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A PIRATE'S LIFE FOR ME: THE MARITIME CULTURE OF THE SEA PEOPLES

Louise A. Hitchcock and Aren M. Maeir

An anthropological approach to a culture extrapolates social structures, traditions, and general organizing principles of that culture from the careful observation of patterns of behaviour as described in case studies. In the absence of a living culture to record, archaeologists extrapolate this information from behaviour reconstructed from spatially determined patterns in the deposition of material remains and from patterns found in the general organizing principles of historically documented cultures, using arguments based on analogy. This contribution builds on our previous research on the "Sea Peoples" as a piratical culture in order to apply an anthropological approach to understanding the cultural identities of the various tribal groups involved in maritime activities at the end of the Bronze Age who are popularly known as the "Sea Peoples", and place this within the broader context of the current discussions on the transition between the Late Bronze and Early Iron Age in the Mediterranean.

Keywords: Piracy, Sea Peoples, Aegean, Philistines, Anthropology, Mediterranean

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1. INTRODUCTION

At the transition between the Late Bronze Age and the Early Iron Age (c. late 13th–late 12th centuries bce), Mediterranean coastal regions, including Italy, western Mediterranean islands, south-western coastal Anatolia and the eastern Aegean islands (the SASCAR region),[1] the Syro-Palestinian coast, and Cyprus saw new tribal groups sometimes disrupting or destroying, and later settling among, the local populations (Fig. 1). Recent research has demonstrated that substantial material components of what is perceived to be immigrant populations derive from multiple regions throughout the Mediterranean, but with strong Aegean and Italic material cultural elements. This contribution builds on our previous research (Hitchcock and Maeir 2014; in press a; in press b; in press c)[2] on the "Sea Peoples" as a piratical culture to investigate what it means to apply an anthropological approach to understanding the cultural identities of the various tribal groups involved in maritime activities at the end of the Bronze Age. Our aim is to place the cultures of the Sea Peoples within the broader context of the maritime culture of this era. An anthropological approach to a culture strives to extrapolate social structures, traditions, and general organizing principles of that culture from the careful observation of patterns of behaviour as described in case studies. In the absence of a living culture to record, archaeologists extrapolate this information from behaviour reconstructed from spatially determined patterns in the deposition of material remains and from patterns found in the general organizing principles of historically and/or anthropologically documented cultures, using arguments based on analogy.

In previous articles, we have examined how limited migration by the Sea Peoples as tribes of pirates might occur throughout the eastern Mediterranean, we put forth hypotheses about pirate leadership and feasting activities among the Sea Peoples, examined how the study of piracy in the eastern Mediterranean might aid in interpreting similar events in the western Mediterranean, and we looked specifically at how Bronze Age piracy desolated the coast of

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Fig. 1. Map of the Mediterranean with regions mentioned in the text. Arrows indicate currents, shading indicates possible pirate coasts, and octagons indicate choke points from historical eras (map by Jay Rosenberg, after Galvin 1999, 9).

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Crete. In this contribution, we focus on examining the various tribes of Sea Peoples as a maritime culture and begin to try and understand their archaeological signatures as well as their potential interactions with the maritime cultures around them. Although our focus is on the eastern Mediterranean, it is clear that the Sea Peoples were active in and impacted the western Mediterranean as well (e.g., Jung 2009; Jung and Pacciarelli in press).

The tribal ethnonyms of the Sea Peoples are mentioned in Egyptian New Kingdom texts as originating in islands and among modern scholars they have been collectively referred to under the term "Sea Peoples" (coined by Maspero in 1881, see Adams and Cohen 2013; Killebrew and Lehmann 2013, 1; Cline 2014, 45). Some of their activities are known from the records of Ramesses II, Ramesses III, and Merneptah (O'Connor 2000; Yasur-Landau 2010; Cline 2014) and in letters by the king of Ugarit (Yon 1992). Increased tensions in the Mycenaean world are alluded to in Linear B texts from Pylos, which describe a heightened alert with some 800 watchers guarding the coast (Shelton 2007, 173) and a recycling of bronze in the region of Pylos, which indicates a shortage of metals to allocate to smiths (Ventris and Chadwick 1956, 354–55, Jn04; Palaima 1995). In addition, their activities are depicted on the reliefs from the mortuary temple of Ramesses III at Medinet Habu, although the accuracy of this record is questioned. As historical documentation of their activities is minimal, their origins, identities, activities, and fates remain matters of lively scholarly debate (see, e.g. Gitin, Mazar, and Stern 1998; Oren 2000; Harrison 2008; Cline 2014). However, it is an oversimplification to rely on archaeological and iconographic evidence from the Late Bronze Age and on 12th century bce historical accounts to understand the Sea Peoples' phenomenon.

There are earlier accounts of piratical activity in the eastern Mediterranean, in Hittite texts about the Lukka (Gilan 2013, 53–55; Wachsmann 2008, 130) and about skirmishes with the Ahhiyawa (Beckman et al. 2011; Wood 1985; Wachsmann 2008, 129). A raid on Alašiiya (Cyprus) by the Lukka is described in EA 38:9–12 (Linder 1981, 39, n. 37). Gilan (2013, 56; also Jung 2009, 79) suggests that when the Hittite kings Tudhaliyas IV and Suppiluliuma

were fighting enemies from Alašiya and Lycia, they had already been fighting forerunners of the Sea Peoples. The Sherden are first mentioned in the Amarna Letters (14th century BCE) as mercenaries serving in Egyptian garrisons (Vagnetti 2000, 305). Skirmishes with Ahhiyawa are known from a series of Hittite texts known as the Ahhiyawa texts, the most relevant being the Indictment of Maduwatta, the Manapa-Tarhunda Letter, and most importantly, the Tawagalawa Letter. The Indictment of Maduwatta is dated to Late Helladic IIB–IIIA2 (c. 1450–1430 BCE) and complains about a man of Ahhiya, Attarissiya (Atreus?), conducting military raids against Anatolia and Alašiya. The Manapa-Tarhunda Letter from the Annals of Mursili II (c. 1326 BCE) complains about attacks by the renegade Piyamaradu (Epiamandas?) on the Seha River Land, on Lazpa (Lesbos), and on Wilusa (Ilios/Troy). The Tawagalawa Letter only preserves the third tablet of a correspondence that probably dates to the reign of Hattusili III (c. 1275–1250 BCE) or Late Helladic IIIB1 in Miletus. Tawagalawa was the brother of the king of Ahhiyawa and based in Millawanda. Atpas was the king of Millawanda, the son-in-law of Piyamaradu, and loyal to the king of Ahhiyawa. Piyamaradu is referred to as a man of Millawanda and as a renegade (pirate?) operating in Hittite territory. The Hittite king Hattusili III (1255–1230 BCE), writes to the king of Ahhiyawa addressing him as his brother king and goes on to complain that Piyamaradu is making constant raids on Hittite territories, including raids on Wilusa (Troy). He goes on to note that the king of Ahhiyawa and Tawagalawa stand side by side. He further complains that Tawagalawa demands special treatment as a Hittite vassal, refusing to go to Hattusas. Instead, he wants the crown prince to come to Millawanda and confer kingship on him in person. The Hittite king is attacked *en route* to Millawanda and by the time Hattusilis arrives in Millawanda, Piyamaradu and Tawagalawa have fled to Ahhiyawa by ship. Jung (2009, 79) notes that the king of Ugarit is directed by the Hittite king to provide food rations to the Hijawa (Ahhiyawa) living in Lukka. The picture that Jung (2009, 79) and the above discussion paints is one of Mycenaeans sometimes engaged in trade and technology transfer, while at other times engaging in piratical activities. In the Aegean, Morgan (1988, 159, 164) has suggested that scenes of soldiers and men drowning from a shipwreck in the miniature frescoes from the West House on Thera dated to Late Minoan IA (c. 1614 BCE) may represent the collective fears and dangers of a coastal community with regard to piracy. What these events and representations serve to illustrate is that a culture of piracy was developing prior to the emergence of the Sea Peoples.

2. THE CULTURE OF PIRACY: FROM THE LATE BRONZE AGE TO THE EARLY MODERN PERIOD

We aim to take an anthropological view of the relationship between the Sea Peoples and piracy by examining them as a culture that was shaped by their shipboard context as discussed below. We will also further elucidate cultural patterns found in historical accounts of piracy from the classical to early modern periods, which may have been meaningful in the past. We base this meaningfulness on the tendency of certain types of behaviour and interaction with the landscape to recur at different times and in different places. For example, pirates favoured eating the Galapagos turtle in the 18th century. While this is an interesting piece of information, it has no bearing on our research. We regard taking an anthropological approach as a holistic one, in which one looks for patterns in data and patterns in cultural practices then makes meaningful hypotheses about them for further investigation and reflection (Haviland et al. 2011, 5, 18). We continue to suggest (e.g., Hitchcock and Maeir 2014) that patterns exist in the social and cultural behaviour among pirates (e.g., Rediker 1991, 204) and that patterns of behaviour reflected in historical accounts of piracy can serve as a model for understanding the formation and organization of the Sea Peoples as a mixed culture with different tribal affiliations that contributed to the end of the Bronze Age. Pirate culture in historical times is characterized by largely egalitarian and multi-ethnic tribal societies that might include individuals from multiple

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geographic origins and religious backgrounds that frequently intermingled with indigenous populations (Pennell 1994a, 273). For example, among the Barbary pirates could be found Dutch, Spanish, French, Irish, British, Portuguese, Turks, Italians, Greeks, and Jews (Tinniswood 2010). Similarly, items and linguistic elements found in new settlements following the end of the Sea Peoples' movements include facets of Anatolian, Cypriot, Aegean, Italic, and Levantine culture. In addition to using anthropology to form historical analogies, we will also begin to suggest possibilities for identifying archaeological signatures associated with piracy, as noted in the introduction.

Rites of Initiation, Integration, and Isolation

Given their various names, including Lukka, Meshwesh, Danuna, Sherden, Shekelesh, Peleset or Pulesati, Aqaiwasha, Tjekeru (Wood 1985), we hypothesize that the Sea Peoples were a tribal culture, but not in the broad anthropological sense that one is born into a tribe as a related kin group. Instead, we view tribalism in this case as something unified by a particular factor such as common interest. In contrast to a kin-based tribe, one joins, is forced to join, is adopted into, or otherwise becomes acculturated into piracy (Haviland et al. 2011, 63; but see, e.g. Tsetskhladze [2000–2001] discussing kin-based tribes in the Black Sea region who, according to various Hellenistic and Roman sources, "specialized" in coastal piracy). In this sense we liken the tribes of the Sea Peoples in structure to the later ten tribes of Athens created in the Kleisthenic reforms of the 6th century BCE, whereby Athenians were assigned to a tribe named after one of the ten Eponymous Heroes (Glowacki n.d.). These tribes, or *phylai*, functioned more as administrative units in which rights, privileges, and obligations derived from membership in a tribe (Camp n.d.; further detail in Herodotus Book 5), yet they were all considered Athenians. In anthropological terms, tribal systems are more informal, with an egalitarian structure in contrast to chiefdoms and states (Haviland et al. 2011, 284ff). Where we suggest pirate tribes are different is with regard to requiring particular specializations related to seafaring and ship construction (discussed below). Tribes also tend to be self-governing and self-supporting.

A Pirate's Life for Me?

As noted above, piratical activities periodically took place throughout the Bronze Age, and there was a long tradition of interactions throughout the Mediterranean, as summarized below. However, one might ask what motivated people to turn to piracy in such meaningful numbers that it could not be controlled? Inhabitants of villages desolated by piracy might choose the pirate lifestyle. There have been various suggestions peasant uprisings occurred during the Late Bronze–Early Iron Age transition in the Mediterranean as part of the various collapse mechanisms (see, e.g. Cline 2014, 148–49). Perhaps such insurrections might be responsible for some of the manpower, and socio-economic structural changes, that are manifested in pirate groups. Furthermore, it has been stressed that the collapse of Mycenaean civilization was a moment of liberation for many rather than simply a disastrous event (Crielaard 2011, 98). For example, Frizell (1997–98, 107, 115–16) proposed that construction works using enormous blocks exceeding structural requirements enhanced prestige of the palace through conspicuous display, which included dragging them in public ceremonies through the Mycenaean hinterland. Such projects served the interests of the ruling strata of Mycenaean society, but would have been hard labour for those undertaking such substantial modifications of the landscape. Exchanging a life of tedious and hard labour (a negative push factor), whether as a builder, a quarry worker, a textile worker, a rower, or some other occupation that tied people to the palaces, for a life of plunder (a positive pull factor) may have appealed to

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some individuals (Anthony 1990), attracting them to a life of piracy. Life as a rower in the British royal navy could be as difficult, cramped, and unsanitary as spending one's life as a slave (Tinniswood 2010) and flight from slavery and hard labour is known from the ancient Near East (e.g. Snell 2001). Poetry about the work of 1000 labourers required to quarry enormous stelae at the Yangshan Quarry in Nanjing (China) commemorates the many workers who died from overwork, disease, or execution from not working hard enough (Yuan Mei 1717–98).

From as early as the Minoan period on Crete, there is indication of rationing in the Cretan hieroglyphic and Linear A scripts in which there is indication that workers were paid with rations of wine, oil, meat, grain, and figs (Younger 2008, esp. 363–64). From the later Linear B texts we know that less-skilled workers who were palace dependents might be given rations in the range of 0.5 to 1.2 litres of grain per day. They also provide evidence that female workers attached to the Mycenaean palaces were provisioned with rations of figs and barley (Crielaard 2011, 98) or 0.5 litres of grain per day (Palaima 2008, 386). Stores of dried figs were found in later LH IIIC Lefkandi (Euboea) and suggest a resumption of rationing. In contrast, a pirate crew of the 17th and 18th centuries would equally share the spoils of plunder among themselves (Tinniswood 2010).

We argue elsewhere (Hitchcock and Maeir in press a), that the Homeric word for feasting, which is *dais* or 'share', characterized the egalitarian nature of pirate feasting among the Sea Peoples. It is notably absent from Linear B, from which we learn that Mycenaean palaces undertook the practice of diacritical feasting. The finely decorated furniture and feasting implements listed in the Pylos Ta series (Palaima 2008, 385) call to mind elaborate feasting furniture, such as 2.7 m long anthropomorphic food bowls with multiple cavities and special wooden bowls for eulachon oil used in North American indigenous traditions of potlatch (papers in Jonaitis 1991). Based on what we know from historical piracy, those joining the Sea Peoples as pirates, might have enjoyed greater access to food and drink, and could share the work among a greater number of people.

As collapse occurred across the Aegean with the spread of new weaponry and warrior burials (discussed below), trade routes collapsed and there was a decline in the safety of rural farming communities in coastal Crete, where numerous people founded refuge settlements in less-accessible places at the end of LM IIIB/early LM IIIC (Nowicki 2000). As socio-political identity fragmented across the Final Bronze Age Mediterranean, Italy remained relatively stable, providing new opportunities for Mycenaean Greeks, while Italian craftspeople seem to have been attracted to similarly stable conditions in Achaea (Moschos 2009, esp. 380–84). At the same time, we hypothesize that new members of pirate tribes could have been added through what has been termed "rituals or rites of social integration", whereby new members might be promoted into the larger group through demonstrating their commitment in committing acts of piracy as known from 18th century piracy (Rediker 2004, 47–79). Others may have been forced into piracy through slavery. Among the Barbary pirates, new recruits might occasionally be captured as slaves and beaten and imprisoned under disorienting circumstances until they felt they had no other choice than to become a pirate (Tinniswood 2010).

Subsistence Patterns

As Artzy (1997) observed, piratical activities result from, and shadow, expansion of sea traffic, coinciding with periods of expanding trade and the acquisition of slaves (as discussed below). Although it has now been shown that interactions through trade, movement, and transfer of technology in the eastern and western Mediterranean go back to Neolithic times, the Mediterranean saw a greater era of globalization in the 14th and 13th centuries BCE, as evidenced by the Uluburun shipwreck, creating the conditions Artzy describes. Unchecked by the kind of

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political will to put a brutal end to piracy such as during the Roman period and the 18th century CE, pirate tribes might grow rather quickly in a power vacuum. Descent from just two original ships has been established for 3,600 pirates operating in the 18th century CE Atlantic region (Rediker 2004, 80–81, esp. Fig. 4; 1981, 212–14). In this way, pirate tribal networks might be seen as functioning analogously to land-based genealogical bands of either hunter-gatherers or nomadic pastoralists, whereby kin-groups may split off (a process known as fission) when the carrying capacity of a particular geographic area is reached or disputes over resources occur (e.g., Cribb 1991, 45; Haviland et al. 2011, 241, 247). Like hunter-gatherer activity, pirate activity was a subsistence strategy based on mobility in order to undertake plundering (gathering). Here it should be noted that hunter-gathers have a simpler social structure (the band). Thus we might see pirate tribes as incorporating features found in bands, tribes, and chiefdoms.

Social Cohesion

Pirate tribes became distinct cultural entities for which, the ship became a context for transmitting and perpetuating pirate culture (Rediker 1991, 214). In historical times, pirate groups generally formed through insurrection or by people joining voluntarily when a vessel was taken or a territory was plundered. Although pirates in the historical era might plunder ships and towns of all valuable goods, it was not unusual to throw many of these goods into the sea and sell others (Rediker 2004,18, 192), as pirates chiefly sought the things that would enable them to maintain their ships and sustain themselves (Earle 2003, 177). The crews aboard pirate ships might be larger than institutionalized or state-supported navies, with the sharing of plunder taking place among larger numbers of crew members, resulting in less work per person. The sharing of plunder is one of the features that made piracy attractive in the 18th century CE to overworked and underfed seamen, with historical sources citing ill-use as a motivating factor in turning to piracy (Rediker 2004, 28, 57). Peasants excluded from the lifestyle of fortified centres might also turn to piracy (e.g., Pennell 1994b, 57). Returning to the Sea Peoples, as more people from different regions of the Mediterranean joined multi-ethnic pirate tribes moving around the Mediterranean, it is likely they developed their own mixed language. The Barbary Pirates, who operated under the sanction of the Ottoman Turkish Empire, spoke and sometimes wrote what is termed a creole that is called the "Mediterranean *lingua franca*". Although dominated by Italian, the term creole does not really do justice to the *lingua franca* as creoles normally emerge from the expansion of a pidgin (Hitchcock 2011). The *lingua franca* also incorporated a number of other languages, including Greek, Turkish, and Spanish (Tinniswood 2010). As it was mostly a spoken language and pirates in most periods did not write their own histories, it is ironic, given its contemporary meaning, that the *lingua franca* remains poorly understood (Mallette 2014).

Symbolism

We have argued that pirate identity coalesced around feasting and adornment. Given the many different tribes of Sea Peoples, it is of note that there are just two main types of helmets associated with them, the spikey, or hedgehog, helmet and the horned helmet. Much has been made about the just two types of Sea Peoples' helmets in contrast to the many tribal names they went by. Crielaard (2011, 93; also Yasur-Landau 2013; Moschos 2009) suggests an answer to understanding the variation among helmet types. It is possible that some of the variation is a result of individuals being responsible for making their own helmets, resulting in a variety of different versions, as hinted at by different artistic depictions and controversies regarding how they were made (e.g. Gilan 2013, 58; Jung 2009, 78–79). In

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addition, in the earlier miniature frescoes from the West House at Akrotiri (Thera, c. 1614 BCE), eleven boar's tusk helmets are depicted, yet the artist has chosen to depict no two exactly alike (Morgan 1988, 109), suggesting that warriors made their own. The aristocratic status assigned to boar's tusk helmets may be telling, as they are not depicted at the end of the Bronze Age. A famous example of the spikey helmet has been found in a LH IIIC Middle grave at Portes (Moschos 2009, 356–59). Jung (2009, 83) suggests the possibility that its predecessors come from Italy, where domed rivets are found near the heads of MBA warrior burials. A good example of the two together, aside from the Medinet Habu reliefs, is on the famous Warrior Krater from Mycenae (which was found with a Naue II cut and thrust sword; Crielaard 2011, 91). Crielaard (2011, 92–93) observes that the soldiers wearing the horned helmets on side A are marching in uniform step with their spears leaning on their shoulders, in contrast to the spikey-helmeted warriors on side B who are in battle formation with spears raised and shields lowered. Based on this and other iconography, he suggests that spikey-helmeted warriors were engaged as foot soldiers, charioteers, and maritime fighters. What is absent in many depictions of fighters are swords and daggers, which he associates with horse soldiers. Although the Medinet Habu reliefs show some maritime fighters wearing both horned and spiky helmets, and brandishing swords, those brandishing swords are among the minority. Thus, the different helmet types may have signalled particular tasks, while still binding them together as pirates sailing under different tribal names; status may have been determined by the weapons one had access to.

As a multi-ethnic tribal entity, pirates selected particular symbols that bound them together as a group. In modern piracy, this was the Jolly Roger, which also had a variable iconography, yet remained recognizable and commanded the allegiance of at least 2,500 pirates (Rediker 2004, 98). It is possible that at the end of the Bronze Age (c. 1180 BCE), a particular warrior persona and a Mycenaean style of drinking and feasting ware assumed a similar function, particularly since feasting formed a key element both in Late Bronze Age society and in recent historical accounts of piracy (discussed in Maeir and Hitchcock in press a). Thus warrior accoutrements, Aegean-style drinking sets, and particular decorative motifs, such as the bird and the spiral, may have served as rallying symbols around which collective identity coalesced during piratical activity (Fig. 2). In the era of the Cilician pirates, Rauh (1997, 279) suggests that the ethnonym *Kilix* or Cilician served the same unifying symbolism as the Jolly Roger. Adopting and combining foreign symbols could be quite common, as is documented by the ambassador to Persia Robert Shirley, who wore a turban with a crucifix attached to it (Tinniswood 2010). Shirley's practice represents nothing new as from at least the Late Bronze Age onwards in the Mediterranean, small objects made of precious materials that could be easily displayed and which incorporated stylistic elements from more than one culture were used to promote multi-regional elite identities and served to bind disparate groups of elites together (Feldman 2002, 6-7; 2006, 7).

Pirate Interactions

Piracy as an activity of attacking from ships can be identified even if the word (*peiratis*) is not attested until the 4th or 3rd centuries BCE in Greece (Ormerod 1997, 59). Attacking from ships is depicted much earlier on Mycenaean sherds that show fighting and/or brandishing of weaponry on ships, most notably those from Pyrgos-Livanaton (Kynos) in eastern Lokris, Bademgediği Tepe in western Turkey, and Seraglio on Kos. All wear the feathered/spikey/hedgehog style helmets associated with the Sea Peoples. The only nautical weapon that was in use during this time was the grapnel, but pirate ships could be used as firing platforms for the use of spears (Wachsmann 2008, 321).

Höckmann (2001, 224) notes that one of the ships in famous the flotilla fresco from Akrotiri shows a man holding a long lance standing at the bow, with naked dead bodies and shields

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Fig. 2. Assemblage of ~~Mycenaean IIIC/Philistine I style~~ drinking ware from Tell es-Safi/Gath (courtesy of Tell es-Safi/Gath excavations).

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floating in the sea between the ship and the shore. He interprets them as defenders killed by long-range weapons of sea-borne attackers. Based on this, he suggests that ship-board combat was common by the time of the Pyrgos-Livanaton sea fighters. He is referring of course to the famous Sea Battle Krater (Fig. 3), which depicts warriors holding up shields and preparing to throw spears (Dakoronia 2006, 24). Dakoronia (1999, 120–21) further points out that the joining fragments from the krater depict two ships going against each other, as indicated by the oars going in opposite directions on both ships. She sees this as conclusive proof for war at sea and notes Homer's mention of long spears kept on board a ship as ready-to-fight weapons. The Bademgediği Tepe sherd is dated to LH IIIC and belonged to a large krater. It depicts a line of rowers below the deck of a ship with a bird-headed prow, behind which stands a line of warriors in hierarchic scale. The warriors are holding spears and shields, and face another line of warriors on an opposing ship as detailed by Mountjoy (2005). Crielaard (2011, 92) and Wachsmann (2008, 157–58) note that the Mycenaean galley[3] propelled by large numbers of rowers could beach at speed, sliding up the sand to insure surprise, while the attacks described above could take place from fighting platforms, the central gangway, or the deck and forecastle.

Skills

Who could be a pirate? In early modern history, the best seamen were usually among pirates (Rediker 1981, 207–208). Leadership skills, a disregard for conventional morality, and bravery were also important (Tinniswood 2010). Recent archaeological evidence from Egypt indicates

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Fig. 3. Sea Battle illustration on LH IIIC Middle sherd from Pyrgos Livanaton (after Mountjoy 2011, from Emanuel 2014, Fig. 3a, reproduced by permission).

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women sometimes participated in naval battles alongside men in the British Royal Navy (Bohstrom 2016; also Hitchcock and Maeir 2014, 626). Women fighting as Vikings, and who received warrior burials have also been documented (Price 2014, 59). Linder (1981, 40) regards Ugaritic texts UT 319 and UT 2085 as a Canaanite "catalogue of ships" that describe the roles involved in seafaring, which are divided into two categories, skilled and unskilled. A ship's crew would typically be made up of skilled commanders, sailors, and shipwrights. Unskilled crewmembers would include rowers and warriors, though success as a warrior might rely on different sorts of skills and muscle memory, which needed to be developed from youth (Skogstrand in press). Wedde (2005, 33) suggests that some rowers may have also enjoyed warrior status. We know from the classical era that the crew might also be divided into those who fought and those who worked the ship (Ormerod 1997, 51), indicating that seamanship was not required for all.

As suggested above, it is possible that not all pirates adopted the lifestyle willingly. Linder (1981, 34, 40–41) contends that ship commanders at Ugarit formed a type of aristocratic elite that entered into an economic relationship with the palace, which might be trade or militarily based. This corresponds to regions such as Lebanon in the 19th century CE, which resisted becoming involved with piracy, as trade was more lucrative (Galvin 1999, 12). In contrast, rowers may have had other occupations during the non-sailing season and been pressed into duty as *corvée* labourers aboard ships (Linder 1981, 41). Similar practices were used on Mycenaean ships as attested on Pylos tablet Ah12 and Palaima (1991, 308) notes that a single tablet mentions about 600 men serving as rowers of the fleet. Wachsmann (2008, 159) believes that only unusual circumstances would necessitate pressing into action such a large team of rowers. Pylos tablet An 724 makes specific reference to a *ki-ti-ta o-pe-ro-ta e-re-e*, a landowner who owes service as a rower (Wedde 2005, 33). As implied above from later examples, the circumstances of rowers in the Late Bronze Age that might have involved being pressed into labour and given rations would have made them attractive prospects for pirate tribes looking to increase their numbers. Thus, pirate tribes would have been composed of skilled

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mariners, skilled and un-skilled rowers, and skilled and less skilled warriors. Their numbers may have also included those skilled in ship-building and in rudimentary medicine who received a greater share than the others, although the latter is pure speculation based on early modern history (Rediker 2004, 163).

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Fragmentation of Identity

Historical accounts speak of pirates settling among and intermingling with local populations, forming new ethnic groups. Examples of this are found in accounts of the Barbary pirates, 460 in which there are numerous examples of British, Dutch, Greeks and Italians among them who converted to Islam (e.g. Rediker 2004, 31, 52–56; Earle 1970, 93; Tinniswood 2010). Furthermore, it is unlikely the Cilician pirates of the Roman era were of Cilician origin (Rauh 1997, 268–70). In addition, there are documented examples of pirates of one nationality marrying women of another in a city far from their place of origin (Tinniswood 2010). A fragmentation 465 of identity is seen in changes in settlement patterns throughout Greece, Cyprus, and the Levant, while ship technology remained relatively unchanged (Hitchcock and Maeir in press d).

3. POTENTIAL ARCHAEOLOGICAL SIGNATURES OF PIRATE CULTURE

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Rauh et al. (2013, 59) have noted that archaeological remains do not necessarily confirm the presence of pirates, while Nowicki (2001, 30) has raised the possibility that sea raiders and Sea Peoples mostly camped or slept aboard their ships. However, we will make some suggestions for considering what might constitute an "archaeological signature" (pace Anthony 1992, 475 174) of pirates or pirate activity in order to better sustain the pirate model for the end of the Bronze Age.

Desolated Coastlines

480 Numerous Aegean, Anatolian, Cypriot, and Levantine sites were situated near the coast and as such their strategic placement may have served as a deterrent against piracy (Hitchcock and Maeir in press c). Examples of such sites included, but were not limited to Amnissos, Mochlos, Pyrgos-Myrtos, Makrigialos, and Kato Zakro on Crete; Tiryns, Tychos Dymaion, Pyrgos-Livanaton, and Pylos on the Greek mainland; Kalavassos-*Ayios Dhimitrios*, Maroni-485 *Vournes*, Hala Sultan Tekke, Enkomi, Kouklia-*Palaepaphos*, and Maa-*Palaiokastro* in Cyprus; Troy and Miletus on the Anatolian Coast; and Ugarit, Sarepta, Dor, Nami, Qasile, Ashdod, and Ashkelon on the Levantine Coast. In addition to coastal regions, important sites might be situated near river valleys such as Kato Zakro near the Gorge of the Dead, Pyrgos-Myrtos next to the Myrtos River, and Knossos near the Kairatos River (all in 490 Crete). Another example is the string of inter-visible palatial Mycenaean sites along the Eurotas River Valley in Lakonia, a region that is strongly connected to the story of the Trojan War, which may have links to acts of piracy and the carrying off of women.

Safe Havens, Urban Landscape of Piracy, and the Sudden Fortification of Sites

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We regard as safe havens sites that survived the catastrophes and collapse of the 12th century BCE. Bell (2006, esp. 110; also Yasur-Landau 2010, 168) suggests that sites in Cyprus and the Levant that were not destroyed seemed to have had a closer and long-standing trading relationship with the Aegean during the Late Bronze Age. This close relationship may have 500 led to their functioning as safe havens to tribes of Sea Peoples.

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Jung (2009, 80) has suggested a foreign presence at Enkomi based on handmade cooking pots, yet we remain uneasy with the pots equal peoples approach. However, there are other sorts of evidence for Enkomi as a safe haven: that it was not destroyed and that it contained Sea Peoples iconography in the form of the ivory box depicting a man running behind a chariot and wearing a feathered helmet as well as the horned helmets of the "Ingot God" and "Horned God". These horned-helmeted bronze figurines and the feathered helmet known from throughout the Aegean and Cyprus find correlates in Sardinian figurines, which are depicted wearing horned and feathered helmets and are placed in the Final Bronze Age, which runs possibly quite late (Vagnetti 2000, 319–20). Given that they could be heirlooms or that warrior culture continued despite a lack of warrior graves, a connection with tribes of Sea Peoples cannot be ruled out when considering that Aegean and Cypriot characteristics continue in Philistine culture well into the 9th century BCE (Maeir et al. 2013).

Furthermore, in Sardinia large numbers of oxhide ingots, presumably from Cyprus, start turning up in the 13th century BCE (Vagnetti 2000, 313). Although their origin is by no means certain, various Cypriot tool types indicate that technology transfer was coming from Cyprus, as Cypriot-style bronze stands are attested in both Sicily and Sardinia (ibid., 317). Sea Peoples' ships with bird-head devices are also found depicted in Urnfield cultures of central and eastern Europe and as far east as on a burial urn in Hama (Syria) as well as on ceramics from Cyprus (Wachsmann 2008, 178–84).

Other sites that remained vibrant and active following the 12th century BCE destructions and collapse in the Mediterranean, such as Tiryns, ~~Medea,~~ Tychos Dymaion, Pyrgos-Livanaton, Enkomi, Hala Sultan Tekke, and Sarepta are characterized by far-flung international connections, the continued use of exotic display items, and a taste for Mycenaean pottery (e.g. Stockhammer 2011; Bell 2006). These were sites that were not destroyed, or in the case of Tiryns, it was destroyed but quickly re-inhabited, and exhibited foreign links with Cyprus and the Levant (Cohen et al. 2010).

Pirate settlements might be composed of peasants and soldiers of different ethnicities settled amongst indigenous peoples (Rediker 2004, 63). Pirates often tend to operate from islands, which served as "cosmopolitan rendezvous" points", which provided retreats, hideouts, and lookouts as well as served as sources of food and water (Galvin 1999, esp. 16). There, and in mainland contexts with rocky coasts, pirates could hide in sheltered creeks, safe havens, and promontories, the latter providing a good vantage point from which to prey on ships hugging the coastline (Ormerod 1997, 18, 22–26). Citing Moran (1992, *EA* 101, 105, 114), Wachsmann (2000, 809) has observed that hugging the coastline would have left ships vulnerable to piracy, as has been recorded in the Amarna Letters, and was not necessarily the preferred sailing approach. The Mediterranean was particularly vulnerable to piracy, which was difficult to eradicate because of its rocky and barren coastlines as well as its plethora of islands (Ormerod 1997, 14; Pennell 1994b, 77; Galvin 1999). When coastal settlements were maintained, they served as pirate refuges and took particular forms, such as defensible promontories at Maa-*Palaeokastro* in Cyprus, which we discuss elsewhere (Hitchcock and Maeir 2014, 629–30; in press c). Promontories provided excellent lookouts to spot suitable prey in the form of passing ships (Pennell 1994a, 279). Remote creeks could also serve as safe havens (Tinniswood 2010). In addition, islands and coastal regions frequently provided access to "choke points", constricted maritime routes as defined by capes, straits, and islands (Galvin 1999, 12). Sites such as Troy, as well as western Mediterranean islands such as Sardinia and Sicily, were situated at such choke points.

Abandonment possibly accompanied by destruction and resettlement, evidence of multiculturalism, and movement to areas with difficult access might all be seen as archaeological signatures of piracy. Abandonment leaves a different archaeological signature than destruction, which is indicated by a violent rather than a natural end to a building (e.g. Hitchcock

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2013). Following abandonment, houses fall victim to lack of maintenance: first the roof collapses, sealing the floor; then the walls fall in, sealing the roof; and some stones are perhaps reused for new buildings until only the foundations remain. Buried hoards of precious items may accompany sudden abandonment, whereby the inhabitants retain the hope of a chance to return and retrieve them as at Pyla-*Kokkinokremos* on Cyprus (Karageorghis 1984, esp. 67–70). Destruction is usually marked by burning and plunder, with objects left behind sometimes carelessly strewn about the building, such as the ivories that were strewn across a courtyard and scattered about the palace at Ugarit following its looting in c. 1185 BCE (Feldman 2009, with further references; see as well Namdar et al. 2011 for a specific study of a destruction and its implications).

As piracy could result in a desolation of settlements along coastlines and river banks, such places might be attacked at night, with villages burnt and pillaged, and fields devastated (Ormerod 1997, 19, 50; Pennell 1994a, 272, 274). Thus, destruction by fire of coastal sites as well as the presence of watchtowers and signal towers might (Wachsmann 2008, 164) represent other aspects of an archaeological signature for piracy, though such things should not be assumed and need to be carefully studied. Inhabitants of such areas might be motivated to move to defensible places further inland, be taken as slaves, or join a pirate tribe (Tinniswood 2010). A rapid defensive build-up of well-fortified sites is interpreted as indicative of piratical activity in the era of the Cilician pirates (Rauh et al. 2013, 68–72). Fortification might also serve to prevent a settlement from turning into a safe haven as in the time of the Barbary pirates (Tinniswood 2010). In eras of intensive piracy, coastlines could become entirely abandoned, and this is a tactic that occurs repeatedly across different times and places (Pennell 1998, 70). Such abandonment and move to defensible areas away from the coast characterized early Iron Age Cretan settlements, such as Karphi, Kavousi, Chalasmenos, and Thronos-Kephala, which were also relatively inaccessible from the surrounding landscape (Nowicki 2000). The appearance of these sites has long been subject to a debate as to whether they were chosen for defensibility or for availability of resources. The 120 defensible sites documented by Nowicki (2000, 9) in post-palatial Crete are regarded as representing only a fraction of the total. However a couple of the defensible sites on Crete including Elias To Nisi and Palaikastro Kastri were situated on promontories, and the fortified site Kato Kastellas in the Gorge of the Dead at Kato Zakro was also suitably placed to be infested by pirates (Hitchcock and Maeir in press c; also Nowicki 2000, 46, 50–52, 252; 2001, 29).

An urban plan characterized by houses built next to each other, whereby their backs form a protective wall, was used as a defensive strategy in the Greek island of Kimolos (Ormerod 1997, 56–57). Pyla-*Kokkinokremnos* (Cyprus), another short-lived settlement dating to the final phase of LC IIC:2 (from c. 1230 to its abandonment in c. 1175 BCE based on the presence of imported LH IIIC pottery) (Kanta 2014, 111), has a material culture reflecting Aegean (including Minoan) influences and Cypriot traditions, and employs a similar settlement layout. On Crete, a number of low lying settlements continued as at Chania, Knossos, Tylissos and others, and Nowicki (2000) suggests they were militarily strong enough to repel raiders who were reliant on the element of surprise.

Maritime Evidence

Pirates often favoured smaller, lighter, and more manoeuvrable boats, which could be used to chase down more cargo-laden ships. The smallest could be carried over land manually or on a wagon, even over an isthmus to avoid maritime pursuit (e.g. Ormerod 1997, 28–29; Rediker 2004, 28ff), and there are numerous depictions of ship-carts or ships on carts in Greek and Roman art (Wachsmann 2013). Wachsmann (2013, esp. 26, 85) has convincingly proposed that a ship model on wheels that he studied from Abu Gurob (Egypt), which he dates to the

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late 13th or 12th century BCE, represents a Mycenaean style of galley situated on a cart. Less well-known is a possible ship model with wheels from Kynos, which Dakoronia (2002, 283–84, fig. 4) interprets as a child's toy, but which could very well be a model of a pirate ship, based on Wachsmann's reading of the Abu Gurob model.

605 Ship representations maintain a remarkable continuity between the Bronze and Iron Ages (e.g., Wedde 2006; Emanuel 2014). Dakoronaia (1999, 119–20) also notes continuities in ship configuration between the Kynos ship depictions and a Geometric one depicted on a krater from the Louvre. The systemic changes resulting from the collapse around the Mediterranean (e.g. Cline 2014) would have eliminated the ability of wealthy patrons to harness labour and 610 resources for constructing monumental architecture. If builders and designers or shipwrights were among the Sea Peoples and other groups, it is tempting to suggest that skilled builders turned their energies towards ship production. Cutler (2016, 174–75) has observed that the development of motor habits to transfer weaving technology is a long-term skill that can take several years for vertical transfer of skill to occur when an apprentice is working alongside 615 a master or an instructor, usually a parent. Motor habits are internalized through repeated actions, whereas it is more difficult to change an existing motor habit than to teach a novice. If builders transferred the motor skills used for building structures in both wood and stone to ship building, we may be seeing an example of what Brysbaert (1997; also Brysbaert and Vetters 2010) refers to as cross-craft interaction (horizontal transfer). Wachsmann (2000, 620 806) has suggested that the carpentry techniques used in mortise and tenon construction in concert with ashlar masonry could be transferred to ship building as early as Late Minoan IA, although this remains uncertain (Wachsmann 2008, 155). Palaima (2008, 385–86) refers to a profession known from Pylos FN7 in Linear B as the *pan-tektōn* (*pa-te-ko-to*), an "all builder", perhaps foreman, versed in multiple architectural talents, who received three times 625 as much in rations as builders possessing a single skill.

Slavery

Slavery typically goes hand in hand with piracy. In the Roman era, Cilician pirates posed as 630 slave traders (Ormerod 1997, 207), while Illyrian pirates were said to have lured kidnap victims to the shore with the intent of engaging in trade (Dell 1967, 352–53). Pirates might also resort to trickery; for example, in the early modern era, keeping multiple sets of flags and emblems or using other means to disguise their identity (Rediker 2004, 162–65; on pirates involved in the slave trade in Roman period Black Sea, see Tsetskhladze 2000–2001, 13–14).

635 While slavery is well known from various Late Bronze Age texts, archaeologically, it is not easy to define. Textual evidence from Egypt abounds (e.g. Helck 1984; Allam 2001) as it does from western Asia (e.g. Mendelsohn 1949; Dandamaev 1984; Chirichingo 1993; Culbertson 2011). Similarly, the Linear B texts suggest slavery existed in Mycenaean Greece. The terms *do-e-ra* (fem.) and *do-e-ro* (masc.) used in Linear B for "slave" were primarily used to refer to 640 servants of a deity (Nikoloudis 2006, 115). However, Olivier (1987), notes that there were contracts for the purchase of slaves in two tablets from Knossos (KN B 988 and KN B 822). Olsen (2014) tends to see many of the workers as *corvée* labourers, noting that both Pylos and Knossos held men and women as slaves alongside a number of other occupations. The term *ra-wi-ja-ja* (war captives), a derivative of **lāwiā* (war plunder), is used once to refer to a group of twenty-six 645 women (Pylos Aa 807) who seem to have been treated as palace dependents and came from various sites on or near the Anatolian coast (Nikoloudis 2006, 45–46, 59). The term **ra-wo* is associated with **lāwos* by Nikoloudis (2006, 211–12), who provides a detailed discussion of it, likening it to both PIE and Hittite terms for pouring and plunder and suggesting that the pouring in of plunder could be the associative link. Nikoloudis (2006, 217) goes on to 650 propose that it could refer to captives or independent newcomers, noting that the Mycenaeans

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also tended to "otherize" foreign alongside local landless groups. Wachsmann (2008, 128) observes that individuals of foreign origin mentioned in Linear B texts, such as men of Nauplia at Knossos, a Knossian at Pylos, a Theban at Knossos, and so on, could have only reached their destinations by sea.

655 Moreover, it has been suggested that the Handmade Burnished Ware (HMBW) found in various late Mycenaean contexts with clear Italian connections is to be seen as evidence of the presence of foreign slaves in Mycenaean society (see Bankoff et al. 1996; Killian and Mühlenbruch 2007, but see Genz 1997). Jung (2009, 78) has studied HMBW and unequivocally equates it with styles produced in southern and central continental Italy, and he suggests that migration 660 of Italic peoples from Italy to Greece can be associated with both the piratical activities of the Sea Peoples and with the incorporation of foreign warriors into the Mycenaean military. What is more, Mycenaean pottery was produced in Italy with local clays from the 14th century BCE, suggesting both regions were culturally entangled from an early period, with the number of workshops increasing in the IIIC era (as detailed with further references in Vagnetti 2000, 665 312). Hittite texts mention a man named Ibnadushu who reports on the Shekelesh to the Hittite king after escaping from the Shekelesh, while another Ugaritic man is reported simply as being captured (Wachsmann 2008, 164).

Funerary Remains and Weaponry

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Osteological evidence is another potential indicator of slavery. Bioarchaeological studies of osteological trauma and positioning of the body for burial also reveal evidence of conflict, including fractures that occur around the time of death (perimortem) (Martin et al., 2010). Non-lethal trauma to the skull and healed fractures may indicate abduction or beatings. Ossi-675 fied ligaments, osteoarthritis, asymmetries, and dental pathology provide evidence of servitude, while amputations may suggest punishment or battle, and lack of a proper burial indicates outsider status in a community. Among the Barbary pirates, those who tried to escape might have their limbs intentionally broken (Tinniswood 2010).

In addition, burials containing certain mixtures of foreign accoutrement are also evidence 680 for identifying warriors from LH IIIB–IIIC who may have engaged in piratical activities. Tomb 21 at Langada (Kos) included a spearhead next to the skull, a Cetona (Naue II) sword, two spearheads with casted sockets, a razor, two fibulae, and many amber beads (Vitale and Blackwell in press). Exact parallels for the spearhead are found only in northern Italy and Achaea (Jung 2009, 73). This is one of a number of warrior burials studied by 685 Jung (2009), which may represent the signature of a pirate burial.[4] In Achaean burials, Naue II swords were accompanied by Aegean spearheads, and a total of seventeen Naue II swords were found in Greece (Moschos 2009, 360, n. 71). Aside from the Naue II sword, Crielaard (2011, 92–93) notes that different types of weapons and armour appear with seafarers and charioteers. Those depicted on ships include javelins, bows, shields, fringe tunics, and greaves. 690 Jung (2009, 72) associates new weapons and metal implements such as Naue II swords, spearheads with cast sockets, fibulae, and particular knife and axe types that appear in the Aegean in the last centuries of the second millennium with the Urnfield tradition in Italy and the Balkans. Lead isotope analysis carried out by Jung (2009, 74–75) and his research team point to a Cypriot origin for the copper used in Naue II swords in Greece, which sets them apart 695 from Italian swords. Italian and central European depilatory habits involving the use of tweezers and razors also find their way into warrior burials as a symbol of warrior beauty and at times may be the only items signifying warrior status (Skogstrand in press).

We acknowledge that there is a certain amount of slippage in distinguishing between the hard life of a labourer or a slave and a pirate life. If a labourer or a slave became a pirate, the 700 osteological data might be indistinguishable. For the moment, caution is warranted, and it

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might be most prudent to stick with the evidence of warrior graves, including razors, tweezers, exotic imports such as amber beads, and identifying use wear on the weapons. Acquiring the motor skills to become a warrior through years of training and exercise, do leave occupational markers on the body generated through physical activity such as larger than normal muscle attachments on the bone (Whitehouse in press). Making progress on these issues calls for greater collaboration between bioanthropologists and archaeologists.

Evidence of Cultural Mixing

The archaeological signature for cultural mixing and entanglement at the end of the Bronze Age includes: multiple ways of manipulating a range of writing systems (see Davis et al. 2015); the spread and usage of Mycenaean-style feasting paraphernalia that became more egalitarian in orientation; the spread of Cypriot divination practices as found in the Levant; and the mixing of Mycenaean and Italian grooming and depilatory habits as seen in the continued use of perfumed oil over a wide region, as indicated by stirrup jars and the appearance of Italian fenestrated razors and other grooming items in the Aegean (Kanta and Kontopodi 2011, 130, 140; Crielaard 2011, 97). Only a small amount of HMBW in Cyprus can be associated with Italian traditions (Jung 2009, 78) and it is tempting to suggest that, by the late Mycenaean period, people making HMBW were very much entangled with other cultures and the tradition evolved. A similar situation of local production occurs at Bademgediği Tepe, where HMBW is made in large quantities. Finally, precious objects in unusual contexts and far from their points of origin at the end of the Bronze Age may be suggestive of piratical looting, such as the Neopalatial Minoan ivory figurine found at Punta di Zambone in Italy (Jung and Pacciarelli in press) and the ivory bowl with parallels in the Megiddo hoard found at Tell es-Safi/Gath (Maeir et al. 2015).

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4. CONCLUSIONS

This paper has used an anthropological approach using historical sources and archaeological data to identify patterns in the culture of piracy that might be applicable to understanding the Sea Peoples as ethnically mixed tribal cultures that inhabited ships, engaged in piracy, and settled in various regions in the eastern and western Mediterranean, having a broad ranging effect on cultures in the region. The features and patterns we have derived and identified include pre-existing historical evidence for piracy and cultural interaction in the Late Bronze Age, maritime evidence and the role of the ship in forming pirate identity, rites of passage, social mechanisms and stratification that gave rise to pirate culture, weaponry and technology, fragmentation of identity, new symbolism around which their identities coalesced, gender identity, and the geography of piracy.

Although the Philistines have traditionally been emphasized because of the biblical tradition surrounding them, there are other peoples who require the same kind of close investigation. These include the peoples of Sardinia, Sicily, and Dor, a possible Tjekker or Sikel town as attested in the Report of Wenamun (Lichtheim 2006, 224–29; but see, e.g., Sharon and Gilboa 2013 for a different interpretation). Peoples from the areas associated with the Ahhiyawa also merit further scrutiny, such as those from Miletus, Lukka, and Cyprus – which goes from being known as Alašiya to being called Iadnana (island of the Danuna). Future studies should also take into account Lycia, and Tell Tayinat – identified by some as the land of Palasitin, raising the possibility of there having perhaps been a breakaway group from the Peleset tribe.

We have begun to investigate the different types of material culture found within tribes of pirates. While the tribal names may point to specific cultures, it is likely that such tribes were

culturally mixed coming from different regions and occupations around the Mediterranean. They went on to develop a unified culture aboard their ships that coalesced around dress, weaponry and warrior culture, Mycenaean styles of drinking, and Mycenaean and Italian grooming habits. Much more work in Mediterranean archaeology might be done with regard to studying the razors and tweezers found in burials in combination with osteological evidence, as warriors were not always interred with weaponry (Skogstrand in press). In addition, we have begun to set out the process whereby we might identify archaeological signatures for piracy in the Bronze Age. Much more research needs to be done in this area, particularly where geography plays a major role in understanding social interactions. We would stress that these are suggestions and hypotheses to be further investigated, analysed, and refined.

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NOTES

[1] The Southeast Aegean/Southwest Anatolian Region: Material Evidence and Cultural Identity I: The Early and Middle Bronze Age, conference held in May 2016.

[2] Each of these articles has a different focus on the Sea Peoples from the present one. The first examines the relationship between piracy and migration, the second provides an overview of pirate leadership and feasting habits, the third one only touches on the topic of piracy with regard to ways of studying east-west interactions, and the fourth investigates the relationship between an Aegean *thalassocracy*, piracy and Cretan geography from the Late Bronze Age until the end of the Bronze Age.

[3] This seemed to be the preferred form of ship used by the Sea Peoples if representations are to be believed. On the details of their construction see Wachsmann (2008: 155–58).

[4] Comment by R. Jung at *Hesperos* conference, held in Thessaloniki, Greece, 18–20 June 2016.

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