

## SEAFARING السفر البحري

*Steve Vinson*

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## SEAFARING

## السفر البحري

Steve Vinson

## Seefahrt

## Navigation maritime

*Seafaring either to or from Egypt cannot be specifically documented before the Old Kingdom, but evidence points to the possibility of sea contact between Egypt and the Syro-Palestinian coast in the Early Dynastic Period, and it is not implausible to suggest that such contacts could have been established in the Predynastic Period or earlier. Egypt's wooden boat-building industry appears to extend back that far, and while all currently available evidence is oriented towards Nile River shipping, there is no obvious reason why Predynastic Egyptian vessels could not have navigated coastal waters, as Mesolithic and Neolithic Aegean watercraft certainly did. Old Kingdom texts and images confirm seafaring on both the Mediterranean and Red Seas, and this activity continued throughout documented Egyptian history. By the Roman Period, Egypt was the nexus of a far-flung international maritime system that tied the Mediterranean to distant ports in East Africa, Arabia, and India.*

قد عرف المصريون السفر البحري من وإلى مصر منذ قديم الزمان، ولكن لا يوجد أية أدلة محددة تثبت إستخدام البحر للسفر قبل الدولة القديمة، وذلك فيما عدا بعض الأدلة التي تشير إلى إحتمال وجود إتصال بحري ما بين مصر والشواطئ السورية-الفلسطينية أثناء العصر العتيق، وبذلك يمكن إقتراح وجود إتصال بحري منذ ما قبل الأسرات أو حتى قبل ذلك. ويبدو أن صناعة المراكب الخشبية بمصر تعود إلى ذلك الوقت. بالرغم من أن كل الأدلة المتاحة حالياً تشير إلى وجود نقل نهري، لا يوجد سبب واضح كان قد منع المراكب من عصر ما قبل الأسرات من الإبحار على السواحل مثلما فعلت المراكب من منطقة بحر إيجة بالعصور الحجرية. أكدت النقوش والنصوص من الدولة القديمة سفر المصريون بحراً عبر البحرين المتوسط والأحمر، وقد إستمر ذلك عبر التاريخ المصري القديم. أصبحت مصر في العصر الروماني حلقة وصل ما بين شبكة ملاحية دولية كبيرة، حيث وصلت مابين البحر الأبيض المتوسط والموانئ بشرق أفريقيا وشبه الجزيرة العربية والهند.

**T**he sources for the history of ancient Egyptian seafaring—that is to say, use of water-craft on the Mediterranean and Red Seas—are, unfortunately, somewhat uneven and less informative than one would like. Far more information (textual, iconographic, and archaeological) is available for the study of

riverine ships and shipping. In general, evidence is biased towards the New Kingdom and later periods, but at least some important and interesting material comes from almost every period in Egyptian history.

Royal inscriptions, including both texts and images, are highly useful but not attested in all

periods, and their limitations must be kept in mind. Egyptian nautical images are often highly detailed, but the details they provide are limited to exterior structures, most especially rigging. In the New Kingdom, a few tombs include images of ships from Canaan/Syria-Palestine, along with images of foreign traders bringing exotic materials from Western Asia, the Aegean, and Nubia. Numerous boat models come from Egypt, but none can be identified as models of specifically ocean-going craft.

The texts that accompany nautical images can be informative, but their roots in religious/propagandistic discourses praising royal power must be kept in mind. So too must the interpreter be alert to these texts' allusions to Egyptian perceptions of the world beyond Egypt—i.e., in part as a place where *maat* does not necessarily obtain, but also as a place where distant, unknown gods may dwell and where wonderful things may be found.

Documentary texts dealing with seafaring (as opposed to river transportation) are rare before the Ptolemaic and Roman Periods; one exceptional document is a papyrus from the dockyard annals of Thutmose III, which includes mentions of ships of *Kefityw* (probably Crete). Likewise, archaeological remains directly connected with seafaring are relatively sparse, so far found only on the Red Sea coast. For all periods, an important source of indirect information is the archaeological and textual attestation of foreign trade.

### *Prehistoric/Predynastic Egypt*

Seafaring, either by Egyptians or by others traveling to Egypt, cannot be documented before the Old Kingdom, but it might well have begun in the Predynastic Period, or even earlier. It is very probably the case that Egypt's wooden boat/ship-building technology was well developed by the late Gerzean/Naqada II Period, when boat imagery (especially images of so-called "sickle-shaped" boats, characterized by crescentic hulls with multiple paddles, deck structures, standards, and palm-frond-like bow decorations) is common in both rock art and

in pottery decoration. Such representations offer us no direct evidence for the material used to construct Egypt's "sickle-shaped" boats, but archaeological evidence suggests a high general level of technical skill in working wood in the Predynastic Period. Construction of wooden boats is certain by the 1<sup>st</sup> Dynasty (Vinson 1994: 17 - 20; Ward 2003). While all extant evidence for such early craft points towards their use on the Nile, it is not difficult to imagine that Egyptian vessels could have sailed on the Mediterranean or Red Sea before the Old Kingdom; there is no reason to doubt that Egypt's Predynastic and Early Dynastic vessels were at least as well constructed as the Mesolithic water-craft that brought obsidian traders to the Greek island of Melos, or the Neolithic water-craft that brought the earliest settlers to Crete and Cyprus (Bass 1972: 12). Moreover, there is considerable evidence for the importation of exotic materials into Egypt in the Gerzean/Naqada II Period (Hoffman 1979: 336 - 338; Marcus 2002). To what extent this can be attributed to either land transportation or seafaring cannot be definitely determined.

We can, however, certainly discount earlier Egyptologists' theories of circum-Arabian voyages from lower Mesopotamia to Egypt's Red Sea coast by Uruk-era Sumerians who (allegedly) conquered Predynastic Egypt and founded the 1<sup>st</sup> Dynasty (Hoffman 1979: 340 - 344; Redford 1992: 18 - 24). A carved ivory knife-handle said to be from Gebel el-Arak in Upper Egypt (now in the Louvre) shows boats resembling vessels portrayed on Uruk-era cylinder seals, as well as sickle-shaped boats that somewhat resemble vessels on Gerzean/Naqada II painted pottery, amid a battle in progress. This scene, as well as other images of "foreign" ships, was once generally interpreted as showing such an invasion (Bass 1972: 13; Bénédite 1916: 31 - 34; Petrie 1920: 49), but since the 1970s, this interpretation has lost considerable favor (Hoffman 1979: 339 - 342). In all likelihood, the undoubted Mesopotamian flavor of the Gebel el-Arak imagery—along with other examples of Mesopotamian cultural influences that reached Egypt in the Predynastic Period—can

be explained by diffusion via Syria, which was reached by Sumerians during the Uruk Expansion in the late fourth millennium BCE, rather than by a sea-route connecting Mesopotamia and Egypt in this period (Moorey 1987).

### *Early Dynastic Period*

By the 1<sup>st</sup> Dynasty, contacts between Egypt and western Asia had accelerated and sea contact seems certain. An Egyptian cup, datable to the Early Dynastic Period, was found by an Israeli fishing trawler off the coast of Gaza in the 1980s (Marcus 2002: 407). We know that, in the Early Dynastic Period, Lebanese cedar was imported into Egypt for the construction of royal tombs, and a Dynasty 1 label from the tomb of Aha (second king of the dynasty) includes images of ships labeled with the word *mr* “cedar” (Hoffman 1979: 296, fig. 70), which suggests a connection between Egyptian cargo ships and the importation of Lebanese or Syrian wood. It is unclear whether the word “cedar” here refers to the vessel’s construction or its cargo. Both are possible, since cedar was a well-attested ship-construction material in Egypt (most notably the 4th Dynasty funerary vessel of Khufu; cf. Lipke 1984: 24 - 25), and other evidence makes it all but certain that, not later than the 4<sup>th</sup> Dynasty, imported wood came to Egypt at least sometimes by sea (see *Old Kingdom* below). That said, it is impossible from the evidence at hand to say anything specific about how any Pre- or Early Dynastic seafaring would have been organized, beyond the probability that much, if not all, of this activity would have been in the hands of the ruling elite. Nor is it possible to estimate how important it was to Egypt’s overall economy.

### *Old Kingdom*

The Palermo Stone reports for the 4<sup>th</sup> Dynasty: “bringing 40 ships filled [*mh*] with coniferous wood [*š*]” in the reign of Sneferu (Strudwick 2005: 66; Wilkinson 2000: 141 - 142). This would appear to confirm sea-going transportation of wood between Egypt and the Syro-Palestinian coast from at least the 4<sup>th</sup>

Dynasty, if not earlier, though whether the ships involved were “Egyptian” (i.e., built, crewed, and commanded by Egyptians) or “Canaanite/Syro-Palestinian” cannot be determined. The first Old Kingdom representation of what appears to be a sea-going craft appears in the 5<sup>th</sup> Dynasty sun temple of Sahura (Borchardt 1913: pls. 11 - 12; Landström 1970: 63 - 69). This much-discussed relief shows vessels that appear to be rigged like standard Egyptian river-boats of the Old Kingdom (i.e., with bi-pod, rather than mono-pod, masts), but that also show stoutly-lashed bulwarks (uppermost hull planking) and a hogging truss (heavy cable running bow-to-stern, capable of being tightened to prevent the ends of the ship from sagging), which would suggest a ship designed to withstand the rigors of sea travel (Vinson 1997b: 157, n. 3).

The presence aboard of bearded persons who appear to be western Asian, along with an inscription presented as the arriving seafarers’ praise to Sahura, has led to the conclusion that this vessel probably represents a foreign craft arriving in Egypt. Although the word does not actually appear here, it may well be that this is a “Byblos” ship (*kbnt*). This ship name does not appear until the 6<sup>th</sup> Dynasty, in the inscription of the courtier Pepynakht (Strudwick 2005: 335). Pepynakht reports that he had been assigned to bring back to Egypt the body of a murdered Egyptian who had been sent to Western Asia to oversee the construction of a “Byblos” boat, which had actually been intended for an expedition to Punt (probably southern Sudan and/or Somalia, perhaps also including southern Arabia). This suggests that in the Old Kingdom, Egyptians may have depended at least in part on Western Asian ship-builders for their ocean-going craft.

### *Middle Kingdom*

In the Middle Kingdom, we encounter “Byblos” boats (*kbniwt*) once again in a Wadi Hammamat inscription commemorating an expedition to Punt. This time, the ships are actually constructed on the Red Sea coast—

thus, most probably by Egyptians (Couyat and Montet 1912: 82 - 83; see 1.9 for reference to "Byblos" boats and 1.14 for their construction on the coast). In general, the best evidence for Middle Kingdom seafaring reflects Red Sea shipping. One of the best-known Middle Kingdom Egyptian literary compositions, the *Tale of the Shipwrecked Sailor*, is centered on a voyage to Punt. The details given for the size of the sailor's ship (120 cubits by 40 cubits, or about 60 meters by 20 meters) and its crew (120 men) (Lichtheim 1973: 212) should not be taken seriously (cf. Vinson 1997a; 1998: 15ff. for the much smaller crews known from actual documentary texts for working Nile vessels), but the tale does include a plausible list of products from Punt (e.g., myrrh, various oils, giraffe tails, elephant ivory) and reflects the genuine hazards of shipping on the Red Sea. One archaeologically documented Red Sea embarkation point during the Middle Kingdom was Marsa Gawasis, where shrines constructed of stone anchors have been discovered (Sayed 1977, 1980). However, Egyptian contacts with the Levantine coast, especially Byblos, and the island of Crete are also documented or suggested in the Middle Kingdom (Watrous 1998).

### *New Kingdom*

Punt continued to be a focal point of Egyptian seafaring in the New Kingdom, with Hatshepsut's Punt reliefs at Deir el-Bahri constituting perhaps the finest preserved examples of Egyptian nautical art (Landström 1970: 122 - 127; Naville 1898: pls. 72ff.). The vessels portrayed here show classic Egyptian lines and rigging, and suggest the very highest achievements of Egypt's traditional boat- and shipbuilding craft. Further evidence for Red Sea sailing in the 18<sup>th</sup> Dynasty has more recently been brought to light by Boston University archaeologist Kathryn Bard, who in 2004 discovered a cave at Marsa Gawasis containing fragments of rope, steering-oar, and hull-planking that may date to or near the reign of Hatshepsut (Bard et al. 2007; Ward and Zazzaro 2007; Ward and Zazzaro fc.). The Ramesside Papyrus Harris I reports a

voyage to Punt in the reign of Ramses III (Fabre 2004: 84 - 85).

As in the Old and Middle Kingdoms, Egypt in the New Kingdom was also in maritime contact with the Late Bronze Age civilizations of the Eastern Mediterranean and Aegean. A number of 18<sup>th</sup> Dynasty tomb reliefs portray Minoan traders (Rehak 1998), and an important relief from the tomb of Ken-Amun (TT 162) shows a Canaanite ship in port (Vinson 1994: fig. 28). This ship resembles contemporaneous Egyptian ships like the Hatshepsut Punt-expedition ships in some respects, notably the rigging; but the overall hull shape is characteristically Near Eastern. New Kingdom texts also reflect these connections. The dockyard annals of Thutmose III refer to ships of *Keftyw* (*Kftjw*) (cf. Glanville 1931: 116; 1932: 36), likely Crete or the Aegean more generally (Rehak 1998), and ships from Canaan are described in the Kamose Stela from the terminal Second Intermediate Period.

The Kamose-stela ships are said to carry luxurious cargo including gold, silver, lapis lazuli, various sorts of wood, and other raw materials; curiously, the only finished products are "countless copper axes." The summary writing used here for "copper" (*ḥmt*) could also bear the reading *ḥsmn* ("bronze") per Habachi (1972: 37). Although the common Egyptian word for "axe" used here (*mjnb*) is admittedly attested nowhere else in this sense, it may be that the reference in the Kamose Stela is actually to copper ingots of the "ox-hide" type. The shape of such ingots has been compared to that of Aegean double axes of the Late Bronze Age (Burkert 1973: 69 - 78). The rest of the cargos described on these ships comprise raw, unfinished products; copper ingots would be a more plausible bulk cargo than literal finished axes (cf. the large cargo of ox-hide ingots in the late fourteenth-century BCE Uluburun shipwreck [Pulak 2001]; also the even larger (?) cargo of copper ingots described in Amarna Letter 35 [Moran 1992: 107ff.]).

Archaeologically, the late-18<sup>th</sup>-Dynasty-era Uluburun shipwreck shows the extent to



which Egypt was embedded in maritime and overland routes that extended throughout Africa, Western Asia, and southern and eastern Europe (Pulak 2001). Perhaps the most important Egyptian artifact from the Uluburun wreck is the golden scarab of Nefertiti. However, other important objects that suggest Egypt's central location on many of the important trade routes of the Late Bronze Age world include raw ebony and ivory and ostrich eggshells, which may have been transshipped through Egypt from tropical Africa, and perhaps the wreck's glass ingots, which some have argued to be of Egyptian origin (Nicholson 2007: 23).

By the end of the 18<sup>th</sup> Dynasty, new principles in ship design, likely derived from the Aegean, are visible in Egypt. A relief from Saqqara, probably to be dated to the reign of Horemheb, is the first known example of a ship rigged with brails—Venetian-blind-like lines that could be used to shorten or shape loose-footed sails, and that were to characterize the standard sea-going rig of classical Mediterranean antiquity. Up until this point, Egyptian ships—as well as sea-going ships that appear in the art of Mycenaean Greece, Minoan Crete, and the island of Thera—were almost always shown with the feet of their sails secured with booms (Vinson 1993). It could be that ships with these characteristics were brought to Egypt by raiders or traders from the Aegean, who are attested as early as the Amarna Period and who seem to have become increasingly irritating to the Egyptians in the Ramesside Period (Vinson 1993: 146 - 149).

The best illustration of Egyptian seagoing ships in the late New Kingdom occurs in the 20<sup>th</sup> Dynasty sea-battle relief at Medinet Habu, showing Egypt's fleet under Ramses III in a pitched battle against the invading Sea Peoples. In the relief, both sides' ships are shown with the new brailed rig. Since the sailors shown fighting on the Egyptian side are almost all wearing attire closely similar to that of the invading Sea Peoples, it seems likely that the Egyptian navy was made up, at least in this instance, of ships actually owned

by Egypt's own Sea-People allies or mercenaries—the Sherden or others.

Were other innovations in ship design adopted by the Egyptians? The late fourteenth-century BCE Uluburun shipwreck features a sea-going vessel with a construction similar to that of later Greek and Roman ships on the Mediterranean—that is, with pegged mortise-and-tenon joints—but unlike that of earlier Egyptian ships with lashed construction (Vinson 1993: 150). A fascinating letter, in Akkadian, from the court of Ramses II speaks of an Egyptian ship that had been sent to the Hittites, evidently for the purpose of allowing Hittite shipwrights to copy it (Fabre 2004: 96). The only constructional details we get are that the ship apparently had internal framing (ribs), and that it was caulked with pitch (Pomey 2006: 240), a practice now paralleled archaeologically by a water-proofing agent observed on some planks salvaged from New Kingdom sea-going ships found at Marsa Gawasis (Ward and Zazzaro *fc.*; cf. Vinson 1996: 200 for the practice in Greco-Roman antiquity and one occurrence in Roman Egypt). Whether this was a traditionally constructed Egyptian hull, or a new-style hull based on Eastern Mediterranean/Aegean principles, is unknown.

Egyptian dependence on foreign commercial ships at the end of the New Kingdom is suggested in the *Report of Wenamun*, a terminal New Kingdom/early Third Intermediate Period literary composition that describes the experiences of a priest of Amun who is dispatched to Phoenicia to secure wood for the renovation of the sacred bark of Amun. In this tale, Wenamun has to endure the sneers of his Phoenician interlocutors who point out that he has come to Lebanon on a foreign ship. Wenamun's protest that any ship chartered by an Egyptian is, *ipso facto*, an Egyptian ship, is shown by the story itself to be empty bluster (Lichtheim 1976: 224 - 230).

#### *Late/Ptolemaic and Roman Periods*

Beyond the period reflected in the *Report of*

*Wenamun*, it is not easy to trace any of Egypt's own seafaring ventures. In the first millennium BCE, Egypt certainly maintained continuous, if fluctuating, contact with Syria-Palestine; many of the Egyptian artifacts discovered in Western Asia during this period may have been carried by sea, perhaps by Phoenician seafaring merchants (Mumford 2007: 257 - 261). Seafaring again becomes clearly visible in Egyptian history largely in the context of Greeks coming to Egypt as traders or as mercenaries. As Greece recovered from the collapse of Mycenaean civilization, Iron-Age Greek seafarers spread throughout the Mediterranean. The most important early Greek entrepôt in Egypt was the east-Delta city of Naukratis, founded in the seventh century BCE. According to Herodotus (2.179; translation by Grene 1987: 209), Naukratis was originally conceived as a controlled trading point beyond which Greeks were not supposed to go (not unlike Nagasaki in Japan under the Tokugawa Shogunate). Egypt fell to the Achaemenid Persians in 525 BCE, and integration into the Persian empire appears to have promoted Egyptian trade in the Red Sea and Indian Ocean. This eastern trade was facilitated by the construction of a canal linking the Nile to the Red Sea through the Wadi Tumilat. A series of stelae in hieroglyphic and Persian marks the route of this canal, which continued in use during the Ptolemaic Period (Redmount 1995).

Many Greeks were already settled throughout the land of Egypt by the time of Alexander the Great's conquest in 332 BCE. The new dynasty founded after Alexander's death in 323 by his general Ptolemy son of Lagos turned the new city of Alexandria into one of the most important commercial and cultural centers of the Hellenistic Mediterranean. After Egypt was conquered by Rome in 30 BCE, Alexandria became the port

of embarkation for the vast quantities of grain taken from Egypt to feed the Roman mob. By the end of the Ptolemaic Period, a Greek skipper appears to have discovered the monsoon system that blows across the Indian Ocean, enabling the establishment of a rapid, open-water trade route between Egypt and India; this route only grew in importance following the Roman conquest. The most important document detailing this route is the *Periplus Maris Erythraei* ("Sailing Directions for the Erythraean Sea," a term designating both our Red Sea and Indian Ocean). The *Periplus* is a first-century CE Greek-language manual, probably written by a Greek-speaking Egyptian skipper or at least a Greek skipper with considerable knowledge of Egypt, that describes maritime routes for East Africa, Arabia, and India, as well as commercial opportunities and political/cultural conditions in the associated major ports (Casson 1989).

Hellenistic and Roman ships departed from Egyptian Red Sea ports like Myos Hormos or Berenike (Wendrich and Sidebotham 2007), which were accessible via desert routes connecting the Red Sea to the Nile Valley. These routes appear to have ended at Coptos, near the eastern-most bend of the Nile River. In the ninth year (89 – 90 CE) of the Roman emperor Domitian, an important inscription was executed near Coptos, detailing tolls to be paid by various classes of persons, animals, or items traveling or being transported along the desert route. Tolls varied widely—a "Red Sea skipper" paid eight drachmas, while "women for companionship" were assessed 108 drachmas (Young 2001: 49)! The eastern-most end of the Red Sea-Indian Ocean route can also be traced archaeologically through finds of Roman material, notably glass, which occurs in numerous sites along the coast of India (Meyer 1992).

## *Bibliographic Notes*

The only monographic treatment devoted specifically to a general account of ancient Egyptian seafaring from the Predynastic into the Ptolemaic and Roman Periods is Fabre (2004), though like

other treatments of Egyptian boats, ships, and shipping, much of the evidence it discusses is actually more directly related to Nile River shipping, for obvious reasons. Observations and discussions of Egyptian seafaring and Mediterranean or Red Sea trade are usually to be found in discussions of ships and shipping generally. An important early study is Boreux (1924 – 1925), which collected and analyzed all the important Old Kingdom material known to that date. Modern surveys include Landström (1970) and Ward (2000). While Landström's work is somewhat out of date, he was a skilled naval architect; his drawings are excellent and his interpretations always thought-provoking. Ward (2000) is the most comprehensive source for the survey of actual archaeological remains of ancient Egyptian ships up to the date of its publication, but see now Ward and Zazzaro (2007 and *fc.*) for discussion of recently discovered sea-going ships' timbers from the Red Sea port of Marsa Gawasis; Bard and Fattovich (2007) provide an overview of the excavations there. Wachsmann (1987) is a good general discussion of Egyptian connections with the Aegean world in the New Kingdom; Wachsmann (1998) includes good discussion of Egyptian shipping in the context of the Late Bronze Age. For Red Sea shipping in the Ptolemaic and Roman Periods, Casson (1989) is indispensable; and see now Wendrich and Sidebotham (2007) for the archaeological excavation and interpretation of the Red Sea port of Berenike, and Young (2001) for a good survey of Roman trade with the east. For an overview of Egyptian nautical terminology (comprehensive, but due to the nature of existing evidence largely oriented towards river shipping), see Jones (1988). Two general works on aspects of ancient ships and seafaring may also be recommended, both for the specific material they include on Egypt, and for the broader technological and historical context they provide: Steffy (1994) and Casson (1995).

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