# PTOLEMAIC GALLEY



Among the finds in Thonis-Heracleion is a Ptolemaic galley of about **25 metre length**. She sank after being hit by huge blocks from the famed temple of Amun, which was totally destroyed during a cataclysmic event in the second century BC. The galley was **moored at a landing stage** in the canal that flowed along the south face of the temple when the disaster occurred.

The fallen blocks protected these precious naval remains by pinning them to the bottom of the deep canal, which was then filled with the debris of the sanctuary. The galley lies under 5 metres of hard clay mingled with the remains of the temple and was only detected through the use of a cuttingedge prototype sub-bottom profiler.

### Rare find

Finds of fast galleys from this period remain extremely rare. The only other examples to date being the Punic Marsala Ship (235 BC) and the Phanagoria Ship (mid first c. BC). Preliminary study shows that the hull of this galley was built in the Classical tradition and relied on long mortise-and-tenon joints and well-developed internal structure.

However, it also contains features of ancient Egyptian construction and allows to speak of a mixed type of construction. It was a rowing ship that was also furnished with a large sail, as shown by a mast step of considerable dimensions.

This long boat was flat-bottomed and had a flat keel, which was quite advantageous for navigation on the Nile and in the Delta. Some typical ancient Egyptian shipbuilding features, together with the evidence for a reuse of wood in the ship, indicate that it was built in Egypt.

# Early stage of analysis

The analysis of the ship is still at an early stage. There are many questions that have to be answered and this needs time, not to mention that some of them will be probably never answered completely.

Only one half of the initial length of the ship is preserved and in transversal section the hull was preserved approximately till the turn of the bilge - that is the area where the 'walls' of the planking start to raise to form finally the vertical upper planking. Judging on these proportions it is proposed that it is a 'long' ship (rather slender) as opposed to the

'round' trade ships which were very wide, sometimes their length was in proportion to their width as 3 to 1.

# Sailing or rowing ship?

The length of the ship and the fact that it was equipped with a massive mast step definitely indicates a sailing ship. But was it a rowing ship as well? Judging on its proportions, yes, but until today there is not a single trace of the rowing arrangement. Of course, rowing benches (thwarts), oarlocks, etc. were installed much above the remains that were preserved so it is not so surprising.

# Could it be a warship?

The hull of this ship contains frames of the transversal structure and these were too massive and irregularly spaced for a warship which depended on speed. The carpenters tried to give such a ship a lot of strength but the construction elements must have been slender to obtain a light ship, easy to move under oar. A perfect example of such a warship is the Hellenistic Phanagoria shipwreck, the only undeniable warship ever found.

Also, the bow of the Thonis-Heracleion ship, even only partially preserved, was not really designed to carry a ram. The force from the ramming had to be distributed to powerful constructional members of the bow and on the keel and we do not have these.

Thus, it seems that the galley was not a warship but could have been used during a war as a rapid transport of the troops or an aviso.

### Possible link to Amun-Gereb temple

As the boat was found moored in the vicinity of the temple it is of course possible that it was a temple shuttle craft and could have been used by the priests or the court's elite.

Otherwise, Thonis-Heracleion was an important customs station and the income of the temple depended on the foreign trade. In Ptolemaic times even a special river police was active on the Nile and this boat could have been used by custom officials.

**Object:** location: south of the sunken Amun-Gereb temple in Thonis-Heracleion. **Source:** Preliminary studies by Alexander Belov, researcher with the European Institute for Underwater Archaeology (IEASM), publication in progress as part of the series by the Oxford Centre for Maritime Archaeology (OCMA).

**Photos:** Christoph Gerigk © Franck Goddio/Hilti Foundation





