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The Greek Age of Bronze

Ships



The Aegean has since prehistoric times been a sea that has united rather than separated the large or small islands. Between these islands, there were narrow sea passages and shallow gulfs, accessible by some primitive sailing means. Navigation in the Aegean, has been testified by the tools made of Melian obsidian which were found in Franchthi Cave in *Hermionid* (at the eastern coast of the Peloponnese, a distance of 80 nautical miles (approximately 150 kilometers) from *Melos*. Tools made of Melian obsidian also found on Crete (*Knossos*) and on Cyprus, substantiate the existence of sea routes in the Aegean from the Early till the Final Neolithic (6800-3200 BC). They made a boat exclusively from papyrus, an aquatic plant which can be found near water areas of Greece (as well as on the river Nile in Egypt). A similar boat was used until recently in *Kerkyra*. The "papyrela" could easily travel from *Lavrion* to *Milos*. Its crew would use kayak oars for navigation. It has also been proven that men in the Greek prehistoric period could travel by sea using natural material offered by the domestic world of Greece and also using simple techniques such as the one of straw mats.

This clay model from *Palaikastro* Crete dated around 3000 BC is one of the earliest representation of Aegean ship. In this model the hull terminates at one in a lofty vertical or nearly vertical post, while the other, with no upright fixture at all, trails of into horizontal extension at the waterline.

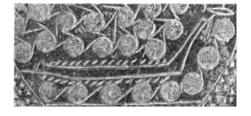




Another clay model from *Mochlos* Crete date around 3000-2700 BC represent a small craft with bifid stem-projecting forefoot together with raised stem. This kind of ship distinguished by straight lines, angled ends, and a lofty prow seems to be a prototype for the later Greek warship and commercialship

One of the earliest large Aegean ship is represented in this Cycladic terracotta "frying pan" from Syros dated around 2500-2000 BC. This multi-oared galley has a long vertical prow with a fish symbol mounted on top, perhaps acting as a wind vane to detect wind direction relative to the vessel. Also the cords or beams hanging bellow the fish symbol might conceivably act as some sort of wind catching element.

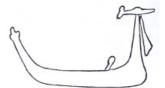
Note the waves shown as spirals, indicative of the orbital motion of real sea waves.

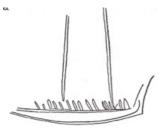




Large ships with similar design and fish symbol on top of prow are well attested in several Cycladic representation dated around 2500-2000 BC. This type of ship was more likely the earliest wreck discovered near the island of Dokos.

A ship with a Cycladic like design is also one of the simbols of the still undeciphered disk from *Phaistos* dated 2000-1700 BC.





These ship drawings were imitated as far inland as *Orchomenos* where the sketcher added a mast. The Aegean were not the only trading ships at sea, of course, (*1) but they were among the most active and adventurous.

The earliest shipwreck so far discovered dated around 2200 BC has been found near the island of Dokos at the entrance of the *Argolikos Kolpos* gulf. This ship was carring many ceramic objects dated around 2700-2200 BC coming from different areas of Peloponnesian. Very few parts of the ship survived as for instance more than 10.000 pottery fragments and the big anchor which is about 50 cm high and very heavy.



In the Greek mainland a ship scene is restored from three small pottery fragments from *Iolkos* dated in the **Middle Helladic** period (about 2000-1700 BC). In this scene there are perhaps two ship, no people. The polychrome design shows a short vessel, thickly outlined, the reserved interior filled with zigzag pattern; there is a stout curved ram on the prow, and a steering oar. The polychromy is in the Cycladic tradition.





Because of the intensive commercial trade between the Aegean population and the Near Eastern Kingdoms some of the early Aegean ships show several similarity in general shape and design with the Egyptian ships of the same period, as well attested in this Aegean vase dated around 1700 BC.







Minoan seal dated around 2000 BC. These ships also show an asymmetrical profile, a high stem at one end and low

extension at the other. Even if the illustrations are very schematic, the repetition of certain details adds credibility to the depictions. For example the forked appearance of the lofty stem.

Another Minoan seal from *Paleocastros* also dated around 2000 BC shows a ship with high stem at one end and also high extension at the other.

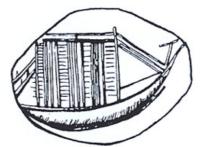




From Crete is also this amygdaloid seal dated around 1600-1500 BC with a representation of a boat which shows forked lofty stem, mast and sails. This ship design resemble the ones depicted in the famous fresco from the island of Thera.











A Minoan ship with a beak shaped prow, high stern and single mast connected to the vessel by ropes is represented in this seal stone from *Pseira* dated around 1800-1675 BC.

Pottery fragment from *Kolonna* Aigina dated **MH II** (about 1800-1650 BC) with a large ship with curved hull. Five stick figures, four crossed by oblique line, here interpreted as oars, disappearing into the hull, three long spears are also represented.





On this clay seal impression from *Knossos* dated around 1600 BC a fearful sea cerature with a doglike head, attacking a small ship is depicted. This "sea-monster" has been interpreted by Sir **Arthur Evans** as a prototype of Scylla, and though her monster heads were multiplied and modified by later Mycenaean tradition.

Several type of Aegean ships are depicted in the famous fresco from *Akrotiri* in the Thera island dated around 1600 BC (*2). This images shows a small boat with 10 oars one sterring oar and a "skipper" or high rank passenger.





The Thera ships have one other interesting feature, namely the flat projection extending outwards from the stern just above the supposed waterline level. Interestingly, these illustrations seem to indicate the feature was added to the hull. The stem is long and slender with mysterious objects attached, similar to the Aegean "frying pan ship". If a storm wind came against the side of the vessel, the stem would catch the wind while the stern appendage drags in the water, turning the vessel around until the stern points into the waves.

This other high decorated medium size ship shows the mast, the sail, two sterring oars, some passengers and the "ship captain" in the relevant cabin located on the back of the ship. The stern appendance was not present in the small and medium size ships it seems a prerogative of the large vessels.





Another examples of the stern appendage is shown in this ship. The extended feature is clearly stern. This has been the subject of considerable scholarly debate both in terms of the relationship between the Thera ships and other contemporary ships known to exist on the same area. and of the function of the stern projection on the ships themselves.

This other large size ship was probably compoused by a crew of 42 to 46 oars one sterring oar, the captain, two attendants of the captain and some passengers wearing either tunics or long robes. It is reasonable to suggest that they represent peple of higher status. Also in this representation the ship has the stern appendance, long stem with ornaments, central feature and captain's cabin.





Closer detail of one of the Thera ships captain cabins. They consist of wooden poles wrapped by ox-hide sometimes decorated with religious simbols both Aegean and Egyptian. On top the cabin's central pole a strange object which seems to be a boar tusked helmet is placed. In the Thera ships these cabins were placed on the back of the ship, for this reason this features have been also identified as cabins for "VIP people" or elements with ceremonial significate. On Egyptian ships the captain's cabin was normally placed in the front so that he could have a good view ahead of him whereas the ceremonial cabin of the king or queen was placed in the middle. Some of these cabins have been also represented alone in the West house's room 4 fresco. They could allude to the marine festival which is depicted in the room 5 and with which the West house was connected. It is even possible to interpret them as emblems of the religious leader of the largest ship. These cabins were probably movable so they could be placed on or off the ships. This would suggest a ceremonial usage which is supported also by the evidence from seals where these cabins appears lone, possibly as emblems with some intrinsic importance.

The *Akrotiri* West house room 5 fresco is probably also representing the oldest sea battle so far attested. A conflict and naval engagement between aegean warrior and non-Aegean enemies (Lybian pirates?) seems to have taken place, and the outcome was victory for the Aegeans. The Aegean warriors arrived with their ships to protect the town and they have succeeded. We see the moment of victory when they are marching on the shore in triumph.





Based on the Thera fresco representations this very interesting and awesome model of a typical Aegean large ship of this period has been reconstructed.

A Very interesting ritual ship is represented on this ring from Crete named "Ring of Minos" dated around 1500 BC (*3). In this lost ring a priestess steering a shrineladen boat acrooss a bay is depicted. The small boat seems to be decorated with a sea-horse head representation and two cerimonial shrine or altars with sacral horns seem apparently built or transported on the afterdeck. This representation offer some additional support for the idea of a sea-shore cult involving both fixed shrines built on the land and portable shrines ferried coastwise by priestesses. A similar scene is also represented in another gold ring from the port of *Mochlos*.





Beautiful Aegean stone anchor decorated in the form of an octopus. Even if This element has been also interpreted as a religious ritual stele its identification as a ship anchor, based on general dimensions weight and design, is more reasonable.

A Minoan shipwreck discoverd in the 2010 brings to the light 209 ceramic vessels, about 80 of which are nearly whole and clearly identifiable as types of amphoras and large jars that would have transported liquids, possibly wine and olive oil, though no residues remain. A handful of artifacts, including cooking pots, jugs, a few cups, and fishing weights, likely belonged to the ship's crew. Even though no wood from the ship survives, the archaeologists are convinced they belong to a wreck because they are an unusually large group of ceramic vessels that all date to the same period **MM IIB**, (1800-1700/1675 BC) and were all made on east Crete. Furthermore, the pottery that was still in place was found upside down, which seems to indicate the ship completely capsized and wound up with the hull uppermost and the cargo down. The ceramics broaden into a roughly oval-shaped concentration that extends over an area 50 by 65 feet, from which it is possible to estimate -by the distribution of objects- the ship to have been between 32 and 50 feet long.



An Achaean ship similar in design to the ones represented in the fresco from Thera with sterring oar and two passengers in the central cab and is also represented in this gold ring from *Tiryns* dated around 1500 BC.

Fragment of marble rhyton from *Epidauros* found in disturbed layers with **EH-LH** ceramics and idols. At lower right a ship cabin is represented. At base of square, protome dolphin rears up. To left shore line with marching men. Lower left at least two men behind body-shields and long baton or spear.





This amphoroid krater fragments from *Enkomi* Cyprus dated around **LH IIIB** (about 1350 BC) show elaborate representation of ship and two classes of men: the huge warriors with spotted robes, helmets, and swords, who stand on the deck or the shore, and the little nude men who toil below the decks. This is the first full naval scene in the history of Achaean pictorial painting (as opposed the above shown isolate Middle Cycladic or Helladic pictures of ships, or the naval fresco from Thera). The scene seems almost the same on each side: the ship, with three or four lilies on the stem, a mast with stacked rigging rings or deadeyes, and a bird prow, support two large figures on the upper deck, facing each other across the mast, and four small figures on the lower deck, facing each other in pairs across the mast-step. It is clearly a military scene, not a pure commercial venture, nor a festival voyage as on Thera, and it fits well with the recorded Sea Peoples raids of the thirteenth century, a prototype for ship-raiding scenes in **Homer**.



Very interesting developed clay ship model from *Tiryns* dated **LH IIIB** (about 1300 BC).

Clay model of a boat of Plain White Handmade ware, from *Kazaphani* Cyprus dated around 1350 BC. The model has holes on either side below the rim and dowel hole for mast. This is one of the largest models of a ship from the Late Bronze Age. Such models become commoner during the Cypro-Archaic period but they begin to appear in Cyprus already in the Middle Bronze Age Late Cypriote I-II period. This model represent more likely a large commercial ship similar to the ship that wrecked at *Uluburun*.





The Uluburun wreck is located at *Uluburun*, which is on the southwestern coast of Turkey near Kas. The wreck is located at a depth of more than 40 meters. The ship has been dated to the Late Bronze Age, with the more specific date of 1300 BC given by dendrochronological testing performed on dunnage or firewood found on the wreck. The Uluburun wreck has been crucial to the understanding of ship construction and trade in the Late Bronze Age. Pulak describes the wreck as "one of the wealthiest and largest known assemblages of Late Bronze Age trade goods yet discovered in the Mediterranean" . The cargo included nearly a ton of tin ingots and around ten tons of copper ingots from Cyprus. Other cargo finds include elephant and hippopotamus ivory, glass ingots, and bronze tools and weaponry. Interestingly, by examining the personal effects of the ship �s passengers as well as the cargo, archaeologists have hypothesized that there were at least two Mycenaeans aboard, likely men of rank serving as envoys. Some indications of the provenance of the ship and the nationality of its crew or merchants on board the ship may be gained from the utility wares (i.e. Cypriot jugs and Mycenaean deep bowls and cook-pots), perhaps also from the incised trade marks on the handles of amphora which can be claimed to be connected to the Cypro-Minoan I Script. These facts, taken with the location of the wreck, point to the coast of Cyprus, as the probable base of the ship, where large naval centres flourished at Enkomi, Kition, the site at Hala Sultan Tekke (Alyke), Palaipaphos and Maa-Palaiokastro or to the south coast of the Argolid, to important centres of naval power, also known from the Catalogue of Ships in the Iliad (*4) and from Hesiod S Catalogue of Women (*5) to well-fortified Tiryns, Mases, and well-harboured Hermione and Asine

The largest seagoing sailed merchantmen in the Mediterranean and Gulf during the Bronze Age (c. 3000-1150 BC) were probably not much larger than the ship that wrecked at Uluburun about 20 tons capacity and 16 meters long. A 13th c. letter from Ugarit, long interpreted as indicative of much larger ships, is reinterpreted in the context of available texts, archaeology, and iconography. Available iconographical evidence points toward a 20 meter maximum length, and the evidence of the Uluburun shipwreck only nominally exceeds the maximum size of seagoing ships appearing in Mesopotamian records. Storage jars from shipwrecks, including those found at Uluburun, are used to address problematical aspects of the textual evidence, wherein the capacity of ships is given in volumetric units. Though problematic, all available evidence suggests that reconstructions of Bronze Age trade networks should assume smaller ship capacities.





This large stone anchor weighing approx. 220 kg. was one of 24 recovered from the Uluburun wreck. All but two of the smallest anchors are of sandstone. The two small limestone anchors found on the wreck, weighing between 21 and 25 kg. These anchors were originally stowed near the bow.

Similar Late Bronze Age Cypriote stone anchors have been found at other sites in the Mediterranean like these two specimens respectively from Gulf of *Cugnana* near *Olbia* Sardinia and from the shipwreck at Cape Iriain the Gulf of *Argos*. Though the ethnicity of the ship cannot be determined with certainty, the Cypriote connection of the cargo is undoubted.

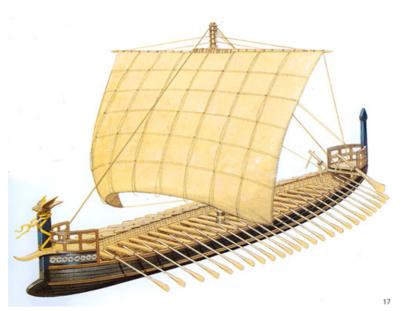






A typic Late Achaean ship is represented on a pyxis from the *Tragana* tholos tomb near *Pylos* dated **LH IIIC** (about 1200 BC). It is a long lean ship with a low gunwale, equipped with a ram as on the Middle Helladic *Iolkos* fragments but more swift-looking and narrow. It is probably meant to represent a warship or one suited to pirate raids, not a merchantman. The mast is centered, with an oval sail, whose form is more influenced by the filled concentric arcs on the ornamental panels of the pyxis than by marine facts.

An interesting and reasonable reconstruction of the Achaean ship depicted in the Tragana pyxis has been made by Peter Connoly (*6). This heavy warship had 50 oars and it is shown with both sails and oars but more likely these would not be used at the same time being the sails only used when the wind was in the right direction. The latticework panels popular in the period are used for the steering platform in the stern, underneath which the steering oar and tiller project on the diagonal, and for the lookout platform or windscreen in the high stem. In the Iliad the Achaean's ship are described as black (*7), probably because their keels were tarred. Of course in the upper parts they could have been decorated in any colour, for instance Odysseus refers to crimson-painted ship (*8).





The ship on the stirrup jar from *Asine* dated **LH IIIC** is miniature and poorly drawn. Probably it is sailing right, with an incurved bow and a slight ram, a fringed curved screen or relic of the fish standard on the prow, a centered sail, square and crosshatched, with the mast off-center at the left corner, eleven oars, a tall laddered steering platform, and a steering oar lying almost level in the water.

Other two stone anchors from the Achaean period. The one at the top had two stakes through it to stop it dragging along the sea bed.





A stirrup jar from *Skyros* dated **LH IIIC** has a long bird-headed ship. It is drawn with a long narrow hull made of two lines that angle up as a triangular-bladed steering oar obliquely across it, and the stern curves up and over into a double tail. The mast is centered and surmounted with a ring or halyard deadeye; below it two tautened stays run to stern and prow. No sail is set.

Very interesting bird-boat motif painted on a krater sherd from *Tiryns* dated **LH IIC**. This boat with two headed bird simbol shows closer similarity with the Sea Peoples's ones represented on the *Medinet Habu* relief.

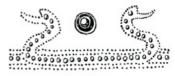




If there is no doubt between the similarity of the ship represented in the *Tiryns* krater sherd and the ones of the Sea Peoples as shown on the *Medinet Habu* relief, how far the above mentioned ship from Skyros jar is influenced by the bird-headed ship of the Sea Peoples, or by "Philistine" contacts in the twelfth century is not clear; *Skyros* was a natural home for pirates and sea rovers, who would have seen innovative ship in the Levant and across the Aegean.

The above mentioned representation of Aegean double-headed bird-boats show closer and very interesting similarity with some ships models or representations of the Late Bronze Age found the Central Europe as these embossed Urnfield ornaments from Slovakia and Pomerania.

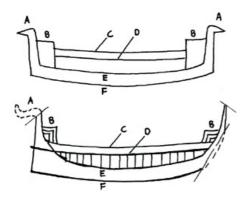








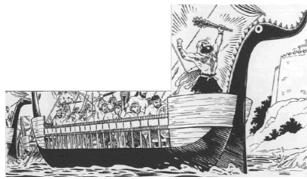
The excavation in *Pyrgos Livanates* in East *Locris* and in all likelihood the site of *Kynos*, the home of **Ajax Oileus** in the Iliad, has disclosed a major **LH IIIC** site with an extensive building complex. The pottery produced at the site includes vessels with striking depictions of ships, warriors and sea battles. The ships depicted appear to include both wide-bodied merchantmen and narrow warships. A terracotta ship model recovered in the excavation may originally have contained fifty oars, matching the description of ships in Homer as well as the **Jason**'s mythical ship **Argo**. A depiction of a similar oared galley appears on an angular alabastron dated around 1100 BC found in a reused **LH IIA** tholos tomb at *Tragana* near the palace of *Pylos*.



The construction details comparison between the Sea Peoples ship represented in the *Medinet Habu* temple and the Achaean one from *Kynos* show closer common elements like the bird headed prow (A), the two platforms (B), the bulwark protecting rowers (C-D), the wooden hull (E-F) were the F representing the line of the keel or keel-plank and the E the caprail. The above shown ship iconography confirms the significant interconnection between Achaeans and Sea Peoples, documented so well in other aspects of material cultures (see also the page dedicated to the Sea Peoples)

A Narrow medium size ship, warriors and steering oar involved in a sea battle is also represented in this other pottery fragment from *Kynos* dated **LH IIIC**. The ship has an high indented stem and a long stern. These warships were shallow-draught vessels and could be beached in sandy bay. **Homer** describes the Achaean ships as being dragged up onto the beach and held upright with props (*9)





A beautiful representation of an Achaean warship has been made by **Eric Shanower** in the number 3 of his awesome mithologically and archaeologically based comic serie **AGE OF BRONZE** THE STORY OF THE TROJAN WAR. The scene and the ship, more likely based on the above shown pottery fragment from *Kynos*, is related to the mithical first Achaean attach to Troy lead by **Herakles** and his followers.

Achaean sherd dated **LH IIIC1b** (about 1200-1190 BC) from *Ashkelon* Israel with lower legs of human figure standing on bird's head curved line of a possible ship's sterm.





Aegean-style ship is also engraved on a seal from *Beit Shemesh*. **Philistine** wares are prevalent at *Beit Shemesh*. Therefore, it seems probable that the prototype of the ship engraved on the seal was **Philistine**

On this **LH IIIC** ship representation from *Kynos* we can see the feet of a warrior standing on a ship deck and underneath a waid bulwark runs along the side of the ship. Its decoration shows a common motif used to fill decorative bands on Achaean vases. Below the bulwark the low hull of the ship can be seen and eleven oars are depicted, extendind from above the gunwale down below the keel.





Another war ship is depicted in this **LH IIIC** pottery fragment always from *Kynos*. Although it is only partially preserved, we can recognise an oar-propelled galley with low angular hull, a rather high stem or stern and many oars.

On another fragment from *Kynos* dated **LH IIIC** a part of undecked rowing-ship is pictured. It seems that both type of war-ships, decked and undecked, existed at the same time and were used to transport troops.





A small sailing ship, or rather a sailingboat is depicted in this fragment of a krater from *Kynos* also dated **LH IIIC**. Preserved on the sherd are the mast, a backstay and a forestay and one of the boat extremities that rise well above the gunwale or the deck (if there was one). The standing figure between mast and stay facing this end perhaps suggests that we are dealing with a stern.

On these two pottery fragments, perhaps belong to the same krater, warriors with helmets and rectangular shields on board of war-ships are picture. In the left piece we distinguish the mast of a ship, at the top of which two brails hang from a double ring. The horizontal line under the rings should be the yard of the sail, and the hanging festoon-like semicircles obviously represent the brailed-up sail. In the right piece a warrior seems to be standing below the construction behind him. This construction could be a rail or a bulwark, than the warrior is probably standing in the hull of an undecked ship.

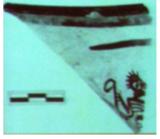


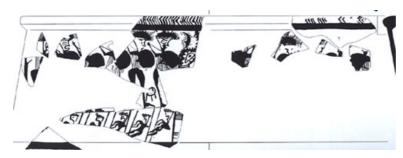




Warriors with hedgehog helmets behind a ship's prow are depicted in this fragment of a krater from *Kynos* also dated **LH IIIC**.

A warrior with hedgehog helmet and possible banded cuirass on a ship is also attested on this krater fragment from *Kynos* also dated **LH IIIC**





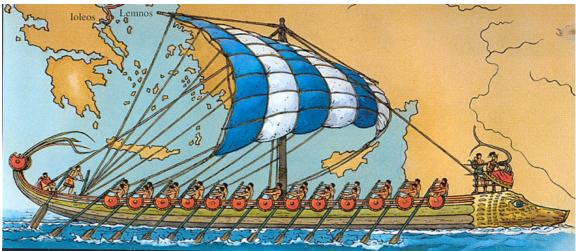
Naval battle is also depicted in this krater from Bademgedigi Tepe in the west Anataolia dated LH IIIC. Sea battles are clearly one of the most popular theme in the final phase of the Late Heladic period and they are not only a Greek mainland phenomenon, but also appear on the islands and the coast of Asia Minor. They are probably evidence of a new kind of warfare. The fact that similar scenes were found across the Aegean could suggest that war at sea was more common than before.

A detail of the same krater fragment from the Anatolian site of *Bademgedigi Tepe* shows the rowers in the bellow deck. The more fully preserved rower on the right shows that the rowers have both hands on the oars which rise up to the deck above.





A large Achaean warship seems to be represented in this pottery fragment from *Kastanas* dated **LH IIIC** The drawing is very schematic but it is possible to identify one of the platforms normally located in the high stem or in the stern area, the sail and the oars. In the Iliad is mentioned that the rowers were numbed in leg and arm by the toil of smiting the sea-water with their blades of polished pine (*10).



An interesting reprentation of the mithical **Jason**'s ship **Argo** has been made by **Marc Henniquiau** and **Jacques Martin** (*11). According to ancient Greek mythology **Aeson** was the rightful king of *Iolcos*, but his brother **Pelias** usurped the throne. It was **Pelias** who sent **Aeson**'s son **Jason** and his Argonauts to look for the Golden Fleece. The ship **Argo** set sail from *Iolcos* with a crew of fifty demigods and princes under **Jason**'s leadership in the 13th century B.C. **Jason** assembled a great group of heroes known as the Argonauts. They included **Heracles**, **Philoctetes**, **Peleus**, **Telamon**, **Nauplios**, **Argus**, **Orpheus**, **Castor** and **Polydeuces**, **Atalanta** and **Euphemus**. Their mission was to reach Colchis in *Aea* at the eastern seaboard of the Black Sea and reclaim and bring back the Golden Fleece, a symbol of the opening of new trade routes. Along with the Golden Fleece **Jason** brought a wife, the sorceress **Medea**, king **Aeetes**' daughter, granddaughter of the Sun, niece of **Circe**, princess of Aea, and later queen of Iolkos, Korinth and *Aea*, and also slayer of her brother **Apsyrtus** and her two sons from **Jason**, a tragic figure whose trials and tribulations were artfully dramatized in the much staged **Euripides' Medea**. The place of ancient *Iolcos* is believed to be located in modern-day nearby *Dimini*, where a Mycenaean palace was recently excavated.





The boat **Argo** was constructed with the help of Goddess Athena. The shipbuilder was **Argus**, and so the ship was named after him, **Argus** meaning swift. The wood came from the pine trees of Mountain Pelion, and from the talking oak trees of **Dodone**, and as such the boat was endowed with the gift of speech.

The Municipality of Vales, in conjugation with the local Municipal Tourist Burgay and the research team of

The Municipality of *Volos*, in conjunction with the local Municipal Tourist Bureau and the research team of "Navdomos", reconstructed the myth and the ambitious project, which took years of painstaking enquiry and relevant studies, at the end materialized, with the newly built replica of the mythical Argo and its launching on September 17, 2006, in the presence of Prime Minister **Costas Karamanlis**. The building of the ship, with Bronze

Age tools to the specifications of a Mycenaean-era vessel, took place at the shipbuilding yard in *Pefkakia*, near *Volos*. The 28.5 meter long and 4 meter wide vessel have on 50 oarsmen. The 50 rowers are citizens from all the member-states of the European Union. **Argo** travels to the ancient Colchis, present-day Georgia, symbolically looking for the "Golden Fleece" of our times.



A similar large ship with large sail and several oars is represented in this larnax from Crete dated around XII century BC.





A very unique and interesting representation of ship is present on this table from Ithaca. This Late Helladic clay table of uncertain dating has been found by the Archaeologists Thanasis Papadopoulos and Litsa Kontorli in the same area of a recentelly discovered Achaean palace. The clay table is very likely repesenting an episode from the Odyssey-the ship with **Odysseus** bound to the mast- with monster-like motifs on either side and markings which are probably **Linear B** script like the sigh **AB09** "SE".

There is another interesting seal from Knossos dated more likely in the final phase of **LM III** (about 1200 BC). This seal, probably used as a warranty mark for the traded goods, shows a huge Achaean style horse placed over a single mast medium size ship with oarsmen .





Two oarsmen are well attested in this pottery fragment from *Kos Seragio* dated around 1200-1100 BC. The fragment shows the lower deck of a ship being rowd right by two sailors in baggy turbans. The ship is shown in cross section, as on the *Enkomy* vase.

Men on oared ship are depicted in this sherd fragment from *Xeropolis Lefkandi* also dated **LH IIIC**.

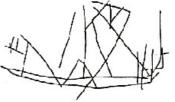




Two warriors rowing are also well depicted on this pottery fragment from *Voudeni* dated around 1200-1100 BC. The warriors seem to be equipped with decorated or embossed helmet and corselet.

Very schematic ships representation from Late Cypriote stone stele dated 1200-1100 BC.





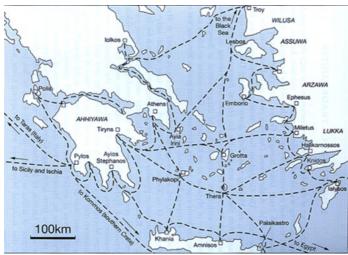


Vase of Proto-White painted ware, in the form of a warship from *Lapithos* (Tomb 74) Cyprus date around 1100-1000 BC. The surface is covered with painted geometric patterns. Long and swift warships were no doubt used to bring the Achaean immigrants to Cyprus and other places where they settled at the end of the Late Bronze Age.

Similar askoi of Proto-White painted ware in the form of warship always from Cyprus dated around 1100-1000 BC. Also in this case the surface is coverd with painted geometric patterns. Whether the newcomers are called raiders or refugees seeking to settle in a new home in Cyprus, it is clear at any rate that those who came from the Aegean must have come to the island in organized groups, with aristocratic leaders who could afford to arrange their transport in warships during a period when piracy made traveling in the Mediterranean difficult.



PYLOS ROWERS AND COASTGUARD



Aegean Trade routes

Some Linear B tablets from Pylos are referring to naval/military subject-matter (*12). The specific subject of the naval tablets is indicated by the word ",rowers" which appears in the first line of three tablets. The first is a list of the numbers of rowers to be provided by various town for an expedition to Pleuron. The second is probably somewhat similar, but the heading is almost all lost, and the numerals are much larger; in all 443 men are recorded. These numbers make it certain that we are not here concerned with a paceful mercantile venture, but a naval operation; and it would be unlikely that the business of trade would be thus organized by a central authority. It is possible that the thirty men specified (PY An12) is the complement of a Mycenaean ship or part of the complement for a larger ship with fifty oarsmen. The second tablet then appears to allow for at least nine ships. The third tablet is more enigmatic, the heading speaks clearly of "rowers who are absent" (without leave?).

In these tablets an important coastal town is mentioned **Ro-o-wa** which provides eight of the thirty men for *Pleuron*; it is the seat of a coastal command (PY An43). As the Lawagetas and other important people are associated with it here, it may well be the port of *Pylos* itself. In the **linear B** the terms **na-u-do-o** was the ship builders, **o-pi-ka-pe-e-we** seems related to the superintendants of the hulls or boats, **e-re-e-u** was the responsible for oarsmen, **e-re-ta** were the rowers, and **ka-ko-na-wi-jo** is related to naval bronzes.

CONCLUSIONS

The history of the Aegean ships and Naval trades does not have a concrete point of beginning. Its roots are lost in the depths of centuries of the history of mankind. In a geographical area of which any part is no more than 150 km.away from the sea, the Greeks Aegean areas populations developed from the Prehistoric Age societies which were coastal in their majority. There, they learned to exploit the marine resources and loved the sea. Automatically, the need for protecting and further spreading the cultures that they had developed was created, having as a result the progressive development of the first organised units of the Aegean sea power. Since the cycladic period several pictorial evidences and shipwreck attested a large development of ships used both as warship and commercialship. These early Aegean ship were characterized by a lean long design and a long vertical prow with symbols mounted on top. In the Greek mainland ships with the typic curved ram on the prow, are attested since the Middle Helladic period. Because of the intensive commercial trade between the Aegean population and the Near Eastern Kingdoms some of the early Aegean ships show also several similarity in general shape and design with the Egyptian ships of the same period, as well attested in pottery representation and in the famous fresco from Akrotiri in the Thera island dated around 1600 BC. Different type of Minoan ships in size and general design are well represented on several Seals, pottery, fresco and jewellery. Some of The early Achaean ships were similar to Minoan ships, the later design was still characterized by the typic long lean design and a long vertical prow with symbols but with a rams and the platforms located in the stern and in the high stem. the largest of these ships could accomodate up to 50 oarsmen. large sail was also used probably only when the wind was in the right direction. Sea battles represented on Greek pottery dated during the final phase of the Late Helladic

periods seem related to these kind of large or medium size Achaean ships which are also attested in pottery/stone depictions, or askoi coming from Anatolian coast settlements and islands.

TOP

- (*1) Egypt, the Levant, Anatolia, and Crete all illustrate their ships in this period. Even if the sword-blade inlaid with ship from the mysterious Dorak Treasure contemporary with Troy II should prove genuine, the ship do not look quite Cycladic (Illustrated London News 28 November 1959, 754)
- (*2)This fresco was clearly painted before the destruction of the island by an earthquake followed by the vulcano's eruption and ashes fallout which based on the most recent analysis seems occurred not later of 1600 BC.
- (*3) The genuineness of the Ring of Minos has been sometimes questioned, but now that it is lost, allegedly buried somewhere in the garden of Nicolaos Pollakis, the priest of *Fortetsa*, who for a time shortly after its discovery was its owner, the question will probably never be resolved (Warren 1982).

(*4) Iliad II, 559-564

(*5) 39, 94.96, b 14-11.

(*6) PETER CONNOLY; THE LEGEND OF ODYSSEUS, Oxford University Press 1986

(*7) Iliad VIII, 258

(*8) Odyssey XXIII, 270

(*9) Iliad II, 180

(*10) Iliad VII, 5-6

(*11) MARC HENNIQUIAU, JACQUES MARTIN; LA MARINE ANTIQUE 1, Dargaud Editeur 1997

(*12) MICHAEL VENTRIS, JOHN CHADWICK; DOCUMENTS IN THE MYCENAEAN GREEK, Cambridge University Press 1956