

Luna / Tsu-xiit the “Whale”: Governance Across (Political and Cultural) Borders¹

By Emma S. Norman, Ph.D., Northwest Indian College

Abstract: *This case examines the multiple discourses (identities) created around Luna, a lone juvenile orca (or killer whale, *Orcinus orca*) in the remote waters off of the northwest coast of Vancouver Island, British Columbia. This case illustrates the complexities associated with managing “resources” that transcend both political borders (in this case, the Canada-U.S. border) and cultural borders (Western - non-Western). The case compares the experiences of the Mowachaht/Muchalaht First Nation, which recognizes Luna (or, in the perception and language of the Mowachaht/Muchalaht, Tsu-xiit) as its chief incarnate, with those of governmental employees (Fisheries and Oceans Canada, or DFO) who are charged with the task of protecting marine life and habitat. The case illustrates how a single living being can hold multiple meanings to multiple people. In so doing, the story of Luna brings to light two main points: Modern conceptions of nature are constructed socially, and governance of shared resources requires an acceptance of diverse worldviews – particularly in the case Native and Western belief systems.*

Background

In July 2001 a lone juvenile orca was observed in the remote waters off of the northwest coast of Vancouver Island, British Columbia. The killer whale² was a curious sight. After more than 30 years of research, scientists have come to believe that orcas are social creatures that stay with their families (or pods) for life. Even when the animals are fully grown, they are not known to stray far from their mothers. Why, then, was this juvenile whale in isolation? Why did the orca travel several hundred miles away from its resident community in the San Juan Islands of Washington State to take up residence in the remote Gold River inlet, the traditional territory of the Mowachaht/Muchalaht First Nation?³ Over the next few months, numerous marine scientists travelled to Gold River to observe the orca whale, now identified as L98 in the scientific community, or “Luna” to the general public, in an attempt to answer this question.

¹ Copyright held by The Evergreen State College. Please use appropriate attribution when using and quoting this case. Cases are available at the Native Cases website at www.evergreen.edu/tribal/cases. The author wishes to thank the Mowachaht/Muchalaht First Nation Council of Chiefs for supporting this project and for reviewing the case prior to publication.

² The orca or “killer whale” is actually the largest member of the dolphin family.

³ The Mowachaht/Muchalaht – pronounced Mow-i-chit/Much-a-laht – are located in the Nootka Sound region on the western coast of Vancouver Island. Today, they reside at Tsaxana, located up the Gold River in Muchalat Inlet. Their head chief of Mowachaht is Tyee Ha’wilth Mike Maquinna - the son of Chief Ambrose Maquinna who passed on his hereditary title and responsibilities in 1988. The land, sea, and rivers in their traditional territory remain a major source of food for their people (Inglis 2009). As one community member reflects, “Success in any undertaking, such as fishing, hunting or gathering tree bark, is dependent on effective communication with the spirit beings. By showing respect and taking only what is needed, we remain rich with the resources in our traditional territory.” This is consistent with their belief that everything in their world is interconnected and has a spiritual meaning. Archaeologists have dated their presence in the region for over 4,300 years. However, from their oral histories, they know they have always been there (Inglis 2009).

Time, however, was running short. Luna was putting itself and others at risk by frequently socializing with marine vessels. Luna was frolicking with the boats, rubbing against the vessels and occasionally causing them damage. Although many boaters and observers found much joy in this friendly behavior, “experts” warned boaters that it was best to ignore Luna; that the more attention the whale received from humans the less likely it was he would return to his pod.

As it became increasingly clear that Luna would not reunite with his pod “naturally,” an international effort to “save Luna” ensued. Scientists and governmental officials in Canada corresponded with scientists and governmental officials in the United States to come up with a transnational plan to reunite the orca whale with its pod in the Puget Sound of Washington. A significant financial contribution by a Washington State Senator in October 2003, which was matched a few days later by the Canadian Forestry Minister, provided the extra push for the coordinated move (McClure, 2003). After months of discussions (and a few failed attempts to lure Luna back to his pod), a date was set to move Luna from the waters of British Columbia to the waters of Washington in the summer of 2004 (see Figure 1).

Costs of Non-Consultation

Despite the lengthy bureaucratic endeavors and the coordination of governmental offices at federal, provincial, and state levels, the Mowachaht/Muchalaht First Nation, whose traditional territory Luna inhabited, were not included in these early discussions. Had the governmental officials consulted with the First Nation they would have learned that Luna’s arrival to Gold River was not an “accident” and that the whale was not in fact “lost.” Rather, the orca was actually returning *home*.

In fact, Luna, or – to the Mowachaht/Muchalaht – Tsu-xiit, embodied the sprit of their recently deceased chief, Ambrose Maquinna. Before passing, Chief Maquinna disclosed to the members of the Mowachaht/Muchalaht First Nation that he would return to them in the form of a whale. Five days after his passing, Tsu-xiit arrived.

Tsu-xiit had spent a full year in the traditional waters of the Mowachaht/Muchalaht territory with little fan-fair. During this time, Tsu-xiit exhibited no behavior indicating an intention to return to his resident community in the San Juan Islands. His food source was plentiful, he inhabited waters much cleaner than those found in the southern waters of his relatives, and he found company with which to socialize.

However, the increased pressures from local boat-owners who worried that the whale’s “friendly” behavior would cause expensive property damage, coupled with the listing of the orca whales of San Juan Island as an endangered species, placed pressures on the Canadian government to remove the “problem” whale from Gold River.

The Fisheries and Oceans Canada, (DFO’s)⁴ plan was to capture Luna in a holding pen where marine scientists would observe him for several days to assess whether his health was good enough to move him. Then, a truck would transfer him 350 kilometers where he would be placed in southern waters (ironically in waters much more congested with boat traffic). The hope was that Luna would choose to reunite with his pod as it migrated past this area.

⁴ Fisheries and Oceans Canada was formerly, and remains commonly known as the Department of Fisheries and Oceans, or simply, "DFO."

Despite this lengthy coordination process, the Mowachaht/Muchalaht First Nation was never directly informed of the transfer. In fact, the Mowachaht/Muchalaht community members only learned of the plans to capture the orca whale through an anonymous tip to the health center, in which the informant suggested they prepare for possible injuries associated with pepper spray. Not including the Mowachaht/Muchalaht First Nation in this decision-making (governance) process is systematic of greater issues associated with non-consultation and non-recognition that the First Nations of Canada faced during this time (and continue to face, in various degrees). In this case, the results of the non-inclusion led to what is now referred to as the “nine-day standoff.”

Nine-day Standoff

In an effort to keep the whale and chief incarnate in Canadian waters, members of the Mowachaht/Muchalaht First Nation diverted Tsu-xiit away from the holding pens set up by governmental officials. For nine days, they were able to steer Tsu-xiit away from the pens by showering him with attention – paddling with him, rubbing his side, and singing traditional songs to him. Striking images of community members paddling alongside Tsu-xiit hit the media by storm and launched the story into the public eye.

After the Mowachaht/Muchalaht started paddling with Tsu-xiit and publically announced his position as the chief incarnate, it was clear that a new plan would have to be devised. An article published by the Canadian *Globe and Mail* two days into the stand-off reported:

Department of Fisheries and Oceans officials could *only stand by and watch* as their quarry swam out toward the sea. The unexpected development *threw a wrench* into a highly publicized and costly plan to capture whale and truck it 350 kilometers down the coast to a bay near Victoria (emphasis mine, Armstrong, 2004).

The language in the newspaper article indicates a significant power-shift within the Canada-First Nations relationship, eventually leading to greater consultation.

It was not immediately evident, however, that the First Nation would succeed in its efforts to stop the plans. In an article written about the incident, Mowachaht/Muchalaht First Nation member Tyee Ha’wilth Mike Maquinna noted their potentially vulnerable position:

The concern we have is that DFO is trying to escalate this into a conflict... All we are doing is the same thing we’ve been doing here for thousands of years; paddling our canoes and singing songs. We have a very special connection with Tsu-xiit and we’re paddling in support of him,” he said. “We’re trying to stay out of harm’s way, but DFO seems committed to turn this into a battle, even though we’ve made it clear we don’t want that. They have bulletproof vests, guns, and high-powered vessels. We’re just paddlers in traditional canoes. (Wiwcher, 2004)

The highly publicized stand-off eventually succeeded in halting the plans to capture and move Tsu-xiit. This public negotiation underscored the need for prior consultation, and demonstrated the costs – socially, politically and economically – of exclusion.

Consultation

These dramatic, highly publicized, yet peaceful, demonstrations helped to open up the dialogue between the governmental officials and the Mowachaht/Muchalaht First Nation. As a result of the standoff, the First Nation and the governmental officials began a consultative process to discuss the fate of Tsu-xiit whereby the Mowachaht/Muchalaht were able to explain why they rejected the removal plan. Several reasons were outlined to explain why Tsu-xiit should not be moved, beyond the fact that the whale was their chief incarnate returning home.

For one, the plan did not respect Luna's decision to reside in Gold River – a choice worthy of both respect and consideration. Secondly, the plan to transfer Luna did not assure the whale's safety, nor did it solve the “boat problem.” In fact, the southern waters were much more congested with boats – and far more polluted – than the relatively quiet Gold River. Thirdly, no plan was in place if Luna did not reunite with his pod. The agencies did not allocate any funds for a return trip if the mission failed. As a result of these discussions, the Mowachaht/Muchalaht First Nation was eventually recognized as Luna's official protectorate. To help protect Luna from boats (and boats from Luna), the First Nation formed a stewardship group to monitor the waters while the consultation between governing sectors continued.

These negotiations ensued until one spring morning in 2006, when Luna encountered an exceptionally large tugboat that had pulled into Nootka Sound in an attempt to avoid inclement weather. Luna, perhaps curious of the unfamiliar vessel, swam up alongside the 104-foot tugboat and, within seconds, was pulled underneath its hull and killed instantaneously by the propellers.

Despite Luna's tragic and untimely death, his story and the issues surrounding its public unfolding, remain very much alive. We have much to learn from this experience.

The multiple perceptions of Luna

The orca's niche in Western society has changed significantly over the past 40 years. The dynamic genealogy is dizzying - from elusive, to hunted, to entertainment in a pen, to entertainment in the wild. Each of these identities has been constructed, branded, and accepted by a wider public. Furthermore, each transition has slipped into the next phase without much notice or discussion (see Appendix A).

These inconsistencies are indicative of the multiple constructions developed around whales in general, and Luna, specifically. In many ways, Luna functions as a mirror reflecting variant perceptions of nature. Luna is many things to many people. To the marine scientists, Luna is L98, a stray orca whale that exhibits atypical behavior. To the Mowachaht/Muchalaht, Tsu-xiit is the incarnation of their chief. To the casual boater, Luna is a friendly animal that rubs against their boat. To the commercial fisher, Luna is a liability to their assets. To the governmental official, Luna is an international incident that requires coordinated efforts and federal funds. And, to the environmentalist Luna is an endangered animal that needs to be protected. With so many people interpreting this entity, how is it possible to act on its behalf? How can anyone collectively decide what is best for it, if it does not hold a clear and singular identity?

These multiple constructions are indicative of the variation in worldview that each stakeholder brings to the negotiating table. Luna only exists through the interpretation of each individual. Or, as Donna Haraway notes, nature (read Luna) cannot preexist its construction (1991). Experiences as a fisherperson, a politician, an environmentalist, or a

mother all inform people's relationships to the whale. Through stories and schoolbooks, children learn to either fear (as in the biblical story of Jonah) or adore (as in the Free Willy films) whales. In adulthood, politics and economics increasingly shape and inform human perceptions of nature and wildlife as things "worthy" of protection or as "resources" for greater economic gains.

Thus, neither Luna, specifically, nor orca, in general, are neutral terms. Framing the notion of whales as a singular identity has political consequences. Not recognizing or appreciating these multiple constructions and perspectives is, in fact, at the heart of many struggles over the environment. This is seen in the logging controversies that focus on Canada's west coast. Like Luna, the fate of the temperate rainforest has "pitted environmentalist against industry, First Nations against the state, environmentalists against First Nations, even the state against industry, in a complex shifting matrix of political actors" (Braun and Wainwright, 2001, p. 50). As Braun and Wainwright note, the controversy is not about the "rainforest" as singular, rather it is about the politics of the discursive practices that produced the ideology surrounding the "rainforest." Hence, in environmental politics – regardless of the issue – it is the act of framing nature rather than nature itself that has political consequences.

This challenge to Western doctrines of science is particularly powerful because the First Nation's announcement immobilized the Province of British Columbia's and the State of Washington's plans to move the orca. The fact that those governments could not move the whale without negotiating with the First Nation indicates a very significant power-shift within the history of Canada-First Nations relationships. Although the negotiations surrounding Luna stopped after his death, the lessons learned from these negotiations may carry over into future discussions.

The following three appendices supplement the case and add content regarding the production of knowledge and scientific discourse.

Appendix A: The Changing Meaning of “Whale”

Whales have captivated humans for centuries. Scores of stories have been created around their magical properties, from the classic text of *Moby Dick* where the elusive whale is the demise of men fixated on the idea of killing the “*biggest whale in the ocean*” to First Nations creation stories where whole civilizations are created through the magical properties of whales. However, human concepts of whales’ place in nature have changed dramatically over time. Just as the idea of wilderness has shifted from a “dark and sinister place” to a “tranquil and rejuvenating place,” so too have perceptions of whales changed.⁵ Surveying the changing discourse surrounding whales, particularly orca whales, is a necessary starting point to understand why and how Luna has risen to almost mythical status, captivating the attention of thousands of people worldwide.

Orcas have long evoked strong emotions such as fear and love. Records of people’s relationships to these whales are recorded in folklore and legends worldwide.⁶ In marine folklore, particularly amongst fisher people, the orca was depicted as a voracious predator that was extremely bloodthirsty and dangerous to humans. This attitude is seen as early as the 1st century A.D., when the Roman scholar Pliny the Elder wrote, “A killer whale cannot be properly depicted or described except as an enormous mass of flesh armed with savage teeth” (Ford 2000: 10). Captain Charles Scammon wrote in 1874 that, “in whatever quarter of the world [orcas] are found, they seem always intent upon seeking something to destroy or devour” (Ford 2000: 10). As Ford further recounts, even as late as 1973, manuals used by the U.S. Navy warned divers of the ferocious nature of orcas and that “they will attack human beings at every opportunity” (2000:11). For example, in the coastal waters of British Columbia and Washington orcas have, until recently, been seen as fierce competition for salmon fishermen. The Canadian Department of Fisheries and Oceans had even devised a plan to start culling orcas, as evidenced by a letter from the planning committee dated July 28, 1960:

It is recommended that one .50 caliber machine gun with tripod mounting be used [at Seymour Narrows] with ball ammunition only ... If the whales approach from the westward, the method of attack would be to open fire when they approach ... in an endeavor to turn the head back and so prevent them from entering Seymour Narrows and continuing on to Campbell River area ... Should the whales approach from the Campbell River side, it would be preferable to withhold fire until they passed to the westward of the gun position, to prevent turning back toward Campbell River only.
(Quoted in Ford, 2000, p. 12)

⁵ See Cronon (1996) and White (1980) for an in-depth discussion on the changing meaning of wilderness

⁶ The diverse records are due to the whales’ wide distribution. Orca whales hold the distinction of being the second most widely distributed mammal on earth. The whales can be found near the frozen ice of the poles, through the temperate forest and into the tropical seas along the equator. The whales have concentrations in certain waters, such as off Antarctica, northern Japan, Iceland, Norway, Alaska and British Columbia (Ford 2000).

However, not all communities fear orcas. Many indigenous coastal cultures have long regarded orcas with admiration, respect, and awe. The whale is featured prominently in art and mythology of many indigenous peoples throughout the Pacific region of North America.

For the Mowachaht/Muchalaht First Nation, orcas are revered as the protectors of the sea. The Tlingit of southeast Alaska also view the orca or Keet Shu-ka as their guardian, protecting them from danger and providing gifts of strengths, health and food. The Coast Salish tribes of Northwest Washington such as the Tulalip and Swinomish, also view the orca as sacred and their creation stories depict the orca as a savior who helped their ancestors during the great flood.⁷ The Haida of the Queen Charlotte Islands (Haida Gwaii), self-identify with the orca, calling themselves the Sgaana Xaaydagaay (literally, "killer whale [orca] people").

Relationships between people and whales are inseparable from specific environmental and cultural histories. However, recent shifts in attitudes towards orcas can be linked to the global shift in attitudes towards whaling as an industry. Whale hunting has a long history. Communities off the coasts of Japan, Norway, Greece, and Alaska are known as some of the oldest whale hunting cultures in the world, with evidence of hunting as early as 1500 B.C. (Slijper, 1962). Although whale hunting has occurred in different corners of the world for thousands of years, the whale populations were not significantly threatened by early hunting methods. As environmental historian J. McNeill states, in a characteristically macro-historical perspective, “for the first 50 million years, whales enjoyed an unusual peace” (McNeill, 2000 p. 238). However, in more recent history, whales have suffered the “rogue hand of man” as technological advancements have made it significantly easier to harvest and process whale products. This was particularly true during the 18th and 19th centuries when whales were especially valued for their oil. The oil was used primarily as fuel for lamps, but also for heating; lubrication of machinery; soap, paint and varnish manufacturing; perfume; and the processing of textiles and rope. In North America, whaling started to decline after 1850 with the development of kerosene as a cheaper, more viable source of oil (Robbins, 1992).

However, whaling did not decline worldwide. Countries like the former USSR and Japan continued to hunt extensively for both oil and food. It was not until 1979, when the former USSR took what the world perceived as simply *too* many whales, that whaling was seriously called to question worldwide. The catch of 916 whales in the Southern Hemisphere, in contrast to their typical 25-per-season catch, raised concern among many conservationists and the wider public (Ford, 2000). This led the International Whaling Commission – established to help regulate the whaling industry - to recommend a suspension of further killing until more was known about the impact of hunting on populations⁸ (IWC, 2004). International opinions regarding human relationships to whales, however, had started to change earlier.

⁷ The Maori people of New Zealand have similar legends with the humpback whale – where the whale helped their ancestors move from Hawaii to New Zealand. This legend was recently popularized when it was depicted in the film, *The Whale Rider*.

⁸ The International Whaling Commission was founded in 1946 to “provide for the proper conservation of whale stocks and thus make possible the orderly development of the whaling industry” (IWC 2004).

In the late 1960's attitudes towards whales started to shift dramatically. Orca whales, for example, were losing their reputation as "ferocious killers" and gaining a reputation as "loveable" whales "worthy" of protection. Emphasis away from the predatory habits of the whale was replaced with images of a friendly whale that performed awe-inspiring acrobatics. Even the name changed from killer whale to the more scientifically-based orca whale. This shift can be attributed to two main factors. For one, a general concern for the environment was becoming a worldwide issue. Doomsday reports by conservation biologists such as Rachel Carson and Paul Ehrlich, coupled with the massive oil spill off the coast of California, helped mobilize the burgeoning environmental movement in North America and beyond (Kraft, 2004; Nelson, 2002). This increased environmental consciousness translated into a "new tolerance and compassion for the species" (Ford, 2000, p.12).

Ironically, a second reason for the change in attitude was that millions of people became acquainted with orca whales through aquarium and Sea World shows. Through this growing entertainment industry, the whales began to earn a reputation of being smart and friendly rather than shrewd and malevolent. With an estimated 10 million people visiting Sea World parks annually, people started to know, and love, the orca whales (WDCS, 2004). Shamu, the most famous whale in captivity, became the unofficial mascot for the protection of killer whales.⁹

However, it was not long before aquaria, themselves, were considered inappropriate places for whales. The increased profile of Shamu led people to question the effects and appropriateness of capturing whales from the wild and keeping them in captivity (Ford, 2000).¹⁰ Animal rights groups became increasingly vocal about the negative effects of keeping orcas in captivity, particularly focusing on Sea World, which owns 48% of captive whale populations (WDCS, 2004). This message condemning the captivity of whales is posted on the Whale and Dolphin Conservation Society's website:

Unaware of their plight, millions of people flock each year to watch the orca show, seduced by the extravagant promises of the display industry. Glossy brochures herald a spectacle - billed "The Wettest Show on Earth!" which will simultaneously entertain and educate the whole family ... Visitors are invited to enter a fantasy land where orcas weighing several tons circle, leap and tail-slap seemingly out of sheer high spirits. Highly-choreographed show routines, performed to a background of tired old rock songs, are presented as "natural behavior" ... Clever marketing and showmanship have, however, failed to completely conceal the reality behind the razzmatazz. Visitors may experience feelings of disappointment, distaste and disillusionment after watching the orcas perform, finding it hard to articulate these feelings precisely, but aware that the docile, playful orca portrayed is far removed from the real animal (WDCS 2004).

Keeping the whales in captivity, which initially brought attention to the "friendly nature" of the species, soon became perceived as "cruel" and "unnatural." This attitudinal shift occurred in a relatively short period of time, considering only a few years earlier the culling of orcas seemed a viable option for the Canadian government. This backlash to

¹⁰ Capturing, or "commercial netting," had become a lucrative business and greatly increased since it began in 1965 (Ford 2000: 13).

the entertainment industry is evidenced by Hollywood movies such as *Free Willy*, where an orca whale is successfully “saved” by a young boy who rises against industry to release the whale back to the wild. The movie’s popularity led to a grassroots movement to “free” the real-life orca that played Willy (i.e., Keiko). As a response to the public attention, donors such as Warner Brothers and United Postal Service helped pay for the costs associated with rehabilitating Keiko, and moving him to a sea pen off the coast of Iceland where marine ecologists trained him to be wild again (Keiko, 2004).¹¹ Thus, orcas started becoming branded as simultaneously “wild” and “friendly,” and the public began demanding that whales be appreciated in their “natural” habitat (Ford 2000: 11).

As it became increasingly uncouth to keep these marine mammals in captivity, new forms of entertainment industry emerged to support more “eco-friendly” approaches to nature-appreciation. Through what Cindi Katz (1998) refers to as “greenateering,” these environmentally friendly eco-tours have developed throughout the world – in particular in places like the cloud forests of Costa Rica and the savannah of South Africa. Off the coast of British Columbia and Washington, this greenateering has provided tourists with the option to appreciate orcas in their “natural habitat.”¹² Tourists are able to view the whales through a number of eco-outfitters ranging from rustic kayak tours to high-speed boat tours. One can even view the whales from luxury liners while eating a salmon dinner and sipping champagne. Not surprisingly, the prolific (and profitable) eco-tours are now under criticism for “loving the animals to death” as swarms of nature-loving tourist vessels crowd the whales as they emerge to the surface for breath (Deecke, 2000; Jelinski, 2002; and Williams, 2002).

From vicious killers to adored mascots, orcas have come to symbolize the wild, natural beauty of the Pacific Northwest of North America. Orcas are now not only part of the natural backdrop, but they have increasingly entered into the urban landscape and capital economy. As a symbol of nature, the image of the orca is prolifically reproduced in numerous forms – from the orca T-shirts found in tourist shops in Seattle, Washington and Vancouver, British Columbia, to the orca clock found on “Save Luna” websites. In a more comprehensive celebration of the orca whale, the city of Vancouver recently completed an *Orca in the City* event, which raised money for local charities by placing orca sculptures throughout downtown. Businesses sponsored the orcas and, in return, their corporate logo was displayed next to the sculpture. The fundraising project capitalized on people’s strong connection with nature as embodied in an orca whale.¹³ Thus, the branding of orcas, reproduced through art, capital, and politics, perpetuates the notion of orcas as a public good – to be owned, protected, and governed.

The irony of the movement towards “saving” the wild animals, through eco-tourism, rehabilitation and relocation, is that the main threat to marine life is anthropogenic. The main cause of the decline in whale populations is lack of food from over-fishing, noise pollution from large vessels, and bioaccumulation of toxins from industry (Deecke, 2000; Jelinski, 2002; and Williams, 2002). In the waters of the Puget

¹¹ Before Keiko died in January, 2004 of pneumonia he participated in a 1000-mile journey across the North Atlantic, by the Faeroe Islands and the coast of Norway (Keiko.com 2004).

¹² In the true spirit of greenateering, one can even purchase a limited edition hand-crafted Luna clock with all proceeds going to Orca Conservancy Fund.

¹³ The orcas took on almost mythical status as indicated by the shocking fact (*shocking* according to the announcement of a local radio station) that none of the sculptures had been defaced through graffiti.

Sound, for example, when a dead whale washes up on the shores, its carcass is treated like toxic waste with extraordinarily high toxin levels. Toxic chemicals such as PCB's, although currently banned, are still present in various forms throughout the environment, including in the fish that whales eat. Because whales require so much food and have a long lifespan, they are greatly affected by the long-term accumulation of these persistent toxic chemicals (Baird, 2001). The paradox of protecting Luna, but not the habitat he lives in is particularly evident with the contradictory role of the British Columbia Provincial government. On one hand, officials in Victoria agreed to pay \$135,000 to help "save" Luna; on the other hand, officials refuse to pay to install a sewage treatment plant for their city despite international criticism of disposal of raw sewage into the sea. Although the cost of the sewage plant is significantly greater than Luna's relocation efforts, it is a useful comparison as it highlights the blatant inconsistencies in behavior: The city is simultaneously soiling the marine habitat and allowing whale populations to be harassed through boat traffic, while engaging in a high-profile campaign to protect a *single* whale.

Moving Luna, then, could be seen as short-term "feel-good" solution, which would have avoided tackling larger, more complicated issues. In a world of complex environmental issues, this singular case seemed tantalizingly simple. To "fix" this environmental issue would have meant moving Luna from point A to point B. However, as seen from the messy unfolding of Luna's situation, this straightforward solution did not materialize as expected. The project of moving Luna was perhaps perceived as a ray of hope: In a time of complicated environmental issues the governmental officials thought or hoped that moving Luna would, at least, help one very public whale. Using Luna as the "poster child" for marine protection is a testament to the ability of communities to reconstruct nature and its discourse at an amazingly rapid pace – for did not just 30 years prior, Canadian governmental officials issue a letter for the culling of these same whales? (Ford, 2000). This brief genealogy of orca whales serves to show how nature is socially constructed and illuminate the malleability of public discourse. In the next section I explore the politicization of scientific narratives through the production of "scientific truth."

Appendix B: Power and Science Studies: “Knowing” Luna

A whole science industry has developed around studying the behavior of orcas. As the general reputation of the orca improved, a demand for greater understanding of the whale emerged. People started to question the long-term effects of removing orcas from the wild and criticizing hunting practices and sea shows for possibly damaging wild stocks. A general curiosity emerged regarding the behavior of whales – people wanted to learn about things such as the whales’ feeding habits, social structures, and migration patterns.

With over 30 years of fieldwork, marine scientists in British Columbia and Washington have amassed an impressive amount of research. From these studies, scientists have learned what constitutes the “normal” behavior of orca whales. For example, it is known that whales are social creatures, have distinct calls, stay with their mothers for life, are members of either a transient or a resident pod, and that resident whales eat salmon and transient whales eat seals (Baird, 2001; Filatova, 2004; Ford, 2000; and Miller, et al. 2004). They have also learned that orcas are affected by anthropogenic behavior: That the noise of engines affects their ability to find fish through echolocation, that overfishing of salmon and global warming are reducing food sources; and that toxic waste and PCB’s are causing damage to their immune systems (Lusseau, et al., 2004; KuKanich, et al., 2004; Wartzok, et al., 2003; Gaydos, et al., 2004; and Ford, 2004; and Jelinski, et. al., 2004).

Not only are the general characteristics of the orca whales known, but also, every orca in the Puget Sound-Georgia Strait study area is documented through comprehensive census studies. Through this constant monitoring and documentation, the genealogies of the orcas are known in amazing detail. The whales are known through unique markings on their dorsal fins and recorded through photographs. The whales are assigned unique alphanumeric designations depending on which pod they are in and when they were born. Books and brochures are published with this information so anyone interested (from scientists to tourists) can easily identify the orcas. Scientists know Luna as L98. That is, he is a member of the resident L population, and he is the 98th whale born to that pod since scientists started monitoring births.¹⁴ The scientists also know when and where the calves are born, who the parents are, and if any aberrant behavior exists. For example, this statement about Luna’s lineage was posted on the “Reunite Luna” website:

When Luna was born, in September 1999, Marine Biologists were unsure who his mother was. He was often seen swimming with Splash (L67), but also with Kiska (K18). Eventually he was observed being nursed by Splash, and it is believed that Kiska, whose calf had died, was treating Luna as her own. (Reunite Luna, 2004)

Thus, when Luna strayed from his “rightful” path, scientists knew *where* he should be and *who* he should be with. The classification system allows the scientists to easily recognize an aberration – a matter out of place. In Luna’s case, because orca whales were listed as “depleted” in 2003 by the Marine Mammal Protection Act there was legal

¹⁴ There are three resident pods: K, L and M.

foundation to “save” Luna by putting him in his “rightful” place.¹⁵

¹⁵ In Canada the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) designated the southern resident population of orcas as “endangered” in 2001. Though this is an official Canadian government., their authority for protection is very limited. The Canadian Species at Risk Act (SARA), which came into effect in 2004, lists the southern residents as an endangered species. In the U.S., in 2003, orcas were listed as “depleted” under the Marine Mammal Protection Act, and then in Nov, 2005 the Southern Resident killer whale distinct population segment (DPS) of orcas was listed as “threatened” under the ESA. For U.S. see: <http://www.nwr.noaa.gov/Marine-Mammals/Whales-Dolphins-Porpoise/Killer-Whales/ESA-Status/Listing-Final.cfm>. (Thanks to Jovana Brown of Evergreen State College for raising this point).

Appendix C: Nature and Science from a Traditional Native American Perspective

However, members of the Mowachaht/Muchalaht First Nation have developed their own explanations to describe the world they live in and their views of Luna the whale. Native American scholars Greg Cajete, Daniel Wildcat & Vine DeLoria, Jr., and LeRoy Littlebear all speak to this issue – the notion that Western science and policy is based on fundamentally different ideas of nature and science than those outside a Western European tradition. Scholars such as Littlebear suggest that “nature” and “science” are culturally relevant: “What is considered “science” is dependent on the culture/worldview/paradigm of the definer” (Littlebear, 2000, p. ix). One of the fundamental differences between Western and non-Western views of nature is the placement of humans within or outside nature. This is at the heart of the issue with Luna, where the Mowachaht/Muchalaht view nature and culture within a singular frame. Conversely, the Western worldview not only separates nature from culture, but often allows for human domination of nature. Cajete, in his book *Native Science* notes, “Western science and society perpetuate the illusion of “objective” detachment and psychological disassociation,” whereas “Native science continually relates to and speaks of the world as full of *active* entities with which people engage (26-7).” Thus, the Western tradition of science often plays humans *outside* of the “natural” system looking down; conversely, in many Native traditions nature and culture are not separate entities, rather relationships are both reflexive and collapsible – where human and animal forms are easily interchanged.

The traditions and beliefs *outside* of the Western tradition, however, have been historically marginalized as Western beliefs are reified (and institutionalized) through policies and nation-building projects. Europeans imported their worldviews to define the policies that have not only carved the physical landscape of the country, but also defined human relationships to nature. The story of Luna is particularly powerful because it brings into dialogue the possibility of collapsing (and destabilizing) these Western-constructed dualisms.

By embracing Luna as their chief incarnate, the First Nation is exercising its sovereign right over the seascape, but also challenging Western worldviews where nature and culture are separate entities. The controversial and highly publicized Makah whale hunt off the Olympic Peninsula in the summer of 1999 posed similar challenges to Western worldviews (Brown, J, 2008). The reaction of the Canadian government, halting their plans to move Luna, indicates that a power shift has occurred – where the state no longer acts with disregard to those “outside” the dominant structure. Thus, the story of Luna is not just a story of a lost orca whale; it is a story of power, race, and privilege reified through state policies and subverted through the actions of the First Nations. It is also tells us much about issues around traditional governance.

References

- Armstrong, J. (2005, August 11). A whale of a solution: Give Luna human link. *Globe and Mail*, Ottawa.
- Baird RW. (2001). Status of Killer Whales, *Orcinus Orca*, in Canada. *Canadian Field-Naturalist*(115), 676-701.
- Braun, B. (2002). *The Intemperate Rainforest: Nature, Culture, and Power on Canada's West Coast*. Minneapolis: University of Minnesota Press.
- Braun, B., & Wainwright, J. (2001). Nature, Post-structuralism, and Politics. In *Social Nature: Theory, Practice, and Politics*. Malden & Oxford: Blackwell.
- Brown, J. (2008). *It's in our treaty: The right to whale*, Olympia, WA: The Evergreen State College, Enduring Legacies Project. <http://www.evergreen.edu/tribal/cases/>
- Cajete, G. (2000). *Native Science: Natural Laws of Interdependence*. Santa Fe: Clear Light Publishers.
- Cronon, W. E. (1996). *Uncommon Ground: Rethinking the Human Place in Nature*. New York: W.W. Norton and Company.
- Filatova OA, Burdin AM, Hoyt E, Sato H (2004). "A Catalogue of Discrete Calls of Resident Killer Whales (*Orcinus orca*) from the Avacha Gulf of Kamchatka Peninsula" *Zoologicheskyy Journal* **83** 1169-80
- Ford, J., Ellis, G., & Balcomb, K. (2000). *Killer Whales: The Natural History and Genealogy of *Orcinus Orca* in British Columbia and Washington* (2nd ed.). Seattle: University of Washington Press.
- Ford, J., Horne, J., & Allman, K. (2004). Echolocation Signals of Free-Ranging Killer Whales (*Orcinus Orca*) and Modeling of Foraging for Chinook Salmon (*Oncorhynchus Tshawytscha*). *Journal of the Acoustical Society of America*, *115*, 901-909.
- Freedman, E. (2002). When indigenous rights and wildlife collide: prosecution of Native Americans for using motors in Minnesota's Boundary Waters Canoe Wilderness Area. *American-Indian-Quarterly*, *26*(3), 378-392.
- Gaydos, J., Balcomb, K., Osborne, R., & Dierauf, L. (2004). Evaluating Potential Infectious Disease Threats for Southern Resident Killer Whales, *Orcinus Orca*: A Model for Endangered Species. *Biological Conservation*(117), 253-262.
- Haraway, D. (1991). Situated Knowledge: The Science Question in Feminism and the Privilege of Partial Perspective. In *Simians, Cyborgs, and Women: The Reinvention of Nature* (pp. 183-201). New York: Routledge.

Inglis, R. (2009). Vancouver Island's West Coast - Coastal Waters: Mowachaht-Muchalaht First Nations. Retrieved May 9, 2009, from http://www.royalbcmuseum.bc.ca/exhibits/journeys/english/water_3_2a.html

International Whaling Commission (IWC)(2004). History and Purpose of the Commission. Retrieved December 2, 2004, from "History and Purpose of the Commission" <http://www.iwcoffice.org/commission/iwcmain.htm>

Jelinski, D., Krueger, C., & Duffus, D. (2002). Geostatistical Analyses of Interactions between Killer Whales (*Orcinus Orca*) and Recreational Whale-Watching Boats". *Applied Geography*, 22, 393-411.

Katz, C. (1998). Whose Nature, Whose Culture. In B. Braun & N. Castree (Eds.), *Remaking Reality* (pp. 46-63). London; New York: Routledge.

Keiko, 2004 [cited December 2, 2004]. "Keiko's story: The Timeline" <http://www.keiko.com/history.html>

Kraft, M. E. (2004). Environmental Politics and Policy. In (pp. 1-). New York: Pearson Longman.

Kramsch, O., & Mamadouh, V. (2003). Crossing Borders of Political Governance and Democracy. *Journal of Borderlands Studies*, 18(1), 39-50.

KuKanich, B., Papich, M., Huff, D., & Stoskopf, M. (2004). Comparison of Amikacin Pharmacokinetics in a Killer Whale (*Orcinus Orca*) and a Beluga Whale (*Delphinapterus Leucas*). *Journal of Zoo and Wildlife Medicine*, 35, 179-184.

Littlebear, L. (2000). Foreword. In C. G (Ed.), *Native Science: Natural Laws of Interdependence*. Santa Fe, NM: Clear Light Publishers.

Lusseau D, Williams R, Grellier K, Barton, Hammond P, Thompson P, 2004, "Parallel Influence of Climate on the Behaviour of Pacific Killer Whales and Atlantic Bottlenose Dolphins" *Ecology Letters* 7 1068-76

McClure, R. (2003, October 31). Canada pledges money to return Luna to pod. *Seattle Post-Intelligencer*, Seattle, WA

McClure, R. (2005, December 13). Efforts to protect orcas may have wide impact: Public urged to comment on the conservation plan. *Seattle Post-Intelligencer*, Seattle, WA

McNeill, J. R. (2000). *Something New Under the Sun*. New York: W.W. Norton.

Miller, B. (1997). The "Really Real" Border and the Divided Salish Community. *BC Studies: The British Columbian Quarterly*, 112, 63-79.

Miller, P., Shapiro, A., Tyack, P., & Solow, A. (2004). Call-Type Matching in Vocal Exchanges of Free-Ranging Resident Killer Whales, *Orcinus orca*. *Animal Behaviour*, 67, 1099-1107.

Nelson, G. (2002). *Beyond Earth Day: Fulfilling the Promise*. Madison: University of Wisconsin Press.

Orcas in the City. (2004). Retrieved October 22, 2004, from <http://www.orcasinthecity.com/index.cfm?fuseaction=vancouver.description>

Reunite Luna. (2004). Retrieved October 22 and December 2, 2004, from http://www.reuniteluna.com/news_release.php?id=571

Robbins, J. S. (1992). How Capitalism Saved the Whales. *The Freeman*, 42(8).

Slijper, E. (1962). *Whales: The Biology of Cetaceans*. London: Hutchinson & Co.
Wartzok, D., Popper, A., Gordon, J., & J, M. (2003). Factors Affecting the Responses of Marine Mammals to Acoustic Disturbance. *Marine Technology Society Journal*, 37, 6-15.
WDCS. (2004). Whale and Dolphin Conservation Society. Retrieved October 25, 2004, from <http://www.wdcs.org>

White, R., et al. (1980). *Land Use, Environment, and Social Change: The Shaping of Island County, Washington*. Seattle: University of Washington Press.

Wildcat, D. (2004). *Science, Worldviews and Native Traditions Public Lecture*. Bellingham, Washington: Northwest Indian College.

Wildcat, D., & Deloria, V. (2004). *Power and Place: Indian Education in America*. Golden, CO: Fulcrum.

Williams, R., Trites, A., & Bain, D. (2002). Behavioral Responses of Killer Whales (*Orcinus orca*) to Whale-Watching Boats: Opportunistic Observations and Experimental Approaches. *Journal of Zoology*, 256 255-270.

Wiwcher, D. (2004). Mowachaht/Muchalaht keep Tsu-xiit free. *Ha-Shilth-Sa Newspaper*, from http://www.westcoastaquatic.ca/article_mowachaht_free_Luna0704.htm

Acknowledgements

I would like to thank the Mowachaht/Muchalaht First Nation Council of Chiefs for supporting this project and for reviewing the case prior to publication. I truly appreciate their valuable comments on this project and their support of making this case available as an educational resource. In addition, my sincere and heartfelt thanks to Jamie James, Fisheries Manager of the Mowachaht/Muchalaht First Nation, for spending time with me to discuss this important case. Jamie's commitment to protecting Tsu-xiit while he was

living in the waters of Gold River is remarkable; his commitment to keeping the story alive after his untimely death is admirable. My hands go up in respect to Jamie and the other members of the Mowachaht/Muchalaht First Nation who work tirelessly not only for the protection of the marine waters, but also for their commitment to cross-cultural education.

I would also like to thank Dr. Karen Bakker and Dr. Matthew Evenden from the Geography Department of the University of British Columbia. I started this endeavor as part of graduate course work at UBC with Dr. Bakker. Both Karen and Matthew provided valuable comments on earlier drafts. Thanks also to the Enduring Legacy Project staff for supporting this project and my colleagues at Northwest Indian College for their valuable insights and comments.