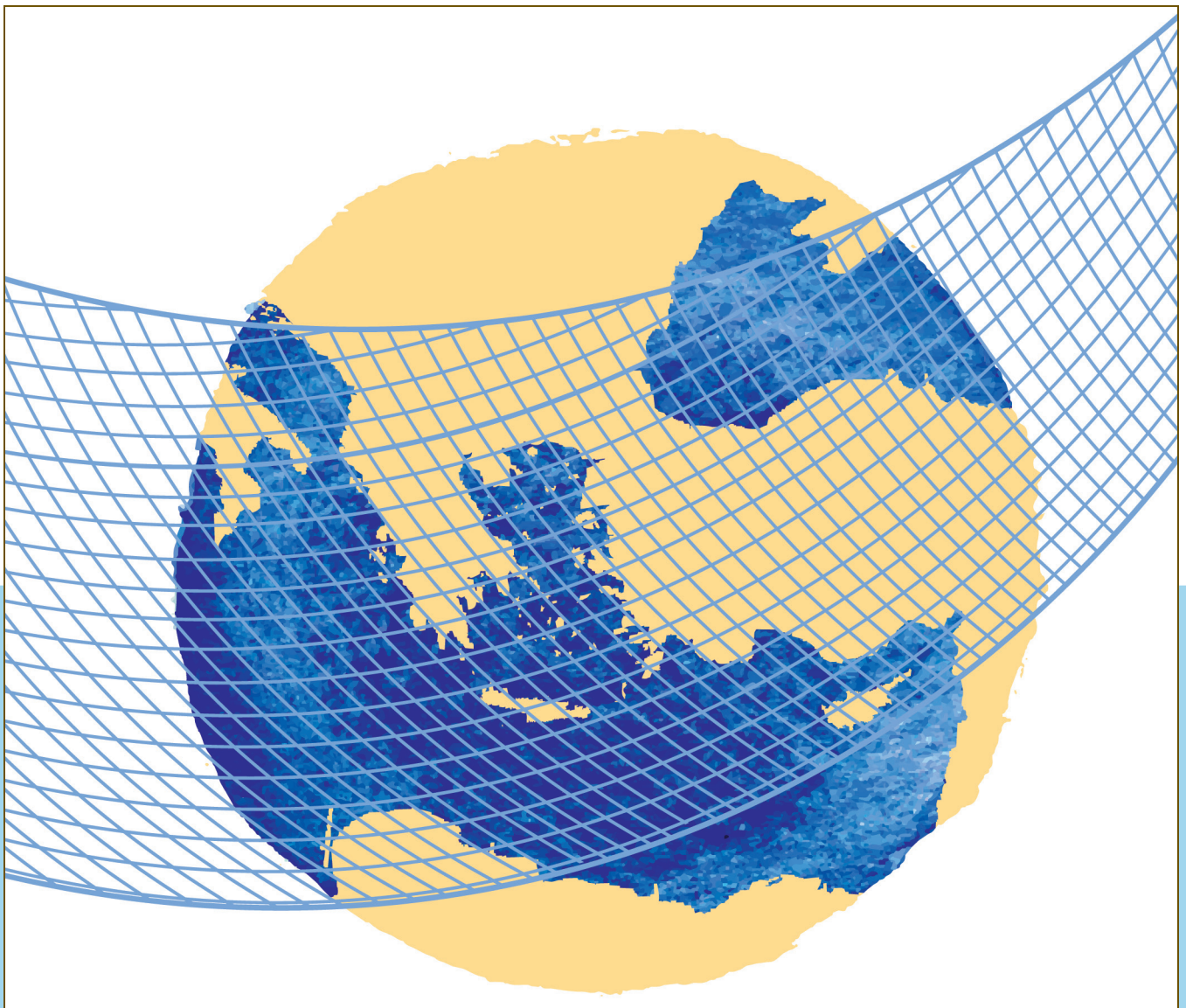


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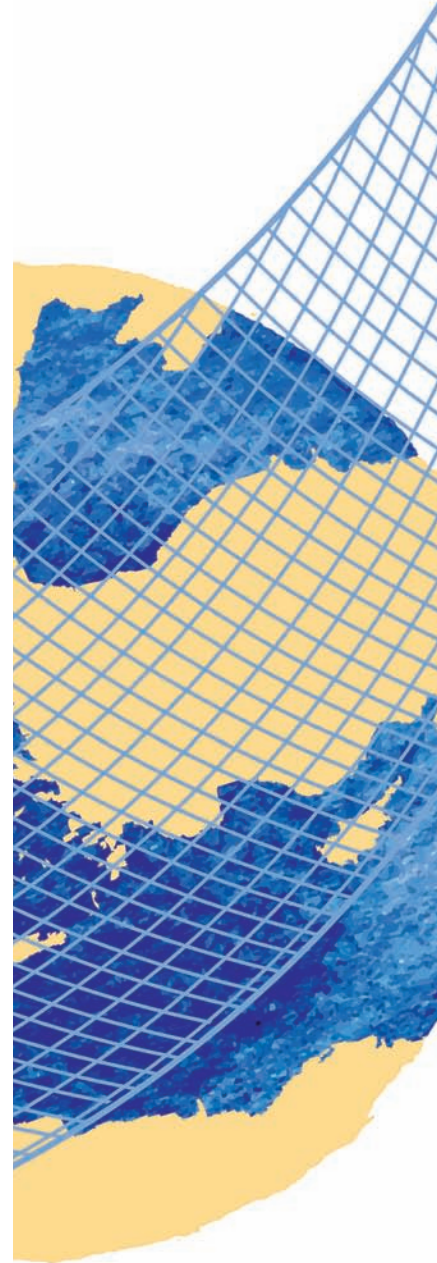
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THE HUMAN EXPERIENCE OF SEAFARING IN PREHISTORIC TIMES



Anja Krieger

ABSTRACT

The majority of current research dealing with the maritime world is centered on abstract notions such as trade, networks, connectivity, or the movement of objects. Yet, while these abstractions are useful and necessary, they often tend to neglect the people involved in seafaring activities and their experiences, contributing to the still dominant perception of the open sea as an empty space. This article seeks to address the human maritime experience as an intrinsic part of a seascape by tracing the specific experiences a sailor would have made out at sea. Based on an analysis of archaeological material derived from Late Bronze Age and Archaic shipwrecks from the eastern Mediterranean and incorporating comparative textual sources and iconography the article will attempt to shed light on particular aspects of maritime culture in prehistoric societies that are hard to grasp.

KEYWORDS: human-centered approach, seascape, shipwrecks, Late Bronze Age, Archaic period, eastern Mediterranean

The bottom of the Mediterranean Sea is covered with the remains of sunken ships from all time periods and regions, thus generating a wealth of data that has been recognized and exploited ever since the spectacular find of the Antikythera wreck in 1900 (Weinberg et al. 1965). The first systematic underwater excavations began after the invention of the Aqua-Lung by Jacques Cousteau in the early 1940s, and since then the wrecks themselves or the evidence they produced have been used to assess a multitude of questions related to the ancient economy, society, and culture using different methodologies (e.g., Casson 1991, 1994; Höckmann 1994; Göttlicher 1992; Parker 1992; Wachsmann 1998; Gould 2000; Gibbins and Adams 2001; Robinson and Wilson 2011; Sauvage 2012; Tartaron 2013; Leidwanger and Knappett 2018) and—more recently—employing different theoretical approaches deriving mostly from anthropology or the social sciences (Gould 2000; Flatman 2003; Adams 2001). The majority of research dealing with maritime matters in the (prehistoric) Mediterranean has in common the predominance of abstract notions and general processes over questions dealing with the experience of humans and their agency (Phelps, Lolos, and Vichos 1999: 254; Kotsakis 2011). This bias in the general history of prehistoric research can be attributed to two main reasons: Theoretical research addressing the experience of past humans, usually grounded in a phenomenological approach (e.g., Tilley 1994), has a focus that is

predominantly terrestrial (Farr 2006). In addition, most scholars focusing on the maritime landscape or the seascape developed their approaches while working on historic periods or outside the Mediterranean (e.g., Westerdahl 1992, 2011; Cooney 2003; Ford 2011; notable exceptions are Berg 2007; Vavouranakis 2011; Knapp 2018). This article, therefore, tries to address this gap by first discussing the concept, definition, and meanings of maritime cultural landscape and seascape and the potential and usefulness of these approaches for the Mediterranean, the Late Bronze Age, and Archaic period. Secondly, the article aims to demonstrate how evidence derived from shipwrecks and other sources such as experimental archaeology, ancient texts, and iconography can be used to recreate past human experience on board (Fig. 1).

A Phenomenology of Seascape

The concept of phenomenology, employed as a tool to describe the character of past human experience, was originally introduced to archaeology as part of landscape studies. Christopher Tilley, in his book on the phenomenology of landscape, advocates immersion of one's own body into a landscape to explore and understand social and cultural meanings of places and monuments in the past by means of walking, thus recreating experiences in the past (Tilley 1994, 2012). This immersive approach is not uncontested in landscape archaeology (summary of critique: Brück 2005; Thomas 2015), and a phenomenology of the sea or seascape also needs to be approached differently as the sea neither yields visible ruins on the surface nor is it easily explored through one's body (Berg 2007: 389).



FIG. 1

Ma'agan Mikhael II, the full-sized replica of the Ma'agan Mikhael wreck, dated to the Classical period.

(Photo by A. Efremov, Ma'agan Mikhael Replica Project.)

In addition, two other theoretical approaches, aiming to illuminate specifically the human experience of seafaring, are the concepts of “maritime cultural landscape” and “seascape.” The concept of maritime cultural landscape was developed by C. Westerdahl and has at its basis the notion of the “human utilization (economy) of maritime space by boat: settlement, fishing, hunting, shipping” (Westerdahl 1992: 5). Westerdahl’s approach, despite strong emphasis on the sea and the maritime world, remains firmly grounded in the terrestrial. In his opinion, maritime aspects cannot be understood outside their relationship with the coast (Westerdahl 2011). Furthermore, Westerdahl developed his concept while working on historic periods in Scandinavia with ethnography and historical textual sources being two of his main tools (Westerdahl 1992). Thus, the applicability of this concept is limited when it comes to the prehistoric period since many of his research tools, such as toponyms, place-names, and ethnography, are often not or barely available to prehistoric archaeologists (Westerdahl 2011). Westerdahl himself introduced the term *seascape* as a synonym or variation of the term *maritime cultural landscape* (Westerdahl 2011: 735–55). However, despite overlap, these two are essentially not the same. A seascape, while it can be connected to the land through its physical boundary, the coast, does just as much exist independently of the land. There is dissent among scholars on the exact definition of seascape, but most of them include the relationship between sea and land (e.g., Westerdahl 2011; Cooney 2003). The few works addressing the seascape from a distinct Mediterranean point of view are restricted to the Aegean and neither treat the sea as independent from the coast nor do they incorporate shipwrecks or experimental archaeology (Berg 2007; Vavouranakis 2011). Knapp’s recent book on seafaring amends this Aegean-centered approach by addressing the topic of seascape in a wider geographical and chronological time frame and incorporates archaeological and documentary evidence in greater detail, including shipwrecks (Knapp 2018). Knapp’s own definition of seascape is influenced by Westerdahl, and despite acknowledging the importance of trying to take on a mariner’s point of view, he still directs that view towards the shoreline and coast (Knapp 2018: 22, 29).

In order to overcome the shortcomings of previous approaches, I am proposing to follow a different definition of seascape for this article. Instead of directing the

view towards the coast or incorporating the shoreline, the seascape will be treated as a sum of “all factors that allow an individual to perceive his or her location out of sight of land. These factors allow navigators to place themselves on a mental map containing cultural constructs, such as routes, and unseen but known locations, which then become part of the seascape” (Ford 2011: 4). The definition by Ford creates a framework in which it is possible to address the human experience specifically with the sea without necessarily having to incorporate the coast once a ship has left land. The high intervisibility in the Aegean, which is often evoked when talking about seafaring in the eastern Mediterranean, does not constitute an argument against this definition despite seeming contradictions. The movements of ships and sailors, especially in the Bronze Age and after the introduction of the sail, were not restricted to the Aegean as is evidenced by the shipwrecks listed below. Similarly, the notion of coast-hugging ships should not be overstressed. The coastline is indeed often more hazardous than open water. Open sea voyages lasting several days, nighttime sailing, and bad weather obscuring the view of the coastline are all circumstances a sailor had to be familiar with in order to go about his daily on-board life whether in summer or winter (Georgiou 1997; Pomey 1997; Morton 2001; Parker 2001; Tammuz 2005; Arnaud 2011; Beresford 2013). Therefore, looking at the maritime experience of a sailor once he has left the coast and is looking out to the sea is a necessary factor for grasping the human experience of the sea at its fullest (for the opposite point of view, i.e., a sailor looking from the sea to the land, see Ilves 2004; Berg 2007; Hulin and German 2018). To this end, several aspects of life on board can be analyzed that did not require a boat to touch upon the coast.

Sources of Seafaring: Archaeology, Literature, Iconography, and Experimental Archaeology

Three shipwrecks dating to the Late Bronze Age and the Archaic period are used as primary case studies to explore the tangible traces of the lived experience at sea: the wrecks at Uluburun, dated to the late fourteenth century BC (Pulak 1998, 2008), at Cape Gelidonya (Bass 1967; Bass et al. 1989), dated around 1200 BC, and the

wreck at Pabuç Burnu (Greene, Lawall, and Polzer 2008), dated to the sixth century BC (Fig. 2).

Each wreck was chosen for distinct reasons. The Uluburun wreck, one of the oldest wrecks found in the Mediterranean, yielded the richest cargo of raw and manufactured materials found thus far (Pulak 1998) and has been interpreted accordingly: either as having been part of royal (Pulak 2008) or elite (Bachhuber 2006) gift exchange between the Levant and the Aegean or as a shipment bought by and paid for by an Aegean polity (Cline and Yasur-Landau 2007) (Fig. 3).

In contrast, the Cape Gelidonya wreck, dated around a hundred years later, was loaded with markedly different cargo. Interpreted as the ship of a traveling merchant-smith based on its cargo of mostly scrap metals, it can serve as an example of a ship engaged in ordinary trade and travel (Bass 1967; Linder 1972). The Pabuç Burnu wreck, finally, of the later Archaic period is the most extensively excavated and published one so far. The wreck

dates into the sixth century and was a small merchantman carrying agrarian products, mostly wine, in several hundreds of amphoras produced in the southeast Aegean and a smaller assemblage of plain wares (Greene, Lawall, and Polzer 2008).

The most comprehensive account of sea voyages in early Greek literature is found in Homer's *Odyssey*, and I will base the following discussion of the textual evidence on this source. Despite its literary genre identifying it as poetry and displaying a predominantly elite point of view, a careful analysis can offer a glimpse into the maritime experiences of individuals in different situations and of their perception of the sea as a world they inhabited (Crielaard 2012). The epos is neither meant to be taken at face value nor as portraying real historic events but as a collection of maritime stories close enough to real life experiences (Mann 2019) that they were familiar to an audience in the eighth century BC (Morris 1986; Raaflaub 1998). The epos covers several topoi of seafaring, which

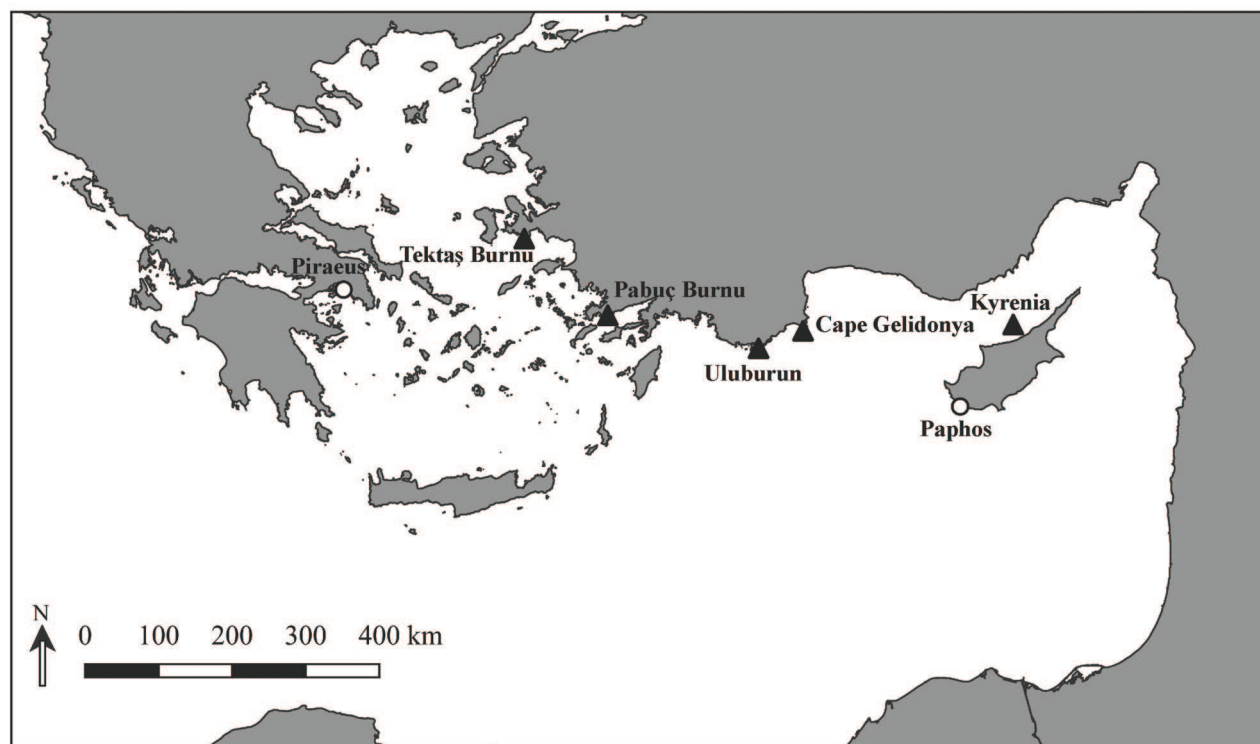


FIG. 2

Map of the eastern Mediterranean displaying wreck locations (filled triangles) and other sites mentioned in the article (open circles). (Map by E. D. Aines.)

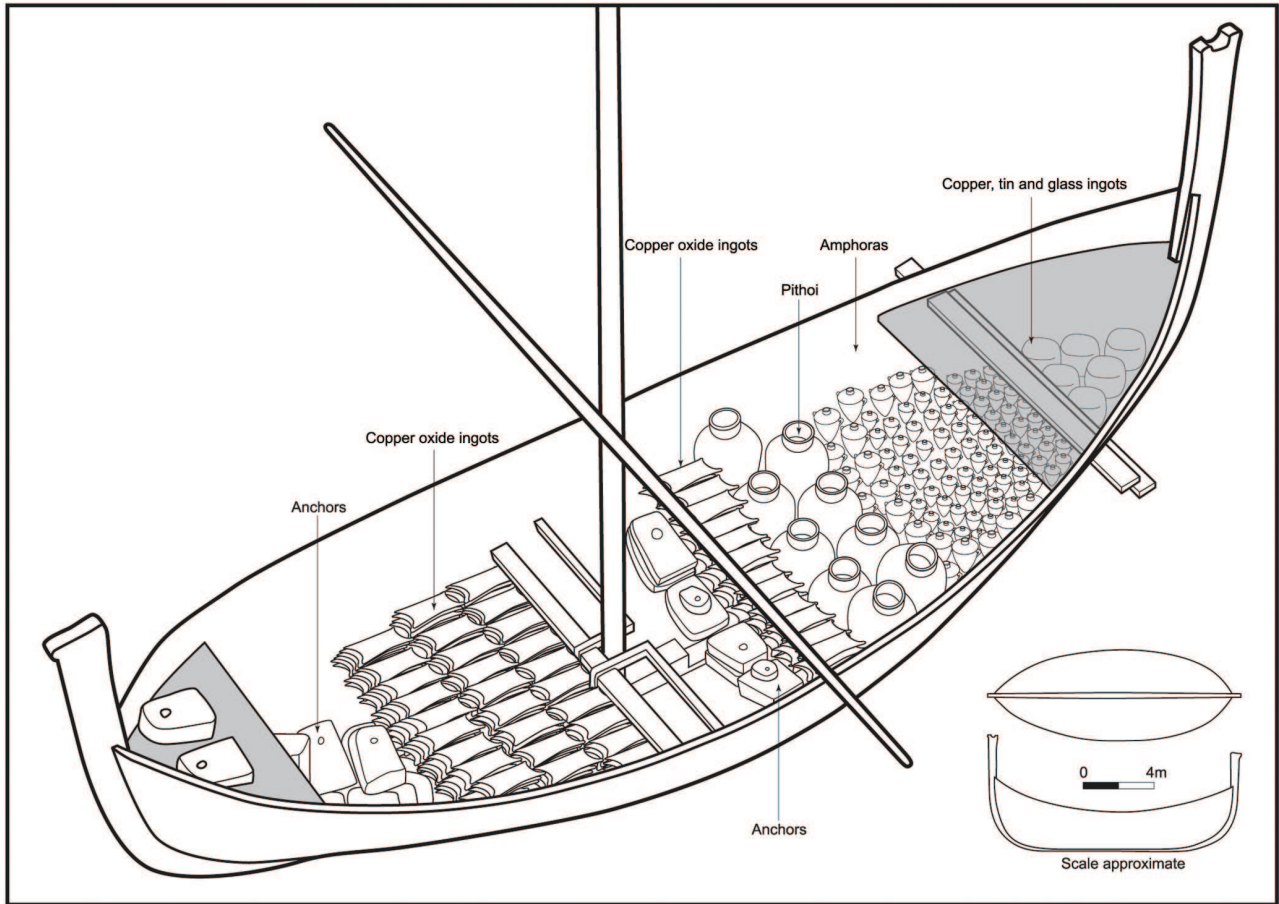


FIG. 3

Reconstruction of the Uluburun ship. (Illustration by Pighill Heritage Graphics after S.-H. Lin, *Lading of the Late Bronze Age Ship at Uluburun*, MA thesis, Texas A&M University, 2003, fig. 7.1; courtesy of I. Berg.)

can be used to get a glimpse into the way of thinking about the maritime experience either by the audience or the fictional characters themselves.

Ships are a common motif on pottery found in the eastern Mediterranean during the Late Bronze Age and subsequent time periods (e.g., Kirk 1949; Morrison and Williams 1968; Gray 1974; Basch 1987; Wachsmann 1998; Moore 2000), and thus a selection was made that is in accordance with the specific topics chosen to be elucidated in this article. The images will neither be discussed in a historic context nor as illustrations of specific texts as attempts to do so remain too speculative (Schmitt-Pantel and Thelamon 1983) but instead as illustrations of specific instances of the maritime experience in concordance with other sources.

Another potential way to bridge the gap between the past and the present, to retrace the experiences of past sailors or captains through our modern eyes in concordance with a phenomenological approach, is to engage in experimental archaeology. There are two general approaches within experimental archaeology: the representative approach, a reconstruction based mainly on textual and iconographic sources, and the scientific approach, a reconstruction based primarily on excavated evidence of one particular vessel (McGrail 2006). The Mediterranean has seen three examples of scientific replicas thus far: Kyrenia II (M. Katzev and Womer-Katzev 1989; M. Katzev 1990; S. Katzev 2008); Gyptis (Pomey and Poveda 2018), and Ma'agan Mikhael II (Cvikel 2019). Despite some reservations about the authenticity of the

experience made on sailing replicas, replicas can give an idea about sailing performances and navigation as well as an impression of how ancient sailors would have experienced the boat, objects, and the sea, provided necessary caution is taken in the interpretation of the results (Crumlin-Pedersen 2006). Of these three replicas, the most information comes from the experimental voyages of *Kyrenia II*, the replica of a small third-century BC merchant ship (M. Katzev and Womer-Katzev 1989). She was sailed from Piraeus to Paphos (Cyprus) in 1986 (M. Katzev 1990) and back again from Paphos to Piraeus in 1987 (Cariolou 1997). The foremost objective of these sailings was to test the ship's sailing abilities by day, night, and over open stretches of water as well as the ship's general performance; it was not necessarily to recreate the experience of past sailors. Information about how a small crew handled the day-to-day duties, what and how they ate, slept, or how they passed the time was nevertheless recorded throughout the publications of these journeys (M. Katzev 1990; Cariolou 1997; S. Katzev 2008).

Life on Board and with the Sea: The Voyage Begins

The preparations that mark the beginning of a journey across water can be gleaned from the *Odyssey*. The ships typically described by Homer were galleys propelled by rowing with an average crew of either twenty or fifty, due to the nature of elite traveling described, while all wrecks found in the Mediterranean are merchant ships that had a sail. The *Telemachy* in the *Odyssey*, however, which provides a comprehensive account of travel preparations, mentions several aspects of a voyage that probably would have been similar for a merchant ship, although the sequence might not have been the same (S. Katzev 2008): the stowage of cargo, the acquisition and loading of provisions, and sacrifices to the gods for a safe passage. As a first step, food was prepared in the house and brought upon the ship together with the necessary gear. The ship itself was pulled into the water and moored. Afterwards, the mast was erected and the sails lifted. After mooring ropes were cast and the ship had left land, the cargo was stowed away and a libation for the gods was poured out to

guarantee safe passage. The crew, assembled from among the ordinary citizens of Ithaca, took to the benches ready to row (*Odyssey* 2.389–393, 414–430, 430–433, reiterated in *Od.* 13.20–23 [stowage]; 12.144–148 and 8.50–55 [the proper launching]). The launching operations cannot be seen in the archaeological record, but rituals, as a part of it, have left a few visible traces underwater, although they are scarce. The specific beliefs of sailors are visible in the dedication of anchors and ship models in temples or shrines of deities connected to the sea, weather, or way-finding (Brody 2008; Irwin 2013); and a number of objects that are connected to rituals and date to later periods are known from the Mediterranean, such as cups, altars, *louteria*, and lead horns. The *louteria* were used on board for ablution rites and are found in most cases within shipwreck contexts, while the cups were thrown into the sea as singular offerings and are usually found within harbor areas (Kapitän 1989). Rituals might not have been performed solely at the beginning or end of a journey but might have been done during a journey, for instance after a storm on sea.

But also the ships themselves were believed to possess protective qualities. The ship's eyes (*ophthalmoi*), depicted on the bow of Archaic and Classical ships on vases, attest to this belief (Hornell 1946: 285–89; Basch 1987: 206–28; Göttlicher 1992). The rare find of marble *ophthalmoi* at the site of the Classical shipwreck of Tektaş Burnu and of two more along the coast of Israel indicates that not all ship's eyes were rendered only in paint (Carlson 2009; Galili and Rosen 2015).

The Crew and Passengers

The ships described in the *Odyssey* had usually large crews because the typical Homeric ships are biremes and penteconters needed for heroic deeds. Each person on a ship fulfilled different roles: Menelaos and Odysseus, as the leaders and captains, usually left the steering to their helmsmen, despite having the necessary technical knowledge, and the warriors would double as rowers (*Od.* 3.279–283; 10. 31–33; 12.144–147). On a merchant ship, with its much smaller crew, it would make sense that every member of the crew had at least some sailing

knowledge, not only the captain. The small crew numbers are estimated on the basis of available galley ware. The Hellenistic wreck found at Kyrenia in Cyprus carried dinnerware as sets of four: four dishes, four wooden spoons, four kantharoi, four oil jugs (Swiny and Katzev 1973: 345). The Classical wreck at Tektaş Burnu, southern Turkey, might have had an even smaller crew: only one plate, two bowls, one mortarium, one jug, and one hydria were found (Carlson 2003: 593–94). It is possible that sailors shared dinnerware and the crew sizes were bigger, but the experimental voyages on Kyrenia II and Ma'agan Mikhael II demonstrated that sailing ships could be operated with small crews (Cariolou 1997; S. Katzev 2008; Cvikel 2019) since the primary mode of propulsion was the sail and not oars. Two to four rowers were sufficient to propel the ship over short distances, enough to get it out of anchorages but probably not for any longer distances (Cariolou 1997: 93–94). Furthermore, fewer crew members meant that more space was available for cargo or paying passengers. The Late Bronze Age and Archaic wrecks found so far in the eastern Mediterranean fall generally into the smallest size class of ancient ships overall (Parker 1992: 26) with estimated sizes ranging between 10 m (Cape Gelidonya, see Bass 1967) and 17–18 m (Pabuç Burnu, see Greene, Lawall, and Polzer 2008: 700–703). The Uluburun wreck and Kyrenia wreck are estimated to have measured 15 m and 14 m in length respectively (Pulak 1998: 210; M. Katzev and Womer-Katzev 1989). Two rare scenes of merchant ships depicted on Attic black-figure vessels, discussed in more detail below, seem to confirm those small numbers (Basch 1987: 221–22, figs. 461–464; Casson 1996).

Passengers are mentioned in the *Odyssey* on rare occasions and are either merchants or guest friends who depend on the goodwill of the captain to adhere to the rules of hospitality (Höckmann 1985: 86–87). Passengers on merchant ships were probably mostly traders. A large number of weights and seals have been found on the wrecks at Uluburun and Cape Gelidonya (Pulak 1998; Bass 1967) and while the shipowner and the captain were not necessarily the same person, ship captains could double as merchants (Casson 1991: 100–102). The excavators of the Uluburun wreck proposed that three or four merchants were on board, in addition to the crew, and

possibly two Mycenaean envoys based on the number of weight sets, excavated weapons, and specific galley wares (Pulak 2008: 301–2), which fits into the previously mentioned narrative of the Uluburun wreck as a royal or elite ship in contrast to ordinary merchant ships such as Cape Gelidonya and Pabuç Burnu.

Every crew member probably brought a few things on board to engage in petty trade, or sailor's trade, on the side (Artzy 1997: 9), in addition to their individual personal belongings. While the distinction between personal objects and cargo items is not always clean-cut, some of what has been interpreted as personal belongings was clearly of importance to the owners: a single Ionian cup found on the Pabuç Burnu wreck had been carefully mended in antiquity, which makes it unlikely that it belonged to the cargo, rather, it was brought aboard as a personal object (Greene, Lawall, and Polzer 2008: 697–98).

Provisions and Food

When Telemachus sets out on his fateful voyage, he loads nothing but wine and barley (*Od.* 2.290–291), poetically referred to as the food that is making or becoming the $\mu\upsilon\epsilon\lambda\omicron\nu\ \acute{\alpha}\nu\delta\rho\omega\nu$, the marrow of men. It can be assumed that these two foodstuffs mentioned in the epics were chosen for their poetic connotation rather than being a reflection of the actual provisions taken on board of prehistoric ships. Grains are not usually found among the organic material derived from shipwrecks (except Uluburun; Bass et al. 1989: 10–11), although it is entirely possible that ancient sailors brought bread as a provision. Olive pits, grape seeds, fig seeds, almonds, pine nuts, pomegranates, pistachios, and different types of pulses were found on the Uluburun, the Gelidonya, and the Pabuç Burnu wreck (Haldane 1993; Greene, Lawall, and Polzer 2008: 687, 688 n. 18). The boundaries between cargo and provisions for the crew are unclear, but the large number of olive pits in a region where olive trees grow abundantly seem to indicate that olives were part of the regular diet on board. There are indications that the crew supplemented the vegetarian diet on board by catching fresh fish. Lead net weights and fishhooks were

found among the assemblages from the Cape Gelidonya and Uluburun wrecks (Bass et al. 1989). Fish vertebrae and fish bones, found mixed in with other organic material, indicate that meals were eaten on board during voyages (Bass 1967: 131–34). Mortaria for food preparation—whether on board or on land—and cooking pots are not unusual finds among shipwreck assemblages. Galley wares, such as the drinking sets, dishes, water jugs, bowls, and cups, found on board of several wrecks (Swiny and Katzev 1973: 345; Pulak 2008: 302) can attest to a certain formality when consuming meals. Arguments for cooking on board have been made (Irwin 2012), however, the archaeological evidence from the Late Bronze Age and Archaic period is too circumstantial to allow more than speculation on where ancient sailors prepared their meals. So far no ship dating prior to the Late Roman or Byzantine period has been found carrying appliances that could be interpreted as a hearth (Beltrame 2015). In the Byzantine period cooking on board seems to have been a regular occurrence (Rhodian Sea Law, c. 1 with app. crit.; II, ch. 10; Ashburner 1909: 2, 61). The men sailing the *Kyrenia II* did not cook on board either, despite open sea voyages lasting several days. Instead they warmed up precooked meals in the sun (M. Katzev 1990: 252).

Meals in the *Odyssey* were not taken on board during sea voyages but instead on the shore in close proximity to the ships (e.g., *Od.* 9.85–86; 10.56–57). No information is given about meals during voyages lasting several days or the types of food consumed. Fish as a source of food is mentioned only twice in the *Odyssey* and each time in a context of near starvation (*Od.* 4.368–369; 12.329–332): fish is not the food of men (Berdowski 2008). Archaeological and textual evidence does attest to fish processing and consumption in the Aegean and the wider eastern Mediterranean (Powell 1996; Hulin and German 2018: 361; Theodoropoulou 2018), but it seems that the overall feeling towards eating fish was ambiguous at best (Purcell 1995; Wilkins 2018). Meat, on the other hand, does not seem to have been a staple of shipboard diet. The only evidence for potential meat consumption on board comes from the Classical wreck at Tektaş Burnu. The two amphorae filled with salted beef and beef bones could have served as provision, unless they were part of the cargo (Carlson 2003: 589–90).

Stellar Navigation and Nighttime Sailing

The aspects of a voyage presented so far have all left tangible traces in the archaeological record to a varying degree. Other experiences pertaining to seafaring can be inferred mostly from textual and iconographic sources and to a lesser degree from experimental archaeology. Navigational skills are indispensable during a sea voyage, a knowledge that is for the most part transmitted orally and enriched with personal experience and lore (McGrail 1996; Pomey 1997). Ancient seafarers were familiar with both coastal voyages and open-sea crossings. No navigational aids are mentioned in the *Odyssey*, nor are charts or maps. A sailor could triangulate his approximate position with the help of stars at night, the sun and currents during the day, landmarks if he was close to shore, but also through clouds and winds when the visibility was poor (Pomey 1997; Morton 2001: 223–28; Beresford 2013: 177). Navigational instruments are known from Late Archaic and Early Classical shipwreck contexts and underwater coastal sites (Oleson 2000; Galili, Rosen, and Zviely 2009), but no such finds are known from the Bronze Age thus far.

Night travel, stellar navigation, and open-water crossings that could last several days are all well attested in the *Odyssey* and other ancient texts (Bilić 2009). Odysseus and his crew sailed for nine days from the Aeolian Islands towards Ithaca (*Od.* 10.28–29), for five days from Crete to Egypt while crossing open water (*Od.* 14.252–258) and for seventeen days from Ogygia to Scheria (*Od.* 5.270–280). Menelaos sailed between Cyprus, Phoenicia, Egypt, Sidon, and Libya before finally returning to Sparta (*Od.* 4.81–85). The examples cited above do not entail negative feelings towards sailing at night. A possible exception can be found in Book 12 (*Od.* 12:286–290), but in this case the fear stems from the possibility of a storm, not the night itself. Nightly storms are more dangerous if a ship is sailing close to the coast, as unexpected landfall or low-lying coasts are among the greatest hazards to ships (Morton 2001: 69–81, 146–47; Parker 2001: 33; Beresford 2013: 176). In the Mediterranean, breezes blowing away from land usually occur after dawn and navigation at night is easier than during the day, provided the sky is cloudless (Georgiou 1997: 118–20; Beresford 2013: 204–9). The crew

on Kyrenia II learned that their ship could withstand bad weather and rough seas in the open sea without great problems. They managed to stay on course despite low visibility and they learned that navigating the open sea was much easier at nighttime than during the day. Between Paphos (Cyprus) and Rhodes they had to navigate by dead reckoning and with the help of celestial bodies as they sailed out of the sight of land during that part of their voyage. They relied heavily on the sun and the moon, and on the stars Arcturus and Polaris, and Venus (Cariolou 1997: 91). In this respect, the crew on Kyrenia II followed the same celestial bodies as Odysseus. The epos mentions further constellations as navigational aids, such as the Pleiads, Boötes and Arcturus, and the Big Dipper (*Od.* 5.270–280). A different indication of nighttime sailing, or at least of a human presence on board during the night, can be seen in the lamps found on the Uluburun and Cape Gelidonya wrecks, some of them with clear traces of use (Bass et al. 1989: 9).

Violence and Death

Violence and death were abundant on water (Knapp 2018: 35) and thus an intrinsic part of the seascape and the human experience on water. The danger came in two guises: navigational hazards such as promontories, headlands, treacherous currents, straights, and storms could lead to the foundering of ships; and then there was harm caused by man. Sea-related violence has been depicted on ceramic vessels since the Bronze Age and is a common motif on vases from the Late Geometric period, dated to the ninth and eighth centuries BC, which usually served as grave markers or grave goods (Kirk 1949; Morrison and Williams 1968; Ahlberg 1971; Gray 1974; Moore 2000). The images show different stages of fights: right before a fight begins (e.g., on an Attic skyphos, Archaeological Museum, Eleusis, Inv. No. 741, see Basch 1987: 175, 177, fig. 372); an ongoing fight that has already claimed several victims (e.g., on fragments of Attic kraters in Warsaw, National Museum, Inv. No. 142171, see Basch 1987: 174, fig. 360 and Brussels, Musée du Cinquanteaire, no Inv. No., see Basch 1987: 171, 173, fig. 357); or the precise moment of dying (e.g., on a fragment of an Attic krater

in Paris, Louvre A 528, see Basch 1987: 166, fig. 336). These Late Geometric scenes have in common that the fighting occurs either on ships that seem to be beached or in their immediate coastal surroundings, but not on water. A possible exception could be an ambiguous scene on a fragment of an Attic krater in Paris that depicts two ships and corpses floating underneath (Louvre 3362, see Basch 1987: 167, fig. 340; but contra Fittschen 1969: 46 n. 233). These scenes, portraying fights that involve ships but not necessarily on water, echo the fighting scenes described in the *Odyssey*. The raids recounted there on several occasions (e.g., *Od.* 14.261–284 and 9.39–61) are exclusively coastal raids (affirmed later in Thucydides, *Historiae* 1.5.1–2), probably because coastal pillaging was much more lucrative than looting single merchant ships (Casson 1991: 45). These fights involving ships can be either interpreted as acts of war or as piracy. The argument has been made that, before the Classical period, acts of war and acts of piracy were essentially the same, since both had rich loot as their foremost goal (de Souza 1999: 21). It is very difficult to distinguish pirates in the archaeological record since it is unclear what a distinct pirate assemblage would look like (Gianfrotta 1997). Pirates are foremost sailors, merchants, and shipowners who turned to raiding in precarious times, or displaced groups who made their skill in sailing and fighting the basis of their survival, such as the Sea Peoples or the later Cilician pirates (Casson 1991, 178–80; Artzy 1997; Jung 2009). Defensible sites close to maritime trade routes have been interpreted as possible pirate sites, and attempts have been made to tease out patterns of what could be a pirate culture based on textual and archaeological sources (Hitchcock and Maeir 2016; Hitchcock and Maeir 2017, contra Knapp 2018: 39). The topic of piracy remains overall contested in scholarship (see discussion in Knapp 2018: 36–50, with further references to Greek and Near Eastern textual sources), and a full discussion on piracy is outside of the scope of this article. Examples of fights on ships can be found in the Archaic period, although they are scarce. The Aristonothos krater, found in Caere, modern Cerveteri, Italy, and dated to the first half of the seventh century BC (Rome, Capitoline Museums, Collection Castellani, Inv. No. 172, see Basch 1987: 233, fig. 482) shows warriors on two ships facing

each other ready for battle. While the warriors are almost identical, the ship types are markedly different: one is a Greek ship with a ram, the other has been identified as possibly Etruscan or Punic. Two other images showing a fight at sea display a different kind of violent altercation. A black-figure kylix, which dates to the late sixth century BC (British Museum B436, see Basch 1987: 221–22, figs. 461–464; Casson 1996), and a fragment of an Attic black-figure bowl (University of Heidelberg, Archaeological Collection, no Inv. No., see Casson 1996) display a merchant ship pursued by a warship. Thucydides states that attacking enemy merchants during times of war was not an unusual practice and that privately owned boats were sanctioned to attack adversaries (*Historiae* 2.69). Thus, while these scenes are rare examples of merchant ships and violence directly at sea, they cannot be used to advance discussions of piracy specifically as distinct from acts of war. Weapons are less commonly found in shipwreck contexts from the eastern Mediterranean than in the western Mediterranean, but overall the numbers remain small (Gianfrotta 1997: 51, 54). The wrecks at Uluburun and Cape Gelidonya have produced weapons, but they were interpreted either as attire of envoys (for Uluburun, see Pulak 2008: 300–301) or as part of the cargo (for Cape Gelidonya, see Bass 1967: 102–5). The wrecks themselves show no evidence of attacks. Instead, their wrecking was most likely due to bad weather and/or piloting mistakes. References to shipwrecks are abundant in the *Odyssey*. The act of wrecking is oftentimes described extensively and with great detail regarding weather conditions, the sounds, the smells, and even the strong bodily pain. Odysseus, Menelaos, and Ajax all become victims of the wind and the waves (Odysseus: 5.291–332, 356–393, 400–453; 7.270–282; 12.403–450; 14.299–314; Menelaos: 3.286–300; Ajax: 4.495–512.). With the exception of Ajax, the hero usually survives the wreck-age but not his crew. Shipwreck scenes in the *Odyssey* are used to underscore the fragility of human life and the power the gods hold. Zeus and Poseidon cause the storms that in turn cause the drowning of ships and people in the examples cited above.

Shipwreck scenes are rarely depicted on vessels dated to the Late Bronze Age or later time periods. For instance, only two vessels with shipwreck scenes are known from

the eighth century BC. One oinochoe in Munich shows a capsized boat (Antikensammlung, Inv. No. 8698, see Basch 1987: 177, fig. 370): one person sits on the keel, while the others are floating in the water around it. None of the depicted is dead yet, instead they are fighting to stay alive, trying to hold on to those parts of the boat that are closest (this scene has been dubbed “Shipwreck of Odysseus” in earlier scholarship: Hampe 1952: 29–30, contradicted by Fränkel 1956: 570–72 and Fittschen 1969: 49–51, who convincingly argued in favor of a nonspecific scene). While this scene implies a chance of survival, the scene on a krater found on Ischia (Archaeological Museum, no Inv. No., see Basch 1987: 188, fig. 394) allows no hope of survival. Several dead bodies float beneath a capsized boat, a large fish is about to devour the head of one of the dead. The motif of fish eating humans, albeit not very common, is known from different sources (Purcell 1995: 133–34). The krater itself was found in a kenotaph, which could mean that the person intended to be buried there had died at sea, and the shipwreck scene explicitly references his fate (Fittschen 1969: 50–51, with n. 64).

Conclusion

A seascape can refer to both the human perception and experience of the sea itself, and thus it encompasses both tangible and intangible evidence. Therefore, when attempting to understand past experiences with the sea, it is helpful to make use of different proxies such as material culture, texts, iconography, and experimental archaeology. If we were to trace the voyage of a sailor in the prehistoric Mediterranean, we could picture days spent toiling on board, taking breaks to eat with crew mates, taking turns to catch fish, bartering at the shore, and sleeping on top of bags of cargo. Dangers might be lurking in the water, storms and bad weather might force a ship to stay on land for several days, and there was always the possibility that a person venturing out to sea might not come back, despite sacrifices made to the gods. On the other hand, the sea offered a plethora of possibilities to see new places, to experience new things, and to immerse oneself into a different world that existed

beyond the land. Archaeology can approach past human experience at sea: by drawing on various sources, tangible as well as intangible, we can carefully piece together how humans in antiquity interacted with their maritime environment and tell stories about how they lived, traded, traveled, fought, and died. A sailor on a typical merchant ship as documented in the archaeological record would have shared the closed confines of a boat with few other persons. Space was restricted, due to the size of the ship and the cargo. It can be assumed that sailors took turns in their work, whether keeping the ship on course, catching fish, preparing food, or being on the lookout for dangers to counterbalance small crew sizes. Meals were probably shared and eaten off regular plates. They slept on board in relative comfort: the space beneath the foredeck was relatively dry and protected from cool nightly breezes. During the day, they would watch the wind and the waves and would look to the stars during the night to set course and to triangulate their approximate position outside the view of land. Storms could be dangerous with high waves, heavy rains, and terrible sounds cutting through the calmness of sailing on a sunny day. Even if a ship foundered, the crew was potentially able to survive and live to tell the tale, as Odysseus did many times. It is not known with certainty how sailors were recruited or how nationalities and languages blended together on a ship, but it can be inferred that a sense of community existed among sailors based on shared experience, cultural traits, and the knowledge they possessed that set them apart from those who never experienced the rocking of the wind and the waves.

Note

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