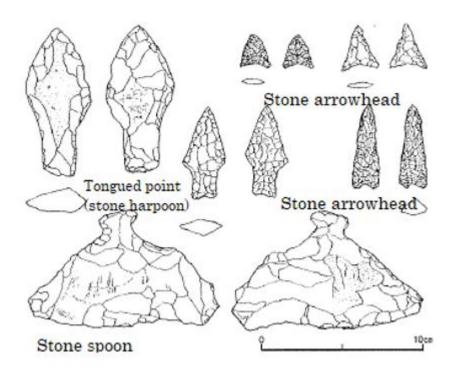
Chapter I Whales Saved the Japanese

History of the Japanese love for whales: the Jomon and Yayoi periods

The Japanese have been closely tied to whales from ancient times. Whale meat eating goes back a remarkably long way.

A great number of bones of cetaceans have been unearthed from various areas including graves and shell mounds of the Jomon period, about 8,000 to 9,000 years ago.

"Shell mounds" suggests at least that people in the Jomon period were collecting shell fish as food, which is nowhere near the fact. Subsequently, whale meat was selected as food since, more than anything, whale meat is delicious, which I would like to point out here. Once you eat whale meat, its good taste remains with you, making you want to eat it again. In addition, one whale can feed hundreds or even thousands of people at a time. Furthermore, the bones can be processed into tools and, moreover, bones, teeth, fins and baleen can all be used.



Stoneware unearthed from Tsugumenohana Site, Nagasaki Prefecture (Source: *Tsugumenohana Iseki no Gaiyo* (Overview of Tsugumenohana Site), Shobayashi M. and Baba, Bulletin of the Nagasaki Archaeological Society Vol. 2)



Whale's intervertebral disk used as a workbench for pottery
(Unearthed from Saga Site / Tsushima City, Nagasaki Prefecture)

The flesh of whales contains large amounts of excellent protein and, considering the dietary habits in those days, eating whale meat could have been dramatically vitalizing. That is why, for ages, the Japanese have been tied to whales.

From the shell mound of the Tsugumenohana Site in Hirado City, Nagasaki Prefecture, which has been dated to between the early and the middle phases of the Jomon period, the skeletal remains of many whales, dolphins and sharks have been unearthed. Stone implements of types not found in other sites, such as those apparently used for dissection and skinning of whales, have also been dug up. Dr. Mori Koichi, an archaeological expert, says that it is assumed to have been a site for dissecting catches. Whales and dolphins were eaten not just in a few areas of the Japanese archipelago but seaside archaeological sites in almost all parts of the country have yielded artifacts that provide supporting evidence.

What is worth noting, in addition, is that sites of settlements of Jomon people have also produced goods from whale bones, which include stabbers resembling chopsticks and accessories such as necklaces and bracelets. These show that whales, their bones, teeth and baleen, were used in handiwork, in addition to consuming their flesh as food. Interestingly, from coastal landform sites dated about 4,000 years ago (the middle to late phases of the Jomon period), many pieces of earthenware have been discovered that have pattern-like indentations preserved on the bottom. They are marks of an intervertebral disk, suggesting that the disk was put down and earthenware was made on it. That is, intervertebral disks were used as workbenches for pottery.

It is assumed that, generally during the Jomon period, whales drifted into bays and shores,

which are called *yori kujira* (whales beached alive) or *nagare kujira* (dead whales drifted ashore), were caught. However, the Mawaki Site on Noto Peninsula, Ishikawa Prefecture has yielded many cetacean bones and rod-shaped spearing instruments, which has led to a presumption that active whaling took place in some areas.

In the Yayoi period, active whaling that utilized boats is believed to have been conducted.

On a burial jar from about 2,000 years ago (latter half of the middle phase of the Yayoi period), which was unearthed from the Harunotsuji Site in Iki City, Nagasaki Prefecture, a whaling scene is preserved. There are also arrowheads made with whale bones.

The Oniyakubo Tomb located in Gonoura Town, Iki Island, has a horizontal stone chamber from the 6th century, where a petroglyph depicting whaling was discovered.

Based on these things, Dr. Mori presumes that people were already catching whales by using several boats to surround one that strayed into a bay.

What is even more intriguing is that investigation into the bones dug up revealed that, in the Yayoi period as well as the Jomon period, bones of the same whales were unearthed from several different settlements.

This suggests that, once a whale was caught, whale meat was distributed to settlements in a fairly wide area, including those on the beach where it was caught or otherwise shared by many people. If that was the case, then whales were helping a great number of people from ancient times.

Emperors and Court nobles fell in love with whale meat

Over time, utilization of whales became increasingly established in the lives of the Japanese. After the development of writing, whales were mentioned in many old documents. *The Kojiki*, which dates from the early Nara period, states that Emperor Jimmu ate whale meat: *Isukuhashi Kujira sayaru*. *Isukuhashi* is the pillow word for "whale" and said to mean "valiant" and "a magnificent catch of the shore" alluding to a whale, by using different sets of kanji representing the respective meanings. Incidentally,

the original text of The Kojiki (An Account of Ancient Matters) uses the kanji 久治良,

which reads kujira, a Japanese word for "whale."

In the Nara period, various regional gazetteers called *Fudoki* were compiled by order of the central government. *Hitachi no Kuni Fudoki*, (*Fudoki* of Hitachi Province), contains a description of whales, according to which the present Kuji County, Ibaraki Prefecture "was named Kuji by Prince Yamato Takeru" due to the shape of the hill in the area, suggestive of a whale, or *kujira* in Japanese.

In *Nihon Shoki*, or *The Chronicles of Japan*, there is a poem that mentions the word whale in a phrase: *isanatori umi no hamamo no...*" *Isanatori* means a "hunter of *isana* (literally "valiant fish," or whales)" and is used as a pillow word for *umi*, a Japanese word for "sea."

This word *isana* also appears in a poem written by poet and aristocrat Kakinomoto no Hitomaro in *The Manyoshu*, the oldest extant collection of Japanese poetry compiled in the 8th century. *The Manyoshu* includes as many as 12 poems that use the pillow word *isanatori*, which clearly shows how whales permeated the lives of the nobility in those days.

In the Nara period in the 8th century, Buddhism was quite influential in Japan. Accordingly, the Buddhist concept of animal meat eating as a taboo gained influence. In the reign of the Emperor Tenmu, in particular, a so-called animal meat eating prohibition order was issued to forbid animal meat for a certain period, which exemplifies the growing trend toward avoidance of animal meat eating. However, eating of whales, which were believed to be valiant "fish" from the sea, was hardly affected by the order and people apparently continued to eat whale meat.

As with the Nara period, whale meat continued to be eaten in the following Heian period by people living in seaside communities and people in some classes. Aristocrats and high-ranking samurai living in the capital of Kyo (Kyoto) enjoyed eating whale meat. *Wamyo Ruijusho*, an encyclopedic Japanese dictionary of nouns written in the mid-Heian period, contains the word *aramaki*, which literally means "wrapping in straw." This suggests that thick straw rope was wound around whale meat for shipping from whaling bases to the privileged classes who ate whale meat. The methods of preserving whale meat in those days included covering with salt, wrapping in leaves of Japanese butterbur or bamboo grass and soaking in soy sauce or *miso*. *Azuma Kagami*, a historical chronicle compiled in the Kamakura period, presumably around 1300, includes a description of how a whale

was landed near Kamakura to benefit many people.

In the following Muromachi period, descriptions of whales in literature dramatically increased, which shows that people in those days ate a huge amount of whale meat. For example, *Miyoshi Chikuzen no Kami Yoshinaga Ason Tei e Onari no Ki (An Account of a Visit to the Residence of Miyoshi Chikuzen no Kami Yoshinaga Ason*), dated 1561, has a description of a Court noble named Miyoshi Yoshinaga who entertained the Shogun Ashikaga Yoshiteru with whale dishes, which made the Shogun very happy.

In those days, court cuisine came to be adopted by samurai and eating etiquette called *shokureishiki* developed. In formal banquets of high-ranking aristocrats and samurai, in particular, attendees had food and drink as part of a ceremony, where a ritual called *shikisankon*, or three rounds of drinks accompanied by a different meal set on a tray each time, was established. In this *shikisankon*, a Shinto prayer was first recited before eating, sake was drunk and dishes were served in the order of seafood, food from the land, wild vegetables and farm produce. In fact, for seafood, whale meat was served most often following sea bream and carp. This suggests that whales as food were valued in samurai society as well.

There is a diary entitled *Tokitsugu-kyo Ki* (*Journal of Lord Tokitsugu*) written by a Court noble named Yamashina Tokitsugu (chief curator of the palace and head of the *Mizushidokoro*, or food preparation room of the palace). Yamashina Tokitsugu can be described as an incarnation of curiosity, so to speak, especially for food because of his position as head of the Imperial kitchen. He was a man of culture brimming with knowledge. Whales appears several times in *Tokitsugu-kyo Ki*.

In one anecdote, Tokitsugu was invited one day by a Court noble of his acquaintance to a meal of whale soup cooked in the residence, to which he went happily, just bringing rice. This was a customary practice in those days, that one should bring his own rice when invited to a feast. When they obtained special food such as whale meat, they invited each other by only offering dishes to accompany rice.

There is also a description of Tokitsugu's visit to Mikawa in present-day Aichi Prefecture in 1556, where he ate whale *takeri* and was delighted. *Takeri* is the penis of a male whale. How interesting to see the head of the Imperial cuisine department finding this food delicious!

Another account mentions whale meat presented to the Imperial Court by Oda Nobunaga in 1570, a portion of which Tokitsugu had a chance to eat and found extremely delicious. In those days, the most thriving whaling bases were Ise and Mikawa, which leads to the conclusion that the whale presented by Oda Nobunaga, who was based close to Mikawa, was probably from Mikawa Bay.

That is, Court nobles as well as samurai eagerly ate whales. First of all, whale meat tastes good. It has much richer taste than ordinary fish. While pheasants and wild ducks were also eaten in those days, whale meat is by far more delicious than wild birds and abounds in protein and fat. Just one taste of whale meat, the forbidden, diabolical delicacy, would have been enough to captivate and rapidly win the heart of anybody, whether samurai or Court nobles, or even the Emperor.

Shijoryu Hocho Sho, a cookbook written at the end of the Muromachi period, also mentions whale and provides a ranking of fish as ingredients. The book ranks the whale second only to the carp. It means that whales were given an important position, slighting the sea bream, a fish prized from old times, which is worthy of special note in the history of Japanese foodstuffs. This shows that whale meat eating is part of a deep culture that has permeated the Japanese to the core since ancient times.

Whale meat-eating culture blossomed in the Edo period

Then, the Edo period began. The Edo period was a time that saw an enormous number of events symbolic of the origin of the subsequent relationship between the Japanese and the whale.

During the Edo period, the population on the Japanese archipelago is said to have been 20 million.

As the population grew, the importance of ensuring the availability of animal protein also increased. However, in Japan, the influence of Buddhism, in which the taking of life was forbidden, hence no meat eating, had taken root and whale meat was rarely served among the common people.

In addition, the fifth shogun, Tokugawa Tsunayoshi, promulgated animal protection laws

called *Shorui Awaremi no Rei*, which prohibited the killing of animals. However, the enforcement of the laws was apparently not very strict and animal meat was eaten in secret not only in provincial areas beyond the control of the government but also in the capital city of Edo itself. The animals eaten stealthily included: quails, longbills, thrush, rufous turtledoves, wild geese, wild ducks and pheasants and deer, wild boar, raccoon dogs, rabbits, otters and bears. Code words such as *momiji* (autumn leaves) for deer meat and *botan* (peony) for wild boar meat were used.

Still, what many people ate without fear or hesitation was fish, including saltwater fish such as sardines, horse mackerel, mackerel, sea bream, cod, trout and salmon and freshwater fish such as sweetfish, crucian, carp, loach and eel. The whale was naturally regarded as saltwater fish and people did not feel resistant to eating the meat.

On the contrary, whales were very much appreciated because one whale provided food for hundreds or even thousands of people and, what is more, whale meat was much tastier than fish and abounded protein and fat. As shown by the code word for wild boar meat, *yama kujira*, which literally means "mountain whale," the whale itself was food firmly established among the common people of Edo.

In reflecting this, many of the cookbooks that came out in the Edo period presented dozens of whale dishes.

One factor of the popularization of whale meat in the city of Edo is that the supply of whale meat was stable in the latter half of the 1700s. Until then, apart from the privileged classes, whale meat was only available mostly in areas near the sea where whales were caught. However, whale meat came to be frequently eaten by the common people of Edo and whale meat eating culture flourished.

One thing that made it possible for the supply of whale meat to be stable is the development of meat preservation methods. Methods of producing salt on a large scale had already been established and salt allowed food to be preserved for a long time. Soy sauce and *miso* were already produced by using salt, which could also be utilized for preservation.

Another major factor is that marine transportation dramatically developed.

In those days, *kitamaebune* (northern-bound ships) and *tarukaisen* (cargo ships initially for shipping sake in barrels) were already in service. *Kitamaebune*, which were also referred to as *Hokkokukaisen*, went from various ports in Oshu (roughly present Tohoku region) and Hokuriku through the Sea of Japan and further through the *Nishimawari-koro* (western sea route) to ports such as Osaka and Hyogo, which was a central distribution artery. Large junks operating on the Pacific Ocean also transported large volumes of products including rice, salt, timber and textiles from various parts of the country, which came to be distributed nationwide.

Tarukaisen carried goods such as sake and food from Osaka to Taiji, Wakayama Prefecture, which was already the biggest base for whaling. After visiting Taiji for taking whale meat onboard, ships called at nearby Yuasa, Kishu, the birthplace of Japanese soy sauce, to take on soy sauce and Taketoyo Port on the Chita Peninsula to take on goods such as vinegar and miso. Present Aichi Prefecture, which includes the Chita Peninsula, already produced haccho miso, tamari soy sauce, rice vinegar and mirin rice wine in those days and functioned as supply warehouse. Whale meat was locally preserved with salt, soy sauce and miso for transportation.

In this way, whale meat caught in Kishu came to be carried via Mikawa all the way to Edo.

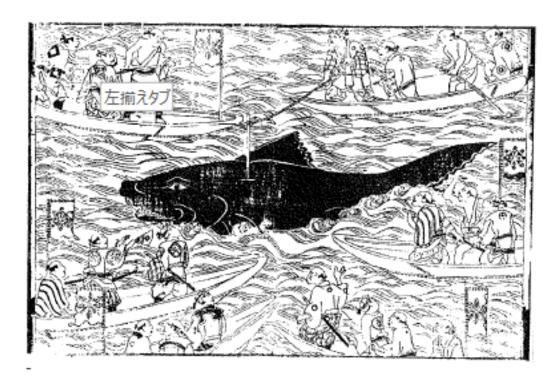
Whale consumption established among the common people

The Eternal Storehouse of Japan, a novel written by Ihara Saikaku and published in 1688, mentions Tengu Gennai, a character modeled after Taiji Kakuemon, who was a master harpooner in Taiji, Wakayama. The story was made into a *kabuki* play.

Tengu Gennai was good at harpooning whales. One whale he caught is described as a right whale measuring "33 hiro 2 shaku 8 sun," which converts to about 60 m, unprecedentedly large. The story notes that the oil obtained from the whale filled as many as 1,000 barrels, chunks of blubber were as white as snow on Mt. Fuji and the chunks of lean meat suggested a magnificent view with autumn leaves of Takao, which is in current day Kyoto. The novel also says that the bones, skin and fins were all used without being wasted.

There were also whale restaurants in the streets of Edo. Paintings of the city of Edo in

those days sometimes show "Whale" signs in front of taverns.



The Eternal Storehouse of Japan, Ihara Saikaku

The Eternal Storehouse of Japan, a novel by Ihara Saikaku, describes the head of a whaling group who made a fortune by whaling, suggesting that whaling produced a lot of wealth.

How was whale meat eaten in those days? Mostly, it was processed into *tare* for eating. *Tare* is sliced lean meat of the whale soaked in soy sauce and dried, which withstood long storage. Popular ways of eating *tare* included grilling lightly or desalting and putting into *miso* and other soups as solid ingredients.

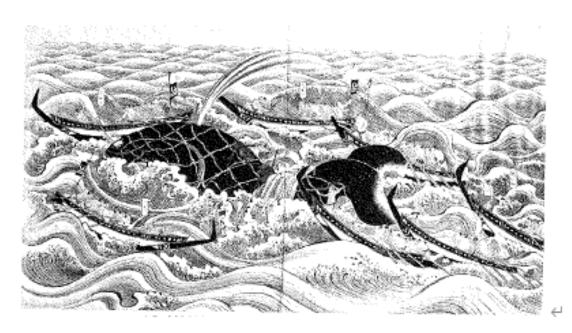
One famous food book of the Edo period is *Honcho Shokkan*, literally "Our Country's Food Reference (published in 1697). It mentions a variety of types of food and goes so far as to say, "What is free of poison, best for the human body and tasty? Whale."

Wakan Sansai Zue ("Illustrated Sino-Japanese Encyclopedia"), which is as famous as Honcho Shokkan, was an illustrated encyclopedia published around 1713. This book already contained a map of the Japanese archipelago, with indicators of whaling bases in various parts of the country. Whaling centers across the country are presented including

Yobuko in present day Saga Prefecture, Taiji in Wakayama Prefecture, Matsumae in Hokkaido and the Goto Islands in Nagasaki Prefecture. Grilled whale is eaten in Matsumae, according to the book--apparently, whales were processed and prepared in various ways in different parts of the country.

Taisei Bukan, a book of heraldry published in 1789, contains a list of tributes from different *daimyo* feudal lords to the Shogun, which says that the lord of Kishu (Wakayama) domain presented the Shogun with whale every October. This means that successive Tokugawa Shoguns ate whale meat every year.

In the mid-Edo period, a book specialized in whales quite suited for connoisseurs came out: *Isanatori Ekotoba*, literally "An Illustrated Explanation of Whaling." The book describes how whales were hunted by Hirado Domain, in present Nagasaki Prefecture, written by a scholar of the Japanese classics, Oyamada Tomokiyo, and provides a valuable encyclopedia that covers topics ranging from how to catch whales, different species of whales, details on the processing of whales, such as how to dissect them, tools used for dissection and the names of different parts of whale anatomy.



Ikitsuki no Misaki Oki ni Sebikujira Hitomori Futamori Tsuki Shirushi Tatsuru no Zu (a Right Whale off Ikitsuki Point Harpooned and Marked) from Isanatori Ekotoba, depicting how a whaling group in those days caught a whale by using several boats to surround a whale.

It comes with a supplemental volume entitled *Geiniku Chomikata*, a specialized book on whale dishes, which is entirely devoted to how to eat whales.



The book explains how to prepare and cook virtually all, or 67, different parts of the whale including internal organs and skin (with different ways of cooking for different parts including the head skin and side skin in addition to the black skin), breasts, uterus, eyeballs and penis, not to mention red meat and tail meat. Surprisingly, it even covers how to cook the lungs.

I will give a further description about *Geiniku Chomikata* later, but, according to author Oyamada Tomokiyo, who fully tasted every part of the whale

body, the most delicious thing is sashimi from the tail meat. It is quite understandable to me. Tail meat was the part that people longed for since the Edo period.

All in all, the fact that such a variety of literature came into being ranging from whaling to how to cook whales in the mid- to late-Edo period in this way suggests that whale eating had already spread among the general public and a considerable number of whales had been caught as well.

Apparently, whales inhabited the sea in appreciable numbers and frequently came into Edo Bay. Incidentally, a whale was seen off the coast of Shinagawa in 1798 (10th year of the Kansei era), which attracted a lot of visitors. That whale was said to have been a blue whale, the biggest of the whale species, and was referred to as the Whale of Kansei, and ranked with the Arabian Camels of Bunsei and the Elephant of Kyoho, collectively the Three Rare Animals that created a sensation in Edo. The cranial bones of this whale were interred in Kagata Shrine (in the present Higashi Shinagawa, Shinagawa City, Tokyo), which still maintains the whale mound from those days.

The U.S. demanded the opening of a port for whale oil

In June 1853 at the end of the Edo period, an American Naval officer, Matthew Perry, led

the East India Squadron to Uraga and demanded that trade to the U.S. be opened. In those days, American whalers often came to catch whales off the Sanriku coast, Hakodate coast and Izu Peninsula and the main purpose of demanding the opening of ports was to build supply bases (for water, food, firewood, etc.) intended for whalers.



Shinagawa Oki no Kujira Takanawa yori Miru Zu (Whale in the Bay at Shinagawa as Seen from Takanawa), Katsukawa Shuntei (owned by Shinagawa Historical Museum) c. 1820.

In the U.S. around that time, a major whaling industry had arisen, mainly in Boston, and greatly expanded. The purpose of their whaling, unlike how the Japanese whaled for food, was only to obtain fat for use as fuel for candles and lamps. To describe the large scale of American whaling in those days, as of 1845, they had as many as 659 whalers, which they used to go all over the world including the Atlantic Ocean, Indian Ocean and Pacific Ocean to hunt whales.

In particular, the numbers of sperm whales and right whales caught were quite large and, according to A. Starbuck's *History of the American Whale Fishery* (1878), 225,521 sperm whales and 193,522 right whales were caught in a 72 year period, from 1804 to 1876.

Quite bluntly, these are huge numbers. Whales off the whaling base of Boston were caught almost to the last and that is why the Americans expanded their whaling grounds to all over the planet. Its impact reached Japanese coastal waters and right whales, about 10,000 of which had assumedly existed, is said to have sharply decreased to about 1,000 because American whalers caught too many of them off the coast of Japan. In those days, not only

the U.S. but also the U.K. and France were actively catching whales.

The Americans, unlike the Japanese, as mentioned earlier, were whaling just for obtaining oil for use as lamp oil and machine oil.

When an American whaler caught a whale, how was it handled? First, the whale was dissected on the side of the ship right away and the skin with thick blubber was removed, which was put into wooden barrels to bring home. The remaining part of the whale meat, bones and internal organs were all dumped into the sea.

In this way, there is a stark difference in attitudes to whales of Americans and the British, who were killing large numbers of whales just to obtain blubber, which accounted for only 1/10 of the weight of massive whales, and discarding everything but the oil, and the Japanese sentiment toward whales. This should be recognized.

In 1859, oil was struck in Pennsylvania, USA. This great discovery led to America's first energy revolution. An oil rush eventually began, and America's whaling rapidly declined. Eventually, U.S. withdrew from commercial whaling in 1972.

Then, in an about-face, Americans took an anti-whaling position and started saying things such as "Whaling nations are barbarians" and "It's cruel to whales." If this is not conceited logic, what is it?

And for all that, people are still whaling in some parts of the U.S., which is dumbfounding. I will detail this later.

Key role played by whales in postwar reconstruction

In this way, the U.S. and Europe organized large fleets to hunt whales in Japanese coastal waters and caught large numbers of whales, which rendered Japanese traditional whaling by hand-harpooning totally unable to compete.

Accordingly, in the mid-Meiji period, Japan learned from Norway and introduced a modern whaling technique of firing guns to catch whales.

As time went by, through the Taisho to the Showa era, Japan entered the time of the Pacific

War. In those days, Japan was short of food and everybody was poor. Therefore, without knowing what else to do, people caught whales in Japanese coastal waters even during wartime.

It was a time when food shortages were so severe that the Japanese could not take in sufficient animal protein without consuming whale meat.

In the end, Japan was defeated. The Japanese, who were suffering from a scarcity of food, were saved by whales.

In Japan in those days, dairy farming was yet to be developed and neither cattle nor swine were raised in large numbers. Chickens were not the broilers like we have today and limited to those kept in farmers' gardens

After all, marine products were just about the only source of animal protein but fish alone were not enough to fill the stomach of the nearly 100 million citizens. With whales, however, just one could provide a large amount of meat. In addition, whale meat is, above all, rich in nutrients, which will be detailed in Chapter V--on the amazing potential of whales--and gave great help to the postwar Japanese people by vitalizing its eaters.

During the postwar period, around 1947 to 1948, whale meat is said to have accounted for about 46 to 47% of the total meat supply per citizen.

The central role of whale meat grew more pronounced and, if limited to meat such as beef, pork and chicken, from 1957 to 1962, when the quantity of catches peaked, the Japanese depended as much as over 70% of their animal protein on whale meat.

Around 1957 coincides with the time I entered junior high school. In those days, even greengroceries in the streets offered whale meat, wrapped in newspaper and put in orange and apple crates, for sale by weight. This shows how abundant whale meat was in the streets back then.

If no whale meat had been available in those days, what would have become of the Japanese? The lack of protein and energy would have reduced vitality and everybody would have become skinny and physically unfit for work. Imagine this: Of the 100 grams of meat taken in by the Japanese in those days, if 70 grams had been lost, their physical

strength would have doubtlessly declined.

In fact, the background of the wonderous postwar recovery of Japan is very closely linked with the Japanese consumption of whales.

When the war ended in 1945, Japan was a wide stretch of burned-out ruins. In particular, metropolitan Tokyo and Osaka, a major commercial city, were reduced to ashes.

Amazingly, however, photos of Ginza around 1948 show big flashing neon lights. Shortly afterward, the Yamanote Line was restored and most city functions of Tokyo recovered. It is said that, as early as in 1955, Tokyo joined the club of the world's five major cities along with Paris, London, Rome and New York. Praised by U.S. Ambassador to Japan Edwin Reischauer, Japan achieved an astounding recovery in all aspects including politics, economy, science, culture and education in just a little more than 10 years after defeat.

I believe that what was essentially behind the marvelous energy and vitality of the Japanese and their characteristic willingness to make an earnest effort even while living a rugged life is the power of whales.

A key role was literally played by whales in postwar reconstruction.

"Whaling group": an exceptional big industry

Why have whales taken root this deeply in the lives of the Japanese? The biggest reason lies in geographical conditions. Japan, an island country, is surrounded by the sea, where fish that whales eat school together, which are followed by whales reaching Japanese coastal waters. In addition, whales that stray or are strand into bays due to marine currents could also be used as food. Anyway, many whales used to be caught in coastal waters. The Pacific seaboard, in particular, provides a good fishery with a warm current called the Kuroshio, flowing south to north and a cold current called Oyashio flowing north to south. The two ocean currents carry large schools of small fish and whales chase after them to reach Japanese coastal waters. That is why the Japanese Pacific coast is one of the most whale-abundant areas in the world.

Tarukaisen, which were in service on the Pacific run in the Edo period, took a route from Osaka to Edo via Mikawa and could travel very fast. It was because the ships were carried

by the Kuroshio and the so-called "Kuroshiogawa," literally meaning "Kuroshio River" to which the current was likened, made the fast sailing possible. Whales followed the same course.

The same can be said of the Sea of Japan. The warm current south to north and the cold current north to south meet to bring abundance fish, attracting many whales.

In ancient times, people mostly caught whales that were carried by those currents to the coast. However, once they learned how they could obtain vitality from whales and how delicious they were, food practices related to whales gradually developed and demand further increased. To meet the demand, people subsequently directed attention to whales swimming off shore, rather than depending on whales that drifted ashore, and gradually came to hunt whales in an organized manner. Some old records show that, at the end of the Muromachi period, small-scale organized whaling was carried out in the Tokai area including Owari (western Aichi Prefecture), Mikawa (eastern Aichi Prefecture) and Ise (Mie Prefecture). In this region, coastal whales such as right whales and gray whales swam in large numbers, which people caught, and whaling gradually grew in scale.

In the Edo period, large whaling groups were finally formed to actively hunt whales. Whaling groups increasingly became larger in scale growing into massive organizations.

The whaling group said to be the oldest started whaling in present day Taiji, Wakayama Prefecture, in 1606, where Wada Yorimoto, a descendent of Wada Yoshimori, a meritorious retainer of Minamoto no Yoritomo, hand-harpooned whales (organizations like this group were called *sashite gumi*, or group of harpooners). This method was called *tsukitori-ho*. In the same period, a whaling organization was formed in Katsuyama Awa (present day Chiba Prefecture) by the Daigo clan. These *sashite gumi* developed to organize "whaling groups."

The Wada group of Taiji invented an even more innovative whaling method in the period of Wada Soemon (later called Kakuemon), a grandson of Yorimoto, and developed into a still larger group. The method was called *amitori shiki*, which uses enormous nets (made of strong hemp) to catch whales. This not only kept whales from escaping but also prevented them from sinking and improved the efficiency of whaling by a degree that can be described as revolutionary.

Before long, this whaling technique spread to whaling groups nationwide and whaling groups grew into large organizations. Whaling by these large organizations took place in areas such as Taiji, Koza and Miwasaki of Kishu, Tsuro, Ukitsu and Kubotsu of Tosa (present day Kochi Prefecture), Senzaki and Kayoi of Nagato (part of present day Yamaguchi Prefecture), Ogawashima, Hirado, Arikawa, Ukujima and Ikitsukishima of Hizen (present day Nagasaki and Saga Prefectures), Katsumoto of Iki and Waniura of Tsushima.

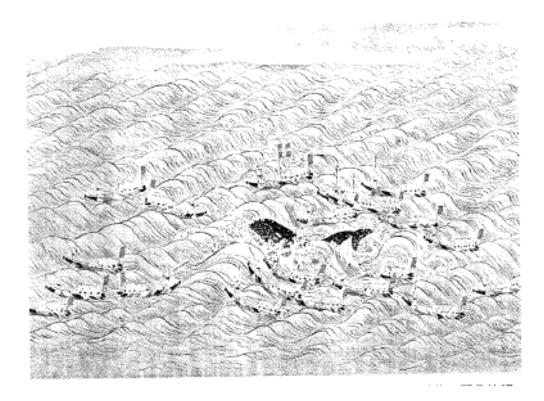
The size of staff that formed a whaling group greatly varied. A middle-ranking group typically consisted of about 700 people including 20 in management and administration, 500 in charge of whaling at sea and 200 in charge of works on land (dissectors, processors, carrying vessel carpenters, etc.). Some were large enough to include about 3,000 people such as that of Taiji.

They were mammoth enterprises for those days and made an exceptionally large industry. No other industries were as large as this at that time and whaling is assumed to be one of the biggest industrial organizations in Japan, along with mass mining of gold, silver and copper. In the *amitori shiki* method employed in Taiji, huge nets of about the size of an elementary schoolyard were made, which were brought offshore in boats to be spread, and a whale was driven into them, harpooned to be weakened and dragged ashore by boats.

This technique of using nets to hunt whales is unique to Japan, from a historic perspective, to be found nowhere else in the world.

Now, how were whales caught specifically?

First, those stationed at a point commanding a view of the sea to keep watch for whales swimming closer called *yamamikata* would alert others to the discovery of one or more whales. They light a signal fire and flag the location and the number of whales. Based on that information, *amibune*, or netting boats, spread nets in the open sea. Then, *sekobune*, literally meaning "beater boats," get behind a whale to drive it toward the nets. *Sekobune* join forces to drive the whale into the nets to slow it down, when the crew called *hasashi* throw hand harpoons in rapid succession. The harpoons have a rope attached to the near end connected to *sekobune* and the whale trying to escape drags the *sekobune* with it. As the whale exhausts itself, a sharp sword is used to finish it off.



Taijiura Hogei Emaki (Whaling at Taijiura a Series of Scrolls) depicting whaling off the shore of Taiji) Vol. 2 (Source: Kumano Taijiura Hogeishi Bessatsu (Appendix to A History of Whaling at Taijiura, Kumano) Vol. 2, originally owned by Mitsuyo Wada, Heibonsha edition).

On shore, people assigned to land the whale when it arrives are waiting. There are also people in charge of different tasks such as dissecting the whale, dividing the meat to various parts, boiling the meat to extract fat, corning the meat and carrying it into the storehouse. The whole process involved a huge number of people.

This being the case, three or four whales found at one time would put the entire group into a state of chaos.

Whales inseparable from rice

After catching a whale, a peculiar wisdom was utilized.

Whale meant was first corned to prevent it from spoiling. However, simply covering whale meat with salt would dehydrate the meat to make it dry. What did the Japanese use

to prevent this? Rice straw.

Whales caught at sea can be eaten right away in the local area but, for transporting them to densely-populated areas, a method called *aramaki* was devised. If corned meat is wrapped in rice straw (a coarse straw mat), the straw mat preserves moderate moisture, which allows the whale meat to be delivered to the destination while a moderate amount of moisture is maintained. The name *aramaki zake* for salted salmon, which is now a standard New Year gift item, derives from the method of whale meat preservation. Wrapping corned whale meat in a rice straw mat and pouring brine onto it to moisturize in its entirety before storage allowed the meat to be preserved for months. This, in the first place, is a benefit of the rice growing culture in Japan. Therefore, the Japanese, whales and rice are an inseparable combination from the perspective of food culture as well.

What is more, whale meat-eating has been closely linked with the rice diet. With rice, salty food such as *miso* or soy sauce marinades go well. Thinking in different terms, *miso* or soy sauce-marinated whale meat eaten together with bread does not seem so delicious and eating whale meat together with buckwheat or wheat noodles does not sound very tasty either. Rice goes best with whale meat.

Rice almost always comes with *miso* soup and, in the past, *kujirajiru* (whale soup) containing whale blubber was popular nationwide. This *kujirajiru* and rice are a match made in heaven.

This is another reason why Japanese cuisine can be said to have provided a basis for the prosperity of a whale meat-eating culture.

There is a great variety of recipes for whale meat. It can be eaten raw as sashimi, boiled in pots as sukiyaki, cooked with Japanese mustard greens as *harihari-nabe*, or as *kujirajiru* seasoned with *miso*.

In the first place, the reason for the large number of *nabe*, or hot pot, dishes in Japanese cuisine is that its origin is in open hearths. Above a hearth, a pothook was dangled from the ceiling to hang the *nabe*, which was eaten by family members together. It facilitated family unity and the pleasures of a happy home.

Why did *nabe* dishes develop in Japan? Because the Japanese boil their food in order to eat it. First of all, rice, the principal food, is boiled for eating; the Japanese are a graineating people.

For the rest of the world, people in most other countries, including the U.S. and European, African and South American countries, originally ate flour. In China, people often eat buns and noodles. Rice is popularly eaten only in the southern part of China, from Henan Province to Yunnan Province and, in other areas, people make wheat flour noodles. People in the area around Beijing, Shanxi Province and Guizhou Province also eat noodles--the Chinese can be regarded as a mostly flour-eating people.

Koreans, who have recently come to eat rice, originally ate a lot of flour as well.

Indian naan is also made of flour. In areas such as Afghanistan, Iran, Turkey and Iraq, they usually mix and knead flour and water and spread out the mixture flat to be baked for eating.

In European countries, including the U.K. and France, people eat bread, which is made of flour. Africans, who bake their principal food to get rid of the water content, are floureating peoples.

Unlike people in other countries, the Japanese boil their principal food before eating, which encouraged the development of pots. There were already pots in the Nara period but cookware like frying pans came to be used at a much later time. Aristocrats in those days ate whale meat mainly by boiling in pots. Since the Nara period, whales have been eaten mainly as *nabe* dishes.

Tastiness enhanced sevenfold by glutamic acid and inosinic acid

Above all, Japan is an island country and copious amounts of salt could be obtained. As the Japanese have made salt since the Jomon period and salt was available in abundance, a method of preserving whale meat in large quantities was developed. Covering with salt could make anything resistant to decay. In addition, salt has produced soy sauce and also *miso*. Food preserved in them lasted well for a long time and, more than anything, became much tastier.

These methods of preservation may be one factor that brought the Japanese closer to whales.

From the perspective of fermentology and food culture, which are my specialties, what goes best with soy sauce and *miso* to make good recipes is whale meat.

The savory flavor of soy sauce and *miso* comes from the *umami* of glutamic acid. Soy sauce and *miso* taste good because of a high amount of glutamic acid that constitutes soy protein is released during fermentation and the Japanese can be said to have a palate that senses the *umami* of glutamic acid.

Meanwhile, the *umami* of whale meat comes from inosinic acid. Whale meat, along with animal meat and seafood contain a large amount of inosinic acid.

Combining the glutamic acid of soy sauce and inosinic acid of whale meat multiplies the *umami* as much as sevenfold. That is, 1 for glutamic acid plus 1 for inosinic acid do not make 2 but 7, thanks to the multiplier effect of taste produced. That shows how amazingly inosinic acid enhances the flavor of glutamic acid. That is why simply sprinkling soy sauce on dried bonito flakes makes them so much tastier.

In any case, the Japanese have eaten whale meat flavored with soy sauce or *miso* from ancient times, which has made the Japanese a people who know the "tastiness" of whale meat.

Gratitude to whales expressed by wasting nothing

The Japanese have eaten all of the meat and internal organs of whales and even made use of the bones and fins attached to the meat. They naturally utilized the oil as well. Without whale oil, Edo nights would have been very dark. The Japanese have been supported by whales also in this respect as well as in their diet.

In addition, whale teeth and bones were made into various things including sword guards, carved toggles, ornaments such as *kanzashi* hairpins and combs, chopsticks, earpicks and fish hooks. The greatest work of all, however, is a bridge made of whale bones: Setsugeikyo at a temple called Zuikoji in Higashiyodogawa Ward, Osaka City. The bridge was built and rebuilt, from the Edo period to the present day, using the bones of whales

caught in Taiji, Wakayama brought to Osaka.



Setsugeikyo bridge at Zuikoji, Osaka City: Rebuilt to be the 6th generation in 2007.

This all started in 1756, when people in Taiji suffering from poor catches asked the chief priest of Zuikoji Temple, who happened to be on a visit to Taiji at that time, to pray for good catches. Then, whales came back to the Taiji coastal seas. This prompted the whaling group of Taiji to bring whale bones all the way to the temple for replacing the bridge. They dug a huge hole in front of the temple to bury the whale bones for about two years. This degreased the bones, which are dug up to build a bridge.

A bridge rebuilding ceremony was held in 2007, which I attended. Not one other country in the world does anything like this. In addition to temples, Kaido Shrine in Arikawa, Goto Islands, Nagasaki Prefecture, for example, maintains an enormous *torii* gate made of whale bones to this day.

Another application of whale bones was crushing them into dust and using it as calcium fertilizer for agriculture. Scattering this dust is said to have been very effective and brought good crops.

Baleen also had many applications such as musical instruments. Baleen stretched inside drums greatly improved the sound. Mechanical dolls and *joruri* puppet theater would have been impossible without baleen.

One less-known application is drugs. Whales provided ingredients of large amounts of drugs. Liver oil was made from the liver and hormone drugs from the pancreas and pituitary. Sperm whales are known to provide high-quality whale oil and the intestines produce ambergris, which is used as perfume, on rare occasions.

In this way, the Japanese used the entire whale body including bones and baleen for food, agricultural, industrial and craftwork purposes. Quite unlike the Americans and the British in the past, who only took whale oil and baleen and threw away the rest, the Japanese thought that, once a whale was caught, they should waste nothing and allow it to depart in peace.

Of all countries, memorial services for whales are held only in Japan

As described above, the Japanese utilized the whole whale as a valuable resource and were thoroughly grateful to whales. I believe that no other people have treated whales with as much mercy, respect and reverence as the Japanese.

It is true that catching, killing and eating whales is painful and this very thought is the reason why Japanese ask for the whales' forgiveness and express their profound gratitude at the same time. Therefore, bases for whaling often have a grave mound or tumulus for whales. In some areas, people have given a posthumous name to each one of the whales caught, made a memorial tablet and erected a tower for the repose of their souls to honor them. These things are seen in no other country but Japan.

Sometimes female whales were found to be pregnant. On the coast of Kishu and in some other areas, when a female whale that happened to be caught was found with a fetus, it was not eaten. The fetus was wrapped in the fisherman's wife's waistcloth and carefully brought to land, where it was buried at a temple with solemnity and due respect.

In Yobuko Town, Karatsu City, Saga Prefecture, there are *geigei kuyoto* (tower for the repose of souls of whales) and *geigei senbon kuyoto* (tower for the repose of souls of

numerous whales). *Geigei* is originally written in two kanji 鯨鯢, the first one for male whales and the second for female whales as well as whale cubs. Accordingly, these towers honor all whales, including fathers, mothers and children. Whenever I visit Yobuko, I go to a temple called Ryushoin, which has both *geigei kuyoto* and *geigei senbon kuyoto* to offer incense.



Geigei Kakocho (Koganji Temple, Nagato City, Yamaguchi Prefecture)



Memorial tablets for whales (Koganji Temple / Nagato City, Yamaguchi Prefecture)

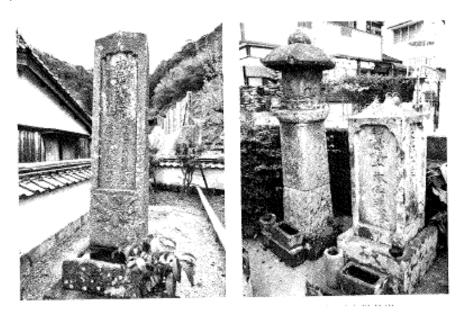
There are also graves for whale fetuses in various parts of Japan. When I go to the Kumano coast of Mie Prefecture, I find many memorial tablets for baby whales in temples in the area.

The honoring of whale memorials like this began around 1700, when whaling groups were formed and started to develop.

There is a tomb for whale fetuses at Koganji Temple in Kayoi, Nagato City, Yamaguchi Prefecture, which faces toward the sea. I hear that this is out of the people's wish to let fetuses, which never had a chance to see the sea in this world, see it by orienting the tomb toward the sea as the least they can do.

Based on the explanation given by Nagato City, the inscription on the tomb for whales means:

"Although your life as a whale was terminated with the mother's life, it was not our intention to take your life. We'd rather have freed you into the ocean, but you'd not be able to survive on your own in the harsh environment. Therefore, we pray that you receive the virtue of impermanence like us human beings." (Comment by Rev. Shoyo Tokujo)



Geigei kuyoto and geigei senbon kuyoto(Ryushoin Temple / Yobuko Town, Karatsu City, Saga Prefecture)

Grave for whales (Seigetsuan Temple / Nagato City, Yamaguchi Prefecture)

The *Geigei Kakocho* (Register of Dead Whales) owned by this Koganji Temple contains a record of mother and child whales caught during a period of about 120 years, from 1719 to 1837, including their posthumous Buddhist names given, species, areas where they were caught and the names of the whaling groups that caught them in chronological order. Each and every whale was given a proper posthumous name such as Shoyo Geigaku and a register was made based on this information. Livestock such as cattle and swine were not given this treatment--apparently only whales were regarded equal to human beings.

At one time, I told this story to foreigners, especially people who were anti-whaling. Their reaction was generally cool, "Isn't it just that the Japanese are sentimental?" They were hardly surprised or impressed. There is probably a difference in religious perspective involved but I believe that the feeling of veneration toward whales and the sense of gratitude to living things represent a unique view of life and death shared by the Japanese.

In addition to this, the Japanese show their reverence to whales by the many whale-related shrines and festivals that exist throughout the country. Among the festivals that revere whales as deities, Nagasaki Kunchi of Suwa Shrine, Nagasaki has a large float modeled after a whale that is mounted with a decorative halberd to represent how traditional whaling was carried out in the Edo period and a "spouting whale" performance is given as a religious offering.

On the coast of Ise Bay in Mie Prefecture, several shrines dedicate fancy whaling ship floats and whale-shaped paper decorations to shrines.

There are also other whale festivals all over Japan and are depicted in various writings and paintings.

While memorial services are held for whales at temples, festivals are held at shrines in appreciation of whales. In Japan, a considerable number of Shinto as well as Buddhist events for honoring whales are held.

"Itadakimasu": a phrase unique to Japan

Why have the Japanese appreciated whales to this extent and set such a high value on whales? Not many other people have this much feelings toward living things that they

use as food.

To begin with, human beings only eat living things. Nobody eats stones or dirt. Vegetables are also living things. Rice and fish are living things. That is, human beings survive on forms of life.

In fact, there is one food that does not have life: salt. Sugar is made from sugar cane, a plant, and had life, which is not the case with salt.

In other words, everything eaten by human beings to survive has life, except for salt. That is the starting point of eating. Just as human beings do, whales eat fish. Fish that are eaten by whales also eat smaller fish. Based on such an ecosystem and food chain, lives on earth are maintained and controlled.

At the top of the ecosystem are human beings, which I think gives human beings an important mission. Overseen by human beings with their wisdom, human beings are the only living things capable of giving consideration to the balance of the natural world. We must carry out human activities in accordance with that sense of mission.

That is exactly why we must value the lives that dwell in food and must treat them with respect, where gratitude exists. The phrase *itadakimasu*, which Japanese people often say before meals, means that "I am taking your life with gratitude and respect." In fact, a phrase with a similar meaning to *itadakimasu* exists in nowhere else but Japan.

Christians thank God before meals but it is not gratitude to living things or to the food itself.

Muslims also pray to thank the Allah before eating but it is to show gratitude for having food to eat.

A phrase *itadakimasu* to show gratitude and respect for the life about to be eaten only exists among the Japanese.

Unfortunately, however, present-day Japanese have forgotten the origin of *itadakimasu*.

This is symbolized by the fact that in Japan, which is said to have a food self-sufficiency

rate of as low as 41% (meaning that about 60% of what the Japanese eat depends on foreign countries), the annual amount of leftover food is approximately 20 million tons.

Where does such leftover food come from? First, there are agricultural surpluses. If a large amount of cabbage is harvested, for example, some of it is disposed of, which is called production adjustment, because bringing all of it to market would cause a sharp decline in the price. There are also leftovers from school meals and households. What accounts for the most part of waste are products on the market past their use-by date. Food that is still good to eat is disposed of only because it is past its use-by date.

The annual amount of unsold food products including those past their sell-by dates or returns is approximately 600,000 tons. By simple arithmetic, assuming that an adult eats 500 grams of food a day, it translates to a bewildering amount of food worth--as much as 3 million servings are dumped every day.

In impoverished countries in Africa and Asia, thousands of children are dying each day due to starvation, while the Japanese are throwing away 3 million servings of food every day. If we continue to do such a thing, we will receive Heaven's punishment. Present-day Japanese have lost a sense of gratitude expressed in *itadakimasu* to show respect for the food and the life in it. Present day Japanese fail to value all food, not to mention whales. The Japanese economy has become way too developed, resulting in the creation of a society of material consumption. We may now be paying the price for parroting the phrase "consumption is a virtue".

There is a lesson taught to children in the Edo period.

"Who gave you what you are eating now? If you cannot thank the person who gave you the food, do not take up your chopsticks.

What is the food you are eating now? It all comes from living things. If you cannot thank the living things, you are not allowed to take up your chopsticks.

Who grew and caught the food you are eating now? Farmers and fishermen. Therefore, if you cannot sincerely thank them, you cannot take your chopsticks.

The precious work of people and sacrifice of valuable lives is in the food in front of you. Therefore, if you leave one grain or one drop uneaten, you are not permitted to take up your chopsticks from the start."

That is, taking up chopsticks means to have a sense of respect and reverence for food.

In the past, these things were properly taught.

In any case, the Japanese of the past, who used to value all the food and drink they took, consumed whales as food with respect and did not throw away one drop of blood. This thinking is was reflected in what people used to often say: "A grain of rice is worth a drop of blood."

Mongolian nomads do not inflict pain on sheep

I have said that not many peoples have this much respect for living things eaten as food but Mongolian nomads actually have a similar sense of reverence, which is shown in how they eat sheep.

I have traveled in Mongolia many times to obtain information and, when I saw Mongolians eat sheep, I realized that their feelings are exactly the same as those of the Japanese toward whales. It made me go so far as to think that, in one sense, it might be a sentiment common to Mongol that is not shared by the Anglo-Saxon-Germanic peoples. The more sheep I eat in Mongolia, the prouder I feel as a fellow Mongol.

When they pick a sheep to eat, Mongolian nomads go near to the sheep and lay it down while petting it. The moment it lies down, they use a large Mongolian sword to slash its throat, put the hand in through the opening to take out its heart. The blood of the sheep immediately gushes out, not a drop of which is wasted but put into the container prepared at the side. It may seem cruel at first glance but the sheep feels no pain. It dies before it realizes what even happened. In a sense, no other animal used for food may be as happy as sheep in Mongolia.

The blood, of course, is a valuable food and they usually make it into soup to eat. Boiling this blood down causes the protein to harden to become something like spongy tofu, which is really delicious.

Then, the hair is stripped, which is naturally used as valuable wool. The skin is tanned to use as a material of mats, bags and tent roofs. The bones, after collecting cerebrospinal fluid, are crushed and returned to the Mongolian soil. Then, the calcium and potassium from the bones turn into a nutritious fertilizer to grow grass, which in turn feeds sheep.

They naturally eat the meat and all of the internal organs as well. Fat is used as fuel in addition to as food. The head, of course, is cracked open for the brain tissue and cerebrospinal fluid. In this way, the entire sheep is used and nothing is thrown away. This is exactly the same as how the Japanese have used whales from old times.

What is common to the Mongolians and the Japanese may be the mentality of giving thought to the value of life and a sense of gratitude and preciousness. This is known in a physical sense. This is because of that thought that no animal is used in a wasteful manner. While I watched a sheep being skillfully dressed in Mongolia, I thought about Japanese whaling.

As described later, in Japanese whaling, people came up with a strategy of aiming at the vitals of whales in order to minimize suffering. Landed whales were handled carefully to avoid causing injury. Behind the hunt was a wish to relieve the whales from suffering as quickly as possible.

Gratitude forgotten in the modern era

In this way, the Japanese have eaten whales while appreciating them and honored them by not wasting anything. Without whales as food, the Japanese would have been in a terrible situation.

However, various whaling countries, including Japan, have become increasingly commercialized with the introduction of large-scale whaling by using modern whaling techniques. Modern whaling in Japan started in 1899, when cannons and harpoons for whaling were bought from Norway. Whaling ships were built and Nihon Enyo Gyogyo K.K. a modern whaling company, was established at the same time. These developments made it possible to catch far larger numbers of whales than those caught by the conventional *amitori shiki*, and safely and reliably at that, which made the biggest change in the history of Japanese whaling.

While whaling expertise was introduced from Norway at first, the Japanese, living up to their characteristics as a maritime people, came to independently establish modern whaling techniques in the meantime and finally pushed their way up to be one of the world's leading whaling bodies. More than anything, modern whaling made it possible to

catch much more whales safely and reliably as compared with the conventional *amitori* shiki and even the Japanese, who had treated whales with respect until then, significantly changed their perspective from whales as living things and objects of reverence to commodities that produce money.

In time, whaling came to take place in the oceans around the world in a competitive manner and the population of whales sharply decreased. There was a metaphor that time to describe the era: the Whaling Olympics. It was used by the mass media to goad each whaling country to catch as many whales as possible within each year.

We must reflect seriously on overhunting of whales using modern, scientific whaling. The historical fact that we once drove whales to the point of extinction as a result of competitive whaling, based on body counts, was quite regrettable.

We do have to reflect on this and face whales as living things, regaining a sense of reverence and gratitude.

That makes it all the more important to find out how manty whales can be caught under legal Whale Research Program (research whaling), under the International Convention for the Regulation of Whaling, that is sustainable. Rather than using results from the Whale Research Program to find the maximum number of whales that can be caught, we should make maximum effective use of whales with the least number of whales caught. I think that the future in whaling is hunting and not overhunting.

This chapter discussed how the Japanese historically valued whales and treated whales with respect. Foreigners, especially anti-whaling people, say that whale meat eating by the Japanese is needless slaughter and barbaric but the Japanese people's feelings toward whales are in a different category than foreigners. It may be impossible to ask people who say those things to understand how the Japanese have long thought of whales but I would like at least the Japanese to have an understanding of this ethno-cultural trait.

I always ask anti-whaling activists to seriously consider the importance of the lives of the cattle they eat. Is there any difference in the value of life between cattle and whales? This line of thinking should not only apply to cattle but to other wild animals as well. Australians, who strongly oppose whaling, kill wild camels and kangaroos and butcher some of them but can they explain why camels and kangaroos are hunted but not whales?

I would like anti-whaling people to give a serious thought again to "what it means for human beings to eat living things" while considering the basis and origin of human life.