

A MYCENAEAN POTTERY SHERD FROM LIMAN TEPE WITH A WARRIOR ON CHARIOT AND ITS SIGNIFICANCE IN AEGEAN ARCHAEOLOGY

LİMAN TEPE ARABALI SAVAŞÇI TASVİRLİ MİKEN KAP PARÇASININ EGE ARKEOLOJİSİNDEKİ YERİ

Makale Bilgisi

Başvuru: 7 Kasım 2017
Hakem Değerlendirmesi: 5 Mart 2018
Kabul: 21 Aralık 2018
DOI Numarası: 10.22520/tubaar.2018.23.004

Article Info

Received: November 7, 2017
Peer Review: March 5, 2018
Accepted: December 21, 2018
DOI Number: 10.22520/tubaar.2018.23.004

Ayşegül AYKURT *

Keywords: The end of the Bronze Age, Mycenaean, Warrior, Sea Peoples

Anahtar Kelimeler: Bronz Çağı'nın Sonu, Miken, Savaşçı, Deniz Kavimleri

ABSTRACT

In this article, a Mycenaean ceramic fragment recovered at Liman Tepe, with a depiction of a warrior with chariot, is examined. It is likely that this sherd was part of a closed vessel, and that this vessel was a local product, since the paste of the sherd contains high amounts of mica. A warrior with chariot was often depicted on Mycenaean vessels that bore pictorial representations, figures and iconographic meanings. The motif was prevalent in the Aegean and East Mediterranean in LH III. The complete delineation of the lower body of the warrior figure, as seen on the Liman Tepe fragment, is the most salient characteristic of depictions of this kind dated to LH IIIC. As one of the few examples from this period, the Liman Tepe Mycenaean ceramic has particular significance with regard to its connection with the west–east migrations thought to have taken place in the Eastern Mediterranean. It is also important for the fact that it belongs to a period after the collapse of the Hittite Empire in Anatolia and the Mycenaean kings in Mainland Greece.

* Prof. Dr., Hacettepe University Faculty of Letters, Department of Archaeology, 06800 Beytepe, Ankara. E-mail: aysegulaykurt@gmail.com
In Memory Kutlu Emre...

ÖZET

Bu makalede Liman Tepe’de ele geçen üzerinde arabalı savaşçı tasviri yer alan bir Miken seramik parçası incelenmiştir. Kapalı bir kaba ait olması gereken bu parçanın, hamurunun bol miktarda mika içermesi nedeniyle yerli üretim olduğu düşünülmektedir. Üzerinde yer alan arabalı savaşçı tasviri ise GH III’de Ege’de ve Doğu Akdeniz’de yaygın olarak görülen resimsel tarzlı, figürlü ve ikonografik anlamı olan Miken kapları üzerinde çok miktarda resmedilmiştir. Liman Tepe Miken parçası üzerinde yer alan savaşçı figürünün gövdesinin altının tamamen tasvir edilmiş olması, GH IIIC’ye tarihlenen arabalı savaşçı tasvirlerinin en belirgin özelliği olarak karşımıza çıkmaktadır. Döneminin benzer şekilde yapılmış az sayıdaki örneğinden biri olan Liman Tepe Miken seramiği, Anadolu’da Hitit İmparatorluğu’nun ve Kıta Yunanistan’da Miken krallarının çöküşü sonrası bir döneme ait olmasının yanı sıra, Doğu Akdeniz’de batıdan doğuya gerçekleştiği düşünülen göçlerle bağlantılı olması bakımından önem taşımaktadır.

INTRODUCTION

Liman Tepe is situated on a peninsula in the Iskele District of Urla, opposite Karantina Island, in the south of the Gulf of Izmir. During the excavations performed at the settlement since 1992, stratification ranging from the Chalcolithic Age to the Roman Period has been determined. Of these layers, the Late Bronze Age has been uncovered in both the northern and the southern sections of the dig site, partly preserved. Three architectural layers belonging to the Late Bronze Age settlement were detected in the southeastern corner of the

Liman Tepe's Late Bronze Age settlements were ruined as a result of both late-period settlement at the southern excavation site and particularly from soil hauling during the 1950s at the northern excavation site. It was observed via excavations performed in the southeastern part of the northern excavation site and western part of the southern excavation that the Late Bronze Age settlement was better preserved. Three architectural layers belonging to this cultural layer were detected there. The third architectural layer, which constitutes the largest of these architectural layers, presents an organized settlement plan consisting of a thick fortification wall, roads and streets. Ceramic

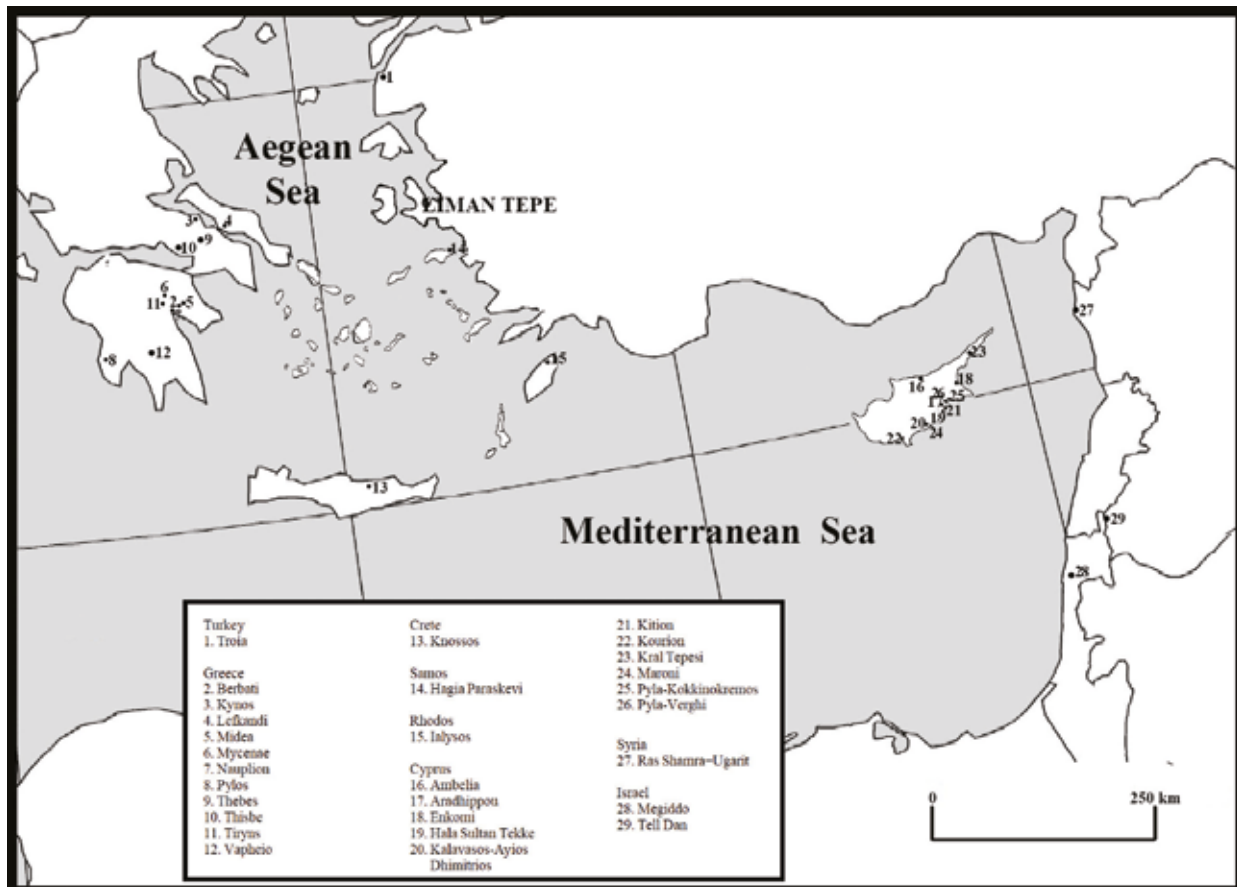


Figure 1: Map Showing Sites Mentioned in the Text / *Metinde Geçen Merkezleri Gösteren Harita.*

northern dig site, in a well preserved state. Sherds of local and imported Mycenaean vessels recovered together with examples of local ceramics in these architectural layers are of particular importance for reflecting the stratigraphic position of Liman Tepe and its connections with surrounding cultures. As a result of evaluations of the Mycenaean ceramic finds, it has been determined that layer II.3 of the settlement is contemporary with LH IIIA, layer II.2 with LH IIIB, and layer II.1 with LH IIIC (Fig. 1)¹.

ovens unearthed among these architectural remnants serve as evidence that Liman Tepe was an important center for ceramic production. In addition to local ceramics, a few Mycenaean ceramics were obtained from this architectural layer. The majority of the Mycenaean ceramic finds were imported and they date to Late Helladic IIIA. Although the second architectural layer situated over this architectural layer and dated to Late Helladic IIIB was less well preserved, it helps demonstrate the persistence of settlement. Remnants relating to the second architectural layer indicate that the region lost its characteristic of being a mill during this period. The

¹ Erkanal 2008; Erkanal and Aykurt 2008: 226–242.

percentage of Mycenaean ceramics increased during this period. Remnants belonging to the first architectural layer on the upper levels were better preserved. Monumental structures, of which the majority are rectangular in shapes, were revealed in this architectural layer and were dated to Late Helladic IIIC. It was determined from these ceramics and antiques that Mycenaean activity increased during this settlement period, and also that the use of domestically produced Mycenaean ceramics soared in comparison with imported ceramics².

THE LIMAN TEPE MYCENAEAN POTTERY SHERD WITH A WARRIOR ON CHARIOT

In studies carried out at the southern dig site of the settlement, it was determined that the remains dated to the Late Bronze Age had been to a large extent destroyed by the Late Period layers and are not complete (Fig. 2). During the excavations in this area, only a fill composed of stones of various sizes, lying in the east-west direction, and two infant graves, buried inside this fill, were unearthed. The infant remains were found inside jars made of so-called Barbarian ceramic³. At the excavations to the northeast of these ruins, ceramic pieces belonging to different periods and a burnt body sherd from a Mycenaean pot were discovered inside the yellow soil containing the stones of various sizes. (LMT 99 - 21076A) (Figs. 3–4). The preserved wall thickness of the sherd, of which the interior is damaged, is 0.9–1.1 cm, and the diameter of the body is between 28 and 32 cm. Macroscopic examinations performed on this sherd determined that its paste is slightly porous and contains a large amount of mica and small quantities of stone and grass, and that the piece is well fired. The paste is light brown (5 YR 5/3–4/3 reddish brown)⁴, the slip is cream-beige (10 YR 8/2 white – 10 YR 8/3 very pale brown), and the piece is decorated with dark brown paint (5 YR 3/2 – 3/3 dark reddish brown). The chariot and the human figure depicted on the sherd form a pictorial composition. Only the rear part and the tail—drawn as herringbone—of the horse, which is shown moving towards the right, and a fraction of the chariot's wheel were preserved. Standing between the wheel of the chariot and the horse, the legs of the human figure are shown. The legs are athletic in form, and the left foot rests against the wheel of the chariot. The figure wears a short kilt and his left shoulder is angular, giving rise to the thought that the upper body of the figure is triangular.

² Erkanal/Günel 1995: 264–265, Figs. 1–3; Günel 1999: 62, abb. 21/55; Erkanal/Artzy 2002: 426, res. 7; Erkanal 2008: 91–100; Erkanal/Aykurt 2008: 231–237; Aykurt 2014: 56; Erkanal/Aykurt/Büyükkulusoy/Tuçcu/Tuncel/Şahoğlu 2017: 137–138, pln. 1–2, res. 9–10.

³ Erkanal 1999: 327, pics. 3–4.

⁴ Munsell Color, 2000, Gretag Macbeth, New Windsor.

DEPICTIONS OF A WARRIOR WITH CHARIOT ON MYCENAEAN POTTERY

(Distribution of chariot kraters, see: Feldman and Sauvage 2010: s. 107, Fig. 17)

The earliest examples in the Aegean of depictions of a warrior with chariot are seen on tomb stelae dated to 1600–1500 BC in Mycenae⁵, on Vapheio seals dated to LH II⁶, and on Thisbe Boeotian⁷ and Mycenaean seals⁸. Following this period, in LH III, the warrior with chariot was often portrayed on Mycenaean vessels with pictorial representations, figures and iconographic meanings, as seen in the Aegean and East Mediterranean.

Besides the representational artefacts and the pictorial pottery, warriors with chariots are also mentioned on Linear B tablets dated to LH III. The words E-πε-τα/ E-QE-TA /heqetas/ heqetai/ eqate/ equeta in the tablets found in Knossos and Pylos have been translated as 'chariot-warrior'. While Denys Lionel Page⁹ states that the word has the characteristics of a local formal language rather than the characteristics of the official language¹⁰, suggests it is a religious term, and suggests¹¹ it is a military one. Besides the warriors with chariots, vehicle ideograms¹² and ideograms representing different types of chariot wheels appear on the tablets as well¹³. These records also indicate that the palaces had significant reserves of military equipment and supplies to fully equip the chariots, including swords, spears and spare wheels¹⁴. The Sc and Vc tablet series which constitute 33 per cent of the Knossos archives are related to chariots, horses and armour¹⁵. Furthermore, on the Pylian tablets, two private chariot manufacturers are mentioned, in addition to workshops which produce chariot wheels and bodies¹⁶. Other than the written records from Knossos and Pylos, warriors with chariots also appear in Homer's *Iliad*, dated to 800–700 BC, in a section describing the Trojan War¹⁷.

Hector William Catling¹⁸, who studied depictions of a warriors with horse-drawn vehicles in the Aegean, classified these artefacts into three main stages. He dated

⁵ Heurtley 1921–1923: 126–146; Vermeule 1964: 90–94; Catling 1968: 42–44; Crouwel 1981: 59–62.

⁶ Greenhalgh 1980: 203.

⁷ Evans 1925: 31–32, Figs. 33–34.

⁸ Schliemann 1878: 223, Fig. 234; Evans 1925: 34, Fig. 35.

⁹ Page 1959: 208, n. 39.

¹⁰ G. Pugliese-Carratelli 1958: 322.

¹¹ Leonard Robert Palmer 1954: 18–53.

¹² Wiesner 1968: 45, abb. 9d, i.

¹³ Wiesner 1968: 39, abb. 6a.

¹⁴ Kelder 2004–05: 157.

¹⁵ Gulizio/Pluta/Palaima, 2000: 454.

¹⁶ Fields 2006: 22–23.

¹⁷ Erhat/Kadir 2004: section eleven /173: lines 521–530

¹⁸ Catling 1968: 42.

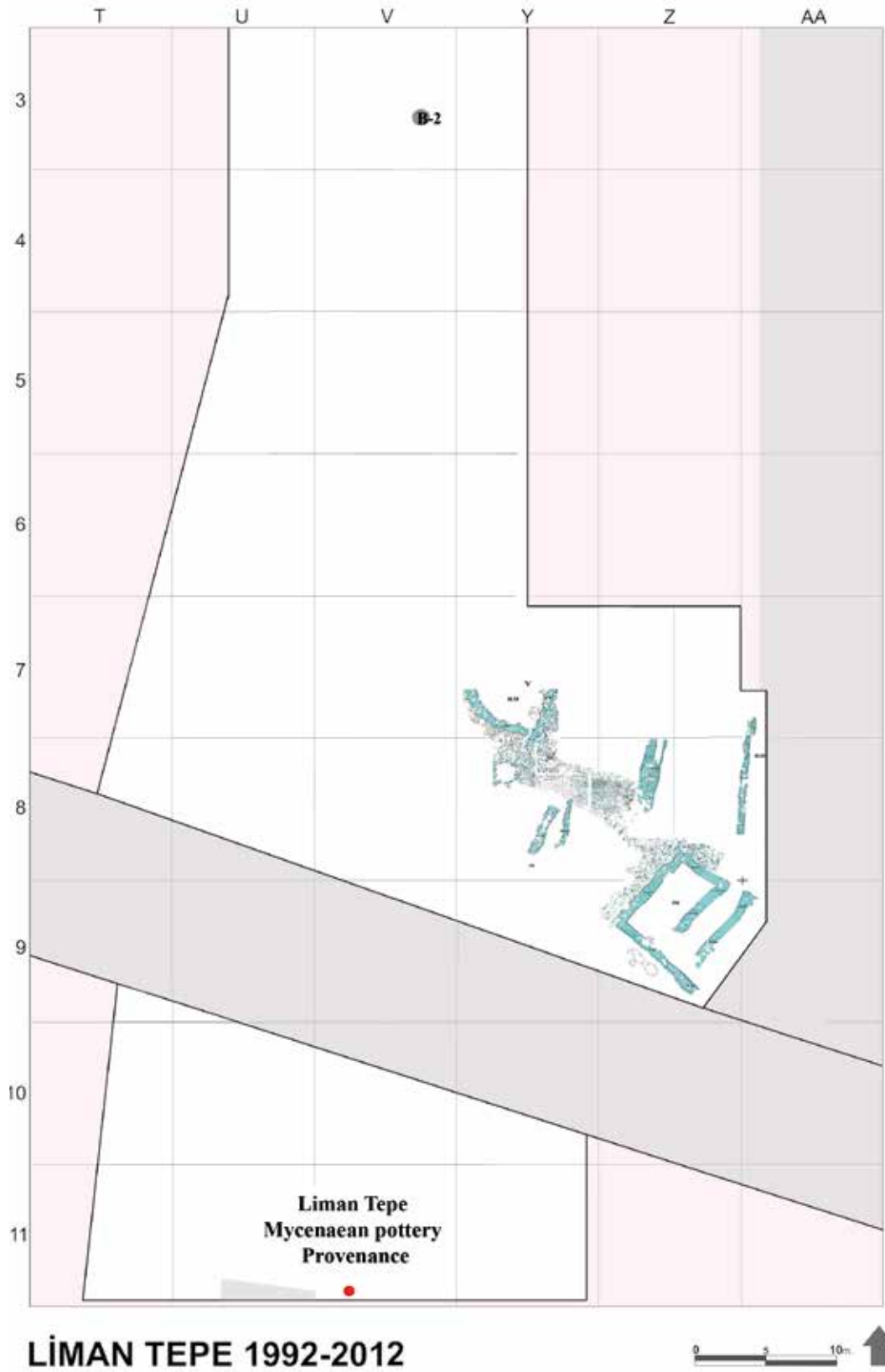


Figure 2: Plan Showing the Location of the Late Helladic IIIc Remains from Liman Tepe, and Provenance of the Studied Mycenaean Pottery Sherd / *Liman Tepe Geç Hellas IIIc Yerleşimine Ait Kalıntıları ve Miken Seramik Parçasının Buluntu Yerini Gösteren Plan.*



Figure 3: The Liman Tepe Mycenaean Sherd / *Liman Tepe Miken Seramiği*.

Stage I to the 16th–15th centuries BC, when the vehicles were box chariots with closed frames. Although Stage I chariots do not appear on Mycenaean pottery, they are seen on the signet ring and the stelae recovered at Mycenae, on the fresco and the gem found in Knossos, and on the gems at Vaphio. Catling¹⁹ observed that on these artefacts, the chariot was depicted in fighting, hunting and ceremonial scenes.

The warriors with horse-drawn vehicles categorised by Catling²⁰ as Stage II are dated to the 14th–13th centuries BC. In these examples, which constitute the largest group, the dual chariot has a rectangular body. There are two or three figures in the chariot, which is drawn by a pair of horses. Wearing long robes, these figures are depicted in ceremonial scenes. Kraters with representations of two figures in a chariot have been recovered in Mycenae²¹; Berbati²²; Nauplion in Greece²³; Hagia Paraskevi, Samos²⁴; Ialysos, Rhodos²⁵; Kourion²⁶; Enkomi²⁷; Hala Sultan Tekke²⁸; Kalavassos-Ayios Dhimitrios²⁹; Kition³⁰; Maroni (buying)³¹; Maroni Cemetery³²; Pyla-Verghi in

¹⁹ Catling 1968: 42–44.

²⁰ Catling 1968: 42–46.

²¹ Vermeule/Karageorghis 1982: IX.2.

²² Åkerström 1987: no. 1, pl. 1.

²³ Catling 1978–79: 18, Fig. 22.

²⁴ Myres 1914: 48, no. 437.

²⁵ Mee 1982: 11, 17, 134; Vermeule/Karageorghis 1982: XII.3; Morris 2006: 103, Fig. 3.

²⁶ Vermeule/Karageorghis 1982: IV.48; Morris 2006: 103, Fig. 4.

²⁷ Murray/Smith/Walters 1900: Fig. 65; Gjerstad/Lindros/Sjöqvist/Westholm 1934: 484; 1948: pl. LXXVII, CXX, CXXI; Sjöqvist 1940: Figs. 19.3, 20.2; Karageorghis 1960: 140–141, 144, pls. III, VII.1–2; Vermeule/Karageorghis 1982: V.13, 18; Rystedt 1986: 105, Fig. 6; 2006a: 124, Fig. 2; 2006b: 243, Fig. 5a; Dikaios 1969–71: pl. 302:1–2.

²⁸ Åström/Bailey/Karageorghis 1976: 84, pls. LVI, LXXIV: 214

²⁹ South 2006: 137–142, Fig. 11: K-AD 1619; Steel 2006: 147–148, Fig. 1.

³⁰ Vermeule/Karageorghis 1982: Fig. IV.26.

³¹ Myres 1914: 48, no. 436; Immerwahr 1945: 544–549, Figs. 8–10; Vermeule/Karageorghis 1982: III.16; Morris 2006: 105, Fig. 8.

³² Johnson 1980: 33, no. 235, pls. XLVII, LXV.



Figure 4: The Liman Tepe Mycenaean Sherd / *Liman Tepe Miken Seramiği*.

Cyprus³³; Ras Shamra–Ugarit, Syria³⁴; and in Tell Dan, Israel³⁵.

Kraters with representations of three figures in a chariot are known from Enkomi³⁶; Aradhippou, Cyprus³⁷, and Ras Shamra–Ugarit, Syria³⁸. Besides these sites, the depiction on the krater named the “Mycenaean Parasol Crater” could also be considered among the examples from this stage³⁹.

In the depictions evaluated as Stage III, dated to the 12th century, the chariots have an open framework. The figures within are shown as engaged in warfare⁴⁰ and are clothed differently than their counterparts from the other categories. They wear short kilts, and their legs and feet are fully portrayed. The warrior figure depicted in the front of the chariot drives the horse and the figure behind him carries a spear and a shield. A substantial group of artefacts which fall into this category have been recovered at Tiryns⁴¹. Catling⁴² has also evaluated the warriors with chariots depicted on Mycenaean fragments found in Lefkandi, Greece⁴³ and Ambelia/Gnaftia, Cyprus⁴⁴ as belonging to this stage.

³³ Dikaios 1969–71: 915–916, 918–925, pls. 230/1, 231, 301; Morris 2006: 104–105, Fig. 7; Rystedt 2006a: 124, Fig. 1.

³⁴ Schaeffer 1936–37: 214–215, Fig. 2; 1949: pl. 35, Figs. 89–90, 94; Benson 1961: Fig. 45; Rystedt 2006a: 126–127, Figs. 4a–b.

³⁵ Vermeule/Karageorghis 1982: IV.49.

³⁶ Catling/Millett 1965: 222, pl. 59:3; BMC, Fig. 116; Morris 2006: 104, Fig. 6; Rystedt 2006a: 126–127, Fig. 4c.

³⁷ Vermeule/Karageorghis 1982: V.23.

³⁸ Schaeffer 1936–37: 213–215, Figs. 1, 3; 1949: pl. 35, Figs. 89–90; Benson 1961: Fig. 46; Rystedt 2006a: 126–127, Figs. 4a–b; 2006b: 243, Fig. 5b.

³⁹ French 2006: 49, Fig. 3.

⁴⁰ Catling 1968: 46–48.

⁴¹ Güntner 2006: 58–59, Figs. 26–27; Crouwel 2006a: 16, Fig. 1; 2006b: 165–166, Fig. 1.

⁴² Catling 1968: 48–49.

⁴³ Catling 1968: 49, pl. 21, Fig. 1.

⁴⁴ Catling 1968: 48, pl. 21, Fig. 2.

THE GENERAL EVALUATION OF THE LIMAN TEPE MYCENAEAN POTTERY SHERD WITH A WARRIOR WITH CHARIOT

The Mycenaean ceramic with a depiction of a warrior with chariot recovered in a mixed fill at Liman Tepe is of particular importance as the only example of its kind found in Anatolia.

The most significant feature of the paste of the Liman Tepe sherd is that it contains a large amount of mica. Regarding those Mycenaean ceramics recovered in West Anatolia that have been tentatively identified in publications as locally produced, it is stated that their most significant feature is their notable mica content and that when compared with imported examples, their decoration and firing are of poorer quality⁴⁵. In this context, given its high mica content, and poor paint and firing qualities, etc., the paste of the Liman Tepe example can be described as West Anatolian local production.

The motif on this sherd bears a resemblance to the Mycenaean examples of the abovementioned Stage III. The Liman Tepe warrior has a short kilt like the others in that group. Standing right behind the horse, he must be the driver of the chariot as observed in all the similar examples. He raises his left hand with bent elbow, while holding the reins of the horse with his right hand. In this representation, the warrior bears close resemblance to the warrior on the vessel recovered at Tiryns⁴⁶ and dated to LH IIIC. However, the Liman Tepe warrior differs from the others in that his clothes are completely painted. As mentioned, only the rear part of the horse drawing the chariot has been preserved on the Liman Tepe Mycenaean sherd. Horses with tails depicted as herringbones, drawing chariots, are also seen on kraters recovered at Lefkandi⁴⁷, Midea⁴⁸ and Kynos⁴⁹ in Greece. The Midea example is dated to LH IIIB, while the krater uncovered at Kynos is dated to the mid phase of LH IIIC. On the Liman Tepe piece, the depiction of only one horsetail also shows that the chariot is drawn by a single horse.

On examination of the preserved part of the chariot wheel, it can be seen that the spokes of the wheel branch out to make a triangular shape against the rim. This flaring part of the spoke connects to the rim as three branches. Such examples of spoke-to-rim connection are

found on amphoroid kraters with warriors depicted, in Kourion, Cyprus⁵⁰; Maroni⁵¹ and Aradhippou⁵². Of these, the Kourion and Maroni examples are dated to LH IIIA2, and the Aradhippou example to LH IIIB1. Besides the ceramic examples, such wheels also appear among the wheel ideograms on Linear B tablets⁵³.

Belonging in Stage III, the Liman Tepe sherd should once have depicted two warriors in the chariot with open framework. In addition, the warrior who would have appeared standing behind the driver should have been armed. In the Aegean, the examples included in Stage III are all dated to LH IIIC. Even though the sherd from Liman Tepe was recovered from a mixed fill, it could feasibly be dated to LH IIIC as well, based on manufacture and materials, and comparisons with similar items.

THE LIMAN TEPE MYCENAEAN POTTERY SHERD WITH A WARRIOR ON CHARIOT AND THE SEA PEOPLES

As mentioned above, the LBA layers of Liman Tepe have been thoroughly researched only in the southeastern section of the northern dig site. In this area, layer II.1, dated to end of the LBA / LH IIIC, reveals architecture composed of a street connected to another road extending in the east–west direction from the south, and structures located on the sides of the road and the street (Fig. 2). In these architectural layers, local and Mycenaean ceramics have been found together⁵⁴. Of the Mycenaean pottery, the krater belonging to the “East Aegean Group”⁵⁵, and the bowl and amphora that indicate connections between Mainland Greece, Crete and Cyprus⁵⁶ bear great significance as evidence of cultural mobility. Even though they were recovered from mixed fills, the Mycenaean sherd depicting a ship that dates to this period⁵⁷ and the Mycenaean fragment with a depiction of a warrior with chariot should also be considered part of this group. Along with these Mycenaean pottery sherds, the vessels called “Barbarian Ceramics”, recovered at the southern and northern dig sites of the settlement⁵⁸, and the Aegean-type cooking ware⁵⁹ are of particular importance as constituent elements of the group of common finds associated with the Sea Peoples⁶⁰ in the Aegean and East Mediterranean.

⁵⁰ Vermeule/Karageorghis 1982: IV.2.

⁵¹ Johnson 1980: 33, no. 237a-b, pls. XLVIII, LXV.

⁵² Vermeule/Karageorghis 1982: V.23.

⁵³ Crouwel 1981: Fig. 31.

⁵⁴ Erkanal/Aykurt 2008: 237.

⁵⁵ Aykurt 2014.

⁵⁶ Mangaloğlu-Votruba 2011: 53.

⁵⁷ Aykurt/Erkanal 2017b.

⁵⁸ Erkanal 1999: 327, pics. 3–4.

⁵⁹ Mangaloğlu-Votruba 2011: 53.

⁶⁰ The first awareness in the science world of sea peoples came as a result of deciphering the inscription of the Victory Stele of

⁴⁵ For Mycenaean ceramic paste features found in settlements in Western Anatolia, see: Aykurt 2014: 57–59; Aykurt and Erkanal 2017a: 99–101.

⁴⁶ Crouwel 2006a: 16, Fig. 1; 2006b: 165–166, Fig. 1.

⁴⁷ Sackett/Hankey/Howell/Jacobsen/Popham 1966: 103, Fig. 28, pl. 16a.

⁴⁸ Demakopoulou 2006: 36, 43, Fig. 11.

⁴⁹ Dakoronia 2006: 174, Fig. 6.

In addition to the ceramic fragments at Liman Tepe, there are also architectural remains that indicate a connection to the Sea Peoples. In the masonry of the western wall of structure no. M-54, uncovered in architectural layer II.1, there are vertically placed stones; this architectural characteristic is associated with the Sea Peoples. Wall masonry consisting of vertically placed stones has been found at structures dated to Late Cyprus IIC–IIIA during excavations performed in Maroni-Vournes⁶¹ and Pyla-Kokkinokremos⁶² in Cyprus. Brick walls built using the same technique can be seen in Ashkelon in the Levant. The remains unearthed in Ashkelon are dated to Iron Age I⁶³.

In addition, during the studies performed at the south excavation area in Liman Tepe, infant graves, probably belonging to sea peoples, were uncovered buried in jars of the so-called Barbarian ceramics type⁶⁴.

Taking into consideration all of the above data, we can say that in architectural level II.1 at Liman Tepe, local people resided together with the peoples who arrived via migrations. When the local ceramics are compared with the other ceramic groups present at the site, they can be seen to make up the largest group, while the ceramic groups associated with the Sea Peoples are few in number. Accordingly, it could be said that the people who came via migrations were relatively few in number as well.

During the period when these migrations occurred, at the end of the 2nd millennium BC⁶⁵, many cities were either abandoned, burnt or otherwise ruined⁶⁶. It is suggested

Merneptah (Breasted 1906: 249, 255), the Great Karnak inscription, and the Athribis Stele inscription (Sandars 1985: 105, 107), found at excavations in Egypt. The terms foreign lands of sea, sea countries and sea country have been used in connection with the nations mentioned in these representational artefacts. The term Sea peoples was first used by Gaston Maspero in 1881, as *peuples de la mer* (Woudhuizen 2006: 35). The advance of these people was stopped by Ramses III before they reached Egypt (Woudhuizen 2006: 51–52).

⁶¹ Deger–Jalkotzy 1998: 122.

⁶² Aja 2009: 455.

⁶³ Aja 2009: 69–71, 79, 246, Figs. 3.1; 4.1.

⁶⁴ Erkanal 1999: 327, pics. 3–4.

⁶⁵ The cities of the Eastern Mediterranean, from the Mycenaean kingdoms in Continental Greece, to the Hittite Empire in Anatolia, the Kingdom of Alasia in Cyprus, the Kingdom of Ugarit in Syria and the Egyptian Empire, all entered into a period of turmoil at the end of the Late Bronze Age. During this period, many cities were burned and destroyed. Different opinions are asserted about this period. The first is that the migration of the Sea Peoples caused the destruction in the East Mediterranean (Lehmann 1970: 37–49). V. Gordon Child (1942: 175–179) claimed that the end of Late Bronze Age came when the economic system of which the kingdoms were part collapsed. The widespread use of iron is suggested as the factor which caused the downfall of this economic system (Drews 1993: 85). Another proposed cause is drought (Breasted 1906: 580; Carpenter 1968: 61, 81–82; Drews 1993: 77), and another is that earthquakes caused the collapse. (For earthquakes, see above.)

⁶⁶ Nur/Cline 2000: 61.

that the destruction at the end of the Late Bronze Age in Mycenae⁶⁷, Tiryns⁶⁸, Midea⁶⁹, Thebes⁷⁰, Menelaion, Sparta⁷¹, Kynos⁷², Troia⁷³, Kral Tepesi⁷⁴, Ugarit⁷⁵, and Megiddo⁷⁶ was caused by an earthquake occurring in the settlements and fires associated with it. Robert Drews⁷⁷, however, rejects the earthquake theory, observing that there were no human skeletons in the cities and the contexts yielding finds were very few. He suggests these circumstances reflect the abandonment of the settlements by the local people shortly before invaders arrived. As for the excavations at Liman Tepe, no evidence has been found to suggest the destruction of the settlement by these peoples or as a consequence of a catastrophe such as an earthquake. In the light of the current data, it appears that the peoples who came at the end of the Late Bronze Age resided at Liman Tepe alongside the local people and maintained elements of their own cultures. The Mycenaean sherd discussed here with a depiction of a warrior with chariot, along with the other ceramic finds at Liman Tepe, bears great significance in revealing the presence of the Sea Peoples in the region.

ACKNOWLEDGEMENTS

I would like to thank Prof. Dr. Hayat Erkanal for giving me permission to publish the Mycenaean sherd examined in this article.

The Liman Tepe excavation is conducted under the framework of The Izmir Region Excavations and Research Project (IRERP) and generously supported by the Ministry of Tourism and Culture, Turkey; Ankara University; Ankara University, Dil ve Tarih Coğrafya Fakültesi; INSTAP-SCEC, and the Urla Municipality.

The original drawing of the Liman Tepe Mycenaean sherd was made by illustrator Douglas Faulmann, from the Institute for Aegean Prehistory, Study Center for East Crete.

⁶⁷ at the LH IIIB site; Mylonas 1966: 224–227; Iakovidis 1977: 134, 140; 1986: 242–245.

⁶⁸ at the end of LH IIIB site; Kilian 1980; 1981: 193; 1985; 1988; 1996: 63–65.

⁶⁹ at the LH IIIB2 period; Åström and Demakopoulou 1996: 37, 39; Shelmerdine 1997: 543.

⁷⁰ at the late LH IIIB1 settlement; Sampson 1996: 114.

⁷¹ at the LH IIIB2 period; Catling 1978–79: 19–20; 1980–81: 18–19.

⁷² at the phases 4–5 of site; Dakoronia 1996: 41–42, Figs. 3a–b

⁷³ at the late VI settlement; Blegen, Caskey and Rawson 1953: 89–90, 98, 220–225, 262, 257, 283, 330–332.

⁷⁴ at the Late Bronze Age IIC; Kızılduman 2017: 48, res. 9a.

⁷⁵ level VIII; Schaeffer 1968: 753–768.

⁷⁶ level VII; Loud 1948: 6; Shipton 1939: 4; Davies 1986: 64; Kempinski 1989: 10, 72, 76–77; Ussishkin 1995; Nur and Ron 1997a: 533–539; 1997b: 50–51.

⁷⁷ Drews 1993: 39–40.

REFERENCES

- AJA, A., 2009.
Ohilistine Domestic Architecture in the Iron Age I. USA.
- ÅKERSTRÖM, Å., 1987.
Berbat 2. The Pictorial Pottery. Stockholm.
- ÅSTRÖM, P. / D.M. BAILEY / V. KARAGEORGHIS, 1976.
Hala Sultan Tekke I. Excavations 1897-1971. SIMA XLV.1. Goteborg.
- ÅSTRÖM, P. / K. DEMAKOPOULOU, 1996.
“Signs of an Earthquake at Midea? ”, *Archaeoseismology*. (Eds. S. Stiros / R.E. Jones) Athens: 37-40.
- AYKURT, A., 2014.
“An Example of Mycenaean Pictorial Pottery: Krater from Liman Tepe”, *Armağan Erkanal’a Armağan Kitabı: Some Observations on Anatolian Cultures. Compiled in Honor of Armağan Erkanal* (Eds. N. Çınardalı–Karaaslan / A. Aykurt / Y.H. Erbil / N. Kolankaya–Bostancı) Ankara: 55–74. Hacettepe Üniversitesi Yayınları
- AYKURT, A. / H. ERKANAL, 2017A.
Bakla Tepe Geç Tunç Çağı Mezarları/Late Bronze Age Graves of Bakla Tepe. Ankara.
- AYKURT, A. / H. ERKANAL, 2017B.
“A Late Bronze Age Ship from Liman Tepe with Reference to the Late Bronze Age ships from İzmir/Bademgediği Tepesi and Kos/Seraglio”, *Oxford Journal of Archaeology* 36/1: 61-70.
- BENSON, J.L., 1961.
“Observations on Mycenaean Vase-Painters”, *American Journal of Archaeology* 65: 337-347.
- BLEGEN C.W. / J.L. CASKEY / M. RAWSON, 1953.
Troy III: The Sixth Settlement, Princeton.
- BREASTED, J.H., 1906.
Ancient Records of Egypt: Historical Documents from the Earliest Times to the Persian Conquest 3. Chicago.
- CARPENTER, R., 1968.
Discontinuity in Greek Civilization. Cambridge.
- CATLING, H. W., 1968.
“A Mycenaean Puzzle from Lefkandi in Euboea”, *American Journal of Archaeology* 72/1: 41-49.
- CATLING, H. W., 1978-79.
“Archaeology in Greece, 1978–79”, *Archaeological Reports* 25: 3–42.
- CATLING, H. W., 1980-81.
“Archaeology in Greece, 1980–81”, *Archaeological Reports for 1980–81*: 3–48.
- CATLING, H.W. / A. MILLETT, 1965.
“A Study in the Composition Patterns of Mycenaean Pictorial Pottery from Cyprus”, *The Annual of the British School at Athens* 60: 212-224.
- CHILDE, V.G., 1942.
What Happened in History. Harmondsworth.
- CROUWEL, J., 1981.
Chariots and Other Means of Land Transport in Bronze Age Greece. Studies in Ancient Civilization. Amsterdam.
- CROUWEL, J., 2006A.
“Late Mycenaean Pictorial Pottery: A Brief Review”, *Pictorial Pursuits. Figurative Painting on Mycenaean and Geometric Pottery. Papers from Two Seminars at the Swedish Institute at Athens in 1999 and 2001*. (Eds. E. Rystedt / B. Wells) Stockholm: 15–22. Svenska Int. Athens.
- CROUWEL, J., 2006B.
“Chariot Depictions-From Mycenaean to Geometric Greece and Etruria”, *Pictorial Pursuits. Figurative Painting on Mycenaean and Geometric Pottery. Papers from Two Seminars at the Swedish Institute at Athens in 1999 and 2001*. (Eds. E. Rystedt and B. Wells) Stockholm: 165–170.
- DAKORONIA, P., 1996.
“Earthquakes of the Late Helladic III period (12th century BC) at Kynos (Livanates, Central Greece) ”, *Archaeoseismology*. (Eds. S. Stiros / R. E. Jones) Athens: 41–44.
- DAKORONIA, P., 2006.
“Bronze Age Pictorial Tradition on Geometric Pottery”, *Pictorial Pursuits. Figurative Painting on*

- Mycenaean and Geometric Pottery. Papers from Two Seminars at the Swedish Institute at Athens in 1999 and 2001.* (Eds. E. Rystedt / B. Wells) Stockholm: 171–175.
- DAVIES, G., 1986.
Megiddo. Cambridge:
- DEGER–JALKOTZY, S., 1998.
“The Last Mycenaean and Their Successors Updated”, Mediterranean Peoples in Transition. Thirteenth to Early Tenth Centuries BCE. In Honor of Professor Trude Dothan. (Eds. S. Gitin, A. Mazar / E. Stern) Jerusalem: 114–128.
- DEMAKOPOULOU, K., 2006.
“Mycenaean Pictorial Pottery From Midea”, *Pictorial Pursuits. Figurative Painting on Mycenaean and Geometric Pottery. Papers from Two Seminars at the Swedish Institute at Athens in 1999 and 2001.* (Eds. E. Rystedt and B. Wells) Stockholm: 31–43.
- DIKAIOS, P., 1969–71.
Enkomi. Excavations 1948-1958. Mainz am Rhein.
- DREWS, R., 1993.
The End of the Bronze Age. Princeton.
- ERHAT, A. / A. KADIR, 2004.
Homeros - İlyada. İstanbul.
- ERKANAL, H., 1999.
“1997 Liman Tepe Kazıları”, 20. *Kazı Sonuçları Toplantısı* 1. Ankara: 325–336.
- ERKANAL, H., 2008.
“Geç Tunç Çağı’nda Liman Tepe”, *Batı Anadolu ve Doğu Akdeniz Geç Tunç Çağı Kültürlerine Üzere Araştırmalar.* (Eds. A. Erkanal–Öktü / S. Günel / U. Deniz) Ankara: 91-100.
- ERKANAL, H. / M. ARTZY, 2002.
“2000 Yılı Liman Tepe Kazı Çalışmaları.” 23. *Kazı Sonuçları Toplantısı* 1. Ankara: 375-388.
- ERKANAL, H. / A. AYKURT, 2008.
“Liman Tepe 2006 Yılı Kazıları”, 29. *Kazı Sonuçları Toplantısı* 3. Ankara: 223–242.
- ERKANAL, H. / A. AYKURT, / K. BÜYÜKULUSOY, / İ. TUĞCU / R. TUNCEL / V. ŞAHOĞLU, 2017.
“Liman Tepe 2015 Yılı Kara ve Sualtı Kazıları” 29. *Kazı Sonuçları Toplantısı* 3. Ankara: 133-150.
- ERKANAL, H. / S. GÜNEL, 1995.
“1993 Liman Tepe Kazıları.” 16. *Kazı Sonuçları Toplantısı* 1. Ankara: 263-279.
- EVANS, A., 1925.
“The Ring of Nestor’: A Glimpse into the Minoan After-World and A Sepulchral Treasure of Gold Signet-Rings and Bead-Seals from Thisbê, Boeotia”, *The Journal of Hellenic Studies* 45/1: 1–75.
- FELDMAN, M.H. / C. SAUVAGE, 2010.
“Objects of Prestige? Chariots in the Late Bronze Age Eastern Mediterranean and Near East”, *Ägypten und Levante/Egypt and the Levant* Vol. 20: 67–181.
- FIELDS, N., 2006.
Bronze Age War Chariots, Oxford. Osprey.
- FRENCH, E., 2006.
“The Functional Contexts of Pictorial Pottery at Mycenae”, *Pictorial Pursuits. Figurative Painting on Mycenaean and Geometric Pottery. Papers from Two Seminars at the Swedish Institute at Athens in 1999 and 2001.* (Eds. E. Rystedt / B. Wells) Stockholm: 45–50.
- GJERSTAD, E. / J. LINDROS / E. SJÖGVIST / A. WESTHOLM, 1934.
The Swedish Cyprus Expedition. Finds and Results of the excavations in Cyprus, 1927-1931. Stockholm.
- GREENHALGH, P.A.L., 1980.
“The Dendra Charioteer”, *ANTIQUITY* 54: 201–215.
- GULIZIO, J. / K. PLUTA / T.G. PALAIMA, 2000.
“Religion in the Room of the Chariot Tablets”, *AEGAEUM* 22, *Potnia: Deities and Religion in the Aegean Bronze Age. Proceedings of the 8th International Aegean Conference,* Göteborg University [12–15 April 2000], (Eds. R. Laffineur R. / W.D. Niemeier) Göteborg, 453–461.
- GÜNEL, S., 1999.
“Vorbericht über die Mittel- und Spätbronzezeitliche Keramik von Liman Tepe”, *Istanbul Mitteilungen* 49: 41-82.

- GÜNTNER, W., 2006.
“Mycenaean Pictorial Vase Painters: A View from Tiryns”, *Pictorial Pursuits. Figurative Painting on Mycenaean and Geometric Pottery. Papers from Two Seminars at the Swedish Institute at Athens in 1999 and 2001*. (Eds. E. Rystedt / B. Wells) Stockholm: 51–61.
- HEURTLEY, W.A., 1921–23.
“The Grave Stelai”, *The British School at Athens* 25: 126–146.
- IAKOVIDIS, S., 1977.
“The Present State of Research at the Citadel of Mycenae”, *Bulletin of the Institute of Archaeology*. London: 99–141.
- IAKOVIDIS, S., 1986.
“Destruction horizons at Late Bronze Age Mycenae”, *Philia Epi eis Georgion E. Mylonan*, V. A. Athens: 233–260.
- IMMERWAHR, S.A. 1945.
“Three Mycenaean Vases from Cyprus in the Metropolitan Museum of Art”, *American Journal of Archaeology* 49: 534–56.
- JOHNSON, J., 1980.
Maroni de Chypre. SIMA LIX. Goteborg.
- KARAGEORGHIS, V. 1960.
“Supplementary Notes on the Mycenaean Vases from the Swedish Tombs from Enkomi”, *Opuscula Athes* 3: 135–153.
- KELDER, J., 2004–05.
“The Chariots of Ahhiyawa”, *DACIA* 48–49: 151–160.
- KEMPINSKI, A., 1989.
Hittites in the Bible: “What does Archaeology Say?”, *Biblical Archäologische Anzeiger* 5/5: 20–44.
- KIZILDUMAN, B., 2017.
“Kral Tepesi: Karpaz Yarımadası’nda Bir Geç Tunç Çağı Yerleşimi”, *TÜBA-AR* 21: 35–61.
- KILIAN, K., 1980.
“Zum ende der Mykenischen Epoche in der Argolis”, *Jahrbuch des Römisch-Germanischen Zentral-Museums Mainz* 27:166–195.
- KILIAN, K., 1981.
“Ausgrabungen in Tiryns 1978, 1979”, *Archaeologischer Anzeiger* 1981: 149–194.
- KILIAN, K., 1985.
“La Caduta dei Palazzi Micenei Continentali: Aspetti Archeologici”, *Le Origini dei Greci: Dori emondo egeo*. (Ed. D. Musti) Rome: 73–116.
- KILIAN, K., 1988.
“Mycenaeans up to date. Trends and changes in Recent Research”, *Problems in Greek Prehistory. Papers Presented at the Centenary Conference of the British School of Archaeology at Athens, Manchester, April 1986*. (Eds. E.B. French / K. A. Wardle) Bristol: 115–152.
- KILIAN, K., 1996.
“Earthquakes and Archaeological Context at 13th century BC Tiryns”, *Archaeoseismology*. (Eds. S. Stiros / R. E. Jones) Athens: 63–68.
- LEHMANN, G.A., 1970.
“Der Untergang des hethitischen Grossreiches und die neuen Texte aus Ugarit”, *Ugarit Forschungen* 2: 29–73.
- LOUD, G., 1948.
Megiddo II: Season of 1935–39. Chicago.
- MANGALOĞLU-VOTRUBA, S., 2011.
“Liman Tepe’de Geç Hellas IIIC Dönemi”, *Anadolu/Anatolia* 37: 43–73.
- MEE, C., 1982
Rhodes in the Bronze Age: An Archaeological Survey. Warminster.
- MORRIS, C., 2006.
“Design Element Analysis of Mycenaean Chariot Kraters”, *Pictorial Pursuits. Figurative Painting on Mycenaean and Geometric Pottery. Papers from Two Seminars at the Swedish Institute at Athens in 1999 and 2001*. (Eds. E. Rystedt / B. Wells) Stockholm: 97–106.
- MURRAY, A.S. / A. H. SMITH / H. B. WALTERS, 1900.
Excavations in Cyprus. London.
- MYLONAS, G.E., 1966.
Mycenae and the Mycenaean Age. Princeton.

- MYRES, J.L., 1914.
Handbook of the Cesnola Collection of Antiquities from Cyprus. New York.
- NUR, A. / E.H. CLINE, 2000.
“Poseidon’s Horses: Plate Tectonics and Earthquake Storms in the Late Bronze Age Aegean and Eastern Mediterranean”, *Journal of Archaeological Science* 27: 43–63.
- NUR, R. / H. RON, 1997A.
“Armageddon’s Earthquakes”, *International Geology Review* 39: 532–541.
- NUR, R. / H. RON, 1997B.
“Earthquake! Inspiration for Armageddon”, *Biblical Archaeology Review* 23: 49–55.
- PAGE, D.L., 1959.
History and the Homeric Iliad. Berkeley.
- PALMER, L.R., 1954.
“Mycenaean Greek Texts from Pylos”, *Transactions of the Philological Society* 1954: 18–53.
- PUGLIESE–CARRATELLI, G., 1958.
“Eqeta”, *MINOICA*: 319–326.
- RYSTEDT, E., 1986.
“The Foot-Race and Other Athletic Contests in the Mycenaean World. The Evidence of the Pictorial Vases”, *Opuscula Atheniensi* 16: 103–116.
- RYSTEDT, E., 2006A.
“Tracing Stylistic Evolution in Mycenaean Pictorial Vase Painting”, E. Rystedt and B. Wells (eds.) *Pictorial Pursuits. Figurative Painting on Mycenaean and Geometric Pottery. Papers from Two Seminars at the Swedish Institute at Athens in 1999 and 2001*. Stockholm: 123–129. Svenska Int. Athens.
- RYSTEDT, E., 2006B.
“Pictorial Matter, Pictorial Form”, *Pictorial Pursuits. Figurative Painting on Mycenaean and Geometric Pottery. Papers from Two Seminars at the Swedish Institute at Athens in 1999 and 2001*. (Eds. E. Rystedt / B. Wells) Stockholm: 239–245.
- SACKETT, L. H. / V. HANKEY / R. J. HOWELL / T. W. JACOBSEN / M. R. POPHAM, 1966.
“Prehistoric Euboea: Contributions toward a Survey”, *British School at Athens* 61: 33–112.
- SAMPSON, A., 1996.
“Cases of Earthquakes at Mycenaean and pre-Mycenaean Thebes”, *Archaeoseismology*. (Eds. S. Stiros / R. E. Jones) Athens: 113–117.
- SANDARS, N.K., 1985:
The Sea Peoples: Warriors of the Ancient Mediterranean 1250-1150 BC. London.
- SCHAEFFER, C.F.A., 1936-37.
“Sur un Cratere Mycénien de Ras Shamra”, *The Annual of the British School at Athens* 37: 212-235.
- SCHAEFFER, C.F.A., 1949.
Ugaritica II. Paris.
- SCHAEFFER, C.F.A., 1968.
“Commentaires sur les lettres et documents trouvés dans les bibliothèques privées d’Ugarit”, *Ugaritica V* (Mission de Ras Shamra 16), Paris: 607–768.
- SCHLIEMANN, H., 1878.
Mycenae: A Narrative of Researches & Discoveries, London.
- SHELMERDINE, C.W., 1997.
“Review of Aegean Prehistory VI: The Palatial Bronze Age of the Southern and Central Greek Mainland”, *American Journal of Archaeology* 101: 537–585.
- SHIPTON, G.E., 1939.
Notes on the Megiddo Pottery of Strata VI–XX. Chicago.
- SJOQVIST, E., 1940.
Problems of the Late Cypriote Bronze Age. Stockholm.
- SOUTH, A., 2006.
“Mycenaean Pictorial Pottery in Context”, *Pictorial Pursuits. Figurative Painting on Mycenaean and Geometric Pottery. Papers from Two Seminars at the Swedish Institute at Athens in 1999 and 2001*. (Eds. E. Rystedt / B. Wells) Stockholm: 131–146.

STEEL, L., 2006.

“Women in Mycenaean Pictorial Vase Painting”, *Pictorial Pursuits. Figurative Painting on Mycenaean and Geometric Pottery. Papers from Two Seminars at the Swedish Institute at Athens in 1999 and 2001.* (Eds. E. Rystedt / B. Wells) Stockholm: 146–155.

USSISHKIN, D., 1995.

The destruction of Megiddo at the end of the Late Bronze Age and Its Historical Significance. *Tel Aviv* 22: 240–267.

VERMEULE, E. T., 1964.

Greece in the Bronze Age, Chicago.

VERMEULE, E.T. AND V. KARAGEORGHIS, 1982.

Mycenaean Pictorial Vase Painting, Cambridge.

WIESNER, J., 1968.

“Fahren und Reiten”, *Archaeologia Homérica I F. Göttingen*: 1–10.

WOUDHUIZEN, F.C. 2006.

The Ethnicity of the Sea Peoples. Master Thesis. Rotterdam.