The Viking longship and the Greek trireme By Manos Rashford, Paschalis Beckham, John Hamilton, Vittorio Shakespeare, and Dimitris Kane

LONGSHIP

In Scandinavia, longships were a sort of specialized warship dating back to at least the fourth century BC and whose presence has been supported by archaeological evidence. Many of the longship's attributes were adopted by other cultures, such as the Anglo-Saxons, and continued to have a long-lasting influence on shipbuilding.

The longship was initially created and used by the Norsemen (commonly known as the Vikings) for trade, exploration, and warfare during the Viking Age. The longships were described as being sleek, long, slender, and light, with a speed-oriented shallowdraft hull. The ship's modest weight allowed it to be transported over portages or used bottom-up for shelter in camps, while its shallow draft allowed navigation in waters just one meter deep and arbitrary beach landings.

Longships also had two ends, with symmetrical bows and sterns that made it possible to quickly change course without turning around. This feature was especially helpful in northern latitudes, where icebergs and sea ice presented navigational challenges. Oars were attached to longships along almost the entire length of the boat itself. Later variants, which replaced or increased the work of the rowers, had a rectangular sail on a single mast. The first ones were constructed between 500-300 BC.





TRIREME

A trireme (/trarim/ TRY-reem; from Latin: trirmis "with three banks of oars"; compare Greek trirs, literally "three-rower") is a vessel with three banks of oars. It was a prehistoric ship and a kind of galley that was employed by prehistoric maritime civilizations in the Mediterranean Sea, particularly the Phoenicians, ancient Greeks, and Romans.

Vases and ceramic fragments from the 8th century BC and later frequently depict two-banked ships (biremes), with or without the parexeiresia (the outriggers, see below), and it is at the end of that century that the earliest mentions of three-banked ships are discovered. The fleets of Tyre and Sidon are depicted in fragments from an 8th-century relief in the Assyrian city of Nineveh. The ships are equipped with rams and have their oars pivoting at two levels. They have been perceived as triremes as well as two-decked warships.

The layout and quantity of oarsmen determine the size of the ship first. The ratio of an oar's outboard length to its inboard length, or oar-gearing, is what determines how fast a ship can move. The trireme's arrangement of the oars is unique and quite effective. With little wasted area, the ports could accommodate the oarsmen. Each oarsman would be outboard of and in height overlapping the one below, resulting in three files of oarsmen on each side, provided that thalamian tholes were put inboard and their ports were widened to accommodate oar movement.





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