A Chinese River Barge

Ships come in all sorts of shapes and sizes, and their components have various purposes to provide function for the ship at hand. Concerns must be raised and questions must be asked before their construction. For example, how should it sail based upon where it will be going or what it will be used for? These questions require a lot of time and planning. Analyzing ship construction can therefore give us clues as to what purposes the vessel served. Based on the construction of this ship model, it appears to be representative of a Chinese river barge owned by a very wealthy and powerful individual.

The ship model has a wide, flat keel with a very rounded hull, making it a shallow-draught vessel. This construction sacrifices speed for maneuverability through shallower waters. It makes it possible for these types of boats to access smaller ports and thus travel along rivers.

The gunwale (also known as a sheer strake) blends into the deck. In other words, it is essentially absent so the deck is flat without a barrier to the water (Figure 1). This is another indicator that it is a river boat: without a gunwale, the deck would flood in rough waters. Furthermore, the stem of the barge is flat and rectangular in shape, which would aid in easy embarking and debarking, important for traveling short distances to a river shore or port. There is no stem post, which enable vessels to cut through the water efficiently and effectively. This would mean that moving fast in open and rough waters is not the goal, rather the goal is to make the vessel ideal for river travels where waters are calmer and the need to cut through rough waves is unnecessary.
Most of the barge is covered by a deck house/gazebo-like structure with intricate floral wood designs painted with bright floral patterns in green, red, and gold (Figure 2). Some of the side walls have panels with Old Chinese characters painted on them, all of which have some variant of the phrase “no noise.” If standing on the bow and facing toward the stern of the vessel, one looks at an opening into the deck house which is framed by an arch of more intricate and detailed woodwork and paneling, again with the old Chinese phrase painted delicately (Figure 3). At the stern of the vessel is a small, elevated, enclosed deck house which attaches to the larger deck house in front of it (Figure 4). Other than shielding the men that would have been on board from the weather, the purpose of the deck house might be to show the wealth of the owner(s) as the detail involved in its structure is very elegant, especially with the woodwork and gold detailing.

The rudder of the ship model is comprised of a long pole with what looks like a wooden flag attached to the end. These are called steering rudders, which evolved from oars (Worcester, 1947, p. 103). In China, there are no records of shipbuilding as it pertains to rudders, so estimating a date as to when they were introduced is difficult (Worcester, 1947, p.104). Additionally, the ship model’s method of propulsion is by oars, specifically a type of oar called a *yuloh* (Worcester, 1947, p. 58-59). They are long, thin, and gradually fan outward at their midsection. These yulohs evolved from the paddle, as they use a more scientific method of propulsion, and thus are more expensive. For example, they are slightly bent as to be more efficient when angled (Worcester, 1947, p. 58-59). There are additional long pole-like objects on deck which presumably were used to maneuver and guide the vessel by pushing along the river-bottom, as they would have no use in open seas. Similar barges drawn on scrolls depict this as well (Paludan, 1998).
When analyzing a ship, examining the fasteners can generally provide a good amount of information. Unfortunately, the fasteners on the ship model are painted on which presents a challenge as to their accuracy. On our ship model, the fasteners on the hull are perpendicular to the exterior planking. However, their locations do not seem to give a purpose, as they are not located on joined pieces of futtocks that join up to create the hull (Figure 1). We can only speculate that where the painted fasteners are located on our ship model represent where they would have been joined to make up the hull in the actual vessel, or that they are somehow fastening the exterior planking to the interior planking (if there is any).

So who would have owned such a beautiful barge? Drawings and paintings of imperial Chinese river barges look similar to this ship model. For example, a painting of Chinese Emperor Jiajing on his state barge in 1538 AD shows a similar intricate and elegant deck house, with the same deck shape, lack of a gunwale, and hull shape (Paludan, 1998). These kind of vessels were used on imperial journeys to astonish the population with the emperor's power and wealth as he travelled down rivers in excessive luxury and with a large entourage (Paludan, 1998). Another emperor’s river barge is more extravagant, with an additional small deck house structure at the stern, just like our ship model (Robert Merry’s Museum, The Emperor’s Barge). Lastly, a Chinese barge of Lord McCarthy’s Embassy in 1796 is even more lavish, with multiple larger deck houses (Alexander, 1796). As a result of these similarities, it would be safe to say the barge our ship model represents is of either royalty or someone of extreme power and wealth.

Based on the the ship’s construction, I would lean towards the conclusion that this ship model is of a Chinese barge between 1500 and 1800 that would have been owned by a wealthy, influential, and powerful individual for leisurely river travels. The pieces of evidence that seems to point towards this conclusion include the old Chinese writing, the absence of a gunwale, the
shallow draught, the scientifically advanced oars, elaborate and colorful deck houses and ornamentation, and the rectangular ship bow. This barge would have played a role in solidifying the individual owner’s power and showing it off to the rest of the populace.

Figure 1: Photo by Author

Figure 2: Photo by Author
Figure 3: Photo by Author

Figure 4: Photo by Author
Bibliography


