi*. They are thought to be young girls who were magically turned to stone after reaching puberty. Menstruating rocks and mountains may look like a young woman wearing a hood or be partly red in color. Beliefs about menstruating mountains also stress their potential danger as weather breeders, and caution is always required when approaching them. In ancient times, attempts were ritually made to harness the power of menstruating rocks by means of beads presented as offerings. Passing by such landscape features without showing proper respect can be offensive; getting close to

them -especially touching the boulders- may cause heavy snowfall or torrential rain (McClallan, 1975:86).

Some menstruating mountains are only visible to the *yeik* spirit of a shaman, since they do not exist in the physical geography of the landscape (Mc Clallan, 1975: 87). In Tagish and South Tutchone shamanistic ceremonies, the *ixt* shaman is required to fast and chant in preparation for the calling of the *yeik* spirit. The concept of *yeik* (phonetically similar to the Scandinavian *joik*) also refers to the song that is sung by the auxiliary spirit of the shaman (Dahuenhauer and Dahuenhauer, 1990: 123-125).

9. A solstice ascent to Midnight Dome in Dawson City

The granite mountain called Midnight Dome rises sharply above the Yukon River, overlooking the mining town of Dawson City. In 1896, after the discovery of gold in nearby Rabbit Creek (later baptized as Bonanza Creek), thousands of stampeders from northern California traveled on boat to southeast Alaska and crossed the coastal mountains into the Klondike region of the Yukon Territory. This area in the heart of the Yukon was called Klondike after the local Trondek Hwëch'in people, who were seriously affected by the changes and sudden transformations introduced by the gold rush. Chief Isaac was forced to make arrangements for his people to move to Moosehide, a few kilometers downriver, which is still the home to many Native residents.

With a population of nearly 50000 gold miners and prospectors, Dawson city became the largest town north of Seattle at the end of the XIX century. Famous for its brothels, gambling halls and theater, it was known as the “Paris of the North”. The city is a National Historic Site, often described as a living museum, which

preserves old cabins and memorabilia of renowned writers such as Jack London or Robert Service (Figure 6). Although Dawson City attracts many tourists, it has a permanent population of only 2000 residents, due to the extreme winter temperatures which often reach -50 C° .

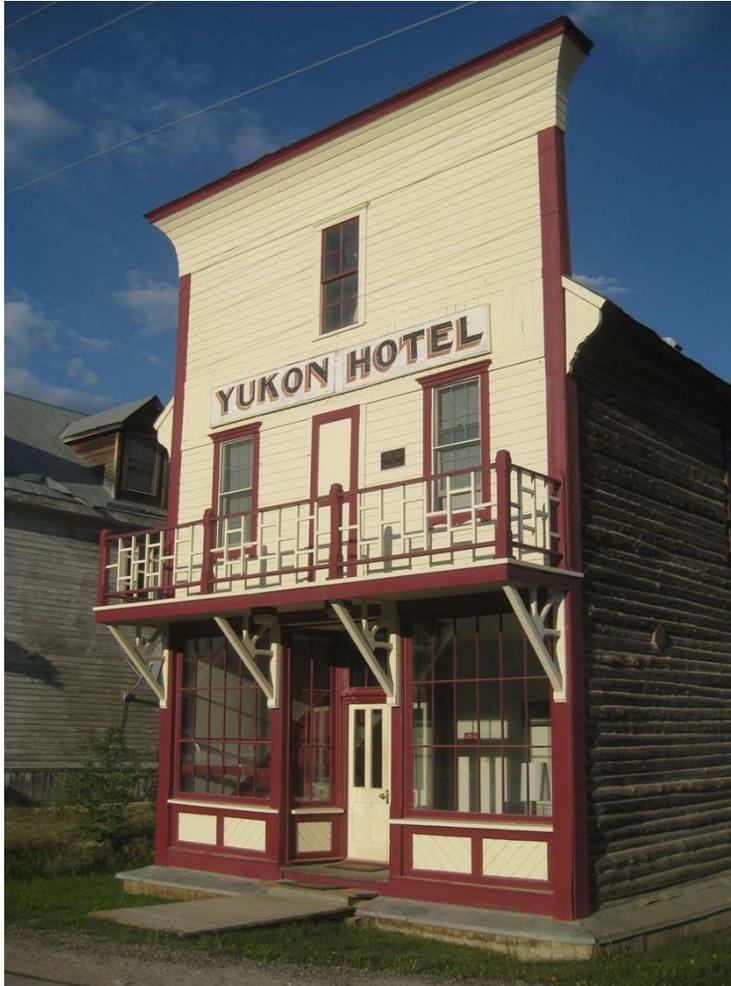


Figure 6 -Historic Architecture in Dawson City (© María Constanza Ceruti)

The colorful personalities of the earlier residents at Dawson are celebrated as part of the cultural heritage of the town. The exhibits at the City Museum (and the printed information about the pioneer's cemetery) celebrate de memory of remarkable characters such as Father William Judge, known as “the Saint of Dawson”, or Percy Dewolfe, the mailman, who was nicknamed “the Iron Man” after the challenges he faced while delivering the mail in wintertime.

The mountain dome that overlooks the city of Dawson must have been of cultural significance to the Trondek Hwëch'in people, although not much information is available on this regard. In the late XIX century, a few dozen residents of Dawson City climbed to the glacial eroded granite summit late in the evening of June 21st, in order to see the Midnight Sun. The mountain was to be named after the unique Arctic phenomenon, but the climbers were frustrated to discover that the sun actually set a few minutes before midnight. That is the reason why the mountain was given its current name.

Coincidentally, I happened to be stranded at Dawson City on June 21st 2012, and the logistical incident gave me the unexpected opportunity to spend the night on the summit of Midnight Dome, together with a group of about 30 residents who were celebrating the solstice with music and drinks. We all enjoyed the reddish twilight colors that painted the sky as the sun “*sort of went around the edge of the summit*” (Figure 7).



Figure 7 -A midnight hike to the summit of Midnight Dome (© María Constanza Ceruti)

10. “Long Ago person found” and the “glacier stories” of the Tlingit

The Yakutat Tlingit traditionally refer to glacier spirits as “inhabitants of inside the glacier”. They may represent a threat to the livings if they come close to a hunting campsite, attracted by the smell of barbecued meat. Cooking can be dangerous according to the sex or gender of the glacier, which can be inferred from the activity of the ice: it is not safe to light a fire near a male (advancing) glacier; whereas it is all right to cook near a female (retreating) one. Burning rags or old clothes are ritual mechanisms to keep the dangerous glacier spirits at bay. Early ethnographic references compiled by Frederica de Laguna (1972:

818 - 819) also describe glaciers as “children” who were turned into ice by their own mothers, due to their unhinged behavior.

In ways that are similar to the Sami people in Lapland, the Yakutat Tlingit traditionally put on their best clothes and sing in order to appease the glacier spirits before passing nearby. It is also advisable to avoid looking straight into the glaciers and to always wear goggles or smeared black powders around the eyes. A widespread belief among the Tlingit explains that coastal glaciers retreat as a consequence of dead corpses –human or animal– rotting within the ice crevasses (Laguna, 1972: 819).

In view of the majestic Kluane Mountains, at the shores of Lake Kathleen, Ron Chambers, a member of the Champagne-Aishihik First Nations offered a presentation on traditional singing and drumming. A descendent of the Tlingit, Ron is a mountain climber and former warden of the Kluane National Park. Following the ancestral ways of “telling stories”, he described his participation in the retrieval of the frozen remains of a three hundred years old man discovered on the glaciers more than twenty years before. As one of the few Native climbers with some experience on the highest summits in the area, Ron collaborated actively with the glacial archaeologists in the difficult process of freeing the frozen remains of “Long Ago Person Found” from the ice. The rescue mission took place on the heights of glaciers that were visible from the shores of the lake (Figure 8).



Figure 8 - Kluane mountains and Lake Kathleen (© María Constanza Ceruti)

Ron's firsthand participation in the transcendental rescue-archaeology mission, as well as his previous mountaineering experiences, enabled him to come up with singular hypothesis: he believes that "Long Ago Person Found" was likely a member of a trading party going across the coastal mountains, who suffered a lethal accident in a crevasse while attempting to cross a dangerous section of the glacier. Being the son of a chief -or someone of high status as suggested by the associated findings- his death had to be recalled in songs and story-telling. Ron's interpretation of the last moments in the life of the unfortunate man considered the possibility that the fellow travelers might have been forced to abandon him inside the crevasse while he was still alive. According to Ron, the post-traumatic shock of being forced to make such a decision -and live with the consequences-

could account for the ancestral fear that many coastal tribes still show towards their ice-covered mountains. It could also account for the origin of some of the “glacier stories” among the Tlingit, compiled in Julie Cruikshank’s book “When Glaciers Listen”.

11. Ice-patches and Glacial archaeology

The snow patches or ice patches are usually found at elevations between 1600 and 2000 meters above the sea level, on the north faced slopes of the circumpolar mountains. The Yukon ice patches are the largest in the world, as well as the oldest, with human use of these landscape features going back in time to 9000 BP (cf. Hare, 2011). Ice patches are also found in Alaska, British Columbia, the Northwestern Territories, Colorado and Scandinavia, where they are also object of scientific research in the context of the emerging discipline of Glacial Archaeology. Unlike glaciers, the ice patches are stable and do not move, therefore the stratigraphy of ice patches is horizontal rather than vertical.

The area of Mount Granger has some of the most significant snow-patches in the Yukon. In June 2012, I joined the local mountain archaeologists hiking across snow-covered alpine landscape in order to visit archaeological sites around Bonneville Lakes and Fish Lake (cf. Gotthardt and Hare, 1994). According to the information provided on site by Greg Hare, the leader of the Ice Patch Archaeological Project, there are 24 ice patches in the Yukon Territory which have yielded archaeological findings, including arrowheads, shafts, moccasins, flints and darts.

The ice-patch technology is often associated to traditional activities connected to the caribou hunt. Caribou herds tend to congregate on snow-patches in the summertime in order to avoid

being tormented by insects, thus becoming an easy prey for human hunters. Architectural evidence of human occupation of the higher slopes of snowcapped peaks include hunting blinds, which are usually located above the ice patches, miles away from the traditional lakeside campsites at the foot of the mountains. Sheep hunting blinds are also common features on the heights of the coastal ranges (Hare and Greer, 1994).

A Frozen Past exhibit held in 2012 at the recently inaugurated Kwanlin Dun Cultural Center in Whitehorse, enabled scholars and visitors to admire the arrowheads, wooden shafts and a bear skin that had been found and retrieved by archaeologists and native collaborators in the context of the snow-patch archaeology projects ongoing in the Yukon for more than two decades. During the inauguration of the exhibit, I conversed with Art Johnson, an elder of the Tagish First Nation and a pioneer in the field of snow-patch explorations, whose expertise in caribou hunting techniques led archaeologist to many important discoveries.

Ice patch archaeology in the Yukon provides an opportunity to bring together past and present by combining both, science and traditional knowledge. It also contributes to strengthen the First Nations identities as the younger generations learn from the elders, and share their stories with the residents and visitors in their territories.

More than two hundred artifacts have been found in ice patches, including about 40 wooden shafts dating back between 4100 BP and 3600 BP. Only 17 shafts have been found with the feathers still preserved. Scholars who attended the III International Symposium on Archaeology of the Criosphere were allowed to examine collections of frozen artifacts housed at the governmental laboratories, in a “behind the scenes tour” led by

local archaeologists and conservators. Cultural findings recovered from high-altitude surveys in Yukon comprise dozens of arrow points and shafts, and even the oldest moccasin found in Canada, which dates back to 1400 BP.

Retreating glaciers have a significant impact on the vulnerability of ice-patch archaeological heritage. The melting of the permafrost caused by increasing temperatures in the summertime is seriously affecting the taiga ecosystem, causing the dramatic “drunken forests” that can be seen when traveling along the desolated roads of interior Alaska and the Yukon.

12. Final considerations

Southern Tutchone speaking groups of the Athabaskan linguistic family, such as the Champagne-Aishihik, Tagish and Trondek Hwëch´in, share the territory of Yukon and Interior Alaska with the Coastal and Inland Tinglit. All these groups look upon the highest ice-covered mountains with utmost reverence: ritual prescriptions recommend staying away from their dangerous glaciers, and no attempts are made to climb them for ceremonial purposes.

Lower mountains in Yukon, such as Ibex Mountain or Rabbit Peak, are traditionally named in ways that reflect their importance for indigenous subsistence. In the old days, some of these peaks were ascended for the purpose of caribou hunting. Evidences of those prehistoric activities, including windbreakers, arrowheads and wooden shafts are found on snow patches and currently studied more systematically, in the context of glacial archaeology projects.

Certain elevations in the landscape of Yukon are considered to be “menstruating mountains” that cause landslides and floods, which make roads impassable in springtime. Menstruating rocks and mountains are thought to be young girls who were magically turned to stone after reaching puberty. Other peaks, such as the Grey Ridge, are connected to the stories about the creation of animals, and the Spirit of the Animal Mother, who sang them into existence.

Tlingit shamans or *ixt* used to undergo spiritual retreats in the forested slopes of mountains, to call the *yeik* spirits and obtain supernatural powers from the high peaks. The Tlingit stories about a Mountain Man who kidnaped or married young indigenous women could easily have been inspired in the early Russian trappers and explorers.

In general, the Tlingit views on the coastal mountains are similar to the Athabaskan, in that the snowcapped peaks are considered dangerous places to be approached with utmost caution, and exclusively for vital economic reasons. Trading parties that undertook the perilous traverse of snowy mountain passes and ice-fields are likely to have inspired a corpus of “glacier stories” that tell about the *qwani* spirits that dwell inside the mountains and the ice. These cautionary tales teach mountain travelers to avoid looking directly into the ice and refrain from cooking in the vicinity of glaciers. Some elders believe that the terrifying aspect of glaciers could have been underlined by historic accidents, such as the one that took the life of “Long Ago Person Found” high on an iced-covered mountain, nearly three centuries ago.

13. Acknowledgements

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Figure 9 - *In the mountains of Yukon with ice-patch archaeologist Greg Hare* (© María Constanza Ceruti)

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