

The Impact of Globalization on Environmental Management and Indigenous Societies in Canada

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Abstract

This essay focuses on Canada's Northwest Territories and, more specifically, on a recently created administrative region: Sathu. These geographical landscapes are home to descendants of Amerindian and Inuit societies (traditionally known as Eskimos) as well as descendants of Euro-Canadians, the traditional Métis. The first Europeans to arrive on the American continent were the Norwegian Vikings, who managed to colonize Iceland, southern Greenland, and the Labrador Peninsula, which they called Vinland. This occurred between 980 and 1350 AD. The drop in temperatures during the so-called Little Ice Age (1350-1850) forced the abandonment of these colonies (Junquera Rubio, 2023). Christopher Columbus arrived in the Caribbean in 1492, and the North Atlantic began to be visited by Europeans of various nationalities, primarily Spaniards, Portuguese, French, Dutch, and British. The North Pacific was first explored by Spaniards from the Gulf of California. Juan Rodríguez Cabrillo reached the California coast as far as San Francisco in 1542 but did not continue. Spain resumed exploration when it learned that the Russians were already established at Fort Ross, near present-day San Francisco, and then sailed to Alaska to neutralize this advance, but was unable to do so (Junquera Rubio, 2022, 2023: pp. 88-110). The land areas in this essay were colonized by the British, and what is important is to understand what is happening today. I recommend that readers have a good map of Canada, especially the Northwest Territories, handy.

Keywords

Globalization, Environment, Impact, Indigenous Peoples, Sathu Region

1. Introduction

Indigenous Canadians began to be globalized by the European economy in 1534,

the time when Frenchman Jacques Cartier sailed through the estuary of the St. Lawrence River (Donalson-Forbes, 2006; Junquera Rubio, 2019). Canada is the second-largest country after Russia. I will focus this essay on the Sahtu Region, a recently created region that appears on the map because of the desire to increase the political autonomy of Indigenous societies vis-à-vis the federal institutions based in Ottawa. The area covers approximately 16,000 square miles, equivalent to almost 42,000 km². This enclave is part of Canada's Northwest Territories, and the most important population centers are found along the Mackenzie River and in two of its natural ponds: Great Bear Lake and Colville Lake.

This constituency emerged in 1993 when an agreement was signed between the Canadian federal government, represented by the Minister of Indian and Northern Affairs (Pauline Browes), and representatives of the First Nations of the Dènè and Métis Indians settled in those territories, which had prior recognition. The area became strategic during the Second World War, as it had oil reserves and was ideal for safeguarding similar reserves in Alaska from Japanese attacks, which were then taking place in the so-called Battle of the Aleutians. This is why the CANOL project, which has already been referred to on several occasions, was planned (Junquera Rubio, 2019: pp. 676-746).

This unstable situation broke the traditional state of neglect in which the entire northern region of Canada had been immersed. The confrontation between the capitalist and communist blocs arose shortly after the end of the Second World War; moreover, the so-called Cold War began in Ottawa, when Russian codebreaker Igor Guzchenko defected and provided documents that clearly indicated that Russia was an enemy and that he had managed to establish a vast espionage network involving numerous Canadian officials (Junquera Rubio, 2019: p. 667).

In 1870, the Hudson's Bay Company sold the so-called Rupert's Lands and the then Northwest Territories to the Dominion of Canada (Junquera Rubio, 2019: pp. 431, 539). These two enormous geographical areas were merged into one and have since been called the Northwest Territories. Today, that area is divided into three smaller ones: Yukon, Northwest Territories, and Nunavut. From south to north, these areas represent the traditional habitat of three major Aboriginal communities: 1) First Nations, 2) Inuit or Eskimos, and 3) Métis, or descendants especially of French-speaking men, those who were called bushwalkers, and Cree or Ojibwa women. There are other descendants recognized with the same term, but the successors of the unions are the most notable and numerous.

The Federal Government, based in Ottawa, has recognized the official status of eleven different languages, although some are related except for the two European ones, which are: 1) English, 2) French, 3) Chipewyan, 4) Cree, 5) Gwich'in (previously called Kutchin), 6) Inuinnaqtun, 7) Inuktitut, 8) Inuvialuktun, 9) Northern Slave, 10) Southern Slave, 11) Tlicho (also called Dogrib). These data can be expanded with various readings by linguists who have dedicated themselves to the study of traditional communication heritages between societies and people (Norris, 2006: pp. 197-228; Junquera Rubio, 2019).

From the perspective of the Inuinnaqtun language families, Inuktitut and Inuvialuktun are languages distinct from the Inuit. Cree is Algonquian, but is spoken in the Fort Smith and Hay River areas, demonstrating that the fur trade drove the movement of people and the corresponding human, and social impacts (Junquera Rubio, 2018: pp. 95-120). Chipewyan, Gwich'in, Northern Slave, Southern Slave, and Tlicho are all Dènè languages and are therefore grouped within the Athapaskan family (Hojjer, 1963; Junquera Rubio, 2019: p. 333).

The Northwest Territories are divided into five administrative regions: 1) DehCho, which includes Fort Simpson and where Native Americans speak Southern Slave; 2) the Northern Slave District, which includes Yellowknife, where Tlicho is spoken; 3) the Sahtu region, where they speak three varieties of Northern Slave; 4) the Southern Slave Zone, including Fort Smith, where Chipewyan is spoken; and 5) the Western Arctic, traditionally the habitat of the Gwich-speaking Dènè and the Inuvialuit with whom the Inuit communicate.

Historically, slave communities, grouped in the First Nations, were the first to settle in what is now Canada's Northwest Territories. Currently, the descendants of this ethnic group reside mainly in Arctic and subarctic areas (Junquera Rubio, 2019: p. 452). Their ancestral land is called Denendeh, which means "the Spirit of the Creator flows through this Earth" (Junquera Rubio, 1995: pp. 135-151). The society has been classified based on five main linguistic groups (Petitot, 1876; Legoff, 1889).

These five groups are:

1) The Chipewyan, who reside east of Great Slave Lake, including the Yellowknives, also known as the Copper Indians, who were already described by Franklin (1824); the Fon du Lac Dènè, settled on lands that are now Saskatchewan, who have been studied by Müller-Wille (1974); and the Sayisi Dènè ("people of the east"), who are considered a First Nation, registered under number 303 with federal, provincial, and territorial agencies. The latter were resettled in 1973 to Tadoule Lake, Manitoba, once the provincial boundaries were fixed (Petch, 1998).

2) Gwich'in (previously inscribed and known as Loucheux or Kutchin), who live along the Mackenzie Delta and are therefore the northernmost settled Native American group on the Canadian map.

3) Tlicho (formerly known as Dogrib), who reside between Great Slave Lake and Great Bear Lake, the latter being the eighth largest in the world and the largest of those found entirely within Canada.

4) Northern Slave speakers, who live in the Sahtu region.

5) Southern Slave, who live in the DehCho region.

This essay will focus primarily on the Northern Slave-speaking Dènè settled in the Sahtu region of the Northwest Territories. This area has been the traditional habitat of three related societies: 1) the Hareskin, better known as Hare or Hares; 2) Highlanders; and 3) Dènè Slaves. Currently, some 2600 individuals from this group reside in this area, distributed across five communities, and they speak three distinct dialectal variants that have been classified as those of the Northern Slave

(Petitot, 1876; Legoff, 1889; Hoijer, 1963; Norris, 2006; pp. 197-228).

It should be noted that the names given by the British, French, or missionaries of Anglican or Catholic faith are disappearing, or have already disappeared, from Canadian maps, especially in those places where Aboriginal or mixed-race populations live. Instead, these same sites are renamed with the name proposed by Aboriginal leaders. In this sense, I provide the new names, which will dominate Canadian geography in the short term, both in the Sahtu region and its surroundings. I do so to support those researchers who wish to conduct studies in that area, which will soon change its nomenclature:

1) Yellowknife: This was the name applied by the English, but S̱q̱bak'è is now more commonly used, a Dogrib word that is appearing on new maps.

2) Fort Simpson: This title is becoming extinct in favor of a southern Slavic word, Ћídljǐ Ḵe, which translates as “where the rivers meet”; in this case, the Liard and the Mackenzie.

3) Fort Wrigley: Which has become Ṯhedzéh Kó̱, which in Southern Slavic means “place with an abundance of red earth”.

4) Fort Norman, which today is Tulit'á, which in Northern Slavic means “where the waters of the rivers meet”, in this case the Mackenzie and Bear Rivers, or Sahtu Dé.

5) Norman Wells: This settlement was born with oil and there were no native inhabitants there, but they renamed the place Le G̱ẖḻnj, which in Northern Slavic means “where the oil flows”.

6) The Rapids are a stretch of the Mackenzie River where the waters flow with turbulence and eddies due to the slope. In Northern Slavic, they are known today as Radeḻj Sele.

7) Fort Good Hope: A missionary foundation. Today, it is known in the Northern Slavic language as Ráḏeḻj Ḵo, meaning “as far as the rapids go”. The same place in Inuit is known as Kuujjuaq, meaning “where there is wood”.

8) Arctic Red River, which is now known as Ṯsi̱g̱ẖtshik, or “red waters”.

9) Fort McPherson is a settlement not on the Mackenzie River, but is mostly occupied by Northern Slaves, who renamed the place Teetl'it Zheh, meaning “village as far as the water goes”.

10) Inuvik is an Inuit word meaning “place where man is”.

11) Aklavik is an Inuit expression meaning “place where the fierce bear resides”.

12) Tuktoyáktuk is an Inuit word meaning “place where the caribou are found”.

13) Great Bear Lake, which stands for the nerve center for all slaves, and is known in their language as Sahtu.

14) Fort Franklin, a site founded by the British explorer between 1825 and 1827, is found on the western shore of Great Bear Lake. The northern slaves called it Déline, which means “where the waters are born”, in reference to the Bear River (Sahtu Dé), which runs from here to the Mackenzie River, into which it empties.

15) Another crucial point on Great Bear Lake is Port Radium, which has been a major mining center.

An expansion of the data just cited can be found in the [Office of the Commissioner of Official Languages \(1860, 1870, 1880, 1891\)](#) and I have extracted and classified these sources from these sources to update them in a voluminous book recently published ([Junquera Rubio, 2019](#)).

[Bell \(1901\)](#) wrote the following for this region: “The day is not far distant when much of this great region will support a thriving population, but the Arctic part of it must remain, for climatological reasons, as it is now, a great northern wilderness, a home fit only for savages, and a refuge for caribou, musk-oxen, and other northern animals” (p. 8). Interestingly, prosperity has provided a certain level of well-being to the Aboriginal people, but the Indigenous residents of the Sahtu region are concerned about the impact of hydrocarbon mining and commercial activities on their region. One of the aims of the CANOL project, conducted between 1942 and 1944, was to gather information on this issue throughout the Sahtu Dene region ([Junquera Rubio, 2019: pp. 676-746](#)).

Over the years, from 1976 to the present, I have interviewed several people, belonging to diverse groups, who were willing to express their opinions. All the conversations took place in English, as most are bilingual and understand that this is the language that connects them to the outside world. Three interviews were conducted in French because they had a better command of that language than English.

An additional and interesting fact is that throughout my research, I have realized the enormous influence that the French Oblate missionary René Fumoleau, who recently passed away in his country on August 6, 2019, had on the social, political, and linguistic life of all the Indigenous residents of the Mackenzie Valley. He became known through a work that has had a significant impact throughout Canada and even worldwide for scholars of the Canadian Subarctic and Arctic ([Fumoleau, 2004](#)).

2. Some Facts to Keep in Mind

Great Bear Lake has been described by its geographical characteristics, as it has a shape like that usually applied to a puzzle piece ([Johnson, 1976](#)). A group of Dènè people has long lived around this natural reservoir. Beginning in 1825, people from this group came to trade at Fort Franklin, a fur trading post that first belonged to the Northwest Company and later to the Hudson’s Bay Company. These two fur companies were merged by decision of the British Parliament ([Junquera Rubio, 2019: pp. 231-314](#)). During the 20th century, these Indigenous people were identified as distinct ([Osgood, 1931](#)) and given two names: Bearlake Dene, in English, and Gens du Lac d’Ours, in French.

These groups remained nomadic until 1949. The Hudson’s Bay Company opened a post at Fort Franklin in 1950. The federal government built a school at this site in 1952, and thus it became a permanent settlement because children were required to attend school ([Junquera Rubio & Fernández, 2019](#)). Native families settled here at the same time as the missionaries, as the latter advised the change of

residence. On June 1, 1993, the name of Fort Franklin was changed to Déline, which means “moving water” in Northern Slavic.

The Hamlet of Déline is the only community located on Great Bear Lake today. Stewart (1996) reported on fishing at this site and the immediate process that this task had to follow to follow the so-called criteria that were already prevalent at the time, with those proposed to conserve the environment. Fortunately, this aspect continues to be met, as Native leaders constantly recommend respecting the land on which they live.

Currently, there is great concern among Déline residents, as they constantly fear the potential impact that oil spills could have on the waters of Great Bear Lake. Interviewees emphasized the importance of fish to human survival and reminded us that the Dènè have been coming here to fish for centuries. This evidence is found in the widely available traditional literature devoted to the region (Piper, 2009; Dokis, 2016).

Miller (1947) reported that fish production in the entire Great Bear Lake was 900 tons per year, and the amount intended for direct human consumption and fresh fish represented about three tons per family per year. These amounts have only recently been considered valid, and I suspect with little or no reflection on them (Meis Mason et al., 2008: p. 2). It is possible that the amount caught in 1947 amounted to 900 tons, but the consumption indicated for each family per year: three thousand kilos, seems a bit excessive. If one considers that family units can total four members, it turns out that those three tons divided by 360 days yield a consumption of 8.3 kilograms per family unit and, if distributed equitably, about 2.08 kilograms per person. If that were the only food, then perhaps we could consider it valid, but fish is not the only food.

However, the diet of the natives settled around Great Bear Lake, and for those dates immediately following the conclusion of the Second World War, must be considered to have been based more on meat from hunting (caribou, moose, rabbits, hares, and other species). If to these sources, we add about three kilos more, then it turns out that the food consumption per family and person must be between twelve and fifteen kilos per day, which is still excessive anywhere in the world, and even more so in an area that was then classified as impoverished (Johnson, 1976: pp. 231-244). With that amount of food, the Canadian Subarctic would offer a unique place in the world and is far from having been able to present that image.

The data provided by Meis Mason et al. (2008) should be considered with much more caution. First, in 1947, fishing was possible, at best, on Great Bear Lake between May 15 and August 30, when the surface of this natural pond was clear of ice. During the other months, fishing was occasional and much less productive. It was achieved by digging a hole in the ice layer and inserting hooks that, when removed, allowed the capture of a few fish. I should add that at that time, there was little or no foreign trade; moreover, there was no means of communication, which is not the case today, which is quite different.

Assuming Miller's data are considered reliable, it must be taken into account that they could have large packs of dogs, which, incidentally, also consume food and, in the summer, would be tied up near the houses, since at that time they did not require sled pulling because they were not suitable for mobility in the summer, although they were suitable for the winter (Junquera Rubio & Fernández, 2001: pp. 223-260).

Unlike the communities settled on the Mackenzie River, which have access to services provided by barges, Déline lacks these facilities, as there is no possibility of large vessels navigating the Bear River. Its only road in and out for vehicles is one that is operational in winter and travels across the lake, which is frozen during those months. These types of roads are referred to as winter roads. The distance from Déline to Norman Wells is 213 km via this route. Buffalo Airlines provides cargo service, as it also has a paved dirt runway, and if there are passengers, it can also transport them, but at the rear, as the front section is used exclusively for cargo.

Déline is represented by several state institutions: a post office located in the so-called Northern Store, a medical post staffed by two nurses, and a space equipped for a dentist when he visits, as he does not have a permanent residence but only a temporary one. There is also a government-sponsored social housing program in place, and a Catholic church is served by Oblate missionaries when they visit to perform their pastoral duties. The permanent presence of missionaries disappeared years ago (Brown, 2014); however, one of the best evangelizers and scholars in the entire region existed here: the French Oblate Émile Petitot (Petitot, 2005).

The Aboriginal people living in Déline refer to this place as Widows' Village, as there is a considerable number of them (Brown, 2014: p. 47). The cause of this situation dates to the 1930s, when deposits of silver and pitchblende (a mineral containing radium and uranium) were discovered. In 1933, the Port Radium mine was opened on the shores of the lake and was designed to serve as a center to facilitate the settlement of the *Eldorado Mining and Refining* complex, owned by the Crown Company, which was then in charge of extracting uranium (Robinson et al., 1957: pp. 619-628; Griffith, 1967; Canada, 2005). The complex was used until after 1982 by the *Echo Bay Mines* consortium (Wonders, 2003; Brown, 2014).

The Dènè settled near Great Bear Lake were hired to transport the ore in canvas sacks on their backs to load trucks and water tugs between 1930 and 1982 (Canada, 2005: pp. 3-5). Tulita was used as a uranium deposit because the Mackenzie and Great Bear Rivers connect during the summer months, when they can be navigated by small boats. Native people of the so-called Great Bear Lake Band report, even without being asked, that many became ill and died because of radiation exposure, and that many of the deceased succumbed to lung disease and various types of cancer (Canada, 2005: pp. 28-45; Brown, 2014).

Interestingly, the area is also rich in oil and gas, and Native people express concern because extractive and industrial activities have expanded since 1960, result-

ing in increased consumption of these products in southern Canadian cities. Indigenous societies wish to safeguard themselves from the potential negative health impacts of their respective extractions. Since there appears to be no possibility of halting the development of the industries involved in obtaining these riches, any shock can be mitigated by applying two methods: 1) carrying out all tasks using appropriate means, since current technologies are much better than those of 1930, for example; 2) providing large amounts of money budgeted by the federal parliament in Ottawa.

The relationship between industries, considered polluting, and health is a source of concern for citizens, who want to breathe quality air, have access, if necessary, to hospitalization, and, equally, to be able to secure necessary appointments for medical checkups. These demonstrations are alarming, since the Sahtu Region has notable shortcomings in terms of hospital facilities, available beds, and the number of nurses and doctors. These issues are of primary importance when raising any complaints by the Indigenous people (Richmond & Cook, 2016: pp. 1-16).

Native people also express concern about the impact of development on their traditional culture. In 2006, Native people raised a series of grievances related to actual and potential negative aspects. The reasons for this were presented at a *Joint Review Panel Hearings*, held that year and attended by government officials.

Those interviewed expressed particular concern about the potential contamination of waters having trout and other fish. Edward Reeves, a Deline leader who attended the meeting, stated in July 2008 that a balance must be found between development, environmental protection, and the defense of the traditional economy, in all matters affecting renewable resources.

The Hare was so named because of their heavy dependence on the animal, from which they obtained materials for the snowshoes they used in winter to walk on the snow, support for their daily livelihood, and use the skins to make warm clothing. Morice described them this way: “a Déné tribe which shares with the Loucheux the distinction of being the northernmost Redskins in America, their habitat being at once south of that of the Eskimos. Their territory extends from Fort Norman on the Mackenzie, west of Great Bear Lake, to the confines of the Eskimos, not far from the Arctic Ocean” (Morice, 1910: p. 136).

Although I have already specifically addressed the Hare communities (Junquera Rubio, 2006), in the current situation, they find themselves in similar conditions to the other societies with which they share territories. Environmental issues concern them, as they believe that any alteration to the landscape will bring short- and long-term harm. Their life has been spent hunting and fishing, more than enough reasons for them to show as they do.

It is possible that, due to their territorial settlement, the Hare had ancestral relations with the Inuit. This must have occurred long before the arrival of Europeans, including the bushwalkers. This hypothesis is tenable, since temporary migratory movements and permanent or semi-seasonal hunting grounds provide more

than enough evidence to confirm such contacts going back centuries (Ingold, 1980; Fitzhugh, 2015: pp. 37-62). On the other hand, the other Athapaskans did not have significant contact with the Inuit; indeed, it is suspected that they did not have contact with those not of their own ethnicity, including the Inuit and more southern Indian societies (Wilson, 2003).

Morice noted that the Hare were evangelized beginning in 1859 by Oblate missionaries and concluded: "Today, the Hare Indians are almost all Catholics" (Morice, 1910: p. 137). That was in the early 20th century, but Savishinsky (1978) has pointed out that they traditionally followed an ethic that balanced exchange and interdependence with autonomy and freedom. Today, they still claim to be Catholic, but largely non-practicing. Much more than the mountain Dènè, they were introduced to the fur trade. Trading took place at Fort Good Hope, Fort Franklin (today's Délne), and Fort Norman (today's Tulita). Fur companies and those interested in fur supplies sought to obtain them at any price (Ray, 1998; Junquera Rubio, 2018: pp. 95-120, 2019).

Remote on the map of the Mackenzie River, Lake Colville relies heavily on a 165-km-long ice-road to connect with Fort Good Hope, as barges cannot access the community. While mountain caribou (an ecotype of the woodland caribou subspecies that is nearly extinct in the U.S.) are important to Fort Good Hope residents, few people at Colville Lake hunt the other subspecies, *Rangifer tarandus caribou*, and subsistence for reservoir dwellers depends primarily on the somewhat smaller south-migrating barren-ground caribou, *Rangifer tarandus groenlandicus* (Kelsall, 1968; Olsen, MacDonald, & Zimmer, 2001).

Teresa Lee, in one of her papers, quotes Marie Kochon, a resident of Colville Lake: "Although times have changed, people still want to live with the land. To support our traditional way, we don't want the pipeline to destroy the animals and their habitat [...]. The old-fashioned, independent way of life is preferable to destroying the land and depending on others" (Lee, 2006: p. 8). Those interviewed in 2009 and 2012 confirmed that industrial development and progress were not desirable here because of the impacts they could generate, as they cannot be controlled once they become polluting.

Participants in our study, which has been ongoing since the late 1970s, have consistently emphasized the importance of traditional subsistence activities. Stewart reported that Fort Good Hope residents harvested approximately 157,500 kg of fish for subsistence in 1961. Much of this was used to feed the dogs, which were then used for transport until the introduction of ski-powered motorcycles for travelling over the snow. Stewart notes, "In 1972, the combined subsistence catch of fish and other food items by residents of Fort Good Hope and Colville Lake was estimated at 45,450 kilograms" (Stewart, 1996: p. 21).

The decline in fishing may have been associated with the decreased use of dog teams, rather than with a change in human consumption habits. Confirming the importance of food to the nation, Berkes (1990) noted that the annual fish catch by Fort Good Hope residents was 125 kilograms per capita in 1982. Currently, no

known data is available. And there was a certain commercialization here at the time, as many whalers arrived in the Mackenzie Delta.

To complement local production, much food comes from outside the region, and this occurred even before the arrival of the Oblate missionaries, who impacted many social spheres, not only religious ones (Junquera Rubio & Fernández, 2019). Many products arrive on the freighters that travel along the Mackenzie River in the summer months and on the front of airplanes from Edmonton, Calgary, and Regina. This work has not stopped or neutralized but rather has increased. The outside world is increasingly present in the daily life of any of the settlements, and they do not close themselves off from that influence.

Those I interviewed on several occasions, years apart, emphasized the importance of protecting their environment from outside development. They say this because they wish to support their traditional subsistence activities. This is also consistent with concerns expressed at the 2006 Joint Review Panel hearings. Roger Boniface, a leader at Fort Good Hope, notified Teresa Lee: “We need to protect the land, the wildlife [...]. The pipeline is crossing one of the most sensitive and valuable traditional hunting and trapping areas that have been used by Fort Good Hope trappers and fur traders for years. This will have a major impact on their way of life” (Lee, 2006: p. 9). The philosophy of George Blondin, whom I have quoted many times, makes a similar point.

A Métis informant, Sherry Terroy, explained to us that there has always been development, but it was “more sustainable, as we made the moose hide canoe, and it was ideal for shallow water. But that was when there were more moose”. These data were collected during my first visit to the Mackenzie Valley in June 1974, and they served as a temptation to continue. There are places in this world that attract scholars like a magnet, and that was the case with me. Some data on these types of canoes and how they were used back then, even with dogs being transported as travelers, were published some time ago (Junquera Rubio, 1986: pp. 267-278, 1987: pp. 201-214).

The Tulita settlement is found approximately 72 km upriver from Norman Wells. The neighborhood is composed primarily of people grouped as the Dènè Highlanders, who speak Northern Slavic. The area has few infrastructures. In the summer, Tulita can be accessed by barge or canoe from Hay River and along the Mackenzie River. I have personally made this trip from Norman Wells by renting Frank Pope’s¹ outboard motor launch, and I have made this journey about thirty times since 1974. A winter road is the only land link to any other location; one connects this settlement to the Mackenzie Highway via Wrigley, but it is only open from mid-winter to late winter.

Norman Wells is 84 km from here and can be accessed using this ice road. The available buildings consist of a supermarket and a hotel. The former Hudson’s Bay Company store has long since closed. The village has 56 privately owned houses

¹Frank Pope is a Euro-Canadian of Scottish origin and a longtime resident of Norman Wells. He is the town’s mayor and wields considerable influence in the region.

(2016 data), of which nine are rented to tourists and transients; another 74 are publicly owned and rented exclusively to residents. Ten more are used for administrative staff, who are mostly foreigners. Sanitation is transported in specially prepared trucks. There is a Catholic church, inherited from the Oblate mission opened in the 19th century under the patronage of Saint Teresa, and between two and four missionaries from the Congregation of Saint Felix of Cantalice. Education and pastoral care are directly supported by Sister Celeste Goulet, a resident since 1979, except on days when an Oblate missionary appears.

While the development offers safeguards and convenience, Tulita residents express concern about the negative impacts on the environment, as it affects their food supply. Gordon Yakeleya, who served as mayor of Tulita and is now the chair of the Tulita District Land Corporation, told me in a three-way conversation, as Sister Celeste Goulet was also present: “The environment is the most important thing”. This statement comes from the discussions and agreements reached at the 2006 Joint Review Panel. Interviewees in Tulita noted that subsistence hunting is important to their Native residents.

Those interviewed explained that mountain caribou are of particular importance, but they are equally pleased if they are lucky enough to shoot a moose, for example. This supports the positions of Olsen, MacDonald, and Zimmer (2001). Gordon Yakeleya understands that it is essential to continue living off the resources offered by the nearby landscape, and he states this not only on a personal level but also as a spokesperson for the community. Many people in Tulita prefer traditional foods to imported ones, so fishing and hunting are inherited activities that must continue, and the same goes for the subsequent marketing of the skins they harvest, which they no longer use for clothing, but instead for foreign trade.

When asked about the impact of oil development in the region, Gordon Yakeleya told us, “Money comes into the community, which is good. However, drugs and alcohol come from the south, and our own people resell these harmful products. The family falls apart, and this harms the community. Young people can receive training, but if they have alcohol and drug problems, they won’t be employed. The companies that lay pipelines need us, but they must help us prepare people can’t change overnight. One solution would be to prevent the entry of outsiders and foreign products, limiting the amount of alcohol to one bottle per person entering the community. Oil and gas companies will also need to enforce alcohol and drug policies within the camps”.

There are concerns about the impact of development on traditional culture and spirituality. Bobby Clement of Tulita expressed his opinion: “We want to reserve lands that are so important to this community. I heard the elders mention Bear Rock, which is a spiritual place where people go to pray and find comfort. There’s a coal seam about four miles from here that people use. There’s Bear River. There’s the Keele River. Those are historic sites that we use for hunting and fishing. And that’s why, when we talk about this land-use planning, we need to push for it so that everything happens on our land. We need to focus on that. That’s the only way we

could get what's needed to preserve for future generations". I've heard and recorded similar statements many times.

In another interview, Judy Snortland, who has been the executive director of the Sahtu Renewable Resources Board in Tulita since 2008, points out that while the pipeline may not directly affect the caribou, they will be. About the "confrontations three or four years ago, between 2009 and 2012, during construction", she expressed concern about the cumulative effect. "It's the decisions that happen later that scare me", she confessed. Her firm opinion was: "We have to find a balance for the caribou and for development".

During a 2013 interview with Carl Yakelea, leader of the Tulita Dènè Band, he reminded us that the construction of the Enbridge pipeline during the 1980s had not helped the Tulita community. "We don't want a repeat of it!" Yakelea exclaimed. "What's in it for us?" he asked. A significant economic benefit could be the creation of jobs during the construction of a new line, which is expected to last three years as it runs through the community's areas of influence. The arguments, whether sincere or not, focus on the destruction or integrity of the environment; moreover, this leader understands that traditional life was achieved with the resources provided by the landscape and that his fellow citizens will not survive if it disappears or is significantly altered.

Those from Tulita and those from outside understand and are aware that changes are now an unstoppable reality, and to cope with this impact, it is important to prepare in advance. In a conversation with Grace Ruppert in July 2019, a missionary and seasonal volunteer in the town with a deep understanding of ecology and environmental stewardship, who holds a degree from the University of Toronto, she opined: "We need social workers ready to address the new problems that will arise as a result of the pipeline laying, and young people will need treatment because they will abuse alcohol and drugs".

The case of Norman Wells is different. Its history as a settlement began when the Imperial Oil Company began drilling nearby in 1919 (Lloyd, 1944). Therefore, unlike the Aboriginal communities described above, this town was born because of the oil industry. It was the first settlement in the Northwest Territories because of the development of non-renewable resources. The municipal flag features an oil platform along with a bear.

Oil flowed here in 1920 (Hopkins, 1943; Bone & Mahnic, 1984: pp. 53-60) and Norman Wells became the northernmost well in the world (Junquera Rubio, 2019: p. 286). Finnie noted further details regarding oil development at Norman Wells, "A gush was extracted, but the local market was too small to warrant production. Oil was important to the country, but in the 1920s, there was no industrial development in the region. The largest users of fuel were steamships, which then ran on wood, which is why they did not consume oil. Imperial Oil closed several wells that had been drilled in 1925 and withdrew" (Finnie, 1942: p. 413).

Shortly after, in 1933, mining operations began in earnest, which was then considered the richest radium ore mine in the world. This discovery occurred on the

shores of Great Bear Lake, and the discovery “justified reopening the Norman field and drilling new wells [...]. By 1939, new refining equipment had been installed, making it possible to meet the oil needs of the entire Mackenzie district” (Finnie, 1942: pp. 413-414). Moreover, Imperial Oil continued drilling for oil in the region and completed a new production sector in September 1942.

By the end of 1943, 26 wells had been completed and established on lands traditionally used by the Dènè Highlanders, who lived near Fort Norman and Norman Wells. To meet wartime fuel needs, the U.S. government built the 4-inch CANOL pipeline, which was executed by the military during the winter of 1943 and 1944 (Junquera Rubio, 2019: pp. 676-746). This route crossed rugged terrain and mountains from Norman Wells to a refinery in Whitehorse, and much of the route was laid without proper maps or environmental impact studies at the time (Hopkins, 1943).

Oil extraction was semi-halted for years. Beginning in 1980, concern for this wealth arose again, and another pipeline was laid, this time heading south, and completed in 1985. Frank Pope, mayor of Norman Wells, noted in a 1994 interview that Aboriginal people lacked the skills to obtain well-paid jobs at the time, so wages and profits went into the pockets of outsiders, creating discontent. However, Aboriginal people acknowledged their lack of training, as this required educational establishment, which at the time was available outside the region.

Bone and Mahnic provided a comprehensive account of Norman Wells’ development as the region’s oil center. They noted that “almost all of the residents of this community are Esso employees or otherwise connected with the oil industry. Most have come north to find work, and few remain in Norman Wells after their contracts expire. In 1981, approximately 82% of the population was white” (Bone & Mahnic, 1984: p. 53). Thirteen artificial islands have been constructed in the Mackenzie River channel to pump out the crude oil stored beneath its waters.

Even now, Norman Wells is a meeting place for diverse cultures. First Nations respondents at this location indicated that they come to Great Bear Lake to fish for grayling², trout, and other fish needed for their subsistence. This statement, provided in early August 2002, supports Stewart’s (1996) earlier positions. One of the interviewees, a Métis with a Dènè father and an Inuit mother³, who does not wish to have his personal identity published, noted that, “Compared to the Inuvialuit further north, the Dènè of Sahtu have far fewer and smaller businesses, and many of them are in the start-up phase”.

On the other hand, dependence on environmental resources is a constant reality; in fact, many confess that “if there is no nature to support food, then things are going to get difficult”. The rejection of food products from the dominant society is constant, but, unfortunately, these external products are consumed more

²It is a variety of trout.

³Marriages between Dènè and Inuit have been few, rare, and virtually nonexistent until recently. The reason for this was that the two societies met in the Mackenzie Delta, where they would fish for marine resources during the summer, but each group tried to avoid encounters with members of the other group (Krech III, 1979: pp. 102-122; Graburn, 1979: pp. 184-195).

every day and have taken over from traditional food.

Another problem that residents constantly refer to is the danger posed by the presence of foreigners settled in Norman Wells, or those who come temporarily as transients or tourists. This situation reduces the possibility of access to housing, and this contingency increases demand, which increases overcrowding, displacement, and prices. The law of supply and demand operates here and in this area with a force not traditionally known. And along with this aspect, there is an increase in criminal activity, as many locals appear to be displaced. Crime, family crises, drug use as a remedy, violence of all kinds, and suicides are some of the problems that mayors must face, and in the case of Norman Wells, Frank Pope points out that these conflicts will increase and will not have a short-term solution.

Several respondents expressed concern about the potential harm caused by an oil spill or a pipeline rupture, and the impact these toxic products could have on fish, mammals, ruminants, deer, freshwater, and so on. They noted that these negative actions would cause harm to the Native people living in the region. They also stated that a spill at sea is easier to control than one occurring on land; furthermore, saltwater can be cleaned more quickly than land, despite the permafrost present.

Many Dènè stated that even without a spill, the simple exploration and development of wells affect wildlife, especially caribou. These statements seem to be in line with the contributions of Olsen, MacDonald and Zimmer, who noted that “boreal caribou are thought to be sensitive to aircraft disturbances, motor vehicle traffic, industrial activity and habitat alteration” (Olsen, MacDonald, & Zimmer, 2001: p. 1).

When asked by outsiders about the customs of the Aboriginal people with whom they must live, one expressed himself thusly to the settlers in Norman Wells: “Aboriginal people used oil before it was discovered in 1920. They used it to repair canoes and for lighting on long winter nights, but they never considered it as a means of transportation”. This is how businessman Larry Wallace expressed it, who had certainly previously read the accounts compiled by Alexander Mackenzie in July 1789 and first published in 1801 (Mackenzie, 1903: pp. 287, 325; Junquera Rubio, 2019).

The wife of this businessman, who runs the Mackenzie Valley Hotel in Norman Wells, took us one day to observe the laying of the pipelines that transport crude oil to Edmonton and Calgary, which are now underground, and pointed out that “the natives demanded that they be covered with earth and that when this task was completed, the same flora that had been ruined by the work carried out should be planted”. She added a curious comment: “Now predators can kill more caribou, and with greater ease than ever, since the pipeline work allows for greater visibility”.

He also explained that the coniferous forest does not regenerate because of the permafrost. He explained that bulldozers were used to clear a linear corridor along the Mackenzie River, ranging in width from 7 to 15 meters. The timber from the

piners was wasted, but that loss had a clear purpose, as industrial structures must constantly adapt to drilling equipment mounted on trucks and equipped to drill a series of holes in which dynamite is placed to later detect whether there are liquids or gases underground.

These statements offer several interpretations. First, it must be noted that explosions cause seismic waves that can be recorded on a computer's hard drive, and sound waves that are reflected as the explosions occur are added to this process. Appropriate software allows for drawing all the required representations present in the subsoil.

Seismic drilling is typically spaced about 400 meters apart; that is, in the project to be developed, one line is that far apart from the next. And, although it may seem strange and odd, the caribou have little security, because any explosion unnerves them. Given this possibility and the immediate protests raised by the Dènè leaders, it was suggested that the dynamite tests would be less bothersome if they were conducted at a distance shorter than the 400 meters. Furthermore, the subalterns hired by the oil industry had to travel in all-terrain vehicles, usually with military-grade traction, which required, at least, an opening in the boreal forest of at least 2.5 meters wide to be able to move.

In this context, the president of the *Land and Water Use Permit Board* suggested to us that meandering or irregular lines applied to the boreal forest had a greater capacity to provide refuge for the caribou. Whether this proposal is coherent or not, the future will be told in the short term.

3. Supplying the Canadian Arctic

At the beginning of the 20th century, supplies of foreign goods reached the Mackenzie Valley thanks to a steamship known as the *S.S. Distributor*, which was the largest in the Mackenzie River Transport fleet (Hewetson, 1947: pp. 185-226). Its mission was to deliver goods to communities in what is now the Sahtu region. This task could be performed for five or six weeks in the summer, when the Mackenzie River was ice-free. These ships burned firewood to move before being changed and modernized with gasoline-powered engines (Krutko, 2004).

Currently, this task has been replaced by Douglas planes and their DC-3 and DC-4 aircraft, which have replaced ships and delivered cargo more quickly. The impact of the volume of transported goods reached nearly four million tons between 1950 and 1972, exclusively in the Mackenzie Valley and its tributaries, 3,786,870 to be exact (McLaren, 1974: p. 82). This activity has not slowed down but has steadily increased and can now be estimated at ten times the volume of transported goods, according to data provided by the Regional Government (Northwest Territories Transportation, 2015).

Most of the territory lacks roads and paths, and in this situation, alternatives are scarce. The Douglas DC-4 plane, with its large doors, is ideal for use as a loading and unloading vehicle. It is one of the few plane types that can carry heavy cargo, including fuel, and it lands and takes off on short, even unpaved and unlit

runways. Beginning in 1970, Buffalo Airways delivered products averaging over half a million kilos per month. These goods were distributed among all the communities settled in Canada's Northwest Territories.

This company has its main base of operations at Yellowknife Airport and a backup airport in Hay River. Over time, due to a lack of modernization, some planes have suffered accidents. These incidents led to intervention by the Canadian government, which has hindered their continued operation. The reason given is that the DCs were developed as fighter planes during World War II and by 1970 were already quite outdated. After 1944, gasoline refueling took place in Norman Wells, due to the presence of oil and a refinery.

Yellowknife and Norman Wells have paved takeoff and landing strips. This fact dates to the time of World War II, influenced by the CANOL project, which had its most important operations center in the latter town. Most of the other airports scattered throughout the Northwest Territories are gravel, which is why planes must be prepared for use without accidents. The baggage disposal ramp at Norman Wells Airport is the only one I know of that warns with sirens and red lights that it is about to move; the reason is none other than to avoid accidents, lawsuits, and compensation payments.

Another notable gravel airport is Fort Good Hope. It is accessible by small plane and helicopter. The flight takes about half an hour from Norman Wells and crosses the waters of the so-called Rampants or rapids. Here, the waters of the Mackenzie River are confined, providing a channel that can be up to 500 meters wide and runs between two limestone cliffs that are almost 100 meters high. I make this reference because the natives of the surrounding area believe that the Great Spirit had excess mud when he created the world and threw the excess in this place, to force the river course to have a westerly orientation and then return to a northwesterly direction.

4. Reflections on the Impacts Caused by Western Culture

The Sahtu Dène were nomadic hunters who roamed a large area of the Northwest Territories, on both sides of the Arctic Circle. They subsisted on hunting until the late 18th century, as by then white traders from eastern Canada and Europe were present, penetrating these areas and persuading these Native Americans to become trappers. Some of them even had no problem finding wives in one of these Native American societies, and the resulting product is today a large and dispersed group, officially recognized as an Indigenous society, the Métis.

Contact with Euro-Canadian traders required exchange and travel to capture the animals that carried their precious furs, which, once obtained, had to be transported to the receiving centers. These tasks required the construction of larger sleds and the provision of more dogs to facilitate any transport tasks (Morse, 1968). It should be noted that these animals also eat and must be provided with food. This issue is mentioned here tangentially with regard to the capture of river fish, since, although they were close to the Arctic, there is no archaeological evidence that

they frequented those coasts controlled by the Inuit (Morse, 1968). It should be clear that before the end of the aforementioned century, there were no permanent camps (Junquera Rubio, 2018: pp. 95-120, 2019; Junquera Rubio & Fernández, 2001: pp. 223-260).

These natives lived scattered in small mobile groups led not by an elected chief, but by an individual who distinguished himself because he was able to hunt enough to support his family and could also collect and dispose of a surplus that he gave to any of his fellow citizens. Pre-state societies were more hospitable and supportive than state societies. About two hundred years ago, they began to build small, conical dwellings, using willow branches that they curved and then covered with moss and skins.

This residential shift is the beginning of a semi-sedentary lifestyle, as they settled near the forts built by the Hudson's Bay Company first, and the Catholic and Evangelical missions that arrived shortly after. These contacts also led to a cultural tendency toward teepees, which were the residences of the more southern societies, and to preparing birch or pine logs to build cabins. The latter are rented today to tourists willing to take shelter in one (Junquera Rubio, 2021: pp. 821-838).

Men, women, and children covered their bodies with clothing made from hare and rabbit skins, and from them they also obtained snowshoes for walking on the snow. They carried huge quantities of lice, and cutting these parasites from their heads and bodies needed patience and instruction. Prior to the 18th century, hunting was conducted using bows, arrows, spears, and traps, and the choice of strategic locations through which potential prey had to pass.

In those distant times, they built fences with branches from shrubs and small trees, up to more than a kilometer long. Wherever there were stones, they were used for the same purpose. The goal was to allow the caribou herd to pass through these artificial corridors and ensure that they could be captured in sufficient numbers. They also built birch bark canoes, which they used to shoot caribou as they crossed a river or lake. The mouths of tributaries were ideal places for hunting, as they also served as watering holes for the animals.

The history of the Sahtu Dènè is one of a continuous and permanent war against the elements and surviving in these inhospitable and harsh landscapes always offered very limited success, if not almost failure. According to what the current heirs tell, it seems that they were always living in fear and dread due to the following facts: 1) panic of dying of hunger, 2) suspicion of the neighbor who could try to take away a wife or the resources required for subsistence and 3) fear of the evil spirit, the same one that in our culture is traditionally identified with Satan (Brown, 2014: p. 212).

Given these negative realities, it is possible that they felt tempted to migrate to more southern areas, but the fear of the Cree, who always showed them hostility and who controlled Lake Athabasca, was more than enough reason to stay where they were (Finkelstein, 2002: pp. 163-172); at most, they could approach the Inuit territories, which were close and less dangerous, but also with a shortage of hunt-

ing resources. The Canadian prairies, spread across the provinces of Alberta, Saskatchewan, and Manitoba, are rich in bison and many other animals, but they were never able to access these riches for the three reasons mentioned above. Trapped in a geography that sustained them with great difficulty, they were forced to do the best they could to get by daily.

With this context in mind, it is remarkable to see the current situation. First, the most significant fact is that they have abandoned most of the vast territory that we must assume was their traditional habitat and are now settled in permanent settlements following Western standards. For the most part, they have stopped hunting, so they no longer need to use the territory that was ancestrally their only food source. They have never aspired to be farmers, and the federal government and Catholic and Anglican missions were involved in this endeavor, but they failed in their attempts, despite the 1921 Treaty⁴, in which some native leaders, most notably Chief Monfwi, played an important role (Helm, 1994).

Colonization contributes to the discovery and colonization of domestic animals and plants on which societies in their metropolises depend. Curiously, there are many similarities in the form and manner of carrying out this task. The first goats, sheep, and pigs, for example, raised in the Antilles were brought by Christopher Columbus on his second voyage in 1493, and the breeding stock was shipped from the island of La Gomera (Tejera Gaspar & Capote Álvarez, 2005).

In the Northwest Territories, fur traders and missionaries also introduced goats, sheep, cattle, and other domestic animals, along with instruction in agricultural work. These attempts began, developed, and ended in the most resounding failure. Cash crops that could be grown in the short summers when sunlight was warm around the clock have not taken root among the Sahtu Dène, and those involved in teaching these techniques struggled mightily to ensure the success of foreign approaches, as they were not available here (Crowe, 1974).

Today, Native societies have largely abandoned their nomadic lifestyle, and when they hunt an activity destined for extinction, they do so to fulfill some ancestral purpose, but they no longer depend on this management as they once did for their livelihood. Curiously, it is the oil and diamond mining companies that are using the land for industrial exploration, and current economic development in these activities must be assessed. No examples of cultivation are detected. As a result of the many signed pacts and ecological disasters, companies wishing to settle in areas controlled by the Dène must first obtain the appropriate permission from Native bands, councils, and other organizations that have a say in matters affecting the landscapes of the Northwest Territories and the resources they contain (Brown, 2014: p. 213).

In 1993, Native and Métis leaders signed an agreement with the Canadian federal government stipulating that ownership of the land and subsoil of Sahtu, as well as other extensive landscapes in the Northwest Territories, would be trans-

⁴I have recently offered an extensive study on treaties between Aboriginals and federal authorities, but I have not cited it despite it being a tangential topic for what is discussed here.

ferred to Indigenous peoples, and control of their resources was subsequently negotiated between three parties: leaders, territorial authorities, and federal authorities. The agreement, known as the *Sahtu Dene and Métis Land Claim Settlement Act*, was enacted in 1994, the year the Canadian Parliament passed the law. A consequence of this decision was the significant funding available to promote community development and set up the general guidelines for establishing numerous new forms of self-governance.

Most Sahtu Aboriginal people live in wooden houses assembled by the federal or territorial government, but with prior agreement. They contribute a minimum rent, which they pay at the location indicated by the person in charge. All these homes are equipped with electricity, which is used to power televisions, stoves, refrigerators, and computers. If some Aboriginal people do not pay their appliances or rent, a government agent is called in to cover the costs, never to impose fines.

Since opinions are free, there are those who, from a fiscal perspective, believe that this model is helping to undermine the foundations of the economy, for the simple reason that provincial regulations are contrary to those applied in Yukon, the Northwest Territories, and Nunavut. This situation could become a problem, not only for the Dènè but for all those who are benefiting from opportunities that economists describe as short-term and at risk of disappearing because those disadvantaged in the south understand that these situations do not mean equality but injustice.

In June 1974, I found myself visiting Mackenzie Valley for the first time. These were times when change was brewing in every sense, and I suspect that those who invited me on these trips expected me to give my opinion on the matter. It was then that I had my first contact with Inuit individuals who were already beginning to reside in housing provided by the federal government. And in that context, I asked a government official, from his native Ontario, Albert Hall, about what might happen if a Native American refused to pay rent, or found himself in a difficult but temporary economic situation.

At the time, he told me that anyone who didn't pay would be evicted, and the property would be given to someone else. When I asked him again if any of them had been evicted for that reason, he replied that he didn't know anyone who had been forced to leave their rented property, but added that, at the time, about two-thirds of those residents were short on their rent. In other words, no one had bothered to enforce the rule.

A notable sign of change and impact is the snowmobiles that have replaced dogs as the natural engines for sleds. Similarly, aluminum speedboats equipped with outboard motors of 40 horsepower or more have replaced canoes made of birch bark or captured animal skins. Many of the natives have bought pickup trucks, even though they can only be used on the few streets and the few short roads that may be open in a community, unless they have equipment for driving during the winter months.

The current clothing worn has replaced the original clothing made from hare and rabbit skins. Blue jeans have now replaced most traditional skirts and pants. Body and head lice have disappeared, and young women curl their hair and wear lipstick. Women are now accepted as equals, but I have seen, but not commented, that when they walk around their homes, they still walk about four steps behind their husbands. I don't believe there has been any religious influence in this, neither from Catholics nor Evangelicals, much less from Semitic cultures, which are closely tied to those customs. Polygamy has disappeared, as has female infanticide. Civil marriage is the current norm, but common-law marriages are gaining ground due to various external influences.

Samuel Hearne was the first to note that Native American societies practiced infanticide (Hearne & Tyrrell, 1911: pp. 131-132), and later this practice was extended to the Inuit (Remie, 1985: pp. 67-76). But the custom quickly declined, as Franklin noted half a century later: "The difficulty of obtaining food frequently induced the women of this tribe [of the Great Bear Lake region] to sacrifice their daughters. This practice is mentioned by Hearne as a common crime among the northern Indians, but this was the first incidence that has come to our knowledge, and I understand that it is now very rare among the Chepewyan tribes" (Franklin & Richardson, 1828: p. 64). Missionaries will note that this tradition and custom disappeared around 1860 (Mishler, 1990: p. 124).

Most of the traditional taboos, labeled as such by outsiders of Western culture, have disappeared or nearly so, but remnants remain, as it is not so easy to erase personal and ancestral beliefs. The last to disappear, and those that have been detected in this end, seem to be those associated with the first menstrual period, as this event is traumatic from the perspective of traditional culture. The enthusiasm with which the Dènè first adopted Christianity, nearly two hundred years ago, has frozen. Their attendance at cults and liturgies has decreased, but the resurrected ancestral creeds are increasing without detecting, or at least not confessing, the assent to the rites proposed by certain native leaders who have already become heroes and religious guides, as is the case of Blondin (1990, 1993, 1997).

A topic worth considering, with delicacy and sadness, is the problem of alcohol consumption among the Native population, especially among young people, but which also affects adults. Before the arrival of European traders, the Native Americans did not know how to make intoxicating beverages, or at least no evidence has been found of it. Between 1910 and 1920, traders introduced the model for making homemade beer, as they provided the process (Brown, 2014: pp. 216-217).

It is well known that all Native Americans have shown addiction to alcohol upon contact with Europeans in Canadian lands (Junquera Rubio, 2019: p. 37). The artist Paul Kane, a Euro-Canadian of Irish descent who crossed Canada from the Atlantic to the Pacific and who captured numerous snapshots and captured them in his paintings, commented on more than one occasion that the societies he encountered were quick to consume rum and would trade anything they had to obtain it (Kane, 1859: p. 316). That was 150 years ago. Anyone who travels through

what is now the Northwest Territories understands that liquor is a problem and acts like a magnet on Native American minds, even though the local authorities officially established a kind of prohibition law, which has not been able to eliminate the addiction.

The Dènè became addicted to alcohol from the moment they first met Westerners who offered it to them unscrupulously. Frequently, especially on weekends, they use an empty gas barrel and pour all the ingredients into it to ferment during a maceration that occurs in a single night. This domestic brew is consumed before it reaches maximum fermentation, so the alcohol content is low, but the cumulative effect of drinking it for part of an evening and all the following night can produce considerable intoxication. Some are heavy drinkers and love to invite their friends over. Today, this tendency results in a good percentage of settlement consuming at the same time, and the effects can often last for days (Brown, 2014: p. 218).

The abuse of psychedelic substances and alcohol is a matter of concern to local leaders, who have taken precautions, as such excesses harm the entire Indigenous society. Like other Dènè communities and other ethnic groups, some settlements in the Sahtu Region have decided to dry up; that is, to limit consumption and prevent outsiders from bringing it in. By 2011, seven settlements in the Northwest Territories had set restrictions and completely banned alcohol consumption within community boundaries, and ten other sites enforced the rule, letting them know that the supply was restricted (Brown, 2014: p. 225).

This rule made it possible to implement alternative approaches. Initially, it was known that alcohol was being consumed in certain communities despite the prohibition. Notable locations such as Déline, Tulita, and Norman Wells supplied liquor despite the current prohibition. These situations often generate other secondary problems and unpleasant incidents, as the Royal Canadian Mounted Police search airports and access roads, especially those used in winter, in case a traveler is carrying more than one bottle. I have experienced this search several times, but without consequences, as I reject such consumption.

Another related aspect that has surfaced is domestic smuggling, as it has become a lucrative activity. Local leaders have planned the steps to be taken, believing that these are the steps to take in the right direction; moreover, they hope that by reducing alcohol consumption, there will be less domestic violence and that neighbors will respect each other more. Likewise, those in charge hope that absences from work will not occur. Ultimately, they assume that by giving up drinking, the tribal spirit will recover, following the teachings of the great masters.

The current Dènè of Sahtu have learned to live in harmony and rarely show hostility toward each other, except when under the perfidious influence of alcohol. However, under the influence of rum or whiskey, the picture changes, and fighting appears immediately and increases as one loses their sanity. When they regain their composure, they will calmly confess: "If I did this, it's because I was drunk".

Husbands punish their wives and beat them mercilessly as soon as they drink.

Some of them have started drinking, thinking that if they are at the party, they will be respected. The data reported do not seem to say that domestic violence has decreased, and this cycle continues despite the restrictions.

One of my informants, a resident of Fort Good Hope, confessed to me that one day a cat had drowned in one of the homemade drums in which he was fermenting the drink he was going to consume in a few hours. When he opened the lid and saw the dead animal, he wrung it out like a wet cloth, trying not to lose a single drop of the 45 gallons required to make them lose all consciousness after consuming it.

The real fact is that alcohol has a significant impact on the social life of the Dene of Sahtu; moreover, it has a devastating effect on family and work life. An outstanding issue is assessing the results and efforts that the bans will generate, and this aspect must be evaluated in the long term. Calls announcing meetings with people affiliated with Alcoholics Anonymous who have overcome the vice are poorly attended. Everyone recognizes the problem but seems inactive in addressing it.

Added to the concerns are other concerns. Sahtu's children attend school and learn English, and attend added classes focused on their ancestral language, as the leaders do not want to lose this heritage inherited from their elders, but the number of native language speakers is gradually decreasing. The impact of television, to which they are glued all day, is exerting a powerful influence. Another added problem is that a high percentage of children show alcohol-related syndromes, with the figure around three-quarters, which forces us to rethink many aspects of daily life. School attendance is very irregular, especially when parents do not value the importance of a formal education (Brown, 2014: p. 221).

Another disturbance connected to education is that young people are being trained for jobs in oil wells, mining, and tourism, three jobs that didn't exist in their traditional communities. Speaking about this one day with Frank Pope, mayor of Norman Wells, he told me that he had more than twenty high school graduates in this town who were unemployed, but who wouldn't accept employment outside the settlement. The reason for this is that these young people fear unfamiliarity, and this context creates uncertainty in the communities about anything foreign and unknown, even if it's in the Sahtu region. Many cling to the security of their families because they know their relatives.

In recent years, many problems and opposition have arisen about residential schools (boarding schools), which were initially established based on religious and missionary principles, but with financial support from the federal government and programs from the same sources. This situation appeared in the late 19th century, but gained momentum after 1945, and more specifically from 1960 onward. At the time, these centers operated with policies of social and cultural assimilation, proposed by the federal government and implemented by Anglican and Catholic missionaries. The idea was to remove children from their native and maternal homes at an early age and educate them in English and away from any family influences,

since only in this way would their Indigenous origins be eliminated (Junquera Rubio & Fernández, 2019).

In the late 1960s, proposals were made to set up biculturalism and later multiculturalism. As Aboriginal groups in Canada, and especially in the Northwest Territories, gained a degree of autonomy, the residential school system quickly disappeared, giving priority to communities having their own educational centers (Burnet, 1988: p. 1401). Fortunately, fundamental policy changes were proposed at the federal level in the 1970s and 1980s.

A significant social impact, which occurred during these times, occurred when the effects of residential schools on the children of previous generations were reexamined. Accounts of abuse and deplorable situations became public and have reached all Canadian and international media outlets. Following certain allegations, commissions, meetings, investigations, and so on began to be established. Public apologies were issued by both the government and the churches involved, and large monetary compensations were promised. While the measures taken may have offered some recognition of wrongdoing and proposed measures of justice and reparation for certain proven facts, the process itself appears to have generated controversy, overreach, and even demonstrated greed among Native American defense lawyers. The negative social impact has been exploited for financial gain in the courts, given the generous nature of the federal government.

A recent and well-documented essay in Maclean's magazine outlines the role and compensation that trial lawyers expect to receive for their clients, although no amount is indicated for them to award. The total claimed amounts to approximately two billion Canadian dollars, which is what the federal government has already budgeted to settle this matter. However, and in anticipation of what may happen, it is suggested that the final amount could be around five billion dollars. I recently addressed this issue with another colleague, and it is possible that the model will continue to be investigated and positive facts will emerge, which it also has and even offers ingredients that can be assessed as suitable for evaluating the current identity of the natives residing in the Sahtu region (Junquera Rubio & Fernández, 2019).

Traditionally, the Dènè culture, like that of many other societies, has established that children are responsible for caring for their parents when they reach old age. One of the traditional trappers, one of those who wished to remain anonymous, once told me in Tulita that he always provided his descendants with the best captured furs for trade. He refrained from punishing them so they wouldn't have any bad memories of their parents, and what he wanted was for them to have a childhood and youth filled with happiness and good times.

Another Fond du Lac resident, Tom Monfwi, refused to let his daughter go to Edmonton to train as a nurse. He told me that if I let her go, she might never return and that he felt I should provide her with aid in her old age. These examples are reported in addition to the fact that, in recent years, the government has begun constructing buildings designed to house the elderly. As this Indigenous culture

has shown, even living in luxurious residences does not eliminate family responsibilities.

This aspect must also be considered in contrast, because when a huge building was built in Déline to house the elderly, costing millions of dollars, it resulted in the relatives losing access to their monthly old-age benefits, which amounted to more than a thousand dollars per person. In this context, many were removed from that residence and returned to their homes. Another important budget the federal government must address is distributed to health care. Most communities in northern Canada now have health centers staffed by staff from the southern provinces, primarily from Calgary, Edmonton, Regina, and other centers, even as far away as Toronto. This care is free and includes medications and dental checkups, including fillings and dentures.

This figure is augmented by ophthalmologists and prescription glasses. Individuals needing X-rays must be transferred to centers where a hospital operates. Travel and accommodation, if necessary, are expenses borne by the federal government and usually include the cost of airfare. If charter flights are needed, which are often expensive in this part of the world, the payment is made by state agencies. These images have obliterated the presence of shamans who would come to the homes of the sick to heal them with their songs and sounds made with their drums (Brown, 2014: p. 224). In this respect, postmodernism has eliminated tradition.

The collected stories that depict hunger and cannibalism are now legends of the past. The Dènè have the means to eat well, and stores supply everything they need, relying on state aid to obtain food. Native societies have perfected a taste for white man's food. At first, they opted for lard instead of butter, and they preferred tea to coffee, but these customs have changed. Currently, they consume cocoa, mustard, and tomato sauce, products that they took a while to acclimatize. Those who smoke do so like whites and the elderly, who always smoked pipes; few remain to maintain the tradition (Brown, 2014: p. 224).

Father René Fumoleau, a French Oblate who recently passed away, was the initiator of the first cooperative. He founded it in Déline in 1963. The idea may have been good, but this venture failed to create jobs for the residents. Positions of responsibility fell to native people, but as managers, they proved incapable of preventing their relatives and friends from frequently exceeding their own credit limits, and the cooperative failed (Brown, 2014: p. 224).

Those who decided to become guides for sport fishermen and tourists quickly grew tired of being at the helm of an outboard motor all day; moreover, they found it difficult to get to the pier on time in the mornings. The girls who helped with cooking and washing clothes had a bad habit of not showing up for work and did not give advance notice of their absence. Many of these jobs have been unfulfilling, because the Dènè have not grown accustomed to the discipline of the white man, much less to his workday.

The Indigenous people of the Sahtu Region now elect their leaders, who hold

frequent meetings with government officials and lobby regarding the demands put forward by their respective band. When they have tried to control the social behavior of their fellow citizens, the response has been to expel them from their positions. Consequently, supporting power depends on the amount of aid obtained from ambassadors sent from Ottawa.

The government built a modern jail in Yellowknife to house Native criminals. It is equipped with ultramodern technology and has instructors to teach inmates mechanics and carpentry skills. It is money wasted, as most of the inmates are emotionally too attached to playing poker. I have spoken with individuals who have spent time being incarcerated here who came from Tulita, Fort Smith, Norman Wells, and other places. All agree that they were well-fed and that their time there was enjoyable. Supposedly, captivity does not seem to act as a deterrent to lawbreaking.

As a result of negotiations to settle land claims since the mid-1970s, the federal government has granted soil, subsoil, and certain lucrative subsidies. These Native people have asserted that their ancestors, those who signed any agreement with an "X", did so because they believed they were approving a peace treaty and therefore requested a review. Frank Pope, mayor of Norman Wells, and Sister Celeste Goulet, a missionary in Tulita, assured me that government officials spent days explaining the content of each agreement before it was presented for signature. This same point is made at length by Fumoleau (1973: pp. 168-210).

5. Conclusion

It is not easy to predict the future of the Dènè of the Sahtu region, but I doubt that, in the next fifty years, or perhaps more, they will return to being hunters like their immediate ancestors, even if precious furs may fetch exorbitant prices on the market. The youth confess that the lives of their elders were very boring, even though they have never experienced it. They understand that their future depends largely on oil and diamond exploitation, as they will obtain higher income from the royalties these companies pay them for leases and use of access roads.

It remains to be seen whether the Native Americans of the Sahtu region will join the Canadian mainstream, instead of insisting on being a nation within a nation. Their population is currently growing at twice the rate of the Canadian national average. Given some semblance of self-governance, federal policies favoring a recovered identity for Native peoples in Canada, and improving economic prospects, they will need to carefully negotiate their place within the broader Canadian mosaic. Perhaps strong faith will support them as they move into an uncertain future and transform it into a promising one.

Caribou have been a food and renewable resource for the peoples of the Canadian North for millennia (Burch, 1972). Today, the territory offers oil and gas-based operations. To these, we can add others related to the extraction of diamonds, gold, uranium, and zinc, as well as the development of projects aimed at coal gasification. What will happen to the caribou, their environment, and the subsistence activities

of the people of the Sahtu region? What will be the social price of economic development?

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

- Bell, J. M. (1901). Explorations in the Great Bear Lake Region. *The Geographical Journal*, 18, 249-258. <https://doi.org/10.2307/1775131>
- Berkes, F. (1990). Native Subsistence Fisheries: A Synthesis of Harvest Studies in Canada. *ARCTIC*, 43, 35-42. <https://doi.org/10.14430/arctic1588>
- Blondin, G. (1990). *When the World Was New: Stories of the Sahtu Dene*. Outcrop, the Northern Publishers.
- Blondin, G. (1993). *My Life in the Sahtu*. Royal Commission of Aboriginal Peoples.
- Blondin, G. (1997). *Yamoria the Lawmaker: Stories of the Dene*. NeWest Press.
- Bone, R. M., & Mahnic, R. J. (1984). Norman Wells: The Oil Center of the Northwest Territories. *ARCTIC*, 37, 53-60. <https://doi.org/10.14430/arctic2163>
- Brown, B. W. (2014). *End-of-Earth People: The Arctic Sahtu Dene*. Dun-durn.
- Burch, E. S. (1972). The Caribou/Wild Reindeer as a Human Resource. *American Antiquity*, 37, 339-368. <https://doi.org/10.2307/278435>
- Burnet, J. (1988). Multiculturalism. In J. Burnet (Ed.), *The Canadian Encyclopedia* (Vol. 3., p. 1401). Hurting Publishers.
- Canada (2005). *Canada-Déline Uranium Table. Final Report*. Deline Uranium Team.
- Crowe, K. J. (1974). *A History of the Original Peoples of Northern Canada*. McGill-Queen's University Press.
- Dokis, C. A. (2016). *Where the Rivers Meet: Pipelines, Participatory Resource Management, and Aboriginal-State Relations in the Northwest Territories*. University of British Columbia Press.
- Donalson-Forbes, J. (2006). *Jacques Cartier*. The Rosen Publishing Group.
- Finkelstein, M. (2002). *Canoering a continent on the Trail of Alexander Mackenzie*. Natural Heritage.
- Finnie, R. (1942). A Route to Alaska through the Northwest Territories. *Geographical Review*, 32, 403-416. <https://doi.org/10.2307/210382>
- Fitzhugh, W. W. (2015). The Inuit Archaeology of the Quebec Lower North Shore. *Études/Inuit/Studies*, 39, 37-62. <https://doi.org/10.7202/1036077ar>
- Franklin, J. (1824). *Narrative of a Journey to the Shores of the Polar Sea in the Years 1819-20-21-22*. John Murray. <https://doi.org/10.5962/bhl.title.9671>
- Franklin, J., & Richardson, J. (1828). *Narrative of a Second Expedition to the Shores of the Polar Sea, in the Years 1825, 1826, and 1827*. John Murray. <https://doi.org/10.5962/bhl.title.39025>
- Fumoleau, R. (1973). *As Long as This Land Shall Last*. McClelland and Stewart.
- Fumoleau, R. (2004). *As Long as This Land Shall Last* (2nd ed.). University of Calgary Press. <https://doi.org/10.2307/j.ctv6gqrx6>
- Graburn, N. (1979). Indian-Eskimo Relations. *Arctic Anthropology*, 16, 184-195.
- Griffith, J. W. (1967). *The Uranium Industry. It's History, Technology and Prospects*. The

Queen's Printer.

- Hearne, S., & Tyrrell, J. B. (1911). *A Journey from Prince of Wales's Fort in Hudson Bay to the Northern Ocean, in the Years 1769, 1770, 1771, and 1772*. Champlain Society.
<https://doi.org/10.5962/bhl.title.28167>
- Helm, J. (1994). *Prophecy and Power among the Dogrib Indians*. University of Nebraska Press.
- Hewetson, H. W. (1947). Transportation in the North-West. In C. A. Dawsons (Ed.), *The New North-West* (pp. 185-226). University of Toronto Press.
- Hoijer, H. (1963). *Studies in the Athapaskan Languages*. California University Press.
- Hopkins, O. B. (1943). The 'Canol' Project. *Canadian Geographical Journal*, 27, 238-249.
- Ingold, T. (1980). *Hunters, Pastoralists and Ranchers: Reindeer Economies and Their Transformations*. Cambridge University Press.
<https://doi.org/10.1017/cbo9780511558047>
- Johnson, L. (1976). The Great Bear Lake: Its Place in History. *ARCTIC*, 28, 230-244.
<https://doi.org/10.14430/arctic2840>
- Junquera Rubio, C. (1986). Los esquimales del Bajo Mackenzie. *Cuadernos de Realidades Sociales*, 27-28, 267-278.
- Junquera Rubio, C. (1987). Los esquimales del Bajo Mackenzie, II. *Cuadernos de Realidades Sociales*, 29-30, 201-214.
- Junquera Rubio, C. (1995). Una aproximación a los criterios que permiten evaluar la asociación entre pueblos y el reconocimiento de los derechos políticos en los territorios del noroeste del Canadá. *Revista Española de Antropología Americana*, 25, 135-151.
- Junquera Rubio, C. (2006). *La identidad étnica en los Territorios del Noroeste canadiense: Dene, Dogrib, Hare, Métis e Inuit*. Universidad Complutense.
- Junquera Rubio, C. (2018). El impacto de la Hudson's Bay Company en los Territorios de las sociedades canadienses a finales del siglo XVIII. *M + A*, 19, 95-120.
- Junquera Rubio, C. (2019). *Canadá. A Mari Usque Ad Mare*. Eunate.
- Junquera Rubio, C. (2021). Arquitectura autóctona de los dènè del río Mackenzie (Canadá). In S. R. Becerra, & P. Panero (Eds.), *Pensar la Tradición. Homenaje al Profesor José Luis Alonso Ponga, Vol. I*. (pp. 821-838). Universidad de Valladolid.
- Junquera Rubio, C. (2022). *Descubriendo y cartografiando: Los rusos en el Pacífico septentrional entre 1619 y 1867*. Eunate.
- Junquera Rubio, C. (2023). The Impact of European Colonialism in the North American Pacific from the 16th Century. *Siberian Historical Research*, 4, 88-110. (In Russian)
- Junquera Rubio, C., & Fernández, S. V. (2001). Del trineo a la postmodernidad: Dènè, Inuit y Métis en la sociedad canadiense actual. *Revista Española de Antropología Americana*, 31, 223-260.
- Junquera Rubio, C., & Fernández, S. V. (2019). *Oblatos de María Inmaculada. Agentes de cambio social y promotores de la modernidad en el Noroeste y el Ártico de Canadá*. Alef del Bronce.
- Kane, P. (1859). *Wanderings of an Artist among the Indians of North America from Canada to Vancouver's Island and Oregon through the Hudson's Bay Company's Territory and back Again*. Longman, Brown, Green, Longmans, and Roberts.
- Kelsall, J. P. (1968). *The Migratory Barren-Ground Caribou of Canada*. Canadian Wildlife Service.
- Krech III, S. (1979). Interethnic Relations in the Lower Mackenzie River Region. *Arctic*

- Anthropology*, 16, 102-122.
- Krutko, M. (2004). *Mike Krutko's Amazing Adventures*. Trafford.
- Lee, T. (2006). *Northerners Presenting to the JRP about Looking after the Land*. WWF Canada.
- Legoff, L. (1889). *Grammaire de la langue montagnaise*. Forgotten Books.
<https://doi.org/10.5479/sil.1107331.39088005795463>
- Lloyd, T. (1944). Oil in the Mackenzie Valley. *Geographical Review*, 34, 275-307.
<https://doi.org/10.2307/210122>
- Mackenzie, A. (1903). *Voyages from Montreal through the Continent of North America: To the Frozen and Pacific Oceans in 1789 and 1793*. Barnes and Company.
- McLaren, D. E. (1974). *A Survey of Current Factors Influencing Harbour and Port Development in the Canadian North*. Ministry of Transport.
- Meis Mason, A., Anderson, R. B., & Dana, L. (2008). Globalisation and the Dene First Nations of Canada. *The Global Studies Journal*, 1, 71-78.
<https://doi.org/10.18848/1835-4432/cgp/v01i02/40813>
- Miller, R. B. (1947). Great Bear Lake. *Bulletin of the Fisheries Research Board of Canada*, 72, 31-44.
- Mishler, C. (1990). Missionaries in Collision: Anglicans and Oblates among the Gwich'in, 1861-65. *ARCTIC*, 43, 121-126. <https://doi.org/10.14430/arctic1601>
- Morice, A. G. (1910). Hare Indians. In C. G. Herbermann (Ed.), *Catholic Encyclopedia*, Vol. VII (pp. 136-137). Robert Appleton Company.
- Morse, E. W. (1968). *Fur Trade Canoe Routes of Canada/Then and Now*. Crown.
- Müller-Wille, L. (1974). Caribou Never Die! Modern Caribou Hunting Economy of the Dene (Chipewyan) of Fon du Lac, Saskatchewan and N. W. T. *The Musk Ox*, 14, 7-19.
- Norris, M. J. (2006). Aboriginal Languages in Canada: Trend and Perspectives on Maintenance and Revitalization. In J. P. White, S. Winget, D. Beavon, & P. Maxim (Eds.), *Aboriginal Policy Research: Moving Forward, Making a Difference* (pp. 197-228). Thompson Educational Publishing.
- Northwest Territories Transportation (2015). *NWT Transportation Strategy 2015-2040*. Northwest Territories Transportation.
- Office of the Commissioner of Official Languages (1860). *Confederation: A Bold Vision for Canada*. Office of the Commissioner of Official Languages.
- Office of the Commissioner of Official Languages (1870). *Talle-de-Saules (Now Willow Bunch), Saint-Laurent-de-Grandin and Batoche Leave Their Mark in Saskatchewan*. Office of the Commissioner of Official Languages.
- Office of the Commissioner of Official Languages (1880). *The Indians Residential School System Is Officially Established*. Office of the Commissioner of Official Languages.
- Office of the Commissioner of Official Languages (1891). *In the Northwest Territories, the Territorial Legislature Is Empowered to Regulate Its Proceeding*. Office of the Commissioner of Official Languages.
- Olsen, B., MacDonald, M., & Zimmer, A. (2001). *Co-Management of Woodland Caribou in the Sahtu Settlement Area: Workshop on Research, Traditional Knowledge, Conservation and Cumulative Impacts*. Sahtu Renewable Resources Board.
- Osgood, C. (1931). The Ethnography of the Great Bear Lake Indians. *Bulletin of the Department of Mines, National Museum of Canada*, 70, 31-92.
- Petch, V. C. (1998). *Relocation and Loss of Homeland: The Story of the Sayisi Dene of North-*

- ern Manitoba*. Ph.D. Thesis, The University of Winnipeg.
- Petitot, E. (1876). *Dictionnaire de Langue Dene-Dindjie: Dialectes Montagnais ou Chipewyan, Peaux de Lièvre*. Ernest Leroux.
- Petitot, E. (2005). *Travels around Great Slave and Great Bear Lakes, 1862-1882*. The Champlain Society.
- Piper, L. (2009). *The Industrial Transformation of Subarctic Canada*. University of British Columbia Press.
- Ray, A. J. (1998). *Indians in the Fur Trade*. University of Toronto Press.
- Remie, C. (1985). Toward a New Perspective on Netjilik Inuit Female Infanticide. *Inuit Studies*, 9, 67-76.
- Richmond, C. A. M., & Cook, C. (2016). Creating Conditions for Canadian Aboriginal Health Equity: The Promise of Healthy Public Policy. *Public Health Reviews*, 37, Article No. 2. <https://doi.org/10.1186/s40985-016-0016-5>
- Robinson, S. C., Evans, H. T., Schaller, W. T. & Fahey, J. J. (1957). Nolanite, a New Iron Vanadium Mineral from Beaver Lodge. *American Mineralogist*, 42, 619-628.
- Savishinsky, J. S. (1978). *The Trail of the Hare: Life and Stress in an Arctic Community*. Gordon and Breach.
- Stewart, D. B. (1996). *A Review of the Status and Harvests of Fish Stocks in the Sahtu Dene and Metis Settlement Area, Including Great Bear Lake*. Fisheries and Oceans Canada.
- Tejera Gaspar, A., & Capote Álvarez, J. (2005). *Colon y la Gomera. La colonización de la Isabela (República Dominicana) con animales y plantas de Canarias*. Centro de Cultura Popular Canaria.
- Wilson, C. R. (2003). The Northern Athapaskans: A Regional Overview. In W. C. Wonders (Ed.), *Canada's Changing North* (pp. 96-101). McGill-Queens University Press.
- Wonders, W. C. (2003). *Canada's Changing North*. McGill-Queen's Press.