A VIEW FROM THE WATCHMAN'S POLE:

Salmon, Animism and the Kwakw<u>aka</u>'wakw Summer Ceremonial

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We have come to meet alive, Swimmer. Do not feel wrong about what I have done to you, friend Swimmer, for that is the reason why you come that I may spear you, that I may eat you, Supernatural One, you, Long-Life-Giver, you, Swimmer. Now protect us, (me) and my wife, that we may keep well, that nothing may be difficult for us that we wish to get from you, Rich-Maker-Woman. Now call after you your father and your mother and uncles and aunts and elder brothers and sisters to come to me also, you, Swimmers, you Satiator. ("Prayer to the Salmon," in Boas 1930, 206-7)

INTRODUCTION

N THE LITERATURE, much emphasis has been placed on the Kwakwaka'wakw winter ceremonial, with its lore of cannibalism, the taming of a man gone wild, intriguing dances; vibrant and intricately carved masks, art, drama, and interaction with the spirit world (e.g., Goldman 1975; Locher 1932; McDowell 1997; Walens 1980, 1981). Many of these writings attempt to reinterpret the Boas and Boas-Hunt materials in an effort to gain an understanding of the winter ceremonial's fundamental meaning (Berman 2000, 53). This meaning remained elusive to Boas, and, in the end, he believed the winter ceremonial was a religious act that sanctified the tribe (Berman 2000, 54; Boas 1966, 172). According to Berman (2000, 54), attempts at reinterpretation have been plagued by a lack of understanding of the texts and language and, too often, a focus on cannibalism, which, she argues, results in a misinterpretation of the religious nature of the ceremonial. The exception may be Berman's article in which the winter ceremonial is considered in terms of the cultural practice "through which nineteenth-century Kwakwaka'wakw expressed their material and spiritual relationship with fish, especially salmon" (2000, 55). But what of the summer season, which had its own ceremonialism (59)? In all cases, much less emphasis has been placed on this ceremonial, its meaning among nineteenth-century Kwakwaka'wakw people, and how the Kwakwaka'wakw spirituality of the summer ceremonial was sensitive to salmon ecology and helped to sustain the ongoing salmon resource. The effect of my argument relies heavily on my definition of "ceremonial." Here I use the definition from Cambridge Dictionaries Online (2011), which defines ceremonial as "a set of formal acts, often fixed and traditional, performed on important social or religious occasions."

Unlike the resource procurement/accumulation and individual nature of the summer ceremonial, the winter ceremonial included giving away and was community centred. In contrast to the summer ceremonial, which seemed to be practised by everyone, winter ceremonial participants were of high rank and witnesses were commoners. These differences likely played a role in Boas's distinction between the religious (winter) and the secular (summer) seasons, even though both the winter and summer ceremonials contain concepts of spirituality, the supernatural, and expressions of Kwakwaka'wakw cosmology that were revealed in daily life.

Berman (2000, 59) makes another distinction, noting that the oppositional relationship between summer and winter, or $b\bar{a}'\underline{x}wEs$ and ts!a'eqa, was rooted "in the fact that in summer humans fished for salmon, while in winter predatory spirits hunted for humans." To take this a step further, in summer, humans caught and *consumed the supernatural* (e.g., fish), while in winter humans were at risk of being caught and *consumed by the supernatural* (e.g., hamatsa and $bax^wbak^walanuxsiwe$). This resulted in a dichotomy that saw the supernatural as prey, on the one hand, and as predator, on the other, a reflection of the apparent human world.

The term "supernatural," although venerable in anthropology, can be problematic because many peoples do not separate the supernatural world from the so-called "natural" world (Lohmann 2003, 176; Saler 1993). Its use can also imply that the natural world is real and that the supernatural world is imagined (Klass 1995), a Western ontological view that, again, many peoples do not share. Among the Kwakwaka'wakw, who traditionally did not draw a distinction between the natural and the supernatural, Lohmann's (2003, 176) use of "supernatural" fits well: "a real phenomena with physical causes and effects."

The importance of salmon in the summer ceremonial should not be overlooked. Salmon appear continually in Kwakwaka'wakw legends, myths, stories, songs, winter dances, and prayers, to which I collectively refer as oral traditions. Sometimes salmon appear in salmon form, while at other times they appear in human form, having removed their salmon masks. Occasionally a salmon appears as a sisiutl, a mythical figure represented by two serpent-like heads on each end of its snake-like body and a face in the middle, often seen during the winter ceremonial. It is found in both the upper- and underworlds of Kwakwaka'wakw cosmology and is sometimes seen as a salmon (Locher 1932, 6; Boas 2005 [1897], 371-72). For those who enjoy supernatural powers or the help of the supernatural, the sisiutl can bring power (Boas 2005 [1897], 371-72). Fish traps and weirs also play an important role in these oral traditions, often catching not only salmon but also other supernatural beings, like the sisiutl, and sometimes providing strength and power to summer beings.

In this article, I present an alternative to Boas's secular/religious dichotomy as it relates to the Kwakwaka'wakw summer and winter ceremonials. I argue that the nineteenth-century summer ceremonial was in fact religious in nature, that fish and fish traps (specifically, salmon and salmon traps) played a prominent role in this ceremonial, and that Kwakwaka'wakw animistic beliefs resulted in a management and stewardship of resources that was influenced by cosmological belief. Salmon – along with halibut, trees, birds, and large and small animals – were all believed to have souls. As Boas (1949, 616) argues, "all were human." This belief system was codified within oral tradition and practice and, I argue, resulted in effective resource management and conservation not only within Kwakwaka'wakw lands but also throughout the entire Northwest Coast.

To support my research I utilize the English translations of the Boas-Hunt texts that were published in the late nineteenth and early twentieth centuries. Although there are arguably translation problems with these texts and, ideally, one should use the original texts, which are in Kwak'wala (see Berman 1992, 1994), because I am considering the place of salmon within a supposed secular/religious dichotomy, the quality of the translation is less important than if one was studying for example, the language of the potlatch.

ANIMISM ON THE NORTHWEST COAST

In order to understand the interaction between Kwakwaka'wakw cosmology and resource management it is necessary to understand the relationship Kwakwaka'wakw people had with animals. In recent years, scholars have begun to consider the ontology and cosmology of the human-animal relationship (Bird-David 1990, 1999; Fausto 2007; Guthrie 2000, 2001; Helander-Renvall 2010; Ingold 2000, 2007; Losey 2010; Pedersen 2001; Peterson 2011; Viveiros de Castro 1998; Willerslev 2004, 2007). In the ontologies of many indigenous peoples, including those of the Northwest Coast, "the world is inhabited by different sorts of subjects or persons, human and non-human, which apprehend reality from distinct points of view" (Viveiros de Castro 1998, 469). Viveiros de Castro refers to this as "perspectivism." From a Western ontological perspective, it is easy to assume that attributes of personhood belong solely to humans: we see animals as natural, behaving solely according to instinct (Willerslev 2007, 2). This, however, is not the norm for all peoples. For some, persons can appear in the form of animals, waterways, plants, or humans, and it is often believed that each can change form and so experience life from another perspective (Willerslev 2007, 2). Hallowell (1960, 36) uses the term "other-than-human-person" to refer to beings that have attributes of humanity and personhood but who are non-human.

In anthropology, the use of the term "animism" dates back to 1871, when E.B. Tylor used it in an attempt to characterize what he thought were simple forms of religious belief (Willerslev 2007, 2). Tylor (1871) argues that animism refers to the "doctrine of souls and other spiritual beings" (21). Many early uses of the term were derogatory (Losey 2010, 18; see Bird-David 1999 and Harvey 2006 for an overview of the term and its development) and were dismissed as metaphors, mistakes, misunderstandings, or as primitive religious beliefs (Descola 2009, 146; Willerslev 2007, 2-3; Zedeno 2009, 408). I use the term "animism" in accordance with Ingold (2007, 12), who suggests that animism requires more than a simple "sprinkling of agency." For people whose ontologies include animism, he argues that "things are in life rather than that life is in things." In other words, objects and materials are not simply given attributes of life, agency, or spirit; rather, they are actually alive. This is different from anthropomorphism, according to which humans project human characteristics and behaviours onto non-human animals or objects, or interpret their behaviour in terms of human characteristics.

Viveiros de Castro (1998, 470) nicely summarizes this world view:

Typically ... humans see humans as humans, animals as animals and spirits ... as spirits; however animals (predators) and spirits see humans as animals (as prey) to the same extent that animals (as prey) see humans as spirits or as animals (predators). By the same token, animals and spirits see themselves as humans: they perceive themselves as (or become) anthropomorphic beings when they are in their own houses or villages and they experience their own habits and characteristics in the form of culture. ... In sum, animals are people, or see themselves as persons.

Therefore, to understand the relationship between humans and salmon, I do not grant special epistemological status to Western belief; rather, like Losey (2010, 18), I assume that non-Western, animistic beliefs are valid perspectives of the world, which can illuminate how a group of people understands its place and relationship with regard to other entities.

In almost all cases, non-human persons take the form of a particular species through the use of a mask or, as Viveiros de Castro (1998, 471, 482) calls it, an envelope (see also Berman 1992, 151-53). This mask covers the human form and the being takes its non-human shape, while its internal form and its soul remain human. As Berman (1992, 152) explains, "the mask is both the thing which transforms and the end result of the transformation." Understanding this way of viewing the world and the place of human persons within it is vital to understanding traditional Kwakwaka'wakw ontology and cosmology and the Kwakwaka'wakw relationship between human persons and non-human persons, especially fish.

BOAS AND "RELIGION"

While Boas addresses religion in many of his writings, using the term regularly and dedicating whole volumes to its discussion, he is vague when it comes to defining religion or how he understands the concept. Although there are occasional hints that Boas inclined towards the concept of religious awe (see, for example, Boas 1904, 244), one could dedicate a series of papers to how he viewed religion. In an effort to provide some insight, I review his position as he outlined it in *The Mind of Primitive Man* (1938), in which he says that "the attitudes and activities centering around everything that is considered as sacred or outside of the sphere of ordinary human acts" is religion (160) and that religion is the "result of speculation in regard to nature" (178). He continues: "Animals and the active form of nature are seen in anthropomorphic

form and endowed with supernatural powers. Other objects are seen as possessing beneficent or malevolent qualities. Magic is ever present" (165). He notes the common belief in a "multiplicity of worlds" (165) and argues against an evolutionary development of religion; rather, he suggests that the "lack of system in religious behavior of primitive man subjects him to a mass of disconnected, apparently arbitrary rules and regulations" (173). Finally, he argues: "When once the idea of animism and anthropomorphism has developed, the transfer of the social experiences into the anthropomorphic world must occur and it can have no other form than that of the society with which man is familiar" (174).

THE SANCTITY OF THE KWAKWAKA'WAKW SUMMER CEREMONIAL

Given the discussion of Boas's notion of religion, it is interesting that he did not recognize the important religious aspects of the Kwakwaka'wakw summer ceremonial, choosing instead to focus on the winter ceremonial as a religious practice. Further, he did not acknowledge the sacredness of the summer ceremonial, referring to summer and winter as "secular and sacred," respectively (Boas 1966, 172-73). According to Boas: "There is no doubt that the winter ceremonial is essentially religious ... [while] in summer, the secular season ... the supernatural power is not present" (172). He argues that this is because, in summer, supernatural beings reside in "distant countries" but, in winter, they come to the villages of mortal humans (172). He does not acknowledge the supernatural qualities of salmon. Boas refers to the term bā'xwEs, which means "profane." He says that this term is used for everything that refers to the summer season, in which the ts!a'ega, or winter ceremonial, is not performed (Boas 1966, 167; Boas 1949, 612; Berman 2004, 137). Interestingly, the word for person in Kwak'wala is baxwom, apparently associating humans with the profane.

The dichotomy between the religious and the secular was further emphasized by the fact that the Kwakwaka'wakw only recognized two seasons – summer and winter (Berman 2000, 56). The salmon play a role in this dichotomy, winter being the time of consumption and summer the time of procurement. The salmon arrive at the beginning of the summer season and were believed to have supernatural powers (Boas and Hunt 1921a, 635-37). As noted above, this seems to contradict Boas's (1966, 172) assertion that the supernatural was not present in the summer. For example, in a prayer for good weather, the speaker asks salmon – or their human incarnation, twins – to "work your supernatural power and make good weather in your world ... let your world become summer, salmon!" (Berman 2000, 56; Boas and Hunt 1921a, 635).

Does the dichotomy between summer and winter extend to the realms of the secular and the religious as Boas suggests? I argue that the summer ceremonial was in fact sacred, that it focused on salmon and salmon spirit beings (who were benevolent to humans), and that it was the sacred nature of the relationship between humans and the supernatural (salmon) that codified the treatment and management of this remarkable resource. If I am correct, then Boas (1966) was mistaken in his assertion that the supernatural was "not present" in the summer. Summer was about resource procurement, and the summer ceremonial was largely individual or family oriented. In contrast, the winter ceremonial focused on wilder spirit beings who were often malevolent to humans. The separation between the beings present in each season seems to be marked by the malevolence of winter and the benevolence of summer. This is exemplified when the son of heron, $Q!\bar{a}'n\bar{e}q\bar{e}^{\epsilon}lak^{\mu}$, the transformer (Berman 1992, 129; Boas 1934, 22), begins to explore his "world" and meets a shaman and a woman who are performing the winter ceremonial, throwing supernatural power at one another. It is said that $O!\bar{a}'n\bar{e}q\bar{e}^{\epsilon}lak^{u}$ was afraid because he was "secular," or "bāxusaē," having no connection to the winter ceremonial (of malevolent beings) and belonging to the summer ceremonial (of benevolent beings) (Hunt and Boas 1906, 195). Nevertheless, regardless of his lack of association with the winter ceremonial, $Q!\bar{a}'n\bar{e}q\bar{e}^{\epsilon}lak^{\mu}$ did have power, seemingly associated with summer (cedar, salmonberries, herring, etc.). And, in fact, at one point Boas translates a line in the story as follows: "truly, they [Q!ā'nēqē' lak" and Ō'emāl-Raven] were supernatural beings" (Boas 1910, 207). For example, in his travels, *Q!ā'nēqē^elak*^u creates deer, raccoon, land otter, mink, mallards, and anatomically correct humans. Further, he indirectly establishes the huge runs of herring and eulachon, essentially transforming the world to make it habitable for humans (Boas 1910, 201-8; Hunt and Boas 1906, 211-17). As the transformer, *Q!ā'nēqē' laku* brought an end to the myth world: "his purpose in life is to ... 'set everything right in the world' (hixhəlisəla), to create a world of order and plenty where humans can safely dwell" (Berman 1992, 149). These actions reveal the

¹ Another version of this story, published in 1910 (Boas 1910, 187-208), has Q!ā'nēgē" lak" pretending to be the son of heron. Many other aspects of the stories are similar. Boas translated Q!ā'nēgē" lak" as "born to soar" (Berman 1992, 145).

power of $Q!\bar{a}'n\bar{e}q\bar{e}^clak^u$ even though he is associated with summer, with what Boas refers to as the secular.

Boas's lack of acknowledgement of the sacred in the summer ceremonial is all the more interesting given the animistic nature of Kwakwaka'wakw belief. According to Boas (1966, 155), "all nature, the heavenly bodies, rocks and islands, waterfalls, animals, and plants are beings of supernatural power whom man can approach with prayer, whose help he can ask, and to whom he may express his thanks." Kwakwaka'wakw prayer expresses the emotion of the speaker and allows the speaker to communicate with supernatural beings, who are referred to by honorific titles, such as "Supernatural One" (155). The significance of salmon in Kwakwaka'wakw life is revealed in numerous salmon-centred prayers. Animals who migrated and returned each year were greeted by prayers in which humans expressed gratitude for their return as well as the wish to meet again in future years (157).

The word for "prayer" in Kwak'wala is *ts!E'lwaqa*, which means "to thank, to praise, to ask favours" (Boas 1966, 170; Boas 1949, 617). The salmon, along with cedar and the "lark," are addressed in prayer as *na'walak*", the general term for the supernatural (Boas 1966, 165-66; Boas 1949, 612). Supernatural beings, twins (believed to have the supernatural powers of salmon), and people initiated into religious ceremonies are also called *na'walak*" (Boas 1966, 166). It was generally understood that salmon knowingly offered themselves to mortal humans as a gift so that the latter might eat and live well. It was expected that this gift would be acknowledged through prayer, which recognized the power of salmon – who could grant "long life," health, and wealth.

SALMON BIOLOGY

Before further discussing the role of salmon in the Kwakwaka'wakw summer ceremonial, a brief description of salmon as a species, its behaviour and its environment, is important for setting the context in which this ceremonial grew. There are five species of salmon available in different areas of Kwakwaka'wakw territory: chinook (spring salmon), sockeye, chum (dog salmon), pink (humpback salmon), and coho (silver salmon). Each species differs in its behaviour, time and location of spawning, size, diet, and overall lifecycle. In all cases, each species relies on a healthy riverine system for at least part of its lifecycle; generally, long drainage systems with high volumes of water support

greater numbers of salmon, in terms both of the number of species and the size of the runs (Langdon 2006, 25).

Within Kwakwaka'wakw territory there are hundreds of small streams, many of which support runs of salmon. Larger rivers are fewer, numbering about a dozen. These local rivers and streams support massive runs of salmon each year. Additionally, Kwakwaka'wakw territory is located along the east coast of Vancouver Island and the mainland opposite, along the migration route of Fraser River-bound sockeye. These sockeye travel through Johnstone Strait, and, because of the influence of currents and tides, their behaviour is predictable: they school and hold in particular areas and follow particular routes. This predictability made them easy to catch. This fact, combined with their oil content and flavour, made the Kwakwaka'wakw value sockeye over all other species of salmon.

The other four species of salmon are also common in the waters off the east coast of Vancouver Island. In fact, Campbell River, now home to the Laich-Kwil-Tach, the southernmost group of the Kwakwaka'wakw, is known worldwide as the "Salmon Capital of the World" and is renowned for huge spring salmon as well as huge runs of pink and chum salmon. Unlike sockeye, pink and chum have a relatively short migration window, and they have lower nutritional value due to their lower oil content when spawning (Langdon 2006, 26). However, chum in particular was prized precisely because this lower oil content enabled it to be easily smoked and preserved. This ensured that it would last the winter without spoiling. Chum was also the last salmon to arrive each year. Pinks, on the other hand, were much less valued (Boas and Hunt 1902, 303), and even today I have heard them referred to as "Laich-Kwil-Tach hotdogs" or "Laich-Kwil-Tach spam."

All salmon spawn in the fresh-water regions of rivers, streams, or lakes, and each year, through a gauntlet of obstacles, some salmon return to their natal river. Once at their natal river, they deposit thousands of fertilized eggs in the gravel and then die. Their carcasses provide important nutrients to the river systems, and they are a vital food source for many animals.

Over several weeks, the eggs mature and hatch into alevin, which have a yolk sac. This small fish eventually develops into a salmon fry that must fend for itself, both in terms of acquiring food and avoiding predators. Depending on species, the fry may remain for more than a year in fresh water or it may head to the ocean immediately. It then spends from one to four years in the ocean growing into a full-size

salmon, preparing to return to its natal stream to complete the cycle once again.

SALMON AND CULTURE - CULTURE AND SALMON

For the past five thousand years, salmon has been a fundamental component of life on the Northwest Coast. The archaeological record suggests that, after the Pleistocene epoch and local sea level stabilization, salmon grew in numbers (Fladmark 1975, 202-7, 214). From ten thousand to sixty-five hundred years ago, salmon became increasingly established on the Northwest Coast (Donald 2003, 296), and by five thousand years ago, salmon abundance reached "peak productivity" (Fladmark 1975, 217-18). By at least four thousand years ago humans were intensively utilizing the salmon resource, which involved preservation and storage technologies that allowed them to rely on the resource year round. Carlson (1998, 23) suggests this occurred earlier, about seven thousand years ago. This intensification and its concomitant cultural changes led to the socio-cultural complexity of the Northwest Coast, which was present, at least in the Georgia Basin, thirty-six hundred years ago (Moss and Erlandson 1995, 183). It was the growth of the salmon population, its availability, and its rise to the pinnacle of importance on the Northwest Coast that led to the development of the cultural system anthropologists call the "Northwest Coast Cultural Complex," which is unique to the northwest coast of North America (Ames 1981, 1994; Benedict 1934; Cannon and Yang 2006; Coupland 1998; Suttles 1968; Testart et al. 1982; Walter 2006; Wissler 1917). This cultural pattern – marked by its grand potlatches, complex economy, highly structured political organization, large villages, and complex ceremonials - was largely built on an economy based on salmon as a managed resource.

It is generally believed that the pre-contact harvest of salmon on the Northwest Coast was huge. Evidence from journals suggests that thousands of fish were caught using fish trap technology (Campbell 1967, 42), and there is evidence that traditional salmon management on the Northwest Coast led not only to great harvests but also to the enhancement of the species, an argument to which I turn shortly.

SALMON ECOLOGY AND SPIRITUALITY

Furst (1989, 100) speculates that, because the small salmon begins to grow quickly when it leaves the river and enters the ocean, the ocean water is akin to the water of life, a common element in Kwakwaka'wakw

oral tradition. The water of life has powers of resurrection, and, for the supernatural salmon, both young and dead, the ocean was the key to life and resurrection. The salmon has further powers in that it is able to transform physically. Throughout its life it transforms from an egg to a young, fresh-water salmon that transitions into a young salt-water salmon, then into a large salt-water salmon, and, finally, into a migrating salmon who again changes physically and re-enters fresh water. For some salmon, the physical change during migration is dramatic, making them appear almost fierce as they return to the human world. Thus, like their winter ceremonial counterparts, who are often fierce as they enter the human world, the salmon, supernatural beings associated with summer, transform into fierce-looking creatures. However, unlike their winter counterparts, salmon maintain their benevolent nature, bringing a generous gift to humans. Throughout their lifecycle, salmon have a dual role, alternating continuously between being prey and being a predator. This duality is reflected in the human world, where people also alternate between being predators (of salmon in the summer) and being prey (of the supernatural in the winter).

When the salmon migrate, they face many obstacles, including predators, powerful tides and currents, rushing rivers, waterfalls, and even traps and weirs. Their ability to transform physically and to navigate these obstacles was a testament to their position as supernatural beings and to their supernatural powers.

In Kwakwaka'wakw traditional belief, salmon are supernatural beings who wear a salmon mask; in their world, when they remove this mask, they are human. In their salmon form, they do not die but, rather, pass through an endless cycle of birth, death, and resurrection, requiring the ocean (their water of life) for their rebirth and their return migration to their land.

Each year, as a gift to humans, salmon were believed to don their salmon masks and begin their migration. They were greeted by fishers as supernatural beings and "Bringers of Life" (Furst 1989, 99), and they were offered prayers of thanks and respect. By late spring, migrating salmon begin to arrive in huge numbers. Because fish runs are "highly localized" both in time and space, it was necessary for people to come together and to cooperate in order to maximize the catch (Berman 2000, 57). This was essential as a good season of preservation ensured a bountiful winter and a vigorous winter ceremonial.

But from where did the salmon come? There are many different stories from different Kwakwaka'wakw groups, and in all these stories,

humans required supernatural intervention to obtain and to utilize this all-important fish. For example, the Koskimo, a Kwakwaka'wakw group located on the northwest coast of Vancouver Island, have a story that Boas calls "The Origin of the Salmon" (Boas and Hunt 1902, 390-92). In this story, "Wise-One" had three sons. Wise-One attempted to make the salmon out of red pine, red alder, and red cedar, and, after throwing the shaped bark in the water, he had created cod, red cod, and halibut, respectively. Thus Wise-One told his sons that they must all go and steal the salmon from the salmon chief. To protect themselves on their journey, they wore red-dyed cedar bark, a potent talisman used in the winter ceremonial to protect its wearer from the powers of winter beings. Wise-One told his sons that their goal was to steal only the anal fin of the salmon. When they arrived in the salmon world, the salmon chief, Chief-of-the-World, invited them into his house as "younger brothers," revealing a kinship between humans and salmon. Chief-of-the-World cooked with copper nuggets. He prepared crab, which turned into frogs, and clover root, which turned into snakes. Each time Wise-One denied the food, an act that, according to Kwakwaka'wakw etiquette, would be considered rude. Then Chief-of-the-World told his slave to get salmon from the salmon trap. He returned with two salmon. Once prepared, the floor was swept in front of Wise-One and his sons, and Chief-of-the-World served the salmon but warned them to "take care of the bones! Don't steal a single piece of the bones." After the feast, Chief-of-the-World counted the bones. He did not find them all and searched his four visitors. He knew they had stolen a bone but he could not find it. In desperation he warned them "don't ill-use my salmon." Wise-One and his three sons left, and, upon returning home, the youngest son placed the anal fin of the salmon in the water and, at last, many salmon jumped there. He also caused the salmon to ascend the rivers. From this trip to the salmon world, the four obtained the supernatural gifts of copper, snakes, frogs, and importantly, salmon. "That is the way they made the salmon come."

In other stories, the creation of salmon is not so complex. For example, Boas and Hunt record several versions of the story of $LEma^*ye$, or "Scab" (Boas 1910, 38-81; Boas 1969 [1935], 156-73; Boas et al. 2002, 358-59, 406-8). In each version, a person who is covered in sores gives birth to a child named $LEma^*ye$, but the child is born directly from the sores. The child, called Scab in English, makes the salmon out of hemlock needles. In each story, Dzunokwa, the Wild Woman of the Forest, steals the salmon that Scab often caught in his weir, and he punishes her for this

theft (and for the disrespect to salmon). These stories, and the respect commanded by salmon that they codify, reflect specific reverence for a fish that was vital to the rich life of the Northwest Coast. Generally, "the spiritual ecology of fish, as understood by nineteenth-century Kwakwaka'wakw, supplied the reference point for larger notions of life, death, and resurrection" (Berman 2000, 55). Through mythic charter, Kwakwaka'wakw people expressed their understanding of salmon: they are humans who appear in the human-person world in their salmon masks, and they are sentient beings who are aware of the human-person world. As long as they are treated respectfully, salmon will choose to continue to provide their human counterparts with wealth, health, and well-being. This requires that they receive special treatment in the form of prayers, proper handling, reverence, respect for their remains, and the ability to think like them. If salmon are neglected or disrespected, they may choose to punish their human-person counterparts by not returning the following year. These animistic beliefs resulted in the care and maintenance of the resource and a sensitivity to salmon ecology that resulted in effective stewardship techniques and an abundance of fish.

SALMON'S ARRIVAL, FIRST SALMON CEREMONY, AND FISH REVERENCE

The anticipation of the arrival of salmon and the arrival itself were ceremonial occasions among the peoples of the Northwest Coast, and the Kwakwaka'wakw were no different. This part of the summer ceremonial began with purification (Boas 1925, 157). The spiritual leaders who invited and welcomed the salmon purified themselves in order to entice the salmon back to the human world. Then a "watchman's pole" was built, from which a man with the proper rights watched the river and traps for the arrival of the salmon (150-51). The entire process surrounding the watchman's pole, from its building to its use, was imbued with ceremony, and the man who climbed the ladder-like structure, the watchman, had received this "privilege from the earliest myth" (149). Once the pole was complete, it was announced: "Now it is finished, the great (watchman's pole which is) your privilege, chief, which was given to you by your grandfather at the far end, when first our world was lighted up" (151). This statement refers to humans who travelled to the spirit world and were given the gift of supernatural power, or Tłogwe (Boas 1949, 616; Goldman 1975, vii, 25). With song and prayer, the watchman mounted the pole and called the salmon, who were overcome by the



Figure 1. Watchman's pole, Cape Mudge, c. 1925. Photograph by Ernest William Albert Crocker. *Source*: Image AA-00129 courtesy of Royal BC Museum.

pole: "My schools of salmon are coming to my salmon weir here, chiefs" (Boas 1925, 153). From this position, that watchman directed the chiefs to check their traps for salmon. He then sang to the salmon:

Now I see it, now I see it, the salmon.

It is coming up stream with a great wave following what I obtained by purifying myself.

You were overcome by me on account of this watchman's pole. (Boas 1925, 157)

Barnett (1935) notes the watchman's pole in his field notes from the Comox, Puntledge, and Cape Mudge (Laich-Kwil-Tach) people. He writes that it is part of the first salmon rite and that the owner of the "fish stand" inherited the right to catch the first sockeye. The owner of the stand climbed the "scaffold" while singing, with his face painted, his rattle in hand, and eagle down in his hair. He harpooned

several fish and put them in the canoe, keeping the first one separate. He then returned to shore with the first fish, carrying it ceremonially and "gently" to his house, where he prepared it, still singing, rattling, and sprinkling eagle down on the fish. The only people present were members of his extended family who were also painted and "downed." It is they who ate the first salmon. The next day, the fishery was opened to the rest of the people. The watchman's pole has a long history on the coast and, according to photographs, was used in Kwakwaka'wakw territory until at least the 1920s.

Across the Northwest Coast the first salmon (and also the first eulachon) run of the year was greeted with ceremony by a high-ranking person or his designate, and no one could fish before this first salmon ceremony took place (Assu and Inglis 1989, 94; Langdon 2007, 237; Stewart 1977, 166-68; Suttles 1990, 468). Among the Kwakwaka'wakw, twins of the same gender, because they were considered to be the human form of salmon, were involved, sometimes being responsible for returning the bones and remains to the ocean (Assu and Inglis 1989, 94; Boas 1966, 365). In fact, twins, being the human incarnation of salmon, were thought to have great influence by virtue of their salmon-ness. They were understood to "belong to the Salmon" (Boas and Hunt 1921a, 674, 681). Twins were named according to the salmon from whom they were believed to have come. Twins who came from coho were named Abalone-Woman (girl) or Only-One (boy), and twins from sockeye were named Head-Dancer (girl) or Head-Worker (boy) (Boas and Hunt 1921a, 693). The older sibling of twins was named Salmon-Head, while the next born sibling was named Salmon-Tail (Boas and Hunt 1921a, 681, 692).

The supernatural powers of twins included control over the weather (a power that increased with age), the power to cure, and the power to call salmon to the river (Boas 1966, 367-68; Boas and Hunt 1921a, 633-35, 675). Each of these powers is held by the salmon themselves. Because twins are the incarnation of salmon, upon their deaths, it is believed that their souls travel back to the Salmon-maker (Boas 1930, 257). Twins also display their place as salmon in the winter ceremonial. Only twins have the prerogative to perform the Salmon Dance, in which they move like salmon, and the corresponding song, masks, and regalia honour the salmon's gift.

Like the first harvest ceremonies of horticulturalists, the first salmon ceremony is the human attempt to appease, and show gratitude to, the supernatural in order to ensure a bountiful harvest. A woman prayed

to the first dog salmon: "O Supernatural Ones! O, Swimmers! I thank you that you are willing to come to us. Therefore, I beg you to protect me and the one who takes mercy on me, that we may not die without cause, Swimmers!" (Boas and Hunt 1921a, 609). Then, once they had prepared the salmon, she gathered the entrails and slime and returned them to the water at the mouth of the river in order to ensure that *all* the salmon would be resurrected and would return to their salmon world.

Once the first salmon ceremony was complete, all fishers, men and women alike, offered prayers and greetings throughout the season. Unlike the winter ceremonial, in which the ceremonies and rituals belong to the descent group, summer ceremonial prayers belonged to each person individually. It seems that only the First Salmon Ceremony (and other first fish ceremonies) was a rite that belonged to the larger group and was managed by high-ranking individuals.

The ritual significance of salmon in the winter ceremonial was evident in the re-enactment of the First Salmon Ceremony during the winter ceremonial. At the potlatch, guests were, metaphorically, salmon. When the guests' arrival was acknowledged, the watchman and the host chief ran up the watchman's pole and repeated the ceremony that was conducted when the first watchman's pole was finished. Returning to the ground, the watchman ordered the singers to sing the watchman's song (cited above), and the gift blankets were placed at the foot of the pole to be distributed (Boas 1925, 175). The first food served to guests was dried salmon (177). A guest arriving at a potlatch was referred to as a "salmon," as was the wealth that a person acquired in order to host the potlatch (Boas 1925, 173; Boas 1949, 234). A copper was also referred to as a salmon (Boas 1925, 152; Boas 1949, 234), and a large number of guests was referred to as a "school of salmon," while the village or house of the host was referred to as the "salmon weir" (an allusion to the guests the host catches in it) (Boas 1925, 152, 172-74; Boas 1949, 234). During the potlatch, the salmon metaphor continued. For example, the words of a feast song refer to the host's rivals as "losing their tails" (like old salmon) (Boas 1921, 1291; Boas 1949, 235).

As noted above, on the Northwest Coast salmon were considered humans who donned a salmon mask in order to seasonally transform themselves into salmon (Furst 1989, 99) so that they might offer themselves to respectful and deserving human-persons. Respectful human-persons were those who, as in the story of Wise-One and his sons, understood that the bones must be cared for and that the salmon could not be "ill-used" (Boas and Hunt 1902, 391-92). Kwakwaka'wakw oral

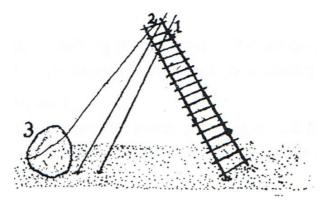


Figure 2. Sketch of a watchman's pole. Source: Boas 1925, 150.

traditions are filled with examples of how to treat salmon respectfully and of what can happen if they are mistreated. This is a common theme on the Northwest Coast. For example, in the story of Salmon Boy, told in many areas of the coast, a boy disrespected the salmon and so was taken by them to live in the salmon world. He was later caught by his mother and resurrected (see, for example, Langdon 2007, 238-40; Swanton 1909, 301-10; Thornton 2008, 73-74). Among the Kwakwaka'wakw, Ō'ɛmeäł, Chief of the Ancients, was one of those punished for disrespecting salmon. In this story, O'meäl brought his wife to life by sprinkling the bones of a twin (i.e., the human form of a salmon) with the water of life. She was resurrected and they were married. Later, he "scolded" the backbone of a spring salmon that was caught in his hair and threw it in the corner. His wife was sad, but O'meäl simply laughed at her. His wife left him, saying to the dried salmon: "Come, my tribe, let us go back" (Boas and Hunt 1902, 330). Having thus spoken, she led her tribe back to the water. This left O'meäł and his family poor and without anything to eat (320-30).

Respectful treatment of the salmon also involved offering prayers as it was caught, clubbing it only once, and keeping it clean by placing it on clean pebbles along the beach and then on a clean cedar mat (Boas 1930, 199-200, 205; Boas 1932, 239). The Laich-Kwil-Tach would string the fish on a cedar withe and carry them round their necks (Boas 1932, 239), a tradition similar to that of the Matilpi (another Kwakwaka'wakw group), who did this with the first nine sockeye caught (Boas 1930, 205). Tradition commanded that particular parts of the first salmon be eaten immediately and properly (Boas 1932, 239; Boas and Hunt 1921b, 610,

612). Menstruating women could not eat fresh-caught fish, nor could fresh fish be cooked in a house in which a menstruating woman was living – to do so would be to put her male relatives at risk (Berman 2000, 61). It was forbidden to eat the entrails, a taboo codified in the story of a boy who was sent to the land of the ghosts, where he became mad after eating salmon entrails (Boas 1910, 477). The heads of coho salmon were ritually roasted, but it was important to eat the roasted eyes for, if they were kept in the house overnight, it was believed the coho would disappear from the ocean (Boas and Hunt 1921a, 611). Disposing of the salmon bones and entrails in a proper manner, often returning them to the ocean but other times burning them in the fire, was an absolute rule (Boas and Hunt 1902, 316; Boas and Hunt 1921a, 304; Boas 1932, 239). How the entrails were removed was also ritualized. For a speared salmon, the entrails were broken off at the anal fin; however, if the fish was caught by hook and line, the intestines were cut to ensure that, in the future, the fisher's line would not break (Boas and Hunt 1921a, 610). Because women cleaned the fish, it was often their role to ensure proper handling. A woman who cleaned a salmon was to offer prayers. She was to welcome the salmon, thanking it for its annual return to keep her family healthy, asking it to return next year and to keep her protected for the year so that they might meet again (Boas 1930, 207). This reveals not only the power of the salmon to provide wealth but also its power to heal and keep one healthy. In the same vein, a man may say: "Take away my sickness, friend, supernatural one, Swimmer" (Boas and Hunt 1921b, 319). The belief in the power of the salmon to heal and to offer health to humans was deeply ingrained in the Kwakwaka'wakw psyche – so much so that dreams were interpreted according to this belief. For example, in a dream recorded by Hunt and Boas, a woman saw dead women but also saw many salmon jumping. She took this to mean that she would live until the salmon returned (Boas 1925, 25).

The intention of all these practices, taboos, and beliefs is to ensure the safe and continual return of salmon each year. Hunt refers to these practices as "treating clean," from the Kwak'wala word 2a?ikila, meaning "to make good, lucky, well, clean, clear, bright" (Berman 2000, 62; Berman 2004, 143). Boas expands this definition to include the act of observing taboos and being careful in "ordinary pursuits" (Boas 1949, 617), and he notes a very similar word, e'kleqEla, as an alternative to the word tsla'eqa (Boas 1966, 172). Boas defines e'kleqEla as "good minded or happy," an interesting contrast to the word tsla'eqa, "to be fraudulent, to cheat." It is also interesting that an alternative word for the winter

ceremonial is similar to the word used to describe the reverence for salmon.

Sockeye, chinook, coho, and chum salmon, as well as halibut and eulachon, received reverential treatment (Berman 2000, 62; Boas and Hunt 1902, 303). Two important species missing from this list are herring and pink salmon. This is interesting because, although herring were an important springtime species, they were considered unclean, while pink salmon were considered weak: "and the weak ones shall put on the hump-back-salmon [masks]" (Boas and Hunt 1902, 303; see also Berman 2000, 62 for further discussion). Kwakwaka'wakw people believed that the resurrection of the salmon was possible because their taking of the salmon, as long as it was done respectfully, did not result in the death of the soul of the fish. This fact is revealed in a prayer to the coho, in which the speaker says: "We know that only your bodies are dead here, but your souls come to watch over us when we are going to eat what you have given us" (Boas and Hunt 1921a, 612).

One Mamalilikulla (a Kwakwaka'wakw group) story explains the origin of returning the bones and entrails to the ocean. In this story, Thunderbird steals the wife of Woodpecker. Wren, the wise advisor to the other spirit animals, suggests that they borrow the salmon masks from the Spring Salmon, who held all the masks of the salmon. In their disguise, they entered Thunderbird's fish trap and Woodpecker spoke to his wife, telling her:

As soon as you cut open these salmon, throw the bones, the intestines, and the blood of the salmon into the sea. If you do not do so, the salmon will not go back to our house. As soon as you have cut me open, you must go and throw me into the water. Then you must walk out into the water, and stop walking when the water reaches your knees. (Boas and Hunt 1902, 305-6)

When she did this, all the salmon were resurrected and Woodpecker won back his wife (Boas and Hunt 1902, 307). The spirit animals then conspired to destroy Thunderbird, and this is how they received the right to use the salmon weir and salmon trap. And, because of Woodpecker and his wife, the people still return salmon remains to the ocean (Boas

² In the text, the name of this bird is *Gu'ldEmax*, which Berman (1992, 128) translates as "Fiery." He is the chief of the birds of the earth. Boas calls this bird Woodpecker, likely referring to the Pileated Woodpecker or Northern Red Shafted Flicker. In this same text, *Gu'ldEmax* and the birds of the earth also fight Thunderbird for control over the weather. It is significant that the bird fighting for summer and sunshine is named "Fiery," a metaphor that Boas seems to have missed (Berman 1992, 128).

and Hunt 1902, 316-17). The return of the salmon to the ocean, the water of life, is a fundamental tenet and is essential to its resurrection: "After they had eaten, the bones were gathered and were thrown into the water. Immediately the salmon jumped and came to life" (Boas 1910, 171). Without this final respectful treatment, the salmon would not be resurrected and would not return to the human world to ensure human health, wealth, and well-being.

The water of life is a common feature of Kwakwaka'wakw oral traditions. Humans often obtained it on a trip to the supernatural world, and when they returned home, they could use it to resurrect or cure people in the human world. Although for humans the water of life seems to have been urine obtained from a supernatural being (Furst 1989, 95), for salmon it was the ocean. The ocean had a magical effect on salmon, ensuring their resurrection, or rebirth, and enabling them to return to their world beneath the sea, which, according to Kwakwaka'wakw cosmology, was located far to the west.

The sharing of the salmon resource was codified within oral tradition. For example, the story of Heron and his wife, part of the *Q!āʾnēqēʿlaku* story, reveals the consequence of greed. Each day they visit their salmon trap to take the sockeye salmon, but they send their children away and hide the fish from them. The children are hungry, but the parents hoard the food for themselves. In the end, the children discover their parents' treachery. Heron is destroyed and is scattered to become the ancestor of all herons, while his wife becomes the ancestor of the woodpecker, and the children go on to have prosperous lives (Boas 1969 [1935], 5-76; Hunt and Boas 1906, 185-191).

FISH TRAPS AND ACQUISITION OF THE WINTER CEREMONIAL

Fish traps and fish weirs are part of a fishing technology that is found around the globe. A fish weir "is essentially any structure constructed in water and acting as a funnel or barrier to direct fish into a trap or enclosure" (Connaway 2007, 5). The enclosure area – be it a fenced area, a basket, or a container – is the trap. Very often these two terms, "fish trap" and "fish weir," are used interchangeably or in combination, likely because they often work in concert. I use the term "fish trap" to refer to both of these technologies.

On the Northwest Coast, fish traps were seen as a fundamental technology, contributing to the well-being and wealth of people, but

in the case of the Kwakwaka'wakw, the salmon trap was also vital in acquiring the rights to the winter ceremonial. In the stories of Mink, or T'tisalagi'ta, Born-to-be-Sun was on a quest to steal the winter ceremonial from Wolf (Hunt and Boas 1906, 103-13). In this quest, Born-to-be-Sun built a salmon trap of cedar. It was broken three times before Born-to-be-Sun could determine who or what was destroying his trap and stealing his sockeye salmon. On his fourth attempt, he learned that it was the sons of Wolf who were the thieves and vandals. In retaliation, Born-to-be-Sun killed the sons of Wolf and hid their heads in a basket. He then made a red cedar bark head-ring and travelled north, towards the world of the Wolf. On his way, he built another salmon trap and asked it what it had caught. The trap's reply was "only a little bull-head" (Hunt and Boas 1906, 105). This happened three times: the second time it caught a sole and the third time it caught a flounder. Each time Born-to-be-Sun told the trap to throw it back. The fourth time the trap answered that it had caught a sisiutl, the double-headed serpent, which can appear as a salmon. This is what Born-to-be-Sun was waiting for. He took the sisiutl and put its head on his cedar bark head-ring, along with the heads of the sons of Wolf. It was this that turned the wolves to stone, and, in this way, Born-to-be-Sun acquired the winter ceremonial (Berman 2000, 70).

In another version of the story (Boas 1930, 57-85), Born-to-be-Sun built a salmon trap at the mouth of the river, and he also built a stone weir leading to the entrance of the trap. Once he had built it, Born-tobe-Sun spoke to his trap and asked: "What is in you, Salmon Trap?" Salmon Trap replied: "A little bullhead." Born-to-be-Sun told Salmon Trap to throw it away. This happened for all kinds of fish, all of which Born-to-be-Sun told Salmon Trap to throw away. Finally, Salmon Trap named the sisiutl, which pleased Born-to-be-Sun. Born-to-be-Sun put the sisiutl in his canoe and returned home, where he made a cedar headring and placed the sisiutl on top. This head-ring then went into his box to await the winter ceremonial (74-76). Later, Born-to-be-Sun used his cedar head-ring with the sisiutl to incapacitate the wolves so that he could take the head of the eldest son of the Head-Wolf. In this way, he defeated the wolves, who left in shame, and he won the right to the winter ceremonial (81-82). Thus, in this pivotal moment, a salmon trap, endowed with supernatural powers, provides an essential component to the successful attainment of the rights to the winter ceremonial.

SALMON. SPIRITUALITY. AND STEWARDSHIP

Whereas many studies have considered the collapse of the modern salmon industry on the Northwest Coast, its unequal access to the resource, and its management (see, for example, Evenden 2007; Harris 2001; Harris 2008; Taylor 1999; Wadewitz 2012), few have considered the role of human agency and cosmology in pre-contact salmon ecology. According to Losey (2010, 18), investigations into fish traps on the Northwest Coast have largely been conducted by archaeologists who focused on chronology and the species that may have been harvested, the latter question being the more difficult one to answer (see also Caldwell 2008; Monks 1987). But what was the role of the fish trap in Kwakwaka'wakw cosmology? The importance of the fish trap within Kwakwaka'wakw traditional life is reflected in the summer ceremonial. Like salmon, traps were also seen as sentient beings who could choose to be generous to humans or who could punish them for their indiscretions. Through the summer ceremonial, the rules of the catch and the treatment and management of the resource were expressed. It was these religious beliefs and practices that formed the Kwakwaka'wakw approach to salmon management.

Recently, this concept has been discussed in regard to another fishing technology on the Northwest Coast. Although it caught several thousand fish per day (Suttles 1990, 457), Salish reef-net fishing was a sustainable harvesting practice in which Salish cosmology ensured that salmon were treated respectfully (see Claxton 2003; Claxton 2008, 52-55; Turner and Berkes 2006, 495-513). Salish people believed that the salmon of a particular run were all members of the same lineage, and so they ensured an escapement large enough to sustain that lineage (Claxton 2003, 26).

Animistic beliefs that endowed salmon with both human and supernatural qualities ensured that all fishing technologies on the Northwest Coast treated salmon with respect. Indiscriminate and unnecessary killing was inconceivable because it put all human-persons at risk of punishment from the supernatural salmon. Langdon (2006, 21-46) discusses the practice of building fish traps that work with the outgoing tide. He suggests that traps were designed to allow the safe passage of the fish at high tide; however, those fish who "chose" not to ascend the river but, instead, to give themselves to human persons, were caught in the trap with the outgoing tide. He refers to this as "tidal pulse fishing" (21-46). In a similar argument, Losey (2010) suggests that fish traps were partially dismantled when not in use to avoid catching and killing fish

unnecessarily. He suggests that this is why, today, archaeologists rarely find intact fish traps.

Fish biologists have long pointed to the return of the carcass to the river and the First Salmon Ceremony as forms of conservation. The former ensured the health and well-being of the overall river or stream ecosystem, and the latter provided time for a run of fish to pass, ensuring appropriate levels of spawning escapement. What is missing from this consideration of conservation methods is the reverence for fish resulting from animistic beliefs in which fish, especially salmon, have agency and supernatural power. General respect and care were vital, and management practices included not only good escapement levels and sensible trap and weir use but also transplanting eggs from one stream to another (Sproat 1868 [1987], 148), assisting salmon over barriers such as landslides to ensure that they reached their spawning grounds (Daniel Billy, personal communication, 2009), clearing barriers within streams, and having general resource managers who determined when fishing could begin (Barnett 1935; Daniel Billy, personal communication, 2009; Boas 1925, 153). These management and stewardship practices are sensitive to salmon ecology and are codified in both myth and ritual both of which reflect the nature of animism in Northwest Coast ontology and cosmology.

CONCLUSION

The winter ceremonial is undoubtedly one of the most important aspects of Kwakwaka'wakw spirituality. The story of Born-to-be-Sun and the Wolf discussed above provides important hints about the connection between the winter and the summer ceremonials. The story ties the winter and summer ceremonials together and reveals the importance of the latter to the success of the former – something that is not adequately addressed by Boas and other scholars of the winter ceremonial. In the discussion between Born-to-be-Sun and Salmon Trap, the latter's spirituality and supernatural power is revealed. In fact, Salmon Trap must be powerful to capture both the sisiutl and the salmon, whom, as I have shown, were also considered to be powerful supernatural beings. The connection between the summer ceremonial and the winter ceremonial was vital and important. Without the original acquisition of the winter ceremonial, and without a successful summer season of resource procurement, the winter ceremonial, in all its grandeur, could not have existed.

Animistic belief endowed salmon, and even salmon traps, with human qualities and agency; they were considered part of the supernatural realm, and they commanded care and respect. Proper care and respect ensured that these supernatural beings would remain benevolent and generous, and this resulted in a form of resource management that was sensitive to salmon ecology while ensuring a successful winter season. Respect was paid through prayers from the fisher and sometimes from his wife (Boas and Hunt 1921b, 609-11, 1318-19; Gunther 1926, 606-7; Turner and Berkes 2006, 510). The result was that all forms of fishing, including those that involved the use of traps and weirs, were conducted in a manner that conserved fish numbers. This involved dismantling traps and weirs in order to avoid needlessly killing salmon (see Losey 2010, 28) as well as developing technology to ensure the safe passage of salmon who chose not to be caught. Losey equates the needless capture of salmon with the refusal of a gift, an act of rudeness; and the abandonment of fish in a trap constitutes an unforgivable act of transgression. Given the sentient qualities of salmon, such an act of ingratitude and disrespect would result in the salmon's refusal to return. which would result in human starvation and the failure of the winter ceremonial, consequently placing humans at the mercy of malevolent winter supernatural beings. Thus, the salmon, a benevolent supernatural being, protected humans with its generosity in both summer and winter. It is no wonder that it needed to be protected and respected.

Finally, fishing itself, guided by religious beliefs and the summer ceremonial, may have enhanced species runs and numbers. It is thought that human activity is critical in explaining the dominance of fish runs (i.e., a strong run every other year) on the Northwest Coast (Kew 1989, 183; Walters and Stanley 1987, 383). Fishing removes large numbers of salmon, and spawning escapement of a proper size, known as optimal escapement, can maximize productivity (Foerster 1968, 54; Kew 1989, 179; Sprout and Kadowaki 1987, 387). The rate of return per spawning fish begins to decline once the optimal escapement rate is reached (Walters et al. 2004, 8). Additionally, among at least some Kwakwaka'wakw, salmon were taken even after they had spawned, thus allowing the fish to deposit their eggs prior to being caught for consumption. At this point the fat content was so low that they preserved quickly and did not go mouldy or take on a foul taste through the winter (Boas and Hunt 1921a, 224-25, 238-40).

Although the Kwakwaka'wakw winter ceremonial is highly regarded among Kwakwaka'wakw people today, and is widely studied

and written about, it was the nineteenth-century summer ceremonial that reflected Kwakwaka'wakw belief with regard to salmon. While the winter ceremonial was conducted to protect the community from malevolent spirits, it was the summer ceremonial that ensured a way of life that was full of abundance, essentially allowing the success of the winter ceremonial and providing protection from those dangerous and powerful winter beings. Without the summer resource season, complete with its spiritual connection to resources and cosmologically guided management practices, the extraordinary winter ceremonial could not have existed. This relationship between the summer and winter ceremonials and the practices they prescribed resulted in the coalescence of knowledge, belief, ritual, myth, and ceremony. The result of properly managing the social relationship and reciprocal responsibility between humans and the supernatural salmon was an effective and long-lasting system of stewardship.

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