Whaling, Science, and Trans-Maritime Networks, 1910–1914

Lars Schladitz, Universität Erfurt

The archive of the Smithsonian National Museum of Natural History in Washington, D.C. preserves a photograph of the museum's mammal exhibition hall in 1915 (figure 1). It depicts a row of upright glass showcases containing skeletons of various mammal species; the showcases are arranged in a line and are classified according to their biological relationships. The skeleton of a gray whale (its scientific name at the time was *Rhachianectes glaucus*) is mounted in an extra case on the wall above this careful arrangement and dwarfs all the other exhibits. The artifact is carefully suspended from the roof supported with plaster, in order to give the impression of a whale drifting through water. The visual dominance of the whale skeleton in the museum display also underscores the artifact's special value as one of only two complete gray whale skeletons on display anywhere in the world at a time when they were already believed to be extinct.



Fig. 1: Eschrichtius robustus skeleton, mounted on display at the National Museum of Natural History in Washington, D.C. in 1915. National Museum of Natural History, Division of Mammals. MMP USNM 199527.



The skeleton had been obtained in early 1912 by Roy Chapman Andrews (1884–1960), assistant curator in the department of mammals at the American Museum of Natural History in New York City (AMNH), while visiting the Japanese Tōyō Hogei (Oriental Whaling) company's whaling station in Ulsan in colonial Korea (Chōsen). Working together with the newly successful and expanding whaling business, Andrews had arranged the shipment of two of these precious skeletons, one for each of the two premier American natural history museums. Andrews visited Japanese whaling stations on two separate expeditions between 1910 and 1912, when he collected and produced a large number of specimens, photographs, and scientific data, and initiated an exchange that reached truly Pacific dimensions and went far beyond his original scientific agenda to collect cetaceans. The collection of the two museum exhibits brought together an American scientific mission to the Philippine Sea seeking whales, whalers, and colonizers from Japan on new hunting grounds, Koreans looking for employment and food at the docks, technology and seasoned personnel from Norway, and last but not least, the gray whales on their annual journey between the Bering Sea's winter quarters and the Korean nursing grounds. All those translocal actors and movements eventually connected at the coast of the Korean peninsula.²

Following the question, under which circumstances knowledge of whales was produced, I will use the pictured gray whale artifact as a starting point from which to explore the global network underpinning the scientific practice of collection and analysis in the whaling grounds of the Sea of Japan and in the United States. This was a period when historical processes like the emergence of a new cetacean science, the establishment of a "modern" Japanese whaling

^{1 1910} had been a successful business year for the Tōyō Hogei. During the summer season, it had processed 324 large whales; a significant increase over the previous year's 255 whales, while the winter season until March had yielded 444 whales. Simultaneously, prices for whale oil and meat had gone up by 30-40% with one whale netting between 2,200 and 4,000 Yen on average. The company declared an annual net win of 840,000 Yen. "Whaling Lucrative Business" in Dainippon suisan kaihō 343 (1911): 2; On a global level, Norwegian whaling (and their technology which the Japanese had chosen to adapt) had largely replaced the American system which had dominated the industry until the 1860s. Bjørn L. Basberg, "Hegemonic Transition: American and Norwegian Whaling in the Nineteenth and Twentieth Centuries" International Journal of Maritime History 20, no. 2 (2008): 208–214; For the history of modern Japanese whaling, see Johan N. Tønnessen and Arne O. Johnsen, The History of Modern Whaling (Berkeley: University of California Press, 1982), 135-146; Arne Kalland and Brian Moeran, Endangered Culture: Japanese Whaling in Cultural Perspective (Copenhagen: Nordic Institute of Asian Studies, 1990), 75-81; Fukumoto Kazuo, Nihon hogei shiwa: Geiso manyufakuchua no shiteki kōsatsu o chūshin ni (Tokyo: Hōsei Daigaku Shuppankyoku: 1978), 220-246; Morita Katsuaki, Kujira to hogei no bunkashi (Nagoya: Nagoya Daigaku Shuppankai: 1994), 329–336; Takahashi Junichi, Kujira no Nihon bunkashi. Hogei bunka no kōsaki o tadoru (Kyoto: Tankōsha, 1992), 78-87; Torisu Kyōichi, Saikai hogei no shiteki kenkyū (Fukuoka: Kyūshū Daigaku Shuppankai, 1999), 333-349.

² See Matt K. Matsuda, *Pacific Worlds: A History of Seas, Peoples, and Cultures* (Cambridge: Cambridge University Press, 2012), 5–6.

industry using appropriated Norwegian technology, and the implementation of a colonial system in Korea occurred concurrently.

I will demonstrate that the global entanglement of Japanese whaling was not a one-sided transfer of technology from Europe to Asia, but rather a multidirectional flow of knowledge and artifacts. Previous research on this early period of Japanese whaling has focused on the introduction of Norwegian whaling technology through the movement of whaling experts and equipment, largely omitting the flows originating from Japanese whaling, which were relatively limited up to the 1930s.³ An analysis of Andrews' research expeditions to the stations of the Tōyō Hogei company will significantly broaden this perspective. It reveals that despite the limited range of the Japanese whaling operations at the time, they nonetheless proved crucial to Western scientific research on whales by providing equipment, expertise, and specimens. Japanese whalers, on the other hand, were eager to place themselves in a global framework of whaling and gain scientific information about whale stocks and movements.

The Japanese and Korean waters where the whalers and Andrews worked together became a seascape in which both scientific knowledge and artifacts were produced alongside the global commodities of whale meat and oil. This entanglement of scientific and commercial practice was locally embedded into the Japanese colonial practice and into the currents and animal migrations of the northern Pacific Ocean and the Japanese Sea.

Histories of maritime research are commonly written with a focus on the researchers and their organizations.⁴ While prey animals, ships, and machinery, as well as many colonial subalterns, usually have little or no voice in historical writing, it is impossible to deny that they had a major impact on the way the networked commercial whale hunting and whale science were practiced and on the results they produced.⁵ The agency of the human actors was always determined and limited by non-human forces within a complex

³ Hiroyuki Watanabe, *Japan's Whaling: The Politics of Culture in Historical Perspective* (Melbourne: Trans Pacific Press, 2009), 10–42; Eldrid Mageli, "Norwegian-Japanese Whaling Relations in the early 20th Century. A Case of Successful Technology Transfer" *Scandinavian Journal of History* 31, no. 1 (2006): 1–16.

⁴ Helen M. Rozwadowski, *The Sea Knows No Boundaries: A Century of Maritime Science Under ICES* (Copenhagen: International Council for the Exploration of the Sea, 2002), 42–76; Rozwadowski acknowledges the boundaries posed by the natural environment and technology in Helen M. Rozwadowski, *Fathoming the Ocean: The Discovery and Exploration of the Deep Sea* (Cambridge: Harvard University Press, 2008), 5, 45–46.

⁵ See D. Graham Burnett, *The Sounding of the Whale: Science & Cetaceans in the Twentieth Century* (Chicago: The University of Chicago Press, 2012), 63–78, 138–189. Burnett offers some insights into the workings and tools used by the Discovery Committee.

network.⁶ In executing his scientific work, Andrews was equally as influenced by his own network of whaling specialists in Japan and Korea, as he was by his scientific tools, the whaler's equipment, and the unpredictable behavior of the whales. This culture–nature approach makes it possible to include technology (such as harpoon guns or cameras) in the study, as well as to put "the ocean into history," even though the relationship between human actors in the capitalist colonial setting or between the whales and their hunters was never a "symmetrical" one.⁸

The question about the processes underneath the water surface, how the activity of Andrews and the whalers influenced the whales and their ecosystem, and in what way the submarine movements influenced the humans on the ships and shores has recently surfaced with increasing frequency. Efforts to expand these studies' scope to what lies beneath the surface of the ocean, to include human actors' impact on and interdependencies within the northern Pacific ecosystem, inevitably have to include the results of the very research a study on whale science is seeking to deconstruct, and still will not answer all the questions about the Pacific connections and relationships that might arise, yet provide a fruitful new perspective and make is possible to historicize the Pacific Ocean. Pocused here on the one whale species whose skeleton ended up on the museum wall, this perspective demonstrates that the circumstances around its collection had a far greater geographical reach and deeper impact than what is visible on the surface.

⁶ See Timothy Mitchell, *The Rule of Experts: Egypt, Techno-politics, Modernity* (Berkeley: University of California Press, 2002), 10–11; Bruno Latour, *Pandora's Hope: Essays on the Reality of Science Studies* (Cambridge: Harvard University Press, 1999), 145–215; Bruno Latour, "On recalling ANT" in *Actor Network Theory and After*, ed. John Law and John Hassard (Oxford: Blackwell Publishers, 1999), 15–24.

⁷ See Jeffrey W. Bolster, "Putting the Ocean in Atlantic History: Maritime Communities and Marine Ecology in the Northwest Atlantic, 1500–1800," *American Historical Review* 113, no. 1 (2008): 19–47

⁸ See Samuel J. M. M. Alberti, "Objects and the Museum," Isis 96, no. 4 (2005): 561.

⁹ Ryan Tucker Jones, "Running into Whales: The History of the North Pacific from below the Waves," *The American Historical Review* 118, no. 2 (2013): 350–352; cf. Kären Wigen, "AHR Forum. Oceans of History: Introduction," *The American Historical Review* 111, no. 3 (2006): 721.

¹⁰ Human-ecosystem interaction on the Pacific Ocean was not something new to the 20th century. Rather, these entanglements have shaped the Pacific's history since the appearance of mankind. See David Igler, *The Great Ocean: Pacific Worlds from Captain Cook to the Gold Rush* (Oxford: Oxford University Press, 2013), 5–11, 99–128; Jones, "Running into Whales," 352–377; Matsuda, *Pacific Worlds*, 6.

¹¹ For biological studies on the impact of whaling on ocean ecosystems, see Timothy E. Essington, "Pelagic Ecosystem Response to a Century of Commercial Fishing and Whaling," in *Whales, Whaling, and Ocean Ecosystems*, ed. James A. Estes et al. (Berkeley: University of California Press, 2006), 38–48; Boris Worm, Heike K. Lotze and Ronsom A. Myers, "Ecosystem Effects of Fishing and Whaling in the North Pacific and Atlantic Oceans" in ibid., 335–342.

The written historical traces center around Andrews and his fellow scientists and contacts at the whaling stations as historical actors. Andrews and other museum staff exchanged numerous letters with various Japanese and Norwegians employed at the whaling stations. These included well-known individuals from the story of Japanese whaling like the main individual behind its inception, Oka Jūrō (then president of the company), and the Norwegian gunner, Hendrik G. Melsom. Lesser-known people included employees of the whaling company like the managers Matsuzaki and Ogiwara, with whom Andrews organized the transport of specimens. However, reading against the grain indicates that a great deal of Andrews and the human network's agency was determined by their complex relationships with objects, "nature", and with "silent" colonial subjects.

First, I will present this relationship between objects and humans by outlining the network that existed between Andrews and his scientific tools. Second, I will trace the entanglement of his research with the various persons engaged in whaling activity in Japanese whaling grounds, which formed a trans-Pacific circle representing a number of different interests. In what follows, I will show how Japanese waters became the grounds where the gray whale could be preserved for the Western public through research and the collection of specimens, and how this endeavor interacted with the maritime environment. And lastly, I will demonstrate the complexity of the relationships in the network at the colonial whaling station in Korea by examining the field between the scientific whale collector and the "silent" colonial subaltern.

Whaling and the tools of a scientist

After his return from the month–long visit to the Ulsan whaling station and a subsequent expedition to the Korean inland to collect further mammals and birds in September 1912, Andrews wrote a letter to his colleague and fellow specialist on mammals, Joel A. Allen. In it he outlined his discoveries:

During my stay about thirty-five specimens were killed and I secured measurements and notes of all of them and photographs of many. These photographs show every part of the animal in detail and are, I believe, the only ones extant. Three rolls of motion picture films showing the operations at the stations were also taken.

One fine skeleton of the California Gray Whale was secured for this Museum and, as had been arranged, one for the Smithsonian Institution. A considerable quantity of alcoholic material consisting of parasites and sections through the internal organs for histological study was preserved.¹²

¹² Letter from Roy Chapman Andrews to Joel Asaph Allen, 5 September 1912, Box 222, File 968, 1912–1916, American Museum of Natural History, Central Archives.

As this short passage indicates, Andrews' work as a scientist not only relied on his previous knowledge of cetaceans, but also on a number of objects without which he could not work and whose limitations greatly determined the results of his research. The baggage Andrews brought with him to Japan contained tools that had evolved as the new standard accoutrements of scientific inquiry during the nineteenth century: A field journal in which to write measurements and notes about particularities of the examined animals, create a statistical basis for his research, and write down the information he could gain from the whalers' experience; containers to conserve and transport various animal artifacts, and a relatively recent tool for scientific exploration—a 4x5" Revolving Back Graflex camera. The instrument was transportable enough to be used for fieldwork on a cramped catcher boat and the shutter and speed of the photographic plates were sufficient to capture relatively rapid movements including the sounding of a whale or even a harpoon in mid-flight.

Andrews' later account of his research to Allen reveals the use of different tools that formed a vital part of his practice as a scientist. First, his scientific processing of whales consisted of a complete record of all the animals that were killed. Andrews numbered all the whales and made notes in his field journal. While he did note that measurements of body lengths might not be precise because he could not take them while the whale was still in the water intact, he relied on the accuracy of descriptions and measurements to produce valid scientific results about cetaceans. The great advantage of working at a modern shore whaling station, as Andrews described, was the ability to take measurements after the whole whale had been landed; however, this did not necessarily apply to the Korean whaling station, where the whale was partially dismembered before the crane removed it from the water. Beginning with the "No. 1" gray whale (a female which included a fetus itemized as "1a") caught on 8 January 1912, Andrews described in detail the appearance of every whale including color, form, body size, and individual parts, as well as the baleen, and later processed this information for his scientific publications.¹³

Andrews' main task for the museum was the collection of specimens as objects for study and exhibition. Since the museum was financed largely by donations, spectacular displays that appealed to a wider public were of great importance. Materials had to be preservable and only smaller specimens of complete animals or organ samples could be transported in containers with alcoholic liquid. Otherwise, the off–site study of whales was limited to the skeletons, which also constituted—cleaned and assembled in lifelike postures—the core of animal representation in the museum's exhibition halls, and was sometimes combined with painted backgrounds to give an impression

¹³ Roy Chapman Andrews, Whale notes, measurements, Korea, Jan.—Feb. 1912, in *Journals*, 1908–1912, vol. 4, AMNH Central Library, Rare Book Collection. A54; 3.

of the animal's natural habitat.¹⁴ Most of the whales whose skeletons were preserved seem to have been male specimens and were generally chosen for preservation because of their extraordinary size.¹⁵ Apart from the two gray whale skeletons, Andrews also had a skeleton of a humpback whale and an orca that had been shipped to the United States from Korea. These were added to the AMNH's collection, which already included sperm whale, sei whale, and "sulphur–bottom" (blue whale) skeletons that he had gathered during his earlier expedition to stations on the Japanese islands in 1910.

Besides shipping a large number of crates containing bones, teeth, skins, and other animal parts, the large number of photographs Andrews brought home formed another substantial part of his scientific production of knowledge. Andrews' indication that he took photos of most of the caught whales reveals that, along with a complete account of statistical data, pictures played an important role in providing scientific evidence. The fact that photographs of Pacific whales were a novelty further increased their value. In his popular book, *Whale Hunting with Gun and Camera*, first published in 1916, Andrews wrote about the process of developing the exposed negatives into visible photographic images and their importance:

For me, developing the photographic negatives after a trip at sea is almost as fascinating as taking them, and no secret treasure chest was ever opened with greater interest than is the developing box. [...] I shall never forget the breathless interest with which I developed the negative exposed when the humpback whale came up beneath the ship [...]. I had had no time to focus the camera, and really expected a blurred picture, but still there was just a chance that it might be good. The image appearing on the plate slowly assumed form and I saw that it was a picture of a great body partly hidden beneath the ship. No one but a naturalist can ever know what it meant to get that photograph and how impatiently I waited until it could be taken from the hypo bath and examined. 16

The images were taken to document the actual process of whale hunting. He described the procedure of turning the photographic plates into visible images as something that allowed him to almost relive the actual hunt. While

¹⁴ Oliver Cummings Farrington, "The Rise of Natural History Museums," *Science, New Series* 42, no. 1076 (1915): 206–207.

¹⁵ See Gary Kroll, America's Ocean Wilderness: A Cultural History of Twentieth-Century Exploration (Lawrence: University Press of Kansas, 2009), 25–26.

¹⁶ Roy Chapman Andrews, Whale Hunting with Gun and Camera: A Naturalist's Account of the Modern Shore—Whaling Industry, of Whales and their Habits, and of Hunting Experiences in Various Parts of the World (New York: D. Appleton—Century Company, 1935), 54.

Andrews wrote about the emotional impact that the production of the images had on him, he also claimed that his status as an expert "naturalist" gave him a special connection to the images taken. It was his position as a scientific specialist that enabled him to capture pictures of the whale hunt that no one else could. Despite having been taken spontaneously and under rather uncontrolled circumstances, the pictures are described as authentic documents of the whale, which capture a moment that might have otherwise been lost. Andrews described the spontaneous snapshot and excitement during the processing of the pictures to a broad audience in a report, but in a letter to his colleague Allen he spoke of the same incident in more modified terms; the language and the content of his writing clearly differed depending on the context. Although taking photographs for scientific purposes had to be done objectively, without emotions, and under controlled circumstances, describing the same process to a large audience allowed for the notion of adventurous exploration and emotional involvement. While Andrews presented himself as an adventurous explorer in front of a general audience, his scientific works predominantly employed the passive voice. Methods and tools took the role of the protagonist here. There is little doubt that Andrews was picturing and describing his work according to the norms and expectations of his different audiences. This language difference becomes more obvious when comparing his scientific texts with personal letters and more popular texts where, in the latter, he would describe whales anthropomorphically or describe the people at the whaling station instead of focusing on his object of research.

The pictures taken by Andrews were not just incorporated into the museum's scientific archive and used as objective proof of whale behavior and appearance, they also reached a greater public through his various publications and the numerous public lectures he gave across the United States, the main attraction of which was the display of exotic landscapes and animals through colored lantern slides. Andrews' office at the museum's department of mammalogy also received a number of requests from private persons for prints of whale pictures. His use of photographic equipment not only served the purpose of proving scientific facts and of showing the "true" appearance of whales, but it also provided a source of astonishment and entertainment for a wider audience that was increasingly interested in exotic animals and in "Oriental" places.

By the turn of the century, "Western" science had already described Japanese whaling and the species of whales caught by examining Japanese whaling accounts; however, Western naturalists had done little to meet the high scientific standards of knowledge production represented in the tools and standardized processing employed by Andrews. In his 1894 article Karl August Möbius, the German zoology professor and director of the

Museum für Naturkunde in Berlin, praised the Japanese ability to formulate "true–to–nature" (Naturwahrheit) descriptions of animals' properties and acknowledged that the drawings in Japanese accounts must have been made while studying the freshly killed animals. He also suggested that although these drawings reflected the particularities of the different whale species well, they were not sufficient to describe and classify the animals scientifically.17 After contacting a colleague from London for advice, Möbius concluded that the description of the "Kokukujira" matched the existing scientific description of the gray whale in the Northern Pacific years before Andrews' "rediscovery" of the lost species.18 Whether or not Andrews was aware of Möbius' description, he was nevertheless (arguably) the first "Western" naturalist to study Japanese whaling first hand.

Because of the massive and economically important global hunt for whales, they were present in public discourse and had already been assigned a place in biological taxonomy. However, a broad scientific research agenda was not established until the end of the nineteenth century. 19 In his accounts, Andrews stressed that his descriptions of whales were a scientific novelty. He used his observations at the whaling stations and the expertise of the whalers to write and publish a number of scientific articles on whales and porpoises, most notably on the gray whale and the sei whale (Balaenoptera borealis). Andrews wanted to improve upon an older systematic description of gray whales that had been published by the whaling captain Charles M. Scammon in 1874. Like Andrews, Scammon had used insight gained by participating in whale hunting in the Pacific Northwest of the United States to write an objective and scientific account. Unlike Andrews, however, Scammon was not a professional naturalist. While he used similar techniques, including measurements, descriptions, and various lithographs that were meant to objectively describe the species, Andrews' scientific work was dependent on newer tools like the photographic camera and was meant to be more objective and to reform cetacean science.20 Still, his approach relied exclusively on scientific tools and on finding the right spot to observe whales, as well as on a level of cooperation with various human actors who would assist in the collection of specimens and provide knowledge based on years of experience. Together with those humans would also come a number

¹⁷ Karl Möbius, "Über den Fang und die Verwerthung der Walfische in Japan," *Mitteilungen der Sektion für Küsten- und Hochsee-Fischerei* 7 (1894): 18.

¹⁸ Ibid., 20.

¹⁹ See Burnett, The Sounding of the Whale, 2-4.

²⁰ Charles M. Scammon, *The Marine Mammals of the North-Western Coast of North America: Described and Illustrated Together with an Account of the American Whale–Fishery* (San Francisco: Carmany, 1874), 23–33.

of tools—ships, harpoons, and blubber knives—which were much less made for scientific work than Andrews' equipment, yet they too were indispensable in his whale research.

Establishing a network of whalers and scientists

Andrews cultivated a public persona that he shared with many earlier and contemporary naturalists. He was a good marksman and a passionate hunter; he was a representative example of American white middle-class manliness, a type perhaps best represented by former president Theodore Roosevelt.²¹ But Andrews was also a trained specialist in taxidermy and mammalogy and he worked for the museum on a professional basis. This reflects a larger development within natural history museums, where, by the 1890s, the staff was made up entirely of trained personnel with a university education.²² Because of his position in the department of mammals and the museum's plan to build up a marine mammals collection, Andrews planned to join an ongoing expedition aboard the U.S. Navy operated research vessel USS Albatross.²³ The ship's task was to gather information about maritime resources around the Philippines and other Southeast Asian islands. As a result, Andrews first came to Japan in 1909. He stopped in Yokohama while en route to Manila, and later took a shore leave in Nagasaki.²⁴ The *Albatross*' expedition was part of the American government's larger research agenda following the colonization of the Philippines after the Spanish-American War (1898) and the subsequent Philippine-American War (1899–1902).²⁵ With regard to Andrews' mission to collect whale specimens, the cruise on the *Albatross* proved to be less than satisfactory. In his report to the American museum's director, Hermon Carey Bumpus, he expressed his disappointment at the lack of opportunities for observing whales, let alone collecting them for the museum:

²¹ See Robert E. Kohler, *All Creatures: Naturalists, Collectors, and Biodiversity, 1850–1950* (Princeton, Oxford: Princeton University Press, 2006), 70–71; Gail Bederman, *Manliness & Civilization: A Cultural History of Gender and Race in the United States, 1880-1917* (Chicago: The University of Chicago Press, 1995), 170–216.

²² Kohler, All Creatures, 205-215.

²³ Dean C. Allard, "The Origins and Early History of the Steamer Albatross, 1880-1887," *Marine Fisheries Review* 61, no. 4 (1999): 1-20; Victor G. Springer, "Kumataro Ito, Japanese Artist on Board the U.S. Bureau of Fisheries Steamer Albatross during the Philippine Expedition, 1907-1910," *Marine Fisheries Review* 61, no. 4 (1999): 42.

²⁴ Roy Chapman Andrews, *Under a Lucky Star: A Lifetime of Adventure* (Garden City, Blue Ribbon Books, 1945), 79.

²⁵ Theodore Roosevelt, "Scientific Surveys of the Philippine Islands," *Science* 21, no. 542 (1905): 761–762; cf. David G. Smith and Jeffrey T. Williams, "The Great Albatross Philippine Expedition and Its Fishes," *Marine Fisheries Review* 61, no. 4 (1999): 32-38.

First I tried a heavy ball in a shot gun and succeeded in getting one big fellow so badly wounded that I got the iron in him, but the toggle broke & he got away. The next two times I tried the whale gun and both times killed a big dolphin, but the bomb killed each of them so quickly that they sank before the whale boat could be turned about to give me a chance with the iron. [...] The other two times we lowered for cetaceans, the shots were difficult and I missed. So the sum of that part is nothing. Every man on the ship said that they had never been on a cruise when cetaceans were so scarce.²⁶

Andrews' disappointment with the Albatross cruise revealed that, in order to achieve his scientific goals, he would not only have to travel to a location where cetaceans were common enough to ensure success within a reasonable time, but also that he would have to acquire enough expertise to kill and secure smaller dolphins and porpoises as well as the large whales that were in high demand for museum collections. Clearly, neither his own expertise nor the equipment he would have at hand during regular expedition work would be sufficient to safely collect the animals, let alone observe their behavior for extended periods of time. Unlike the other large marvels of natural history exhibitions—including dinosaur bones and large mammals such as the rhinoceros—whales were of continued worldwide economic importance, and this, to a large part, drove the scientific interest in them. Furthermore, unlike digging up dinosaur bones (which would win larger fame for Andrews in the following decades) or shooting large mammals in a safari-like setting, killing whales and collecting their remains required specialized tools that only the whaling industry could provide.²⁷

Landing at Nagasaki harbor during the return journey of the *Albatross* in February 1910, Andrews used local networks to gain information about the regional whaling operations. He was able to contact the Tōyō Hogei company, which had just been formed by uniting a number of whaling companies and now held a de-facto monopoly on whaling in Japanese and colonial waters.²⁸ Andrews managed to contact the company's president and received permission to spend time at the company's whaling stations, to join the whaler's daily work on the catcher boats, and to secure whale specimens for his museum in New York. Having already spent time with

²⁶ Letter from Roy Chapman Andrews to Hermon Carey Bumpus, Box 159, File 564b, 1910–1913, AMNH Central Archives.

²⁷ See Burnett, The Sounding of the Whale, 29–30; Rozwadowski, Fathoming the Ocean, 45–48.

²⁸ After its foundation in 1909 by uniting twelve Japanese whaling companies, Tōyō Hogei k.k. controlled eighteen whaling stations in both Korea and Japan, along with twenty-eight whaling boats. *Honpō no noruee shiki hogeishi* (Osaka: Tōyō Hogei kabushiki kaisha, 1910), 10–22.

whalers on Vancouver Island in the spring of 1908, working with whalers to gain scientific data was not a new activity to Andrews. But because of some conflict with the American whalers, the earlier expedition had failed to produce any specimens for the museum. The director of the AMNH gave him the permission for a leave of absence and a budget of \$1,000 to spend on artifacts and shipment.²⁹ Once in Japan, Andrews travelled to the company's headquarters in Shimonoseki and from there proceeded to the whaling station at Ōshima (Wakayama Prefecture) at the Seto Inland Sea, where he spent his first successful month. In March 1910, after already making observations and securing a number of skeletons that were put immediately into transport crates and shipped to New York, he went to the whaling port at Aikawa in the Rikuzen province (today Miyagi Prefecture) on the Pacific coast, to make further observations and collect another whale skeleton.

Unlike other branches of natural history collection and survey work, whale research was absolutely interdependent with commercial practice. In contrast to the countless amateur and professional naturalists who supplied museums with collected plants, insects, and hunted animals, the complexity of Andrews' work was much greater. Seen in this light, the willingness of the Japanese to help his endeavor proved very valuable. The whaling company allowed Andrews to commit to his scientific work and actively supported him in both the administrative procedures for traveling and in the acquisition of whales, which in most cases were given to the museum free of charge. This proved to be a lucky arrangement for the museum since rare whale specimens were not only very hard to come by, but also expensive. By securing a North Atlantic right to whale on the Long Island coast in 1908, Andrews' first contact with whales had taken \$3,200 from the department's allowance for a cetacean exhibition.³⁰ In 1913, a whaling captain from the declining American whale fleet operating from Vineyard Haven in Massachusetts offered to sell the museum a bowhead whale for \$10,000—the museum offered \$2,500 instead.31 By contrast, the museum paid the small sum of ¥300 (or \$150) for the shipment of a giant beaked whale whose catch was arranged on Matsuzaki's initiative and bought from another Japanese whaling company for shipment to New York.³² Andrews had seen a skeleton of the species in the Imperial Museum in Tokyo and

²⁹ Letter from H.C. Bumpus to Roy Chapman Andrews, 4 April 1910, Box 159, Folder 564b, 1910–1913, AMNH Central Archives.

³⁰ See Kroll, America's Ocean Wilderness, 12.

³¹ Letter from Roy Chapman Andrews to H.H. Bodfish, 1 March 1913, Andrews Folder VII-1, AMNH Department of Mammals.

³² Letter from Matsuzaki M. to Roy Chapman Andrews, 30 June 1911, Box 142, Folder 503, January-May 1912, AMNH Central Archives.

had discovered that these whales were being caught in the Tokyo Bay area. Andrews asked Matsuzaki to acquire a skeleton during the summer hunting season, and it arrived in New York in 1911.³³

The procurement of the invaluable gray whale skeleton pictured hanging on the wall at the Smithsonian required as little as \$100 for the shipment.³⁴ Altogether, Andrews arranged the shipment of a total of six large whale skeletons from all the major species caught in Japanese waters. The museum had already made plans for a new cetacean exhibition annex (about which Andrews wrote to Ogiwara) that was based on a similar exhibition in the British Museum, London. Due to various delays and financial concerns, it was not opened until 1924. Almost all the major specimens exhibited in the annex originated from Andrews' contact with the Tōyō Hogei company.³⁵

The primary contacts Andrews made while on expedition in Japan and Korea included the Norwegian gunners, with whom he seems to have spent most of his time at the station, and the Japanese staff of both the headquarters of the Tōyō Hogei company and the local whaling stations. Some of the Norwegians, who were hired by the Japanese for their experience in tracking the whales and shooting them with the harpoon gun, were already highly seasoned whalers in Japanese and Korean waters. In fact, many of the Norwegians were already in Korea before the Japanese had arrived and had vast experience in the area and whaling operations.³⁶ Hendrik G. Melsom, who would later become a successful businessman with the establishment of pelagic whaling operations, had already worked for a Russian whaling company in East Asia.³⁷ After the Russo-Japanese War (1904-1905), when the Japanese whalers took over the business, Melsom stayed on with the Japanese companies, who hired him for his experience. In his scientific publication on the gray whale Andrews expressly acknowledged Melsom's help. Andrews had carefully written of Melsom's experience in his journal and later drew on it to describe the behavior of the whales.³⁸ It can thus be safely assumed that most of the second-hand information Andrews used for his research originated from the experience of

³³ Roy Chapman Andrews, "Beradius Bairdii in Japan," Science 36, no. 939 (1912): 902-903.

³⁴ Letter from Roy Chapman Andrews to George H. Sherwood, 6 October 1911, Andrews Folder III-I, 1908–15, AMNH DM.

³⁵ Letter from Hermon C. Bumpus to George S. Bowdoin, 4 October 1910, Box 159, Folder 564b, 1910–1913, AMNH Central Archives. Also published in *Forty-Third Annual Report of the Trustees of the American Museum of Natural History* (New York, 1912), 22.

³⁶ Mageli, "Norwegian-Japanese Whaling Relations in the Early 20th Century," 4–8.

³⁷ Tønnessen, Johnsen, The History of Modern Whaling, 132–133.

³⁸ Roy Chapman Andrews, *The California Gray Whale (Rhachinectes Glaucus Cope): Its History, Habits, External Anatomy, Osteology and Relationship* (American Museum of Natural History, 1914), 231.

the Norwegian employees rather than the Japanese staff. Andrews and Melsom exchanged letters after they both left Korea and Andrews even visited Melsom in Norway. They continued to exchange letters about personal and whaling matters well into 1914, when Andrews (ultimately unsuccessfully) attempted to arrange an expedition to South Atlantic whaling stations.³⁹

Spending time at the whaling company's network of whaling outposts, whose number had grown significantly during the early years of the twentieth century, Andrews observed and actively participated in the hunting of whales. After some time observing the whaler's technique, he was allowed to shoot the harpoon gun—an unforgettable moment that he later recalled on numerous occasions.⁴⁰ The use of the camera as his metaphorical hunting tool during expeditions to Japan and Korea combined a notion of male hunting with the ideal of natural conservation for posterity.⁴¹

Having already secured a number of artifacts for shipment to New York, among them a large sperm whale skeleton and a blue whale, Andrews returned to the United States via Europe, where he visited various natural history museums. After his return, Andrews continued to exchange letters with his contacts at the Tōyō Hogei. He sent several copies of his scientific results as well as a number of prints from the photographs he had taken to the whalers in Japan in thanks for their assistance at the whaling stations. Ogiwara from the whaling company wrote the following in English to Andrews:

From the beginning to the last our meaning were to assist you all what we can for the sake of Science, and did never expect anything in return except your books relating the whale on these water, when published as result of your study from the scientifical point of view. [sic]⁴²

Representatives of the whaling company like the president Oka Jūrō and Ogiwara not only supported Andrews' whale research actively but also expressed a great interest in his results, which might possibly have increased the profitability of their whaling operations. Evidently, not all of the Japanese whalers had a good command of English, but they showed great interest in obtaining foreign-language scientific results. Andrews, on the other hand, seems to have ignored

³⁹ Letter from Roy Chapman Andrews to Hendrik G. Melsom, 17 June, 1914, Andrews Folder III-I, 1908–15, AMNH DM.

⁴⁰ Roy Chapman Andrews, *The Ends of Earth* (New York: G.P. Putnam's Sons, 1929), 46–47; cf. Kroll, *America's Ocean Wilderness*, 9.

⁴¹ See Kroll, America's Ocean Wilderness, 9-11.

⁴² Letter from Ogiwara D. to Roy Chapman Andrews, 23 January, 1911, Folder Toyo Hogei, 1910–1917, AMNH, DM.

Japanese literature on whales and whaling. This omission surely was in part due to his very limited skills in Japanese; however, it also hints at the implicit cultural hierarchies which surrounded his whale research. In fact, in 1910 the Tōyō Hogei company published an extensive account of the history and status of the Japanese whaling industry in which observations were made about the various whale species caught and of their use in the industry. Since 1899 when, after Oka's trip to whaling stations in Norway and the subsequent transport of equipment, ships, and manpower to Japan, the company's earliest precursor was founded, the whalers had long been entangled in a transnational flow that also included scientific information about whales. In general, "Western" scientific results and taxonomies had long influenced Japanese writing about whales and whaling.

Being supplied with new research on the very whales the company would catch at their stations was of great interest to the Japanese. The expansion of the whaling stations had increased the need for trained personnel to man the whaling ships who not only knew how to handle the harpoon cannon, but could also interpret the chased whale's behavior and find the best areas and time to encounter the prey. So far the ship's most qualified (and best paid) position was manned by hired Norwegian gunners. A training program for Japanese gunners had been set up by the Imperial Fisheries Institute in 1908, but when Andrews visited the Korean station in 1912, the harpoon cannons were still exclusively in the hands of seasoned (and expensive) Norwegian gunners. Andrews' contributions could provide valuable information to the whaling company and help make the still largely unexplored happenings beneath the ocean surface more visible to the whalers. Ultimately, the acknowledgement Andrews gave the company for their help would also put it on the world map of whaling.

The Japanese whaler's interest in scientific results indicates that the flow of scientific data and artifacts was not one—sided, but became a mutual exchange of products. While the whaling company allowed Andrews to use their facilities in order to secure whale bones for shipment to New York, the established network proved useful to both sides. In return for the whales killed by the whalers at the Japanese and Korean shore stations, the staff of the Museum of Natural History shipped a number of smaller whale models to Japan. The first batch was sent to Japan after Andrews' first expedition and consisted of humpback, right, and

⁴³ Honpō no noruee shiki hogeishi, 67–104.

⁴⁴ Hogeishi (Tokyo: Dainihon suisankai, 1896), 149–164.

^{45 &}quot;Training Whaling Gunners," *Dainippon suisan kaishō* 311 (1908): 3. The article claims that a Norwegian gunner would earn around 1,000 Yen per season. Despite efforts to increase the number of Japanese gunners, Norwegians remained in employment in Japan well into the 1930s. See Eldrid Ingebjørg Mageli, *Towards Friendship: The Relationship Between Norway and Japan, 1905–2005* (Oslo: Oslo Academic Press, 2006), 111–118.

sperm whale models. Andrews suggested that the company install these models and stressed their scientific value. ⁴⁶ Oka Jūrō wrote a letter of thanks to the president of the Museum of Natural History:

We cannot but feel grateful for the engrossed Resolution adopted by the Board of the Trustees kindly sent by you, which reached to us in safe.

We feel much ashamed to accept such unexpected courtesy from you, while we did not extend so much facilities to Mr. Roy Andrews as to give you ample satisfaction.

The models to be presented by you will never fail to give us much interest, by which we believe we shall be able to improve ourselves in our business. [sic]⁴⁷

One of the whale models delivered to Japan was later donated to the fisheries section of the Tokyo Imperial University by the whaling company. ⁴⁸ Thus, what had started as a transport of specimens eventually became a trans-Pacific circuit for the exchange of scientific material, a circumstance that benefited not only the whalers in Japan, but also created new specimens and observations, in the form of Andrews' scientific publications, available to Japanese research and educational institutions.

Previously, when few skeletons of real whales were available, life-sized whale models were built at the Museum of Natural History. One of Andrew's first tasks in the mammalogy department was to help build a life-sized blue whale model for exhibit in the mammal hall out of a wire "skeleton" and painted papier—mâché. Similar models of different whale species were then shipped to Japan in exchange for the skeletons that came to the museum. In this exchange of artifacts, Japanese whalers enabled the collection of authentic whale specimens for scientific research, and in turn received scientific results that, in case of the models, mimicked the actual animal.

Conserving the "long-lost gray whale"

While Andrews' first expedition to East Asia had been extremely successful, the cetacean museum collection was still missing an example of a species that was believed to be extinct on the American coast. His contacts in the whaling

⁴⁶ Letter from Roy Chapman Andrews to Ogiwara D., 1 March 1911, Folder Toyo Hogei, 1910–17, AMNH DM.

⁴⁷ Letter from Oka Jūrō to H.C. Bumpus, 30 March 1911, Box 159, File 564, AMNH Central Archives.

⁴⁸ Letter from Ogiwara D. to Roy Chapman Andrews, 11 June 1913, Box 159, File 968, AMNH Central Archives

company had informed him about a whaling station in the south of the Korean peninsula where Tōyō Hogei whalers were catching gray whales as well as humpback whales during the winter season. Andrews contacted Ogiwara in September 1911 while the latter was on a business trip to Great Britain buying additional trawlers for the company. He explained his wish to collect gray whales, or "devil fishes" as they were commonly called, and humpback whales to complete his research. Andrews wrote to Matsuzaki, his contact at the company's headquarters in Shimonoseki:

In order to make an absolutely complete study of the Pacific Whales, it is going to be necessary for me to have skeletons of the Devil Fish and Humpback. I am wondering whether your Company would be willing for me to come over to Japan this next winter and get a Devil Fish at Urusan [Ulsan] or Chanzendogo, Korea. I feel rather delicate about asking your Company to allow me to bother them again after all the kindness which you showed me in Japan before, but I do not know any place in the world where they are taking Devil Fish other than at your stations.⁴⁹

Matsuzaki agreed to Andrews' request for a second expedition and recommended a visit to the whaling station at Ulsan to maximize his chances for a catch. Andrews also received corporate help due to the arrangements he made with the colonial authorities.

While gray whales had once populated the American west coast, migrating from the northern Pacific to the Baja California peninsula annually, whalers had decimated the regional stocks so dramatically that by the beginning of the twentieth century the species was considered extinct.⁵⁰ Andrews' predecessor in gray whale research, Charles S. Scammon, had already written about the possible extinction of the whales in 1874 and, with the disappearance of gray whales and other species, a large portion of the American whaling industry had followed.⁵¹ Not only did this make the acquisition of new specimens and the observation of whales around California impossible, very few animal artifacts had been secured for scientific research during the period of whaling activity.

⁴⁹ Letter from Roy Chapman Andrews to Matsusaki, 29 July 1911, Andrews Folder III-I, 1908–15, AMNH DM.

⁵⁰ For the development of catch numbers along the American coastline, see Randall R. Reeves and Tim D. Smith, "Commercial Whaling, Especially for Gray Whales, *Eschrichtius robustus*, and Humpback Whales, *Megaptera novaeangliae*, at California and Baja California Shore Stations in the nineteenth century (1854–1899)," *Marine Fisheries Review* 72, no. 1 (2010): 4–19.

⁵¹ See David A. Henderson, "Nineteenth-Century Gray Whaling: Grounds, Catches and Kills, Practices and Depletion of the Whale Population," in *The Gray Whale. Eschrichtius robustus*, ed. Mary Lou Jones, Steven L. Swarts, Stephen Leatherwood (Orlando: Academic Press, 1984), 159–186; Scammon, *The Marine Mammals of the Northwestern Coast of North America*, 33.

When Andrews, as a result of his expedition, was writing about the relationship between the Eastern Pacific (Californian) and Western Pacific (Korean) populations of the gray whale, he had no measurements and descriptions of the "extinct" whales that would meet the scientific standards. Instead, he had to compare bones from an incomplete skeleton from the National Museum with the skeletons he had collected in Korea.

The hunting and killing of gray whales in Korea gave Andrews an opportunity to attempt what scientists and museums before him had failed to achieve: acquiring a pristine example of the species before it vanished from human exploitation. In his scientific paper he wrote, "During the past twenty years the species had been lost to science and many naturalists believed it to be extinct." While efforts to actually conserve whales in international waters did not start until the late 1920s, scientific studies on their numbers revealed that the situation was critical. When the *American Association for the Advancement of Science* finally discussed the need for more scientific work in order to conserve the stocks of Pacific animals, Andrews' body of work was listed as one of the few recent efforts on the subject. 53

Even in the hunting grounds of the Japanese whalers, which Andrews considered to be a place where industrial exploitation was new, the gray whale was a rather rare species. A compilation of catch results between 1910 and 1933 showed that, in this time period, a total of 1,474 gray whales had been caught by Japanese companies, and concluded that the 1910 total population of Western gray whales consisted of only 1,000 to 1,500 animals.⁵⁴ Although hunted by Japanese net whaling groups throughout the Tokugawa period, only a small portion of the annual catches that were recorded around the Japanese islands during the nineteenth century were *koku kujira*. By the turn of the century, almost no gray whales were sighted in Japanese waters apart from in the Korea Strait.⁵⁵ The gray whale populations would spend the summer months in the colder and more nutritious waters of the Sea of Okhotsk, out of reach of the Japanese shore

⁵² Andrews, The California Gray Whale, 232.

⁵³ Barton Warren Evermann, "The Conservation of the Mammals and other Vanishing Animals of the Pacific," *The Scientific Monthly* 14, no. 3 (1922): 261.

⁵⁴ Dale W. Rice and Allen A. Wolman, *The Life History and Ecology of the Gray Whale (Eschrichtius robustus)* (The American Society of Mammalogists, 1971), 122–123. The numbers of gray whales had already been significantly decreased due to pre-modern whaling in the Pacific by both Japanese and Euro-American whalers. David W. Weller et al. "The Western Gray Whale: A Review of Past Exploitation, Current Status and Potential Threats," *Journal of Cetacean Research and Management* 4, no. 1 (2002): 7–9; Igler, *Pacific Worlds*, 117–128.

⁵⁵ See Ōmura Hideo, "History of Gray Whales in Japan," in *The Gray Whale. Eschrichtius robustus*, ed. Mary Lou Jones, Steven L. Swarts, Stephen Leatherwood (Orlando: Academic Press, 1984), 65–73.

whalers. They only came into range during winter on their migration to the nursing grounds south of the Korean peninsula. The seasonal wanderings of the animals limited both their availability for the whalers, who could only make a profit out of them during the winter season, and the timeframe for Andrews to actually complete his fieldwork. While the whalers did know the approximate time of the whales' arrival on the hunting grounds, fluctuations due to unforeseeable circumstances could pose a serious economic threat to the whaling company, in addition to the danger of losing ships on the ocean. The stormy weather during the winter season was frequently seen as the reason for poor catch results— $Ch\bar{o}sh\bar{u}$ Maru, the first "modern" catcher boat built in Japan, sank during a storm in the Sea of Japan with significant loss of life. The season to the season with significant loss of life.

Another frequently mentioned element of the gray whale hunt was the presence of orca whales (*Orcinus orca*), themselves only infrequently killed by the whalers. As the apex predator of the ecosystem, the orcas were the far distant second in the preying of the gray whales and often interfered with the human whale hunting. In his scientific publication about the gray whale, Andrews reported that a large number of the whales he examined had bite marks or even their tongues ripped out. Andrews retold an event from Melsom's day at sea while the former was at the shore. The carcass of a gray whale Melsom had shot was attacked by a pod of orcas:

They circled about the vessel and one of them forced open the mouth of the dead whale to get at the tongue. When Captain Melsom fired at the Killer with his Krag rifle the animal lashed out with its flukes, smashing the ship's rail, and disappeared.⁵⁸

Despite this violent encounter and the whales' preying on the whalers' profits (and Andrews' specimens), the presence of orcas seems not to have been seen as a serious problem or competition. Andrews assumed that orca whales would kill and consume gray whales on their own, although he had never

⁵⁶ Biological research, including Andrews' own, has stated the possibility that (Korean) and eastern (Californian) populations occasionally mix, meaning that some of the whales Andrews had examined may indeed have travelled around the Northern Pacific, from the coast of the United States. Dale W. Rice, Allen A. Wolman, and Howard W. Braham, "The Gray Whale, Eschrichtius robustus," *Marine Fisheries Review* 46, no. 4 (1984): 8–9; Andrews, *The California Gray Whale*, 236; recent research based on genetic sampling, however, has declared the two populations as distinctive and isolated. Rick D. DeLuc et al. "Genetic Differences Between Western and Eastern Gray Whales (Eschrichtius robustus)," *Journal of Cetacean Research and Management* 4, no.1 (2002): 2–4.

⁵⁷ Honpō no noruee shiki hogeishi, 218; Watanabe, Japan's Whaling, 25–26; Tønnessen, Johnsen, The History of Modern Whaling, 137.

⁵⁸ Andrews, The Gray Whale, 240.

witnessed such an event.⁵⁹ He did not speculate on the possible impact the preying of the orca whales could have on the gray whale stock's reduction in concurrence with the whaling. Andrews, however, went on to write about the benefits of the orca's presence for the whalers:

As soon as the Orcas appear if the Gray Whales are not paralyzed by fright they head for shore and slide in as close as possible to the beach where sometime the Killers will not follow them. [...] The Orcas are not afraid of the ships and will not leave the whales they are chasing when the vessels arrive, thus giving much assistance to the human hunters.

Captain Johnson [...] brought to the station at Ulsan a Gray Whale which had been shot between the fins. He had first seen the Killers circling about the whale which was lying at the surface, belly up, with the fins outspread, being absolutely paralyzed by fright. The vessel steamed up at half speed and Johnson shot at once, the iron striking the whale in the breast.⁶⁰

While the gray whales usually fled the whaling boats, the ecosystem's largest natural predators, orcas, seemed to have adapted to the whaling operations by feeding on the gray whale carcasses. For the whalers, on the other hand, hunting the elusive gray whales, as Andrews described, could be much faster and more efficient when orcas were present.⁶¹

Japanese whaling statistics indicate that, through concessions at the Korean whaling ports, the Tōyō Hogei company was in fact the only Japanese whaling company catching gray whales in Japan by 1912. In total, seventy gray whales were processed by the company during the season of Andrews' visit to Korea and all were caught in the Korean hunting grounds from Ulsan.⁶² The Japanese authorities, represented through the Ministry of Agriculture, Forestry, and Fisheries, had controlled the extent of Japanese whaling by allowing only thirty catcher boats to operate in Japanese waters. These had to be run by Japanese companies with Japanese captains. Despite this measure, the gray whale stocks in the Western Pacific nearly vanished during the first half of the

⁵⁹ See Thomas A. Jefferson, Pam J. Stacey and Robin W. Baird, "A Review of Killer Whale Interactions with other Marine Mammals: Predation and Co-Existence," *Mammal Review* 21, no.4 (1991); Rice, Wolman, *The Life History and Ecology of the Gray Whale*, 98–99.

⁶⁰ Andrews, The Gray Whale, 240.

⁶¹ Andrews described the gray whales' ability to surface and breathe extremely quietly and without creating ripples when ships were near to avoid pursuit, calling them "[...] the cleverest and most tricky of all large whales." Ibid., 241.

^{62 &}quot;Nippon hogeigyō suisan kumiaihō," Dainippon suisan kaihō 46, no. .9 (1912): 33–34.

twentieth century. 63 Mirroring the events on the other side of the Pacific, by the end of the nineteenth century, the catches of gray whales declined strongly in the 1920s and the whaling station in Ulsan was subsequently closed down in 1933. 64

The expedition to Korea thus gave Andrews the opportunity not only to travel to a colonial frontier where animals would still be common enough for research, but also where the established infrastructure of both the authorities and the whaling company would allow him to gather with ease specimens of a species that had vanished from the longtime hunting grounds of whalers. While Andrews did express concern about the possible extinction of whales due to the hunting, it was at the same time an indispensable requirement of his scientific work.⁶⁵ Contemporary discourses about the function of natural history museums stressed the value of museum collections as part of a larger conservation effort that would archive and preserve remains of animals that might otherwise be forgotten after falling victim to the "progress of man".⁶⁶ In this context, killing animals for the sake of science and long-term preservation became the premise of conservation, and enabled artifacts like the skeleton, as well as records and photographs, to be preserved for later generations.

The collection of a whale and the colonial view

Although Andrews spent two months at the whaling station and afterwards proceeded inland into the Korean north, exploring "[...] the last portion which had remained unvisited by white men," Korean individuals are conspicuously absent from his correspondence. On the other hand, Andrews made numerous references to Koreans in his textual work and took a number of photographs of the Korean workers at the whaling station and during his subsequent trip inland. As opposed to the pictures he took of Japanese and Norwegian station employees, some of which he later sent back as personal gifts, the Koreans pictured are never given any names or individual markers, but are identified by rather generic designations

⁶³ Ironically, and in stark contrast to the situation during Andrews' period of research, the western Pacific Population today is critically endangered while the eastern (Californian) population is considered relatively stable. *Encyclopedia of Marine Mammals* (Amsterdam: Academic Press, 2009), s.v. "Gray Whale", 504–507; Howard B. Braham, "The Status of Endangered Whales: An Overview," *Marine Fisheries Review* 46, no. 4 (1984): 4.

⁶⁴ Rice, Wolman, The Life History and Ecology of the Gray Whale, 122.

⁶⁵ Andrews, Whale Hunting with Gun and Camera, 20–21; see also Kroll, America's Ocean Wilderness, 12–23; Burnett, The Sounding of the Whale, 118–123.

⁶⁶ Farrington, "The Rise of Natural History Museums," 207–208.

⁶⁷ Roy Chapman Andrews, Lectures on Natural History and Travel. A.M AMNH DM.

like "young Korean" or "Korean man." These documentary images depict Koreans posing in front of Andrews' camera, and Andrews himself dressed in Korean-denoted items of clothing, which display a reversed mimicry towards the colonial subaltern. These images demonstrate Andrews' paternalistic view of the Koreans as colonial subalterns and subjects for research, while at the same time revealing an interest in the culture through the appropriation of Korean clothes for photographs (he also did something similar with Japanese clothes on tatami mats while on expedition in Japan). His pictures of the Koreans and Japanese reveal a curiosity for his subject that was akin to his interest in the whales he was studying; Andrews was acting as an agent for Western and Japanese colonial culture.

Pictures taken by Andrews showing the local police forces in uniforms lined up for a photo shoot and letters of gratitude to members of the Japanese authorities written by the museum suggest that to some extent Andrews had contact with the Japanese colonial administration. While conducting ethnographic research was hardly the focus of his work, it did fit into the contemporary logic of placing colonial subjects into the same museum context as animals or other "natural" artifacts. 70 Some of Andrews' descriptions of life at the Japanese whaling stations and his lantern-slide lectures about the "Land of the Cherry Blossom" presented Japan and the Japanese as exotic and oriental. However, his correspondence with the Japanese from the whaling company suggests that he also considered his Japanese contacts as equal partners in business and science. Andrews kept in personal contact with Matsuzaki even after he had resigned from the Tōyō Hogei in 1913 and tried to establish a cannery business in Mexico. Andrews supported him by sending a rare book on the subject and by seeking out additional material that might help Matsuzaki. 71 Similarly, he wrote a letter of recommendation to a rubber company with which Ogiwara attempted to establish business relations.⁷²

⁶⁸ A similar mix of paternalism and appreciation was also present in the Japanese attitudes and curiosity towards the Koreans. E. Taylor Atkins, *Primitive Selves: Koreana in the Japanese Colonial Gaze, 1910–1945* (Berkeley: University of California Press, 2010), 3–5, 52–100.

⁶⁹ Eleanor M. Hight and Gary D. Sampson, "Introduction: Photography, 'Race,' and Post-Colonial Theory," in *Colonialist Photography. Imag(in)ing Race and Place*, eds. Eleanor M. Hight and Gary D. Sampson (London: Routledge, 2002), 1–5.

⁷⁰ See Diane Losche, "The Fate of the Senses in Ethnographic Modernity: The Margaret Mead Hall of Pacific Peoples at the American Museum of Natural History," in *Sensible Objects. Colonialism, Museums and Material Culture*, eds. Elizabeth Edwards, Chris Gosden, Ruth B. Phillips (Oxford: Berg, 2006), 230.

⁷¹ Letter from Roy Chapman Andrews to Matsuzaki M., 29 January 1913, Andrews Folder III-I, 1908–15, AMNH DM.

⁷² Letter from Roy Chapman Andrews to the Revere Rubber Company, N.Y., 1 October 1912, Folder Toyo Hogei 1910–17, AMNH DM.

The whaling stations in Korea had played a crucial part in the establishment of the modern Japanese whaling industry. As a reliable cheap labor force, Koreans were frequently employed in the various whaling companies operating from harbors on the Korean peninsula.73 While no Koreans held any positions of higher rank in the whaling company, it is evident that they played an important role in whaling operations and were crucial to the success of commercial whaling, as well as Andrews' research agenda. Another account can give a small glimpse into the extent of Korean employment in the whaling business in Korea. In 1906, the Japanese author and journalist Emi Suiin had visited the Ulsan whaling port where, after the victory in the Russo-Japanese War in 1905, the Japanese whalers had taken over the whaling concession from the Russians. During his stay, he spent some time on the *Rex Maru*, the ship of Melsom. Melsom acted both as the gunner and captain of the boat. Besides him, there were two other Norwegians aboard, one of them the boat's engineer. According to Emi, the other ten crew members were all Koreans. One of them—the only one Emi referred to by name—was the Rex Maru's boatswain, Kim Chin Hee. As boatswain, Kim was foreman in charge of the (Korean) deck crew during whaling operations. This was the highest rank possible to achieve for a Korean.⁷⁴ While the Koreans were not able to apply for higher and more qualified positions within the whaling business, they were employed in the whaling operations to provide manpower for the labor-intensive tasks and shipboard functions.

Among the photographs taken by Andrews at the whaling station in Korea in 1912 were numerous depictions of the landing of the whales at the wharf. Although many images show the approach of the catcher boat with the whale alongside and the winching of the whale at shore, there are also pictures in which Andrews combined his main interest—whales—with a secondary object of scientific interest—Koreans. One image (figure 2) is accompanied by the archival description "Gray whale showing blubber and two Koreans." It shows a partially stripped gray whale winched on the wharf's crane. In the background, several workers with cutting tools are standing in a working pose and looking into the camera. Due to their working garments, their nationality cannot be securely verified; however, two persons standing in front of the scenery are clearly denoted as Korean by their white coats, pants, and hats. Like the people in the background, they too are looking into the camera. Their function within the whaling station remains unclear. Their clothing, which differs from the rest of the workers, suggests that they were not directly involved in the carving up of the whale or perhaps that they changed clothes for the picture pose.

⁷³ See Watanabe, Japan's Whaling, 24-42.

⁷⁴ Emi Suiin, Hogeisen. *Jitchi tanken* (Tokyo: Hakubunkan, 1907), 93; Watanabe, *Japan's Whaling*, 32–33.

In accordance with the museum's orientation towards both ethnography and natural history, Andrews was not only interested in collecting animal specimens and photographs, but also in collecting knowledge about any objects, places, or people that fit into the expedition's scientific aim of describing the exotic and the unknown. Although neither the whales nor the Korean workers posing in front of the carcass on the wharf were allowed to speak as historical actors, both constitute crucial elements of the network that was in formation.



Fig. 2: "Gray Whale showing blubber and two Koreans," Ulsan, 1912. American Museum of Natural History, Central Archives, 59.95.1.

As previously mentioned, the language and content of Andrews' statements varied substantially depending on their audience. The same image was used in diverse contexts with different captions. While in scientific publications on the gray whale, the image was used among others to visualize body parts of the whale with no reference made to the two figures standing in front ("Head, pectoral fin and section of black blubber"), in the book *Whale Hunting with Gun and Camera*, which was aimed at a wider, more general audience, the same image (with a slightly larger

⁷⁵ Andrews, The Gray Whale, Plate XIX.

angle of view) was commented on with a detailed reference to the Koreans: "Cutting in a gray whale. The head is lying on the wharf and two Koreans are standing beside it. They wear long white coats, enormous baggy trousers and a horsehair hat." The photographs that Andrews employed to document the "true" sequence of the whaling operations in Korea and Japan must therefore be understood within the ideological formations surrounding their production and reception. 77

Besides the Koreans being an object of exotic fascination in the pictures he took, Andrews also described circumstances that afford us a glimpse into the active part Koreans played during whaling operations, and in Andrews' scientific practice. In his subsequent book, Andrews brought his whaling experiences to a wider audience and described a situation at the whaling station involving Koreans:

After I had secured the skeleton of a gray whale and had piled the bones, partially cleaned, in the station yard, the Koreans descended upon them like a flock of vultures. With a knife or a bit of stone they scraped each bone, cleaning it of every ounce of meat. At first this seemed to me a splendid arrangement, but suddenly I discovered that some of the smaller bones themselves were disappearing and realized that my skeleton was slowly but surely being boiled for soup.

It did not take long to issue an edict against all Koreans in reference to my whale, but the matter did not end there. The pile of toothsome bones was too great a temptation and whenever I happened to be out of sight some white-gowned native was sure to steal up and leave with a bone under his coat.⁷⁸

Whereas Andrews at first considers this Korean practice of cleaning the bones helpful to his collection of a specimen, his appreciation ends when the completeness of the scientific artifact is endangered by their actions. The defiance he describes—within the paternalistic discourse of the "native"—in which the Koreans ignore his orders to leave the bones alone, hints at the strategies used by the colonial subjects to appropriate Andrews' presence at the station. The act of obstinacy also shows that, despite Andrews' privileged status as a guest researcher with the backing of the whaling company and the colonial authorities, the power within the whaling station's network was not completely in his or the stationmaster's hands.⁷⁹

⁷⁶ Andrews, Whale Hunting with Gun and Camera, 193.

⁷⁷ See Abigail Solomon-Godeau, *Photography at the Dock. Essays on Photographic History, Institutions, and Practices* (Minneapolis: University of Minnesota Press, 1997), 179–182.

⁷⁸ Andrews, Whale Hunting with Gun and Camera, 192–193.

⁷⁹ See Alf Lüdtke, Eigen-Sinn. Fabrikerfahrungen, und Politik vom Kaiserreich bis in den Faschismus (Hamburg: Ergebnisse-Verlag, 1993), 120–160.

Conclusion

This case study of Andrews' expedition to the Japanese whaling grounds and of the acquisition of gray whale skeletons in particular reveals that the production of "objective" knowledge about cetaceans according to scientific standards was determined by a complex network of human and non-human actors who were in constant interaction and mutual interference. While "modern" Japanese whaling was the outcome of the global flow of knowledge, technology, and personnel, the whalers and Andrews (as a scientist on expedition to find animal artifacts like the precious gray whale skeletons) were making an arrangement that proved to be beneficial to both sides. Andrews relied on the experience, knowledge, and technology of the whalers to achieve his scientific goals, while the whalers sought to benefit from the products of his scientific analysis. For his scientific conservation of the otherwise inaccessible gray whale, Andrews not only had to cross the Pacific to reach the newly formed Japanese shore whaling industry, but he also had to go one step further to the frontier of scientific and commercial exploration at the Korean whaling stations

While we cannot access these factors without exploring the (human) traces of these activities, both Andrews and the whalers' agencies were strongly determined by the objects they had to rely on while conducting their work. These included whaling equipment like ships, whaling stations, and harpoons, which, along with Andrews' tools of scientific practice, the whales themselves as research objects, and the "natural" surroundings such as orca whales, deeply influenced the outcome of Andrews' research. Last but not least, the transmaritime network at the Korean whaling station was also determined by the asymmetrical yet mutual power relationship between the colonial agents and the colonial subalterns.