



SHIPS & NAVIGATION

The Changes of the Renaissance Era



KARISA LYNN HERNANDEZ
UNIVERSITY OF TEXAS AT SAN ANTONIO
OCTOBER 8, 2014

During the Renaissance Era, ships ruled in the ways of travel, import/export and battle. Ships went through many changes throughout the era. In the European seas there were two main regional traditions, that of the Northern seas or the Baltic, and that of the Mediterranean. The northern tradition lead back to age of Viking and to their long ships, the southern to the war craft and merchantmen of the Romans and their predecessors. Eventually as time progressed in the last fifteenth century, they would produce a common progeny greater than themselves, to be called the Atlantic tradition.

Mediterranean ships, from the time of the Phoenicians, had been divided into long and round ships. The longer ships were built in order to hold ores; round ships were built to have masts for sails. With the differences varying the ships, for instance, long ships were low and narrow; round ships were high and wide. The galley (figure 1), which was the medieval long ship, had but a single flat deck, in order to be powered by oarsmen, while the round ship might have two or three decks, depending on the use. The two types of ships were most used by the “Venetians were the galley, a long ship, and two forms of the round ships, the ships were called Buss and Tartte” as stated by Frederic Chapin Lane in Venetian Ships and Shipbuilders of the Renaissance.

The Venetians Galley

In this long ship, cabins housed the captain and richer passengers or merchants. Sail area was increased, to two and later three lateen sails. The galley was mostly wind powered, which did require as many oarsmen to be in attendance during a voyage. While it did rely mainly on wind, a crew of oarsmen still remained in attendance, not only to row, if wind was not present during weather conditions, but to be defenders of the ship. They would defend the ship from

pirates and various enemies. The concept of the ship was to defend itself with the additional expense of request a warship escort.

Although Venice had continued to be used mainly as warships. The French used galleys which were armed with convicts. While the ships were grand in design, they mostly stayed in sheltered waters and were equipped with limited fire power and was no match for military ships, such as the Trafalgar.

Three rudders were carried by each galley, designed to project from the sides of the stern, while the ship was able to turn. Traditional Mediterranean ships was built with side rudders. The invention of the rudder to the stern post was a northern tradition and gradually displaced the side rudders. While the lighter galleys were equipped with sails, “the commanders complained that the decks were too easily swept by waves and the fighters were at a disadvantage when engaging a higher elevated galley.”(Lane,1992) At the same time, with the increased necessity for cannons, the bow of the galley was so heavily loaded with artillery, the ship were be barried by waves when tides became rapid, leading to broken oars and lose of men.

Round Ship: Buss

A buss ship, of 240 tons with lateen sails, was required by maritime statuses of Venice to be manned by a crew of 20, or fewer. This ship was made in order to minimize the ships crew. This was particularly true when it came to navigational purposes, because larger crews were expensive to pay and to provisional. The more men that came on board would need provisions, necessities, such as food and water, in order to be able to live during long voyages. “With eastern trade rapidly advancing, the buss ship was supplanted by the cog” as stated in the Complete History of Ships and Boats by R. Curley.y, the ship was able to be easily accessible

by the crew and easy to navigate.

The cog was a barge-style fat-bottomed boat, developed in response to the need for merchant vessels able to transport bulkier loads. It was employed effectively by the Hanseatic League, as they captured a prominent role in international trade, mainly in cloth-making because there waters tended to be near shallow water. Made to be wide and spacious, it proved a to be a good space for cargo and sturdy enough to be unreachable, while traveling at a wide range of ports along the tidal coasts of northern Europe. The hulls were more rounded than those of long and galley ships. It relied primarily on its single square sail, although some of the early models could be rowed short distances, became useful when entering or leaving a harbor, or navigating close to a shore line. Later in time, the Carrack later replaced the cog as a standard late medieval merchantman and pirate ship. Compared to the cog, the carrack had “sails the size of clouds and a massive stern castle. The muzzles of the cannons could be seen protruding through gun ports, which were cutouts in the ship near the feet about the water line.” This allowed other ships to be fired upon and allowed to make severe damage to the opposing ship and crew. (Figure 2)

As stated in the Chapman Great Sailing of the World, The Bremer Hanseatic Cog is on display in Germany at the German Maritime Museum Brernerhaven. This ship was part of the Hanseatic League, the ship which is known to be older then the league itself and which the Hanseatic League achieved greatness. “The Frisians developed the cog as a wool transporter for the coastal trade.” Without allowing the museum to preserve the ship with polyethenglycol the wood would have disintegrated immediately. The older methods would have taken a team about thirty years in order to make sure the ship was persevered correctly. Due to technological advances the ship was able to be completed with six to seven years. (Figure 3)

Figure 1



Figure 2



Figure 3



Bibliography

Curley, Robert, ed. *The Complete History of Ships and Boats: From Sails and Oars to Nuclear-Powered Vessels*. Britannica Educational Publishing, 2011.

Konstam, Angus. *Pirates: Predators of the seas*. Skyhorse Publishing Inc., 2007.

Lane, Frederic Chapin. *Venetian ships and shipbuilders of the Renaissance*. JHU Press, 1992.

Schäuffelen, Otmar. *Chapman Great Sailing Ships of the World*. Hearst Books, 2005.

Waters, David Watkin. *Science and the Techniques of Navigation in the Renaissance*. National Maritime Museum, 1976.

Illustrations:

<http://www.promare.org/the-cog-and-the-hanseatic-league/attachment/bremen-cog>