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The Aleut Kayak: How Aleut Technology Shaped History

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If Russian and American imperialism in the north Pacific was the lever that turned the wheel of circumpolar history then the Aleut kayak, or “baidarka,” was the fulcrum. Without Aleut technology, and the labor of the Aleuts, the Russian-American Company would not have been able to derive tremendous profits from high value otter pelts. After the otters were nearly driven to extinction, the fur business transitioned to focusing on extracting a high volume of less valuable fur seal skins. Fur bearing animals were the most easily extractable form of wealth, and this wealth formed the basis for the United States justification of purchasing Alaska from Russia.¹ The role played by Aleut technology and labor appears to be insufficiently appreciated. Aleut technology and labor, and how they were exploited by Russia and the United States, will be the subject of this thesis.

After losing the Crimean War Tsar Alexander II needed money to repay the Rothchild financiers. The Russians decided the effort and expense of guarding their Alaska colony against the British Navy was not justified. This led to The Alaska Purchase, or "Seward's Folly", for \$7.2 million in 1867 which eventually turned out to be the best American real estate deal since the Louisiana Purchase. Alaska was an icebox full of gold, oil, whales, fish, lumber, etc. At the time the purchase was widely scorned by the press. Members of Congress, eager to protect themselves, seized on the profitable fur seal trade as justifying the expense.²

Congress granted a monopoly on the harvesting of fur seals to the Alaska Commercial Company which used Aleut labor on the Pribilof Islands.³ Pelagic hunting and other harvesting

¹ James R. Gibson, "Russian Dependence on the Natives of Alaska," *An Alaska Anthology Interpreting the Past*, ed. Stephen W Haycox and Mary Childers Mangusso (Seattle, University of Washington Press, 1996) <http://muse.jhu.edu/> (accessed February 8, 2015), 21-42.

² Nikolai N. Bolkhovitinov, "The Sale of Alaska in the Context of Russian American Relations in the Nineteenth Century," *An Alaska Anthology Interpreting the Past*, eds. Haycox and Mangusso (Seattle, University of Washington Press, 1996) <http://muse.jhu.edu/> (accessed February 8, 2015), 89-101.

³ M. Lee, "The Alaska Commercial Company: The Formative Years," *Pacific Northwest Quarterly; Pac.Northwest Q.* 89, no. 2 (1998), 59-64.

of fur seals by trespassing British, Canadian, and Japanese sealers led to a dispute which was resolved by the Bering Sea Arbitration. Continued negotiations eventually led to the North Pacific Fur Seal Convention of 1911.⁴ These events were only possible because of Aleut labor and skin-on-frame boats which allowed them to traverse the harsh conditions of the open North Pacific Ocean.

Western imperialism, enabled by the harnessing of Aleut labor and technology, had dire consequences for fur bearing animals and the Aleut people, resulting in a decrease in the numbers of both. What has changed in the scholarly literature over time is the appreciation of the extent to which Aleuts, otters, and fur seals were exploited. The narrative in the 1920's was one of, "veni, vidi, vici." (I came, I saw, I conquered) However, by the 1960's that had changed as researchers uncovered a history of systemic mistreatment, abuse, and indifference towards the Aleut people. Today, more recent appreciation for the importance of good ecological stewardship changed wildlife management from one of pure economics to a more holistic approach that assesses how human harvesting of wild-life impacts the food chain and the environmental impact as a whole. The literature is complementary and consistent as to how the chain of events unfolded. What has changed in the literature, as it has evolved over time, is a growing recognition of the degree to which human suffering and ecological damage was inflicted by Westerners.

The early sources, such as C. L. Andrews article, "Alaska Under the Russians – Industry, Trade, and Social Life" and Agnes Laut's book, *Pioneers of the Pacific Coast: A Chronicle of Sea Rovers and Fur Hunters*, view the history of imperialism among the Aleut in a very matter-

⁴ Great Britain., *Convention between the United Kingdom, the United States, Japan, and Russia, Respecting Measures for the Preservation and Protection of the Fur Seals in the North Pacific Ocean : Signed at Washington, July 7, 1911* (London : H.M.S.O., 1912).

of-fact way that accepts the narrative of domination as simply being normal.⁵ While Andrews does not hold back from listing the discomfoting facts of how the Russians imposed their dominance through murder, rape, and terror, Laut examines only what is convenient to the narrative of Western domination and disregards facts which could cause discomfort, or even guilt, for her readers.⁶ Ultimately, it is left up to more contemporary writers to sufficiently grapple with the ugly details and consequences of Western imperialism.

Foremost among the authors to delve into the history of the Aleut and their earliest interactions with the Russians and Americans is George Dyson, whose book, *Baidarka*, is a treasure trove of information. Dyson details the intersection of Aleut culture and technology with Russian and American imperialism in a comprehensive fashion. Through Dyson's research readers are able to learn precisely how the exploitation of the Aleut people, and consequently the fur bearing creatures of the region, was made possible by the Aleut kayak. Dyson's motivation for understanding the history of this cultural interaction is to gain a better appreciation for the Aleut kayak which he respects for its remarkable hydrodynamic properties. The hydrodynamic qualities of the Aleut kayak design enabled them to travel vast distances across dangerous open-ocean whereas the skin-on-frame boats built by other native peoples were of less capable design.⁷

E. Y. Arima's book, *Inuit Kayaks in Canada a Review of Historical Records and Construction, Based mainly on the Canadian Museum of Civilization's Collection*, and David W. Zimmerly's book, *QAYAQ: Kayaks of Alaska and Siberia*, are valuable supplements to Dyson's

⁵Agnes C. Laut, *Pioneers of the Pacific Coast: A Chronicle of Sea Rovers and Fur Hunters* (Toronto : Glasgow, Brook, 1920)., 23.

⁶C. L. Andrews, "Alaska Under the Russians - Industry, Trade, and Social Life." *The Washington Historical Quarterly* 7, no. 4 (1916), 279 - 295.

⁷George Dyson, *Baidarka* (Edmonds, Wash.: Alaska Northwest Pub. Co, 1986)., 15.

research. Arima compares the Aleut kayaks with those of the Inuit and offers valuable insight into how differences in design differed from tribe to tribe and region to region.⁸ Zimmerly also compares and contrasts the differences in design while observing how those differences result in various performance gains or losses. Additionally, both authors observe that different tribes used different materials with which to build their kayaks. Shorter, wide bodied kayaks covered with caribou skin were able to turn more easily but were unable to go on the open ocean or track as quickly as the long, skinny fur-seal or sea lion covered baidarkas built by the Aleut.⁹ What set the Aleut technology apart from their neighbors was the physical and design characteristic of the Aleut kayak.



Loman Brothers, *Eskimo in Kayak, Nome, Alaska, Ca. 1910* (University of Washington Libraries, Special Collections, unknown).

⁸ E. Y. Arima et al., *Inuit Kayaks in Canada a Review of Historical Records and Construction, Based mainly on the Canadian Museum of Civilization's Collection* (Hull, PQ : Canadian Museum of Civilization, 1987)., 18.

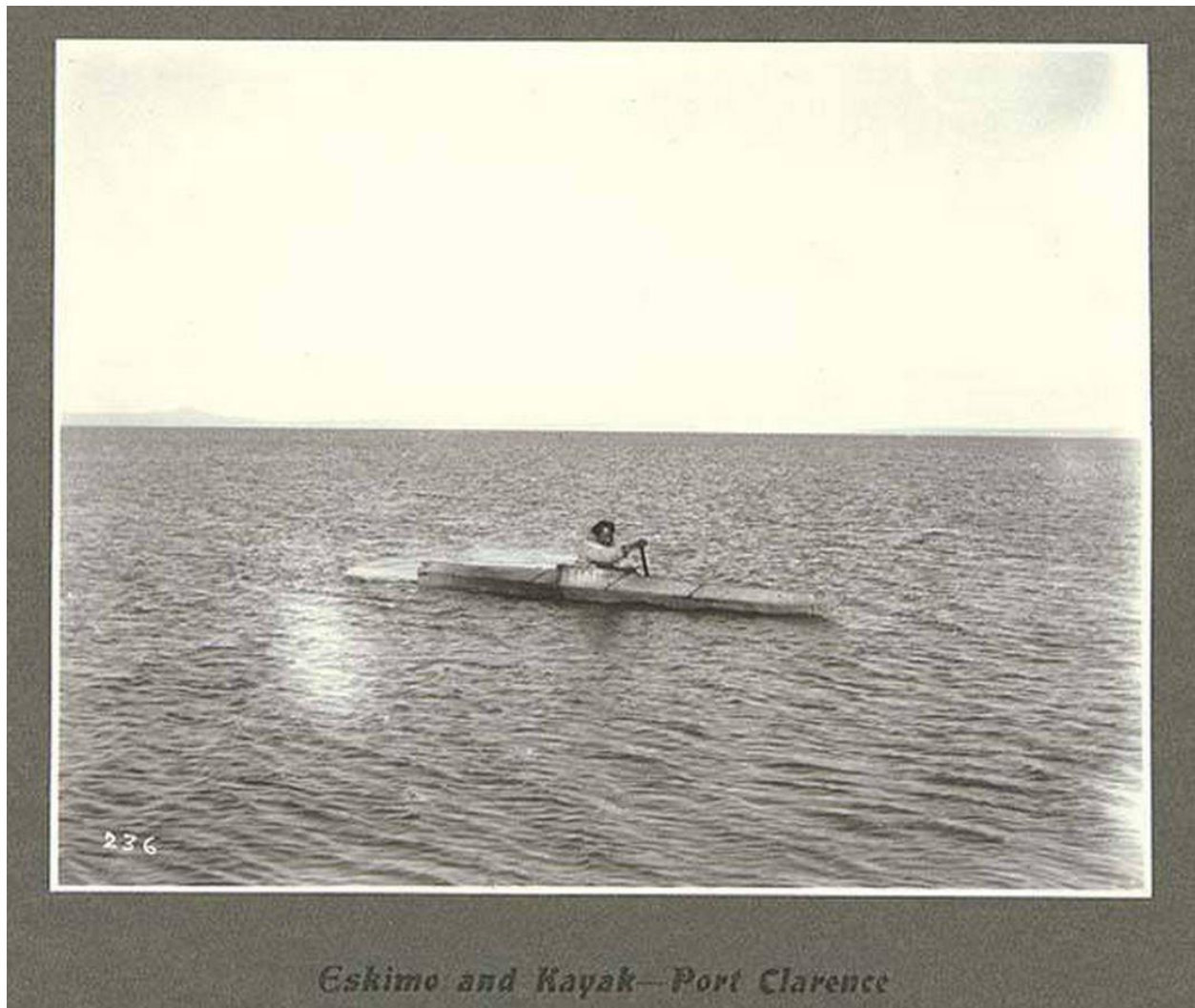
⁹ David W. Zimmerly, *QAYAQ: Kayaks of Alaska and Siberia* (Fairbanks, Alaska : University of Alaska Press, 2000)., 66.

Dorothy Miriam Jones book, *A Century of Servitude*, and K. Reedy-Maschner's article, "Where Did All the Aleut Men Go? Aleut Male Attrition and Related Patterns in Aleutian Historical Demography and Social Organization" are essential sources that enable readers to learn about the consequences of Western imperialism on the Aleut people. Reedy-Maschner tracks the over-all decline in Aleut numbers but focuses on the disappearance of almost all full-blooded Aleut men. She attributes this precipitous decline to the dangerous conditions under which the Aleut men were forced to work by the Russians. Additionally, Russian men took Aleut wives which reduced the number of women available for marriage. This had a cascading effect on social organization of the Aleuts as a people as those of mixed heritage held higher social standing than those who were not.¹⁰

Jones' focus is on the history of the Aleuts living on the Pribilof Islands after Alaska was sold to the United States in 1867. Jones uncovered decade after decade of mistreatment and exploitation of the Aleuts, first on the Pribilof Islands and later during World War II.¹¹ This historical pattern is supported by M. Lee's article, "The Alaska Commercial Company: The Formative Years" and Milton Freeman's book, *Endangered Peoples of the Arctic: Struggles to Survive and Thrive*. There is no disagreement among these authors as to whether or not harm was inflicted upon the Aleut. Rather, the authors' combined reports reveal the extent, depth, and breadth of suffering the Aleuts endured at the hands of the United States Government and its agents.

¹⁰ K. Reedy-Maschner, 2010. "Where Did All the Aleut Men Go? Aleut Male Attrition and Related Patterns in Aleutian Historical Demography and Social Organization." *Human Biology* 82 (5-6): 583-611.

¹¹ Dorothy Miriam Jones, *A Century of Servitude: Pribilof Aleuts Under U.S. Rule* (Lanham, MD : University Press of America, 1980). 3.



Clinton Hart Merriam, *Eskimo in Kayak, Port Clarence, Alaska, July 1899*. University of Washington Libraries, Special Collections, 1899).

Finally, the environmental cost is examined in Todd Braje and Torben Rick’s book, *“Human Impacts on Seals, Sea Lions, and Sea Otters Integrating Archeology and Ecology in the Northeast Pacific* and Ryan Tucker Jones article, “A ‘Havock made among them’: Animals, Empire, Extinction in the Russian North Pacific, 1941 – 1810. These sources reveal the environmental impact resulting from the extraction of natural wealth by Westerners.¹²

¹² Todd J. Braje and Torben C. Rick, *Human Impacts on Seals, Sea Lions, and Sea Otters Integrating Archeology and Ecology in the Northeast Pacific*, eds. Todd J. Braje and Torben C. Rick (Berkeley, Calif.: University of California Press, 2010). 15.

Additionally, we learn that Westerners were aware of the imbalance their activities were causing much earlier than previously believed.¹³



Property of Special Collections, University of Washington Libraries

N. B. Miller, *Sea Otter Hunters and Kayaks Showing Waterproof Garments and Kayak Covers, Unalaska, 1896* University of Washington Libraries, Special Collections, 1896).

Whereas some historical topics cause disputes between different versions of history the evidence gathered here is complementary, supportive, and consistent in describing how history unfolded. Early histories are more Euro-centric, while later publications are more aware of cultural bias and seem to make an effort to be more evenhanded in their portrayal of history. This evolution in the tone of the dialogue is consistent with higher standards in academic research and

¹³ R. T. Jones, "A 'Havock made among them': *Animals, Empire, and Extinction in the Russian North Pacific, 1741-1810*," *Environmental History* 16, no. 4 (2011), 585-609. doi:10.1093/envhis/emr091., 585-609.

publishing. An area of this history that can and should be subject to more research is the technology created by the Aleut culture which enabled them to survive and thrive long before Western explorers and fur traders crossed their paths.

First contact between the Aleut and Europeans came about as a result of Russian exploration. In 1725, Tsar Peter the Great, "...ordered Vitus Bering to journey to Kamchatka and there to build the ship or ships that were to sail to America."¹⁴ Although the Tsar died shortly after initiating this mission to Bering it was supported by Catherine I, his widow and successor. However, it would not be until June 4th, 1741 that Bering would finally disembark on this exploratory voyage. The two vessels built for the mission were the *Saint Peter*, with a complement of seventy-five men, and the *Saint Paul*, which carried seventy-six men.¹⁵ Additionally, the mission included several scientists, including Naturalist Georg Wilhelm Steller.¹⁶ The first contact between Europeans and Aleut would be documented thanks to these explorers.

According to George Dyson, the first documented contact between Europeans and the Aleut occurred on September 5th, 1741.¹⁷ Leonhard Stejneger wrote that it happened "...shortly after the *St. Peter* had dropped anchor off Bird Island, about 4:30 P.M."¹⁸ Stejneger continued, "Sudden shouts from the island surprised the explorers and excited their curiosity, which rose to the highest pitch when somewhat later two little skin boats (baidarkas), which Steller correctly likened to the kayaks of the Greenland eskimos, each holding a single native, came paddling

¹⁴ Herman E. Slotnick and Claus M. Naske, *Alaska : A History*, Third edition.. (Norman : University of Oklahoma Press, 2011), 25.

¹⁵ *Ibid.*, 27.

¹⁶ Dyson, *Baidarka*, 8.

¹⁷ *Ibid.*, 8.

¹⁸ Leonhard Stejneger, *Georg Wilhelm Steller, the Pioneer of Alaskan Natural History*, (Cambridge, Mass., Harvard University Press, 1936), 296.

towards the ship.”¹⁹ Western Europeans had already been introduced to Inuit skin-on-frame kayaks from Greenland which explains why Steller was familiar with the type of approaching craft.²⁰ Author George Dyson includes the following quote from Naturalist Georg Steller in his book *Baidarka*:

The American [Aleut] boats are about two fathoms long, two feet high, and two feet wide on the deck, pointed towards the nose but truncate and smooth in the rear. To judge by appearances, the frame is of sticks fastened together at both ends and spread apart by crosspieces inside. On the outside this frame is covered with skins, perhaps of seals, and coloured a dark brown. With these skins the boat is covered flat above but sloping towards the keel on the sides; underneath there seems to be affixed a shoe or keel which at the bow is connected with the bow by a vertical piece of wood or bone representing a stem piece, so that the upper surface rests on it. About two arshins [56 inches] from the rear on top is a circular hole, around the whole of which is sown whale guts having a hollow hem with a leather string running through it, by means of which it may be tightened or loosened like a purse. When the American [Aleut] has sat down in his boat and stretched out his legs under the deck, he draws this hem together around his body and fastens it with a bowknot in order to prevent any water from getting in... The American [Aleut] puts his right hand into the hole of the boat and, holding the paddle in the other hand, carries it thus because of its lightness on to the land anywhere he wants to and back from the land into the water. The paddle consists of a stick a fathom [six feet] long, at each end provided with a shovel, a hand wide. With this he beats alternately to the right and to the left into the water and thereby propels his boat with great adroitness even among large waves.²¹

Stejneger writes that the next meeting between the Europeans and the Aleut happened later in the afternoon when, “...seven baidarkas (Steller says nine) in single file paddled towards the ship... though only two approached the side. By Bering’s order they were given an iron kettle and some needles and thread; in return he received two of their wooden eyeshade-like hats, to each of which was fastened a small ivory image resembling a man.”²² Bering’s lieutenant Alexei Chirikov and the *St. Paul*, which had become separated from the *St. Peter* in a storm on June 20th, was heading home and dropped anchor at Adak Island. In need of water, and without longboats to reach shore, Chirikov was dependent upon the Aleut for a supply of fresh water.

¹⁹ Leonhard Stejneger, *Georg Wilhelm Steller, the Pioneer of Alaskan Natural History*, (Cambridge, Mass., Harvard University Press, 1936), 296.

²⁰ G. W. Nooter, *Old Kayaks in the Netherlands* (Leiden, Brill, 1971), 3.

²¹ Leonhard Stejneger, Ellsworth Price Bertholf and Frank Alfred Golder, *Bering's Voyages : An Account of the Efforts of the Russians to Determine the Relation of Asia and America*, eds. Leonhard Stejneger and Ellsworth Price Bertholf (New York, N.Y., American Geographical Society, 1922), 90.

²² Stejneger, *Georg Wilhelm Steller*, 298.

Dyson writes, “After further fruitless attempts to lure the natives aboard with trinkets of dubious use, the Russians at last stumbled upon the Aleuts’ preferred medium of exchange. We now know that the Aleuts had long been trading bits of iron among themselves, and, via their Bering Sea neighbors, with Asian cousins to the west.”²³ The Russians traded iron knives for fresh water and continued their voyage home.



Frank H. Nowell, *Alaskan and Siberian Fur Co. Storefront, Showing Display of Animal Furs, Skins, Horns, Native American Baskets, and Kayak, Nome, Ca. 1905* University of Washington Libraries. Special Collections Division., ca 1905).

²³ Dyson, *Baidarka*, 11-12.

The survivors of Bering's mission would bring back news of their discovery in 1742 starting a fur-rush. The Russian pursuit of fur wealth would have dire consequences for the Aleut. Russian guns, ruthlessness, and disease quickly overcame Aleut resistance and the Aleut population consequently declined. The Russians sought to press the Aleut into servitude because of the ability of the Aleuts to use their kayaks to travel vast distances across the open ocean in the pursuit of valuable sea-otter furs.²⁴ The Russian conquest of Siberia in the 1580s enabled Russian fur hunters to expand their operations to the Pacific Coast. These fur hunters, or *promyshlenniks*, were comprised of Cossacks, "...criminals, political exiles, and adventurous camp followers..." who came in search of sea-otter pelts, "...each worth a small fortune in trade with the Chinese."²⁵

The Russian government paid little attention to Alaska for the next half century which enabled individual Russians seeking furs to operate with impunity. Slotnick and Naske write:

... Russian fur merchants sent men and ships to the island to procure the animals. The Russian fur hunters, or *promyshlenniki*, quickly made themselves masters of the islands. A rough, hard-drinking lot, many of them illiterate, quarrelsome among themselves, unrestrained by either government or their leaders, they made virtual slaves of the Aleuts. The Aleut men were forced to do the hunting while the Russians dallied with the women. On several occasions the Aleuts tried to revolt, and these attempts were repressed, sometimes with great cruelty.²⁶

According to Dyson, "...the unofficial motto of the campaign..." was, "God is high above, and the Czar is far away."²⁷ Catherine the Great (also known as Catherine II), "...issued directives demanding better care and treatment of the Aleuts but provided no means of enforcing her decrees except that the fur tax imposed on the Natives was finally terminated in 1767."²⁸

²⁴ Slotnick and Naske, *Alaska: A History*, 16.

²⁵ Dyson, *Baidarka*, 4.

²⁶ Slotnick and Naske, *Alaska: A History*, 28.

²⁷ Dyson, *Baidarka*, 4.

²⁸ Slotnick and Naske, *Alaska: A History*, 28.

Russian mistreatment and disease would cause the Aleut population to decline in much the same way as the population of the otters and fur seals declined.²⁹

The Russians became dependent upon the Aleuts for their kayak technology and labor as hunters. First, and foremost, the Russians were accustomed to hunting fur animals on land and lacked the necessary technology for pelagic (open sea) hunting.³⁰ According to Zimmerly, the Aleut kayak, "...probably represents up to 5,000 years of development and evolution and is the ultimate in sea kayak design."³¹ Secondly, the Russians were dependent upon the Aleuts for their labor. Gibson writes, "The inexperienced Russians were reluctant to exert their brawn and risk their lives, particularly when highly skilled and largely defenseless Native hunters were readily available. Besides, the hunting of nimble sea otters in the open sea from flimsy kayaks with short harpoons was a formidable task that the Natives practiced from childhood and took years to master."³² Gibson goes on, "In fact, [Aleut] expertise with kayaks and harpoons was such that under Russian pressure it contributed to the rapid diminution of the sea otter population. It was also such that the Russian *promyshlenniki* became totally dependent upon the Aleuts, not even bothering to learn how to hunt "sea beavers" themselves."³³

What physical characteristics endowed the Aleut kayak with the ability to venture across the open ocean? Dyson writes:

What were the secrets [of the Aleut kayak]? Clearly, a soft, elastic skin and flexible hull had something to do with it – think of the advantage in being able to bend effortlessly over the waves rather than having to

²⁹ K. Reedy-Maschner, "Where did all the Aleut Men Go? Aleut Male Attrition and Related Patterns in Aleutian Historical Demography and Social Organization," *Human Biology* 82, no. 5-6 (2010), 583-611..

³⁰ James R. Gibson, "Russian Dependence on the Natives of Alaska," *An Alaska Anthology Interpreting the Past*, eds. Haycox and Mangusso (Seattle, University of Washington Press, 1996) <http://muse.jhu.edu/> (accessed February 8, 2015), 23.

³¹ Zimmerly, *QAYAQ: Kayaks of Alaska and Siberia* (Fairbanks, Alaska, : University of Alaska Press, 2000), 15.

³² Gibson, "Russian Dependence on the Natives of Alaska," *An Alaska Anthology Interpreting the Past*, eds. Haycox and Mangusso, 23.

³³ *Ibid.*, 24.

push them out of the way – as did the Aleuts’ uncanny ability to gain the advantage of every wave movement heading their way. Knowledge of winds, waves, and tides was as instinctive to the Aleuts as to their amphibious prey. These exceptionally light, ingeniously flexible, seal-skinned and grease-smearred canoes were not ordinary boats, and these were no ordinary men. In the hands and biceps of the Aleuts, the baidarka was able to skim across the water with the birds.

An axiom of the marine architect’s pursuit is that the limit to a displacement vessel’s speed is set by its own bow wave, against which, at a speed proportional to the square root of the vessel’s waterline length, the vessel expends an increasing amount of work for diminishing returns. The vessel’s bow gets pushed upward by the wave it is trying to overcome, and the stern is left wallowing in the resulting trough. Only a terrific boost of horsepower and a cleanly designed “planing” hull will get the vessel over the obstacle, up on “step,” and out of its own hydrodynamic way...

...[The Aleut kayak bow] appears perfectly designed to cut cleanly into and through that bow wave so as to avoid an uphill fight. And the stern seems designed with particular attention to avoiding getting dragged down in its own wake. The skin covering of the hull, stretched across the deadrise between the keelson and the chines, took a concave form in the water identical to that of the fastest “cigarette boat” that any speed-seeker of our own century has been able to devise.³⁴



Douglas Tancred, *Eskimo in Kayak*, Ca. 1890-1900 (University of Washington, Special Collections Division: , unknown).

³⁴ Dyson, *Baidarka*, 30-31.

The signature feature of the Aleut kayak is the bifurcated bow which endows the vessel with hydrodynamic qualities enabling a faster rate of speed than the kayaks of other Native peoples. Zimmerly writes the bifurcated bow, "... allowed the bottom portion to be sharp and narrow like a cutwater, while the upper part was large and triangular in shape to give more buoyancy. This made the bow concave in cross section, a configuration that would be otherwise impossible to achieve with skin and wood" The Aleut used black spruce to make the kayak frame and yellow cedar for the ribs and cockpit combing. Instead of using screws, nails, or wood pegs, the Aleut used sea lion sinew to lash the frame together. A lashed frame enabled the boat to flex with the waves. Next, seal and sea lion skins were used to cover the kayak. Finally, the kayak was waterproofed with boiled seal oil.³⁵

The Aleut kayaks required constant maintenance in order to stay sea worthy. Dyson writes, "A well-oiled baidarka might remain in the water up to fourteen days without harm, but if the weather was rough the skin would begin to fall apart at the seams in less than a week. And accidents could happen..."³⁶ To balance the kayak, Dyson continues, "Stones as well as water containers were used as ballast to trim and stabilize an empty boat." The Aleut paddle, "...was between six and seven feet in length..." and made of cedar. "...Some of the Unalaska Aleuts used singled-bladed paddles, as was the practice at Kodiak, Prince William Sound, and places further to the east."³⁷ Risky repairs at sea were done by using inflated seal throats or bladders to keep leaking kayaks afloat.³⁸

³⁵ Zimmerly, *QAYAQ: Kayaks of Alaska and Siberia*, 18-20.

³⁶ Dyson, *Baidarka*, 42.

³⁷ *Ibid.*, 52-53.

³⁸ Zimmerly, *QAYAQ: Kayaks of Alaska and Siberia*, 27.

Braje and Rick write, “The Aleut believed that the sea otter was a transformed human being, and they would not use harpoons to hunt them; rather, the sea otter was tormented to the point of exhaustion and then clubbed when it could no longer dive.”³⁹ By connecting the Aleut to the global economy, the Russians changed the, “...relationship between humans and these animals, which altered both the ancient predator-prey dynamic and the cultural aspects associated with their harvest.”⁴⁰ The Aleut hunted sea otter on a seasonal basis in May and June.⁴¹ The traditional Aleut method of hunting otter had been, as noted, to pursue the animal until exhaustion allowed them to club it. After the Russian fur traders connected the Aleut to the global trade system the Aleut would switch to the use of darts thrown with the aid of a throwing board, or *atlatl*. The Aleut would pick a calm day and go out in a line within sight of one another. If a hunter spotted an otter he would raise his paddle and the other hunters would surround him. When the otter came up for air the hunters would throw darts and keep the otter encircled until they finally killed it. The otter was awarded to the hunter whose dart struck first. If two darts hit the otter at the same time the owner of the dart that hit closest to the head would be awarded with the kill.⁴²

Prior to the arrival of the Russians, the Aleut primarily used kayaks with one cockpit. Kayaks with two cockpits were utilized for training children and hunting. The Russians had the Aleuts build kayaks with three cockpits. The kayaks with three cockpits were used to, “... transport traders, explorers and missionaries and goods in the central cockpit.”⁴³ The Russians forbade the Aleut from making *baidara* which were large, “...open-framed, walrus-skinned

³⁹ Braje and Rick, *Human Impacts on Seals, Sea Lions, and Sea Otters*, 113.

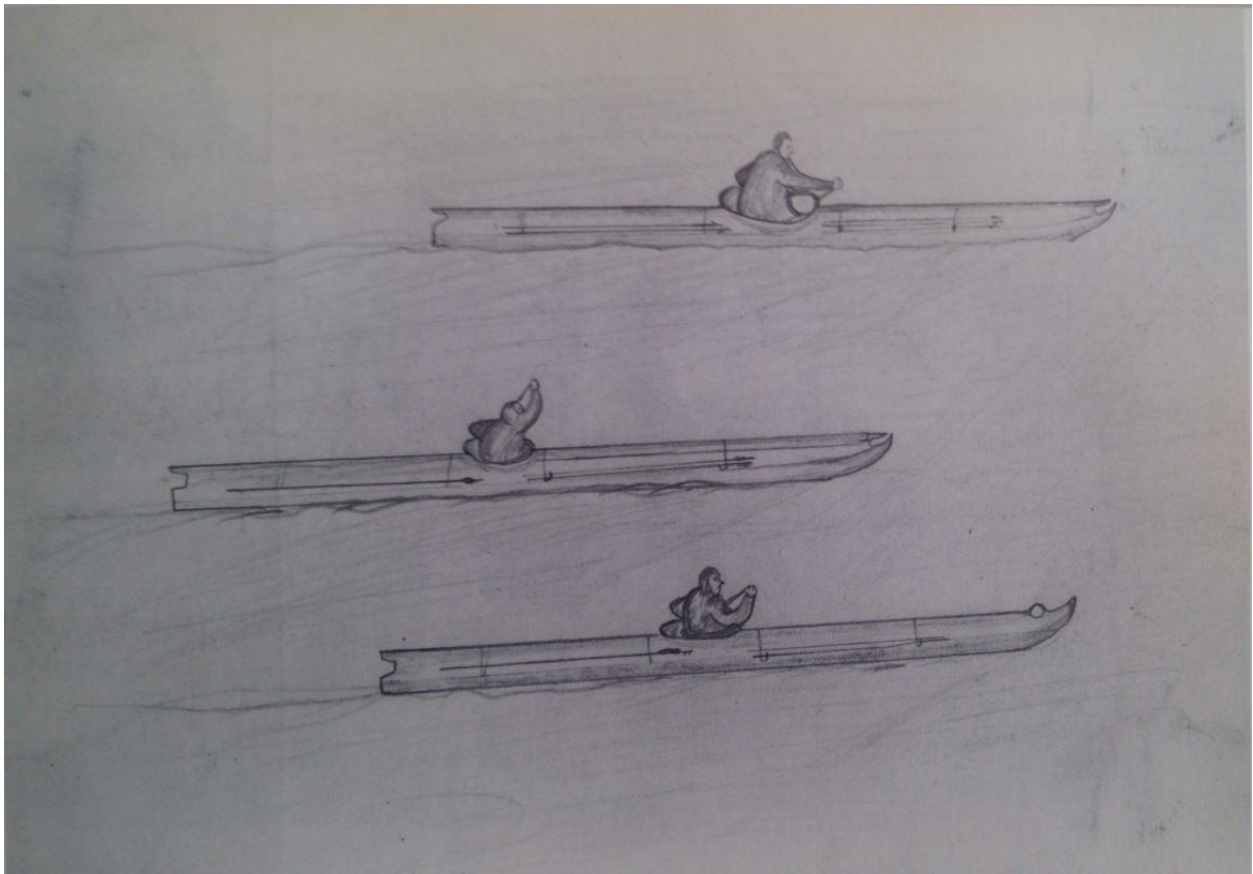
⁴⁰ *Ibid.*, 93.

⁴¹ Dyson, *Baidarka*, 13.

⁴² Zimmerly, *QAYAQ: Kayaks of Alaska and Siberia*, 22-24.

⁴³ *Ibid.*, 17-22.

vessels that served the [Aleut] both for long voyages and for local ferrying of passengers and freight – and for making war on enemy villages, or on foreign intruders such as they now found in their midst.” The three-hole kayak would come to serve the function that the baidara had previously filled.⁴⁴



Smithsonian Institution and George E. Phebus, *Alaskan Eskimo Life in the 1890s as Sketched by Native Artists*, edited by Smithsonian Institution. (Washington, Smithsonian Institution Press, 1972). 81.

Slotnick and Naske write, “Russian penetration of Aleutians roughly followed a pattern of exploiting one group of islands of the chain until the supply of animals became exhausted and then moving eastward to the next group, eventually reaching the mainland. As the distance from Kamchatka increased, the cost of operations went up, making it difficult for the smaller

⁴⁴ Dyson, *Baidarka*, 26.

companies to survive.”⁴⁵ Russian difficulty in supplying their far flung Alaskan colony also meant difficulty competing against British and American traders who were, “...buying up furs from the Natives at prices in trade goods and firearms that the ill-equipped Russians could scarcely meet.” In response, the Russians consolidated Russian-American trade after intense lobbying. Thanks largely to the efforts of the Irkutsk merchant G. I. Shelikhov, Russian fur merchants were now required to operate under license from the crown. Shelikhov’s efforts resulted in the 1799 formation of the Russian-American Company. Alexander Baranov was hired to manage the business and would come to, “...reign singlehandedly over an empire that Shelikhov the dreamer had been able to imagine, but only Baranov was able to build.”⁴⁶ Russian consolidation yielded greater operating cost efficiency which was badly needed because, as R. T. Jones writes, “By the time the Russian American Company (RAC) was granted a monopoly on the trade in 1799, it too was forced to begin looking immediately for new hunting grounds in southeastern Alaska.”⁴⁷

The Russian-American Company was modeled on the Britain’s East India Company which enabled the RAC to operate with only limited Russian government interference. Russian interests in Alaska would be promoted with a minimum of risk or liability to the government. Slotnick and Naske write, “Foreign competition could be better controlled, while the government, if challenged, could repudiate any action of the company as having been unauthorized.” The RAC was granted wide operational latitude and was obligated to use this authority to, “...take possession of all territories already occupied by Russians north of 55 degrees north latitude and to establish new settlements not only in that area but to the south as

⁴⁵ Slotnick and Naske, *Alaska: A History*, 28.

⁴⁶ Dyson, *Baidarka*, 31.

⁴⁷ R. T. Jones, "A 'Havock made among them': *Animals, Empire, and Extinction in the Russian North Pacific*, 1741-1810, *Environmental History* 16, no. 4 (2011), 585-609. doi:10.1093/envhis/emr091., 593.

well, as long as this did not result in conflict with other powers.” The RAC was also obligated to expand colonization, grow trade relations in the region, and help convert Native Americans to Orthodox Christianity.⁴⁸

The Russian-American Company under Baranov changed Aleut otter hunting from small groups to great kayak fleets of nearly 700 hunters. Baranov knew it would become necessary to push farther down the Alaska coastline and the Aleut kayak was the tool that made this possible. The Russians and the Aleut were under constant threat from the weather and sea conditions as well as hostile Tligit Indians. Baranov dealt with the danger by, “[consolidating] the hunting parties into increasingly larger fleets.” Over 500 Aleut kayaks, each holding at least two men, were deployed during the hunting season of 1794. The large hunting fleets were effective at harvesting otter but conducted perilous journeys which not all survived.⁴⁹

In 1808, the Russians sent an expedition all the way to California. They returned with over two thousand skins and sent another mission the following year. The Aleuts tried to, “...sneak into San Francisco Bay without drawing fire from the Spanish guns stationed at the Presidio overlooking the Golden Gate.” The Russians returned again in 1811 but found themselves in the company of Americans from New England who had struck a business deal with Baranov. The Spanish were furious with this patent disregard for their sovereignty and, “...stationed armed guards at all freshwater streams where thirsty Aleuts were likely to come ashore.” They captured several Aleuts who, it was suspected, preferred the California climate and intentionally allowed themselves to be captured. The 1812 expedition to California was

⁴⁸ Slotnick and Naske, *Alaska: A History*, 36-37.

⁴⁹ Dyson, *Baidarka*, 32,43.

intended to establish a permanent Russian outpost, but when the otter ran out and the Aleut refused to farm the Russians were forced to return to Alaska.⁵⁰

The Aleut fared poorly under the rule of their Russian masters. Agnes Laut writes, “How were the Aleutian Indians paid? At first they were not paid at all. They were drugged into service with vodka, a liquor that put them in a frenzy; and bayoneted and bludgeoned into obedience. These methods failing, wives and children were seized by the Russians and held in camp as hostages to guarantee a big hunt.”⁵¹ The Aleut wore clothing made of otter fur when the Russians met them. After the Russians conquered the Aleut and required the Aleut to hand over all otter skins, the Aleut were reduced to wearing hair-sealskin parkas which had previously been their slaves’ clothing.⁵² The Aleut population declined nearly as precipitously as the otter population. As R.T. Jones put it, “Although other factors such as prey availability, changes in climate and ocean temperature, and disease may have played a role, the number demonstrates that the Russian fur trade alone was sufficient to nearly wipe out the Commander Islands’ sea otters.”⁵³ Milton Freeman writes, “In the first fifty years of Russian control, Aleuts died from introduced diseases, wars resisting colonizers, malnutrition, and privation caused by the transport of able-bodied hunters away from their families and villages to hunt sea mammals for the Russians. At the time of contact, the Aleut population is estimated to have been between 12,000 and 15,000. Today, there are about 2,000 Aleuts, of whom only 340 people still speak the Aleut language.”⁵⁴ Agnes Laut writes of the Aleuts’, “Only the Aleut women and children wept for the

⁵⁰ Dyson, *Baidarka*, 57-58.

⁵¹ Laut, *Pioneers of the Pacific Coast: A Chronicle of Sea Rovers and Fur Hunters*, 44-45.

⁵² Dyson, *Baidarka*, 14-15.

⁵³ R. T. Jones, "A 'Havock made among them': *Animals, Empire, and Extinction in the Russian North Pacific, 1741-1810*, *Environmental History* 16, no. 4 (2011), 585-609. doi:10.1093/envhis/emr091., 591, 597-598.

⁵⁴ Milton M. R. Freeman, *Endangered Peoples of the Arctic: Struggles to Survive and Thrive* (Westport, Conn., Greenwood Press, 2000). 1.

loss of the hunters who never returned; and sea-otter hunting decreased the population of the Aleutian Islands by thousands. It was as fatal to the Indian as to the sea-otter.”⁵⁵

Eventually, the otter population collapsed. Dyson writes, “In contrast with the 10,000 or more pelts collected annually during the heyday of the hunt, the results for the years 1842 to 1860, according to company records, averaged an annual 984 pelts.” Russians reacted by instituting conservation measures which put specific breeding areas off limits and enabled the otter to again reproduce. This situation would not last long because the sale of Alaska to the United States in 1867 resulted in, “Hunting restrictions [being] lifted and world market prices offered for pelts.”⁵⁶ As the sea otter became scarce, the Russians turned toward alternative sources of furs. Milton Freeman writes, “Aleut hunters were taken to the [Pribilof] islands, often without choice, on a seasonal basis, and by the 1820s permanent settlements had been established on both islands. Seals were killed ruthlessly until then, when the Russian-American Company established a licensed fur-seal monopoly and adopted conservation methods in harvesting seals, taking only three- to five-year-old nonbreeding males and prohibiting the killing of female seals.”⁵⁷

Russian activity in the North Pacific soon drew the attention of other European nations. Capt. Cook’s mission in 1776 came as an unwelcome surprise to the Russians who had been exploring Alaska for the previous thirty-seven years.⁵⁸ Laut writes, “The Russians of Oonalaska and Kamchatka resented the English intrusion on their hunting-ground, while the English refused to acknowledge that they were invading Russian territory.”⁵⁹ The Russians’ fears that the

⁵⁵ Laut, *Pioneers of the Pacific Coast: A Chronicle of Sea Rovers and Fur Hunters*, 47.

⁵⁶ Dyson, *Baidarka*, 68-69.

⁵⁷ Freeman, *Endangered Peoples of the Arctic: Struggles to Survive and Thrive*, 2.

⁵⁸ Dyson, *Baidarka*, 20.

⁵⁹ Laut, *Pioneers of the Pacific Coast: A Chronicle of Sea Rovers and Fur Hunters*, 61.

purpose of Cook's mission was to make territorial claims and not pursue scientific discovery and exploration for the Northwest Passage proved well founded. Although Cook was killed in Hawaii, his ship continued on to Canton, China, where the English traded otter pelts for tremendous profits. Upon returning to Britain, news of the wealth to be derived from trading otter pelts in China resulted in a growing number of British trade ships entering territory claimed by Russia and trading superior, cheaper goods with Native Americans in violation of local Russian trade policy.⁶⁰

Spain also attempted to lay claim to the North Pacific. Spain claimed the entire territory of the Pacific Ocean in 1493 and the pope confirmed this claim in the Treaty of Tordesillas between Spain and Portugal in 1494. The problem with Spanish claims in the North Pacific was that there were no Spanish settlements north of Spanish California. Slotnick and Naske write, "Meanwhile, the viceroy of Mexico sent expeditions to Alaska in 1774, 1777, 1778, and 1790 to see what the Russians were doing and, perhaps, to take possession of the territory for Spain, but the Spaniards were unable to hold any Alaska territory."⁶¹ The Spaniards had secretly planned to send the third Bucareli expedition in 1776 but were, "...delayed by bureaucratic details and did not reach the Alaskan Coast until 1779."⁶² Unfortunately for Spain, this delay weakened their claim to Alaska because they were preceded by Cook.

In the fall of 1787 the *Lady Washington* and the *Columbia* sailed from Boston, in the new American republic, to explore the west coast of North America in search of the Northwest Passage. Upon arriving at Nootka Sound, strained relations between Britain and Spain proved

⁶⁰ Slotnick and Naske, *Alaska: A History*, 30.

⁶¹ *Ibid.*, 28-29.

⁶² Dyson, *Baidarka*, 26.

fortunate for the Yankees as the Spaniards arrested a British Captain and created an international incident that would further strain relations between those two nations. Laut writes:

It was absolutely necessary to their existence as a nation that the United States should build up a merchant fleet. Under fostering laws, with the advantages of cheap labour and abundant timber, a wonderful clipper fleet had been constructed in Massachusetts and Maryland and Virginia ship-yards, consisting of swift sailing-vessels suitable for belting the seas in promoting commerce and in war. The ship-yards built on shares with the merchants, who outfitted the cargo. Builders and merchants would then divide the profits. Under these conditions American traders were penetrating almost every sea in the world; and the cargoes brought back built up the substantial fortunes of many old Boston families. 'Bostonnais' these swift new traders were called from the Baltic to China. It can be readily believed that what they heard of Cook and Bering interested the Boston men mightily. At all events, they fitted out two ships for the Pacific trade—ships that were to range the seas for the United States as Drake's and Cook's had drawn a circle round the world for England. ...during the winter at Nootka the men from Boston learned [of the North Pacific fur trade] from the Indians.

The American expedition continued on to China where they exchanged their cargo of furs for tea. The *Columbia* returned home to Boston in the fall of 1790.⁶³ The United States now knew there was fur wealth in the North Pacific and more Yankees would return in growing numbers. Slotnick and Naske write, “Russians were alarmed by speeches of American congressmen calling on the United States to prevent further Russian expansion in North America and asking protection for American traders in Russian America. Captain Vasily Mikhaylovich Golovnin warned that an American seizure of Russian territories was imminent and charged that the United States was supplying the Natives with arms to be used in an alliance against Russia.”⁶⁴ Yankee traders, sealers, and whalers would venture into the waters of Russian-Alaska in ever-growing numbers until the eventual sale of Alaska to the United States in 1867.

In 1854 the Crimean War between Russia, Britain, and France began.⁶⁵ In need of allies and support, Russia viewed the sale of Alaska as preventing future conflict between Russia and

⁶³ Laut, *Pioneers of the Pacific Coast: A Chronicle of Sea Rovers and Fur Hunters*, 67-72.

⁶⁴ Slotnick and Naske, *Alaska: A History*, 46.

⁶⁵ *Ibid.*, 50.

the United States.⁶⁶ Additionally, the sale of Russian-America to the United States, "...would rid [Russia] of a burden, and... gain a friend in the United States to give Russia support in her struggle against England."⁶⁷ Moreover, the Russian-American Company had become an economic liability to the Russian government. This was because the market for furs in China had declined due to the Chinese economy shrinking as a result of conflicts with European powers. Furthermore, the Russian government needed an infusion of hard currency to repay their financiers and finance other domestic programs.⁶⁸ The sale of Alaska to the United States was delayed as a consequence of the American Civil War. On March 30th, 1867, the United States reached an agreement with the Russian government to purchase Alaska for \$7,200,000 in gold.⁶⁹ The United States Senate ratified the treaty on the first vote by a tally of twenty-seven to twelve although the final official count would be thirty-seven to two.⁷⁰ After much debate and arm-twisting, the House of Representatives finally voted to pay the Russian government on July 18th, 1868.⁷¹

While the idea of territorial expansion was popular in the United States, paying for it was not. The United States had just ended its costly and devastating Civil War in 1865. The cost of purchasing and administering Alaska came at a time when the United States was grappling with, "...the most significant constitutional crises in American history, southern Reconstruction and the impeachment of Andrew Johnson, leading to much acrimonious criticism of the executive

⁶⁶ Bolkhovitinov, "The Sale of Alaska in the Context of Russian American Relations in the Nineteenth Century," *An Alaska Anthology Interpreting the Past*, 96.

⁶⁷ Slotnick and Naske, *Alaska: A History*, 59.

⁶⁸ *Ibid.*, 57, 61.

⁶⁹ I. I. Alexander et al., *Alaska Treaty, 1867*, eds. I. I. Alexander, William Henry Seward and Andrew Johnson (1867). 1.

⁷⁰ Richard E. Welch, Jr., "American Public Opinion and the Purchase of Russian America," *An Alaska Anthology Interpreting the Past*, ed. Stephen W Haycox and Mary Childers Mangusso (Seattle, University of Washington Press, 1996) <http://muse.jhu.edu/> (accessed February 8, 2015), 102.

⁷¹ Slotnick and Naske, *Alaska: A History*, 65.

branch.”⁷² Slotnick and Naske write, “A few newspapers were most vehement in their denunciation of what they called “Seward’s Folly” and “Seward’s Ice Box.” Horace Greeley, the acerbic editor of the *New York Herald*, sneeringly advised European potentates with worthless territories to discard that they would find a ready buyer in the secretary.”⁷³ On October 2nd, 1867, the *Daily Iowa State Register* published, “Finally Named – Secretary Seward has named our Russian purchase “The Territory of Alaska.” Heretofore every man has had his own name for it – the one most generally used being “Walrussia.””⁷⁴

Seward and his supporters’ justification for the expense of the Alaska purchase was furs.

Dorothy Jones writes:

...the Pribilof fur seal industry was one of the government’s main motivations for purchasing Alaska from Russia in 1867. Though many visitors raved about Alaska’s rich resources – fossil ivory, whales, walrus, many species of cold water fish, vast amounts of timber, and numerous fur-bearing land and sea mammals – only the Pribilof fur seals, estimated at two million animals, produced commercial profits of any significance. During Congressional hearings in 1868, experts gave glowing accounts of the profits from the industry. In the last years of Russian administration of the territory, the Russians insured their animal skins for one million dollars a year. These were primarily seal skins, as the rest of the Russian fur trade had collapsed by then....A customs officer said that one West Coast company alone reported profits of over one-half million dollars from the fur seal trade in a single year, 1868. Another customs officer estimated an annual revenue to the government of \$100,000 from the industry.⁷⁵

Dyson writes, “The Alaska Commercial Company took over where the Russian-American Company had left off, and private contractors moved in to expedite the hunt.” The Russian conservation measures for surviving otter ended, and all restrictions on harvesting of fur-bearing animals were lifted.⁷⁶

⁷² Welch, Jr., "American Public Opinion and the Purchase of Russian America," *An Alaska Anthology Interpreting the Past*, 102-103.

⁷³ Slotnick and Naske, *Alaska: A History*, 64.

⁷⁴ *Daily Iowa State Register*, published as *Daily State Register*, Finally Named." Page 2, Vol. VI, issue 230 edition, sec. News/Opinion, October 02, 1867.

⁷⁵ Jones, *A Century of Servitude: Pribilof Aleuts Under U.S. Rule*, 1.

⁷⁶ Dyson, *Baidarka*, 69.

The transfer of Alaska from Russian to American control brought change for both the animals who were hunted as well as the people who lived there. Freeman writes:

The second great shock to the Aleut culture came with the American purchase of Alaska in 1867. The Pribilofs were the unpublicized “jewel in the crown” of the Alaska Purchase, and the seal industry generated large revenues for the U.S. Treasury. At first, the Aleuts were paid competitive wages by a series of private monopolies, at a rate comparable to other industrial workers in America. After forty years of private control, however, the fur seal populations had been severely depleted, and the Aleuts experienced privation and malnutrition. The U.S. government took over the industry in 1910, and the Aleuts discovered that the government’s agenda for the Pribilofs was seals, profits, and people – in that order. The Aleuts lost the rights they had held as Russian subjects and were now treated as wards of the U.S. government.⁷⁷

Fur Seal numbers fell as a result of unlimited harvesting. Dorothy Jones writes, “In 1867 and 1868 Pacific Coast companies plundered the seal rookeries. Rival traders took an estimated 240,000 seals in 1868 alone. At that rate the seals would be extinct in a relatively short time.”⁷⁸ Freeman writes, “The Americans were also remiss in the first forty years of managing the seal harvest. By the late 1800s, sealskin coats had become so popular that sealers from several countries had launched a spree of uncontrolled high-seas, or pelagic, killing. By 1910, the combination of pelagic sealing, corrupt government agents, who were supposed to oversee the harvest but did not, and greedy monopolies had reduced the northern fur seal from its population of over 1 million animals to only 300,000 animals. In 1911 the North Pacific Sealing Convention was signed by Russia, Japan, Great Britain (for Canada), and the United States in return for a ban on high-seas killing.”⁷⁹

By 1910, the seal population had declined precipitously. Conservationists were lobbying to end the fur seal monopoly and put a moratorium on sealing in order to allow the fur seal population time to recover. Congress passed the 1910 Fur Seal Act ending the private monopoly

⁷⁷ Freeman, *Endangered Peoples of the Arctic: Struggles to Survive and Thrive*, 2.

⁷⁸ Jones, *A Century of Servitude: Pribilof Aleuts Under U.S. Rule*, 3.

⁷⁹ Freeman, *Endangered Peoples of the Arctic: Struggles to Survive and Thrive*, 3.

on sealing on the Pribilof Islands and placing the program under the control of the Department of Commerce and Labor. Protection of the herd, as well as responsibility for harvesting and marketing seal skins was put under the control of the Bureau of Fisheries. The 1910 Fur Seal Act also allocated funds to provide for the welfare of the Aleuts. Dorothy Jones writes, “But additionally it required the Department to pay Aleut sealers fair compensation for their labor, though it offered no standards for determining what constituted fair compensation.”⁸⁰ The North Pacific Fur Seal Convention was signed by the United States, Great Britain (on behalf of Canada), Japan, and Russia in 1911.⁸¹ The treaty abolished sealing on the high seas and enabled seal herds to successfully recover their numbers.

In conclusion, the Aleut kayak made all this possible. This indigenous North American technology, and the labor of the people who designed and built it, made it possible for this history to happen in the way that it did. The Russians extracted large numbers of otter pelts only because of the Aleut kayak. This, in turn, attracted more Russians to come and invade the Aleutians. The vast fleets of Aleut kayaks made large sea otter hunts possible resulting in enormous profits for the Russians and the near extermination of the sea otter. The wealth of furs in the North Pacific then attracted the United States and provided a ready justification for the purchase of Alaska. Each event was possible because the Aleut kayak made it so. Finally, it is a bitter irony for the Aleut that their technological triumph was also instrumental in attracting foreign powers that inflicted great harm upon both them and the animals their culture depended upon.

⁸⁰ Jones, *A Century of Servitude: Pribilof Aleuts Under U.S. Rule*, 51.

⁸¹ Great Britain., *Convention between the United Kingdom, the United States, Japan, and Russia, Respecting Measures for the Preservation and Protection of the Fur Seals in the North Pacific Ocean : Signed at Washington, July 7, 1911* (London : H.M.S.O., 1912).

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