

of Osteria dell'Osa, Rome: Evidence of Social Change in Lazio in the 8th Century B.C." in C. Malone and S. Stoddart, eds., *Papers in Italian Archaeology IV. Part iii: Patterns in Protohistory* BAR International Series 245 (Oxford 1985) 111–44. The complete excavation reports under the direction and editorship of Dr. Bietti Sestieri are now in press. These will provide an enormous amount of valuable information concerning this critical period in the development of Iron Age Italy.

Also of note is the work by E. Randolph Turner, "Difficulties in the Archaeological Identification of Chiefdoms as Seen in the Virginia Coastal Plain during the Late Woodland and Early Historic Periods," in J.F. Custer, ed., *Late Woodland Cultures of the Middle Atlantic Region*, (Newark, DE 1986). For political evolution in Etruria see M. Cristofani, *Etruschi: Cultura e Società* (Novara 1979).

18. M. Toher, "Funerary Legislation and Mortuary Ritual in the Archaic Age" [ca. 1986], manuscript on file, Anthropology Section, West Chester University, suggests that both C. Ampolo, "Il lusso nella la società arcaica" *Opus* 3, no. 2 (1986) 469–76, and T. Cornell, "Rome and Latium Vetus, 1974–1979." *AR* (1979) 83, follow Colonna (supra, n. 15) in accepting a legislative basis for the diminution of evident burials in Latium.
19. Toher (supra n. 18) 14.
20. P. Ucko, "Ethnography and Archaeological Interpretation of Funerary Remains" *World Archaeology* 1 (1969/70) 262–80.
21. This increase would be expected to be reversed during the third century, as a reflection of Roman efforts at political decentralization.
22. This apparent uniformity, over 600 years, in the way infants and very young children were buried is also another indication that the population at this site did not suffer cultural change as a result of invasion or colonization from outside the area.

SEA PEOPLES IN ETRURIA? ITALIAN CONTACTS WITH THE EASTERN MEDITERRANEAN IN THE LATE BRONZE AGE



ROBERT H. TYKOT

The origin of the Etruscans has been debated ever since the fifth century B.C. when Herodotus,¹ citing Lydian sources, attributed them to that region of Asia Minor:

Atys divided the population into two groups and determined by drawing lots which should emigrate and which should remain at home. He appointed himself to rule the section whose lot determined that they should remain, and his son Tyrrhenus to command the emigrants. The lots were drawn, and one section went down to the coast at Smyrna, where they built vessels, put aboard all their household effects and sailed in search of a livelihood elsewhere. They passed many countries and finally reached Umbria in the north of Italy, where they settled and still live to this day. Here they changed their name from Lydians to Tyrrhenians after the king's son Tyrrhenus, who was their leader.

The Greek historian Hellanicus, quoted by Dionysius of Halicarnassus,² also claimed an eastern Mediterranean origin for the Etruscans, stating they were the Pelasgians, who settled the Aegean islands of Lemnos and Imbros. Some weight must be given to this argument since a sixth-century B.C. funerary stele, now in the Athens National Museum, and locally made pottery sherds have been found on Lemnos, all with inscriptions in a dialect similar to Etruscan.³ This evidence, however, may only demonstrate the independent survival of a common pre-Indo-European language.

Most modern scholars reject these "histories" as completely fictitious, as another example of the Greeks' passion for allotting imaginary origins to peoples and cities.⁴ In fact, Dionysius, writing in the first century B.C., informs us of a contemporary of Herodotus, the Lydian historian Xanthus, who claimed that the first man on earth had been a Lydian, that his descendants reigned long before

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the time of Heracles, and that numerous towns in Asia were founded by Lydians. Given these fantastical foundation myths, it seems plausible that the superficial etymological similarity between the Lydian town Tyrrha, and Tyrrhenia, was the provocation for the foundation myth heard by Herodotus.⁵ Other Lydian sources indicate that Tyrrha may have been founded by King Gyges, who named it after a son of the legendary King Atys.⁶ Since Gyges ruled in the seventh century B.C., it would seem that the Etruscans could not have come from a Lydian town founded two or more centuries after they were already established in Italy. Finally, Dionysius states that the Etruscans he consulted considered themselves autochthonous and called themselves Rasenna, not Tyrrhenians.

A more recently proposed eastern Mediterranean ancestry for the Etruscans would have them related to the tribe of Sea Peoples identified in Egyptian reliefs and documents as *Trš* (Teresh).⁷ The tribes of *Šrdn* (Sherden), *Škrš* (Shekelesh), and *Tkr* (Tjekker) have likewise been identified for etymological reasons with the islands of Sardinia and Sicily. Furthermore, archaeological evidence leaves no doubt that contacts did exist between the eastern and western Mediterranean in the Late Bronze Age, thus raising the possibility

Table 1 Chronology of the Eastern Mediterranean and the Tyrrhenian Region

	Greece	Egypt	Italy	Aeolian Is.	Sicily	Sardinia
Early Bronze Age 1700–1600 1600–1400	MH LHI–LHII		Proto-Apennine	Capo Graziano	Castelluccio	Nuragic I
Middle Bronze Age 1400–1325	LHIIIA	Amarna 1352–1336	Apennine	Milazzese	Thapsos	Nuragic II
Late Bronze Age 1325–1190	LHIIIB	Ramesses II 1279–1213	Sub-Apennine	Ausonian I	Pantalica	Nuragic
1190–1150	LHIIIB:2	Merneptah 1212–1202				
1150–1050	LHIIIC	Ramesses III 1183–1152	Proto-Villanovan	Ausonian II	"	"
1050–900	Sub-Mycenaean Proto-Geometric	Wenamun 1070	"	"	"	"
Iron Age 900–750 750–	Geometric Oriental & Archaic	"	Villanovan Etruscan			Nuragic "

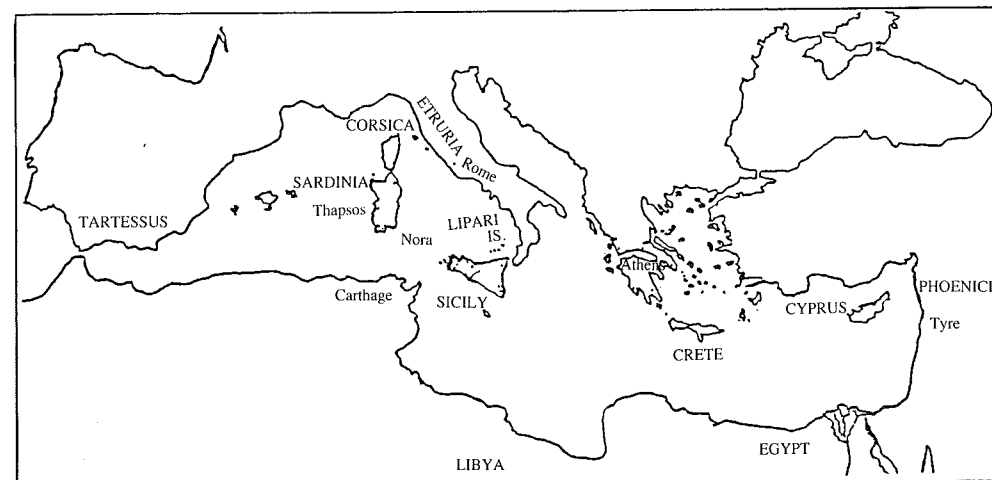


Fig. 1. Mediterranean sites mentioned in the text.

that some of the tribes of Sea Peoples mentioned in the Egyptian documents of Ramses II, Merneptah, and Ramesses III could have settled in the Tyrrhenian region before the emergence of the Etruscan civilization (see table 1 and fig. 1).

Even in the unlikely event of scholarly agreement on the etymological validity of this theory, however, *archaeological* evidence is required to demonstrate the nature of the relationship between these regions and to establish a context in which these etymological derivations can reasonably be explained.

Certainly, there was no wholesale migration between the regions involved, either at the time of the Sea Peoples' raids on Egypt in the thirteenth and twelfth centuries B.C., or any time prior to the emergence of the Etruscan civilization in the eighth century B.C. All of the archaeological data indicate that the Etruscans were the descendants of indigenous peoples, the Villanovans and Proto-Villanovans, who themselves were descendants of the Apennine peoples living in Middle-Late Bronze Age Italy.⁸

This is not to say, however, that the Etruscans and their predecessors were isolated in any way from their cultural contemporaries; on the contrary, Etruscan art seems to owe much to the influence of Greek and Near Eastern cultures. But despite intense interactions with outside groups, the Etruscans were not dependent on external stimuli for their own political and social development.

I would suggest nevertheless that, potentially, the settlement in Etruria of relatively small numbers of the Teresh tribe of the Sea Peoples could have culminated in the adoption of their name for that region. After a review of the textual evidence, I will present the archaeological data for contact between Italy and the eastern Mediterranean in the Late Bronze and Early Iron Ages so that we may critically evaluate this hypothesis.

AMARNA PERIOD

Our earliest knowledge of the “Sea Peoples” comes from the Amarna letters, where the Sherden are listed as mercenaries stationed in the Levant at Egyptian garrisons such as Beth-Shan and Lachish. Although Akhenaten reigned at Amarna from about 1352 to 1336 according to the low chronology, garrison sites in the Levant date back to the conquests of Tuthmosis III in the mid-fifteenth century B.C. and continue up to the reign of Ramesses III in the early twelfth century B.C.

RAMESSES II

The Sherden are first described as *sea*-going in the fragmentary Tanis stele, which dates to the early part of Ramesses II's reign (1279–1213): “Shardana, rebellious of heart . . . and their battleships in the midst of the sea.” Ramses II “destroyed warriors of the Great Green [the Mediterranean], and lower Egypt spends the night sleeping peacefully.”⁹

A few years later the Sherden are again mentioned as mercenaries, fighting at the Battle of Kadesh. The Egyptian-Hittite hostilities began in year 5 of Ramesses' reign, with a treaty signed in year 21 (approximately 1275 to 1258 B.C.). The Battle of Kadesh is depicted on numerous Egyptian reliefs. The Poem of Pentaur (on temple walls at Luxor, Karnak and Abydos) describes the preparations of the Egyptians and their march to northern Syria: “Behold, his majesty prepared his infantry and his chariotry, the Sherden (*S-r-dy-n*) of the captivity of his majesty from the victories of his sword—they gave the plan of battle . . .”¹⁰

UGARITIC AND HITTITE DOCUMENTS

Sherden mercenaries were also employed by the king of Ugarit in the mid-13th century B.C. Liverani was the first to equate the Egyptian *šrdn* with the *trtnm* of the Ugaritic texts, while the role of the Sherden in Ugarit has been discussed by Dietrich and Loretz, Liverani, and most recently by Heltzer.¹¹ The first text (PRU III.16.251) is written in the reign of Niqmepa, while the second (PRU III.15.118) and third (PRU III.15) come from the reign of his son Ammistamru II, both ruling in the mid-13th century B.C.:

From the present day, Niqmepa, son of Niqmaddu, king of Ugarit, took the fields of Allan, the Sherdanu, in the (village) Ilu'istam'i, and the fields of his inheritance (?) and gave it to Sawittenu. And Sawittenu shall honour the king, his lord, with 100 (shekels) of gold.

Nobody shall take it from his hands. The seal of the great king. Witness, Samas-sarru, the scribe.

From the present day, Ammistamru, son of Niqmepa, king of Ugarit, took the fields of Allan, the Sherdanu with its vineyard, in the (village) Mati'ilu and gave it to Ibsali and Ibsali [x (shekels) of silver (?)] shall give to the [king]. In the future nobody [] shall take it from Ibsali. The seal of the king Ammistamru, son of Niqmepa. Witness—Iasiru, the scribe.

[and next: the house] and the salt-producing field [of] IM, son of the sherdana, Kurwanu bought [for x hund]red (shekels) of silver. This field [of] Kurwanu will be forever.¹²

Other texts show that some of the Sherden had west-Semitic names (PRU IV:17.112), and served in the military forces at the royal palace (PRU II.28–31, KTU 4.174). Since their number is 5, 4, 5, 5 and 5, this indicates that the real number of Sherdana in Ugarit was not large.¹³ Yet another text (PRU II.124) lists men receiving or delivering an *utpt sárdnmm*, translated as a “quiver of the sherdana.”¹⁴ Although we have no evidence of the Sherden using a special type of quiver, both the Egyptian reliefs, and many Sardinian figurines, demonstrate the use of the bow and arrow.

The Ugaritic texts demonstrate that some Sherden were land-owners in or around Ugarit, but that their fields were subsequently sold by the king of Ugarit. It is possible that these fields were grants for military service to the king.

Our earliest knowledge of the Teresh comes from a Hittite text of Tudkhaliya IV, which refers to *Ta-ru-i-sa*, located near the Troad.¹⁵ The text is not very specific, and we can only speculate on the potential relationship between this place and the Tyrrha of Lydian date mentioned above. Other Hittite documents including the Tagalawas Letter and the Madduwattas Indictment tell of general unrest in Miletus/Ahhiyawa and the Lukka lands in western Anatolia during the 13th century B.C., events which may be the precursors to the raids of the Sea Peoples on Egypt.¹⁶

A letter from the Hittite king to an official of Hammurabi, the last king of Ugarit, is further evidence of concern over the Sea Peoples (RS 34.129):

From the Sun, the Great King, to the city-prefect: Now, with you, the king, your master, is young. He doesn't know anything. I have (already) given orders to him regarding Lunadusu, who was taken captive by the Sikalayu, who live on ships. Now I have sent to you Nisahili, one of my administrative officials, with instructions. As for you, send Lunadusu, whom the Sikalayu captured, here to me. I will ask him about the Sikala-affair. Then he can return to Ugarit.¹⁷

Apparently Lunadusu, as a prisoner aboard their ships, might be able to provide information about the Sikala (*Si-ka-la-liu-a*).¹⁸ Importantly, Rainey¹⁹ has now identified the Sikalayu of this Akkadian script with the Tjekker/Thekel of the Egyptian inscriptions,

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rather than with the Shekelesh as Lehmann²⁰ did. In fact, Tjeker is a poor transliteration, and should be Sikel, as Breasted²¹ suggested long ago.

Correspondence between the same Ugaritic official and the King of Alashiya (Cyprus) also tells of raids by an unidentified enemy.²² Sandars has correlated the events of these texts with the sea battle of Suppiluliumas II, the last king of Hatti, and makes them contemporary with Ramesses III's northern war (ca. 1175 B.C.). The Ugarit-Alashiya correspondence could, however, relate to the first arrival of the Sea Peoples during Merneptah's reign, about 1207 B.C. Indeed, the chronological correlation of kings, pharaohs, textual events and actual destruction levels is a major problem.²³

MERNEPTAH

Merneptah (1212–1202 B.C.), in the fifth year of his reign, repelled an invasion of Libyans and their allies in the western Delta. These allies of the Libyans included the Teresh, Shekelesh, and the Sherden, previously known only as mercenaries fighting for Egypt, while the Sikala/Sikels/Tjeker are not listed. The Great Karnak Inscription begins “. . . Ekwesh, Teresh, Luka, Sherden, Shekelesh, Northerners coming from all lands”²⁴ and continues:

The wretched, fallen chief of Libya, Meryey, son of Ded, has fallen upon the country of Tehenu with his bowmen—Sherden, Shekelesh, Ekwesh, Luka, Teresh, taking the best of every warrior and every man of war of his country. He has brought his wife and his children—leaders of the camp, and he has reached the western boundary in the fields of Perire.²⁵

The invaders were badly defeated in a six-hour battle, with 6,359 Libyans slain, along with 222 Shekelesh, 742 Teresh, and an unknown number of Sherden and Ekwesh.²⁶ The Israel Stele, in celebrating this victory, mentions that Merneptah campaigned in Palestine, plundering Pekan, carrying off Askalon, and seizing Gezer.²⁷ Are these places where the allies fled after their defeat?

RAMESSES III

The Sikala/Sikels/Tjeker make their first appearance in the first Libyan War of Ramesses III (year 5), and are identified as northerners like the Teresh, Sherden, and Shekelesh: “The northern countries are unquiet in their limbs, even the Peleset, the Thekel, who devastate their land. Their soul came, in the last extremity. They were warriors upon land, also in the sea.”²⁸ Once again, the Libyans and their allies are defeated, with over 12,000 men slain and 1,000 taken captive.²⁹

Another clash between the Egyptians and the Sea Peoples came

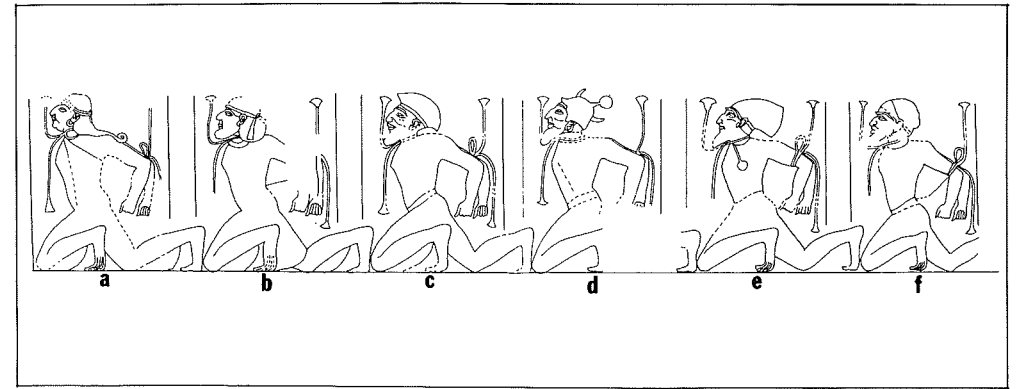


Fig. 2. Captive chieftains on a relief at Medinet Habu:

- (a) Hittite;
- (b) Amorite;
- (c) Tjeker;
- (d) Shardana;
- (e) Shasu or Shekelesh;
- (f) Teresh.

during Ramesses III's eighth year, when the pharaoh's forces defeated the marauders in both a land and sea battle, either somewhere on the Phoenician coast, or as Sandars feels, closer to the Delta.³⁰ Although neither the Teresh nor the Sherden are mentioned in the reliefs, the Sea Peoples again came from the north:

Not one stood before their hands; from Kheta, Kode, Carchemish, Arvad, Alasa, they were wasted. They [set up] a camp in one place in Amor. They desolated his people and his land like that which is not. They came with fire prepared before them, forward to Egypt. Their main support was Peleset, Thekel, Shekelesh, Denyen, and Weshesh; (these) lands were united, and they laid their hands upon the land as far as the Circle of the Earth. Their hearts were confident, full of their plans.³¹

The Sherden are mentioned, however, in the Papyrus Harris, as allies of the invaders:

I extended all the boundaries of Egypt; I overthrew those who invaded them from their lands. I slew the Denyen in their isles, the Thekel and the Peleset were made ashes. The Sherden and the Weshesh of the sea, they were made as those that exist not, taken captive at one time, brought as captives to Egypt, like the sand of the shore. I settled them in strongholds, bound in my name. Numerous were their classes like hundred-thousands. I taxed them all, in clothing and grain from the storehouses and granaries each year.³²

The Teresh, Sherden, and Thekel, as well as the Kheta (Hittites), Amor, Shasu(?) and Peleset(?) are also present in the Medinet Habu relief, which commemorates Ramesses III's Amorite War by showing these seven captive chiefs kneeling with their arms tied behind their backs (fig. 2).³³

It seems clear that Ramesses III made use of these conquered peoples just as his predecessors had: “I made Egypt into many classes, consisting of: butlers of the palace, great princes, numerous infan-

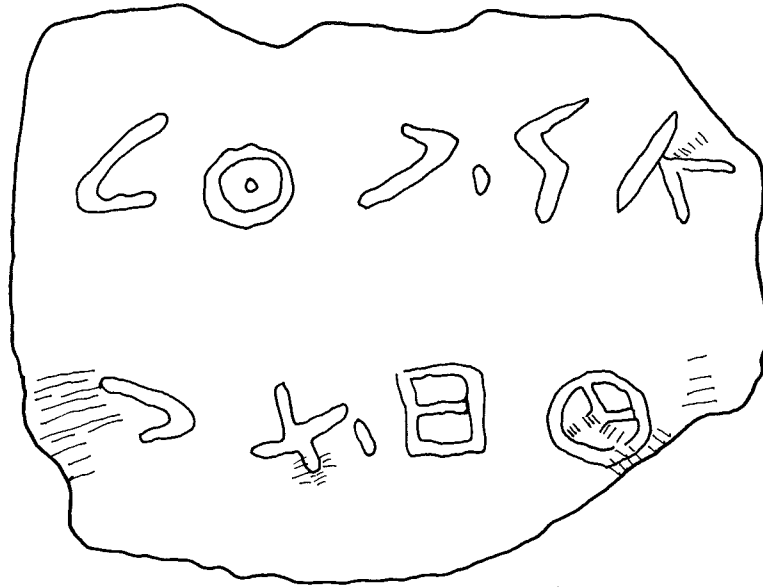


Fig. 3a. The Nora Fragment. Cagliari, Museo Archeologico Nazionale.

try, and chariotry, by the hundred-thousand; Sherden, and Kehek, without number; attendants by the ten-thousand; and serf-laborers of Egypt."³⁴ Furthermore, the Egyptians were familiar with these people, who were probably living in the Levant, a region of great political and economic importance to Egypt:

the Sherden and Kehek were in their towns, lying the [length] of their backs; they had no fear, (for) there was no enemy from Kush, (nor) foe from Syria. Their bows and their weapons reposed in their magazines, while they were satisfied and drunk with joy. Their wives were with them, their children at their side; they looked not behind them, (but) their hearts were confident, (for) I was with them as the defense and protection of their limbs. I sustained alive the whole land, whether foreigners, (common) folk, citizens, or people, male or female.³⁵

WENAMON AND AMENOPE

That the Levant was the home of at least some of the Sea Peoples is confirmed by the *Tale of Wenamon*, who was sent to Byblos to acquire timber at the end of the twentieth dynasty (ca. 1070 B.C.). His payment of gold and silver was stolen while he was at Dor, which was then a petty kingdom of the Thekel: "I arrived at Dor, a city of Thekel, and Bedel, its king, caused to be brought for me much bread, a jar of wine, and a joint of beef."³⁶ Although Wenamon did recover some of the silver, the Thekel followed him to Byblos:

[Wenamon] spied eleven ships coming from the sea, belonging to the Thekel, saying: "Arrest him! Let not a ship of his (pass) to Egypt!" I sat down and began to weep. The letter-scribe of the prince came out to me, and said to me: "What is the matter with thee?" I said to him: "Surely thou seest these birds which twice descend upon Egypt. Behold them! They come to the pool, and how long shall I be here, forsaken? For thou seest surely those who come to arrest me again."³⁷

Wenamon clearly associates these Thekel from Dor with those who fought Egypt twice before, during the reigns of Merneptah (although we have no surviving documents naming them) and Ramesses III.³⁸

The *Onomasticon* of Amenope, also from the early eleventh century B.C., refers to towns and peoples in Canaan, listing from north to south the Šardina, Seqila and Pelastu.³⁹ Since we know the *Pelastu* (= Peleset/Philistines) settled mostly along the southern coast, and the *Seqila* (= Thekel/Tjeker/Sikala/Sikels) were living around Dor, the Šardina must have lived somewhere between Mt. Carmel and Tyre, perhaps at Akko.⁴⁰

PHOENICIANS

The inscription known as the Nora Fragment (fig. 3a), found in the sea near Nora in Sardinia, has been dated to the mid-eleventh century B.C. on the basis of paleographic examination.⁴¹ If one assumes that it was brought to Nora soon after its manufacture, it indicates that by the mid-eleventh century B.C., the Levantine people called Phoenicians, known earlier as Canaanites, were plying the waters of the western Mediterranean. Although the earliest archaeological evidence of Phoenician settlement in Sardinia, at Pithekoussai on Ischia, at Carthage, and in Spain, comes from the early eighth century B.C., it is certainly possible that the Phoenicians were *travelling* in western Mediterranean waters some two to three centuries before their actual *colonization* of the west.

The Nora Stone (fig. 3b), also found in the sea, has been dated to the second half of the ninth century B.C. and thus does not predate Phoenician settlement on Sardinia.⁴² It clearly links, however, the island with the Šardina of the *Onomasticon*, and is therefore fundamental to the hypothesis that Sardinia did derive its name from the tribe of Sea Peoples known as Sherden: ". . . at Tarsis, and he drove them out. Among the Šardina he is [now] at peace, (and) his army is at peace: Milkaton son of Subna, general of (king) Pummay."⁴³ A slightly different reading of the Nora Stone had been made by Peckham,⁴⁴ who translated the text as follows: "From Tarsish he was driven; in Sardinia he found refuge; his forces found refuge: Milkuton, son of Subon, the commander. To [the god] Pmy." Cross, however, has convincingly demonstrated that the eighth line

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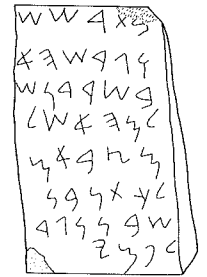


Fig. 3b. The Nora Stone. Cagliari, Museo Archeologico Nazionale.

of the text, *Ipmy*, must be Pummay (Pygmalion), king of Tyre, and that Milkuton "drove them out" (active voice) rather than "he was driven."⁴⁵

Cross interprets the inscription as part of a victory stele, and suggests that it could have begun "He fought with the Sardinians. . . ." Similarly, he feels that "Tarsis is most easily understood as the name of a refinery town in Sardinia, presumably Nora or an ancient site nearby."⁴⁶ The stele thus celebrates the victory of Phoenician forces over native tribesmen in the 'battle of Tarsis.' Pygmalion was in fact king of Tyre from about 831–785 B.C., a date in agreement with Cross' reading of the paleographic evidence. Cross concludes that Phoenician military forces were in Sardinia, sent from Tyre, perhaps to protect colonizing merchants or metal workers.⁴⁷

Given the fragmentary nature of the Nora Stone, it is a large leap to the conclusion that there existed in Sardinia a place called Tarsis, where a battle worthy of documentary commemoration occurred. Alternatively, Tarsis/Tarshish could refer to either the Tarsus of Cilicia, with which the Phoenicians were certainly familiar, or Tartessos in Spain, well known from Greek literary sources as a Phoenician trading-post where copper and tin were acquired.⁴⁸ In either case, the Nora Stone places the Phoenicians of Tyre, among whom the Šardina were settled in the eleventh century B.C., on the island of Sardinia, some two centuries later. Furthermore, the translations of both Cross and Peckham suggest that *the Phoenicians identified the island as 'Sardinia' by the ninth century B.C.*

The two possibilities that exist to explain the island being known as Sardinia are: (1) it is the name given to the island by the indigenous Nuragic peoples among whom the Phoenicians settled; or (2) it is the name given to the island by the Phoenicians or other foreigners who travelled and/or settled there. It follows then: (1) and (2a) that either the name Sardinia is only coincidentally similar to Sherden/Šardina, or (2b) that the island could have been named after the Šardina. It is not hard to imagine foreigners (Phoenicians) naming an island for a group of people (Šardina) with whom they were familiar and who had settled there.

The second part of this paper will examine the *archaeological* evidence for interaction between Italy, especially Etruria, and the eastern Mediterranean in the Mycenaean and Phoenician periods. This data will demonstrate that the Italian regions were in touch with the Aegean and the Levant at a time when the Sea Peoples were active, and that if certain tribes travelled to the west, they were not the first easterners to do so. Likewise, the archaeological data from Etruria will be examined so as to evaluate the circumstances under which it could have received its name from the Teresh, as has been suggested for Sardinia and the Sherden/Šardina.

Archaeometallurgical Evidence

Perhaps the strongest link between the Tyrrhenian regions and the eastern Mediterranean has been the number of findspots (22) in Sardinia with either complete or fragmentary oxhide ingots.⁴⁹ These ingots are well known from New Kingdom Egyptian reliefs, including those of Ramesses III at Medinet Habu, and from the spectacular finds of the Cape Gelidonya and Ulu Burun shipwrecks.⁵⁰ Although Sardinia's wealth of copper and lead/silver ores maintains the possibility that the ingots were locally made according to eastern Mediterranean specifications,⁵¹ recent lead isotope analyses suggest that all the Sardinian oxhide ingots are made of Cypriot copper.⁵²

Other Sardinian artifacts, including 10 bronzes of Cypriot style, appear, however, to have been made of copper from the Iglesias/Sulcis district in southwest Sardinia.⁵³ It is important to note, though, that most of the Cypriot-influenced material, including the Sardinian figurines, dates to the twelfth and eleventh centuries B.C. or later, postdating the widespread destructions in the eastern Mediterranean, and demonstrating continuity in east-west contacts while Greece was in the Dark Age.⁵⁴ Furthermore, many of the oxhide ingot fragments in Sardinia actually come from Early Iron Age, rather than Late Bronze Age contexts.⁵⁵

While metal objects of Cypriot or Aegean influence, including swords, daggers, and tripods, have also been found in Sicily and in mainland Italy, their numbers are not nearly as extensive as for Sardinia.⁵⁶ An anchor of Cypriot type, found near the mouth of the Tiber and made of local volcanic rock, nevertheless adds to the suggestive evidence for eastern Mediterranean peoples sailing in the Tyrrhenian by the end of the second millennium B.C.⁵⁷

Ceramic Evidence

The large number of sites in the western Mediterranean at which Mycenaean pottery has been found provides a second corpus of evidence for east-west contact in the Late Bronze Age. Mycenaean pottery has been found in Sardinia, Sicily and mainland Italy, Malta, and even Spain, ranging from a few sherds of LH I-II (perhaps even some late MH wares) to much greater quantities of LH IIIB and IIIC.⁵⁸ The use at some of these sites of Aegean-style cooking pots and *ceramica grigia*, in forms complementing the Aegean-type vessels and the local impasto wares, may even indicate the actual presence of easterners.⁵⁹

The greatest density of Mycenaean finds comes from that part of Italy closest to Greece and the Aegean world, the regions adja-

cent to the Gulf of Taranto. Mycenaean pottery has been found at 29 sites in Apulia, Basilicata and Calabria, but only 6 with more than a dozen sherds (see table 2).⁶⁰ In Sicily and the Aeolian Islands, guarding the eastern entrance to the Tyrrhenian, only 17 sites with Mycenaean pottery are known, and only three with significant quantities. After one ventures into the Tyrrhenian, the number of sites with Mycenaean finds drops considerably. In the fertile region of Campania, only six sites have Mycenaean products. In Sardinia, only one of eight sites with Mycenaean pottery has more than five sherds, and but two sherds (one IIIA, the other IIIB) have been found in Spain.

Some of the ceramics from these sites have been chemically analyzed to determine their provenience, as indicated in the last column of table 2. While the analyses indicate that both imported and locally produced imitations of LHIIIA, LHIIIB and LHIIC pottery are present, they further demonstrate that many of the imported wares were actually made in Rhodes or Cyprus rather than the Peloponnese.⁶¹ The identification of the items on board the Cape Gelidonya and Ulu Burun ships as Cypriot or Syro-Palestinian is a further indication that Cypriots or Canaanites, rather than Mycenaeans, were travelling in the west.⁶²

Continued contact with the Aegean and eastern Mediterranean after the destructions of the early twelfth century is indicated by the Cypriot metalwork discussed above, and the presence of *imported* LHIIC wares, which in the Levant are always locally produced by new settlers identified as Sea Peoples. The finds of Proto-Geometric pottery at the Gulf of Taranto sites long before the Greek period of colonization would seem to suggest a continuing interactive relationship begun in the Late Bronze Age, as does a Sardinian geometric askos found at Khaniale Tekke near Knossos.⁶³

Etrurian Sites with Aegean Artifacts

In contrast to southern Italy, Sicily and Sardinia, where at least one site has enough Mycenaean material to suppose that an eastern Mediterranean ship stopped there, only four sites with Aegean ceramics are known in Etruria, none with more than five sherds. Even the Piediluco and Contigliano hoards contain only a few objects of eastern origin.

At Luni sul Mignone (Blera, Viterbo) (fig. 4, no. 3) five pieces of Mycenaean pottery were found in pure Apennine levels at an acropolis site continuously inhabited from the Middle to the Final Bronze Age. Four are from closed vessels and one from a cup or bowl. One is LHIIIA/B, two LHIIIB, and two LHIIC.⁶⁴

A single sherd of Mycenaean IIC:2 pottery has been found along with Subapennine pottery at Monte Rovello (Allumiere, Roma)

Table 2 Mycenaean Pottery at Some Tyrrhenian Sites

Site (Map No.)	Ceramics	Context	Analyses
Aeolian Islands			
Lipari Acropolis	3 MH	Capo Graziano	
	4 LMI	"	
	7 Cycladic	"	
	100 LHI-II	"	
	100 LHII/III	Early Milazzese	
	40 LHIIIA	Milazzese	
	26 LHIIIB	Ausonian I	Local &
	14 LHIIC	Ausonian II	Imports ?
Milazzese	38 LHIIIA	Milazzese	Imports ?
Gulf of Taranto			
Porto Perone	2 LHI	Apennine	
	14 LHIIIB	SubApennine	
	30 LHIIC:2	ProtoVillanovan	
Satyron	6 LHIIIB	Late Apennine	Imports ?
	74 LHIIC:1	SubApennine-	Imports ?
	58 LHIIC:2	ProtoVillanovan	Imports ?
Scoglio del Tonno	800 LHIIIA	Apennine	Imports (11)
	14 LMIIIA-B		
	29 LHIIC		
Torre Castelluccia	60 LHIIIB-C	SubApennine-ProtoVillanovan	Imports ?
Termito	600 LHIIIA:2-LHIIC	SubApennine-ProtoVillanovan	Local (24)
Broglio di Trebisacce	>100 LHIIIA:2-LHIIC	SubApennine-ProtoVillanovan	Local (15)
Campania and Etruria			
Montedoro di Eboli	>50 LHIIC	ProtoVillanovan	Local ?
Luni sul Mignone	1 LHIIIA/B	Apennine	
	2 LHIIIB	"	
	2 LHIIC	"	
Monte Rovello	1 LHIIIB/C	SubApennine	
San Giovenale	1 LHIIIB/C	Local ?	
Telamone	1 LHIIC		
Vivara	>>100 LHI-LHIIIA:1	SubApennine	Imports ?
Sardinia			
Nuraghe Antigori	>>100 LHIIIB-C	Nuragic	Imports & Local (66)
Sicily			
Thapsos	28 LHIIIA-B	Thapsos	Imports
	4 LMIIIB	Imports	

Notes: Under Analyses, the number in parentheses is the number of sherds tested for provenience by chemical analysis. Comments with an interrogation mark represent conclusions based upon visual examination.

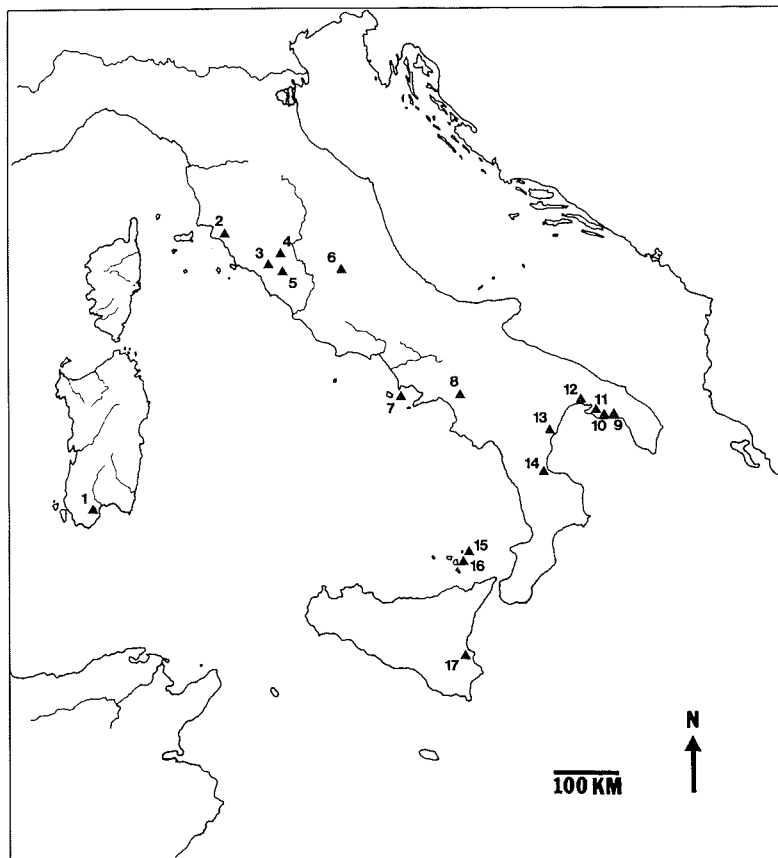


Fig. 4. Late Bronze Age sites mentioned in the text. 1: Nuraghe Antigori. 2: Telamone. 3: Luni sul Mignone. 4: San Giovenale. 5: Monte Rovello. 6: Piediluco. 7: Vivara. 8: Montedoro di Eboli. 9: Torre Castelluccia. 10: Satyrion. 11: Porto Perone. 12: Scoglio del Tonno. 13: Termito. 14: Broglio di Trebisacce. 15: Milazzese. 16: Lipari Acropolis. 17: Thapsos.

(fig. 4, no. 5), about 5 km. closer to the coast than Luni sul Mignone.⁶⁵ The fragment, from the shoulder of a large vase, is small and poorly preserved, and was decorated with a faint net pattern motif. It has been identified as late LHIIIB to mature LHIIC by Vagnetti⁶⁶ although it was originally identified by Toti⁶⁷ as LHIIC:2 or Submycenaean.

San Giovenale (Blera, Viterbo) (fig. 4, no. 4), located near both Monte Rovello and Luni sul Mignone, has a long sequence of occupation through the Apennine, Subapennine, Protovillanovan and Etruscan periods. Malcus⁶⁸ states that the single vase fragment, decorated with a spiral motif, was ascribed by Furumark to LHIIIB, although Vagnetti⁶⁹ describes it as provincial Mycenaean IIC.

A single sherd of LHIIC has also been found at the Etruscan site of Telamone (fig. 4, no. 2) located on the coast near Grosseto.⁷⁰

Some sherds in the back-fill near the archaic temple at Sant'Omobono in Rome, found along with Protovillanovan through sixth century B.C. material, were originally thought to be LHIIC.⁷¹ Vagnetti⁷² has examined these sherds, however, and concluded that they are actually Geometric.

The only other Aegean artifacts found in Etruria come from Piediluco (Terni, Umbria) (fig. 4, no. 6), the probable origin of the Contigliano hoard as well.⁷³ Among the 116 bronze pieces, all broken, are a fragment of a Cypriot tripod from Piediluco, possibly datable between the twelfth and first half of the eleventh century B.C.; another tripod fragment typologically identical to the first from the Contigliano hoard; a four-spoked wheel, probably from a wheeled stand and very common on Cyprus in this period; and a fragment of a cauldron with a circular handle, of a type known in Crete and mainland Greece in the LBA. Another tripod fragment was bought at Piediluco and is now in the Danish National Museum.⁷⁴ Significantly, the other objects in both hoards are not earlier than the tenth century B.C., and considering that the material is mostly scrap, the Aegean objects could have been used and broken elsewhere and subsequently circulated for remelting.⁷⁵

Sea Peoples in Etruria?

Discussion

There is clearly quite a bit of evidence for east-west contact in the Late Bronze Age. The more finely dated ceramics demonstrate that these contacts had begun by the very beginning of the period, while the metallurgical evidence suggests that they continued in the last centuries of the second millennium B.C. It is clear also that Phoenician activities in the west had begun by the very beginning of the first millennium, and continue what must have been more or less continuous relations between east and west.

In addition to strictly Mycenaean products, pottery from Crete, Rhodes and Cyprus also made its way to the west. The metallurgical link, in the form of oxhide ingots, bronze tripods and bronze figurines, is also with Cyprus and Phoenicia rather than the Peloponnese. Some impasto finds at Chania and Kommos in Crete, an Italian sword from the Ulu Burun shipwreck, and a few scattered daggers and fibulae of possible Italian origin, represent the Aegean end of what is mostly an asymmetrical relationship between the eastern and western Mediterranean.⁷⁶

The earliest imported pottery in the west comes mainly from Vivara and Lipari, both islands strategically located: Vivara at the entrance to the Bay of Naples, and Lipari as a crossroads near the

eastern entrance to the Tyrrhenian Sea. Although chemically untested, much of the Mycenaean material at these two sites appears to be imported. The imported coarse wares documented at Vivara are strong evidence for eastern Mediterranean ships stopping there.

Beginning with the LHIIIA period, concentrations of Aegean-type pottery appear at Thapsos in Sicily, and at the Gulf of Taranto sites of Scoglio del Tonno and Broglio di Trebisacce. It appears that Broglio differs from the other three sites in that most of the Aegean-type material was locally produced. In the LHIIIB period, Antigori in Sardinia, and Termitito on the Gulf become major centers of eastern Mediterranean activity, while contacts with Vivara ceased. The material from Termitito, like that at Broglio, is apparently of local manufacture, while both imported pottery and provincial imitations are well represented at Antigori.

During the LHIIIC period local production continued at Broglio, Termitito, and Antigori, while imports continued at Scoglio, Lipari, and Antigori. Very little material from this period has been found in Sicily. Given that the number of pottery analyses for a given period at each of these sites is not very large (except for Antigori), it seems nevertheless that there was no change in production pattern between the LHIIIB and LHIIIC periods, nothing to correlate with the destructions in the eastern Mediterranean. The continued importation of Aegean pottery in the LHIIIC period strongly suggests that the economic relationship between the Aegean and the west differed from that between the Aegean and the Levant.

In the Levant, the presence of LHIIIC pottery, always locally made, is taken to indicate the settlement of Sea Peoples after their forays into Egypt during the reign of Ramesses III. The Sea Peoples are thought to have arrived in the Levant already familiar with Mycenaean type pottery, from which they derived a monochrome and later a bichrome decorative style; trade relations with the Aegean declined. The presence of locally produced LHIIIC pottery at western Mediterranean sites cannot be interpreted in the same manner because importation continued at major sites.

An interesting question is what the potters at Broglio and Termitito used as stylistic models for their (mostly) local Mycenaean-type vessels. The limitations of archaeological sampling, both in the field and in the laboratory, along with the inherent problems of identifying undecorated sherds, may be exaggerating the differences between the assemblages from Scoglio and those from Broglio and Termitito, but an explanation seems warranted. Some might suggest that there was an Aegean segment to the population at these sites, but it is more likely that local potters were acquainted with imported wares, which were certainly abundant across the Gulf at Scoglio del Tonno. It is possible that Scoglio was the major Aegean port-of-call in the Gulf of Taranto and that demand for Aegean-type pottery grew in the region, stimulating local imitation at nearby settlements.

It is a reasonable *hypothesis* that there is a definite relationship between the Sherden of the Ugaritic and Egyptian texts and the island of Sardinia. It seems unlikely that the Sherden came from Sardinia because (1) they are a known entity in the Amarna letters, written in a period (LHIIIA) for which there is no evidence of Mycenaean contact with Sardinia (LHIIIB and LHIIIC); (2) their presence in Ugarit (thirteenth century) and near Tyre (1100 B.C.) argues for an eastern Mediterranean origin, as does (3) their association with other Sea Peoples, "northerners coming from all lands."

Whatever their origin, it is clear from the archaeological evidence, the *Tale of Wenamon*, and the *Onomasticon* of Amenope, that Sea Peoples settled in the Levant, at least the Peleset, the Sikels and the Šardina. Given the Sardinian finds of late Cypriot bronzes, possibly leftover oxhide ingots, the figurines with Cypriot and Phoenician affinities, and the knowledge that Phoenicians were sailing in the western Mediterranean by the eleventh century B.C., it is possible that some Šardina from near Tyre emigrated to Sardinia sometime between 1100 and 800 B.C., settling at the major Phoenician sites such as Nora, Tharros, Sulcis and Cagliari. In this manner these colonists could have given their name to the entire island, a name imposed on the indigenous inhabitants by a commercially-active people with a written language, and one that survived into the historical period. It is noteworthy that the modern name of the island is *not* related to what the Greeks called Sardinia: *Ichnussa*, which means footprint.

A similar scenario could be drawn for Sikels living at Dor, and emigrating to Sicily, but other than the Phoenician colonization of the island in the eighth century B.C., and the obvious phonetic relationship, we cannot suggest such a particular affiliation without any textual evidence. The quantity of Mycenaean pottery, even at Thapsos, does not indicate that non-Sicilians lived there, nor is there the abundant evidence for LHIIIC and twelfth-to-eleventh-century B.C. contact that there is for Sardinia; these situations result in a 300-year gap between the last mention of the Sikels and the earliest Phoenician presence in Sicily.

As for the Teresh, there is no textual documentation of where they settled after their battle with Ramesses III. It is quite improbable that they settled in Etruria in the twelfth century B.C., as there is no evidence of *direct* contact between the eastern Mediterranean and that region before the ninth century B.C. The few sherds and metal artifacts of eastern Mediterranean origin could easily be the result of down-the-line exchange, perhaps all the way from the Gulf of Taranto. Without an idea where the Teresh were between the twelfth and eighth centuries B.C. it is impossible to even formulate a hypothesis regarding how they could have lent their name, even

Robert J. Tykot through Greek intermediaries, to the people of Etruria, who called themselves Rasenna.

What is certain is that a migration or invasion of the scale envisioned by Greek and Roman historians is not supported by any archaeological evidence; if even a small number of easterners settled in Etruria during the ninth to seventh centuries B.C., they did not distinctly alter the indigenous, gradual, cultural development begun in the Late Bronze Age. In fact, the Etruscans themselves considered their first *saeculum* to have started in the eleventh or tenth century.⁷⁷

In this paper I have tried to present the textual and archaeological evidence relevant to the etymology of the Tyrrhenian regions of Etruria, Sardinia and Sicily. Although the region in general was undoubtedly known to easterners in the Late Bronze Age, it is unlikely that there was any regular interaction except perhaps at the port sites of Scoglio del Tonno, Lipari, and Vivara. Even the connection between the Sherden tribe of the Sea Peoples and the island of Sardinia was not established immediately following the events of Ramesses III's eighth year, but is tied to later Phoenician prospection in and colonization of the western Mediterranean. Any relationship between Sikels and Sicily, or Teresh and Tyrrhenia, would have to be just as late, and must for now remain hypothetical, as only new evidence can associate such specific groups with a new homeland after a hiatus of several centuries.

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NOTES

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The following abbreviations have been used, in addition to those in *AJA* 90 (1986) 384-94:

PIA IV = C. Malone and S. Stoddart, eds., *Papers in Italian Archaeology* IV. BAR S245 (Oxford 1985).

MGMM = L. Vagnetti ed., *Magna Grecia e mondo miceneo. Nuovi Documenti* (Taranto 1982).

Sandars 1985 = N.K. Sandars, *The Sea Peoples. Warriors of the Ancient Mediterranean* (London 1985)

SSA = M.S. Balmuth and R.J. Rowland Jr. eds., *Studies in Sardinian Archaeology* (Michigan 1984).

SSA II = M.S. Balmuth ed., *Studies in Sardinian Archaeology, Volume II: Sardinia in the Mediterranean* (Michigan 1986).

SSA III = M.S. Balmuth ed., *Studies in Sardinian Archaeology III: Sardinia and the Mycenaean World*. BAR S387 (Oxford 1987).

TMM = M. Marazzi, S. Tusa and L. Vagnetti eds., *Traffici Miceneo nel Mediterraneo* (Taranto 1986).

Ward and Joukowsky, eds. 1992 = W.A. Ward and M.S. Joukowsky, eds., *The Crisis Years: the 12th Century B.C. From Beyond the Danube to the Tigris* (Dubuque 1992).

Breasted III = J.H. Breasted, *The Ancient Records of Egypt* III (Chicago 1906).

Breasted IV = J.H. Breasted, *The Ancient Records of Egypt* IV (Chicago 1906).

Peruzzi 1980 = E. Peruzzi, *Mycenaeans in Early Latium* (Rome 1980)

Taylor 1958 = W. Taylor, *Mycenaean Pottery in Italy and Adjacent Areas* (Cambridge 1958).

Smith 1987 = T.R. Smith, *Mycenaean Trade and Interaction in the West Central Mediterranean 1600-1000 B.C.* BAR S371 (Oxford 1987).

Tykot and Andrews, = R.H. Tykot and T.K. Andrews, eds. 1992 *Sardinia in the Mediterranean: A Footprint in the Sea*. Monographs in Mediterranean Archaeology 3 (Sheffield 1992).

1. Herodotus 1.94.
2. Dionysius of Halicarnassus 1.28.
3. L. Bonfante, *Etruscan* (Berkeley 1990) 11-12; E. Richardson, "An archaeological introduction to the Etruscan language," in L. Bonfante ed., *Etruscan Life and Afterlife* (Detroit 1986) 216.
4. M. Pallottino, *The Etruscans* (Bloomington 1975); idem, *A History of Earliest Italy* (London 1991) 25-55; M. Grant, *The Etruscans* (New York 1980) 72. See also: E. Macnamara, *The Etruscans* (Cambridge 1991). The Lydian origin of the Etruscans has now been exhaustively examined by D. Briquel, *L'Origine Lydienne des Étrusques. Histoire de la doctrine dans l'Antiquité*. Collection de l'École Française de Rome 139 (Paris 1991). For a strictly archaeological account of Late Bronze

Sea Peoples in Etruria?

- Age and Iron Age Etruria, see N. Spivey and S. Stoddart, *Etruscan Italy* (London 1991).
5. Pallottino 1975 (supra n. 4) 70.
 6. Grant 1980 (supra n. 4) 270 n. 41.
 7. G.A. Wainright, "The Teresh, The Etruscans and Asia Minor," *AS* 9 (1959) 197–213.
 8. See, e.g., M. Cristofani, *The Etruscans. A New Investigation* (London 1979); D. Ridgway and F.R.S. Ridgway, eds., *Italy before the Romans* (London 1979), Grant 1980 (supra n. 4); Pallottino 1975 (supra n. 4); L. Bonfante ed. 1986 (supra n. 3); Spivey and Stoddart 1991 (supra n. 4).
 9. N.K. Sandars 1985, 50.
 10. J.H. Breasted III, 307.
 11. M. Dietrich and O. Loretz, "Die Schardana in den Texten von Ugarit," *Antike und Universalgeschichte, Festschrift Hans Erich Stier* (Munster 1972) 39–42; M. Liverani, "Il corpo di guardia del palazzo di Ugarit," *RSO* 44 (1969) 191–98; "Le Chene de Sherdanu," *VT* 27 (1977) 212–16; M. Heltzer, "Some Questions Concerning the Sherdana in Ugarit," *IOS* 9 (1983) 9–15.
 12. Heltzer, *IOS* 9 (1983) 10–12.
 13. Heltzer, *IOS* 9 (1983) 13.
 14. Heltzer, *IOS* 9 (1983) 15.
 15. Sandars 1985, 111–12.
 16. Sandars 1985, 110; Wainright, *AS* 9 (1959) 202–3. Questions about Hittite chronology and the role of the Sea Peoples have been recently addressed by H.A. Hoffner, Jr., "The Last Days of Khattusha," in Ward and Joukowsky, eds. 1992, 46–52.
 17. M. Dietrich and O. Loretz, "Das Seefahrende Volk von Sikila (RS 34.129)," *UF* 10 (1978) 53–56.
 18. Sandars 1985, 112; Dietrich and Loretz, *UF* 10 (1978); see also G.A. Lehmann, "Die Sikilaju ein neues Zeugnis zu den 'Seevolker'—Heerfahrten im späten 13 Jh.v.Chr.," *UF* 11 (1979) 481–83.
 19. A. Rainey, "Toponymic Problems Continued," *Tel Aviv* 9(2) (1982) 130–36.
 20. Lehmann, *UF* 11 (1979) 481–83.
 21. J.H. Breasted IV, 59, n. a.
 22. Sandars 1985, 141–43.
 23. See many of the articles in Ward and Joukowsky, eds. 1992.
 24. Breasted III, 574.
 25. Breasted III, 579.
 26. Breasted III, 588.
 27. Breasted III, 617.
 28. Breasted IV, 44.
 29. Breasted IV, 35.
 30. Sandars 1985, 120, 124. For the argument that the Year 8 inscriptions at Medinet Habu are actually accounts of events which occurred during the time of Merneptah, see L.H. Lesko, "Egypt in the 12th Century B.C.," in Ward and Joukowsky, eds. 1992, 151–56; for a rebuttal, see J. Weinstein, "The Collapse of the Egyptian Empire in the Southern Levant," in Ward and Joukowsky, eds. 1992, 148.
 31. Breasted IV, 64. P.M. Bikai, "The Phoenicians," in Ward and Joukowsky, eds. 1992, 132–41, suggests that the Phoenicians were not

- bystanders in these conflicts, but rather that they were part of a coalition with the Sea Peoples which may have arisen through the LBA Mediterranean trade network.
32. Breasted IV, 403.
 33. Breasted IV, 129; Sandars 1985, figs. 68, 69.
 34. Breasted IV, 402.
 35. Breasted IV, 410.
 36. Bikai in Ward and Joukowsky, eds. 1992 (supra n. 31) n. 5 interprets Wenamon's "birds" instead as the now endangered Dalmatian pelicans migrating along the coast.
 37. Breasted IV, 565.
 38. Breasted IV, 588.
 39. A. Gardiner, *Ancient Egyptian Onomastica I–III* (1947) 192; M. Dothan, "Sardina at Akko?" *SSA* II (1986) 107–108.
 40. Dothan, *SSA* II (1986) 108; T. Dothan and M. Dothan, *People of the Sea. The Search for the Philistines* (New York 1992) 213–14.
 41. F.M. Cross, "Phoenicians in the West: The Early Epigraphic Evidence," *SSA* II (1986) 124; "Phoenicians in Sardinia: The Epigraphical Evidence," *SSA* (1984) 62.
 42. Cross, *SSA* II (1986).
 43. Cross, *SSA* (1984) 56.
 44. B. Peckham, "The Nora Inscription," *Orientalia* 41 (1972) 457–68.
 45. Cross, *SSA* (1984) 55–58.
 46. Cross, *SSA* (1984) 56.
 47. Cross, *SSA* II (1986) 120.
 48. R.J. Harrison, *Spain at the Dawn of History* (London 1988) 53–55; M. Elat, "Tarshish and the Problem of Phoenician Colonisation in the Western Mediterranean," *Orientalia Lovaniensia Periodica* 13 (1982) 55–69.
 49. F. Lo Schiavo, R. Maddin, J. Merkel, J.D. Muhly and T. Stech, *Analisi Metallurgiche e Statistiche sui Lingotti di Rame della Sardegna/ Metallurgic and Statistical Analyses of Copper Ingots from Sardinia*. Quaderni 17 (Ozieri 1990); F. Lo Schiavo, T. Stech, R. Maddin and J. Muhly, "Ingots and Artifacts from Nuragic Contexts in Sardinia," *SSA* III (1987) 179–87; F. Lo Schiavo, "Sardinian Metallurgy: The Archaeological Background," *SSA* II (1986) 231–50; F. Lo Schiavo and L. Vagnetti, "Micenei in Sardegna?" *RendLinc* 35 (1980) 371–93.
 50. G.F. Bass, "Cape Gelidonya: A Bronze Age Shipwreck," *TAPS* 57(8) (1967) esp. figs. 83–84 for Medinet Habu reliefs of Ramesses III; for the more recently found Ulu Burun wreck, see G.F. Bass, C. Pulak, D. Collon and J. Weinstein, "The Bronze Age Shipwreck at Ulu Burun: 1986 Campaign," *AJA* 93 (1989) 1–29; C. Pulak, "The Bronze Age Shipwreck at Ulu Burun, Turkey: 1985 Campaign," *AJA* 92 (1988) 1–37; G.F. Bass, "A Bronze Age Shipwreck at Ulu Burun (Kas): 1984 Campaign," *AJA* 90 (1986) 269–96.
 51. Lo Schiavo, *SSA* II (1986) 240.
 52. Z.A. Stos-Gale and N.H. Gale, "New Light on the Provenience of the Copper Oxhide Ingots Found on Sardinia," in Tykot and Andrews, eds. 1992, 317–46; N.H. Gale and Z.A. Stos-Gale, "Oxhide ingots from Sardinia, Crete and Cyprus and the Bronze Age Copper Trade: New Scientific Evidence," *SSA* III (1987) 135–78. See also the dis-

- cussion in A.B. Knapp, "Ethnicity, Entrepreneurship, and Exchange: Mediterranean Inter-island Relations in the Late Bronze Age," *BSA* 85 (1990) 129–41.
53. Gale and Stos-Gale, *SSA* III (1987); E. Macnamara, D. Ridgway and F.R. Ridgway, *The Bronze Hoard from Santa Maria in Paulis, Sardinia*. British Museum Occasional Paper 45 (1984).
54. D. Ridgway and F.R. Serra Ridgway, "Sardinia and History," in Tykot and Andrews, eds. 1992, 355–63; D. Ridgway, "Sardinia and the First Western Greeks," *SSA* II (1986) 174. The metallurgical parallels between Cyprus and Sardinia were first addressed in M.S. Balmuth, "Bronze, Cyprus and Sardinia: geographical and chronological problems," a paper presented at the *Fourth International Colloquium on Aegean Prehistory at Sheffield* in 1973 (advertised by Duckworth as forthcoming in 1977, but apparently never issued), and updated in M.S. Balmuth, "Phoenician chronology in Sardinia: prospecting, trade, and settlement before 900 B.C.," in T. Hackens and G. Moucherte, eds., *Numismatique et Histoire Économique Phéniciennes et Puniques, Actes du Colloque Tenue a Louvain-la-Neuve, 13–16 Mai, 1987* (Louvain 1992) 215–27. See also: Lo Schiavo, *SSA* II (1986) 240–43; "La Sardegna nuragica e il mondo mediterraneo," in *La civiltà nuragica* (Milan 1990) 238–63; "Copper Metallurgy in Sardinia during the Late Bronze Age: New Prospects on its Aegean Connections," in J.D. Muhly, R. Maddin and V. Karageorghis eds., *Early Metallurgy in Cyprus, 3000–500 B.C.* (Larnaca 1982) 271–82; F. Lo Schiavo, E. Macnamara and L. Vagnetti, "Late Cypriot imports to Italy and their influence on local Bronzework," *PBSR* 53 (1985) 1–71.
55. F. Lo Schiavo et al. 1990; Lo Schiavo, *SSA* II (1986) 240. Knapp, *BSA* 85 (1990) 148–52 suggests that entrepreneur-based Cypriot interest in copper production continued due to intensified demand in the central and west Mediterranean, while iron production became commercialized in the east.
56. R.R. Holloway, "Italy and the Central Mediterranean in the Crisis Years," in W.A. Ward and M.S. Joukowsky, eds. 1992, 40–45; A.M. Bietti-Sestieri, "The metal industry of continental Italy, 13th–11th century, and its Aegean connections," *PPS* 39 (1973) 383–424; E. Macnamara, "A group of bronzes from Surbo: new evidence for Aegean contacts with Apulia during Mycenaean III B and C," *PPS* 36 (1970) 241–60.
57. L. Vagnetti, "Appendix II. Mycenaean Imports in Central Italy," in E. Peruzzi 1980, 165.
58. W. Taylour 1958 is still the standard reference. Additional material has been published in A.F. Harding, *The Mycenaeans and Europe* (London 1984); Vagnetti in Peruzzi 1980 (supra n. 57); F. Biancofiore, *La Civiltà micenea nell'Italia meridionale 1: la ceramica*. Incunabula Graeca 6 (1963); J.C. Martin de la Cruz, "Die erste mykenische Keramik von der Iberischen Halbinzel," *PZ* 65(1990) 49–52; "Mykenische Keramik aus bronzzeitlichen Siedlungsgeschichten von Montore aus Guadalquivir," *Madridrer Mitteilungen* 29 (1988) 77–92; C. Poduzuweit, "Bemerkungen zur mykenischen Keramik von Llanete de los Moros, Montora, prov. Cordoba," *PZ* 65 (1990) 53–58; H. Mommsen, U. Diehl, D. Lambrecht, F. Pantenburg, J. Weber, "Eine mykenische Scherbe in Spanien," *PZ* 65 (1990) 59–61. See also: Smith 1987; Knapp, *BSA* 85 (1990) 124–28.

59. G. Bergonzi, "Southern Italy and the Aegean during the Late Bronze Age: Economic Strategies and Specialized Products," *PIA* IV (1985) 355–87; S. Tusa, "Tyrrhenian relations and Mycenaean exchange in the early Bronze Age," *PIA* IV (1985) 349.
60. Smith 1987, 14–15; the references for the sites and analyses in table 2 are as follows (for the Etrurian sites, see notes 64–75):
- Scoglio del Tonno: Q. Quagliati, "Taranto: relazione degli scavi archeologici che si eseguirono nel 1899 in un abitato terramaricolo, allo Scoglio del Tonno, presso la città," *NSc* (1900) 411–64; Taylour 1958, 81–126; Smith 1987, 82–84; B. Palsson Hallager, "Crete and Italy in the Late Bronze Age III Period," *AJA* 89 (1985) 297–300.
- Termito: A. De Siena, "Termito," *TMM* (1986) 41–54; Smith 1987, 86–87.
- Broglio di Trebisacce: G. Bergonzi ed., *Ricerche sulla protostoria della Sibaritide* 1 (1982) 119–28; 2 (1982) 99–113; 3 (1984) 164–84; L. Vagnetti, "Broglio di Trebisacce (Cosenza): la ceramica micenea," *MGMM* (1982) 107–12; R. Peroni, "Broglio di Trebisacce (Cosenza)," *MGMM* (1982) 103–7; R. Peroni, F. Trucco and L. Vagnetti, "Broglio di Trebisacce (CS)," *TMM* (1986) 162–63; Smith 1987, 88–90.
- Porto Perone: F.G. Lo Porto, "Leporano (Taranto): la stazione protostorica di Porto Perone," *NSc* 17 (1963) 280–380; Smith 1987, 80–81.
- Satyrion: F.G. Lo Porto, "Satyrion: scavi e ricerche nel luogo del più antico insediamento laconico in Puglia," *NSc* 18 (1964) 177–279; "Gli scavi sull'acropoli di Satyrion," *Bollettino d'Arte* 49 (1964) 67–80; Smith 1987, 82.
- Torre Castelluccia: C. Drago, "Lo scavo di Torre Castelluccia (Pulzano)," *BPI* 5 (1953) 155–61; Taylour 1958, 144–52, 165; Biancofiore 1963 (supra n. 58) 41; Macnamara, *PPS* 36 (1970) 247; Smith 1987, 85.
- Thapsos: R. Leighton, "Evidence, extent and effects of Mycenaean contacts with south east Sicily during the late Bronze Age," *PIA* IV (1985) 399–412; R. Holloway, "Synoicism in Bronze Age Sicily," *PIA* IV (1985) 389–98; S. Tusa, *La Sicilia nella preistoria* (Palermo 1983); Taylour 1958, 56–60; G. Voza, "Thapsos," *Archeologia nella Sicilia sud-orientale* (Naples 1973) 30–52; Smith 1987, 110–11.
- Lipari: Taylour 1958, 9–53, pl. 6:22, 25; 6:23; 6:27; L. Bernabò Brea, "L'età del bronzo tarda nelle Isole Eolie," *AttiRS* 21 (1979) 571–97; M. Cavalier and L. Vagnetti, "Arcipelago eoliano," *TMM* (1986) 141–46. L. Bernabò Brea and M. Cavalier eds., *Meligunis-Lipara* I (1960); III (1968); IV (1980); W. Taylour, "Aegean sherds found at Lipari," in Bernabò Brea and Cavalier eds. IV (1980) 791–817; Smith 1987, 71–74; A.M. Bietti-Sestieri, "Contact, exchange, and conflict in the Italian Bronze Age: the Mycenaeans on the Tyrrhenian coasts and islands," *PIA* IV (1985) 326.
- Milazzese: Brea and Cavalier, eds. III (1968) 186–89; Taylour 1958, 44–47; Smith 1987, 74.
- Vivara: M. Marazzi and L. Re, "Importazioni egeo-micenee dall'isola di Vivara (Procida)," *TMM* (1986) 155–74; A. Cazzella et al., "Isola di Vivara (Procida, Napoli)," *MGMM* (1982) 141–54; "L'isola di Vivara," *TMM* (1986) 147–54; G. Buchner, A. Cazzella, F. Di Gennaro, M. Marazzi, S. Tusa, and A. Zarattini, "L'isola di Vivara: nuove ri-

cerche," *ParPass* 180 (1978) 197–237; Tylour 1958, 8–9; Smith 1987, 96–97; E. French, "The Mycenaean Spectrum," *PIA* IV (1985) 296.

Montedoro di Eboli: A. Schnapp Gourbeillon, "Ceramica di tipo miceneo a Montedoro di Eboli," *TMM* (1986) 175–82.

Sardinia: M.L. Ferrarese Ceruti, "I vani c,p,q del complesso nuragico di Antigori (Sarroch-Cagliari)," *TMM* (1986) 183–88; "La torre f del complesso nuragico di Antigori. Nota preliminare," *Atti del XXII Convegno di Studi sulla Magna Grecia* (Taranto 1983) 187–206; "Il complesso nuragico di Antigori (Sarroch, Cagliari)," *MGMM* (1982) 167–76; "Documenti micenei nella Sardegna meridionale," *Ichnussa* (1981) 605–12; "Ceramica micenea in Sardegna (Notizia preliminare)," *RSP* 34 (1979) 243–53. See also M.L. Ferrarese Ceruti, F. Lo Schiavo and L. Vagnetti, "Minoici, Miceni e Ciprioti in Sardegna nella seconda metà del II millennio a.C.," *SSA* III (1987) 7–37; M.L. Ferrarese Ceruti, "La Sardegna e il mondo miceneo," in *La civiltà nuragica* (Milan 1990) 229–37.

61. R.E. Jones, "Chemical analysis of Aegean-Type Late Bronze Age Pottery found in Italy," *TMM* (1986) 205–14; R.E. Jones and P. Day, "Aegean-type Pottery on Sardinia: Identification of Imports and Local Imitations by Chemical Analysis," *SSA* III (1987) 257–70; L. Vagnetti and R.E. Jones, "Towards the Identification of Local Mycenaean Pottery in Italy," in E.B. French and K.A. Wardle, eds., *Problems in Greek Prehistory* (Bristol 1988) 335–48.
62. R. Holloway, *Italy and the Aegean, 3000–700 B.C.* (Louvain 1981) 85–87; Pulak, *AJA* 92 (1986) 36–37.
63. Holloway 1981, 95; Ridgway and Serra Ridgway in Tykot and Andrews, eds. 1992 (supra n. 54); Polybius 10.1; L. Vagnetti, "A Sardinian Askos from Crete," *BSA* 84 (1989) 355–60, pl. 52.
64. C.E. Östenberg, *Luni sul Mignone e problemi della preistoria d'Italia* (Lund 1967) 128–45; Vagnetti in Peruzzi 1980 (supra n. 57) 152, pl. I; "Luni sul Mignone (Blera, Viterbo)," *MGMM* (1982) 192–93.
65. O. Toti, "Allumiere: L'abitato 'protovillanoviano' di Monte Rovello," *NSc* (1964) 27; F. Biancofiore and O. Toti, *Monte Rovello: Testimonianze dei Micenei nel Lazio* = *Incunabula Graeca* 53 (1973).
66. Vagnetti in Peruzzi 1980 (supra n. 57) 152; L. Vagnetti, "Monte Rovello Allumiere, Roma," *MGMM* (1982) 191.
67. Toti, *NSc* (1964) 27.
68. B. Malcus, "Un frammento miceneo di San Giovenale," *DialArch* (1979) 74.
69. L. Vagnetti, "San Giovenale (Blera, Viterbo)," *MGMM* (1982) 194.
70. Harding 1984 (supra n. 58) 252, n. 109.
71. M.A. Fugazzola Delpino, "The Proto-Villanovan: A Survey," in D. and F. Ridgway eds. *Italy Before the Romans* (London 1979) 44; G. Ioppolo, *Atti della Pontificia Accademia Romana di Archeologia. Rendiconti* 44 (1971–1972).
72. Vagnetti in Peruzzi 1980 (supra n. 57) 154.
73. L.P. Bonomi, "Il ripostiglio di Contigliano," *BPI* 79 (1970) 95–156.
74. Bonomi, *BPI* 79 (1970); Vagnetti in Peruzzi 1980 (supra n. 57) 152–54.
75. Vagnetti in Peruzzi 1980 (supra n. 57) 153–54.
76. Palsson Hallager, *AJA* 89 (1985). But see also: L. Vagnetti, "Late Minoan III Crete and Italy: another view," *ParPass* 220 (1985) 33;

V. Watrous, "A Preliminary Report on Imported 'Italian' Wares from the Late Bronze Age Site of Kommos on Crete," *SMEA* 27 (1989) 69–79; S. Heuck-Allen, *Northwest Anatolian Grey Wares in the Late Bronze Age: Analysis and Distribution in the Eastern Mediterranean*. PhD dissertation, Brown University (1990); J.B. Rutter, "Some Comments on Interpreting the Dark-Surfaced Handmade Burnished Pottery of the 13th and 12th Century B.C. Aegean," *JMA* 3/1 (1990) 29–49; Holloway in Ward and Joukowsky, eds. 1992 (supra n. 56) n. 11.

77. Macnamara 1991 (supra n. 4) 11.

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