Analyzing the Japanese Sailing Ship Model

Arriving at the Peabody Museum at Harvard University between 1867 (the year the museum was founded) and 1932 (the year the models were discovered and categorized) the model titled, “Sailing Ship Model”, has sat alone and unrecognized – until now. The only documentation that accompanied this model was a piece of paper that described it simply as a “sailing ship similar to Chinese Junk (Japanese)”. The initial research questions we were prompted to answer are as follows: where was it likely from, what approximate time period does it represent, who may have been using this type of vessel, and what can we find out about seafaring in this region/culture? Using the resources I had available, I was able to narrow down the answers to some of these questions.
The Chinese Junk is an ancient sailing ship design used extensively for ocean voyages, variations of which are still used in parts of the world today. The design was first developed during the Song Dynasty, which lasted from the years 960 AD to 1279 AD, and further developed in later dynasties. In addition, the popularity of the boat design spread throughout Asia, and adopted regional differences along the way. I hypothesize that our ship model is a Japanese variation of the Chinese Junk ship. This might seem to narrow down the purpose of our boat, but the Junk ships have a variety of purposes from ocean-going, cargo-carrying, pleasure boats, to military ships. In order to properly identify the purpose of the ship, we must analyze its specific characteristics; these will also help us date it to a specific time period.

One of the first things observed about the model is that it has two square sails, the larger of which in the middle of the ship, and the smaller on the deck of the bow. From the larger sail, a forestay runs from the waist to the forecastle, or the upper deck of the ship forward of the foremast. The forestay prevents the mast from falling backwards, and is common on square-rigged ships. The hull of the ship is shallow, and flat-bottomed, and appears to be lacking a visible keel. The hull appears to have lots of cargo room, and the shallow draft leads me to believe this ship was not built for rough ocean waters. Most of the cargo space available is in the stern of the ship although there is also some cargo room in the bow. Rather than traversing across wide-open ocean, I hypothesize the ship was more likely used in transporting goods and supplies from port to port around Japan. In line with this hypothesis, during a period of time in Japan called the Edo period from 1603 to 1868, Japan’s trade and interaction with the outside world was virtually cut off, and ships were

1 Crossley et al., “Song Industries”
not built for the purposes of navigating open water, but instead, only the waters off of the coast of Japan. Upon further research, I found a Japanese model of an Edo Period ship, similar to our model, called the “Higaki Kaisen”.

The Higaki Kaisen model is not a perfect replica of our ship, but it does have some striking similarities. The rudder is of similar size and shape, the decorative railings are vary similar, with gaps in almost identical places, the quarters (possibly captain’s or crewmembers) in the stern of the ship have a similar viewport, the anchors are both four-pronged, and the square shaped sails are sewn together with vertical stitches spanning the height of the sail. There are some differences though that led me to believe the models are not of the same exact ship. Our model includes a second, smaller sail in the bow of the boat, while the Higaki Kaisen does not. The Higaki Kaisen model's hull also is not flat, like our

2 https://shipmodeler.wordpress.com/tag/higaki-kaisen/
model and has a visible keel. Despite these differences, I’m confident that our model is of a ship from the Edo Period, sometime between the years of 1603 and 1868.

The Edo Period in Japan was a very different time than modern period Japan, in terms of government and maritime culture. At this time, “vessels of foreign design and traditional vessels capable of safely navigating the open sea were destroyed to prevent further contact with the outside world.” This political move was made in order to prevent unnecessary contact with Europeans and prevent religious influence; particularly the spread of Catholicism, something the Tokugawa shogunate believed would destabilize the country. There were also guidelines that shipbuilders had to follow: vessel designs were modified in order to prevent sailors from leaving the country’s waters. These modifications included small square sails, which made open sea handling difficult, and large square rudders, which would break off if a ship were caught in rough water. If this happened, and it happened often, any sailor lucky to survive and became stranded in a foreign country, they were prohibited from returning to Japan. This policy, called sakoku, which also banned foreigners from entering the country, was enacted in 1633 and remained in effect until 1853. This policy demonstrates the close interaction with and control the government had over seafaring and other commerce at this time.

In summary, I believe the model of the ship we have called the “Sailing Ship Model” is an Edo Period Japanese trade vessel. The origins of the ship in Japan are currently unknown, but I hypothesize it is from the time period 1603 to 1868. As the semester progresses, I hope to be able to date the ship to a more specific time period, and learn more

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3 Callaghan, *The Use of Simulation Models to Estimate Frequency and Location of Japanese Edo Period Wrecks Along the Canadian Pacific Coast*, 1.

4 Ibid.
about the crew that likely sailed on this boat, the items that they carried with them, and
what it would have been like to spend time on this vessel.

Website blurb:

This ship is an Edo Period (1603-1868) Japanese vessel, most likely used for domestic
trade around Japan. The rudder and square sails are characteristic of a vessel that was built
to be purposefully difficult to handle in rough, open-sea water. This construction was a
result of a policy called sakoku, which prohibited the people of Japanese society from
foreign contact and religious influence. Unlawful contact would be punishable by death.
This demonstrates the close connection and control the Japanese government had over
Japanese seafaring culture.