
3 The Ainu

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3.1 The People, The Environment

The Ainu [fig. 81] today inhabit Hokkaido, the northernmost island of the Japanese archipelago, known before as *Yezo* or *Ezo* (Maraini 1996). Historically, their territory, called *Ainu Mosir* – the world of humans – included southern Sakhalin (VanStone 1985), the Kurile Islands, the southern tip of the Kamchatka Peninsula, the lower Amur River region and the Tohoku region of the Japanese main island of Honshu (Fitzhugh, Dubreuil 1999; Dubreuil 2002; 2004). Although geographically reduced today, the Ainu population was once considerable, sustained by a maritime culture and a regional trade network connecting them with neighbouring groups in Northeast Asia.

The Ainu spoke their own language, separate from Japanese and developed a cultural tradition shaped by sustained interaction and respect for the environment and by regional trade networks connecting them with Chinese, Koreans, Russians, northern Indigenous Peoples of Asia and Alaska and the Yamato people, ancestors of the Japanese today (Fitzhugh, Dubreuil 1999). Ainu society was not isolated. In the north, they maintained

contact with the nomadic Ulita and Nivkh peoples of Karafuto¹ (Sakhalin). Trade with the Santan² introduced Manchurian influences, particularly through Karafuto, which functioned as a Manchurian colony shaping the Okhotsk coast of Hokkaido. To the south, contact with Japanese society was continuous (Takakura 1960).



Figure 82 Ainu couple salmon fishing in a local Hokkaido River. Kumane-kodo

The word Ainu means ‘human’ in their own language, and this is how the Indigenous people of northern Japan identified themselves (Fitzhugh, Dubreuil 1999). For centuries, speculation surrounded the origins of the Ainu. Some theories linked them to Australia, the Philippines, or Mongolia, while others suggested a European lineage. Genetic research has now confirmed that the Ainu are direct descendants of the Jomon³ people, the earliest known culture in Japan, whose history reaches back over twelve thousand years. Their artistic traditions, such as fish skin robes and elm bark *attush* textiles, emerged from this cultural lineage (Dubreuil 2002).

The Ainu lived by hunting, fishing [fig. 82] and gathering wild plants and berries (Watanabe 1979). For archaeologists, the lack of written language and reliance on foraging contributed to the marginalisation of Ainu culture, placing it within a lower tier of cultural development (Lewallen 2014). Until

1 Karafuto was the Japanese name for Sakhalin Island. The southern part of this island was annexed to the Japanese territory from 1905 (after the Russo-Japanese War) until 1945 and established as Karafuto Prefecture in 1907.

2 Through Santan trade, northern peoples living in Sakhalin exchanged goods with those living in the lower Amur River region during the Qing dynasty, between the seventeenth and nineteenth centuries, when they were required to supply products such as sable skins in exchange for Chinese clothing, ornaments, iron tools and food (Hakodate 2025).

3 The Jomon were a long-standing hunter-gatherer culture, active from around 14,000 to 300 BCE, known for rope-patterned pottery and some of the oldest ceramics in Japan. See Van Gulik 1984.

the late nineteenth and early twentieth centuries, the Ainu remained largely hunter-gatherers. While previously regarded in negative terms, there is now growing academic recognition of the sustainability of these cultural practices. As McNeill (2010) notes, societies that did not practise agriculture were more ecologically sustainable. Nonetheless, in Ainu Studies, the perception of hunter-gathering as a primitive economy persisted as a justification for cultural replacement (Hudson 2014).

Japanese sources referred to Ainu lands as *Ezochi*, while the Ainu called the Japanese *Wajin*. In the seventeenth century, *Wajin* traders began expanding into Ainu territory. While *Ezochi* remained predominantly inhabited by the Ainu, Japanese settlements in the southern parts of Hokkaido [fig. 83], became known as *Wajinchi* (Wajin land) (Library of Congress 2025).

Early contact with the Japanese was shaped by trade. As Japanese merchants began to recognise the economic value of Hokkaido's natural resources, they established small coastal settlements to support commercial activity. Over time, these interests extended beyond trade and Japanese expansion into Ainu territory took the form of organised military campaigns (Siddle 1996). By 1514, the Matsumae family had established a fortified presence in southern Hokkaido to protect against Ainu attack. The Ainu of Honshu, once powerful in the ninth century, had been nearly eradicated and by the end of the eighteenth century were assimilated. Although Japanese presence in Hokkaido dates to the late eighth century, it was not until the sixteenth century that Japanese settlers began to arrive in significant numbers. Hokkaido then became a Japanese trading colony (Takakura 1960).

In 1599, the Matsumae clan⁴ based at the south-western tip of Hokkaido, submitted to Tokugawa Ieyasu⁵ as the authority over the region. Following the establishment of the Tokugawa shogunate in 1603, the clan was granted control of the domain known as Matsumae-chi and exclusive rights to trade with the Ainu in 1604. This event marked the recognition of Matsumae authority over the region. Ainu settlement in the area was restricted to communities already residing there, while Japanese civilians were not permitted to live beyond the designated Matsumae domain in Ainu territory. It also formed the northernmost administrative region under Tokugawa control and functioned as a frontier zone between Japanese and Ainu land. The clan held exclusive rights to trade with the Ainu and established coastal trading and fishing posts. Goods such as rice, sake, tobacco, salt, knives, lacquerware, cotton cloth, needles, thread and Manchurian trinkets were exchanged for salmon, furs and items from the mainland. Chiefs known as *Kotan Korkuru* governed villages, but some leaders controlled regions with hundreds of retainers. Japanese records from 1739 describe the Ainu of

⁴ The Matsumae clan were feudal lords of the Matsumae Domain in southern Hokkaido from the late sixteenth century until the Meiji Restoration. Granted control of the region by Toyotomi Hideyoshi in 1590, they were charged with administering and defending Japan's northern frontier, including protection against northern non-Yamato populations, while also managing relations and trade with the Ainu. In return, the clan was exempted from certain obligations to the Tokugawa shogunate, including rice tribute and the sankin-kōtai system that required most daimyō to maintain residence in Edo.

⁵ The Tokugawa shogunate (1603-1868), also known as the Edo shogunate, was the military government that ruled Japan during the Edo period. It organised society under a strict class hierarchy and governed through a feudal system in which regional lords (daimyō) administered domains under shogunal authority. The regime also implemented sakoku, a policy restricting foreign contact and overseas travel, while the period saw significant economic growth and urban development.

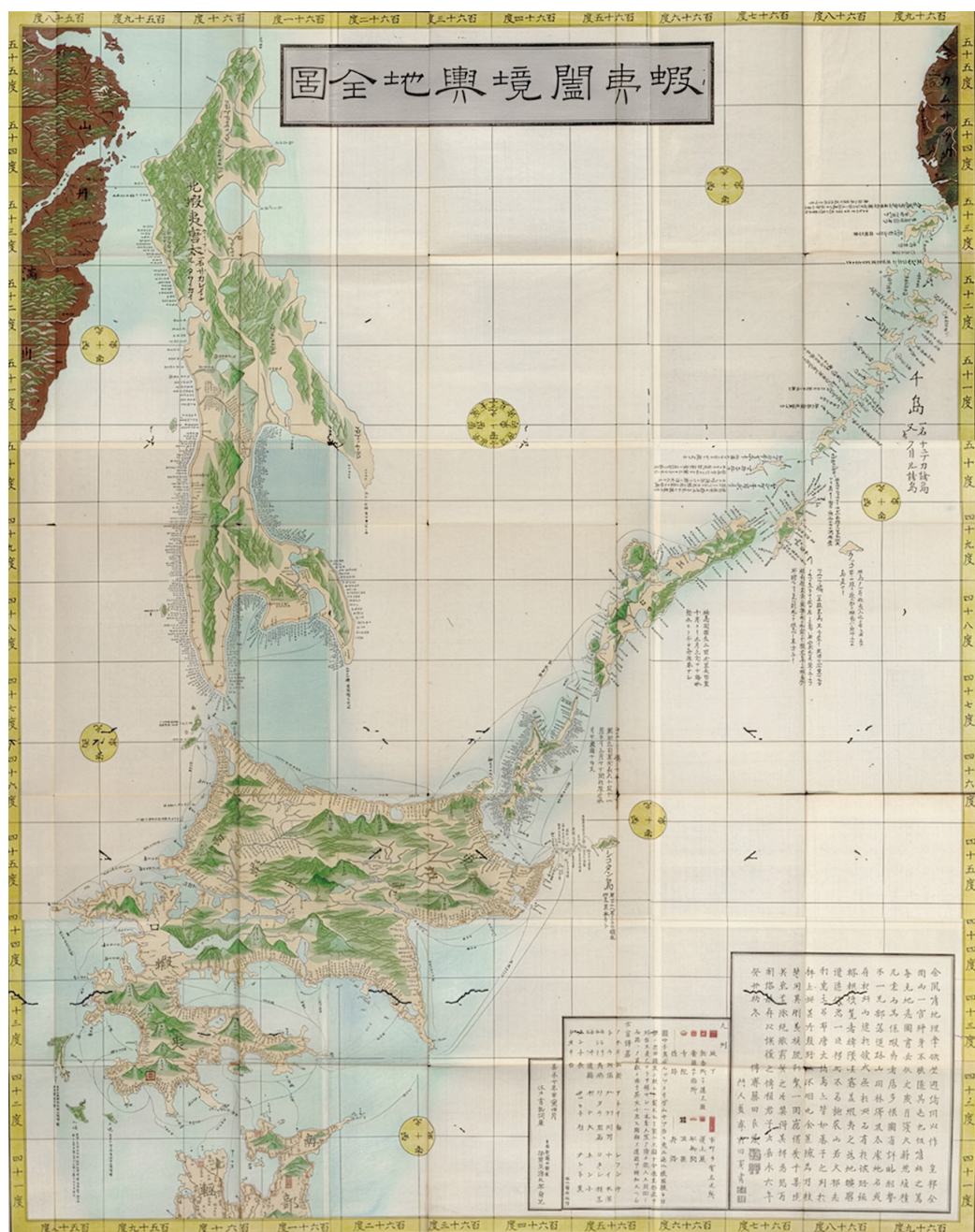


Figure 83 Ezo land-map. Japanese rare book collection, Asian Division, Library of Congress, Washington, D.C., USA

eastern Hokkaido as strong and unwilling to submit to Matsumae control (Watanabe 1979).

Tensions over trade and fisheries led to intermittent conflict. In 1669, a revolt broke out under the leadership of Shakushain.⁶ Though initially successful, the movement was undermined when Shakushain and allied leaders were murdered under the pretext of peace negotiations by Matsumae samurai. Sporadic resistance persisted until 1789, when the Ainu were defeated in what became their final military action (Dubreuil 2004).

Southern Hokkaido came under Tokugawa administration in 1799, primarily to counter growing Russian expansion. Foreign vessels, including Russian, Dutch, French and English ships, became common along the Hokkaido coast. Trading posts were fortified and staffed with Japanese officials, although internal Ainu affairs remained largely unaltered. From 1807 to 1821, northern Hokkaido, including southern Sakhalin, was also placed under direct Tokugawa control. The Matsumae regained their former domain in 1821, and Ainu continued to be employed in coastal outposts. Between 1854 and 1867, direct Tokugawa administration resumed in the southwestern region (Watanabe 1979).

The formal colonisation of Ainu lands began after 1868, following political upheaval in Japan that brought the Meiji Restoration government to power, one year after Russia had transferred Alaska to the United States. In the following year, Ezo-chi was incorporated into the Japanese Empire and renamed Hokkaido (Fitzhugh, Dubreuil 1999). Japanese settlers arrived in large numbers, forests were cleared, towns were constructed, and Ainu livelihoods were disrupted. Government policies were implemented to convert the Ainu into agricultural workers, arguing that hunting and fishing required too much land to support small populations. Although some isolated areas retained traditional practices longer, the Ainu experienced severe cultural and economic upheaval (Maraini 1974). As with other Indigenous groups around the world, the Ainu were dispossessed of their territory, resources and independence by a dominant state that incorporated them (Fitzhugh, Dubreuil 1999). Several cultural practices were prohibited, including female tattooing, the use of animal-skin clothing, men wearing earrings and the burning of homes after the death of the owner (Dubreuil 2004).

Processes that restricted Ainu access to salmon and altered traditional livelihoods had already begun in the late eighteenth century under Matsumae administration. Restrictions on salmon fishing were introduced during the early Meiji period. Ainu were prohibited from catching fish, their primary means of subsistence (Batchelor 1900) and those who did so were arrested. New licensing methods excluded Ainu fishers and traditional subsistence was replaced by forced agricultural labour. Without access to preserved salmon, many communities experienced winter food shortages. These policies undermined social structures and forced Ainu men to seek wage labour in Japanese-run fisheries (Iwasaki-Goodman, Nomoto 2001). Overfishing by Japanese authorities depleted salmon stocks and reduced Ainu access to this critical resource. Men were conscripted into fisheries under harsh conditions and the absence of husbands led to increased sexual violence against Ainu women (Dubreuil 2002). Nutritional changes and forced

⁶ Shakushain, an octogenarian Ainu chief, led some 30,000 tribesmen in a revolt against the Tokugawa regime, fighting with traditional weapons against a state of 25 million Japanese armed with firearms. After reaching a peace agreement, he was mercilessly assassinated.

labour led to population decline (Batchelor 1900). The shift from a diet based on salmon and deer to grains had measurable health consequences. Ainu leader Shigeru Kayano described his father's dependence on salmon fishing as essential for family survival (Kayano 1999). The imposed transition led to loss of dignity and independence (Kayano 1994; Iwasaki-Goodman, Nomoto 2001). During enforced labour at Japanese fisheries, Ainu were unable to store food for winter, resulting in starvation. Inland hunters were somewhat less affected, as they continued to supply hawks, feathers, skins and bear to Japanese traders. Farming initiatives did not compensate for the loss of hunting and fishing rights (Watanabe 1979).



Figure 84 Hata-no Awagimaru, Ainu fishing. Ezoshima Kikan. Japan. Japanese Rare Book Collection, Library of Congress, Washington, D.C., USA

Following Japan's acquisition of the Kurile Islands from Russia in 1875 in exchange for Sakhalin Island, the Kurile Ainu were resettled in Shikotan (Landor 1893). Despite occupying a wide region, they had a dispersed population and moved seasonally between winter villages and summer fishing sites. Their trade with Sakhalin and Hokkaido was vital, particularly in sea-mammal products and feathers. Like the Unangaꝯ of the Aleutian Islands in Alaska, who experienced severe population decline due to Russian exploitation of the sea otter trade, the Kurile Ainu also lost both territory and population as Russian and Japanese interests intensified. The Soviet Union's seizure of the Kuriles in 1945 marked the final expulsion of the remaining Kurile Ainu (Fitzhugh, Dubreuil 1999).

The Sakhalin Ainu had also previously occupied extensive territories in southern Sakhalin. Their location, near the Russian, Manchurian and Japanese borders, enabled sustained trade with Ulita and Nivkh communities. Their material culture, shaped by boreal forest conditions and Siberian influence differed from that of Hokkaido Ainu and they had

greater access to manufactured goods. After 1945, the remaining Sakhalin Ainu were also forcibly relocated to Hokkaido by the Russians (Fitzhugh, Dubreuil 1999).

Within a few generations, the Ainu were transformed from hunter-fishers [fig. 84], into marginalised wage labourers and subsistence farmers. The process was marked by displacement, social collapse and widespread poverty. After the Meiji Restoration, Japanese authorities viewed Hokkaido as a colonisable frontier. The 1899 Law for the Protection of the Aborigines of Hokkaidō was a source of new discrimination enforcing policies that required the Ainu to adopt Japanese language, names and customs, including intermarriage with settlers (Maraini 1996).

Today, Hokkaido remains the only officially recognised homeland of the Ainu. Some Ainu continue to conceal their identity to avoid discrimination. Although the 1997 Ainu Shinpō introduced legislation supporting Ainu culture and language, social exclusion persists and ethnic identity remains a source of stigma, even within families (Fitzhugh, Dubreuil 1999). As a result of long-standing discrimination, many Ainu concealed their ancestry for generations. Only in 2008 did the Japanese government formally recognise the Ainu as “Indigenous Peoples with a unique language, religion and culture” (Godefroy 2011). Introduced amid growing international scrutiny ahead of the Tokyo Olympic Games in 2021, the law allocated funds for the promotion of Ainu culture and eased restrictions on certain traditional practices, including salmon fishing in rivers and the harvesting of elm bark fibre from state forests for weaving textiles used in Ainu robes (Denyer 2019). However, salmon fishing in rivers remains restricted under fisheries protection laws and Hokkaido regulations governing inland fishing. Ainu communities may fish salmon only for traditional purposes and must obtain permission from the prefectural governor (Japan Times 2020). More than a century after the prohibition of traditional salmon fishing, several Ainu communities in Hokkaido have revitalised salmon rituals as part of a broader cultural revival movement (Iwasaki-Goodman, Nomoto 2001).

3.2 Ethnographic Records

The ethnographic study of the Ainu has developed over centuries, shaped by changing ideologies, political imperatives and methodological approaches. This chapter traces that trajectory, beginning with early missionary accounts, followed by Japanese geographic and ethnographic surveys, foreign travellers and anthropologists, subsequent Japanese scholarship and culminating in Ainu-led research.

The earliest references to the Ainu appear in Chinese dynastic chronicles. The Han dynasty referred to them as *Mao min*, *Mo jin* and *Je-dso*, distinguished by their appearance and location east of the East China Sea. In 659 CE, a Japanese delegation presented an Ainu couple at the Tang court. Contemporary Japanese sources also refer to Hokkaido as *Watari sima* Yesso, ‘Crossing Island’, acknowledging the strait separating Yezo from the rest of Japan (Siebold 1881). European awareness of Karafuto began with Jesuit maps of Tartary, compiled in Peking (1710) and published in 1721 by order of Emperor Chingtsu Khanghj. A copy sent to France reached who

issued a reduced version of Father Du Halde's⁷ *Nouvel Atlas de la Chine, de la Tartarie chinoise et du Thibet* (1735). The island was labelled *Saghalien anga hada*, the Isle of the black-mouthed rock, later shortened to *Saghalien* (Siebold 1881).

Christian missionaries and explorers seeking northern routes began documenting Ainu territories in the mid-sixteenth century (Abe 2005). Nicolao Lancillotto, rector of St Paul's College in Goa, noted in 1548, based on accounts from Anjirō,⁸ that *Ezo* was home to bold and warlike people with long beards and shaved heads, unafraid of death (Abad de los Santos 2022). In 1565, Jesuit Luís Fróis wrote of a densely haired people in northern Japan, possibly referring to the Ainu (Siebold 1881). His 1585 treatise provided the earliest European descriptions of Japan. According to Russian anthropologist Nikolaievitch Anoutchine in *Materials for the Anthropology of Eastern Asia* (1876), Portuguese Jesuit missionary Luís Fróis,⁹ in his *First European Description of Japan* (1585), referred to a northern people with body hair, though he did not identify them by name (Siebold 1881; Chamberlain, Batchelor 1887). Jesuits Jerónimo de Angelis and Diogo Carvalho visited Hokkaidō in 1618 and 1621. His *Relazione del Regno di Iezo* (1624) offered the first in situ ethnographic description of the Ainu, covering their economic life, natural resources,¹⁰ and prospects for conversion.¹¹ In 1622, he reported that Ainu traders journeyed to nearby islands to purchase fish skins from groups who spoke a different language. These were likely Gilyak people along the lower Amur, known for their fish skin clothing (De Angelis 1624; Bickmore 1868). Other reports include Nicholas Downtown's 1614-15 mention of the Ainu as a wild people (Siebold 1881; Foster 1939). In 1643, Captain Vries of the *Castricum* described Ainu communities in the southern region of Sakhalin. He noted Ainu tattooing and clothing fashioned from fish skin, wood fibre and animal skins, assembled from varied materials (Howard 1893; Bickmore 1868).

Ainu studies developed in three general phases. The earliest, spanning the Edo through early Meiji periods, was politically motivated by expeditions producing early geographic and ethnographic records by government officials and explorers (Yamada 2003). By the eighteenth and nineteenth centuries, *Wajin* expeditions to *Ezo* intensified for strategic and economic purposes (Library of Congress 2025). Among the Japanese explorers that recorded their travels through *Ezochi*, noting Ainu customs and social life are Mogami, Mamiya and Matsuura (Chamberlain, Batchelor

⁷ Jean Baptiste du Halde, a French Jesuit scholar who never visited China, compiled detailed accounts from missionaries into a comprehensive volume published in Paris in 1735 and later translated into several languages.

⁸ Anjirō, later baptised as Paulo de Santa Fé, was the first recorded Japanese Christian. After fleeing Japan following a homicide, he encountered Francis Xavier in Portuguese Malacca and returned to Japan in 1549 as his interpreter, assisting in the establishment of the first Jesuit mission in the country.

⁹ Europeans received reports in 1565 from the Portuguese Jesuit missionary Luís Fróis about the inhabitants of a land north of Japan "an extensive forested region of wild people, lying three hundred leagues north of the city of Meaco".

¹⁰ Jerónimo de Angelis's *Relazione del Regno di Iezo* sent to the Society of Jesus in Rome, emphasised the region's resources and trade potential, to persuade superiors in Europe of the material as well as spiritual value of founding a mission there.

¹¹ De Angelis 1624; Siebold 1881; Yamada 2003; Abe 2005; Abad de los Santos 2022; González-Bolado 2023.

Figure 85 Mamiya Rinzō, Nivkh man of Sakhalin wearing a fish skin robe and holding a pair of salmon. *Kita Ezo Zusetsu* 1855. Japanese Rare Book Collection, Library of Congress, Washington, D.C., USA



1887; Yamada 2003). Matsuura Takeshirō (1818-1888), later known as the ‘Godfather of Hokkaido’ conducted several journeys into *Ezochi*. His detailed travelogues recorded Ainu difficult life conditions under Matsumae rule and his work as a government surveyor contributed to geographical knowledge of the region (Loar 2025). Japanese cartographer Mamiya Rinzō, under Bakufu directive, explored Karafuto in 1808-09. His *Kita Ezo Zusetsu* includes sketches and descriptions of Sakhalin material life, fish skin garments [fig. 85], housing, tools and subsistence practices (Mamiya 1855). These materials are early modern examples of cartography and ethnography, shaped by Japanese understandings of the Ainu rather than Indigenous voices.

In the absence of Ainu-authored records and despite the distortions shaped by prejudice, limited information and lack of language proficiency, much of what is known about traditional Ainu life was recorded by Japanese artists in the genre of ethnographic painting known as *Ainu-e*,¹² painted ethnographic scenes of Ainu life (Otsuka 1991; Tsuda 2014a). These works offer visual records of clothing, tools, ceremonies and fishing practices, preserving details otherwise lost (Dubreuil 2004).

Following the early interest of Japanese travellers, the ‘opening’ of Japan in 1854 and the settler colonial expansion into Hokkaido after the Meiji Restoration, western attention to the Ainu intensified in the late nineteenth and early twentieth centuries. This second wave of Ainu ethnography reflected the growing presence of foreign travellers and anthropologists in Hokkaido and surrounding regions and followed two key academic trends: cultural studies and theories of ethnic origin, which placed the Ainu as an ethnic group separate from the Japanese (Yamada 2003). Many outside writers promoted the assumption that Ainu people would vanish, a belief that encouraged travellers and museum expeditions to amass large collections of Ainu material culture (Fitzhugh 1999).

Heinrich von Siebold [fig. 86], son of Philipp Franz von Siebold, travelled in Hokkaido and observed Ainu life firsthand during his journeys along the Pacific coast and in Nibutani. His writings portrayed the Ainu as a vanishing people, subject to state prohibitions against tattooing and adornment, whose traditions were fading under the pressure of modernisation. He claimed that their fate would be similar to that of Native Americans (Siebold 1881). Although Philipp Franz von Siebold assembled important Ainu collections during his visits to Japan, he did not travel to Ezo-chi (Hokkaido) himself.

American curator Albert Bickmore, principal founder of the American Museum of Natural History travelled between 1864 and 1867, visiting the Ainu and Nivkh and writing about food, kinship and religion (Bickmore 1868; 1869). Basil Hall Chamberlain, British academic and Japanologist at Tokyo Imperial University, argued that the Ainu were the true predecessors of the Japanese and compared their linguistic and mythological heritage (Chamberlain 1887).

¹² *Ainu-e* is a genre of paintings created by Japanese artists depicting Ainu life. Produced over 150 years, they provide visual documentation of Ainu material culture, daily activities and maritime practices, documenting social life and cultural change shaped by regional trade and contact with neighbouring societies. See Dubreuil 2004.



Figure 86 Philipp Franz Balthasar von Siebold, Ainu settlement or kotan. Nippon. 1838.
Leiden University Libraries Special Collections, Leiden, Netherlands

John Batchelor, whose primary purpose was to convert the Ainu to Christianity, lived in Biratori, in the Saru Valley, for over half a century assembled a significant corpus on Ainu culture and language, including a trilingual dictionary (Batchelor 1938). However, his theological interpretations of Ainu religion faced harsh criticism for Christian bias.

Several Victorian travel writers, including Henry Savage Lander, Benjamin Douglas Howard and Isabella Bird, published accounts of the Ainu through leading London presses. Unmarried and itinerant, each claimed direct experience through time spent among Ainu communities. Despite differing careers and political views, all expressed openly racist and gendered attitudes toward Ainu individuals of the opposite sex. Henry Savage Lander, raised in Florence in a bourgeois British family and trained in portraiture in Paris, left for Asia in 1888, using his painting skills to record people and places when photography remained limited. In *Alone with the Hairy Ainu* (Lander 1893), he portrayed the Ainu as among the lowest of ‘primitive’ races and attributed their supposed decline to inbreeding, denying them any claim to civilisation. He also claimed sexual encounters (Hennessey 2022; 2023). His descriptions of the Kuril Islands Ainu included details of fish skin clothing, such as boots that were soaked before wearing and fastened with cord (Lander 1893). Benjamin Douglas Howard, a British medical doctor, travelled through Siberia and Sakhalin in the early 1890s to examine conditions within the penal system and documented his encounters with the Ainu. In *Life with Trans-Siberian Savages* (Howard 1893) he described Ainu women as ‘repulsive’ and overburdened with labour, simultaneously emphasised their utility and referred to a sexual encounter. He recorded the use of ceremonial fish skin garments and described salmon trout fishing, in which hundreds were hauled ashore in birch canoes. Isabella Bird’s *Unbeaten Tracks in Japan* (Bird 1880) similarly reinforced racialised and gendered bias. Her descriptions of Ainu men carried eroticised overtones, while she dismissed the possibility of Ainu resurgence as ‘hopeless’. She

characterised the Ainu as “savages in everything but their disposition”, reinforcing colonial fantasies of primitivism.

Bronisław Piłsudski, exiled to Sakhalin between 1887 and 1896, conducted fieldwork among the Ainu, Nivkh and Ulita. He produced lexicons and ethnographies, made recordings and advocated for Ainu rights. His work remains foundational in the documentation of Sakhalin’s Indigenous communities (Piłsudski 1910; Yamada 2003; Bejrowski 2019). Neil Gordon Munro, a Scottish physician, settled in Nibutani in 1930, where he conducted long-term fieldwork until his death in 1942. He operated a clinic with his Japanese wife, a trained nurse, to provide free treatment and gathered oral histories through close relationships with Elders. His book *Ainu: Creed and Cult* (Munro 1979) highlights the value of Ainu religion and challenges dominant primitivist narratives.

Italian writer, anthropologist and photographer, Fosco Maraini, supported by Batchelor lived in Shiraoi and Nibutani from 1938, collecting oral histories and artefacts. During World War II, Maraini, his Japanese wife and three daughters were interned in a concentration camp at Nagoya. His Ainu materials were safeguarded and later donated to the Museum of Ethnology and Anthropology in Florence (MacKenzie, Lowman 2023). Maraini noted that the Ainu were beginning to voice their own histories, similar to Indigenous communities in North America and Siberia (Maraini 1996). Swiss anthropologist Georges Montandon, whose legacy is now overshadowed by his collaboration with the Nazi regime (Maraini 1996), travelled to Hokkaido during the interwar period, to conduct research on the Ainu. His work *La civilisation Aïnou et les cultures arctiques* examined the Ainu connecting them with northern Indigenous groups such as the Nivkh in Siberia and the Inuit in Alaska (Montandon 1937). On his return, he deposited his ethnographic collection at the Musée de l’Homme in Paris. His more controversial study, *Au pays des Aïnou: exploration anthropologique* (Montandon 1927) focused on skull measurements and the theory of hogenesis.¹³

The third phase of Ainu studies began in the post-war period. By the late 1950s, following the death of elder tradition bearers, a generational shift led many younger Ainu to prioritise economic opportunity over cultural preservation (Maraini 1996). Responding to these changes, the Japanese Association of Ethnology initiated Japan’s first ethnological fieldwork of its kind that reframed the Ainu as a northern hunter-gatherer society. The research on the Saru River Ainu conducted by the association in 1951, revealed relationships between group structures and subsistence patterns (Yamada 2003). Hitoshi Watanabe participated in this research team, focusing on the subsistence system and ecological cycle of the Ainu in the Saru River basin. His monograph, *The Ainu Ecosystem* (1972), drew on this research to reconstruct traditional cultural practices and contributed substantially to ecological anthropology (Watanabe 1979; 1999).

Earlier in the twentieth century, Japanese scholars had already begun recording the last remnants of oral tradition. Linguist Kyosuke Kindaichi, a professor at the University of Tokyo, proposed a new academic framework,

13 Daniele Rosa’s early twentieth century theory of hogenesis, overlooked due to the absence of an English translation, has recently been reassessed for its historical relevance and connections to current evolutionary thinking, including vicariance biogeography, species individuality and branching phylogenetics.

'Ainuology', intended to formalise the study of Ainu life and language (Yamada 2003). He documented thousands of *yukar*¹⁴ epics as told by Elders (Kayano 1994). His student, Mashiho Chiri (1909-1961), an Ainu scholar, continued this work, before dying prematurely, while Itsuhiko Kubodera collected testimony on oral traditions and ceremonial life (Maraini 1996).

Sapporo became a hub for northern studies with the Review of Studies on Northern Cultures (1939-1965), published by the Research Institute for Northern and Arctic Culture at Hokkaidō Imperial University. Sakuzaemon Kodama, a Swiss-trained anthropologist at Hokkaidō Imperial University, began systematically collecting Ainu artefacts, especially garments, as they vanished from daily life. His collection remains fundamental to Ainu research (Maraini 1996; Kendall 1999). Osamu Baba focused on Sakhalin, the Kurils and Hokkaido, assembling the Baba Collection from 1930. It was designated in 1959 as an Important Tangible Folk Cultural Property of Japan (Kendall 1999).

A generational shift emerged in the late 1960s and early 1970s as young Ainu activists began openly confronting established scholarship. In 1972, at a joint symposium of the Anthropological Society of Nippon and the Japanese Society of Ethnology in Sapporo, they presented a letter condemning scholars such as Kindaichi Kyosuke, whose research was accused of serving his academic prestige rather than the Ainu themselves. He had not lived in Hokkaidō (Yamada 2003), but he maintained close ties with Ainu individuals such as Shigeru Kayano (Kayano 1994). A cultural revival followed. Young people started to appreciate ancestral traditions and began to view their ethnic identity as a source of pride rather than something to conceal. New Ainu associations formed and resumed the performance of traditional ceremonies, which gave rise to spectacular celebrations (Maraini 1996).

Since the late 1980s, Ainu studies have incorporated cultural, cognitive and ethno-scientific anthropology. Scholars such as Yamada Takako, after studying ethno-botany applied these methods to Ainu knowledge of plants, animals, cosmology, gender and spirits (Yamada 1987; 2001; 2003). A key turning point in Ainu studies was the emergence of Indigenous scholars such as Mashio Chiri. A linguist and anthropologist, Chiri documented Ainu life from within and sharply criticised non-Ainu interpretations. He was a fierce critic of John Batchelor's work, condemning his portrayal of the Ainu as 'primitive', his Christian framing of Ainu practices and his search for monotheism. Chiri found intolerable that Batchelor's English-language works were accepted globally as authoritative, including a dictionary that misrepresented the Ainu language. Chiri's pursuit of accuracy, as a minority scholar in Japan, required confronting both discrimination and academic authority, including his former teacher Professor Kindaichi (Fujimoto, Ohnuki-Tierney 1973).

From the 1980s, Indigenous leadership in Ainu cultural work grew through figures such as Kayano Shigeru, born in Nibutani in 1926. He published widely on Ainu language, oral traditions and material culture (Kayano 1978, 1994, 1999) and spent decades collecting Ainu belongings across Hokkaido. Together with his wife, Reiko Kayano, he was commissioned to produce Ainu objects for the National Museum of Ethnology in Osaka when it was

¹⁴ *Yukar* are traditional Ainu narrative chants performed in a recitative style without musical accompaniment. They include epics about human heroes and *kamuy yukar*, which recount the actions of gods and spirits.

established in 1974. His efforts helped establish Nibutani as a major cultural centre, now home to three Ainu research institutions: the Shiryōkan, his private museum; the Nibutani Ainu Bunka Hakubutsukan, supported by the city of Biratori; and the former home of Dr Munro, later developed into a research centre affiliated with the University of Hokkaidō (Maraini 1996).

Tsuda Nobuko, the first Ainu woman to receive a PhD, began studying Ainu textile traditions in her forties. Museums and elders taught her the spiritual logic encoded in Ainu craft. Her dissertation (Tsuda 2014a) and further publications (Tsuda 2018) challenged earlier male-authored studies, offering a methodology grounded in both weaving practice and museum research. Her work reframes Ainu material heritage through gendered and Indigenous lenses (Lewallen 2014; 2016). Chisato Dubreuil, an Ainu-Japanese scholar of art history and curation, reshaped museum representations of Ainu culture. The 1999 Smithsonian publication and exhibition *Ainu: Spirit of a Northern People* co-curated with William Fitzhugh, Director of the Smithsonian Arctic Studies Center (Fitzhugh, Dubreuil 1999) brought together ethnography, art history and Indigenous scholarship. It offered the most in-depth treatise available on Ainu prehistory, material culture and ethnohistory. Dubreuil advocated for the inclusion of contemporary Ainu artists alongside historical artefacts, challenging the persistent narrative of the Ainu as a ‘vanishing people’. As she stated, “We are still here and our culture is still vibrant” (Dubreuil 1999; 2007).

Methodologically, the study of Ainu clothing shifted from description to analysis. Early Japanese accounts of Ainu material culture, such as those by Murakami Shimanonjo and Kondo Jūzō during the late Edo period, combined ethnographic detail with exploration. Earlier symbolic readings gave attention to social and technical uses. Kindaichi Kyosuke, though trained as a linguist, broadened his focus to folklore and clothing terminology. Sugiyama Toshio provided comparative studies of regional garment types, distinguishing bark fibre, animal skin and imported fabrics. Takabe Fukuhira interpreted decorative motifs symbolically, drawing from Japanese folklore. Otsuka Kazuyoshi created motif taxonomies highlighting regional diversity and Sasaki Toshikazu connected motifs to oral narratives. Shigeru and Reiko Kayano documented pattern names and techniques from within the community, preserving their use into the late twentieth century (Tsuda 2014a).

Although Ainu culture, language and subsistence practices have been documented, fish skin art remains largely underexplored. While mentioned in broader ethnographies, detailed studies of technique, transmission and revitalisation are rare. The literature is dominated by male and non-Ainu perspectives, with limited focus on the roles of Ainu women in craft, storytelling and ecological knowledge. Few works consider the connections between fish skin technologies and Ainu understandings of water, animals and seasonal cycles. The research in this book has prioritised collaboration with Ainu scholars and practitioners, particularly in areas of fish skin processing, seasonal knowledge and intergenerational transmission (Palomino 2022).

3.3 Regional Ecology

Shigeru Kayano described ecological knowledge transmitted through domestic routines. As his grandmother spun bark fibre with her fingertips, she told her grandchildren stories in Ainu, interwoven with practical wisdom



Figure 87 Mamiya Rinzō, Ainu hunter wearing a fish skin robe depicted in *Kita Ezo zusetsu* (Illustrated Explanation of Northern Ezo) 1855. Japanese Rare Book Collection, Library of Congress, Washington, D.C., USA

on how to live responsibly within their environment, not to cut trees without reason, not to pollute running water and to remember that even animals repay kindness (Kayano 1994). These teachings emerged from the ecology of the Saru River basin, where salmon were abundant and where Kayano recalled growing up in material poverty, but with what he later described as ‘spiritual wealth’. They provide an understanding of the regional ecology of Ainu communities.

The original Ainu territory, across southern Sakhalin [fig. 87], the Kuril islands, Hokkaido and parts of northern Honshu encompass varied ecological and climatic conditions which shaped subsistence strategies (Williams 2017). Settlements (*kotan*) remained fixed during winter with seasonal movement during the fishing season or when local game became scarce (Takakura 1960). In Hokkaido, villages were established near salmon spawning grounds (Watanabe 1972) and subsistence relied on migratory fish and deer. On the southern coast of Sakhalin, communities alternated between semi-subterranean winter dwellings near hunting areas and summer huts near the coast where herring were a key food source due to short rivers and limited salmon runs. In the Kurils, permanent settlements were located at river mouths with summer camps located inland for gathering. Subsistence relied on ocean fish, seals, sea otters and bird eggs to supplement limited salmon catches (Williams 2017).

While Ainu groups shared common cultural foundations, long periods of geographic separation produced unique regional developments. Ainu social organisation revolved around the family and settlements, usually fewer than ten households, functioning as autonomous units. Communities shared ownership of these sites and conducted fishing rituals (Watanabe 1979). Fishing and hunting territories were communally held and closed to outsiders. Access required formal membership in the *kotan*, obtained through unanimous approval and patrilineal kinship and hunting or fishing within another group’s territory required compensation (Ölschleger 1999). Violations of territorial boundaries could result in punishment and disputes between Ainu groups often concerned these rights. Kinship networks shaped territorial organisation. In southern Sakhalin, neighbouring communities maintained limited contact beyond familial ties (Ölschleger 1999). In many regions, kin-based claims to fishing and hunting grounds included entire river networks surrounding salmon runs, with community rights closely guarded (Watanabe 1972). Territorial arrangements varied regionally, on Sakhalin’s east coast, families held exclusive rights to particular fishing sites, including locations for fish weirs, fishing huts and surrounding watersheds (Ölschleger 1999), while on the northwest coast looser kin networks allowed broader access (Ohnuki-Tierney 1974). Similar practises governed coastal and inland sites in the Kuril Islands, including areas used for fish skin processing (Ölschleger 1999). Fishing was organised cooperatively. During salmon season, villagers fished together and divided the catch, with priority given to the elderly, the feeble and children (Takakura 1960).

3.4 The Fish

Spring fishing began with dace, bullhead and Sakhalin taimen. In some rivers, dace and carp marked the first catch of the year (Watanabe 1972). These early fishing activities supplied the tough skins of taimen, valued for size and abundance and suited to specific parts of garments such as boot soles.

Among the Ainu, salmon is referred to as *cep* (fish) or *kamuy-cep* (deity-fish) and was regarded as a divine gift sent each year by the deities. It nourished both humans and the gods before returning to *kamuy-mosir*, the gods realm. The Ainu describe *kamuy* as gods inhabiting a parallel realm to the human one. All natural phenomena, animals, plants, wind, rain, snow, are gods, not spirits. These gods appear in disguise as bears, salmon, or elm trees, are used to make garments and were sent to earth as gifts only if treated with care (Dubreuil 2002). The term *kamuy-cep* applies specifically to the first salmon caught at the start of the migration season (Yamada 1987). Ritual governed salmon fishing led by Elders to ensure the salmon run and return the fish spirit to the land of the *kamuy*. Chiri (1959) described the ritual held before fishing, in which household headmen offered *inaw* and sake (*tonoto*) to the river and the Fox God, patron of fishing and hunting. The headman would strike the head of a salmon with an *isapakikni*, a kind of sacred stick or *inaw*¹⁵ to return its spirit to the land of gods (Iwasaki-Goodman, Nomoto 2001). Similar rituals were performed following poor catches (Chiri 1959). Menstruating women and children were kept away from the rivers. The First Salmon Ceremony followed three stages: prayer during the wait, a welcome as the salmon entered the river and the return of the jawbone of the first catch to the water at the season's close, fulfilling obligations to the gods and ensuring a plentiful run the following year [fig. 88] (Watanabe 1972).

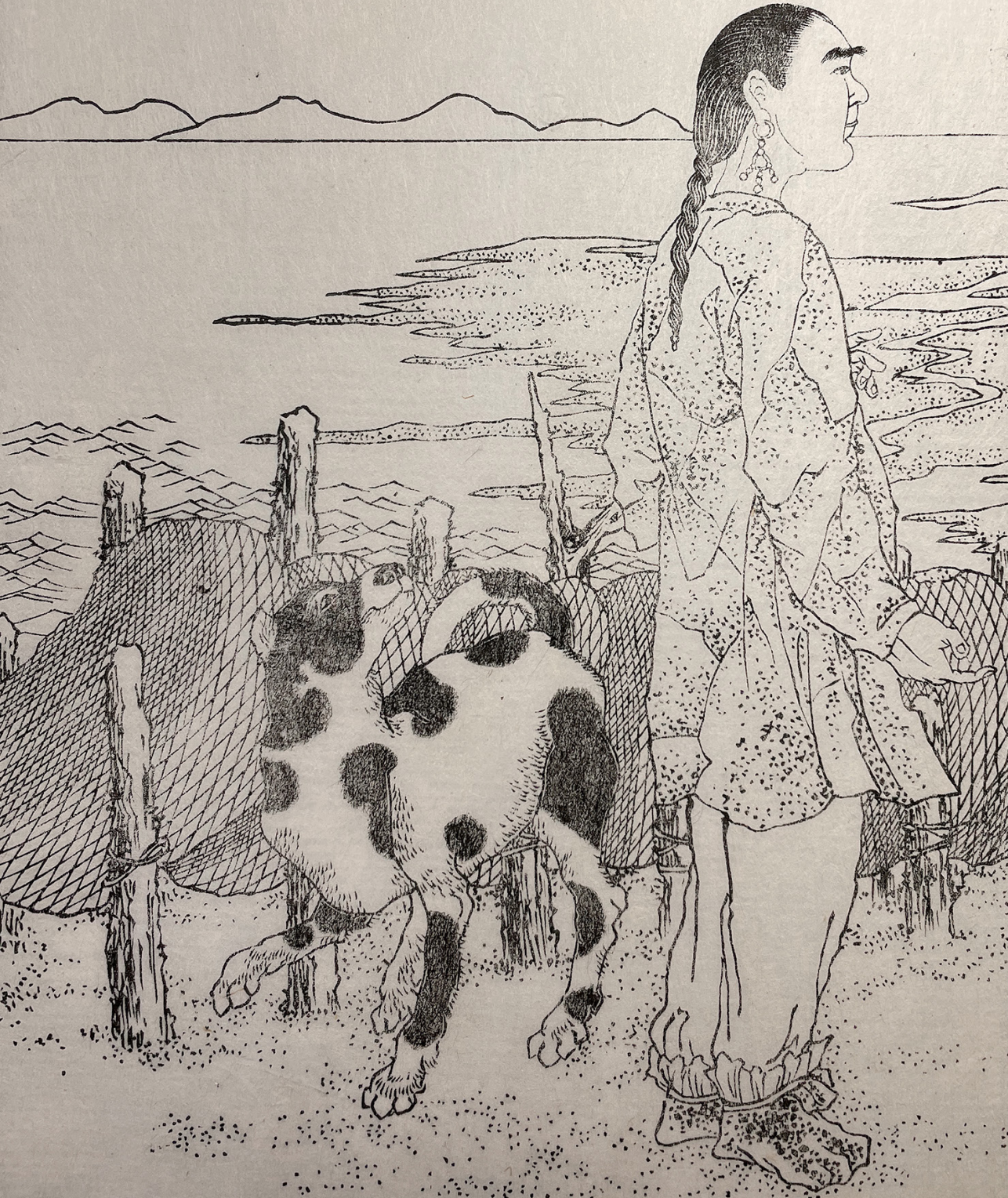
Salmon provided the principal source of protein and Ainu knowledge of their cycle was detailed. This understanding included over forty names for chum salmon [fig. 89], distinguishing sex, size, coloration and spawning stage. Autumn and winter runs were differentiated, with fishing concentrated upstream, near spawning grounds (Yamada 1987). The three salmon species in Hokkaido are anadromous, returning to freshwater on two- or four-year cycles. Migration patterns varied; in rivers with lakes, some paused for weeks before spawning. Chum salmon returned reliably to natal rivers while pink salmon showed less consistency. Cherry salmon, known to the Ainu as trout, migrated from May to September, with peak catches in August (Williams 2017). Cherry, pink and chum salmon were caught using spears, nets and weirs, from canoes or with torches at night. Most salmon was dried or smoked for storage and trade with Japanese merchants (Watanabe and Saito 1998). Salmon was indispensable in maintaining the spiritual and physical health of the Ainu (Iwasaki-Goodman, Nomoto 2001).

Life-stage terms reflect ecological change and the moments relevant to subsistence. A salmon that has just hatched and has yolk sacs are *cipor-se-ceppo* (egg-carrying small fish) or *pakkay-ceppo* (carrying child- small fish). Salmon travelling toward the sea have no specific designation but returning fish appearing offshore are *atuy-or-un-cep* (fish in the sea) or *heruran* (shining scale). Once inside freshwater, the name shifts to *pet-or-un-cep*

¹⁵ Ceremonial *inaw* is crafted from a willow branch, shaved into thin curled slinters at the top, used in Ainu prayers to the spiritual world.

Figure 88

Mamiya Rinzō, A Nivkh fisherman
of Sakhalin wearing a fish skin robe and fish skin boots.
Kita Ezo zusetsu. 1855. Japanese Rare Book Collection,
Library of Congress, Washington, D.C., USA



(fish in the river). With nuptial red spots on the sides, they become *peteci-cep* (fish at the river boiling fish). At spawning sites, names separate male and female behaviour. Males are *ikuspe-tuye-p* (pillar-cutting one) and females *mose-kar-pe* (grass-mowing one). After reproduction, salmon of either sex are *oysiru-cep* (fish with rubbed buttocks), describing their worn condition. Further classifications identify sex and size. Males are *ca*, females *os*. Female size is marked by *poro* (large) and *pon* (small), while males use *si* (parent) for large fish and *mo* (child) for small fish. Seasonal timing also produces different terms. Autumn salmon are *cukcep* (autumn salmon) or *cukipe* (autumn food) in the Saru dialect. Winter salmon with bright scales and limited roe, which remain in the lower river, are *mata-cep* (winter fish). Naming concentrates on salmon returning from the sea, whose capture at spawning grounds sustained Ainu fishing and clothing. Fry heading seaward lack specific terms, while returning adults receive detailed categorisation grounded in observable behaviour and availability to harvest (Yamada 1987).

This naming system expressed detailed ecological knowledge and was closely connected to subsistence practices. Returning salmon were prioritised for fishing and differences in terminology corresponded to their usefulness. After the catch, women prepared the skins using techniques shaped by preservation requirements and seasonal cycles. Although early ethnographic sources seldom documented these processes, they formed an important part of the salmon-based economy. These classifications also guided fishing practices and the selection of skins for specific uses. Skins from spawning fish were larger but generally in poorer condition. Fish altered by the spawning process appeared darker, misshapen and developed tougher skins. Selection therefore depended on material qualities such as toughness, thickness and flexibility. Stronger male skins were preferred for durable items because of their resistance to abrasion and environmental wear and were commonly used for winter footwear. Softer female skins were used for lighter garments such as summer robes. Male salmon skins were especially valued for their durability, as the physical stress of spawning migrations and competition with other males produced thicker and tougher skin. The mottled skins of certain salmon species were also selected for their decorative qualities in outer garments (Palomino 2022).

3.5 Gender and Making

Gender roles shaped seasonal work and artistic production in Ainu communities. These roles, maintained throughout centuries and shared by many ancient cultures, were linked to ecological rhythms and ceremonial rites. Throughout the traditional period, beginning, based on the earliest surviving artistic evidence, around the thirteenth century and continuing through the Meiji Restoration of the 1860s into the early twentieth century, the Ainu creative process was shaped by cultural rules. Artistic expression followed roles that defined gender and subject matter, materials and purpose. Men were responsible for woodworking, constructing dwellings, carving ceremonial objects including *ikupasuy* (prayer sticks), *inaw* (sacred shaved sticks) and utilitarian tools such as bowls, plates and spoons. Women were responsible for garment construction, animal skin processing, weaving textiles and their embellishment, the most visible form of Ainu artistic expression (Dubreuil 1999).

Beyond artistic labour, the gender division of work structured all subsistence. Men hunted, fished and oversaw ceremonial activity. Women gathered plants for food, medicine, thread, rope and clothing, collected bark for weaving, processed fish and helped with winter salmon fishing. Grandparents and older siblings remained in the settlement [fig. 90], looked after the children and contributed by gathering firewood, berries and smoking fish. These duties were linked to broader ecological responsibilities (Yamada 1987; Watanabe 1999; Williams 2017).

Skill instruction began around the age of seven or eight. Fathers trained boys in hunting and fishing, while mothers taught girls to sew, weave, gather and process food. Instruction was individual, adapted to each child's ability. Oral stories accompanied this training, offering examples from human relations, animal behaviour and divine figures. Stories taught children how to recognise danger and adapt their responses, reinforcing the practical skills learned through daily participation in household and subsistence tasks. Though there was no formal schooling, instruction was constant and hands-on. Once they had mastered these life skills and have demonstrated competence in essential tasks, young men and women were recognised as self-sufficient and treated as autonomous adults (Fujimura 1999).

Young girls learned domestic work through play, using miniature mortar and pestles and helping with food preparation. Girls also accompanied older women on plant-gathering trips. Still, it was mastery in garment construction, particularly in embroidery design, that defined a woman's social reputation. Each woman was expected to develop her own visual repertoire without repeating a design twice (Dubreuil 2004). Daughters learned embroidery working alongside elder women, beginning with rough samples and gradually advancing to more complex designs. Garments served as visual records of lineage and skill. Tools, techniques and clothing were passed from mother to daughter, ensuring continuity through the female line. Sewing held practical and social value. It was crucial to women's status as wife and mother and as a recognised fabric creator. Epic narratives, including *Yaoskep kamuy*¹⁶ (Song of the Spider Goddess), praised the persistence and creativity of women's needlework (Dubreuil 1999).

The *kotan*, situated along salmon runs, served as domestic and ritual centre. Its location enabled seasonal access to salmon, deer and bear. Men remained at hunting and fishing camps, while women and children stayed in the village, drying meat and storing food. Women and children might assist in salmon and deer harvesting, but bear hunting was ritualised and restricted to men (Watanabe 1999).

¹⁶ *Yoshosh-kamuy* (Song of the Spider Goddess) one of the epic narratives or *yukar*, describes the long hours Ainu women devoted to sewing and embroidery: "Doing nothing but needlework, I remained with my eyes focused on a single spot and this is the way I continued to live on and on".

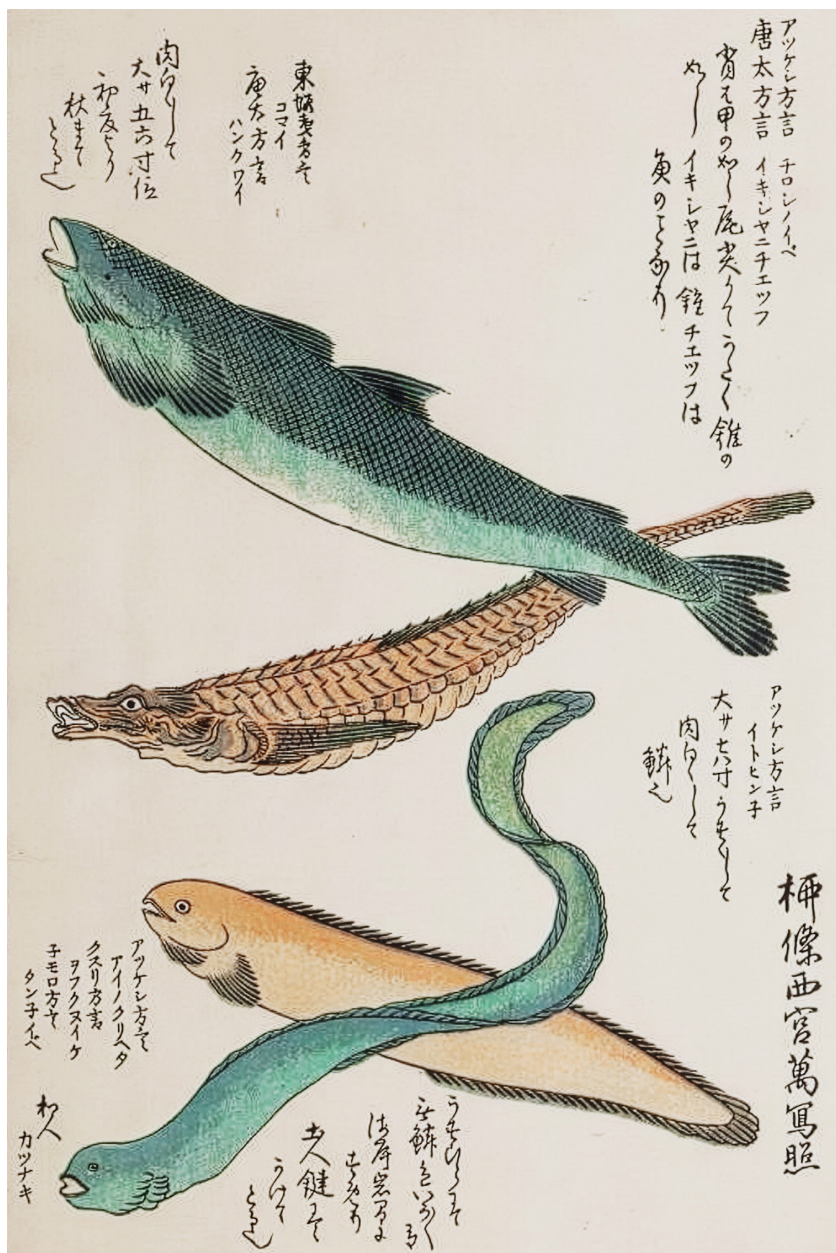


Figure 89 Matsuura, Takeshirō and Shōgo Kitano. Sakhalin fish types. Salmon and eel. Nishi Ezo nishshi 1863. Japanese Rare Book Collection, Library of Congress, Washington, D.C., USA

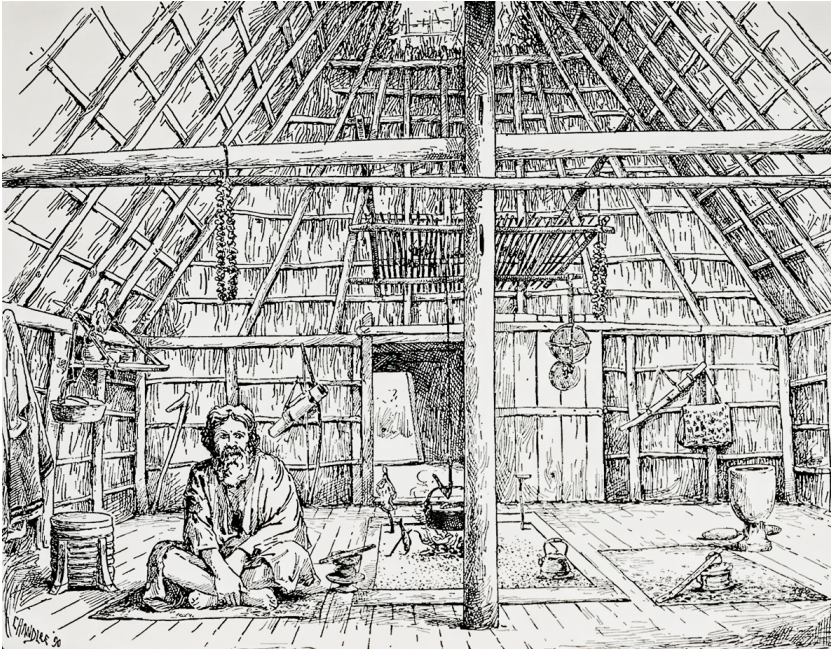


Figure 90 Romyn Hitchcock. Inside an Ainu *cise* or home, where life revolves around the central hearth. 1890. *The Ainos of Yezo Japan*. Leiden University Libraries Special Collections, Leiden, Netherlands

Seasonality structured work. Winter was men's season and summer was women's. Winter fishing intensified from late November to early December. Men caught salmon with spears or nets, after which women cleaned, smoked and dried the catch. Winter wood was cut, split and hauled. Domestic demands remained constant: tending fires, fetching water, mending garments and caring for children (Batchelor 1900). During summer women harvested nettles and silver grass used for weaving, thread-making and embroidery. By late autumn, women concluded gathering work and joined men in salmon processing. Fish skin was among the materials prepared and stitched by women during this period. The practice demanded specialised knowledge of tanning, softening and sewing techniques. Girls contributed to fish processing and gathering raw materials, nettle, bark and vine, needed for fibre and fish skin clothing. These materials, processed in summer, became the basis for garments worn through winter (Keira 1999). The organisation of work, structured around the exchange of essential goods, expressed reciprocal responsibilities shaped by gendered knowledge and environmental experience and affirmed the interdependence of men's and women's roles, grounded in kinship, seasonal tasks and shared duties to sustain life.

Just as gender shaped daily labour and artistic roles, it also structured how the Ainu described relationships between the human, natural and spiritual worlds. Deities (*kamuy*) were assigned gendered attributes drawn from everyday life. Male *kamuy*, linked to animals, represented strength and hunting; female *kamuy*, linked to plants, represented sustenance and gathering. This dual nature of deities highlighted the division of human labour. In ritual, male deities took on external and priestly roles, while

female deities were connected to domestic and mediating functions. Key rituals depended on goddesses such as the Fire Deity and the Goddess of Hunting and Fishing (Yamada 1987). These roles affirmed gendered reciprocity, not inequality, reinforcing cooperation between genders.

3.6 Tanning

The preparation of fish skin for clothing emerged from subsistence routines, shaped by the need for durable materials. These methods required detailed knowledge and regular attention to the properties of the skin throughout processing.

During his visit to Sakhalin to observe the Russian penal colony, the British physician Benjamin Douglas Howard described an Ainu settlement comprising twelve huts, one of which was larger and with a wide doorway. This building served as the communal site for processing fish and game. Skins were removed and prepared there, while in its rear chamber, meat and fish were dried, salted and smoked. Skins from different animals were processed either for domestic use or for trade. Under strict regulation, Japanese traders were permitted annual access to exchange goods, cotton cloth, rice, knives, arrowheads and tobacco, for high-value Ainu furs, including sable. Howard noted that intoxicating alcohols were strictly prohibited throughout Sakhalin under Russian administration, unlike under British rule (Howard 1893).

Fish served as both food and raw material, the flesh was consumed, while the skins were fashioned into robes and boots adapted to Northern climates (Ölschleger 1999). Tanning is a combination of science, art, botany and chemistry (White 1956) and was long practised among Indigenous Arctic communities (Hatt, Taylor 1969). In Hokkaido, Ainu methods for preparing salmon skin for footwear relied on smoking the skins [fig. 91]. Practised since the late Neolithic period, smoke tanning is an aldehyde-based method in which aldehydes released during wood combustion react with collagen amino groups to form stable bonds within the skin (Palomino, Rahme 2021). Skin removal began with shallow incisions at the head, pelvic fins and tail. The skin was then peeled by hand from the tail incision towards the head to avoid blade damage. In some areas, the fish was first dried and beaten to loosen the flesh (FRPAC 2008). Once separated, the flesh was scraped away, the fins and tail removed, and the skin washed. Small holes were pierced so it could be stretched flat with skewers [fig. 92] secured along the edges to prevent curling and suspended above low-heat smoke inside the *cise*.¹⁷ The skin was left to dry for around two weeks, after which any remaining tissue was scraped away. Partially decayed wood produced thick smoke which dried and conditioned the skin over several days. Different woods produced variations in colour, ranging from golden to darker tones. Skins were then left to rest overnight, aired and softened by hand to restore flexibility. Smoking removes moisture, reducing bacterial growth and helping to preserve the material. Compounds contained in the smoke impregnate the skin fibres, increasing water resistance and reducing the tendency of the skin to become saturated, shrink, or deform through repeated cycles of

¹⁷ During winter, the Ainu lived around the central hearth of their dwellings, or *cise*.

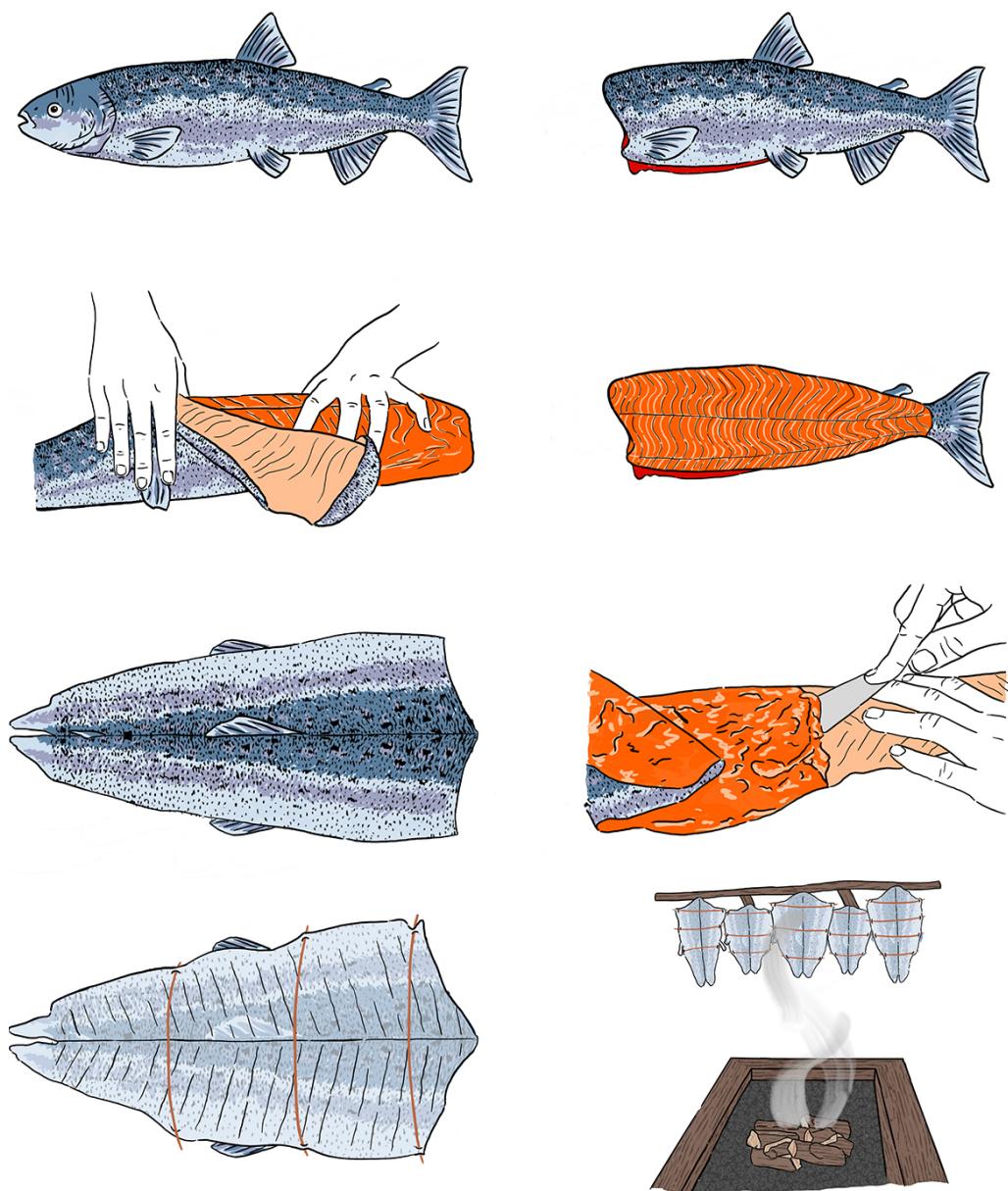


Figure 91 Ainu salmon smoke tanning in the central hearth of the *cise*. Illustration: Laura Fernandez

wetting and drying. This process contributed to the durability properties required for footwear (Palomino 2022).

3.7 Sewing Implements

Following skin preparation, sewing transformed raw material into garments and footwear suitable for cold weather. The process required appropriate tools and specific threads, adapted to different fibres and environmental conditions. In the Neolithic period, the Koushi Ainu,¹⁸ the Ainu inhabitants of the Kuril Islands, used coarse needles fashioned from eagle wing bones (Torii 1919). For winter skin clothing, sharpened fish bone needles were also used (Landor 1893). Later, iron from shipwrecks cast ashore was reworked into fine needles. In the nineteenth century, steel needles supplied by Japan replaced earlier bone versions. An iron needle was a prized possession, kept on a leather cord in a carved bone case called *Shikabi*, highly decorated and carried at all times. The Ainu also adopted a folding three-part needle case from the Kamchadal's. During sewing, a thimble cut from seal back skin was worn on the index finger (Torii 1919).

Body-based measuring methods guided pattern making. Arm span and hand length served as units known in Japanese as *shintaisaku*. The Ainu terms for measurement methods included *si-wo*, from the middle finger to the thumb tip with the hand spread; *mo-wo*, from the index finger to the thumb tip; *para tek*, from the middle fingertip to the palm base; *ik*, the middle joint of the index finger; and *emko*, half an *ik* (Tsuda 2014b).

3.7.1 Threads

Cotton thread became part of Ainu sewing production following commercial exchanges with Japan and its use spread increasingly from the late eighteenth century onwards, while expensive silk thread was also in circulation (TRC 2017). Before cotton became available, sewing different materials relied on threads derived from tree and plant fibres. Fish skin garments were sewn with sinew, nettle bast, or grass thread (Tsuda 2014b). Nettle bast was used for sewing, weaving, nets and fishing lines across Hokkaido. It possessed high tensile strength, almost double that of cotton and unlike bast from linden, retained its strength when wet (Williams 2017). Nettle bast secured garments and footwear made from seal, sea lion and salmon skins (Fukuoka 1995).

The bark of the linden tree (*Tilia cordata*) was also used to make sewing thread, strong twine and braided cord for nets (Hitchcock 1890). Ainu sewing relied on black-dyed elm fibre (Landor 1893). Elm bark was stripped in early spring or autumn, soaked in warm stagnant water for ten days, separated into layers, dried and divided into threads for later use. Sewing thread was chewed to round and compact it; in some cases it was chewed immediately after the fibre was removed from the tree (Batchelor 1900). Women twisted inner bark fibres of trees by the hearth into continuous lengths for sewing and net-making (Bickmore 1869). Fibre colour was

¹⁸ Torii (1919) noted that the Koushi Ainu, the Ainu inhabitants of the Kuril Islands referred to themselves as *Kourilsky* Ainu, because their language was mixed with Russian.



Figure 92 Elisa Palomino, Salmon smoke tanning done by Shigehiro Takano at the *cise*. Nibutani Ainu Museum

deepened using bark-based dyes (Bird 1880). To darken the material further, bark fibre was immersed in a decoction of oak and then placed in iron-rich marsh water, producing a reddish-black colour known as *kunnep* (Batchelor 1900). Black and brown dyeing was achieved using Japanese alder bark (Hitchcock 1890) while other dyes used on fibres were made from crowberry and iron-rich muds (Williams 2017).

Women used the *kagarinui* sewing technique, which was suitable for garments made from skins, salmon skin, leather and bast fibres. Its use declined and the techniques used to join seams changed from *kagarinui* to *naminui* (from a whip stitch to a running stitch) as cotton fabrics became more common, disappearing almost completely in the post-war period (Tsuda 2014b).

3.8 Clothing Technology

Clothing traditions developed alongside fishing practices, as preserved fish skins became essential components of clothing. The harsh winters of *Ainu Mosir*¹⁹ required durable protection, and dress evolved in response to the weather conditions of Hokkaido, Sakhalin and the Kurils. Ainu clothing expressed ethnic identity through the choice of material, the shapes and the embroidered motifs that referred to specific territories (Dubreuil 1999). Women gave form to this knowledge, selecting materials and constructing garments for both daily use and ceremony (Tenri Gallery Exhibition 1983). Clothing carried the rules of respect through which animals, plants and weather were understood. Salmon and the elm trees used for clothing, were received as temporary manifestations of gods (Dubreuil 2002). Pelts and plants were only deemed appropriate if they were dealt without waste and their origin was recognised (Williams 2017).

Ainu Clothing was based on two main types of materials: animal-based and plant-based [fig. 93]. In addition, a further group comprised items acquired through trade with Honshu or the Asian mainland, either as unfinished textiles or as completed garments (Kodama 1999). Early garments made of animal skins (*ûrou*) included fish skin (*akumi*), birdskin (*rapuri*) and the hides of land animals (*uri*), sewn using sinew and plant fibres (Takakura 1960). Deer, bear, fox, sea otter, rabbit and seal hides were employed across Hokkaido, Sakhalin and the Kurils (Dubreuil 2002). In Hokkaido, which formed the main region of Ainu settlement, skin clothing was produced using salmon skin and the game hides (Tsuda 2014a). In the Kurils, where hunting large land mammals was limited, skins from seabirds including tufted puffin or *etupirka*,²⁰ goose, seagull and albatross supplied waterproof clothing (Kodama 1999). The Kurilians also made garments from seal and sea otter skins, linked to the trade networks of the North Pacific (Tsuda 2014a). Sakhalin Ainu used the hides of sea mammals (such as seal, fur seal and sea lion) and fish materials (Kodama 1999).

¹⁹ *Ainu Mosir*, meaning 'land of the Ainu' or 'quiet earth where people live', refers to the Ainu homeland across Hokkaido, southern Sakhalin and the Kuril Islands.

²⁰ The tufted puffin, referred by the Ainu as *etupirka*, means 'beautiful beak'. Robes sewn from entire *etupirka* bird skins were essential for survival, worn with feathers turned inward for warmth or outward for rain and stitched with the heads facing upward to shed water effectively.

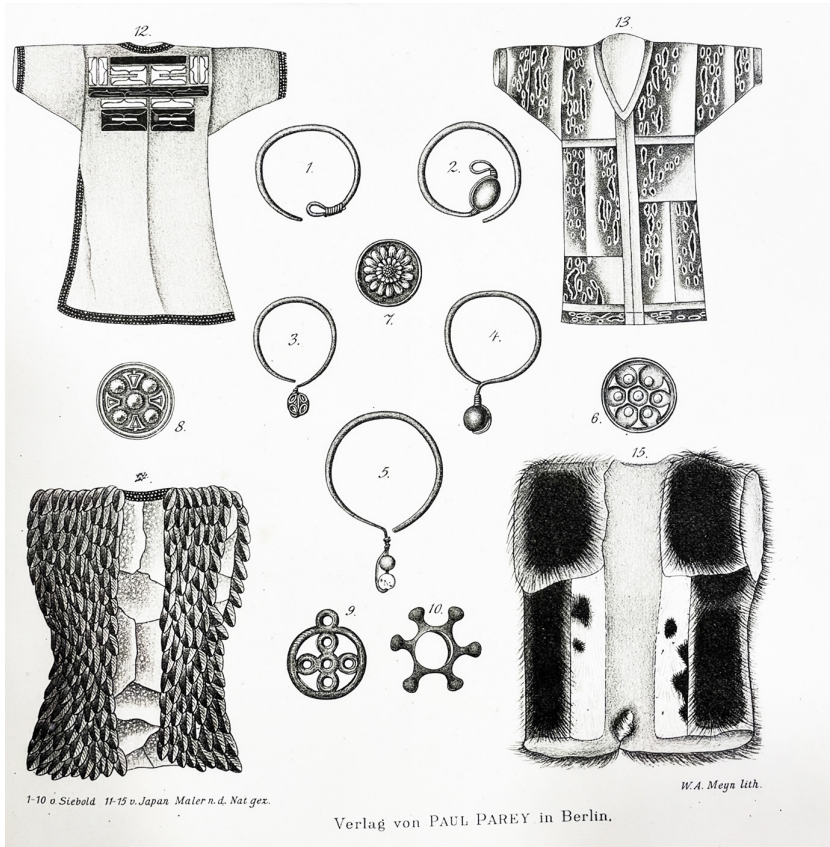


Figure 93 Philipp Franz Balthasar von Siebold, Different plant-based and animal-based Ainu garments. Nippon. 1838. Leiden University Libraries Special Collections, Leiden, Netherlands

Dog skins served for winter jackets and capes, while bear skins, regarded as sacred, were not worn, though later traded (Landor 1893; Williams 2017). Within this category of animal products, fish skins provided an important resource. Garments made from chum salmon and pink salmon, required many skins and were valued for water resistance and strength (Kodama 1999). Along the Sea of Okhotsk, these garments supplied reliable winter insulation and show parallels with clothing traditions in the Lower Amur Basin (Kodama 1999).

Garment shapes varied by region and functional need. In Sakhalin, fish skin robes featured stand-up collars, open fronts and narrow sleeves, resembling elements of European tailoring. Sakhalin Ainu clothing resembled that of the Nanai along the Amur River, indicating influence from the Asian continent (Kodama 1999). Howard described Sakhalin robes assembled from pieces of sable, bear, deer and fox, with birch bark beneath to guard against poisoned arrows used in winter hunting (Howard 1893). In the Kurils, *ûrou* garments made of animal skins, marine or terrestrial, included birdskin robes, sea lion shirts and deer skin high boots (Torii 1919).

Plant-based fibre clothing formed a second major category of Ainu dress. Elm bark, nettle and Japanese linden were used throughout Ainu territories (Takakura 1960; Williams 2017). During his 1808-09 expedition to Sakhalin,

Mamiya Rinzo observed that both men and women in Karafuto (Sakhalin) wore clothing similar to that worn in Yezo but made from nettle fibre due to the absence of elm and other trees that do not grow in their mountains. This cloth, called *tetarabé*, resembled Japanese hemp fabric. His account was later published in the 1850s under the title *Kita Yezo Zusetu* (Torii 1919). The *attush* robe was the main textile garment, woven from elm bark fibres and decorated by women with cotton appliqués after weaving (Hitchcock 1890; Montandon 1937). Winter versions incorporated animal-skin panels stitched to the back for warmth (Batchelor 1900) and embroidery motifs indicated provenance (Montandon 1937). Straw robes or *Kera*²¹ were also used as raincoats (Takakura 1960).

Garments produced through trade formed a third category. Cotton and silk did not reach Ainu communities before the early seventeenth century (Dubreuil 2002). Cotton fabric gradually became standard after 1868 and by the 1870s, it was widely used in gown construction (Tsuda 2014b). In the Kurils, garments imported from Hokkaido were traded for sea otter pelts, while otter and marten skins were exported to markets in Japan, China and Russia (Landor 1893; Williams 2017).

Garment making was shaped by purpose, women designed each piece with a specific wearer in mind, adjusting shape and size as needed and envisioning the person dressed in the final robe. A garment without a clear purpose was seen as incomplete. The ability to conceive a design that had never been made before was especially valued, reflecting both skill and the personal attention given to the wearer. Size was rarely an issue, as aside from length, men's and women's robes shared the same basic structure (Dubreuil 1999).

Meiji-era officials banned animal-skin clothing, deeming it unacceptable despite its practical and spiritual value to Ainu communities. While Japanese publicly dismissed these garments as vulgar and crude, the prohibition primarily sought to expand Japanese textile markets, promoting cotton and increasing Ainu dependence on Japanese trade (Dubreuil 1999). The adoption of cotton clothing progressed gradually; animal skins and imported fabrics continued to be worn through the late nineteenth century and, in remote areas, into the early twentieth century, where government presence was limited. Although removed from Ainu wardrobes under political pressure, fur garments became associated with luxury in the Western world, although not without controversy (Dubreuil 2002). At the same time, Ainu clothing entered Western museum collections, where curators documented robes and footwear made of elm bark, nettle, fish skin and deer hide (Kendall 1999).

3.9 Fish Skin Robe

Fish skin garments served functional needs. Compared with elaborately decorated elm bark robes, only a few surviving examples of fish skin robes show surface embellishment. Their construction prioritised watertightness and insulation during seasonal fishing activities. Given that the production of a robe required large quantities of fish, access to sufficient skins could indicate that a household had abundant catches (Dowie 2021).

²¹ Traditional rain capes made from grass, straw, or bark were replaced by plastic raincoats after World War II. They had been used for work in fields or mountains and for carrying loads.

Comparative examples from Nivkh communities show related construction approaches. Montandon described two robes collected in Siberia: a Nivkh robe with indigo blue appliqué and a Nanai example with multicoloured embroidery. He noted that, despite the Ainu embellishments were of a smaller scale, the patterns resembled Amur River work, while differing from clothing further north (Montandon 1937).

Fish skin robes were known in both Sakhalin and Hokkaido, although written documentation is limited (Otsuka 1991). Most surviving robes are attributed to Sakhalin²² due to early Russian collecting practices and the later population relocations of Ainu communities from Sakhalin to Hokkaido. Salmon skin boots from Hokkaido appear widely in museum collections, yet their origins are seldom questioned. Given that the Hokkaido and Sakhalin Ainu shared similar environmental conditions and access to salmon and trout, it is unlikely that only one group produced robes. Regional differences in artistic design are evident: Sakhalin robes are distinguished by their wide red and indigo blue bands at hemlines and openings, as well as their stitched embroidery [fig. 97]. Hokkaido styles are characterised by minimal decoration [figs 94-98] made with fish skin patches and subtle tonal variations in the skins (Dubreuil 2002). First-hand observations from the late nineteenth century support the attribution of decorated robes to Sakhalin. Howard described fish skin robes worn by both men and women in Sakhalin. Some featured coarse embroidery and reminded him of North American styles. He noted the material's durability, flexibility and thinness and acquired one of these fish skin robes during his visit (Howard 1893).

Manufacturing involved stitching together fish skins including salmon, *Ito* (Sakhalin taimen) and large trout (Sekine 2016). The women prepared the skins to preserve a surface of fine scales which, combined with the natural brown shades and gradations of light and shadow, produced a textured depth similar to that of fur (Cevoli et al. 2015). Skins were stitched with fine thread. Later examples show added embroidery around necklines and seams and occasional use of dyed cloth patches (Sekine 2016). When fins were removed, they left openings that were covered using contrasting pieces of fish skin to produce patterned surfaces, even on robes without added decoration (Motomichi 2001).

The overall look of a fish skin robe was achieved by combining the natural variations in the shape and tone of the skins. Fish skin remnants from multiple species, each with different shades, were employed as design elements. Similarly coloured fragments helped to bridge and conceal gaps between larger pieces. Dubreuil suggests that the irregular contours and tonal shifts in salmon skin influenced the development of *nuitori*, the abstract cloth appliqués with intricate embroidery found on later Ainu garments.

²² Dubreuil observes that many scholars associate most surviving salmon skin robes with Sakhalin because several early specimens were collected there and because Ainu populations were repeatedly relocated from Sakhalin to Hokkaido under Russian and Japanese administration. She also notes that Hokkaido Ainu worked salmon skin, evidenced by numerous salmon skin boots from Hokkaido preserved in museums worldwide, whose provenance is not disputed, making local production of such robes likely. See Dubreuil 2002.



Figure 94 Elisa Palomino, Ainu fish skin robe. Nineteenth century. Catalogue No. 79. Botanic Garden and Museum (HUNHM), Field Science Center for Northern Biosphere, Hokkaido University Sapporo, Hokkaido, Japan

The number of patches on a robe offers an indication of how many whole fishes were used (Dubreuil 2002). Between forty and fifty skins were required to make one robe, similar to fish skin robes by Nivkh communities [fig. 96] along the Amur River (Sekine 2016). Fish skin garments were likely limited to certain areas or used in specific situations, such as trade with Russia or activities linked to northern border patrols in Sakhalin (Otsuka 1991). Their limited appearance in historical records points to selective, situational wear rather than widespread use.

3.10 Embellishments

Undecorated fish skin robes functioned as everyday workwear, while decorated examples became ceremonial garments and were regarded as wearable works of art (Dubreuil 2004). Their ornamentation, through stitching and fish skin appliqué, expressed identity, regional conventions and the maker's skill. Decoration followed construction and strengthened the structure of fish skin garments. Openings created when the fins were removed were covered with lighter toned fish skin or small, red-dyed leather patches to reinforce weak points and create visual patterns (Motomichi 2001). Glue made from chewed salmon skin was used to attach decorative elements to the robe (Chiri 1953). Embroidery was done freehand (Kodama 1999), using techniques such as chain stitch and couching (TRC 2017). One line of thread was sewn alongside the appliqué on fish skin garments, a

過決失

總部酋長

乙箇吐壹

Figure 95

Ikotoi, chief of Akkeshi, depicted with blue bead earrings, plain skin trousers, an Ezo-Nishiki Chinese silk robe with dragons and clouds and a Russian military greatcoat. Musée des Beaux-Arts et d'archéologie de Besançon, France



technique also seen on the *ruunpe*²³ of the Hokkaido Ainu (Kodama 1999). Embroidered elements and narrow fabric strips were concentrated around collars, backs, sleeves and hems to reinforce joins and areas under frequent strain, securing edges and preventing seams from tearing (Dubreuil 1999; Tsuda 2014a). Even garments with minimal stitching show careful patching designed to accommodate areas of repeated wear (TRC 2017).

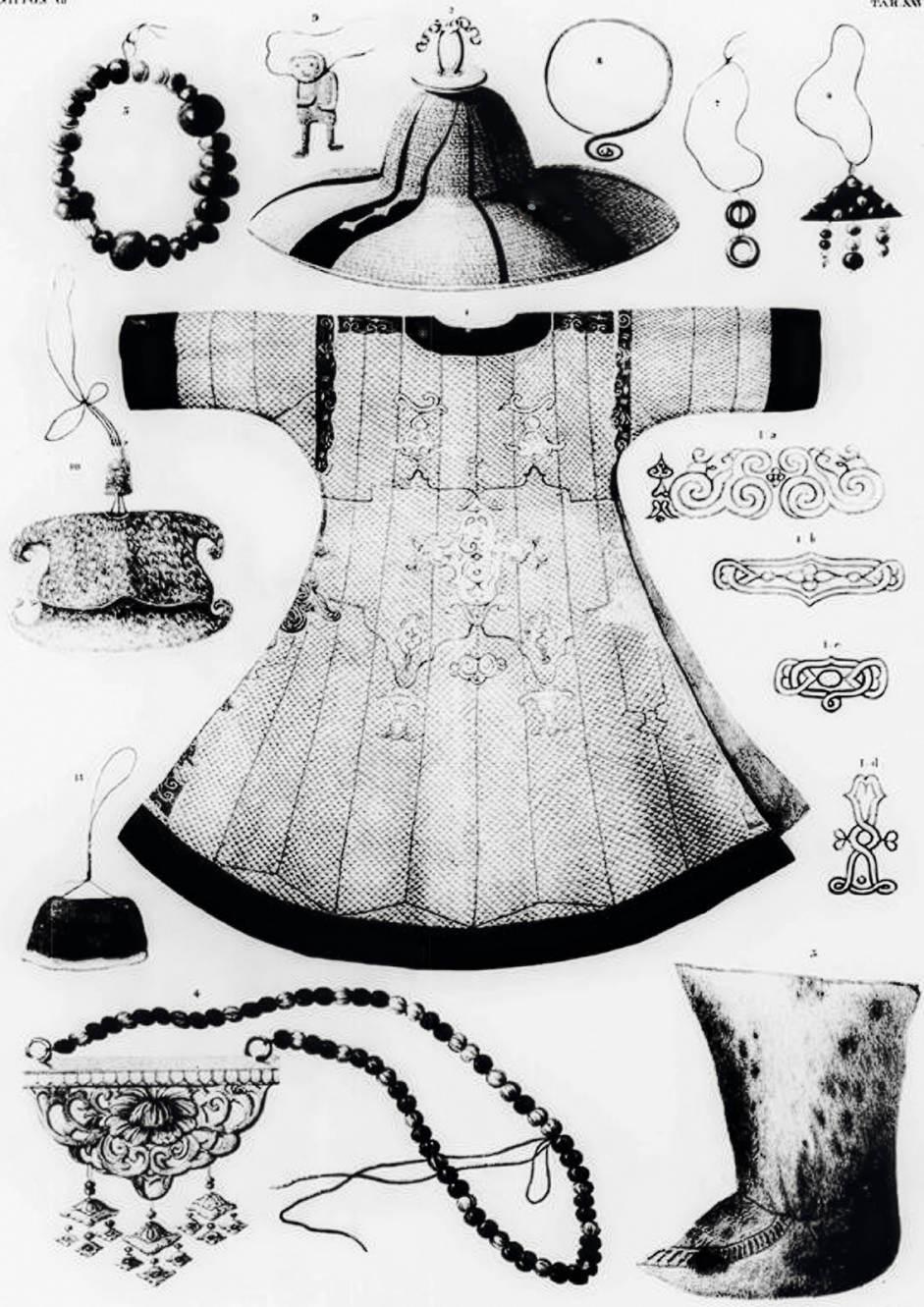
Textiles obtained through trade with Manchuria and Santan merchants were valued for embroidery and in some cases, children trained as interpreters received cloth as compensation (Dubreuil 1999). Between the seventeenth and nineteenth centuries, Santan trade connected Sakhalin communities with groups living along the lower Amur River. Under Qing rule, northern Indigenous groups provided furs in exchange for worn Chinese garments, metal goods and food (Hakodate 2025). Among these items, *Ezo Nishiki*²⁴ official garments of the Qing dynasty, were highly prized and incorporated into Ainu wardrobes and depicted in Ainu-e paintings [fig. 95] but were uncommon in everyday use (Dubreuil 2004; Hakodate 2025). Regulated exchanges included silks, brocades, cotton drills and beads traded for Ainu fox, seal, otter and marten pelts, hawk and eagle feathers and fish products (Takakura 1960; Dubreuil 2004). Known collectively as Santan wares, these materials were incorporated into Ainu dress in Sakhalin and Hokkaido. Silk remnants were cut into strips and sewn to hems, marking material value and social status (Takakura 1960).

Thread materials evolved over time. Sinew and grass fibres were initially used, with cotton introduced later through trade (Takakura 1960; Tsuda 2014b). Because of its cost, cotton thread was reserved for embroidery, particularly on Sakhalin robes rather than general stitching (Dubreuil 2002). Garments collected by Russian expeditions show indigo-dyed cotton strips secured with coloured thread embroidery to outline openings at cuffs and collars (Kodama 1999; Tsuda 2014b). Strips were first stitched in place with bast-fibre thread, then embroidered with cotton thread (Tsuda 2014b). Protective motifs included rope stitching in dark blue thread placed around the neck, sleeves and hems, a practice linked to earlier customs where mothers placed rope around sleeping infants for protection (Kayano 1978).²⁵ Embroidery was concentrated on the upper back, an area considered especially vulnerable (Dubreuil 1999). Imported cotton fabrics and threads were incorporated into decorative features that complemented existing garments while local materials continued to be used (Kodama 1999). Despite their high cost, these materials became part of Ainu clothing practices. Cotton cloth was reused until softened, then repurposed into strips for borders, a practice that minimised waste and kept usable materials in circulation long before sustainability was formally named (Dubreuil 1999).

23 *Ruunpe* translates from Ainu as ‘things that have path’ and denotes the embroidery and appliqué on the front and back of cotton garments.

24 *Ezo-nishiki* are Qing dynasty silk garments that reached the Ainu through regional tribute and trade networks. Along the lower Amur, Qing authorities received valuable furs from northern peoples in exchange for recognising their rights to govern certain lands and provided goods such as silk official dress and ornaments including glass beads. These items circulated through exchange networks linking Primorsky, Sakhalin, Hokkaido and mainland Japan via Ainu intermediaries.

25 Shigeru Kayano notes that Ainu designs derived from the principle of warding off harmful forces. Rope-like embroidery placed around necks, sleeves and hems functioned as protection for the body and relate to the practice of encircling infants with rope during sleep. See Kayano 1978.



KRAFTO
KLEDAADJE. + KLEIDINGSSTÜCKE.

Figure 96 Philipp Franz Balthasar von Siebold, Fish skin robe, seal fur boots, salmon tobacco pouch and jewellery. Karafuto. Nippon. 1838. Leiden University Libraries Special Collections, Leiden, Netherlands

In 1804, British naval officer Broughton²⁶ observed that women's robes in Sakhalin differed from men's mainly in length and that robes made of seal, deer and fish skin were edged with blue cloth along hems and cuffs [fig. 94] (Broughton 1804).

Knowledge of stitching and design circulated within households. Girls learned by watching relatives and attempting small tasks, drawing pattern units in sand or hearth ash before working directly with the garment. Designs were not sketched onto the fabric or copied from patterns, women relied on memory, assembling familiar motifs into new compositions (Dubreuil 1999). Originality demonstrated competence, and each garment was expected to differ from those produced before. Designs and their names varied by region, influenced by personal style and available materials. Marriage between households and villages also led to new combinations of motifs and sewing practices (Kodama 1999).

Researchers have studied the placement of decorative motifs on garments, noting consistent structural divisions at the collar, hem and sleeves [fig. 97]. While early Japanese and European scholars focused on symbolic interpretations, later studies highlighted the practical role of motif placement in reinforcing seams and protecting vulnerable parts of the body (Tsuda 2014a). Initial theories that linked motifs to animals or natural forces were later discarded after Ainu women explained that living beings were not depicted, as doing so could cause harm. Although the Ainu lived in close relationship with nature, representing animal deities in textiles was considered taboo. Despite this, anthropologists continued to assign totemic meanings to embroidery patterns (Dubreuil 1999). Motifs were instead created to please the gods and protect the wearer against malevolent forces (Dubreuil 2002).

Parallels exist between the motifs and placements of embroidery [fig. 98] and the tattoos [fig. 99] in Ainu women's arms and hands which protected women against disease and misfortune. The curvilinear patterns seen on the back of their hands and arms would ward off evil spirits (Dubreuil 1999). Tattooing involved an infusion made from the bark of the ash tree alongside birch soot, applied three times, both valued for their healing properties. The black cloth used to dress the wounds, together with spells, reinforced this effect (Munro 1979). Similar protective intent is seen in the use of dark cotton cloth on openings such as hems and sleeves, where colour and placement served to block the entry of harmful forces (Palomino et al. 2021). Decoration persisted despite assimilation policies. As cotton clothing replaced skins in daily life, stitching practices continued in robe-making using bark fibres and traded cloth (Lewallen 2014).

²⁶ William Robert Broughton, a British naval officer, conducted a four-year survey of the Asian coast in the late eighteenth century, including the Kurile Islands, Japan and the eastern coasts of Honshu and Hokkaidō.





Figure 97 Child's salmon skin robe, before 1896. Museum Purchase, 1897. Accession number PEM E3390. Peabody Essex Museum. Salem, Massachusetts, USA



Figure 98 Salmon skin robe collected by Frederick K. Stearns in 1889-90, Hokkaido. Accession no. X1989.37. The Detroit Institute of Arts, Detroit, Michigan, USA



Figure 99 Hata Awagimaru, Ainu woman. Ezotō Kikan. Japan. 1799. Japanese Rare Book Collection, Library of Congress, Washington, D.C., USA

3.11 Footwear

Fish skin footwear completed the outfit, shaping how Ainu moved through snow, ice and riverbanks. In the summers of Sakhalin, Hokkaido and the Kurils, eighteenth- and nineteenth-century images and accounts suggest that men and women went barefoot during daily tasks [fig. 86]. By winter, specialised footwear became necessary for hunting and travel (Williams 2017). Boots were made from deer or salmon skin, with fish skin preferred for icy surfaces and winter fishing (Kayano 1978).

Construction and terminology varied by region. Ainu footwear included deer skin shoes (*yukker*) and fish skin shoes (*cep ker* or *cep kerī*) crafted from softening and sewing the skins into shape. Some shoes were made like moccasins, while others were completely enclosed like boots, with cords attached [fig. 100] to secure them around the ankles (Sekine 2016). In Sakhalin, long boots (*tanne tchiokap*) [figs 101-102] were used for fishing and medium-height boots (*tokoune tchiokap*) for travel across plains and mountains (Torii 1919). Montandon noted that Ainu and Amur-region footwear followed the moccasin principle, using a single piece of skin folded

around the foot, placing Ainu techniques in dialogue with those in North America and Sápmi²⁷ (Hatt 1916; Montandon 1937).



Figure 100 *Cep kerī*, salmon skin boots. Hokkaido, Japan. Accession no. A406A. Penn Museum, Philadelphia, USA

Salmon skin boots were made from fish taken at a specific stage in their life cycle. Post-spawning salmon had thicker, more durable skins, making them ideal for winter wear (Fukuoka 1995). Each pair required two skins: one for the sole and heel, the other for the upper (Kayano 1978).

Twentieth-century documentation records a detailed making process (Muraki 1994). Tanned skins were washed, dried for several days and then softened in lukewarm water. They were shaped directly on the wearer's foot. Function influenced form. Fish scales were oriented backward to improve grip on snow and mud, and the dorsal fin was often retained at the sole's centre to enhance traction and strength (Kayano 1978). Makers placed the foot so the dorsal fin line lay beneath the arch, then traced an outline to allow for the rise of the sole. Basting began near the toes to gather the upper [fig. 104], an instep piece cut from half a skin was attached and the tail-end skin was folded to form the heel without cutting away surplus, increasing strength. Ankle sections were sewn on as strips. Skins were stitched using thread made from plant fibres or animal sinew (FRPAC 2008). Tendons or muscle strands (*rit*) from whales and large seals were used (Torii 1919) while deer tendons were softened and beaten to produce thread strong enough for stress points (Palomino 2022).

Before wearing, boots were soaked to mould to the feet and tied with elm-bark cords around the ankles (Landor 1893). Laces were twisted from *ohyō* (elm bark) to the needed thickness (FRPAC 2008). Thread for sewing

27 Indigenous Sámi name for the cultural region inhabited by the Sámi people. It spans parts of northern Norway, Sweden, Finland and the Kola Peninsula in Russia.



Figure 101

A pair of fish skin boots. Karafuto (Sakhalin). Accession no. 27977. Tokyo National Museum, 1992. Library of Congress, Washington, D.C., USA



Figure 102

Matsuura Takeshirō, Two Sakhalin Ainu. The woman holding the fish wears boots made of fish skin. Nishi Ezo nisshi 1863. Japanese Rare Book Collection, Library of Congress, Washington, D.C., USA

and lacing (*kaeka*)²⁸ was also made from *Tsuruume-modoki* vine fibres. The production of *kaeka* began by heating plant fibres in water, which caused them to turn green. When the fibres were prepared in winter, they were placed in snow to cool, which removed the green colour. The dried brown fibres were first rubbed by hand to remove dust, then straightened and carefully untangled. The longest fibres were selected and separated. Each fibre was folded in half to form two strands and twisted from the folded end to produce thread. During this process the thread was held between the teeth so that both hands remained free to twist the fibres. The twisting technique followed a repeated under-and-over motion, with additional tension applied as the fibre passed under from left to right in order to keep the thread even and straight (Palomino 2022).



Figure 103 Elisa Palomino, Ainu fish skin boots with grass woven socks. Botanic Garden and Museum (HUNHM), Field Science Center for Northern Biosphere, Hokkaido University Sapporo, Hokkaido, Japan

Figure 104 Elisa Palomino, Ainu fish skin boots. Botanic Garden and Museum (HUNHM), Field Science Center for Northern Biosphere, Hokkaido University Sapporo, Hokkaido, Japan

Insulation was essential. Linings included bast from Manchurian elm, as well as grasses like reed bent grass and dune grass (*keromun*), which cushioned the foot, absorbed moisture and dried quickly (Fukuoka 1995; Williams 2017). Cotton grass, straw and bast-fibre socks [fig. 103] added further warmth. Chewed bark fibres also served as padding. Even with insulated fish or deer skin footwear, travel during the colder months remained risky, as deep snow, limited daylight and severe cold restricted mobility (Williams 2017). Even well-made boots had their limitations: they were not fully waterproof, wore poorly on rocky terrain, could catch fire and were sometimes chewed by dogs (Kayano 1978). To improve traction in rough terrain, Ainu wore thick rope sandals over their boots. In deep or compacted snow, they used snowshoes, horseshoe-shaped *tesma* and gourd-shaped *cinru* [figs 105-106]

²⁸ *kaeka* was traditionally carried out by grandmothers and formed part of everyday activity, undertaken while talking with others or during routine tasks. See Palomino 2022.

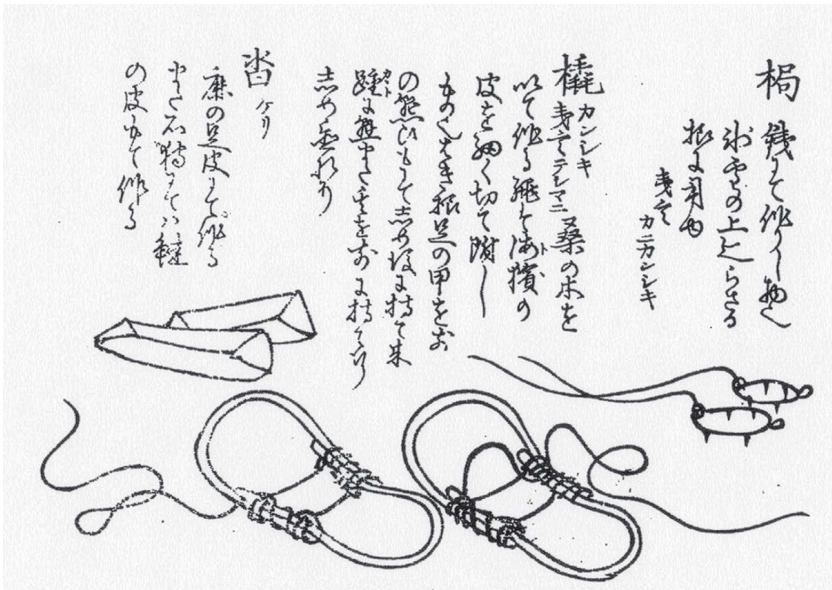


Figure 105 Romyn Hitchcock, Ainu fish skin boots, sandals and snowshoes. *The Ainos of Yezo Japan*. 1891. Leiden University Libraries Special Collections, Leiden, Netherlands

Figure 106 Matsuura Takeshirō, Snowshoes made of wood were worn over fish skin boots to improve traction in rough terrain. *Nishi Ezo nishshi* 1863. Japanese Rare Book Collection, Library of Congress, Washington, D.C., USA



Figure 107 Cotton, plant and fish skin child boots, ca. 1882. Gift of Mr. Miyabe. Accession no. PEM E491. Peabody Essex Museum, Salem, Massachusetts, USA

constructed from bent branches from woods such as maple, amur cork tree and mountain mulberry and bast fibre. Branches were harvested in autumn, when sap levels were lower and the wood was stronger. The wood was boiled to increase flexibility, then bent and bound at the ends with leather or cords made from Japanese linden bast (Williams 2017).

Museum collections preserve both plain and decorated examples. Fish skin boots from the Ishikari River, collected by Edward S. Morse²⁹ in 1882 and now held at the Peabody Essex Museum [fig. 107], still retain their original cotton grass stuffing. These boots are unusual because the embroidery was stitched directly onto the fish skin, meaning it could not be transferred to a new pair once the boots wore out (Dubreuil 1999).

One Smithsonian boot [fig. 108] combines humpback salmon for the upper and Sakhalin taimen for the sole, stitched to form a rounded foot and puffed toe, topped with a narrow, black-dyed cotton band for reinforcement. The dorsal fins were left intact along the sole to improve traction on snow and ice. The natural variation of the skins creates a honey-brown gradient (Palomino 2022).



Figure 108 Fish skin boot. Hokkaido, Japan. Accession no. E150637. Smithsonian NMNH, Washington, D.C., USA

29 Edward S. Morse, an American naturalist, ethnographer and art historian, was among the first Americans to live in Japan, where he taught science at the Imperial University of Tokyo. His extensive collections and notes documented Ainu society and material culture during the late nineteenth century are preserved today in the Edward Sylvester Morse Collection at the Peabody Essex Museum.

Ethnographic sources also detail how boots entered collections. Stewart Culin³⁰ described purchasing a pair of salmon skin boots from an Ainu woman in Shana. The soles were made from large salmon, the uppers from trout skin, with seal fur at the top and plaited grass cords. He noted their warmth, grip and relatively high price (Poster 1999). Other pairs were documented as boots worn from winter to spring for walking in the mountains. Their soles were built for traction and lightness, with dried grass and bark fibre socks for insulation (Ölschleger 1999; Poster 1999). Isabella Bird also observed that in winter, men wore “one or two coats of skin and rude moccasins for hunting” (Bird 1885).

Contemporary reconstructions show the range of variation once present in *cep kerī* design. Cords were wrapped around soles for traction and boots featured turned-up toes and raised ankle quarters for protection (FRPAC 2008). Museum collections reveal regional and household variation in size, structure and material choice, demonstrating how the once abundant salmon helped shape mobility and survival in winter (Kayano 1978; FRPAC 2008).

3.12 Hunting Belt

Smoking tobacco spread to Ainu communities through contact, as tobacco and pipes were imported rather than Indigenous to the region. After travelling in southwest Hokkaido, Broughton noted that Ainu men wore bark cloth robes fastened with a belt that held a tobacco box, pipe and knife [fig. 110]. He described smoking as a popular leisure activity shared by men and women (Broughton 1804). Batchelor later observed that it was above all older women who smoked. Pipes and tobacco boxes were crafted from walnut wood and inlaid with small pieces of deer bone. Many surviving examples feature carved holders and fine wire tools for cleaning pipe bowls. Batchelor also recorded burial customs in which these personal items were deliberately broken and placed alongside the deceased (Batchelor 1900).

Smoking kits were paired with fire-making tools. Ainu strike-a-light sets (*piwci*) included a steel striker, repurposed from broken pots or blades, a piece of quartz and tinder made from powdered wood mushroom³¹ or charcoal. These items were carried in pouches (*karop*) used to light pipes and household fires. Tinder pouches, collected in Sakhalin were made from salmon skin and decorated with glass beads or Japanese coins [fig. 109]. These pouches hung from men’s belts alongside smoking kits, as seen in the *Ainu-e Ishu Retsuzo* [fig. 110] by Kakizaki Hakyō (1764-1826), a samurai painter from the Matsumae clan author of a series of portraits depicting Ainu chiefs from eastern *Ezo*.

³⁰ Stewart Culin, the first curator of Ethnology at the Brooklyn Museum, expanded the museum’s collections through direct field acquisitions. During a visit to Hokkaido in 1912, he collected Ainu objects, including elm bark robes, fish skin boots and carvings, contributing to the museum’s ethnographic holdings.

³¹ Tinder material was made from the processed inner fibres of the tinder fungus (*Fomes fomentarius*). Growing on dead or dying birch and beech trees, it has been used since prehistoric times to catch sparks and carry fire.

Clothing was supported by belts made from locally available materials. Sakhalin Ainu women used sealskin belts (*kaniku*) to fasten their garments and carry work knives and other sewing tools. Brass ornaments, obtained through mainland trade, were affixed to these belts and served as protective elements. Their personal importance is evident in burial practice, where belts were interred with women and in their role as sources of power for Sakhalin Ainu shamans (Wada 1999).



Figure 109 Ainu match pocket or medicine case (*piwci*). Salmon skin, glass beads. Nineteenth century. Accession no. 99.5B571. Gift of Frederick Stearns. The Detroit Institute of Arts, Detroit, Michigan, USA

3.13 Ainu Shamanism

Ainu accounts describe animals and plants as beings sent from a higher world to assist humans. These beings live in dwellings and villages like humans and provide peoples materials for daily use, such as fish skin for clothing. They also appear in stories and ritual language, where the ways they are spoken about indicate their place in both everyday life and oral tradition. Among the Ainu, however, natural entities are not regarded in the same way. While many animals and plants are used for food, clothing and tools, only some are referred to as *kamuy*, powerful beings capable of affecting human life. The bear is treated as a god. Salmon, although called *kamuy-cep* (deity fish), are not considered gods but are understood as beings sent and reclaimed by the Master of the Fish. Deer are similarly regarded as the possessions of the Master of the Deer rather than divine beings. Most plants, including herbs, are not classed as *kamuy* unless they are used in ritual contexts (Yamada 1987).

Rivers and water sources are associated with a female deity that nourishes infants from her breast. This Water Goddess, linked with the River Goddess, is thanked for providing drinking water and for allowing the salmon to return upstream. In this way, water is both essential and treated with care (Yamada 1987). The Goddess of Hunting and Fishing ends famine by asking the Master of the Fish and the Master of the Deer to release animals into the

human world. The Ainu do not pray directly to these two Masters, but appeal to *Hasinaw-uk Kamuy* to act as a mediator and bring success in obtaining game and fish (Yamada 2001). Subsistence activities were accompanied by rituals addressing both safety and success. Before setting out, prayers were offered to the *kamuy*, especially to *Fuchi*, the fire goddess (Ölschleger 1999). Hunters carried *inaw-kike*, curled wood shavings used for protection from harmful forces (Munro 1962). Animals were treated with care during and after the hunt to ensure their continued return to the human world. By the early twentieth century, these practices had largely ceased due to legal restrictions and the decline of key species such as the Sika deer following Japanese commercial hunting. Since the 1970s, some have been revived through efforts to sustain Ainu traditions (Ölschleger 1999).

While ceremonial shamanism declined earlier in Hokkaido, Sakhalin Ainu communities continued these practices into the twentieth century (Wada 1999). Sakhalin shamanism followed patterns seen in neighbouring regions. In one story, *Samaikur*³² travels through layered parallel worlds to retrieve a stolen spirit, aided by guardian beings. In a shamanistic rite or *tusu* ceremony, shamans became possessed by spirits who transmitted messages from deities or ancestors. The hearth goddess served as the link between the shaman and these spirits (Ohnuki-Tierney 1973b; Wada 1999). Séances were held in dark interiors and involved drumming, chanting, dancing and sound-making tools such as chains and carved sticks. They were conducted by a shaman in a state of ecstasy, the so-called shamanistic trance. Intoxicating drinks were also used. These practices align with those found in Siberia (Wada 1999).

Shamans were recognised after childhood illness, understood as a sign of selection. Their work included healing, protective rituals and public ceremonies. Piłsudski recorded that most Sakhalin shamans were men, whereas in Hokkaido the role was usually held by women. Wooden figures called *nipopo* (wooden babies), dressed in red or blue cloth and sacred shavings, were made to protect children or address illness (Wada 1999). Although shamanic traditions in Hokkaido were shaped by different conditions, Sakhalin records preserve detailed examples of practices concerned with health, animal relations and the use of materials in daily life.

3.14 Funeral Rituals

Clothing shaped the transition between life and death. As seen earlier, garments connected humans with the beings who sustained them; here, the use of clothing at the end of life demonstrates the continuation of that relationship. Ainu accounts describe death as a change of dwelling rather than an end. The dead continue to exist in a world that mirrors this one. To prevent hardship after burial, clothing and tools are placed with the deceased (Yamada 2001). The corpse is washed and dressed with care and funerary duties follow kinship lines. Women prepare female relatives, while

32 Ainu oral narratives include the motif of ‘wandering in the other world’, in which the hero *Samaikur* travels through a multilayered spirit realm to recover the soul of a goddess abducted by an evil spirit. His journey is undertaken by riding a cradle (*sinta*), comparable to the symbolic flight of Siberian shamans using drums and the story follows a sequence of struggles in which the hero confronts various enemies with the aid of protective spirits. See Wada 1999.

Figure 110 Kakizaki Hakyō.
Portrait of Ishu Retsuzō. Musée
des Beaux-Arts et d'Archéologie,
Besançon, France

卜羅弼

託子萬末扇部丁雙子萬乙面長





men or close paternal kin dress male bodies. Clothing is reversed to mark separation from ordinary life and to assist the soul's departure. Each woman is expected to keep a spare girdle³³ (*kut*) ready for burial, without which her soul cannot approach the ancestral spirits (Munro 1979).

Some households kept clothing made specifically for burial. Women wove attush for this purpose, or prepared fish skin robes. Later, cotton and Chinese fabrics acquired through trade were also set aside. Clean garments were essential for the journey to join ancestral spirits. Clothes worn by a dead person were avoided by the living because of fear and misfortune associated with their former wearer. Bright colours were excluded, a *kaparamip* ('thin clothes'), with white stitching was preferred and two robes were arranged with one turned inside out to remove all trace of the past, a configuration not used in daily life (Munro 1979).

Grave goods were selected according to gender. Men received weapons, fishing gear, clothing, tobacco pipes, knives and hunting utensils [fig. 111]. Tools for tobacco and fire, bowls, trays, pipe and tinder equipment, were placed by the head, while weapons and clothes lay near the feet. Women were buried with weaving tools, clothing, needles and thread, spoons, ladles and adornments. All items were broken before burial to release their *ramat* (soul/spirit), freeing the spirit of the object to accompany the spirit of its owner (Montandon 1937; Yamada 2001). Materials scarce in life, iron, beads and imported clothes, were still cut, bent, or chipped before they left the house (Munro 1979).

The production and destruction of garments at death indicate that everything possesses its own spirit and can serve its person after death. Death results from harm to the body, yet the spirit endures. Clothing is 'killed' by cutting the garment down the back, as the spine is regarded as the seat of life. Shoes, leggings and working clothes are also provided, with burial assemblages evidencing the strength of ancestral obligations. Where an elderly woman had been the primary resident of a home, dwellings were historically burned so that she would not arrive without shelter. By Munro's time, small-scaled models replaced this older practice (1979). Dreams confirmed the continued presence of the dead. Spirits were thought to appear during sleep, showing that life persisted in another place (Montandon 1937).

After funerals, the surviving spouse altered their clothing temporarily as a means of disguise before returning to ordinary dress. Widows wore a weeping cap of black cloth for several months (Munro 1979). These practices show a careful handling of presence and absence through everyday materials. Together these accounts demonstrate that clothing provided companionship into death, protective structure for the deceased and materials through which obligations were fulfilled across worlds. Garments remained active participants until burial, when they were transferred to sustain the person, they had accompanied in life.

33 Ainu women wore a hidden girdle (upsor *kut*) beneath their clothing, marking matrilineal affiliation. It remained in place during intercourse and served to prohibit relations with men whose mothers wore the same type.



Figure 111 Hata no Awagimaru, Ainu with his hunting implements. Ezoshima Kikan. 1799. Japanese Rare Book Collection, Library of Congress, Washington, D.C., USA

3.15 Fish Skin Tradition Today

By the mid-twentieth century, Ainu clothing production shifted away from materials gathered directly from their lands and waters. The use of bark fibre, animal hides and salmon skins gave way to cotton and silk supplied through trade. Hand-processed fibres and bast-derived threads were gradually replaced by imported alternatives. International museum collections reflect this change. After World War II, garments made solely from bast fibres or fish skin became rare (Tsuda 2014b). The replacement of skin garments with cotton garments stitched using imported materials was linked to broader transformations under industrialisation (Dubreuil 1999).

Despite this disruption, clothing retains narratives tied to specific makers, places and practice (Tenri Gallery Exhibition 1983). Shifts in production during the nineteenth century were driven by increased movement within and beyond Ainu territories and by a growing market for Ainu garments among *Wajin* buyers. This encouraged the making and circulation of bast-fibre clothing into the early Meiji years (1869-79). Much of what survives entered museum collections in Japan, Europe and North America during this period (Tsuda 2014b).

The revival of fish skin clothing is more recent. While salmon skin is now introduced in educational workshops, *attush* manufacture continued throughout the twentieth century and provides both income and continuation of bark-fibre knowledge today (Dubreuil 2002). The broader resurgence of Ainu textile practice began in the 1980s and 1990s, led by women including Shizue Ukaji, Eiko Ota, Kayoko Nishida, Sanae Ueda, Nobuko Tsuda and Yasuko Uetake. Through study of historical garments, museum collections, photographs and conversations with elderly Ainu women (*huci*), they restored sewing methods and embroidery patterns, teaching workshops and publishing books to support knowledge transfer. Ukaji developed Ainu folk tales embroidered on cloth (*kofu-e*), while Tsuda's museum-based work has documented sewing, basketry and braid construction (TRC 2017). Contemporary makers frame the recreation of ancestral garments as a process of learning through making, a practice that forms memory in the hands. Producing a garment as it was made historically is viewed as a continuation of values established by earlier artists (Lewallen 2016).

During my recent fieldwork, Reiko Kayano, one of the last elm-bark weavers (Palomino 2025c), described to my team of Arctic Native Elders the collaboration with Nanai artist Anatol Donkan in 1979 to produce a Sakhalin fish skin robe replica for the opening of the National Museum of Ethnology in Osaka. Because the museum held few Ainu objects, the robe was specially commissioned.

Although not Ainu, Shigehiro Takano has devoted much of his life to supporting Ainu culture. After travelling from Tokyo to Hokkaido as a young man, he settled in Nibutani with his wife and began studying traditional practices. Together they mastered more than 200 of the over 400 Ainu crafts documented by Shigeru Kayano. During a workshop held for my Japanese students in 2018, he demonstrated the making of salmon skin boots, while his wife Keiko taught how to prepare laces from fibres of the red berry vine *Tsurume-modoki* (Palomino 2022).

Tsuda has re-established techniques for salmon skin footwear by drawing on a 1988 recording of Kato Katsuyo in Teshikaga. She emphasises digital documentation as vital for sustaining transmission between generations

(Tsuda 2018). Workshops at the Sapporo Salmon Museum now teach salmon skin shoe making using fish processed for roe, linking material handling with Ainu histories of salmon use. The return of salmon skin garments, despite their rarity, marks renewed engagement with ancestral creativity. While Ainu historically possessed few goods valued as luxuries by *Wajin* and Western observers, skilled work sustained quality of life even in challenging circumstances. Elders carried knowledge forward and present artists continue to maintain, revive and innovate within this lineage (Dubreuil 2002). Tsuda has further proposed a method for reading Ainu clothing beyond its surface patterns. Garments are viewed as records of economic conditions, technical choices and individual artistry across Sakhalin, Hokkaido and the Kuril Islands. Every stitch traces relations between the maker and wearer. By analysing textiles in museums and *Ainu-e* from the eighteenth to twentieth centuries, she seeks to restore social histories to works long separated from their communities. Her approach supports reproduction as restitution, providing artists with means to renew practice where original garments remain in museum storage (Lewallen 2014).

This revival prioritises engagement with ancestral technique. Artists argue that forms and processes, including specific materials and stitching paths, must be experienced physically to retain their intent. Somatic learning is seen as necessary before creative variation can take place (Lewallen 2016). For Ainu scholar Chisato Dubreuil, although discrimination disrupted knowledge transfer, she draws on *Ainu-e* and museum holdings to rebuild practice across many fields (Dubreuil 2004). Contemporary makers describe their work as guided by affection for ancestors who created garments under restrictive conditions, with limited tools and by lamplight. Designs once valued as protective continue to convey care. Even where ideas of *ramat* (spirit) may be interpreted differently today, garments are still regarded as holding the thoughts of their makers (Lewallen 2016). Clothing and adornment strengthen community connection, shaped by prayers as well as technical skill (Tsuda 2018).

3.16 Conclusions

Ainu understandings of their environment frame plants, fish, birds and land animals as arriving from *Kamuy-mosir* to *Ainu-mosir* with purpose. These beings provide food, fuel, tools, housing and clothing and their presence is acknowledged through stories and protocols of use. Within Ainu cosmology, deities and humans are alike yet positioned differently: nature deities take human form in their own realm and appear as plants or animals in this one, while people become deities after death. This characterises continuities between human conduct, environmental use and relations with other living beings. Such ideas are consistent with northern hunting societies across Siberia and Alaska indicating shared histories of subsistence and environmental knowledge.

Material change accelerated in the eighteenth century. Cotton imported from China and Japan replaced bark fibre and fish skin as the principal clothing material, allowing new sewing methods and larger appliqué surfaces. Patterns on Ainu garments articulate protective ties to place rather than borrowing from Chinese ornament and Ainu female artists and scholars continue research to support museum interpretation for future generations.

Ainu livelihoods based on salmon fishing were reinterpreted during Japanese expansion in Hokkaidō, Sakhalin and the Kurils as economically 'primitive'. Yet environmental scholarship now recognises the sustainability of non-agricultural subsistence practices. Museum collections and oral histories show that textile techniques evolved through integration of new resources without severing inherited skills. While cotton changed garment surfaces, the knowledge required for clothing production remained grounded in relationships with land and water.

Textile making has long been gendered labour through which care is shown to family members. Contemporary makers approach garment production as a continuation of ancestral work grounded in inherited knowledge. Protective motifs, construction choices and repair practices transmit knowledge across generations. Fish skin clothing holds traces of the environments and hands that shaped it. These garments show how salmon were used beyond food and how skins taken from seasonal catches became weather-resistant dress. Wear patterns, patching and reuse record the lifespans of both garment and wearer. Lightweight seams, watertight structure and conservation of scraps reflect a material economy attentive to environmental limits. This circular system, where skins, bark fibre and imported cloth were repaired, repurposed and passed on, presents a historical example of regenerative design. Fish skin required labour and care and garments were valued through long use and inheritance. Such approaches contrast with extractive industrial production and point toward practices that keep materials in use across multiple cycles.