

The Shared Underwater Cultural Heritage of Japan and the Netherlands: the Kanrin-maru

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Abstract

In 2014, a non-exhaustive inventory of the shared cultural heritage of the Netherlands and Japan was made by the Dutch government in the context of what the Netherlands calls its 'Shared Cultural Heritage Policy'. This inventory resulted in an overview of shared cultural heritage grouped into the categories 'maritime heritage', 'built heritage', 'museum collections' and 'archives'. Spread over seven different themes and linking to an equal number of time periods, the inventory provided insights into where opportunities for cultural collaboration would lie. One of the opportunities of collaboration found revolved around the potentially preserved Dutch shipwrecks in Japanese waters. This sparked the incentive to propose a project-based partnership through a collaborative research project between the Cultural Heritage Agency of the Netherlands and Tokyo University of Marine Science and Technology, to locate and research the shipwreck of the Kanrin-maru. The project, which commenced in 2017, includes the involvement of Dutch and Japanese researchers to facilitate the transfer of knowledge, as well as the involvement of trainees in order to ensure capacity building. The Kanrin-maru was a warship specially built in the Netherlands in 1856 on order of the Tokugawa Shogunate Navy. It was brought to Japan in 1857, but in 1869 during the Boshin War between Shogunate and Imperial forces it was taken over by the Imperial Japanese Navy, and remained in the service of the Imperial Meiji government until it foundered in the Tsugaru Strait in 1871. Although an anchor thought to belong to the Kanrin-maru was found near where it was said to have foundered, no wreck has been found to date. In November 2017, fieldwork in Hokkaido, including material analysis upon its anchor, as well as library or archival research is to be done by Dutch and Japanese archaeologists.

Key words: UCH, Japan, Netherlands,

Introduction

Japan and the Netherlands, two nations sharing a history with over four centuries of relations, have in recent years reinvigorated their cultural bonds by promoting collaboration in topics of shared cultural heritage. While this has already inspired a broad variety of forms of cultural collaboration such as in the Arts and Crafts¹, this also led to collaboration in the specific field of maritime heritage and underwater cultural heritage management. For in 2014, the Cultural Heritage Agency of the Netherlands (RCE)² and the Japanese Agency for Cultural Affairs together with the Kyushu National Museum took the lead in this particular field of collaboration. The main mutual benefit of their collaboration is that it could help both nations to familiarize with the implications of ratifying the Convention on the Protection of the Underwater Cultural Heritage. At the same time, both nations have grabbed this opportunity to aim for sustainable preservation of what is considered their shared underwater cultural heritage.

This inspired the current authors to further the collaboration in the field of shared underwater cultural heritage between the Netherlands and Japan by proposing the formation a project-based partnership between the RCE and Tokyo University of Marine Science and Technology, a member institution of the UNESCO Underwater Archaeology UNITWIN Network and Japan's only university with both graduate and undergraduate courses in nautical archaeology. An official agreement of this partnership is in the making. With this paper, the current authors wish to promote the potential of this project and the shared cultural heritage it represents.

Main aims of the project are knowledge exchange and capacity building by involving experts and trainees. It was decided that the main subject of research and training would revolve around locating, and if found, researching the wreck of the Kanrin-maru (咸臨丸): a Dutch-built screw-propelled steam schooner that supposedly wrecked near Kikonai Municipality in Hokkaido in 1871. Since the story surrounding the ship and its wrecking have become strongly rooted in the local community, and have also been promoted by the local government, efforts will be made throughout the project to involve the local community and government in order to facilitate a sustainable preservation of the wreck, its story and place within the local community.

Since the wreck of the Kanrin-maru has not yet been located, a start was made in 2017 in order to assess whether locating the wreck is feasible. At the time of writing, the initial research is well underway and consists of desk research in both the Netherlands and Japan, as well as a survey in the field planned somewhere between September and December this year. Results of what has been gathered through desk research thus far will be discussed in this paper. The sections further below provide a historical background sketch, information on prior research, a general project definition with corresponding aims, objectives and research questions, and the preliminary results of the initial research. The paper ends with preliminary conclusions and a thought on the implications of these conclusions in regard to the continuation of the project.

Historical Background

From around 1639 to the year 1854, in a period now known as the sakokujidai³, Japan had practically kept its doors shut to all westerners but the Dutch. At the time, the Dutch were the only ones allowed to trade with Japan through the tiny artificial island called Dejima⁴ that lay in front

of Nagasaki. This centuries old privilege came to an end when in the years 1853-1854, steam warships of the United States Navy led by Commodore Perry (1794-1858) entered Tokyo Bay and forced Japan to end its isolation policy. Fearing a foreign invasion, the Tokugawa Shogunate hastily sought means to build a naval fleet. And for this, the Japanese turned to the Dutch (Kogure, 2008).

In order to jump-start this naval fleet, Japan ordered from the Dutch arms and warships among other things, as well as instructors who were to provide education and training in virtually all matters associated with the navy (Chijs, 1867). Besides seeing direct economic benefits, the Dutch hoped this deal would also help them in trying to maintain their foothold in Japan in the midst of growing competition from other western nations (Kogure, 2008). Meanwhile, the other naval powers were also planning on catering Japan's need for a naval force. In an attempt to beat the competition, the Netherlands decided to grant the *Soembing*, a Dutch paddlewheel steam warship, in 1855 (Stapelkamp, 1999). Sent along with it was a first Marine Detachment of Dutch naval officers and sailors led by G.C.C. Pels Rijcken that was to educate and train the Japanese on their first western-built steam warship.

A year later in the Netherlands, construction commenced on the first warship for the shogun's navy. In 1857, the vessel originally named the *Japan* was launched and was brought to Nagasaki that same year. Upon arrival it was renamed to *Kanrin-maru* and taken into the service of the Shogunate Navy, becoming the first screw-driven steam warship of Japan. Together with the *Kanrin-maru*, the Dutch government sent a second Marine Detachment that was to replace the first which had remained there since 1855. The *Kanrin-maru* was used as a training

vessel and thus became instrumental in the founding years of the Japanese navy.

Six years after its introduction in the Japanese naval service, the Kanrin-maru followed in the wake of an American vessel called the Powhatan which had on board an embassy bound for the United States of America in order to ratify a new treaty between the USA and Japan. The vessel crossed the Pacific with the help of a number of American naval officers, including Captain John Mercer Brooke (1828-1906). To the Japanese navy, the crossing was an important show of skills as it was only seven years after Perry's steam-driven ships had entered Tokyo Bay. This now legendary voyage is still commemorated by Japan and the USA today, as it marks an important event in the relations between Japan and the US. What is more, for Japan it also marks as the second time in history that a Japanese vessel is known to have crossed the Pacific (Fig. 1).



Fig. 1: The Kanrin-maru. (Yokohama Archives of History)

In the years that followed, the Kanrin-maru remained mainly in use as a training vessel. When in the years 1868-1869 the Boshin war broke loose, which was a civil war between forces fighting for the shogunate and forces fighting for the restoration of the Emperor as the greatest in power, the Kanrin-maru was used as a military transport vessel in the fleet of the shogunate until it became battered in a storm and was subsequently overtaken by the imperial forces.

After the Boshin war had ended with the restoration to power of Emperor Meiji, the Kanrin-maru remained in the service of the Imperial Navy and was used as a passenger and transport ship. In 1871, it set sail towards Hokkaido. Its mission was to safely transport 400 civilians who were to immigrate into Hokkaido and to colonize it for cultivation. While traversing the Tsugaru Strait, the Kanrin-maru hit a reef off Kikonai Municipality where it began to make water. Almost all the passengers and all crewmembers managed to survive, but the vessel itself supposedly sank and was lost to the sea.

To this day no wreck has been found, although in 1984 a chance find was made when a fishing boat hauled up an anchor supposedly at a location near what is believed to be its wrecking site.

Today, the Kanrin-maru is commemorated through local annual festivities among other things and has clearly conquered a special place in the hearts and minds of the local community and government. This has been most notably achieved by the efforts of the Society of the Kanrin-maru Crew Descendants, who have been actively promoting this cultural heritage and the fascinating story that surrounds Japan's first screw-driven warship. Through this project, the parties involved can combine their strength to help maintain this valuable source of shared cultural heritage.

Prior Research

A chance find occurred in 1984, when an anchor was salvaged from a depth of 20 meters by a fishing vessel (Fig. 2). The exact location of the find is still unknown, but a local newspaper stated that it was situated 2 kilometers off the coast of Kikonai Municipality. Subsequently, the anchor was researched by an expert, who concluded it was highly likely though still not 100% certain that the anchor belonged to the Kanrin-maru.



Fig. 2: Anchor. (Kikonai Municipality)

Other prior researches consisting of desk works, as well as fieldworks, have been conducted at the presumed wrecking location before. Although some remains of ship equipment or shipbuilding materials were said to be recovered during those field researches, no definite wreck or potentially associated finds to the Kanrin-maru have been found yet. According to one Japanese underwater archeologist, all the remains of the Kanrin-maru have perhaps already been swept away by the strong currents of Tsugaru Strait.

Project Definition

As shortly explained in the introduction, the main aims of the project are to facilitate capacity building as well as knowledge exchange between the organizations and individuals involved about underwater cultural heritage management. With the Kanrin-maru as the research subject, the project also aims to come to a sustainable preservation of the remains of the Kanrin-maru, if found to be existent. Broader, over-arching aims are to raise awareness of the existence of underwater cultural heritage among an international public, and to further improve the bilateral relations between the Netherlands and Japan.

The main aims will be achieved through the following objectives: Capacity building through inviting maritime archaeologists and students to join in on the search and possible research of the Kanrin-maru; knowledge exchange by inviting underwater archaeologists and specialists in both Japan and the Netherlands to join the project, and to create an atmosphere for open discussions with experts and trainees alike. Sustainable preservation will be achieved not only through the two objectives shown above, but also through the involvement of the local source community and government to build sufficient support for future preservation.

The project is proposed to be conducted in the period between late 2017 and early 2018, encompassing desk research and interviewing informants aimed at gathering historical and contemporary data to establish an initial research area, as well as a field survey on land. Main research questions are as follows: could the wreck of the Kanrin-maru be located?; if so, what is its state of preservation?; and how can it be preserved for future generations to come?

Initial research

Research commenced in April 2017, and at the time of writing is still underway. The overall aim is to come to a thorough assessment in order to gauge the chances of finding the Kanrin-maru or related materials in a preserved state and to establish an initial research area required for the continuation of the project.

The methods used thus far comprised of desk research in the form of library and archival research, the results of which have in part been used to form the historical background sketched earlier above. Fieldwork is also part of the research schedule, and is due to take place somewhere in November 2017. It is planned to consist of conducting interviews with local informants such as the local community near the supposed wrecking site, as well as visiting and surveying the anchor site and wrecking site from land.

Library and archival research in the Netherlands mainly focuses on shining a light on the historical context in which the order, construction and eventual delivery of the Kanrin-maru took place. This includes but is not limited to gathering information on the construction of the ship itself, where it was made, by whom, what materials were used in its construction and where these materials came from, and what the ship's overall characteristics were including its quality in terms of materials and its sailing ability. On the other hand, library and archival research in Japan mainly focuses on the wreck of the Kanrin-maru in 1871. Indeed, relatively many studies about the Kanrin-maru have been conducted in Japan, but all of them are interested in its building or its first trans-Pacific voyage. No academic work upon its fate in 1871 has been conducted yet.

Preliminary Results

Desk research in the Netherlands

In 1853, Japan handed over their first request for warships and the like to Donker Curtius (1813-1879), contemporary *opperhoofd* or chief trader (1852-1855) of the Dutch trading post on Dejima. Among the vessels requested by Japan were a number of screw-propelled warships (Chijs, 1867). The Japanese had only just learned of the existence of steamships in 1849 through Dutch books (Arima, 1964), while Perry's impressive 'black ships' were the first real-life steamships appearing before Japanese eyes. Thus in terms of technology, the Japanese knew they fully depended on the knowledge of the Dutch about these type of ships. The Japanese therefore largely left it to the Dutch to decide which type of vessel would be sent first and what equipment it would have in terms of propellant (screw or paddlewheel), armament and other specifics (Chijs, 1867).

One of the earliest mentions of the first screw-propelled steam warship that was to be made for the shogun – and which turn out to be the Kanrinmaru – can be found in a report by contemporary Minister of Colonies, C.F. Pahud (1803-1873). In his report transcribed by Van der Chijs (1867: pp.136), he states that this vessel destined for Japan's navy had to be built in such a way that it could also serve in the Dutch navy in case the Japanese government would refuse the vessel for whatever reason. It was thought that such a ship could not be purchased, neither could it be constructed on the Navy's shipyards in the Netherlands nor in the Dutch Indies. Thus it was decided that the vessel had to be constructed on a private shipyard.

Apparently in order to meet these requirements, it was decided somewhere along the way that this vessel had to be identical to a screw-propelled corvette destined for the Dutch navy that was about to be built around the same time on Fop Smit's shipyard in Kinderdijk. This vessel was given the name Bali, while its sister ship was named the Japan, which later became the Shogunate's Kanrin-maru.

In a technical report evaluating the performance of the Bali, Naval Engineer Huygens (1857) states that the Bali and the Japan were indeed identical. With this and the above in mind, be it with certain reservations, we may presume that the Kanrin-maru and the Bali were thus virtually identical to each other in terms of construction and onboard technology. This allows taking into account the detailed contemporary reports on the characteristics of the Bali, since not much details are known about the Kanrin-maru specifically at this point in time.

The Bali and the Kanrin-maru were constructed at the shipyard of Fop Smit in Kinderdijk (a UNESCO World Heritage Site). The construction plans were designed by J.W.L. van Oordt, Head Engineer of the Dutch navy. The vessel had a waterline length of 40.8 m, a beam of 8.5 m and a displacement tonnage of 619 tons. It had a depth at the bow of 3.4 m and at the stern of 3.85 m.

As screw-propelled steamships with sails, both vessels represented the state-of-the-art in naval engineering. Steam-powered screw propellers were still a fairly novel technology (Oosten, 1972), having been only introduced in the American, British and French navies in the 1840s, while the Dutch had only just welcomed the Medusa as their first screw-propelled steam warship in 1853. In that respect, at least on paper, the Dutch Navy indeed showed intent of catering the Shogun's request for the latest in naval technology.

The vessel was mainly constructed of wood, though at this point further details about the materials used in its construction remain unclear. Additional efforts will be made to find more information regarding the materials used, as this could allow assessing the quality of these materials in terms of endurance. This in turn could help in assessing the chances of finding preserved remains of the Kanrin-maru.

The keel of the Kanrin-maru was laid down in 1856 and the vessel was launched in 1857. After it was launched, the company of one Mr. Rietschoten had fitted its three masts with schooner rigging, while its machinery and boilers were built and installed by the 'Nederlandsche Stoombootmaatschappij' at Feyenoord (Rotterdam) that same year. This machinery was coal-fired and could nominally produce about 100 metric horsepower. Tests with the Bali proved that it could reach a top speed of 8¼ nautical miles per hour, or 8¼ knots (Huygens, 1857), although this also depended on the effectiveness of the stokers (Huygens, 1860).

The Kanrin-maru, or the Japan as it was still called around that time, was readied in March 1857 and set sail from the Netherlands on March the 25th. Sent along with it was the second Marine Detachment, led by Commander Knight W.J.C. Huyssen van Kattendyke (1816-1866). In his diaries (Huyssen van Kattendyke, 1860), he explains that the construction of the Japan suffered several (undisclosed) delays. These delays may have been due to problems similar to the Bali which revolved around the effectiveness of the screw (Huygens, 1857) but were resolved subsequently.

The Dutch Navy and the Ministry of Colonies followed the Kanrin-maru's maiden voyage with great interest, since its performance also had implications for the Bali which was destined for the Dutch Indies. With this in mind, Huyssen van Kattendyke explains in his diary that he sailed

straight to Lisbon (Portugal) in order to test the vessel in all circumstances. Upon arrival in Lisbon he concluded that the vessel was very fast and had met his expectations. On the 21st of September that same year, thus after a voyage of 180 days, the Japan arrived in front of Nagasaki bay.

It was officially handed over to the Japanese in October 1857 and was renamed into Kanrin-maru. A great part of the Nagasaki's Naval Training School then took place on the Kanrin-maru. Training included all aspects of naval training, ranging from deck and rigging lessons to familiarizing with the machinery and many more aspects.

Desk Research in Japan

Emphasis of the desk research in Japan was put on the events past 1868 to around 1871 when it wrecked. Literature and archival research was conducted to reveal more information about the period in between these years. Unfortunately, however, the trustworthy historical materials, in particular, between 1869 and 1871, are extremely scarce. No photo of the Kanrin-maru has not been found yet either in the Netherlands or in Japan. Only one painting of the Kanrin-maru by Yujiro Suzufuji, an officer of the Kanrin-maru during the trans-Pacific voyage is kept in the Yokohama Archives of History (Fig. 1.), which is titled 'the rough voyage of the Kanrin-maru'.

No Japanese newspaper reported the wreck of the Kanrin-maru in 1871, partly because in Japan at that time no paper had been published systematically yet.

Its wreck was said to have happened, therefore, sometimes on 19th September 1871 due to stormy weather, or sometimes on 20th September 1871 due to bad maneuvering the ship. At that time, two U. S. officers handled the Kanrin-maru, viz. one was Francis Etienne, who perhaps was

the captain, and the other was Charline SeLoger Train. Although the official record submitted to Hokkaido says nothing, on 20th September 1871 the drunken U.S. captain seems to have made the Kanrin-maru run ashore on a reef off the village of Izumisawa at Kikonai Municipality (Goda, 2010).

Preliminary Conclusions

Desk research in the Netherlands thus far has shown that the Kanrin-maru, at least to contemporary Dutch naval officers, was indeed a vessel that represented the latest in naval architecture and met expectations accordingly. Furthermore, it became part of one of the means available to the Dutch government in its effort to reinforce what was left of the centuries old special bond with Japan. This, and its historical voyage to the US in 1860 as well as its involvement in the Boshin War, provides support for its historical significance today and in the end adds to the list of reasons for pursuing sustainable preservation of this special remnant that has become part of Dutch-Japanese shared cultural heritage. Be it tangible or intangible, above water or underwater.

At the time of writing, initial research has yet to be completed. This includes the remaining parts of desk research in Japan and the Netherlands, as well as fieldwork. Based on the information gathered thus far, it still is difficult to assess whether or not the wreck of Kanrin-maru could still be lying on the ocean floor near Kikonai Municipality. If continuation is indeed desired, detailed plans for an underwater survey using multibeam or sidescan sonar equipment will have to be made, taking into account the marine environmental conditions in a demarcated research area.

Footnotes

1. See, for example, the Holland-Kyushu programme, initiated by Dutch Culture and the Embassy of the Netherlands in Tokyo and the consulate-general in Osaka: <http://hollandkyushu.com/en/>.
2. <https://culturalheritageagency.nl/en>
3. 鎖国時代, literally meaning 'closed country period', though in reality Japan's isolation from the outside world was highly relative.
4. 出島, meaning 'artificial island' in Japanese.

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