Piecing Together History: Chinese Barges in the Song Dynasty

Archaeological analysis relies upon evidence-based speculation as definitive proof is often lacking. The ship model classified as “99-12-60/52941” is no exception. The Harvard Peabody Museum lists the object as a model of a barge but lacks further information about the vessel’s origin. Based on close examination of the model, I note key features that may lend insight into the vessel’s time period and use.

The model depicts a wooden vessel with a fairly rounded, almost U-shape hull. Where the gunwale meets the deck, the deck extends outwards by several inches on both sides. The extended deck wraps around the sides and bow of the vessel. Attached to the deck there is a covered structure with wood paneled sides and roof. The roof of the structure seems to be accessible from the stern, which may have offered an upper deck space. The covered deck is built of red painted vertical planks that frame intricately carved wooden panels that would have enclosed the space but let in light and air. These panels have calligraphic symbols painted on them. The bow and stern are relatively square-cut rather than the sides extending all the way to a point. The bow features a porthole cut out and the stern has a hole where it appears something has broken off from the model. Beside the model are several long wooden poles and oars, as well as a wooden rudder. This rudder likely broke off from the model and would have connected to the stern. Visible on the sides of the model are square holes in the hull towards the stern. This may have been the spot where oars could have been attached. Looking inside the covered compartment reveals several more poles and a figurine of a triangular straw hat painted with what appears to be the Chinese ying and yang symbol.
Based on these aspects of the model and outside research, the vessel can be tentatively dated back to the Song dynasty period in China, roughly 960 – 1279 AD. The Chinese calligraphy and figurine hat found in the compartment helped to confirm the country of origin. The shape of the hull and the extended deck added evidence to the Peabody’s determination of the ship as a barge. The vessel’s structure would have aided it in traveling down relatively shallow waters, such as the river networks spanning the interior of China. The extended deck would have floated above the water and offered a standing place to the men aboard using poles or oars. The rudder is helpful in narrowing the time period because the vessel had to have been created after the invention of the rudder. Literature on China’s maritime renaissance reveals that during the Song dynasty China contributed to the progression of shipbuilding by inventing watertight compartments in the hull and rudders. This was a period of rapid technological and economic advancement in merchant shipping. During the period, the Song dynasty oversaw an expansion of maritime activity because of the economic and operational benefits of increased access to other parts of the country. Laborers dug canals, dredged harbors, and widened rivers all with the goal of accommodating shipping.

The purpose of this specific barge is unknown. It is possible that like other river vessels of the period it was used to transport goods such as grain up and down the river networks to sell in trade. It also could have been used as a mode of transportation for people traveling, ferrying

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1 Zhang, Cong Ellen. *Transformative Journeys - Travel and Culture in Song China*. Honolulu: University of Hawaii Press, 21. 44
3 Ibid.
4 Zhang 44
5 Zhang 131
them along the river. The intricacy of the carving and the beauty of the vessel perhaps indicate that this barge was privately owned or operated by a wealthier patron. It could have been used for ceremonial purposes or for leisurely travel. While the rudder and design of the boat indicate that this technology was available during the Song dynasty period, this piece of evidence can only allow one to conclude that the vessel was built during or after this point. An additional piece of evidence from an unlikely source shows that similar vessels were used in that time period.

A painting attributed to the Song dynasty artist Zhang Zeduan depicts a panoramic view of life along the river, complete with vessels that look quite similar to the model barge. “Along the River during the Qingming Festival” offers glimpses of period architecture and shipbuilding. The handscroll depicts a large bridge connecting two shores in the center of the scroll. Near the bridge are several low, long vessels. These appear to be river barges, complete with oars on both sides and covered decks. This image resembles the barge model in the Peabody and further research may help to connect the model to this era.

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8 Ibid.
Bibliography


Appendix

Figure of model barge
Sections of painting, “Along the River during the Qingming Festival”