Imperial Taxi:
Chinese Ship Construction and Pleasure Barges

In my last blog post, I focused on dating the model, “A Barge”, and came to the conclusion that it most likely operated during the Song or Ming Dynasty because of its unique artistic elements. However it is still largely unclear why the boat was actually built. In this post, I will attempt to discover the purpose of the model based on its design. I will argue that the construction elements of the model— including a flat stem, an ornate superstructure, and the absence of a mast—suggest that the ship operated as a pleasure barge or taxi, responsible for transporting the imperial elite across the rivers and canals of China.

The shape of the stem or front of the ship is perhaps most indicative that the vessel was designed to transport people. Instead of curving into a single point, the keel of the vessel widens out at the front into a T shape (Fig. 1). Furthermore unlike the raised and enclosed stern or back of the ship, the stem is almost completely flat and has no railings (Fig. 2). When docked, these design elements form a pseudo-bridge between land and sea that allows passengers to quickly and easily get on and off the ship without banging their shins on an edge or falling into the water. Combined with gunwales or decks that open up into cargo holds for passengers to store their belongings, the stem as a whole seems specifically designed with people in mind.

The existence of an ornately designed superstructure offers further evidence that the ship was likely designed to transport people and also hints that the clientele of the ship was predominantly upper class. The exterior of the superstructure features opulent windows that can be easily opened and closed (Fig. 2). The interior of the superstructure is made up of two de facto

1 https://www.peabody.harvard.edu/files/Sessions_Assignment1.pdf
cabins divided by a leather curtain with a tiled floor and more golden adornments (Fig. 3). While the superstructure could have served as living quarters for a fishing crew or even an enclosed shelter in the event of a naval attack, the sheer luxury that went into designing the superstructure and the various end tables, benches, and step stools—also located within the superstructure and ostensibly used to look out the windows and ride in comfort—suggest that this ship offered an experiential way for passengers to travel the canals in style. And since the ship builders seemingly spared no expense in crafting the superstructure, it is likely that these passengers made up the Song or Ming elite.

Even the method of propulsion on the vessel seems to support its riverboat passenger designation. The model does not currently have a mast and there are no identifying features such as a mast step or hole in the stem that indicate a mast was ever used. This severely limits the possibility that the model was a seafaring vessel. The ship instead has several wooden pegs on both sides of the stem (Fig. 1). It is possible that the pegs served as oar slots. As “Along the River During the Qingming Festival,” a scroll from the Northern Song period, shows, many vessels operating during this period utilized several oarsmen to navigate the canals (Fig. 4). However there are currently no oars located on the vessel that can confirm this theory. It is also possible that the dowels originally had ropes attached to them and served as towing pegs. This would limit the number of crewmembers required on board and also create a more private and comfortable atmosphere for passengers seeking a pleasurable trip downriver. Regardless of the true method of propulsion, both theories imply a river or canal designation and short trips, strong indicators of a passenger ship.

But not all aspects of the model imply a Song or Ming passenger designation. Although a keel sunken into the hull and the use of bulkheads are characteristics of the Ming Chinese
shipbuilding tradition (Sasaki 2012: 17), the curved V-shaped hull of the model is usually seen on ships built for speed instead of stability. Pleasure barges, like those in Fig. 4, usually employed a flat hull and shallow draft to make the ship more stable and thus more comfortable for passengers. However it is possible that this ship was merely an experimental new design. The model also showcases smooth sides where the planking should be, something that was considered rare for the period. As archaeologist Michael McCarthy discusses, planks on Song and Ming ships were usually “skew-nailed” together, with fasteners from upper planks driven into lower planks to create an uneven clinker-style outer surface (McCarthy 2016: 50). If the model actually operated during the Song or Ming period, it probably would have had an uneven exterior, iron ‘ju-nails’ of varying lengths and sizes holding the ship components together, and a sealant putty covering the fasteners made of Tung oil, lime, and jute called chu-nam to prevent corrosion. However it is possible that the model is not an entirely historically accurate representation of the ship and was changed to be more visually appealing or cost effective.

The flat bridge-like stem, ornate superstructure, and river-based propulsion methods suggest that this ship model was likely a pleasure barge with close connections to the Song or Ming dynasty. While some design elements suggest the ship model may have been built much later or designed for a different purpose, based on the majority of the construction elements and available information, at this time, the model appears to be based off of an imperial taxi vessel.
Appendix

1. “Stem”

2. “A Barge”
3. “Superstructure Interior”

4. Zhang Zeduan, “Along the River During the Qingming Festival”

Bibliography