# Late Bronze Age Burials, Mycenaean Connections, and The Maritime Cultural Landscape of The Western Anatolian Coast

By

Nuray Nisan Köknar

A Dissertation Submitted to the Graduate School of Social Sciences and Humanities

in Partial Fulfillment of the Requirements for

the Degree of

Master of Arts

in

Archaeology



January 2, 2020

# Late Bronze Age Burials, Mycenaean Connections, and The Maritime Cultural Landscape of the Western Anatolia

Koç University

Graduate School of Social Sciences and Humanities This is to certify that I have examined this copy of a master's thesis by

Nuray Nisan Köknar

and have found that it is complete and satisfactory in all respects, and that any and all revisions required by the final examining committee have been made.

Committee Members:

6 Mc

Assist. Prof. Çiğdem Maner

Assist. Prof. Michael Jones

Assaf Vacur Landons cust . mr. Tok

Prof. Assaf Yasur Landau

02.01.2020

Date:





To my dad...



## ABSTRACT

# Late Bronze Age Burials, Mycenaean Connections, and The Maritime Cultural Landscape of the Western Anatolia Nuray Nisan Köknar Master of Arts in Archaeology January 2, 2020

The relationship between humans and their surroundings in a landscape is a mutual connection. People adapted to their environment by creating a hybrid maritime culture in Western Anatolia during the Late Bronze Age. The landscape forced the region's inhabitants to forge stronger links to the Aegean and rather than inland. People adapted their settlements, harbors, and cemeteries to the environment based on maritime activities, especially sea trade.

Maritime trade, harbors, graves, and settlements on the Western Anatolian coastline have been examined previously, but they have not been holistically studied through the concept of the maritime cultural landscape. Aside from a few publications, researchers did not consider cemeteries and burials as a part of the maritime cultural landscape. Burials on the coastline of Western Anatolia were positioned based on the sea direction and concentrated in the field of maritime activities. In some of the sites such as Pilavtepe and Müsgebi, Bronze Age settlements have not yet been found, but the graves provide information on population and maritime activities. The morphology of the sites is known by studies of geological cores.

Interactions between the various regions and local activities in Western Anatolia peaked in the LBA, especially c. 1400-1200 BC (LBA c.1700-1100). The advantageous position of the region between the Aegean and the resources of Anatolia made it a transit point. These conditions combined cultural and political interactions with Mycenaeans. Characteristics of the burial customs showing evidence for crosscultural networks include funerary architecture, burial practices, positions of bodies in graves, the locations of graves and cemeteries, and grave goods. These graves represent Aegean influence particularly, for example, the Marine Style of pottery, both as Mycenaean imports and local imitations, Aegean style of jewellery and metal objects. The LBA cultures of the Western Anatolian coast cannot be examined without considering this network.



# ÖZETÇE

#### Geç Tunç Çağı Mezarları, Miken Bağlantıları ve Batı Anadolu Deniz Kültür

# Peyzajı

# Nuray Nisan Köknar

# Arkeoloji, Yüksek Lisans

#### 2 Ocak 2020

İnsanlar ile yaşam alanlarının bulundukları coğrafya arasında karşılıklı bir ilişki vardır. Geç Tunç Çağı'nda Batı Anadolu halkları çevrelerini melez bir deniz kültürü yaratarak şekillendirdiler. Yaşadıkları coğrafya onları iç bölgeden ziyade denizcilik bağlantılarına daha yakın olmaya zorladı. İnsanlar; yerleşim alanlarını, limanlarını ve mezarlıklarını denizcilik faaliyetlerine ve özellikle deniz ticaretine göre adapte ettiler.

Batı Anadolu kıyılarındaki deniz ticareti, limanlar, mezarlıklar ve yerleşimler daha önce incelenmiş, fakat deniz kültürü peyzajı kavramı dahilinde bütünsel olarak çalışılmamıştır. Araştırmacılar, birkaç istisna yayının haricinde, mezarları deniz kültürü peyzajının bir parçası olarak ele almamıştır. Batı Anadolu kıyılarındaki gömü yerleri; deniz yönüne göre konumlanmış ve denizcilik faaliyetlerinin yapıldığı bölgelerde yoğunlaşmıştır. Pilavtepe ve Müsgebi gibi bazı alanlarda yerleşim yeri henüz bulunmasa da mezarlıklar nüfusa ve denizcilik faaliyetlerine dair bilgi vermektedir. Alanların morfolojisi sondaj ve mikrofosil çalışmaları gibi jeolojik araştırmalardan bilinmektedir.

Batı Anadolu'da çeşitli bölgeler arasındaki etkileşim ve yerel etkinlikler Geç Tunç Çağı'nda (özellikle M.Ö. yaklaşık 1400-1200'de; GTÇ yaklaşık M.Ö. 1700-1100'ü kapsar) doruğa ulaşmıştır. Bölgenin Ege'deki avantajlı konumu ve Anadolu'nun kaynaklarına erişilebilirliği, bölgeyi Anadolu ve Ege'nin ortasında bir geçiş noktası ve diğer bölgelerin kaynağı haline getirmiştir. Bu koşullar beraberinde yoğun kültürel etkileşimi ve Mikenler ile politik yakınlaşmayı getirmiştir. Mezar mimarisi, buluntuları, ölü gömme biçimleri ve mezarların konumları gibi ölü gömme geleneklerinin karakteristik özellikleri karşılıklı kültürel bağlara kanıt oluşturmaktadır. Mezar mimarisi, ölü gömme gelenekleri ve mezarlarda bulunan eserler, marin stilinde Ege çömlekleri gibi, Miken ithalat ürünlerini ve yerel taklitleri içermektedir. Geç Tunç Çağı'nda Batı Anadolu deniz kültürü peyzajı bu şebeke göz önüne alınmadan etraflıca incelenemez.



## ACKNOWLEDGEMENTS

I would first like to thank my thesis advisor Dr. Çiğdem Maner, she encouraged me to start MA at Koç University. Also, I am tremendously grateful for Dr. Maner's support, advice, patience, immense knowledge, and enthusiasm. Her guidance helped me through all of the research and culmination of this thesis. I would also like to thank my thesis committee: Prof. Assaf Yasur Landau and Dr. Michael Jones. Dr. Jones' door was always open whenever I had a question about my research.

Besides my thesis committee, I would like to thank Dr. Matthew Harpster for introduction to maritime archaeology courses which directed me to the concept of the maritime cultural landscape. Also, I would like to express my gratitude to AKMED for providing a scholarship for my research and their librarians for helping me find whatever sources I needed.

My completion of this project could not have been accomplished without the calming support and constructive comments of all my classmates in the seminar courses and office friends, especially Zeynep Kuşdil, Zeynep Olgun, and Alexandra Koumpouli. I would also like to thank Roselyn Sorensen for her volunteering to help edit my thesis.

I must express my very profound gratitude to my parents for the inspiration that they gave me, their patience and since childhood have always encouraged me. My sister, Cansu, thanks to share my burden always. Finally, thanks to my cousin, Ekin, for providing me with continuous encouragement throughout my years of study and through the process of writing this thesis. To my boyfriend, Remzi and best friend Ayşan, thanks them for helping me overcome my concerns in this process. This accomplishment would not have been possible without them.

ix



# TABLE OF CONTENTS

ABSTRACTiii
ÖZETÇEv
ACKNOWLEDGEMENTS
LIST OF FIGURES
Chapter 1: Introduction1
1.1. Methodology
1.2. Thesis Outline
Chapter 2: Historical and Geographical Overview
2.1. Introduction
2.2. Geographical Overview
2.3. Historical Geography of Western Anatolia during the LBA9
2.3.1. Textual and Archaeological Evidence
2.4. Chronology
2.4.1. Late Bronze Age
Chapter 3: Theoretical Background
3.1. The Concept of the Maritime Cultural Landscape
3.1.1. Background of the Term and its Connections
3.1.2. Western Anatolian Burials in the Maritime Cultural Landscape 32
3.2. The LBA Coastal Burials in Western Anatolia

3.2.1. Burial Practices
3.2.2. Grave Types and Funerary Architecture
3.2.3. Grave Goods
3.2.4. Summary
3.3. Mycenaean Socio-Economy, Politics, and Maritime Network and Western Anatolia in LBA
3.4. Mycenaean Burial Customs During the LH Period
3.4.1. Geography at the Greek Mainland during the LH Period
3.4.2Mycenaean Graves: Funerary Architecture, Grave Goods, and Rituals
3.5. Summary
Chapter 4: Archaeological Data From Western Anatolian Sites
4.1. Beşik Tepe
4.1.1. Grave Types78
4.1.2. Grave Goods
4.2. Panaztepe
4.2.1. Grave Types
4.2.2. Grave Goods
4.3. Değirmentepe
4.3.1. Grave Types
4.3.2. Grave Goods
4.4. Müsgebi

4.4.1. Grave Types	
4.4.2. Grave Goods	96
4.5. Pilavtepe	
4.5.1. Grave Types	
4.5.2. Grave Goods	
4.6. Summary	
4.7. The Mycenaean Connection	
Chapter 5: CONCLUSION	
BIBLIOGRAPHY	
FIGURES	



# LIST OF FIGURES

Figure 1: Western Anatolia: The Coastal Cemeteries	
Figure 2: Western Anatolia during the Late Bronze Age and Possible Location	ons of
States	158
Figure 3: Different Dates for the Period of Muršili II	158
Figure 4: Anatolian Middle Chronology	159
Figure 5: Panaztepe and "Related Sites"	160
Figure 6: "Unreconciled High and Low Aegean Chronologies"	
Figure 7: Minoan, Helladic, Cycladic Islands, and Egyptian Chronologies	
Figure 8: Aegean, Liman Tepe, Troia, Beycesultan, and Miletus Correlations	s 163
Figure 9: Stratigraphy of Çeşme-Bağlararası	
Figure 10: Beşik Bay	
Figure 11: The Plan of Beşik Tepe Cemetery	
Figure 12: Beşik Tepe Above: A-A Section, Below: B-B Section of Grave no	o.15165
Figure 13: Beşik Tepe A Jar Burial from Grave no.15	
Figure 14: Beşik Tepe Stone Seal with Human Representation	
Figure 15: Panaztepe Building Level 4 – Deep Bowl Pottery Remains	
Figure 16: The Western Cemetery of Panaztepe	
Figure 17: The Topography of Panaztepe	
Figure 18: Panaztepe Stone Pavement and Tholos Connection	
Figure 19: Panaztepe Tholos Types	170
Figure 20: Panaztepe Pithos Graves	
Figure 21: Di Class Blade - Ornamented Section from Manisa Museum	
Figure 22: Panaztepe Frit Beads	172
Figure 23: Panaztepe Scarab Seal	172
Figure 24: Değirmentepe from Miletus Ancient Theater	173
Figure 25: Değirmentepe	173
Figure 26: The Milesia Territory	
Figure 27: Alluvial Changes at Miletus	
Figure 28: Değirmentepe Cemetery Plan	175
Figure 29: Değirmentepe The Burial Chamber from the Dromos	175
Figure 30: Değirmentepe Tholos II Plan	176
Figure 31: Değirmentepe Three Handled Piriform Jar	176
Figure 32: Değirmentepe Kalathos	
Figure 33: Müsgebi Cemetery Plan	177
Figure 34: Müsgebi Section of the Graves	

Figure 35: Müsgebi Graves 1	78
Figure 36: Kylix Examples from Müsgebi1	79
Figure 37: Stirrup Jar from Müsgebi1	79
Figure 38: Strainer from Müsgebi 1	79
Figure 39: Pilavtepe Chamber Tomb Plan1	80
Figure 40: Pottery Remains from Pilavtepe1	80
Figure 41: Pilavtepe Bronze Tools and Ornaments	81
Figure 42: Pilavtepe Ornaments of Different Materials1	81
Figure 43: The Summary of Sites Data1	82
Figure 44: The East Aegean- West Anatolian Interface	83
Figure 45: Pottery Ratios at Cemetery Areas1	84



## Chapter 1:

## **INTRODUCTION**

Western Anatolia in the Late Bronze Age was an intersection point for Anatolia and the Aegean. It linked Anatolia and the Aegean specifically, but also allowed longdistance interactions by sea with other regions, such as Egypt and the Levant. The LBA was the peak period of these maritime connections. Besides developments in seafaring and maritime trade, the intense cultural interaction between the regions in the Aegean and Eastern Mediterranean became more significant in the LBA. Physical evidence for cultural interaction in this period includes, for example, pottery, architecture in settled areas, shared burial customs, and tomb and burial architecture in the region, all representing the maritime activities between the Mycenaean and local people in the area. These cultural developments were influenced by the geographical location of Western Anatolia. Particularly, the relationship between the sea, the geography, and human activities in the Aegean was the basis for a maritime cultural landscape concept along the coast of Western Anatolia.

The World Heritage Committee defines a "cultural landscape" as the relationship between humans and nature.<sup>1</sup> German cultural geographers such as August Maitzen first coined the term. Sedentism and agriculture formed the basis of their definition that included material remains and structures of various periods.<sup>2</sup> A "cognitive landscape" is defined as the "*mapping and imprinting of the functional aspects of the surroundings in the human mind. Man in landscape, landscape in man.* "<sup>3</sup> Christer Westerdahl explains the concept of the maritime cultural landscape by starting from these two terms. Initially, the connection between the sea, the shore, and the minds of humans and ancient mariners shaped their cognitive perspective.<sup>4</sup> Fishing, transportation, shipping, boat building, settlements, and similar elements of culture are taken into account in the definition of the maritime cultural landscape.

In this respect, graves have become a specific focus for this work, because graves can represent the habitual customs of maritime-related social practices and experiences as

<sup>&</sup>lt;sup>1</sup> https://whc.unesco.org/en/culturallandscape/

<sup>&</sup>lt;sup>2</sup> Westerdahl 2013, 734.

<sup>&</sup>lt;sup>3</sup> Westerdahl 1992, 5, cited in Löfgren 1981, 235-61.

<sup>&</sup>lt;sup>4</sup> Westerdahl 1994, 266.

one aspect of the maritime cultural landscape.<sup>5</sup> One obvious aspect of this relationship is the location of the graves along the shoreline, but also burial customs and grave goods. Thus, the graves and tombs featured in this study have been selected based on their location in coastal areas and wherever maritime activities took place.

The characteristics of burials as evidence of a maritime cultural landscape in Western Anatolia have never been evaluated. Previous researchers have not contextualized the relationship between the burials and the maritime cultural landscape in Western Anatolia, except for some comparisons between burial goods and architecture at specific coastal sites. Several publications evaluate the Mycenaean influence on Western Anatolian graves and include comments on the general architectural style of tombs of the period.<sup>6</sup> This study aims to examine these data in the context of their role in the maritime cultural landscape of Western Anatolia.

Besides cultural and cognitive landscapes, the other essential term is the "center of maritime culture" which concentrates more on the maritime activities in the area chosen by people based on their necessities.<sup>7</sup> As a multidimensional connection, people make choices based on their needs, but their needs are dependent on their surroundings. For example, the need or desire for raw materials from outside of a region-initiated connections between the different regions and helped people develop maritime activities and knowledge about the sea, for example, sailors' knowledge of the best sailing routes and the safest harbors. The safety of maritime activity and connections were also closely integrated into the economic and political structures of the Aegean and of Anatolia. Sea trade brought the cultural objects of different regions to Western Anatolia, especially Mycenaean cultural products such as pottery styles and funerary architecture. The volume of Mycenaean imported and local imitations of Mycenaean objects, such as pottery and weapons, is greater than that of imported artifacts from other regions such as Egypt.<sup>8</sup>

As mentioned above, this study focuses on graves at coastal sites as sources of information for maritime activities in Western Anatolia in the LBA. Five sites in particular along the Aegean coast of Anatolia are Beşik Tepe, Değirmentepe, Müsgebi, Panaztepe, and Pilavtepe, each include a number of graves and cemetery areas (Fig. 1). These sites were chosen as essential for this study for several reasons. First reasons are

<sup>&</sup>lt;sup>5</sup> Westerdahl 1994, 269.

<sup>&</sup>lt;sup>6</sup> Akyurt 1998; Gür 2013, 31-52.

<sup>&</sup>lt;sup>7</sup> Westerdahl 1994, 267.

<sup>&</sup>lt;sup>8</sup> Akyurt 1998.

their advantageous geographical locations on the coastal landscape during the LBA, consisting of high amount of Mycenaean imports and local imitations of grave goods, and variety of funerary architecture and burial customs. Close cultural and geographical relationships between these sites, accessibility by the sea, and economic and politic networks among them create a holistic approach to define a maritime cultural landscape of the region.

Sites were focused on for the study considering their prominence within the coastal landscape during the LBA. The settlements of three of the cemeteries from LBA are partially uncovered. Archaeologists<sup>9</sup> have not detected any settlement area for the other two cemeteries at Pilavtepe and Müsgebi. Thus, further investigation of the location of settlements in these two areas is needed. Even in the absence of settlements, the material culture of the graves contributes to the understanding of maritime contacts at these sites through metal and clay analysis, geological surveys, and typological examinations.

Although the variety of subjects such as harbors, maritime activities, ports, coastal cemeteries, river connections have been previously studied, the concept of the maritime cultural landscape allows amore holistic approach to this region. This study aims to address this gap, as Western Anatolia is a critical point of interaction between the Aegean and Anatolia. The coastal cemeteries of Western Anatolia in the LBA, as a part of social, political, and economic structure of coastal communities, should be examined together in this framework. The geographical location of Western Anatolia enabled activities related both to the sea and the land. Graves reflect the maritime influence on culture as much as settlements, also as a part of settlements, do at many sites in Western Anatolia. It is important, therefore, to consider burial grounds at coastal sites within the framework of maritime contacts and the maritime cultural landscape. The significant relationship between grave locations and the geography of the area in the Bronze Age can be studied through geomorphological research in addition to other methods.

The imitated and imported pottery, beads, and possibly weapons and seals from different regions as well as the architecture of the graves demonstrate these direct and indirect connections and the position of Western Anatolia as an intercultural hub. The volume of local products, along with Mycenaean imports and local imitations of Mycenaean objects is more significant than the imports of other regions.<sup>10</sup> Both local and imported products and architectural features, and provenance of these goods represent the maritime impact on the culture and the Mycenaean influence in Western Anatolia.

## 1.1. Methodology

The basis for this research is a literature review of Western Anatolian burials in coastal areas. Excavation reports of both completed and ongoing projects at Panaztepe, Liman Tepe, Çeşme-Bağlararası, Ancient Miletus, Müsgebi, Değirmentepe, Beşik Bay, Troy, Pilavtepe, and many other sites in the coastal Aegean part of Western Anatolia were studied, with a focus on cemetery areas, parallelisms, and differences within and across the sites. Similar studies on Mycenaean "deathscapes" and culture was also consulted.<sup>11</sup>

The identification of the locals, and the geological changes in the region, a broader perspective using the maritime cultural landscape concept allowed definition of areas on the coastline. It creates a more unified way together with most of the characteristic features elucidated through archaeological and geological evidence, and comparison with documents. Such an approach may help to better emphasize the problems in a holistic way, thus contributing to solutions and new research questions.

Additionally, I visited all five of the Western Anatolian sites identified above. The scholars and students participating in the excavations helped me to understand conditions of the excavations, the geography of the region, the approaches taken by previous studies, contemporary developments and methodologies.

Archaeologists and geologists in the region are focusing on many specific types of analyses, such as petrography, geological sampling, soundings, and radiocarbon dating. These kinds of analysis are used to date finds for stratigraphic and chronological purposes, to learn the provenance to understand cultural connections and raw material sources, and the changes in geology which affected living style and settlement areas, including harbors and maritime activities. The results of these analyses, including debatable examples, are important to better inform our knowledge about cultural elements and maritime connectivity in this region.

<sup>&</sup>lt;sup>10</sup> Akyurt 1998; see also Kelder 2004-2005, 49-87.

<sup>&</sup>lt;sup>11</sup> Gallou 2005.

#### 1.2. Thesis Outline

Following this introduction, three main chapters and a conclusion section present the maritime cultural landscape concept in Western Anatolia from several perspectives. After the "Introduction" chapter, next chapters discuss geographical characteristics, historical geography, Mycenaean connection, maritime activities, funerary architecture, burial customs, and grave goods of the region.

The second chapter "Historical and Geographical Overview" summarizes the historical geography during the LBA of the Western Anatolian coast. It examines together politics, economics, and social conflicts and agreements to demonstrate the conditions in Western Anatolia and its effect on the region's culture. The relationships between Anatolia and the Aegean is reflected in the settlements and graves in the area as is evident from the archaeological evidence.

In this chapter, written documents outline the political dynamics of the period and conflict between Arzawa, Ahhiyawa, and the Hittites. Besides battles and territorial issues, Hittite documents give clues about the locations and boundaries of these lands. Some written sources from Egypt and the Aegean also provide information of the condition of the land during the same age, while Hittite sources focus not only on Hittite territories, but also on Western Anatolia. The documents about changes, developments, and conflict demonstrate parallels with archaeological evidence of Western Anatolia and help to conceptualize the effects of these dynamics on maritime connectivity and the maritime cultural landscape.

The Chapter 3, "Theoretical Background," discusses theoretical background and the literature review of the maritime cultural landscape concept, Western Anatolian burials, and the Mycenaean tradition in the burial context with maritime impacts. The emergence of the maritime cultural landscape concept, terminological developments, different applications in different regions, and periods of the concept are examined relation to Western Anatolian burials. The Western Anatolia burials section is a summary of general characteristics of coastal cemetery areas and single graves that is examined in detail from five specific sites in the last chapter of this thesis. The last section of the chapter summarizes Mycenaean' geography and burial customs, including marine influences, and their comparisons with Western Anatolian burials.

The Chapter 4, "LBA Graves in the West Anatolian Maritime Cultural Landscape and Mycenean Connections" includes two main parts, namely the data of cemetery areas and graves, in the coastal landscapes of Beşik Tepe, Değirmentepe, Müsgebi, Panaztepe, and Pilavtepe. The chapter also included Mycenaean connection section and it synthesises and compares of characteristics of Western Anatolian coastal burials and Mycenaean cultures in the maritime cultural landscape concept.

Trade for raw materials and possibly metal production created the desire of control or access the Aegean for Mycenaeans. To access these goals Western Anatolia had an advantageous location with its island-like character, connected to inland regions but more accessible by sea, and potentially way to reach resources such as mines. Density of exchanged exotic goods in Mycenaean style in the region corresponds the time when Hittites' documents mentioned conflicts and formalization the Western Anatolian landscape.



## Chapter 2:

# HISTORICAL AND GEOGRAPHICAL OVERVIEW

#### 2.1. Introduction

This chapter summarizes the historical geography and chronology of Western Anatolia, with a primary focus on coastal areas. After consideration of the historical geography, the chronology of the region is discussed. Both chapters include consideration of previous studies, discussions, and recent research. The aim of the chapter is to contribute to the understanding of cultural connections in Western Anatolia, and to show how Hittite written documents demonstrate political and economic conflicts, agreements, and location of cultural and political borders, including the differences and similarities between Western and Central Anatolia.

Historical geography studies help to identify the maritime impact on cultural interactions of the region. These studies allow to compare changes in burial customs, funerary architecture, and grave goods with the political, military, economic and social situations between regions and communities. In this research, this network focuses on Western Anatolia, Central Anatolia – Hittite areas, and the Greek mainland, including Mycenaeans in the Aegean islands.

The section of historical geography is to discuss the Arzawa lands and a discussion of Ahhiyawa. These are considered to comprise Mycenaean lands or the lands of their contemporaries<sup>12</sup> in Western Anatolia. These lands were regarded as a border or bridge between Anatolia and the Aegean, although it was itself an area of conflict for internal reasons and/or because of the impact of the Mycenaeans.<sup>13</sup> The possible location of the lands comes from written documentary evidence about battles and treaties as well as from archaeological evidence that are discussed in the chapter.

After dealing with historical geography, the chronology section explains local and Helladic chronologies, their applications significance to Western Anatolia, problems in chronology and its connections to historical geography, and burials in

<sup>&</sup>lt;sup>12</sup> Kelder 2009; see also Bryce 2011; Roosevelt et al. 2018.

<sup>&</sup>lt;sup>13</sup> Beckman 2006; see also Bryce 2011; Alparslan 2015; Hawkins 2015.

Western Anatolia. Chronological studies based on scientific analyses and artifact typologies illustrate the complexity of political and cultural connections in Western Anatolia. Especially important for chronological studies in this case are grave goods, because most of the periodization and chronology studies in the region are related to archaeological finds.

#### 2.2. Geographical Overview

In Turkey today, Western Anatolia covers two main regions: central western Anatolia and the Aegean coast. These two main regions lie south of the Marmara region and also include the coastal areas of the Aegean region begins at İzmir and end beyond the city of Muğla. The inland section of the region continues to Eskişehir in the northeast, to Manisa to the northwest, to Afyonkarahisar to the east and Denizli to the southeast. The Bakır Çay, Gediz Çay, Küçük and Büyük Menderes Rivers have an east-west orientation and flow to the Aegean Sea.<sup>14</sup>

According to Ralf Becks, Western Anatolia has four main topographical regions within these border regions: coastal areas, river valleys in the western lowlands, alluvial plains in the eastern highlands. These determine the settlement structures and connections between them and mountainous areas that generally do not include major settlements.<sup>15</sup>

This mountainous area both divides and affects interaction between inland and coastal areas. These mountains give Western Anatolia some characteristics of an island, dividing it from the inland and making many sites, such as Müsgebi, more accessible by sea than by land. It is this topography that gives the region its unique culture. This combined with the serpentine nature of the coastline gave the region a character that made seafaring the optimal choice for travel to other sites in the region.

#### 2.3. Historical Geography of Western Anatolia during the LBA

#### 2.3.1. Textual and Archaeological Evidence

Textual evidence from the LBA about Western Anatolia is mostly limited to Hittite sources<sup>16</sup>, some Egyptian sources, and a single source from Western Anatolia,

<sup>&</sup>lt;sup>14</sup> Lichter 2005, 60-5.

<sup>&</sup>lt;sup>15</sup> Becks 2015, 118.

<sup>&</sup>lt;sup>16</sup> Alparslan 2015, 15-6.

the Tawalagawa Letter.<sup>17</sup> Hittite written documents, such as letters and treaties, draw a picture of the historical and political geography of Western Anatolia. These sources do not give us a full picture and reflect only the Hittites' view. However, they help us understand the conflicts, agreements and cultural changes that occurred in the region.

Studies of the historical geography of Western Anatolia focus on the lands of Ahhiyawa<sup>18</sup> and Arzawa, namely Mira-Kuwaliya, the Šeha River Land, Hapalla, and Wilusa in the LBA.<sup>19</sup> The region comprises "western and southwestern coasts, from the Troad in the north to Lukka in the south, and inland to the regions stretching north and south of the (classical) Hermus and Maeander Rivers."<sup>20</sup> The political geography of the Arzawa lands and the identification of Ahhiyawa are still controversial.<sup>21</sup> Nonetheless, the geographical and political boundaries and identifications of the the cultures of these lands are important understanding the connections between Anatolia and the Aegean.

Recent research on the geography of Western Anatolia and the political and historical geography of Arzawan lands support the claim that the Arzawa lands comprised part of Aegean region "from the Troad to the mouth of the Meander River; and identifies Ahhiyawans as the Mycenaean Greeks."<sup>22</sup> The next section gives an overview of the physical, political and historical geography of Western Anatolia, that is, the Arzawan lands and Ahhiyawa.

#### Arzawan Lands

Hittite sources detail the position of Arzawan or Arzawiyan lands politically and geographically in the LBA and the conflicts between the Hittites and the Arzawans. This section follows in chronological order descriptions of these conflicts and compares them with archaeological evidence, particularly burials.

Annals from the period of Hattušili I describe a Hittite attack related to a struggle on the borders between Hittites and Arzawans.<sup>23</sup> In the Palace Chronicle, written during the reign of Hattušili I (ruled between ca. 1650-1620 BC) or his

<sup>&</sup>lt;sup>17</sup> Beckman et al. 2011, 101-22; see also Maner 2015, 842.

<sup>&</sup>lt;sup>18</sup> Hawkins 1998, 1-31; see also Bryce 2011, 368-72.

<sup>&</sup>lt;sup>19</sup> Alparslan 2015, 132.

<sup>&</sup>lt;sup>20</sup> Hawkins 1998, 1-31; see also Bryce 2011, 363.

<sup>&</sup>lt;sup>21</sup> Hawkins 2015, 17.

<sup>&</sup>lt;sup>22</sup> Hawkins 2015, 15.

<sup>&</sup>lt;sup>23</sup> Beckman 2006, 220; see also Bryce 2011, 364.

successor Muršili I (ruled between ca. 1620-1590 BC), Nunnu from Arzawa sent precious metals to the Hittite king. The political status of Nunnu after the conquest are not clear, but the chronicle suggests a partial Hittite imposition of power over Arzawa.<sup>24</sup> Following many conflicts Arzawa benefited from a gradual Hittite weakening and an increase in own strength.<sup>25</sup>

Accounts of conflict between Arzawa and the Hittites and uprisings against the Hittite Kingdom are contained in several documents from later periods. After the conquest of Arzawa by Tudhaliya I/II (ca. 1430-1390 BC), the tension between Arzawa and the Hittites continued. This conquest was not for Hittite domination of the western borders, but to protect them.<sup>26</sup> However, Metin Alparslan claims that since the sources about the battle were written from the Hittite perspective, there might be a different story behind the conquest. According to him, Tudhaliya I/II could not dominate Western Anatolia after attacks, but rather won only secondary advantages. During his reign, he overran the states in northwestern Anatolia called the Aššuwa Coalition and which includes Wiluša.<sup>27</sup> In the same period, the names of Hapalla, Kuwaliya (Arzawan lands) and Ahhiyawa are seen in the documents for the first time.<sup>28</sup> In the reign of Muršili II (1321-1295 BC), the Manapatarhunta Treaty declared a new Arzawan land named the Šeha River Land.<sup>29</sup>

The Šeha River Land most probably consisted of the Bakır and Gediz river valleys. Kaymakçı (Fig. 2) might be the Šeha River Land capital based on written documents and on archaeological evidence. When its architectural characteristics is taken into account Kaymakçı seems to be the best candidate for a capital. It does not have the same grandeur as Troy but exhibits some characteristics that would be expected of a citadel. Kaymakçı includes both Anatolian and Aegean features and seems to have acted as a bridge or border between the two regions.<sup>30</sup> One of the examples of these shared features is two lead objects, most likely balance weights, in discoid shape. This is also important because it implies trade between the Aegean and Kaymakçı. Discoid balance weights are known not only from LBA Aegean contexts, especially from Cyclades, but also Early Minoan and the Uluburun shipwreck.

<sup>&</sup>lt;sup>24</sup> Heinhold-Krahmer 1977, 19-20; see also Alparslan 2015, 132-33.

<sup>&</sup>lt;sup>25</sup> Alparslan 2015, 134.

<sup>&</sup>lt;sup>26</sup> Garstang and Gurney 1959, 121; see also Bryce 2003, 50-1; 2011, 363-64.

<sup>&</sup>lt;sup>27</sup> Alparslan 2015, 134-35.

<sup>&</sup>lt;sup>28</sup> Otten 1972–1975, 111; see also Heinhold–Krahmer 1980–1983, 397; Alparslan 2015, 136.

<sup>&</sup>lt;sup>29</sup> Starke 2001, 346; see also Alparslan 2015, 137.

<sup>&</sup>lt;sup>30</sup> Roosevelt and Luke 2017, 122-39.

Weights of two samples are 9.1 and 10.3 which almost correspond to standard weight of the eastern Mediterranean and lightest weights in Aegean.<sup>31</sup>

Arzawan troops reached the borders of northern and central Anatolia in the reign of Tudhaliya III. In the same period the Egyptian king Amenhotep III (ca. 1391-1353 BC) proposed a marriage alliance to the king of Arzawa, possibly thinking that Arzawan power would replace that of the Hittites.<sup>32</sup> Similarly, seals of Amenhotep III made of different materials such as faience are seen in Mycenae, and these artifacts suggest a positive relationship between royals.<sup>33</sup> A scarab seal from Egypt dating from the reign of Amenhotep III were also found in the Panaztepe graves.<sup>34</sup>

The letters between the pharaoh and the Arzawan king Tarhuntaradu indicated that the latter was an independent king who extended the power of Arzawa.<sup>35</sup> Šuppiluliuma, the son of Tudhaliya III, ended the Arzawan power on their lands by force. The Deeds of Šuppiluliuma refer to the names of new land such as Mira arising during the battles; however, conflicts in the borders continued despite Šuppiluliuma's succession to the throne.<sup>36</sup>

Conflicts over the Arzawan lands continued as is evident in recorded treaties between Hittite kings and foreign rulers. For example, the easternmost state within the Arzawa lands was Hapalla in Central Western Anatolia that expanded to the northwest border of the Hittite Lower Land. Muršili II tried to solve the Arzawan issues with treaties with the kings of Hapalla (Targasnalli), Mira-Kuwaliya (Kupanta-Kurunta), and the Šeha River Land (Manapa-Tarhunda). The Mira kingdom was in conflict with Hittites, but Muršili II took back control.<sup>37</sup> Manapa-Tarhunda, the king of Mira during this period submitted, but also extended Mira's borders to Appawiya (unknown) and Lazpa (Greek Lesbos).<sup>38</sup>

During the reign of Muršili II, the Hittites battled with Arzawa and conquered Arzawan lands, the Šeha River Land, Hapalla and Mira. The Hittites later captured Wiluša and made it part of Arzawan lands. After these victories, Hittite texts stopped mentioning the name Arzawa. The allied territories of Arzawan lands were connected

<sup>&</sup>lt;sup>31</sup> Roosevelt et al. 2018, 673.

<sup>&</sup>lt;sup>32</sup> Moran 1992, 31; see also Bryce 2011, 364.

<sup>&</sup>lt;sup>33</sup> Cline 1990, 200-12.

<sup>&</sup>lt;sup>34</sup> Erkanal 1987, 258.

<sup>&</sup>lt;sup>35</sup> Shelmerdine 2008, 5 fig. I.2; see also Alparslan 2015, 136.

<sup>&</sup>lt;sup>36</sup> Bryce 2011, 364-66.

<sup>&</sup>lt;sup>37</sup> Beckman 1999, 83-4; see also Beal 2011.

<sup>&</sup>lt;sup>38</sup> Houwink ten Cate 1983, 44-6.

to Aegean communities but were divided into four by Hittites and controlled by local lords.<sup>39</sup> The date of the conquest of Arzawa is not certain because Muršili II's reign has been dated to three different periods (Fig. 3). Alparslan assumes it to be in the second half of the 14<sup>th</sup> c. BC. He divided Arzawan history into three stages: the first is dated to the period of Tudhaliya I/II, the second period continued from Tudhaliya I/II to Muršili II, and the third is a continuation of the period of Muršili II (1321-1295 BC).<sup>40</sup>

After Muršili II, his son Muwattalli II agreed treaty terms with the king of Wilusa (Alaksandu).<sup>41</sup> From the 14<sup>th</sup> c. BC Mira was the most powerful of these kingdoms and extended its power to a new land, Kuwaliya, located "near the headwaters of the Meander River, its chief city perhaps to be identified with the site of Beycesultan."<sup>42</sup>

The periods mentioned above from -Muršili II to Muwatalli II- overlap archaeological evidence both from burials and the Uluburun shipwreck. Trevor Bryce claims that the presence of Mycenaean artifacts from the Greek mainland may not be a sign of Mycenaean domination or colonization or even of Mycenaean merchants, but instead indications of trade and/or gift exchange (diplomacy), as at the Uluburun shipwreck.<sup>43</sup> The Uluburun shipwreck contained Mycenaean glass pendants, bronze needles, knives, razors, spearheads, swords, two seals, tools, and more than two dozen items of pottery, possibly demonstrating a Mycenaean presence on the ship. Except for a kylix, items of daily use such as bottles, jars and drinking cups were not exported to the Levant or Egypt. These types of drinking cups were not popular in the Near East, suggesting that these cups belonged to Mycenean officials or travelers on the ship.<sup>44</sup> Christoph Bachhuber argues that there is no evidence to support that these goods were manufactured and used by people who speak Greek and lived in citadels of Greece or Crete. He suggests that these goods produced and used by people –two people in a mixed crew– who lived in the Aegean area, but might not be Mycenaeans.<sup>45</sup> The same type of Mycenaean decorated cups (as well as local imitations), beads, and weapons

<sup>&</sup>lt;sup>39</sup> Roosevelt and Luke 2017, 122.

<sup>&</sup>lt;sup>40</sup> Alparslan 2015, 137.

<sup>&</sup>lt;sup>41</sup> Beckman 1999, 69-93.

<sup>&</sup>lt;sup>42</sup> Hawkins 1998, 22-4; see also Bryce 2011, 367.

<sup>&</sup>lt;sup>43</sup> Bryce 2011, 369.

<sup>44</sup> Bass 1986, 283-85; Pulak 1988, 17; 2006, 94-5.

<sup>&</sup>lt;sup>45</sup> Bachhuber 351-54.

were found in the five cemeteries outlined in detail in the last chapter of this thesis.

At the time of the Uluburun shipwreck, the Karabel relief, situated 28 km east of Izmir, might have marked the northern borders of the kingdom of Mira-Kuwaliya. The relief located between Torbalı and Kemalpaşa<sup>46</sup> on the way of Ephesos and Sardis, has borders with the Šeha River Land and Mira.<sup>47</sup> The monument includes a human figure and an inscription in Luwian hieroglyphs which David Hawkins explains as a relief of the king of Mira, Tarkasnawa, who ruled during the 13<sup>th</sup> c. BC during the reign of Tudhaliya IV.<sup>48</sup> Mira extended to the Šeha River Land in the north.

The northwestern part of Mira and the Šeha River Land are possibly located around the Bakır (Caicus) or Gediz (Hermus) Rivers of today.<sup>49</sup> Correspondence between Manapa-Tarhunda and Muwatalli II shows that the Hittite army reached Wilusa by passing over route of the Šeha River Land.<sup>50</sup> Bryce proposes that Wiluša bordered the Šeha River Land to the north and Mira to the south.<sup>51</sup>

He believes that, if these locations are correct, the northwest corner of the region is Troy. Bryce and others support the identification of "Wiluša" as "Troy/(W)ilios" based on Hittite texts.<sup>52</sup> In the 14<sup>th</sup> c. BC, texts began mentioning the land called Wilušiya as a part of the rebellious Aššuwan Confederacy. Bryce suggests that Taruiša and (W)ilios (in the *Iliad*) corresponds to Homeric Troy and the city of Priam respectively in the membership list of the confederacy. While these regions may have been separate, they bordered each other and shared the same cultural tradition.<sup>53</sup>

For the period in which the number of Hittite documents about Western Anatolia increased, the number of settlements and of Mycenaean artifacts also increased. For example, settlements were enlarged in the Late Helladic IIIA2 phase<sup>54</sup>, but disappeared in Ayasoluk in the same period, assumed to be Apaša, the capital of Arzawa.<sup>55</sup> If this is so, the disappearance of the settlements might be related to Muršili II's conquest of Uhhaziti and the movement of people from Ayasoluk or Apaša. Hittite

<sup>&</sup>lt;sup>46</sup> Hawkins 1998, 4-10.

<sup>&</sup>lt;sup>47</sup> Hawkins 2015, 20; Houwink ten Cate 1983, fig. 48 n. 38.

<sup>&</sup>lt;sup>48</sup> Hawkins 1998, 4-10; see also Bryce 2011, 367.

<sup>&</sup>lt;sup>49</sup> Bryce 2011, 367.

<sup>&</sup>lt;sup>50</sup> Houwink ten Cate 1983, 34–64.

<sup>&</sup>lt;sup>51</sup> Bryce 2011, 367-68.

<sup>&</sup>lt;sup>52</sup> Jablonka 2011; see also Bryce 2011, 368.

<sup>&</sup>lt;sup>53</sup> Bryce 2011, 368.

<sup>&</sup>lt;sup>54</sup> Mountjoy 1998, 36.

<sup>&</sup>lt;sup>55</sup> Alparslan 2015, 138.

texts do not mention Apaša following the defeat.<sup>56</sup> Alparslan claimed that settlements with a high number of the LH IIIB and IIIC finds should be considered as Mira cities under Hittite control. Hittite documents show the second period of Arzawa during the reign of Tudhaliya I/II as the time when Arzawa increased its power. Documents include the name of Ahhiyawa during the same period. If Mycenae and Western Anatolia merged their power against the Hittites in this period, this might have caused Uhhaziti to turn on the Hittites, prompting Milawanda to ally with Ahhiyawa against them.<sup>57</sup>

The second land related to the Greek mainland and Western Anatolia and to which the Hittite cuneiform tablets refer is Ahhiyawa, which, according to Forrer and some other scholars<sup>58</sup>, is the Hittite word for the Greek name Achaiwia, meaning *Achaian*, the name for 'Greek' in the *Iliad*. Schliemann calls the same Greeks who lived in the LBA in Ahhiyawa Mycenaeans. Two letters in the Akkadian language from Ugarit refer to Ahhiyawans which may indicate Mycenaeans came to the area for trade. Egyptian texts are thought to Mycenaean Greece in their texts as *Tanaja*.<sup>59</sup>

Bryce examines the word 'Ahhiyawa' in the Hittite texts from the perspective of these two sources. He claimed the texts defined Ahhiyawa in three ways: as an ethnogeographic term referring to the area including Mycenaean settlements, the Mycenaean Kingdom, and its territorial characteristics including political and military details. Based on these points, it is suggested that the seat of the Ahhiyawan Kingdom was in Mycenae.<sup>60</sup> The second suggestion is that it was in Thebes in Boeotia.<sup>61</sup>

Besides material evidence of sea trade connections, written documents, especially about military activities, contribute to evidence suggesting Mycenaean presence in Western Anatolia. Ahhiyawa was a disturbing military presence and political power in the region against the Hittites.<sup>62</sup> For example, Attarssiya, an Ahhiyawan leader described below the status of the Hittite LUGAL (king)<sup>63</sup>, assembled an army and created a base in Western Anatolia. Later Ahhiyawan kings benefited from this base and tried to control or at least expand Arzawan lands in the region to

<sup>&</sup>lt;sup>56</sup> Mountjoy 1998, 36; see also Alparslan 2015, 138.

<sup>&</sup>lt;sup>57</sup> Alparslan 2015, 138-40.

<sup>&</sup>lt;sup>58</sup> Forrer 1924, 113-18; see also Güterbock 1984, 114-16; Alparslan 2015, 132.

<sup>&</sup>lt;sup>59</sup> Lackenbacher and Labat 2005, 237-38; see also Singer 2006, 250-52; Cline 2009, 178.

<sup>&</sup>lt;sup>60</sup> Bryce 2011, 369.

<sup>&</sup>lt;sup>61</sup> Latacz 2004, 242–44.

<sup>&</sup>lt;sup>62</sup> Beckman 1999, 156; see also Bryce 2011, 371.

<sup>&</sup>lt;sup>63</sup> Bryce 2006, 102.

keep trade relationship going and the Hittites at bay.

Rebellion against the Hittites in Western Anatolia caused instability and risks to peace. The Tawagalawa Letter is an example of a diplomatic solution rather than the use of military force to stop rebellions. During the Muršili II period, the Hittites left an area belonging to the Hittite Kingdom under Ahhiyawan control. Based on archaeological data such as architecture and grave goods, Bryce claims that the area corresponds to Mycenaean settlements in Miletus.<sup>64</sup>

Wolf D. Niemeier<sup>65</sup> explains how and why Miletus corresponds to Milawata/Milawanda in the Hittite texts. For example, annals of the Muršili II period explain the attack on Milawata because of an alliance with the Ahhiyawan king thus separating it from Hatti. As a result, Muršili II attacked and destroyed the area that Niemeier thinks the second LBA building level in Miletus where an Aegean community may have settled and became influential.<sup>66</sup> Miletus may be one of the main harbors in the region, especially for the southern coast.

Bryce<sup>67</sup> stated that there was a Mycenaean settlement in Western Anatolia in Miletus. The site demonstrates a range of periods from prehistoric through to Roman, including Mycenaean building levels, which are chronologically parallel to the presence of Mycenaean pottery in the Değirmentepe cemetery.<sup>68</sup> After the Minoan settlement was destroyed in the first half of the 15<sup>th</sup> c. BC, Mycenaeans settled in Miletus among other settlers. The high volume of Mycenaean pottery and parallel tholos tombs correspond to the Level of Miletus V. Level VI, the last LBA phase of Miletus, dates to the 14<sup>th</sup> c. BC. Mycenaean material culture are represented in the settlement, including burials, pottery, and fortifications, but it also features elements mixed with the local culture.<sup>69</sup>

In a letter Hattušili III called the Ahhiyawan leader 'king and brother'. This might have been a strategy to reinstate peace and stability in the region, because there is no other example of an Ahhiyawan leader being considered equal to a king in Near Eastern documents. Ahhiyawa continued to support rebellions during the periods of Hattušili III and Tudhaliya IV. Tarhunaradu occupied the throne of the Šeha River

<sup>&</sup>lt;sup>64</sup> Bryce 2011, 371.

<sup>&</sup>lt;sup>65</sup> Niemeier 1998, 37-9.

<sup>&</sup>lt;sup>66</sup> Goetze 1933, 36-7; see also Niemeier 1998, 37-9.

<sup>&</sup>lt;sup>67</sup> Bryce 2011, 369-70.

<sup>&</sup>lt;sup>68</sup> Niemeier 1998, 35-7; Gür 2014, 94-5.

<sup>&</sup>lt;sup>69</sup> Niemeier 1998; 2005.

Land and lead rebellions during the reign of Tudhaliya IV.<sup>70</sup> The Milawata letter<sup>71</sup> mentions that Tudhaliya attacked Ahhiyawa and took back control of Miletus. The Ahhiyawan king's name was deleted from the Great Kings' list with a line drawn through the name on the tablet before the clay dried.<sup>72</sup>

#### 2.4. Chronology

This section summarizes of the chronological problems, developments, and changes in Western Anatolian sites, namely Troy, with an Aegean chronology, together with Çeşme-Bağlararası, Liman Tepe, Panaztepe, and the Bronze Age phases of Miletus. It identifies graves in the maritime cultural landscape, discusses other evidence in the material culture, and outlines the geography of the region with a chronology and comparison of the coastal sites. The discussion includes research on the synchronizations of the 2<sup>nd</sup> millennium BC chronology in order to explain how it was shaped at the beginning and developed by scientific analyses and typological comparisons of ceramics from each site. Developing the chronology of the Western Anatolia requires to evaluate Aegean, Anatolian, and Mesopotamian chronologies to plot a better background. The aim of this section is to bring together debates about the forming of local chronologies, the LH, and problems that occurred during the process.

Mycenaean pottery in inland areas is distributed differently than in coastal sites. Only a few samples were found in inland sites: a LH IIIA or B single sherd from Beycesultan, two Mycenaean sherds from Gavurtepe Höyük (Alaşehir)<sup>73</sup>, six LH IIIA-C Mycenaean vessels from Düver<sup>74</sup>, two Mycenaean vessels from Dereköy.<sup>75</sup> The periodization of coastal areas is based on Mycenaean pottery or local characteristics that coincide with Mycenaean pottery. Neither site presents enough evidence to explain culture of Western Anatolia in its entirety. Coastal sites have been excavated more so than inland ones, but still lack of their own unified periodization and chronology.<sup>76</sup>

Problems of chronology in Western Anatolia from the 2<sup>nd</sup> millennium BC arise

<sup>&</sup>lt;sup>70</sup> Bryce 2005, 304-5; 2011, 371-72.

<sup>&</sup>lt;sup>71</sup> Beckman 1999, 144-46.

<sup>&</sup>lt;sup>72</sup> Beckman 1999, 106-11; see also Bryce 2011, 372.

<sup>&</sup>lt;sup>73</sup> Boysal 1967a, 18.

<sup>&</sup>lt;sup>74</sup> Özgünel 1983, 740.

<sup>&</sup>lt;sup>75</sup> Özgüç et al. 1964, 30; see also Seeher 2005, 37-8.

<sup>&</sup>lt;sup>76</sup> Pavuk 2015, 83-5.

from the lack of publications on chronology, stratigraphy and excavations. For example, the Troy and Beycesultan chronologies are used for both Western Anatolian coastal and inland sites. This study does not include the Beycesultan chronology since the focus is on coastal areas.

The most commonly accepted chronology in Western Anatolia is that of Arne Furumark.<sup>77</sup> Terminologically this chronology is named Late Helladic periodization. It was applied in Western Anatolia, especially in coastal areas, except for places where the LH chronology is used such as Miletus, Panaztepe, and Troy, which have local chronologies. The Mycenaean term for pottery is a stylistic and cultural definition that refers to different types of fine ware which are partially derived from Minoan patterns.<sup>78</sup> This pottery is also called culturally Mycenaean when it is found outside its own region. This is important to understand the difference between the use of the terms 'Mycenaean' and 'LH' in Western Anatolia.<sup>79</sup>

Problems of periodization occur not only for the LBA but also for the Middle Bronze Age. The MBA in Anatolia begins in the 2<sup>nd</sup> millenium BC in the Middle Chronology<sup>80</sup> and corresponds to Old Assyrian Colony period.<sup>81</sup> In Western Anatolia and Aegean, before using High Aegean chronology -besides local chronologies-, chronology synchronized with the Low Chronology (of Egypt) and then the Middle Chronology of the Near East (Fig. 4), and even after the High Aegean chronology is suggested, debate about synchronization of these chronologies continues since the dates of important events such as Thera eruption are still up to interpretation. Following subsequent research at Troy, the date of Troy V shifted to the 2<sup>nd</sup> millennium BC, along with a shift of Troy VI to ca. 1750.<sup>82</sup> The change in these periods caused a redating of the west Anatolian LBA. Peter Pavuk claims that the LBA chronologies known as Troy VIb-c, Liman Tepe III1-2, and Beycesultan IVc horizons should start earlier (Fig. 5).<sup>83</sup> This is because the appearance of new shapes and forms of pottery, such as Gray Ware and Red Plain Ware in Western Anatolia, also led to a re-dating of Troy V. He uses this chronology based on a well- studied typology and on an absolute

<sup>&</sup>lt;sup>77</sup> Furumark 1941a-b.

<sup>&</sup>lt;sup>78</sup> Rutter 2012, 418.

<sup>&</sup>lt;sup>79</sup> Rutter 2012, 416-22.

<sup>&</sup>lt;sup>80</sup> Bryce 2005. Middle Chronology refers to foundation of Hittite kingdom in the early or middle 17th c. BC.

<sup>&</sup>lt;sup>81</sup> Manning et al. 2016, 2-5.

<sup>&</sup>lt;sup>82</sup> Brein 2000, 53-5; see also Kitchen 2000, 39; Manning et al. 2016.

<sup>&</sup>lt;sup>83</sup> Pavuk 2015, 85.

chronology of other scholars that dates these horizons to  $1600^{84}$  -  $1700^{85}$  BC.

## 2.4.1. Late Bronze Age

This section focuses on the LBA because the graves identified are dated to the second half of the 2<sup>nd</sup> millennium BC. The archaeological study of the LBA along the Western Anatolian coastal depends on the High Aegean chronology, which starts after 17<sup>th</sup> c. BC<sup>86</sup> because the dating of graves is based on Helladic periods for pottery as grave goods.<sup>87</sup> The high chronology is based on in part on radiocarbon dating. The difficulty of determining absolute dates by radiocarbon dating is that samples from later periods of the Bronze Age. They can give two different dates for the same fragment, because of fluctuation in measurements as a result of fluctuations in atmospheric carbon over time. This can be seen in samples of 17<sup>th</sup> and 16<sup>th</sup> c. BC. Cynthia W. Shelmerdine claims evidence of Thera eruption which dated to around 1700 BC.<sup>88</sup>

Relative chronology for the region is based on parallels between pottery samples in a consistent seriation based on index fossils. As is shown in the figures (Fig. 5, 6, and 7) in this section, these periods are not sharp categories. They overlap, conflict, and change over time because Western Anatolia does not have a unified chronology. Levels of precision, accuracy and inconsistency brought on by the application of radiocarbon dating raised questions about the reliability of absolute chronologies in comparison to more traditional periodization methods.<sup>89</sup>

The traditional Low Chronology synchronizes with the Near East, especially Egypt. The Egyptian chronology depends on contemporaneous sources such as Egyptian king lists and astronomical observations.<sup>90</sup> The comparison between Egyptian and Mycenaean chronologies is based on finds of Mycenaean objects in Egyptian stratified contexts and correlations with Egyptian objects in Mycenaean

<sup>&</sup>lt;sup>84</sup> Günel 1999, 55-64.

<sup>&</sup>lt;sup>85</sup> Pavuk 2014, 363-68; 2015, 84-6.

<sup>&</sup>lt;sup>86</sup> Pavuk 2015, 84.

<sup>&</sup>lt;sup>87</sup> Furumark 1941a, fig. 12, 16, 17, 51; see also Boysal 1963, 71-5; Mee 1978, 133; Korfmann 1986a, 22-4; Erkanal 1987, 258; Mountjoy 1998, 54-5; Benter 2010, 346-47; Çınardalı-Karaaslan 2012, 125; İslam and Aslan 2015, 382.
<sup>88</sup> Shelmerdine 2008, 6.

<sup>&</sup>lt;sup>89</sup> Dickinson 1994, 20-1; see also Kitchen 2000, 41-4; Shelmerdine 2008, 6; Özgünel 2013, 145.

<sup>&</sup>lt;sup>90</sup> Brein 2000, 53-5; Kitchen 2000, 39.

levels.<sup>91</sup> The building levels of the sites and graves in stratigraphy also include a mix of Middle Anatolian<sup>92</sup>, Liman Tepe<sup>93</sup>, Troy<sup>94</sup> and High Aegean chronologies in Western Anatolia. The LBA chronology, which depends on Mesopotamia, is no longer applicable for Central and Western Anatolia after 15<sup>th</sup> c. BC.<sup>95</sup>

The Low<sup>96</sup> Chronology dated the Thera eruption a hundred years later by examining the materials of Late Minoan IA-B phase for synchronisms and transition between phases.<sup>97</sup> Shelmerdine (Fig. 6-7) demonstrates these differences and explains that, as opposed to the LM IB and LH IIIA phases, LM IA does not overlap with the Egyptian phase. Material studies present the Low Chronology as more reliable, but Low and High chronologies agreed about the beginning of the LM IIIA1 phase. Shelmerdine's another chart (Fig. 6) supports the High Chronology dating for the length of the LM IB-II phase.<sup>98</sup>

Furumark organized the relative and absolute chronologies of the LH period following an analysis of pottery typologies and styles. He used Mycenaean pottery in Egyptian and Levantine contexts to synchronize the chronology. These chronologies exemplify Arthur Evans'<sup>99</sup> definition of the Late Minoan period that derived from the Egyptian royal dynasties for both relative and absolute chronologies. He examined tombs and building levels to identify parallels with pottery, and initially defined the pottery sequence as Mycenaean I-II-III.<sup>100</sup>

Elizabeth B. French developed Furumark's chronology to evaluate deposits of fragments from settlements at Mycenae and reshaped the LH IIIB-C phases.<sup>101</sup> The LH III remains are generally situated on rocky or eroded hills where people settled. She asserts that because pottery remains are preserved better in tombs than settlements scholars do not focus on pottery sherds in settlements. These factors make it even more difficult to date and divide pottery chronologically to the LH.<sup>102</sup> Penelope Mountjoy investigated the contexts of settlements that were mostly destroyed but that could be

<sup>&</sup>lt;sup>91</sup> Blegen 1995, 160.

<sup>&</sup>lt;sup>92</sup> Yakar 2011, 56-93.

<sup>93</sup> Erkanal 2008, 76-85; Mangaloğlu-Votruba 2015, 647-48.

<sup>94</sup> Blegen 1995.

<sup>&</sup>lt;sup>95</sup> Pavuk 2015, 84.

<sup>&</sup>lt;sup>96</sup> Shelmerdine 2008, 6; see also Manning 2012, 14.

<sup>&</sup>lt;sup>97</sup> Manning et al. 2006, 569.

<sup>&</sup>lt;sup>98</sup> Shelmerdine 2008, 6.

<sup>99</sup> Evans 1921.

<sup>&</sup>lt;sup>100</sup> Furumark 1941a-b.

<sup>&</sup>lt;sup>101</sup> French 1963; see also Rutter 2012, 416.

<sup>&</sup>lt;sup>102</sup> French 1963, 44.

distinguished, and divided the LH III into sub-phases, namely the LH IIIC Early, Middle and Late along with the Submycenaean.<sup>103</sup>

The coastal sites of Western Anatolia are divided into three periods. The LH chronology correspond to LBA periods as the LH I-II and LBA 1, IIIA-B and LB2, and IIIC and LB3 in coastal Western Anatolia.<sup>104</sup> The dates of the graves in this study are the LH IIIA1-2, IIIB1, IIIC, and rarely II B in terms of the pottery chronology. Besides Beşik Tepe, which was a harbor of Troy and has connection to Panaztepe, and Miletus, that have settlements and parallels in building levels, all are dated based on Mycenaean pottery and local chronologies.<sup>105</sup> Mountjoy<sup>106</sup>, Jeremy Rutter<sup>107</sup>, and other scholars align political, economic, and social conditions to pottery sequences. The LH I-IIA is linked with the beginning of the formation of Mycenaean culture in the Peloponnese.<sup>108</sup> These phases carry Minoan motifs and style, although the Minoan stylistic influence disappeared in the LH IIB with the LM IB destruction in Crete.<sup>109</sup> The LH IIIA1 pottery is uniform with new shapes appearing on the mainland; protopalaces were constructed in this 14<sup>th</sup>-13<sup>th</sup> c. BC phase in mainland Greece.<sup>110</sup> The power and economy of Mycenaean's palatial centers improved and expanded in the LH IIIA2. Mass production of pottery for locals and export started in this period.<sup>111</sup> The transition between the LH IIIA2 and the LH IIIB can be seen in the Uluburun shipwreck. The shipwreck dated to the late 14<sup>th</sup> c. BC based on dendrochronology and radiocarbon dating besides stylistic dating of many objects.<sup>112</sup> As a result of these analyses with two calibration data sets, Bayesian analysis, comparison between Uluburun shipwreck and Near Eastern and Egyptian chronologies, Uluburun shipwreck dated approximately  $1320 \pm 15$  BC, and artifacts dated between  $17^{\text{th}}$ - $14^{\text{th}}$ c. BC.<sup>113</sup>

The Uluburun shipwreck finds do not include LH IIIB pottery but includes

<sup>&</sup>lt;sup>103</sup> Mountjoy 1986; 2008.

<sup>&</sup>lt;sup>104</sup> Pavuk 2015, 96-7.

<sup>&</sup>lt;sup>105</sup> Furumark 1941a, fig. 12, 16, 17, 51; see also Boysal 1963, 71-5; Mee 1978, 133; Korfmann 1986, 22-4; Mountjoy 1986; 2008; Erkanal 1987, 258; Mountjoy 1998, 54-5; Benter 2010, 346-47; Çınardalı-Karaaslan 2012, 125; İslam and Aslan 2015, 382.

<sup>&</sup>lt;sup>106</sup> Mountjoy 1986; 1999; 2008.

<sup>&</sup>lt;sup>107</sup> Rutter 2012, 415-29.

<sup>&</sup>lt;sup>108</sup> Rutter 2012, 416-17.

<sup>&</sup>lt;sup>109</sup> Furumark 1941b, 98-9; see also Mountjoy 1986, 37-50; 2008, 47.

<sup>&</sup>lt;sup>110</sup> Hope-Simpson and Dickinson 1979, 378; see also Mountjoy 1986, 51-66; 2008, 53.

<sup>&</sup>lt;sup>111</sup> Furumark 1941b, 99; see also Mountjoy 2008, 59.

<sup>&</sup>lt;sup>112</sup> Erkanal 1987, 258; see also Mellink 1983, 139; Pulak 2006.

<sup>&</sup>lt;sup>113</sup> Erkanal 1987, 258; see also Mellink 1983, 139; Pulak 2006; Manning et al. 2009, 163-87.

pottery from the LH IIIA period.<sup>114</sup> The Argolid was producing Mycenaean type pottery in the LH IIIB period when the ship sank. Malcolm Wiener claims that the Uluburun shipwreck represents the transition between IIIA and IIIB in the Late 14<sup>th</sup> c. BC.<sup>115</sup> The LH IIIB might be prolonged into the 19<sup>th</sup> Dynasty, according to Kenneth Kitchen.<sup>116</sup> Western Anatolian sites such as Troy<sup>117</sup> and Liman Tepe<sup>118</sup> demonstrate these associations in chronology and, together with the examples given above, help to clarify the chronological range. These associations suggest that the chronological framework needs to include earlier typological periods.

The subdivisions of the LH IIIB1-2 phases are different. LH IIIB2 is not common except in the Argolid.<sup>119</sup> Furthermore, examples of this pottery are not seen in Western Anatolian graves. The palace system in Argolid ended after the destructions at the end of the LH IIIB2 phase.<sup>120</sup> In the LH IIIC Early phase uniformity of pottery styles on the mainland was lost. New motifs and styles appeared in the LH IIIC Middle phase, but many shapes and styles had disappeared by the LH IIIC Late phase.<sup>121</sup>

The synchronisms of the LBA Aegean with Egyptian chronology start with earlier phases. The LM IA period corresponds to the 18<sup>th</sup> Dynasty in Egypt, which began in either 1550 or 1539 BC, based on Middle Bronze II Syro-Palestinian stone vessels found in Akrotiri (Thera). The dynasty includes the reigns of Hatshepsut and Tuthmosis II and III that correspond to LM IB, the LH IIA (1525-1450 BC.), and the LH IIB (1450-1425) phases.<sup>122</sup> LM IIIA1, Late Cycladic III Early, LH IIIA1 (1425-1375) phases correspond to the reign of Amenhotep III. The LH IIIA2 phase (1375-1200 BC (Early and Late) and partially IIIB phase (possibly around 1300 BC) correspond with Akhenaten's reign (1352-1336 BC) in the chronology.<sup>123</sup> A scarab seal of Amenhotep III in a LH III context at the Panaztepe cemetery chronologically supports these correlations.<sup>124</sup>

Carl Blegen describes the occupation phases at Troy and classified the site's

<sup>&</sup>lt;sup>114</sup> Bachhuber 2006, 347.

<sup>&</sup>lt;sup>115</sup> Wiener 2003.

<sup>&</sup>lt;sup>116</sup> Kitchen 2000, 41-4.

<sup>&</sup>lt;sup>117</sup> Blegen 1995; Pavuk 2002; 2007; 2015.

<sup>&</sup>lt;sup>118</sup> Erkanal 2008, 76-85; Mangaloğlu-Votruba 2015, 647-68.

<sup>&</sup>lt;sup>119</sup> French 1966, 216-17; see also Mountjoy 2008, 90.

<sup>&</sup>lt;sup>120</sup> Hope-Simpson and Dickinson 1979, 378-79.

<sup>&</sup>lt;sup>121</sup> Mountjoy 1986, 134-93; 2008, 122-30.

<sup>&</sup>lt;sup>122</sup> Warren and Hankey 1989, 141-54.

<sup>&</sup>lt;sup>123</sup> Dickinson 1994, 20-1; Kitchen 2000, 41-4.

<sup>&</sup>lt;sup>124</sup> Mellink 1983, 139; see also Erkanal 1987, 258.

pottery. Troy VI is represented by eight phases of stratigraphy with groups of letters between a-h and Early, Middle and Late subgroups. Subdivisions are based on architecture.<sup>125</sup> Pavuk outlines ceramic phases in Troy and explains four phases of Troy VI that are also called Early and Middle Troy. Troy V shapes and designs continued into Troy VI, but a new pottery type called Gray Ware also appeared. The first production of this ware was in the Aegean. Pavuk and others advised that Gray Ware, a local ware, should be studied independently. Some of the pottery types of Troy V such as Red Bowls, disappeared at this stage, which Blegen described as Troy VIa and which Pavuk states is the transition between Troy V and VI.<sup>126</sup>

The second phase of Troy VI is associated with Blegen's Troy VI middle and late phases of architecture. Mycenean pottery appears from the third phase in this level and includes Troy VI middle and the first part of the late phase. Further, Tan Ware appeared in Troy VI and became dominant in Troy VIIa. Mycenaean pottery in the third phase is associated with Blegen's VId, VIe, and VIf phases.<sup>127</sup> The third phase of Troy VI matches the LH IIA and B phases.<sup>128</sup> The fourth phase connects Blegen's VI Late phase with VIg and VIh phases. Based on Mountjoy's revision, this nomenclature corresponds to the LH IIIA1 and IIIA2 phases respectively.<sup>129</sup> The preliminary results of radiocarbon dating at Troy for the Late Troy VI, VIIa, and VIIb periods are in accord with the Mycenaean absolute chronology, but are not fully confirmed.<sup>130</sup> Blegen supports this last results, with Tan Ware examples decorated with the LH III style in the Troy VIIa context.<sup>131</sup> A lack of analyses of the materials from the second half of the 2<sup>nd</sup> millennium BC complicates the description of pottery in this context, and finds of organic remains should help to complete research on dating.<sup>132</sup>

Coşkun Özgünel and Ahmet Ünal<sup>133</sup> claim that Miletus and Troy have common characteristics such as similar Mycenaean phases in the settlement areas based on Mycenaean pottery finds. Unlike Ünal, Christopher Mee does not believe that Mycenaean settlements or colonies existed at these sites. Mee claimed that these

<sup>&</sup>lt;sup>125</sup> Blegen et al. 1953a, 11-20.

<sup>&</sup>lt;sup>126</sup> Blegen et al. 1953a, 11-20; see also Pavuk 2007, 473; 2015, 84-7.

<sup>&</sup>lt;sup>127</sup> Blegen et al. 1953b, fig. 382; see also Pavuk 2007, 474.

<sup>&</sup>lt;sup>128</sup> Mountjoy 1986, 2008, 17-50; 37-52 see also Pavuk 2007, 476.

<sup>&</sup>lt;sup>129</sup> Mountjoy 1986, 51-92; 1997, 292.

<sup>&</sup>lt;sup>130</sup> Korfmann et al. 2003, 50.

<sup>&</sup>lt;sup>131</sup> Blegen 1995, 161.

<sup>&</sup>lt;sup>132</sup> Pavuk 2007, 476.

<sup>&</sup>lt;sup>133</sup> Ünal 1991, 16; Özgünel 2013, 141.

settlements were indigenous and interacted with the Mycenaeans.<sup>134</sup> Miletus shows LH I pottery in the settlement, after the decrease in LM I pottery. The LH II in Miletus still carries the LM I-II influence. Most of the Mycenaean pottery in this settlement was imported from the Argolid and dates to the LH IIA phase specifically. These phases correlate with finds from the Müsgebi graves and Troy settlements (Fig. 7).<sup>135</sup>

Phases at Miletus dating to the very end of the IVA, IVB, V, and the beginning of the VI phases associated with the LBA 1A-B, 2A-B and dated from 1600 to 1200 BC, also correspond to the LH I, IIA-B, and IIIA-B phases.<sup>136</sup> The Değirmentepe cemetery in Miletus is found in Building Level 3 in the settlement area. Weickert proposed that the beginning of this level is a transition from the Middle Minoan III phase to the LM I phase based on local wares.<sup>137</sup> Liman Tepe II.2-3 and Troy VId-e-fg-h and VIIa phases correspond to the later IVa-b, V, and VI levels of Miletus.<sup>138</sup>

The Liman Tepe and Çeşme-Bağlararası periodization (Fig. 8-9) also present parallelism with other Western Anatolian coastal sites and the Aegean.<sup>139</sup> After the excavations, the LBA site Liman Tepe was dated to the LH III phase.<sup>140</sup> Layer II, with its three subdivisions, corresponds to the LBA and Çeşme-Bağlararası Level 0. They correspond to the LH IIIA2-B phase.<sup>141</sup> The ceramics of this phase were found in Layer II.3 of the northern and southern structures.<sup>142</sup> Local and Mycenaean pottery in Layer II.2 also dated to the LH IIIA2-B phase.<sup>143</sup> A structure in the northwestern part of the 4<sup>th</sup> phase in Layer II.1 contained local, Mycenaean imported, and locally produced Mycenaean imitation pottery. Local examples contain Troy A93 type<sup>144</sup> and Mycenaean pottery dated to the LH IIIB-C period in Liman Tepe. Other LH IIIC examples are from a construction to the east of this structure. Many of the structures include LH IIIC<sup>145</sup> and Troy local bowls, kylixes, and pots.<sup>146</sup>

In sum, based on the intensity and condition of pottery in the context of the

<sup>&</sup>lt;sup>134</sup> Mee, 1978, 148; Ünal 1991, 16; Özgünel 2013, 141.

<sup>&</sup>lt;sup>135</sup> Özgünel 2013, 141-45.

<sup>&</sup>lt;sup>136</sup> Pavuk 2015, 85 fig. 1.

<sup>&</sup>lt;sup>137</sup> Weickert 1957, 117-18; Niemeier 1998, 36-7.

<sup>&</sup>lt;sup>138</sup> Pavuk 2015, 85.

<sup>&</sup>lt;sup>139</sup> Pavuk 2015, 85 fig. 1.

<sup>&</sup>lt;sup>140</sup> Mangaloğlu-Votruba 2015, 647-48.

<sup>&</sup>lt;sup>141</sup> Erkanal 2008, 91-100; Şahoğlu 2015, 594.

<sup>&</sup>lt;sup>142</sup> Furumark 1941a, 302-6; Erkanal 2008, 94.

<sup>&</sup>lt;sup>143</sup> Erkanal 2008, 96.

<sup>&</sup>lt;sup>144</sup> Pavuk 2002, 61.

<sup>&</sup>lt;sup>145</sup> Erkanal 2008, 97-8.

<sup>&</sup>lt;sup>146</sup> Pavuk 2002, 59-61.

phases, the Layer II.3-LH IIIA2, Layer II.2-LH IIIB, and Layer II.1-LH IIIC corresponds each other in Liman Tepe and other sites in Western Anatolia. Besides the LH pottery, Gray Ware and reddish buff clay pottery of the LBA were found at Liman Tepe.<sup>147</sup>

The wine production workshop in Layer II.2 at Liman Tepe and the Çeşme-Bağlararası wine workshop are similar. The Liman Tepe workshop was dated to the beginning of the LBA based on the Çeşme-Bağlararası workshop that.<sup>148</sup> Oval, elliptical, and apsidal forms of architecture, which had almost disappeared at the end of the MBA<sup>149</sup>, were used again in the Aegean, Crete, and Western Anatolia<sup>150</sup>, as in Layer II.1 in Liman Tepe.<sup>151</sup> Ovoid structures are seen in the MBA and Early Iron Age as a sign of continuation of the site chronologically.<sup>152</sup> Çeşme-Bağlararası has a similar continuation, but also a gap between the periods. Level 1 in Çeşme-Bağlararası presents different phases. The Minoan or Minoanizing style of pottery in Level 1 disappears at the end of this level, which dates to the LBA and corresponds to the LM 1A phase.<sup>153</sup> Following this gap, the LH IIIA2-IIIB1 periods continue<sup>154</sup>, and imported Mycenaean pottery and their local imitations were found together in these periods.<sup>155</sup>

Liman Tepe and Miletus also have an important common feature in terms of chronology and parallels. Layer II.3 of Liman Tepe includes several kilns for pottery production.<sup>156</sup> One of them is typologically and chronologically parallel to a kiln in Miletus.<sup>157</sup> The Miletus kiln is dated to the LH IIIA1-2 period. Another kiln on the southeastern side of the example given and divided by different structures has parallels with a kiln from Miletus. Materials for construction, style, and form of these two kilns are close and dated to the LH IIIA1-2 phase. The only difference between them is the stone base under the mudbrick wall of the Liman Tepe kiln.<sup>158</sup>

The Panaztepe cemetery and settlement areas include local and Mycenaean

<sup>&</sup>lt;sup>147</sup> Günel 2008, 135; see also Mangaloğlu-Votruba 2015, 647-48.

<sup>&</sup>lt;sup>148</sup> Erkanal and Karaturgut 2004, 156–57 pl. 11–2; Şahoğlu et al. 2008, 314–15.

<sup>&</sup>lt;sup>149</sup> Mazarakis–Ainian 1989; Schiering 1959/60, 7–8.

<sup>&</sup>lt;sup>150</sup> Warner 1979; Mazarakis–Ainian 1989, 269; Erkanal and Özkan 1999, 341–42, 348.

<sup>&</sup>lt;sup>151</sup> Mangaloğlu-Votruba 2015, 656-57.

<sup>&</sup>lt;sup>152</sup> Erkanal and Günel 1995, 267–69, 275; 1996, 307–8; Erkanal 2000, 253.

<sup>&</sup>lt;sup>153</sup> Şahoğlu 2015, 594, 606.

<sup>&</sup>lt;sup>154</sup> Şahoğlu et al. 2008, 310; 2015, 606.

<sup>&</sup>lt;sup>155</sup> Şahoğlu 2015, 606.

<sup>&</sup>lt;sup>156</sup> Erkanal 2008, 95.

<sup>&</sup>lt;sup>157</sup> Weickert et al. 1959, 11.

<sup>&</sup>lt;sup>158</sup> Erkanal 2008, 95.

pottery at the same time and correspond to the LH phases as at the other sites described above. Sevinç Günel compares building levels for stratigraphy and pottery for typological chronology. The cemetery phases are divided to four and correspond to all three main periods of the LH; the first phase is the MBA, phases two and three correlate with the LH I and IIA-B, the LH IIIA1-2 phases, respectively. The last phase dates to the LH IIIB1-2 and IIIC phases.<sup>159</sup>

The difference between the materials of the inland and coastal sites, especially pottery, makes it difficult to find explanations for differences, correlations, and the networks between sites. It makes hard to solve issues in the Western Anatolia chronology. Coastal sites themselves also do not present a full correlation but have closer connections to each other than to inland areas, as mentioned in chapter and the sections above. This still does not give a solution for the Western Anatolian chronology because part of these sites such as Miletus and Liman Tepe have their own periodization.

Limited excavations and publications, looted, damaged settlements or materials, and the resulting margin of error in analyses for absolute and relative chronology are not negligible issues. These problems make it difficult to correlate different sites in the same local region. Each site has its own issues: for example, settlements have not yet been found around some of the cemetery sites such as Müsgebi. This situation does not allow for a stratigraphic comparison of regional settlements in context to describe/outline chronology. Western Anatolia was a unique and mixed culture that reflected many aspects of both Anatolian and Aegean cultures as well as connections with other regions. The characteristics and geographical conditions that separate the coastal from the inland areas in Western Anatolia demonstrate the need for a regionally unified chronology.

 $<sup>^{159}</sup>$  Günel 1999, 121-59. The details of pottery and dating of the cemetery are discussed in the 4<sup>th</sup> chapter.



# Chapter 3:

# THEORETICAL BACKGROUND

This chapter includes three main sections: "Maritime Cultural Landscape", "The LBA Coastal Burials in Western Anatolia", and "Mycenaean Burial Customs during the LH". All these sections consist previous studies, theoretical background of terminology, and recent developments in studies about these subjects. The first section describes the maritime cultural landscape concept with its terminological history and applications of the concept in burial studies. This framework would contribute to examine coastal burials in Western Anatolia through comparison with previous studies.

The second section is an outline of characteristics and literature review of Western Anatolian burials, specifically in the coastal landscape and covers different aspects of burial tradition such as grave goods, which are examined through five specific sites in the Chapter 4. The section associates Western Anatolian burials to the concept of the maritime cultural landscape and demonstrates Mycenaean characteristics in burials which are examined in the next section. The third section explains Mycenaean burial customs, with a particularly focus on the impact of maritime activities on burial customs and traditions. These sections provide a basis to understand the importance of Western Anatolian coastal graves and Mycenaean connection to maritime cultural landscape of the LBA Aegean. This chapter prepares the ground to the fourth chapter "LBA Graves in Western Anatolia: The Maritime Cultural Landscape and Mycenean Connections" to understand the particular significance of chosen five sites and their relevance to the concept.

# 3.1. The Concept of the Maritime Cultural Landscape

# 3.1.1. Background of the Term and its Connections

The definition of 'maritime cultural landscape' has been developing since the

first description by Westerdahl in 1978, as has an awareness of its limitations.<sup>160</sup> Before adopting the term "maritime cultural landscape", "relic or fossil" landscape archaeology was used as the relevant terms that included both the sea and land.<sup>161</sup> This concept was influenced by various disciplines such as history, geology, and archaeology, along with human activities in maritime systems and economies, also called "mariculture."<sup>162</sup> Maritime culture can manifest itself in cultural traditions and material remains in the physical landscape. For example, Westerdahl cited Adrian H. Prins' example of Swahili religious poetry to illustrate the point. Swahili is an indigenous African language spoken on the eastern shores of the continent where it meets the Indian Ocean. Populations of fisherman and sailors in this society, the types of their daily habits, such as maritime activities, rituals, myths, and leisure activities related to the sea, are parts of maritime culture and poetry.<sup>163</sup> As a result, the poetry incorporates imagery of fish, sea and waves.

The invention of the concept relates to the necessity of identifying the maritime cultural remains on land. Westerdahl coined the term during his surveys of coast of Swedish Norrland.<sup>164</sup> The focus of the survey was underwater, and coastal survey, but activities such as fishing, hunting, and shipping were not limited to the sea. Therefore, examining the material remains related to these activities on land became a necessity.<sup>165</sup> Westerdahl and his team included in the term the geological conditions and changes to the coast of Scandinavia since the Ice Age.<sup>166</sup>

The idea of the maritime cultural landscape evolved in Westerdahl's later research. In earlier research on the maritime cultural landscapes the main foci were boatbuilding, economic activities, such as fishing, hunting, shipyards, ancient harbors, ports, and maritime settlements. The lighthouses, seamarks and similar elements of maritime culture were emphasized as secondary subjects.<sup>167</sup> The maritime cultural landscape concept was later extended to memorials, graves, material culture, artifacts and their production, rituals, maritime practices in daily life and other characteristics of culture.

<sup>&</sup>lt;sup>160</sup> Westerdahl 1992, 5-6.

<sup>&</sup>lt;sup>161</sup> Westerdahl 2013, 734-35.

<sup>&</sup>lt;sup>162</sup> Westerdahl 1992, 6.

<sup>&</sup>lt;sup>163</sup> Prins 1965; see also Westerdahl 1994, 265.

<sup>&</sup>lt;sup>164</sup> Westerdahl 1978; see also Westerdahl 1992.

<sup>&</sup>lt;sup>165</sup> Westerdahl 1992, 5.

<sup>&</sup>lt;sup>166</sup> Westerdahl 2013, 734-35.

<sup>&</sup>lt;sup>167</sup> Westerdahl 1992, 5.

The concept consists of several concepts. Parker demonstrates the maritime perspective about the landscape in three characteristics.<sup>168</sup> "Plot" is the mapping and monitoring of the landscape, which is also called "relict cultural landscape" in Westerdahl's definition.<sup>169</sup> "Pattern" is the material culture of the area. The pattern of the sea is different from that of the land. Maritime cultural patterns are underwater remnants, such as artifacts and architectural remains related to maritime activities, and "nodal points" such as harbors.<sup>170</sup> Westerdahl also describes "transport and local zones" which refer to nodal points, rivers, straits, estuaries, and coastscapes.<sup>171</sup> A third characteristic is the "interpretive model" which means the system or web of interactions. The interpretive model refers to connections between all the fields of maritime activities.<sup>172</sup> Parker describes "models" based on material culture and defines contextualizing social and political practices.<sup>173</sup> Moreover, based on Orvar Löfgren's<sup>174</sup> definition of cognitive landscape, Westerdahl extends the approach by including the cognitive perspective of humans. He claims that the concept should comprise cognitive or immaterial components of the maritime cultural landscape such as place names as well.<sup>175</sup>

Westerdahl emphasizes five primary elements of the maritime cultural landscape. Two of these are shipwrecks and terrestrial remains such as lighthouses, fish weirs, and artificial port structures. The third, "the tradition of usage", refers to cognition of people about the environment and their usage of it. The knowledge of the best location for a harbor or recognition of the need to move the harbor based on changing environmental conditions are examples of the tradition of usage.

The last two components described by Westerdahl are natural topography, which refers to examining natural harbor basins and traditions of usage together, and place names. Westerdahl adds diverse criteria to evaluate the maritime cultural landscape. One of them is the idea of transit points. These examine the type of boats, activities, practices, and changes on the intersection of river-based and sea-based points. It is the practice of change when transferring from the sea to inland waterways.

<sup>&</sup>lt;sup>168</sup> Parker 2001, 23.

<sup>&</sup>lt;sup>169</sup> Westerdahl 1992, 5; see also Parker 2001, 22-5.

<sup>&</sup>lt;sup>170</sup> Parker 2001, 23.

<sup>&</sup>lt;sup>171</sup> Westerdahl 1994, 265-68.

<sup>&</sup>lt;sup>172</sup> Westerdahl 1994, 267; see also Firth et al. 1998; Parker 2001, 23.

<sup>&</sup>lt;sup>173</sup> Parker 2001, 23.

<sup>&</sup>lt;sup>174</sup> Westerdahl 1992, 5.

<sup>&</sup>lt;sup>175</sup> Westerdahl 1992, 5-6.

Different dating and cross-checking methods are used to determine this transfer. For example, lichenometry can date the stone monuments by computing the rock weathering and lichen by examining it with isostatic uplift for crosschecking.<sup>176</sup> The metrical aspect comprises the distance between transit points. Sea route refers to major Waterways used for navigation. Lastly, centers for maritime culture consist of the relationships between transit points, central places for mariculture, and the connection of maritime culture with the geography.<sup>177</sup>

Theories change when the topic is the inhabitants' views of the sea. Some researchers claim that the sea was a mysterious and dangerous region, with little use for local inhabitants. Others state that maritime activities such as seafaring, were natural activities of the society, and places such as the Aegean and Mediterranean developed a "maritime consciousness" and maritime connections in the LBA. Symbols, designs, structures, or any other sign of a cognitive maritime perspective epitomise the interaction between humans, their land, and the sea.<sup>178</sup>

Discovering the sea should have been an exciting experience for the ancient societies and mariners. Adaptation to their coastscape environment and the sea along with concentration on maritime activities and resources to provide their needs should have been a usual part of daily life, but it can also be the opposite or changeable depending on region and time. This daily order brings economic, political and social necessities together with contact with new cultures and technologies.<sup>179</sup> The needs and desires of the people have lead them to go beyond the sea to the other lands such as Egypt, the Greek mainland, the Levant and further abroad.

Proximity to the sea often gives the advantage of reaching resources much easier and faster than would otherwise be possible. People used these advantages and connections to supply their needs from the landscape. People in many regions, including Western Anatolia and the Aegean, developed maritime activities and technologies with each newly acquired piece of knowledge to find resources, connect with other civilizations, and capture or exploit new lands. In other words, the sea was not an end in itself but a means to an end to obtain the necessities of a maritime culture. The theories and methods about relationships between humans, the sea, and the

<sup>&</sup>lt;sup>176</sup> Westerdahl 1992, 6-7.

<sup>&</sup>lt;sup>177</sup> Westerdahl 1992, 6-10.

<sup>&</sup>lt;sup>178</sup> Westerdahl 1992, 5-6; see also Parker 2001, 38.

<sup>&</sup>lt;sup>179</sup> Parker 2001, 38.

landscape in maritime cultural landscape studies are still being developed. Applications are changing based on different regions, periods, and other conditions, since certain types of evidence are not available in certain contexts. This study examines the maritime cultural landscape of Western Anatolia through the medium of burials, which has to do with the evidence of maritime activities, maritime network and cultural interaction.

## 3.1.2. Western Anatolian Burials in the Maritime Cultural Landscape

Here examples of maritime cultural landscape studies from the Northern Europe, Aegean, and Mediterranean concern memorials, rituals, and burials are discussed in order to present the different methods and theories applicable to LBA burials and the Western Anatolian maritime cultural landscape.

Studies on maritime cultural landscapes can include centers of maritime activities, systems of maritime networks, and features of these two, such as harbors, cemeteries, and settlements. This can be observed relatively easily as bronze became less of a luxury item that could be found different contexts such as founders' hoards. The increase in maritime activity during the LBA also gave rise to new needs and associated developments for the region. For example, a maritime trade center called for new storage areas, beacons, ritual spaces, and settlements for the local population as well as for sailors, merchants, and visitors. These developments in the centers of maritime activities were not limited to permanent settlements only but could also take place in seasonal settlements. An example of seasonal settlements from Selso-Vestby in Denmark comprises fish bones in the seasonal pit houses of a fishing community of the 8<sup>th</sup>-11<sup>th</sup> c. AD. Gutting and salting remains from the 11<sup>th</sup> c. were found in the same place.<sup>180</sup> Among these new developments, cemeteries are a focus of study. Both seasonal and permanent settlements in maritime landscapes needed graveyards for inhabitants and sailors. These graveyards exhibit the cultural adaptation of the society to the environment. If the economic structure is related to the sea, there are likely to be traces of these relationships in settlements or cemeteries. Location, architecture, and artifacts of these graves, therefore, should reflect the connection between the sea, other cultures, and local people.

In coastal landscapes, cemeteries that include different grave types, such as

<sup>&</sup>lt;sup>180</sup> Enghoff 1996, 47-55.

cairns<sup>181</sup>, along with singular graves with their different parts, such as stelae<sup>182</sup>, present typologies for sails, boats, ships, boat figures, and wall depictions about sailing. Several studies, which approach burials and maritime cultural landscape together, examine two main topics. Firstly, they focus on graves as maritime memorials for mariners and naval battles. These memorials were placed near the maritime centers, naval battle areas, or churchyards close to these areas.<sup>183</sup> They also represent how people engaged with maritime activities and incidents through the design of the graves. Another emphasis of funerary research concentrates on rituals, religion, and mythology about water in maritime cultural landscapes, livelihoods, and landmarks of coastal landscape on islands<sup>184</sup> and on the continent of Northern Europe, such as England and Finland.<sup>185</sup> Other burial studies on islands and the mainland, such as the Argolid and the Aegean islands, concern landscapes and waterscapes such as rivers and valleys. However, except for a few studies they are not directly connected with maritime cultural landscape concept.<sup>186</sup>

People shaped their environment and built graves based partly on geographical conditions, but the building process was also affected by other factors. Coastal cemeteries visible from the sea, some parts of are still visible today. They could have indicated territorial rights as well as systems of belief or were positioned to be navigational landmarks or for other physical reasons.<sup>187</sup> In some cases possible headstones, such as vertical flat stones/stelae that surround the graves, are visible from the sea.

The sites of Mochlos and Pera Alatsomouri on Crete provide good examples of landmark, territorial signs, and anchorage areas. Westward-flowing currents forced ships to the west of Mochlos where the cemetery was located and led sailors to the east of the island to the harbor. When sailing to Gournia, the first visible place from the sea was North Cemetery on the hill of Pera Alatsomouri and the slope of Sphoungarasis.<sup>188</sup> At Malia, a rocky area between two anchorages called "the area of the dead" has the same situation.<sup>189</sup> Two Early Bronze Age cemeteries at Galeti and Hellenika are near

<sup>&</sup>lt;sup>181</sup> Tuovinen 2002.

<sup>&</sup>lt;sup>182</sup> Casson 1954, 214-19.

<sup>&</sup>lt;sup>183</sup> Stewart 2007, 112-15

<sup>&</sup>lt;sup>184</sup> Tuovinen 2002.

<sup>&</sup>lt;sup>185</sup> Westerdahl 2005, 2-23.

<sup>&</sup>lt;sup>186</sup> Georgiadis and Gallou 2008.

<sup>&</sup>lt;sup>187</sup> Broodbank 2013, 311.

<sup>&</sup>lt;sup>188</sup> Boyd 1905, 181.

<sup>&</sup>lt;sup>189</sup> Van Effenterre 1980, 229.

the harbor of Palaikastro, and the cemetery at Sissi is close to the sea.<sup>190</sup> Cairn-like structures in the Peloponnese from the Early Helladic II were situated on top of coastal hills, like a coastal tower, and were most probably used for navigation.<sup>191</sup> Homer's poems mention human-made landmarks besides natural headlands such as burial mounds used for navigation through the Dardanelles.<sup>192</sup>

Timmy Gambin proposes the recognition of sailors' activities in order to understand navigation and landmarks in maritime cultic space in the Mediterranean. He points out that despite wind, currents, and other dangers such promontories and offshore lands, constructing visible structures such as shrines in the areas they were familiar with was not only associated with rituals, but also with creating landmarks for navigation.<sup>193</sup> For example, people from different social classes lived together in Ugarit. Besides the royal palace, tombs, mansions, and residences, tower temples were situated at on high ground. They were dedicated to Baal, contained stone anchors as offerings, and almost certainly used as navigational marks for ships.<sup>194</sup>

Burial places can have the same purposes. To clarify these purposes, Gambin refers to Homer's *Odyssy*. When a companion of *Odysseus* died, warriors and sailors showed their respect to him by burying him with his armor, while the burial place itself was marked with an oar. Gambin gave another example from *Odysseus* about a marked warrior grave far away from the warrior's land. Marking burials with significant, also perishable, items such as an oar, results less archaeologically visible, because these kinds of signs decay and archaeological data are lost.<sup>195</sup> Erkanal comes to a similar conclusion about the empty stone boxes in the cemetery area of Panaztepe which could be cenotaphs for sailors who died in the sea away from their homeland.<sup>196</sup> A variety of these examples from Western Anatolia are possible memorials and landmarks for sailors. These examples are expanded later in the chapter dealing with specific sites.

Determining the location of the graves in the LBA without memorial markers that are related to seafaring requires further investigation. They might not be noticeable on initial inspection because the geography of the region has changed due to alluvial infilling. Therefore, examining geological changes between today and the LBA is

<sup>&</sup>lt;sup>190</sup> Schoep 2009; see also Vavouranakis 2011, 101-2.

<sup>&</sup>lt;sup>191</sup> Tartaron et al. 2006; Tartaron 2013, 119-20.

<sup>192</sup> Iliad 7.85-91

<sup>&</sup>lt;sup>193</sup> Gambin 2014, 8-10.

<sup>&</sup>lt;sup>194</sup> Broodbank 2013, 393.

<sup>&</sup>lt;sup>195</sup> Gambin 2014, 8-10.

<sup>&</sup>lt;sup>196</sup> Erkanal and Erkanal 1986, 71.

important. Geological investigations at some sites<sup>197</sup> verify that Western Anatolian coastal burial sites were in the same area as the ancient harbors and ports. Research has established that some harbors filled with alluvium such as the Beşik Tepe cemetery that was located at a natural harbor of Troy<sup>198</sup>, and Panaztepe cemetery, which is related to the Harbour Town at the site.<sup>199</sup>

Besides the geography, artifacts, architecture, and customs reveal information about the network between grave sites and the cultural significance of maritime interactions. For example, Mycenaean style pottery samples, which were produced in Miletus, were found in the Müsgebi graves, and their provenance determined by clay analyses.<sup>200</sup> Müsgebi was open to the sea in the LBA.<sup>201</sup> Sailing in these geographical conditions was the only option for accessing Müsgebi and this aspect was also more advantageous for other sites in Western Anatolia.<sup>202</sup> The geography of Western Anatolia did not affect access across the Aegean only, but also contributed to the relationship between sites in Western Anatolia.

The particular geographic location and economic situation of Miletus is a second reason for the hypothesis that Miletus could have been the distribution point for trade goods between the West and Central Anatolia and the Aegean.<sup>203</sup> This could explain why there were several Mycenaean settlements in Miletus. Another significant aspect of this network is the variety and distribution of foreign objects and their imitation at coastal sites. Inland areas include fewer foreign objects than coastal areas because of the topography. Except for river transport, which itself has its difficulties in Western Anatolia, it was harder to access coastal landscapes from the interior because of Western Anatolia's mountainous geography. Some of the inland sites which were closer to the coastal region such as Kolophon shows evidence for significant amounts of Mycenaean goods such as pottery, but others do not or only rarely have evidence for Aegean products.

Another element of data collection for understanding the meaning, date, and construction methods of the graves are inscriptions and relief carvings. These did not

<sup>&</sup>lt;sup>197</sup> Aksu et al. 1987, 227-50; see also Brückner 1998, 235-59; Kayan 1999, 542-48; Öner 1999, 1; Kayan and Öner 2015, 1-27; Öner et al. 2017, 275-92.

<sup>&</sup>lt;sup>198</sup> Korfmann 1986b, 26-8; 1987, 265.

<sup>&</sup>lt;sup>199</sup> Erkanal-Öktü and Çınardalı-Karaaslan 2007, 403; see also Çınardalı-Karaaslan 2008, 58-65.

<sup>&</sup>lt;sup>200</sup> Mountjoy 1998, 36; see also Gödecken 1986, 312.

<sup>&</sup>lt;sup>201</sup> Gür 2014, 113.

<sup>&</sup>lt;sup>202</sup> Parker 2001, 29.

<sup>&</sup>lt;sup>203</sup> Gödecken 1986, 312; see also Mountjoy 1998, 36.

exist for the Late Bronze Age burials at the sites discussed in this study, and which is therefore absent in the material record. Artifacts in graves symbolized a drastic change in one's existence, a ritualistic celebration of this change, and presented differences in social status with the variety and quality of grave goods included.<sup>204</sup> Ornamentation, technique, and design of the artefacts such as pottery, ornaments, seals, and weapons illustrate these aspects in LBA burials. For instance, the Marine style pottery in the graves indicates the influence of the maritime environment in the region. The concentration of the artifacts in the sites, harbor remains, parallel settlements, and geological changes demonstrate marine effects on culture in burials. Further, the marine effects and material culture can be distinctive for different regions, groups, and traditions.

The second focus of studies is related to rituals, symbols, mythology, and religion. Carl F. Meinander has discussed the role of graves in the maritime cultural landscape in the context of prehistoric Scandinavia. Some of the studies also include subsistence and landmarks in the coastal landscape. A part of these studies investigated coastal cairns in Scandinavia from different aspects. For example, Meinander claims that the cairns on rocky hills and lower lands have different religious meanings in Finland. He maintains that people demonstrated their engagement with nature, including the sea and afterlife, by constructing the cairns on hills to mark boundaries between the dead and the place they lived.<sup>205</sup>

Mercourios Georgiadis and Chrysanthi Gallou claim that besides respect for ancestors, people constructed graves on hills because they believed that the ancestors protect the welfare of their landscape and waterscape.<sup>206</sup> Others who constructed cairns on lower land and close to cultivation areas may have expressed the importance of harvests in prehistoric societies' rituals.<sup>207</sup> LH tombs near water sources included sea creatures and boat representations, which may have symbolized faith in an afterlife journey by the sea.<sup>208</sup>

Religious or magical symbolisms related to the sea are likely represented in some cases. Seals from Crete in the Middle and LM periods depicted fish and boats in similar but different aspects. For example, boat votives and seals together indicated

<sup>&</sup>lt;sup>204</sup> Broodbank 2013, 311.

<sup>&</sup>lt;sup>205</sup> Meinander 1954, 93-4, 196-201.

<sup>&</sup>lt;sup>206</sup> Georgiadis and Gallou 2008, 179.

<sup>&</sup>lt;sup>207</sup> Tuovinen 2002, 270.

<sup>&</sup>lt;sup>208</sup> Gallou 2003, 126-27, 141-42.

that the ships in Minoan art likely represented semi-religious characteristics. The depictions were a mixture of real and fictional additions of a ship, with this fictional part having a magical and religious meaning.<sup>209</sup> Different ship depictions in Minoan art and examples from the Cycladic Islands, consisted of a horizontal stern device which appeared as a part of these depictions as additions and not for a practical nautical purpose. Shelley Wachsmann claims that the reason that some of the depictions included this device and some do not was related to a ritual.<sup>210</sup>

Paddling and rowing are further signs of ritualistic purposes in boat depictions in the Aegean. For example, paddlers are depicted on a sealing from the LM period and men paddling in hand on a seal.<sup>211</sup> Lionel Casson argues that it was a cultic process because paddling in this method may have been an archaic mode of propulsion.<sup>212</sup> The earliest evidence of oars are from Predynastic Egypt (late 4<sup>th</sup> millennium BC) in depictions, the earliest example, if they are oars indeed, is "frying pans" in Aegean from EBA.<sup>213</sup> Similar examples from the Classical periods in Athens represented people sent on an embassy to Delos for the annual spring festival in a paddled vessel to symbolize Theseus' voyage to Crete. This could be a similar reason for paddling depictions in Archaic periods in the Aegean.<sup>214</sup>

Besides depictions, votive figures, and artifacts, for example, "shfifonim", stone stele in stone-anchor form, in Israel have been evaluated as cultic. They were found in several excavations around the Sea of Galilee. Among these artifacts are two in the gate of an EBA site in Khirbet Kerak; another example in Bar Adon was shaped to be placed on ground. A part of these stone anchor shaped artifacts was formed to place on the ground in many places, with unfinished bottoms, and biconical holes. These were interpreted as cultic objects because of this form. The 1<sup>st</sup> c. AD boats found at Kinneret<sup>215</sup> were a maximum of nine meters; the weight of the shfifonim was too much to use in these boats and most ancient vessels in general. Two shififonim and four other monoliths were found on the cultic basin of a tomb from the MBA, but the stone artifacts were dated to the EBA.<sup>216</sup>

<sup>&</sup>lt;sup>209</sup> Betts 1973, 334; see also Wachsmann 2009, 104-5.

<sup>&</sup>lt;sup>210</sup> Wachsmann 2009, 103.

<sup>&</sup>lt;sup>211</sup> Basch 1987, 105; see also Wachsmann 2009, 106-7.

<sup>&</sup>lt;sup>212</sup> Casson 1975, 7; see also Brown 1979, 641; Wachsmann 2009, 107-8.

<sup>&</sup>lt;sup>213</sup> Broodbank 1989; 2000, 256-58; 2010, 253; 2013, 328-29; see also Ward 2000, 25-38; 2004.

<sup>&</sup>lt;sup>214</sup> Casson 1975, 7; see also Brown 1979, 641; Wachsmann 2009, 107-8.

<sup>&</sup>lt;sup>215</sup> Wachsmann 1986, 549.

<sup>&</sup>lt;sup>216</sup> Wachsmann 2009, 262-66.

Twenty-two anchors from the Temple of Baal in the port of Minet el Beida, Ugarit, were dedicated to specific gods of the weather. One hundred and forty-seven stone anchors were uncovered in the temple complexes at Kition which are similar to the Ugarit examples.<sup>217</sup> Anchors in the temples of Ugarit, Kition, and Byblos shared similar characteristics, and were found together among votive figurines at the temples and tombs.<sup>218</sup>

Immigration and cultural connections are other essential concepts associated with the maritime cultural seascapes. Many scholars, such as Meinander, do not reject the idea that people from Sweden moved to the Finnish coast in the EBA. He also claimed that because of continuity in settlement layers, it cannot be migration but a cultural connection that exists between these regions.<sup>219</sup> Christian Carpelan proposed that Scandinavians migrated to the Finnish coast to trade raw materials. They lived in the same area with the local community, so archaeological differentiation is not clear.<sup>220</sup> Additionally, similar cultural contact elements with the Scandinavian coasts exist in Western Anatolia. For example, the fact that new settlers moved into a new area for various reasons, such as raw materials, food, climate, and trade, demonstrate a local settlement continuity for a certain period, for example, Mycenaean settlements starting from LH II in Miletus.<sup>221</sup>

The available geographic position of the new site as a distributor and connecting harbor with the cemetery bring to mind Mycenaean examples. The correlation between the Değirmentepe cemetery and one of the levels of Miletus, including Mycenaean settlements, can be a reflection of this. The position of Miletus between Central Anatolia and the Aegean, Mycenaean settlements, grave types, and pottery are examples of the cultural connection and the advent of new settlers from the Mycenean world.<sup>222</sup>

People in the LBA might have constructed cemeteries and single graves on the shoreline of Western Anatolia for the same purposes as those proposed for graves in parts of Northern Europe. According to Unto Salo, there are two reasons why people built the cairns on top of the hills. They were constructed as memorials to make them

<sup>&</sup>lt;sup>217</sup> Wachsmann 2009, 272-73, 292-93.

<sup>&</sup>lt;sup>218</sup> Frost 1982, 164-65; see also Wachsmann 2009, 272-73, 292-93.

<sup>&</sup>lt;sup>219</sup> Meinander 1954, 93-4, 196-201.

<sup>&</sup>lt;sup>220</sup> Carpelan 1999, 271; see also Tuovinen 2002, 57-8.

<sup>&</sup>lt;sup>221</sup> Niemeier 1998; 2005.

<sup>&</sup>lt;sup>222</sup> See "Değirmentepe" section in Chapter 4 for details of the relationship between Miletus and the cemetery area.

visible from many sides, and the dead should rest with continuity of engagement with the natural elements such as the sea.<sup>223</sup> The high visibility of the monuments can be an indication of their use as navigational landmarks.<sup>224</sup> Burials at all the five sites could have been constructed for these reasons.

The difference between Scandinavian coastal cairns and Western Anatolian graves is that, in some of the graveyards such as Pilavtepe and Müsgebi, connected settlements and possible reasons such as trade using the harbors of these sites have not yet been uncovered. Most of the Finnish sites mentioned above are known for fishing and similar maritime activities, which have direct connections with their livelihood, coastal landscapes, and graves. In Western Anatolia the situation might not be the same. If people did not provide their livelihood from the sea directly and used it for trade, transportation of people, raw materials, and other needs of the communities, they connected with maritime cultural landscape directly and maritime culture indirectly. The diversity of grave types was also significant. For example, the graveyards in Finland from the Bronze Age and Early Iron Age indicate the existence of burial cairns and mounds. Helena Edgren states that these diverse graves establish the discontinuity of settlement phases.<sup>225</sup> Finnish graves bear a resemblance to the variety of Western Anatolian burials, but discontinuity is not the case for Western Anatolia, because different grave types existed in roughly the same space and time.

The evidence of religion, mythology, and ritual in Northern European graves represent belief and social systems as distinctive traditions. The northern tradition asserts that spirits could not pass water, so in some areas and cultures they continued to bury in the sea unknown dead until the late 19<sup>th</sup> c.<sup>226</sup> In Norway, people buried corpses and surrounded them with stones under the line of high-water mark on the border between land and the sea.<sup>227</sup> Maritime burial examples are not limited to the 19<sup>th</sup> century. For example, during the Bronze Age putting seashells and sand in the tumuli of high-status burials at coastal sites was a tradition in Northern Europe.<sup>228</sup>

The Bronze Age also signifies the value of seafaring for North Europeans because it was the only way to import bronze. For example, the Norwegians sailed

<sup>&</sup>lt;sup>223</sup> Salo 1981, 125.

<sup>&</sup>lt;sup>224</sup> Tuovinen 2002, 60.

<sup>&</sup>lt;sup>225</sup> Edgren 1984.

<sup>&</sup>lt;sup>226</sup> Dahlström 1940; see also Westerdahl 2005, 11.

<sup>&</sup>lt;sup>227</sup> Westerdahl 2005, 11.

<sup>&</sup>lt;sup>228</sup> Westerdahl 2005, 11 cited in Kyalo 2000.

from Karmsundet to Jutland, as the possession of bronze and the voyages themselves meant wealth and reputation for upper-class people.<sup>229</sup> Salo proposes that the size of graves suggests the suitability for burying more than one individual. Family graves can illustrate a sense of ownership and family protection. If the cairn is larger, it reveals the ownership of the land, protection, and power of the family as signs of social status.<sup>230</sup> Broodbank discusses a similar example of wealth and reputation by seafaring in the Mediterranean and Cycladic Islands. He supports the conclusion that maritime network between different regions such as Egypt, Levant, and especially Cycladic Islands to access metal resources and prestigious goods by seafaring was a status issue for upper-class people.<sup>231</sup>

Social status and communal wealth in coastal landscapes are visible in burials, and settlements are exemplified by several places in the Mediterranean. Graves in coastal and inland sites, which were connected to the sea by rivers, suggest social inequality. For example, Los Millares, the Iberian Chalcolithic site was connected to the sea by the river and included tumuli in the fortified site. The graves demonstrated social inequality by the different grave goods. Bones were found grouped and buried in a plan. These grave goods consisted of gold, marble, copper, flint, yellow amber, African ivory and ostrich eggs. The number of interments was less than the real population of the site, which supports the existence of privileges for elites in burials consisting of imports by sea trade.<sup>232</sup>

Hierarchy in elite groups was evident from funerary architecture and grave goods, which may have helped to define identity. Unlike pharaoh's graves, without written inscriptions, it is harder to determine the exact owner of graves in the Aegean. It is likely that the imported prestige goods were used to signal wealth and status by the upper class so they competed for the most coveted products they were buried with. Broodbank claims that changes in the economy in the LBA Aegean led to a more capital-oriented system, as in Mesopotamia and Egypt, which allowed access to goods and sources that could not be provided in the local area. For example, the central places in the maritime network, such as Poliochni on Lemnos, settlements and rich burials were located in a fortified area and at nodal points of maritime networks and contained

<sup>&</sup>lt;sup>229</sup> Westerdahl 2005, 11 cited in Kyalo 2000.

<sup>&</sup>lt;sup>230</sup> Salo 1981, 125; see also Tuovinen 2002, 58-9.

<sup>&</sup>lt;sup>231</sup> Broodbank 2013, 257-344.

<sup>&</sup>lt;sup>232</sup> D'Agostino 1990; see also Wallinga 1993, 66-83; Cornell 1995, 179-97; Finkelstein and Silberman 2006, 196-98; Broodbank 2013, 315-20.

significant numbers of imports. Signs of metal production, remnants of Cycladic marble figurines, and well-crafted decorated pottery in trade communities such as Chalandriani-Kastri on the coast of northern Syros, represented the existence of a maritime specialization since obtaining such goods required sea trade.<sup>233</sup>

Symbolism here presents these relationships in terms of social status within the maritime environment. For example, depiction of bigger canoes rather than small one as before, on pottery with fish and stars in Malta and Egypt, may have declared an ideology with its power as long-distance, and new technology associated with cosmological signs. In Cycladic communities the most powerful people could manage a crew for these kinds of canoes to sail them, e.g. the canoe on EBA Cycladic pottery, the "frying pan", which was found in Chalandriani-Kastri. This shows Cycladic communities or elites power in controlling maritime connections.<sup>234</sup>

In summary, Western Anatolian graves reflect the social, political and economic organization of their age. The Western Anatolia burials are dated to the 2<sup>nd</sup> millennium BC, primarily to the the LH II-III phases.<sup>235</sup> Maritime activities, trade networks, and cultural interaction in the LBA peaked in these periods. Some examples to demonstrate these organizations and peak points of maritime connections in Western Anatolian burials are the high number of imported and of Mycenaean type imitated pottery, weapons, seals, ornaments, and fishnet weights in burials.<sup>236</sup> Several empty box graves, which were assumed to be graves dug for the missing could be attributed to the same urge to memorialize, if they are not unfinished graves or contained poorly preserved skeletal remains. Social status may be inferred by examining the distribution of valuable objects in different graves, and in the architecture of graves, such as tholos tombs built for Mycenaean or local elites.<sup>237</sup>

Comparison of burials between different maritime cultural landscape sites is studied through this lens. Burials are studied through customs, rituals, religion, geography, maritime culture, and network. The aim of this study is to formulate these aspects of burials in the Western Anatolian maritime cultural landscape.

<sup>&</sup>lt;sup>233</sup> Broodbank 2013, 327-28.

<sup>&</sup>lt;sup>234</sup> Broodbank 1989; 2000, 256-58; 2010, 253; 2013, 328-29.

<sup>&</sup>lt;sup>235</sup> Mountjoy 1986, 67-92, 134-54; see also Erkanal 1987, 258; Akyurt 1998, 32-3; Basedow 2001, 415; Erkanal-Öktü 2005, 56; 2008, 73-80; Benter 2010, 344-46; İslam and Aslan 2015, 377.

<sup>&</sup>lt;sup>236</sup> Gür 2013, 40-2.

<sup>&</sup>lt;sup>237</sup> Gür 2013, 40-2.

#### 3.2. The LBA Coastal Burials in Western Anatolia

Research on Western Anatolian burial sites includes coastal and inland landscapes. Excavated sites including Troy, Beşik Tepe, Çandarlı Pitane, Çerkez Sultaniye, Panaztepe, Bayraklı, Kolophon, İzmir Agora, Selçuk Ayasoluk, Halkapınar, Miletus Değirmentepe, Sarımeşe Tepe, Bakla Tepe, Çömlekçiköy, Müsgebi, Pilavtepe, Aphrodisias and Kömürburnu are dated to the 2<sup>nd</sup> millennium BC.<sup>238</sup> In this study, five of the published sites, Beşik Tepe, Panaztepe, Değirmentepe, Müsgebi, and Pilavtepe, date to the LBA. They include evidence for a severalcultures directly related to the sea, including the Mycenaeans.

Certain limitations for answering the research questions listed in Chapter 1 include the cultural interaction, the maritime cultural landscape, local characteristics, and the process of cultural and geographical change in Western Anatolia.<sup>239</sup> This information can provide a better idea of the political, economic, and social organization of the region and what kind of interrelations occurred in the period. While not all these questions can be answered, they are worth asking because their investigation can expand our understanding of the context of the cultural and maritime networks in Western Anatolia. Since their locations were based on the coastline and natural harbors; and grave goods, burial practices, and funerary architecture were influenced by Aegean because of maritime connectivity.

# 3.2.1. Burial Practices

Inhumation and cremation practices were applied at a variety of sites (including the five sites examined in this thesis) in Western Anatolia during the LBA. Müsgebi includes a single cremation example; most of the cremated burials at other sites were found in urns. The urns and vessels for cremation burials in Beşik Tepe are generally similar examples for daily use and for grave goods at Troy. A stirrup handle jar from

<sup>&</sup>lt;sup>238</sup> Akyurt 1998, 7-35; see also Gür 2013, 34-9.

<sup>&</sup>lt;sup>239</sup> Some of the sites such as Bakla Tepe, were not included, although they were influenced from the same geological changes, connected to the sea, and located in Western Anatolia. Bakla Tepe example: Erkanal and Aykurt 2017. e.g. Although Bakla Tepe cemetery is close to the sea and next to a graben today, geological investigations indicate that it was previously a lake. This site, connected to the sea by a river channel and land transportation, had an indirect relationship with a harbor. Some of these graves at the Bakla Tepe site are not as close to the sea anymore because of alluvial shifts. Time period, the LBA, cultural interaction remains, especially with Mycenaeans are other limitations.

the Müsgebi graves used as a burial gift is the closest example of one of the jar burials in Troy.<sup>240</sup>

A cremated male body from Beşik Tepe was separated into upper and lower body parts and put two separate vessels, both of which were deposited in a pithos. This may be a local funerary tradition,<sup>241</sup> perhaps for higher-status burials. Infants younger than one year were not cremated in Troy and Beşik Tepe but could be buried with cremated adults in some cases. Metin Akyurt claims that it might be the belief that babies cannot have any evil in their souls and bodies. The remains of children older than one were buried alone and not cremated. This might relate to their kinship. Since both burial customs existed in Western Anatolia, it is possible that different communities had different traditions in the same area.<sup>242</sup>

The discussion about origin of the cremation custom supports its rise in Central Anatolia. Scholars such as Kurt Bittel<sup>243</sup>, Tahsin Özgüç<sup>244</sup>, Akyurt<sup>245</sup>, Ali M. Dinçol<sup>246</sup>, Kutlu Emre<sup>247</sup>, and Mee<sup>248</sup> claim that cremation in Western Anatolia derived from the traditions of Central Anatolia. The oldest example of cremation was found in Gedikli-Karahöyük in Gaziantep from the second half of the third millennium BC. Winfried Orthmann<sup>249</sup>, Emre<sup>250</sup>, and Akyurt propose that this may give some answers about origin of Western Anatolian cremated burials.<sup>251</sup> When Piotr A. Bienkowski evaluated cremation in the Halaf culture and Palestine chronologically and geographically, he came to the conclusion that cremation came to Anatolia from the south.<sup>252</sup>

Inhumation involved a wider area and a higher number of burials in Western Anatolia. At Panaztepe, children were buried in middle-size pithoi and in Panaztepe and Beşik Tepe several burials were inhumed as a family in larger pithoi. It is the same situation for rock-cut tombs. Multiple bodies were buried in the same burial chamber as families. Adults were in the dorsal position in Beşik Tepe cist graves and Müsgebi

- <sup>247</sup> Emre 1978, 64.
- <sup>248</sup> Mee 1978, 137.
- <sup>249</sup> Orthmann 1967, 64.
- <sup>250</sup> Emre 1978, 31.
- <sup>251</sup> Akyurt 1998, 125.
- <sup>252</sup> Bienkowski 1982, 88.

<sup>&</sup>lt;sup>240</sup> Akyurt 1998, 118-23.

<sup>&</sup>lt;sup>241</sup> Akyurt 1998, 123.

<sup>&</sup>lt;sup>242</sup> Akyurt 1998, 123-25.

<sup>&</sup>lt;sup>243</sup> Bittel 1940, 64.
<sup>244</sup> Özgüç 1946, 27.

<sup>&</sup>lt;sup>245</sup> Akyurt 1998, 125.

<sup>&</sup>lt;sup>246</sup> Dinçol 1969, 222.

rock-cut tombs, in hocker position in the pithoi of Beşik Tepe cemetery<sup>253</sup>, and in hocker and half-hocker position in Panaztepe graves.<sup>254</sup> Burial practices continue with grave goods as a supplementary part of these traditions, and these goods expose more connections between different cultures as mentioned briefly above. Other traditional practices in the cemeteries might be related with practical and geographical concerns instead of belief system or social structure.

Single examples, such as at Müsgebi, can be a sign of tradition and obligatory at the same time. It was found in a rock-cut tomb in the burial chamber. Akyurt's interpretation is that the urn burial might belong to outsiders, who might want to keep their dead safe, thus putting the urn in a burial chamber.<sup>255</sup>

Another single example from Beşik Tepe includes similarities with miniature house-shaped urns from Konya Karahöyük and Hittite *E.NA* (stone houses for the cremated royal dead). The grave is a megaron-planned burial chamber with two rooms and urns in both rooms.<sup>256</sup> Akyurt claims that these examples can support Behn's statement which claims that the house-shaped tradition might come from belief in the afterlife. According to Behn, people believed that they need a house symbolically after death.<sup>257</sup> Similar type of example from Italy is Villanovan cremation urns in house or hut form.<sup>258</sup> Gallou underlines similar reason for the Mycenaean rectangular form of tombs, she suggests people made them in this plan to create a house for dead.<sup>259</sup>

### 3.2.2. Grave Types and Funerary Architecture

The wide distribution of graves, including Mycenaean finds, reflects different types of funerary architecture. These types include local and Aegean grave types. The extramural cemeteries on the top of high hills in all the sites are also on rocky slopes at Değirmentepe, Müsgebi, and Pilavtepe. The Panaztepe and Beşik Tepe cemeteries were surrounded by slab stones<sup>260</sup>, and the Panaztepe cemetery has divisions by stones as a planned area.<sup>261</sup> Other cemetery areas might have had a simple hedge or stone

<sup>&</sup>lt;sup>253</sup> Akyurt 1998, 118-19.

<sup>&</sup>lt;sup>254</sup> Erkanal 2005, 55.

<sup>&</sup>lt;sup>255</sup> Akyurt 1998, 126-27.

<sup>&</sup>lt;sup>256</sup> Akyurt 1998, 123-28, 149-50.

<sup>&</sup>lt;sup>257</sup> Behn et al. 1926, 226; see also Akyurt 1998, 128.

<sup>&</sup>lt;sup>258</sup> Warden 2010, 122.

<sup>&</sup>lt;sup>259</sup> Gallou 2005, 71.

<sup>&</sup>lt;sup>260</sup> Akyurt 1998, 98.

<sup>&</sup>lt;sup>261</sup> Erkanal-Öktü 2005, 54.

wall, but they have since been destroyed.<sup>262</sup>

The reason for separating graves from living environments might be related to the belief system, public health, and/or keeping the graves far away from the cultivation centers.<sup>263</sup> One similar example is a cave grave on the Moray Firth coast in Scotland. Since this grave is in a large cove on the shore, it is only accessible from the sea, which as explained makes it ideal for ritual practices. Joanna Brück also claims that hilltops and rocky areas have the same attraction, and one reason for this can be creating an exclusive area away from the local community for high-status people during the rituals.<sup>264</sup> The reason for rock-cut tombs and the usage of high hills for cemeteries in Western Anatolia, then, such as Müsgebi, which is accessible only by sea, might be the same; these graves might have been separated to indicate social hierarchy in a way similar to elites that separated them from the local community by the walls of the citadel.<sup>265</sup>

Rock-cut tombs in Müsgebi, Pilavtepe, and Değirmentepe are also separated from settlement areas, on the top of rocky hills, and in tholos form all contain burial chamber characteristics. The graves are divided into three parts, the *dromos* -narrow and generally long corridors used to reach the burial chamber from outside<sup>266</sup>, but lead first to the *stomion* - a large and shorter doorway leading to the burial chamber including a lining wall and similar to a short dromos- and burial chamber.<sup>267</sup> Gallou associated this architectural plan with a set of beliefs: the dromos is "with the living and the rites of separation", the stomion is "serving as boundary zone between the human sphere and the plane of the ancestors", and the chamber is "symbolic of the reintegration stage, intended as the permanent shelter of the ancestral spirits."<sup>268</sup> However, rock-cut tomb tradition was a Cycladic funerary architecture style in EBA first.<sup>269</sup>

A single burial chamber example from Panaztepe differentiates it from these graves. The tholos tombs in Panaztepe also include burial chambers, but they are not

<sup>&</sup>lt;sup>262</sup> Akyurt 1998, 98.

<sup>&</sup>lt;sup>263</sup> Meinander 1954, 93-4, 196-201; see also Akyurt 1998, 97-8; Tuovinen 2002, 270; Georgiadis and Gallou 2008, 179.

<sup>&</sup>lt;sup>264</sup> Brück 2011, 389-90.

<sup>&</sup>lt;sup>265</sup> Novák 2018.

<sup>&</sup>lt;sup>266</sup> Gallou 2005.

<sup>&</sup>lt;sup>267</sup> Mylonas 1966, 131.

<sup>&</sup>lt;sup>268</sup> Gallou 2005, 75.

<sup>&</sup>lt;sup>269</sup> Berg 2019, 291.

rock-cut examples.<sup>270</sup> The Beşik Tepe cemetery does not have these examples; there is only one megaron-planned chamber tomb in the cemetery. Megaron-planned settlements and palaces are known in the Aegean, but the Beşik Tepe megaron-planned grave is a unique example. Akyurt asserts this could be the idea of the local inhabitants. He also points out that the grave might have monumental characteristics because its upper part was made intentionally visible above the ground.<sup>271</sup>

The differences and similarities between tholos tombs in the cemetery areas is partly connected with local environmental conditions. For example, Erkanal believes that dome-shaped tholos tombs were accessible from their upper part because flat stones cover the top of the tombs, which were moved and put back for the entrance. The domes of burial chambers in Panaztepe created an image of the tholos but they were identified as a fake dome and differentiated from actual tholos tombs in the region.<sup>272</sup> The dromos of these graves differentiates them from the conventional type by their openings. The Müsgebi examples open to the slope, but the Panaztepe examples do not, and are instead positioned deeper in the earth. These design features might require entrance to the tombs from the top instead of the dromos.<sup>273</sup>

Each of the Müsgebi rock-cut tombs are different, due to topographical conditions. The length of the dromos depends on the location of a specific grave on the slope; some of them do not have a dromos, and burial chambers were carved with a dome or were flat, depending on the depth of the floor of the burial chamber. The plans of the burial chambers were circular, oval, ors square in form.<sup>274</sup> In the Müsgebi<sup>275</sup> graves, as at Değirmentepe, the mouths of the stomions were closed by stones - similar to Aegean examples<sup>276</sup>- after the funeral, because the top of the dromos was open.

During the LH, when cist graves were no longer used and when the variety of chamber and tholos tombs increased, their similarity with Western Anatolian tholos and chamber tombs was marked. Tholos and chamber tombs both contained dromos, stomion, and burial chambers. The tholos differs with its top cover, which is generally

<sup>&</sup>lt;sup>270</sup> Erkanal 2008.

<sup>&</sup>lt;sup>271</sup> Akyurt 1998, 111.

<sup>&</sup>lt;sup>272</sup> Akyurt 1998, 115.

<sup>&</sup>lt;sup>273</sup> Erkanal and Erkanal 1986, 69.

<sup>&</sup>lt;sup>274</sup> Özgünel 1987, 539.

<sup>&</sup>lt;sup>275</sup> Akyurt 1998, 114-15.

<sup>&</sup>lt;sup>276</sup> Xanthoudides 1924, 134-35; see also Tsountas and Manatt 1969, 139.

in a vaulted dome form.<sup>277</sup>

On the Western Anatolian coast, four of five cemetery sites consisted of these tombs. Four different types of tholos tombs in Panaztepe, rock-cut chamber tombs in Pilavtepe and Müsgebi, and tholos tombs in Değirmentepe were mentioned in the sections on sites in Chapter 4'. Chamber tombs in the Aplomata and Kamini – LHIIC - including highly rich grave goods<sup>278</sup>, and cemeteries on Naxos are close relatives of the Western Anatolian chamber tombs. Ialysos – LHIIB-IIIB – and Eleona-Langada chamber tombs have architectural characteristics common to the Western Anatolia chamber tombs in Pilavtepe and Müsgebi. Unlike the traditional inhumations of the tholos and chamber tombs on the Aegean Island and in Western Anatolian cemeteries, Müsgebi and some Aegean cemeteries have examples of cremations. For example, six chamber tombs in Ialysos, Müsgebi, Kos, Karpathos, Astypalaea, Naxos, and Perati have cremation burials in the chamber tombs.<sup>279</sup>

Most of the chamber tombs in these sites are rich burials. Even if there were the possibility to separate them based on social hierarchy, it is not possible to interpret them as local by applying either Anatolian or Aegean traditions, or as immigrant Mycenaeans, who may have combined their traditions with local cultures. Further, designating the tombs and their burials as either elite or poor is difficult, as particular positions in society cannot easily be determined. As a result, many questions have arisen about the networks in these regions. Islands such as Kos exhibited both Anatolian and Aegean characteristics, as with cemeteries on the Western Anatolia coasts. Based on the geological evidence, these places might have been islands during the LBA. Currently, there is not sufficient evidence to make an interpretation, although the connection between the islands and Western Anatolia should be considered when researching their relationships with the Mycenaeans.

Olivier Pelon claims that tholos tombs, made by laying stones, were derived from cave or rock-cut tombs; this relationship of type is reflected in many graves. Pelon considers the origin of the tholos tombs to have been in the Aegean because the circular Cycladic tombs in the Early Minoan Age, and the beehive shaped tombs in the Halaf culture of the  $5^{\text{th}}$  millennium BC were related to these tombs. He further states that

<sup>&</sup>lt;sup>277</sup> Berg 2019, 291-92.

<sup>&</sup>lt;sup>278</sup> Deger-Jalkotzy 2006.

<sup>&</sup>lt;sup>279</sup> Cavanagh and Mee 1998; see also Berg, 2019, 291-93.

the megalithic graves inspired the Mycenaeans to develop tholos tombs.<sup>280</sup> George E. Mylonas, however, argues that tholos tombs are more characteristic in areas under Mycenaean influence.<sup>281</sup>

Many graves other than tholoi, do not include the same amount or variety of objects or are as well-structured (based on conditions) architecturally, but they provide different possible aspects for of burial practices. As mentioned in the next section about Mycenaean empty graves, Armağan Erkanal and Manfred Korfmann propose that empty urns in Beşik Tepe and stone box graves in Panaztepe were cenotaphs for people who died on the sea or during a journey.<sup>282</sup> If they were used as symbolic graves, the term for this is "cenotaph". Since the theory has not been proven, the term will not be used in this study. Another theory about these graves is that resulted in poor preservations of the skeletons. This may explain the lack of infant bones.<sup>283</sup>

An Aegean example from LH III A Dendra includes ritual objects such as an altar and an offering pit but does not contain human bones. Akyurt asserts that since Beşik Bay has a sandy environment, the offering pits in Beşik Tepe were used as a rock-bowl, were made well by carving on a rock for sustainability.<sup>284</sup> Mylonas proposes that the grave was well-constructed and arranged as a house with its oven but that it is not a Mycenaean tradition. He also proposes that the grave with four rooms and no bones in Mycenae (Kalkani) was emptied for a new funeral.<sup>285</sup> Hermann Müller-Karpe on the other hand believes that it could be a cult tradition.<sup>286</sup>

Earth graves in an extramural cemetery were found only at Beşik Tepe. Korfmann claims the reason for the circular single earth grave is that people could not find appropriate pithoi to bury the body.<sup>287</sup> Pithos graves in Panaztepe represent several varieties based on their size. The sizes are related to numbers of people and purposed as graves for adults and infants separately, and family burials.<sup>288</sup>

Özgüç evaluated the distribution of pithos graves geographically and chronologically. He reached the conclusion that this type of grave was used continuously in Anatolia unlike other regions such as Mesopotamia, the Aegean, and

<sup>&</sup>lt;sup>280</sup> Pelon 1976, 433-42.

<sup>&</sup>lt;sup>281</sup> Mylonas 1966.

<sup>&</sup>lt;sup>282</sup> Erkanal 1986, 71; see also Korfmann 1987, 265.

<sup>&</sup>lt;sup>283</sup> Erkanal and Erkanal 1986, 71.

<sup>&</sup>lt;sup>284</sup> Akyurt 1998, 158.

<sup>&</sup>lt;sup>285</sup> Mylonas 1966, 117.

<sup>&</sup>lt;sup>286</sup> Müller-Karpe 1980, 680.

<sup>&</sup>lt;sup>287</sup> Korfmann 1986b, 317.

<sup>&</sup>lt;sup>288</sup> Erkanal 1986, 139-40; see also Erkanal-Öktü 2008, 76-7.

Crete. He claims that pithoi graves were intensely used in Anatolia since the Neolithic period. He introduces the idea of the popularity of this type among Anatolians, but it still can be seen in different regions as less popular than in Anatolia in different periods.<sup>289</sup> Cist graves are also common in Anatolia, Özgüç claims that they have the same popularity as pithos graves in the region. They occur as early as the Chalcolithic and in both intramural and extramural cemeteries in Anatolia;<sup>290</sup> stone and some wooden example of these graves are not evenly distributed in Anatolia and other regions such as Crete. They included differences and some unique examples in different areas, but in Beşik Tepe and Panaztepe they are made of flat, large stone slabs arranged in a box shape which is typical.<sup>291</sup>

Jar burials in Panaztepe are the same type as local house wares, which were also used as graves in Troy.<sup>292</sup> Erkanal proposes that the pithos graves encircled by stones are monumental structures.<sup>293</sup> Korfmann proposes the same claim for the encircled pithoi in Beşik Tepe.<sup>294</sup> Oliver R. Gurney compares *E.NA* and pithos graves under earth and surrounded by stones. He mentions a section from the *Iliad* that describes how Hector's mother's pithos grave was buried differently from other Achaeans, was put in a pit, covered with earth, and encircled by stones.<sup>295</sup> Gurney's and Korfmann's comparison of *E.NA* and this type of pithos burial bring them to the same conclusion that this pithos burials belonged to people of high status.<sup>296</sup> Grave goods such as pottery (in this case pithos and similar burials in pottery types such as vessel-like and urns are not included) another archaeological evidence of elites' (local and/or migrant) in the region.

#### 3.2.3. Grave Goods

The five selected sites include many local, imitated, and imported grave goods such as pottery, beads, and weapons. The focus of this study is on local products, imitations, and Mycenaean imports because of the higher variety of artifacts, which is

<sup>&</sup>lt;sup>289</sup> Özgüç 1946, 27-31.

<sup>&</sup>lt;sup>290</sup> Özgüç 1946, 37-40.

<sup>&</sup>lt;sup>291</sup> Akyurt 1998, 108-11.

<sup>&</sup>lt;sup>292</sup> Akyurt 1998, 104.

<sup>&</sup>lt;sup>293</sup> Erkanal and Erkanal 1986, 70.

<sup>&</sup>lt;sup>294</sup> Korfmann 1987, 264-65.

<sup>&</sup>lt;sup>295</sup> Gurney 1976, 168.

<sup>&</sup>lt;sup>296</sup> Akyurt 1998, 156.

also a limitation. For example, the graves contain Egyptian faience beads<sup>297</sup>, a Hittite sword<sup>298</sup>, and similar, but rarer, Central Anatolian and Near Eastern examples. Besides geographical and political closeness between coastal Western Anatolia, Greek Mainland, and Aegean islands, the greater variety of local and Mycenaean products compared to other cultural imports is also significant.

The variety and value of grave goods is differentiated based on grave types and identities of tomb occupants. A considerable amount of bones was damaged, but still many infants and adults including their sexes were identified. The burials for infants and children were fewer and usually contained either few simple grave goods, such as pottery. Only a few significant examples contained high prestige artifacts, such as beads with a golden sheet found in an infant grave in Beşik Tepe cemetery. <sup>299</sup>

Votive figures were not found in the LBA graves, a sign of changing tradition<sup>300</sup>, but ritualistic cups with burial gifts were found in graves. For example, the possible purpose of perforated cups in the Müsgebi graves was purification for funerary rituals according to Soren Dietz<sup>301</sup>, Akyurt asserts that they might be libation jars.<sup>302</sup> Mee proposes that there is no remanents of charcoal braziers in the cups, so indicating they might have been intended for use in the after-life to keep the soul of the dead warm.<sup>303</sup> Akyurt evaluates Müller-Karpe's<sup>304</sup> view about fire remains in the graves for Panaztepe and Müsgebi. Müller-Karpe believes the reason of these remains may be a result of a cultic ceremony. Akyurt proposes that the same thing can be possible for some of the graves that consist of fire remains in Panaztepe and Müsgebi as in Mycenaean graves.<sup>305</sup>

The number of a variety of pottery types increased with the rise in the number of graves. Clay pottery was found in all these cemetery areas, but bronze cups were found only in Panaztepe. Bronze cups are rare, but bronze weapons are common especially after the half of  $2^{nd}$  millennium BC<sup>306</sup>, and bronze tools are also found in graves. Inhumation and cremated burials in different types of graves represents gifting

<sup>&</sup>lt;sup>297</sup> Panagiotaki 2008, 52-4; see also Çınardalı-Karaaslan 2012, 75.

<sup>&</sup>lt;sup>298</sup> Niemeier 1998, 39-40; see also Greaves 2003, 88.

<sup>&</sup>lt;sup>299</sup> Korfmann 1986a, 23-4; see also Akyurt 1998, 130.

<sup>&</sup>lt;sup>300</sup> Akyurt 1998, 170.

<sup>&</sup>lt;sup>301</sup> Dietz 1984a, 32-5, 98-100.

<sup>&</sup>lt;sup>302</sup> Akyurt 1998, 131.

<sup>&</sup>lt;sup>303</sup> Mee 1982, 141.

<sup>&</sup>lt;sup>304</sup> Müller-Karpe 1980, 680; see also Akyurt 1998, 158.

<sup>&</sup>lt;sup>305</sup> Akyurt 1998, 158.

<sup>&</sup>lt;sup>306</sup> Bittel 1942, 175; see also Akyurt 1998, 131-32.

weapons to dead and is not clearly related to any culturally specific burial custom.<sup>307</sup>

Scholars such as Rachel Hood and Piet de Jong evaluate the increase in numbers of Mycenaean-style weapons in Crete<sup>308</sup>; Erkanal<sup>309</sup>, Yaşar Ersoy<sup>310</sup>, and Akyurt compare weapons in Western Anatolian cemeteries, especially swords, with Knossos products from the Mycenaean period and come to the same conclusion as Hood and Jong. All the aforementioned scholars believe that these weapons are a sign of Mycenaean influence, at least stylistically.<sup>311</sup> For this type of high-status contact further evidence includes Myceneans seals at Beşik Tepe and seals from Egypt, including scarabs, in Panaztepe which also demonstrates a possible tradition of leaving seals with dead.<sup>312</sup>

The variety of luxury goods such as faience beads in Panaztepe and amber beads in Pilavtepe are significant; prestige goods are not balanced in between five sites, but they all contain valuable objects, especially in tholoi and some pithoi burials. Understanding the place of luxury goods in burials is important to expose the social and politic organization between regions, and because most of them came from overseas, the trade of these goods is part of the maritime connectivity. The Uluburun shipwreck is the most significant example of this correlation; glass ingots, LH IIA pottery, bronze tools, seals, personal belongings (likely belonging to Mycenaean passengers), and a variety of beads, including amber<sup>313</sup>, in the shipwreck demonstrates the role of maritime connectivity in the economy and political relationships overseas.<sup>314</sup>

Boundaries and valuable objects in graves are connected to the owners of the graves, culture, and maritime activities. For example, the Kilnsea site in the Humber Estuary UK includes graves dating from the Neolithic to the EBA. As a possible route to or from Europe, the locations of the Kilnsea graves might be the marks of sailors' identity and culture by demonstrating rituals and bonds with their ancestors. Robert Van de Noort claims that these graves represent social hierarchy based on their forms,

<sup>&</sup>lt;sup>307</sup> Akyurt 1998, 130-33.

<sup>&</sup>lt;sup>308</sup> Hood de Jong 1952, 245.

<sup>&</sup>lt;sup>309</sup> Erkanal 1986, 69-71.

<sup>&</sup>lt;sup>310</sup> Ersoy 1988, 68.

<sup>&</sup>lt;sup>311</sup> Akyurt 1998, 131-32.

<sup>&</sup>lt;sup>312</sup> Hood de Jong 1952, 245; see also Erkanal 1987, 258; Akyurt 1998, 132. <sup>313</sup> Pulak 1988; see also Bass 1991. Details of parallel goods of Uluburun shipwreck and Western Anatolia burials, which Show more of economic and political relationships, are underlined in the Chapters 2 (2.3.1.1.) and 4 (4.1.6. and 4.2.).

<sup>&</sup>lt;sup>314</sup> Ingram 2014, 22-46.

with elite burials showing engagement in long-distance trade. According to Noort, seafaring is beyond the sphere of daily life and has "special meaning"; the sea created a liminal border for religious and economic conditions in social life as well as performing both as a bridge and an obstacle in political and cultural interaction.<sup>315</sup>

### Examples of Mycenaean Graves in the Mediterranean

Besides Western Anatolian examples of graves with Mycenaean characteristics, some examples can be given from other regions of the Mediterranean. These graves also show mixed cultural features including Mycenaean characteristics which related to regions' maritime network and economic wealth in social structure. For example, 38 vaulted tombs published from Ras Shamra and Minet el-Beida (both in harbor towns) include Mycenaean pottery.<sup>316</sup> Seven of these graves in Minet el-Beida were excavated and Mycenaean pottery were found from all.<sup>317</sup> From hundreds of graves in Ras Shamra, in 32 of published 40 tombs with Mycenaean ceramics were found.<sup>318</sup> However, number of these Mycenaean remains (both imports and imitations), between one-eight in general, are lower than local examples. This reveals that Mycenaean tradition had lower influence in funerary context in the area.<sup>319</sup>

Five tombs in Minet el-Beida have different pattern of Mycenaean characteristics. Five graves contained number of Mycenaean ceramics between 18-43. These graves include a variety of prestige goods in high amount. In Ras Shamra a tomb with 21 Mycenaean vessels have lesser variety of prestige goods. Minet el-Beida's five graves with Mycenaean pottery and prestige goods represent a strong relationship with Aegean tradition.<sup>320</sup>

The largest group of Mycenaean vessels are dinner vessels such as shallow bowls in the graves. They were used 29 times with other types of dinner vessels, more than storage vessels. Kraters and piriform jars are the other largest groups of Mycenaean ceramic in the tombs unlike pictorial vessels. Pictorial vessels are the lowest examples in Ugarit graves. Three tombs contained pictorial vessels with other ceramics such as dinner bowls and piriform jars. Gert Jan van Wijngaarden argues

<sup>&</sup>lt;sup>315</sup> Noort 2003, 410-12. More of these relationships about grave goods and cultural interaction in maritime concept are evaluated Chapter 4.

<sup>&</sup>lt;sup>316</sup> Wijngaarden 2002, 66-7.

<sup>&</sup>lt;sup>317</sup> Saadé 1995, 213-14.

<sup>&</sup>lt;sup>318</sup> Wijngaarden 2002, 67.

<sup>&</sup>lt;sup>319</sup> Vallois&Ferembach 1962, 566; see also Wijngaarden 2002, 67.

<sup>&</sup>lt;sup>320</sup> Courtois 1979, 1283-84.

that of the low variety of pictorial vessels in Ugarit evident that these vessels were not characteristic in funerary context.<sup>321</sup> Some scholars such as Dikaios<sup>322</sup> and Vermeule & Karageorghis<sup>323</sup> argues the opposite and propose that these vessels have a significant place in funerary context.

Three graves in Tel Hazor with Mycenaean contexts from LHIIIA2-B2 period were found. A grave in a cistern dated to LHIIIA2-B contained an alabastra and a piriform jar besides other 14 Mycenaean vessels, mostly dinner vessels. The variety and long-term use of pottery in LH periods may suggest that the grave was used for multiple burials as Ugarit examples. Other two graves had more than one individual and Mycenaean vessels such as dinner vessels, kraters, deep bowls, stirrup jars, and globular flasks, with them. They all were inhumations, but number of burials are different. The types of these pottery indicate a consistency in the variety of pottery that used in graves.<sup>324</sup> All these three graves included other goods from different regions. For example, a White Slip II Bowl, Base Ring jugs, and White Slip vessels from Cyprus, and three scarabs from Egypt which presents the importance of these features in funerary context.<sup>325</sup> Additionally, the regional variety of these goods might contribute to understand dimensions of maritime network and its effects on different cultures.

Similarly, other cemeteries in Cyprus and Sicily had indications of this maritime network with Mycenaeans. 79 rock-cut chamber tombs, two ashlar-built tombs, and two tholos tombs at Enkomi with Mycenaean pottery were discovered. Shaft graves<sup>326</sup> in the area were found without Mycenaean goods, but it is quite normal since these graves do not contain much grave goods in general. Wijngaarden claims that Enkomi did not follow a specific type of grave patterns for Mycenaean goods.<sup>327</sup> One of these tholos tombs, French tomb 1339, included 98 Mycenaean pottery samples.<sup>328</sup> Other graves contained around 312 Mycenaean pottery in total.<sup>329</sup> Unlike Ugarit examples, in Enkomi, number of dinner and storage vessels are almost

<sup>&</sup>lt;sup>321</sup> Wijngaarden 2002, 67-9.

<sup>&</sup>lt;sup>322</sup> Dikaios 1969, 249.

<sup>&</sup>lt;sup>323</sup> Vermule and Karageorghis 1982, 8.

<sup>&</sup>lt;sup>324</sup> Yadin et al. 1960, 141-53; see also Wijngaarden 2002, 92-4.

<sup>&</sup>lt;sup>325</sup> Wijngaarden 2002, 94.

<sup>&</sup>lt;sup>326</sup> Keswani 1989, 56, 69.

<sup>&</sup>lt;sup>327</sup> Wijngaarden 2002, 150-53.

<sup>&</sup>lt;sup>328</sup> Johnstone 1971.

<sup>&</sup>lt;sup>329</sup> Gjerstad et al. 1934, 477-85, 515-24, 551-57; see also Dikaios 1969, 357-94; Courtois 1981, 131-257.

equal. Types of pottery such as piriform jars, kraters, and stirrup jars are the most common pottery in Enkomi graves as in Ugarit. Cups, bowls, and kraters were used relatively less.<sup>330</sup>

Mycenaean figurines, rytha, and pottery were found together in nine Enkomi graves.<sup>331</sup> However, no patter was found in use of these finds in the graves and their limited number also do not give any clue about social characteristics of these graves.<sup>332</sup> Enkomi graves contained prestige goods such as seals, weights for trade, metal vases, and golden jewellery with Mycenaean pottery.<sup>333</sup> Graves with similar prestige goods, but less number of valuable goods such as only a single golden earing and three object of faience, also included Mycenaean pottery.<sup>334</sup> In this point, pottery cannot indicate wealth of graves, since they were involved graves from different statue.<sup>335</sup> Pictorial vessels were generally found in wealthier graves, some of them had less variety of prestige goods, but most of them are rich burials including Mycenaean pictorial vases. It means these vessels for higher strata had a significance in burial customs.<sup>336</sup>

At Kition Area I, Cyprus, six chamber tombs have been uncovered. Among these graves, Tomb 4, 5, and 9 are dated to LBA, and are all carved into soft and clayish rock<sup>337</sup> Tombs 4 and 5 had rectangular *dromoi* and narrow *stomia*. They were looted and damaged. Skeletal remains from inhumations were recovered. A variety of objects such as faience, ivory, and pottery were discovered in the burial chambers and *dromoi* of the tombs. Unlike these two tombs, Tomb 9 was intact, but its roof collapsed. Thirty-five percent of all goods in these graves were Aegean in origin. Thirty-eight percent of pottery was also in the Aegean style. The influence of Mycenaeans at Kition is evident in both authentic imports and imitation goods. Pictorial examples of Mycenaean pottery in the graves include design of bulls, octopuses, and fishes was found in the graves.<sup>338</sup> Tombs 4 and 5 closed covered by the floor of a house dated 13<sup>th</sup> c. BC.<sup>339</sup>

<sup>&</sup>lt;sup>330</sup> Wijngaarden 2002, 153.

<sup>&</sup>lt;sup>331</sup> Yon 1986; Zaccagnini 1987, 58.

<sup>&</sup>lt;sup>332</sup> Wijngaarden 2002, 153-54.

<sup>&</sup>lt;sup>333</sup> Murray et al. 1900, 52; see also Keswani 1989, 68-70.

<sup>&</sup>lt;sup>334</sup> Gjerstad et al. 1934, 530-35; see also Lagarce and Lagarce 1985, 139-141.

<sup>&</sup>lt;sup>335</sup> Wijngaarden 2002, 154.

<sup>&</sup>lt;sup>336</sup> Murray et al. 1900, 38; see also Keswani 1989, 78; Wijngaarden 2002, 154-55.

<sup>&</sup>lt;sup>337</sup> Karageorghis 1974, 42.

<sup>&</sup>lt;sup>338</sup> Karageorghis 1976, 28-30.

<sup>&</sup>lt;sup>339</sup> Karageorghis 1974, 16.

Tomb 9 contained multiple inhumation burials and burial chambers at sides. The tomb contained exotic burial goods such as golden diadems and earrings, scarabs, bronze objects, and ivory.<sup>340</sup> Sixty-four percent of pottery in the tomb consisted of Aegean wares. Of these ceramics, most were Mycenaean in style. A kylix of Anatolian origin was in the same grave. Anatolian pottery types were rare in Cyprus during LBA. However, along with a krater from the Pyla-Verghi site<sup>341</sup>, this kylix is a significant example of interregional interactions. All the goods in these tombs dated to LHIIIB-C.<sup>342</sup>

Among 67 graves in Thapsos (Sicily), 22 graves included Mycenaean pottery. The location of these graves -extramural cemetery- were close to lighthouse in the north of the peninsula. Types of these tombs were different and Mycenaean pottery were not included in a specific group of tombs according to scholars such as Wijngaarden and Paolo Orsi.<sup>343</sup> These are mostly rock-cut tombs including narrow funeral chambers and described with dromos. Similar types of graves without Mycenaean goods were also found and scholars argues that a specific pattern for graves to include Mycenaean pottery was not a case.<sup>344</sup> However, described graves are mostly similar to tholos tombs.

Piriform jars and alabastra were found relatively more than other types of Mycenaean pottery at Thapsos as in Ugarit and Enkomi examples and they dated to LHIIIA-B.<sup>345</sup> Some of these graves contained rich goods such as golden objects, swords, and glass beads.<sup>346</sup> A part of these graves despite their elaborated architecture, did not differentiate than other grave sin terms of Mycenaean pottery and luxury goods.<sup>347</sup> This is a different condition for architecturally elaborated graves both in the Greek mainland and Western Anatolia. Additionally, decorated Mycenaean pottery, stemmed basins, were included in many graves, most possibly as a significant part of rituals.<sup>348</sup> Local decorated pottery with animal depictions were found with Mycenaean pottery in some specific graves.<sup>349</sup> This last group of graves

<sup>&</sup>lt;sup>340</sup> Karageorghis 1976, 32, 50-3.

<sup>&</sup>lt;sup>341</sup> Dikaios 1969.

<sup>&</sup>lt;sup>342</sup> Karageorghis 1976, 30-54.

<sup>&</sup>lt;sup>343</sup> Orsi 1895, 94.; see also Voza 1972, 195; Tusa 1983, 395.

<sup>&</sup>lt;sup>344</sup> Orsi 1895, 113-16; see also Voza 1973a, 200; Wijngaarden 2002, 232.

<sup>&</sup>lt;sup>345</sup> Wijngaarden 2002, 233.

<sup>&</sup>lt;sup>346</sup> Voza 1973b, 34-40; see also Wijngaarden 2002, 233.

<sup>&</sup>lt;sup>347</sup> Orsi 1895, 104-5, 112; see also Brown 1981, 29. Wijngaarden 2002, 234.

<sup>&</sup>lt;sup>348</sup> Orsi 1895.

<sup>&</sup>lt;sup>349</sup> Wijngaarden 2002, 234-35.

also included other import pottery such as from Cyprus and imported glass objects.<sup>350</sup> These matches again represent the strong relationships between cultures by the maritime network including economic and possibly political links.

#### *3.2.4. Summary*

Besides Mycenaean types of graves such as tholos tombs, the frequency and distribution of pithos graves represent local customs in burials which are mixed with a high number of foreign examples in the same cemetery areas of Panaztepe and Beşik Tepe. Pithos burials are seen only in these cemeteries. Müsgebi, Pilavtepe, and Değirmentepe have only rock-cut tombs in the form of tholos tombs. Considering local products such as Gray Ware at Troy and the high amount of local pottery in both the Aegean and local style in Panaztepe may help to raise more questions about the reasons for distinctions between these sites in addition to their similarities and connections.

Apart from the existing examples we have for burial practices, many sites have not been studied and published in detail, or such studies are not yet complete. This situation causes some disconnection in the chronology of Western Anatolia and prevents us from seeing a complete picture of the link between maritime connectivity and burial customs in the region.

# 3.3. Mycenaean Socio-Economy, Politics, and Maritime Network and Western Anatolia in LBA

Mycenaean politics cannot be defined without considering elements such as kinship, centralized palatial administration system, and regional and local connections, including economic, cultural, and political maritime networks. Conflicts and collaboration on the Greek mainland between the palace centers and smaller communities and connections beyond the sea were often mutually linked in the Late Bronze Age and earlier. Describing these developments and their impact on Western Anatolian culture are contained in a general framework of social, architectural and economic structures of Mycenae and the transition from kinship-based to a centralized social system.<sup>351</sup>

Wealth in graves shows social differentiation in LH and explains complex

<sup>&</sup>lt;sup>350</sup> Taylour 1958, 51-52; see also Vagnetti 1989; Wijngaarden 2002, 235.

<sup>&</sup>lt;sup>351</sup> Voutsaki 2010, 86-111.

economy and social structure. For the MH period, there is little evidence of social differentiation or hierarchy based on wealth in graves. Characteristics of graves and settlements, despite small differences, do not differ significantly, and so do not show a strict hierarchy in social life. For example, the tombs in Argolid do not include elaborate goods or funerary architecture in MHI-II, unlike in the LH period. Also, the circulation of goods in the MH in households was higher than in burials, and by looking at non-ceramic production it is possible to see an absence of difference between households. This circumstance supports the view that exchange of goods was not under the control of particular families or individuals, but more likely was part of an exchange network among families. Still, the apparent existence of a kinship-based economy does not mean that it was a more stable period, as both periods of palatial and non-palatial structures experienced changes, developments, shifts and differences.<sup>352</sup>

Architecture, including houses in the MH, were for families containing a small number of people, probably fewer than seven.<sup>353</sup> Unlike the EH, a wide distribution of settlements occurred on the Greek mainland, as populations and settlements clustered on or around citadels in the MH. These social and settlement structures later evolved into centralized systems. These settlement areas, especially at the end of the MH, became enlarged, and were located on cultivated areas and near water sources. Their geographical positions on uplands provided a secure environment and had the advantage of controlling the landscape. When settlement areas enlarged and became more organized during MHII and III, such as in Asine, unevenly distributed disorderly individual burials around settlements aggregated in cemeteries or certain spots.<sup>354</sup>

During the transition between MHIII and LHI, new settlements were founded on inland areas, coastal plains, and uplands. More organized settlements and cemetery areas were separated for different functions; for example, divisions in the houses and other buildings in the same area denoted different functions, such as rituals and political events.<sup>355</sup> This organization of settlements and graves in these specific geographical locations have similar characteristics, not only on the Greek

<sup>&</sup>lt;sup>352</sup> Burns 2010, 105-18; see also Milka n. d. cited in Voutsaki 2010, 89-91.

<sup>&</sup>lt;sup>353</sup> Wright 2008, 238.

<sup>&</sup>lt;sup>354</sup> Wright 2008, 234-35.

<sup>&</sup>lt;sup>355</sup> Cavanagh and Mee, 1998; see also Wright 2008, 237.

mainland but also in other areas around the Aegean Sea, such as Western Anatolia. The five cemeteries featured in this thesis and their associated centers have similar characteristics in terms of their geographical location and organization in the Western Anatolian coastal areas.

The continuity of settlement patterns and cemeteries represented stability in daily social life. Mixed burials, in terms of sex and age in larger tombs and burial mounds, appeared more densely in MHII. In MHIII-LHI, grave types and goods are differentiated with the reinforcement of settlements. These changes signify the start of complex hierarchical systems in social life and the emergence of a new social status.<sup>356</sup>

These regional arrangements changed as a result of developments in the economy. Before the large increase in population and pottery production, especially in coastal areas after the MH, the economy was based more on animal husbandry and agriculture. Coastal areas were more focused on craft production, especially pottery based on surviving evidence.<sup>357</sup> Most of the sites in the Aegean, such as Kos Island and Miletus, had a strong connection culturally and economically with the Greek mainland by way of goods, especially pottery, through sea trade and exchange.

The focus was on craft production on and around the centers and coastal plains on the Greek mainland during the LH. Western Anatolian coastal areas established the same style of local pottery in this period, and imports from the Greek mainland and Aegean Islands were also the same style of pottery, as with many other goods, such as weapons. The strength of culture, economy, social life, and politics within the Mycenaean and Western Anatolian coastal areas seems more understandable when production areas are considered. Further, the development of maritime networks for raw materials and other necessities were combined with exchange and trade of luxury goods. Terms such as 'prestige', 'wealth', and 'elite' emerge at this point. As a result of these economic systems and maritime networks not only were cultural features influenced but also political and economic relationships between the regions.<sup>358</sup>

<sup>&</sup>lt;sup>356</sup> Nordquist 1987, 71-8; see also Wright 2008, 238.

<sup>&</sup>lt;sup>357</sup> Wright 2008, 238-40.

<sup>&</sup>lt;sup>358</sup> In the 2<sup>nd</sup> chapter, conflicts and possible collaborations in Western Anatolia, issues about Ahhiyawan, and Arzawa lands are discussed, especially in terms of historical geography, militaristic dimensions, and politics. In the 4<sup>th</sup> chapter, details of import goods and imitations of Aegean style in local productions of Western Anatolia are evaluated.

The emergence of palatial systems and complex economic and political structures is closely related to maritime networks. This connection is visible in settlements patterns, citadels, harbor areas, and cemeteries, and with a new application to burial customs, trade, exchange, and manufacture. New forms of social structure and their effects influence these connections in turn.

Mycenaean politics and social characteristics, including livelihood, hierarchy, and economy, and the palatial economy, cannot be separated. Sofia Voutsaki examines elite power and social practices within the control of the palatial system. She claims that the relationships between palatial centers and secondary centers, rural areas, palatial territory, regional and local systems, and hinterlands must be taken into account. Increasing power and the resulting palatial authority created by using the resources of these places within the palace centers define the Mycenaean political system. She asks how this power and these resources became centralized at the beginning.<sup>359</sup> For example, for agricultural resources, Paul Halstead proposes that the palace offered a secure landscape and other advantages to local communities for animal husbandry and agriculture. In return, these communities provided the resource for the needs of the palace from their economic activities.<sup>360</sup>

The production of prestige goods and control over this process is another key point relating to the palatial economy and political organization. Voutsaki's research of workshops for prestige goods and the resulting archaeological evidence suggests that no workshops existed close to or far from palaces that were specifically focused on prestige goods. She suggests that even the locations of these workshops were not necessarily in an area of the palace, but that the control of these goods, their disposition and circulation was closely under palace authority.<sup>361</sup>

Carl Knappet focuses on pottery production and social practice in the palatial system. He suggests that pottery production might not be high cost production, but that its importance in the social structure, especially for specific forms and decorations, such as the kylix, explains their social status. These types of pottery were used in rituals and burial customs as precious goods. He investigates the span of this involvement of the palace in pottery production.<sup>362</sup> Whitelaw examines this

<sup>&</sup>lt;sup>359</sup> Voutsaki and Killen 2001, 1-4.

<sup>&</sup>lt;sup>360</sup> Halstead 1988.

<sup>&</sup>lt;sup>361</sup> Voutsaki 2001, 195-213.

<sup>&</sup>lt;sup>362</sup> Knappet 2001, 80-95.

question also and analyzed ceramics in destruction levels in the Palace of Nestor. He proposes that use of pottery at the palace in Pylos was only a small percentage of all production for the entire polity. The palace used pottery for both daily needs and specific events: two to four potters could be enough to produce pottery for these purposes.<sup>363</sup>

As seen in the examples above, material performance in burial customs, places, settlements, and any other place depended on the value of these objects in social life. Besides their functional use, such as kitchen ware, goods were a factor of political and economic connections and systems on the Greek mainland and in the Aegean. Trade or exchange of these goods and subsistence materials gave more power to palaces and elite groups. For example, Voutsaki examines the distribution of prestige goods in different centers, such as Mycenae, Dendra, and Prosymna. She concludes that a wide variety and a high volume of these goods were used in shrines, graves, and settlements, especially in LHIIIB.<sup>364</sup> Susan Sherratt claims that the distribution of Mycenaean goods in other regions in the Aegean, such as on Crete, can support Mycenaean interaction or control of exchange and trade of prestige goods, but it does not mean that they controlled all maritime networks in the Aegean and in the Mediterranean.<sup>365</sup> These conditions contributed to enlarging the maritime networks, but also brought instability and conflict which continued until the Late Bronze Age collapse.

In her investigation of the growth of the palatial system, Shelmerdine concludes that Mycenaean palaces developed from the MH to LHI-II and peaked in LHIII. This peak was not only in the palatial system but also in centers, growth in population, in trade networks, and the manufacture of prestige goods according to archaeological evidence such as burial gifts and settlements. The number of prestige goods and well-constructed graves increased and concentrated around the palatial centers and citadels where they were separated from the lower towns.<sup>366</sup>

Discussion about these centers and their administration can be evaluated from different aspects. Nicholas Postgate proposes that uniformity of culture that continued for hundreds of years, such as fresco depictions, pottery styles, and

<sup>&</sup>lt;sup>363</sup> Whitelaw 2001, 51-79; see also Voutsaki and Killen 2001, 5.

<sup>&</sup>lt;sup>364</sup> Voutsaki 2001, 195-213.

<sup>&</sup>lt;sup>365</sup> Sherratt 2001, 214-38.

<sup>&</sup>lt;sup>366</sup> Shelmerdine 2001, 113-28.

architectural continuity, should be seen as the control of a single administration over all centers and over connections with local communities<sup>367</sup>. Other scholars, such as Voutsaki asks similar questions, as homogenous cultural characteristics of the Mycenaeans and their stability over a long-time span were the result of political uniformity or possibly other reasons.<sup>368</sup>

Thomas Tartaron categorizes Mycenaean political integration according to five spatial scales. He defines the "intra-site" category as a political organization including the palace center and possibly fortification walls. The "Adjacent (near) hinterland" is an economic area, a lower town and a place that provides subsistence for palaces. The "Region (far) hinterland" is under limited political control directly or indirectly as the most distant geographical area and constituting a single state. The "Heartland" is a landscape of shared common culture that includes Mycenaean states. The last category of "Periphery" designates the areas outside the heartland having interactions with Mycenaeans in the other categories.<sup>369</sup>

Voutsaki suggests that interactions between the mainland and peripheral areas can be seen in the form of peer polities within which the Mycenaeans had influence, and gained economic and political control over the other regions through these interactions.<sup>370</sup> The cemeteries of Beşik Tepe, Panaztepe, Değirmentepe, Müsgebi, and Pilavtepe and their connections with the Mycenaean world show parallels here.<sup>371</sup> Growth in wealth can be seen from LHI to LHIII with the peak of prestige goods occurring in LHIIIA-B, especially in the five cemetery areas of the Western Anatolian coast. These circumstances relating to the Mycenaean political entities and their socio-economy allows us to examine possible political and socio-economic interactions in the sites of the Western Anatolia coastal landscape and their networks with the Mycenaeans. Relationships between centers or intra-sites on the Greek mainland, the heartland of the Mycenaeans with their hinterlands, closely resembles the connections between centers such as Troy and Miletus on the Western Anatolian coast and smaller areas or possible local entities such as Müsgebi and Beşik Tepe.

In the next section, an example from Klaus Kilian's article is detailed with

<sup>&</sup>lt;sup>367</sup> Postgate 2001, 181-94.

<sup>&</sup>lt;sup>368</sup> Voutsaki and Killen 2001, 13.

<sup>&</sup>lt;sup>369</sup> Tartaron 2010, 162-63.

<sup>&</sup>lt;sup>370</sup> Voutsaki 2001, 195-213.

<sup>&</sup>lt;sup>371</sup> In Chapter 3 and 4 more details about archaeological evidence of these parallelism are discussed. Historical and political issues of these connections and conflicts in Anatolia are discussed detailly in Chapter 2.

regard to burials. This example can be used for political and economic entities. Kilian proposes that citadels in the Argolid territory had their own rural hinterland, and coastal areas used the advantage of their maritime networks to expand their power and control of centers.<sup>372</sup> Tartaron suggests that the circulation system of imports for specific elite communities was an opportunity to control the quality and quantity of goods, since the prestige that such goods provided could become meaningless if they were to become accessible to a wide range of social groups.<sup>373</sup>

Keeping this power and controlling the distribution of goods could have undergirded a similar system in the Western Anatolian coastal areas among sites in the region and in other regions, such as the Greek mainland. The material culture of Western Anatolia and historical documents about conflicts in Western Anatolia supports contentions about the close relationship between the Mycenaeans and Western Anatolian communities and other parts of the Aegean, such as Kos Island and Rhodes. The Western Anatolia coast, with its material culture, architectural features, burial customs, and harbor activities according to Tartaron's spatial scale, resembles a more peripheral area. It is also important to examine these elements within and between sites to understand the indigenous hybrid culture of Western Anatolia.

For example, as discussed in Chapters 2 and 4, and based on archaeological evidence of settlements and goods found there, Niemeier believes that the second LBA building level in Miletus could have been the site of an Aegean community that may have settled there and become influential. The Mycenaean corridor house in Level VI and the Mycenaean style pottery were found in both these levels.<sup>374</sup> Further examples given in Chapter 4 about Mycenaean cultural features, and historical documents mentioned in the previous chapter, elaborate these types of correlations.

The interaction between Western Anatolian coastal centers and local or smaller areas can be examined from several aspects. Existing archaeological evidence and clay analyses help to confirm some connections. For example, it was determined that Mycenaean style of pottery in Müsgebi graves must have come from Miletus workshops. It is also known that Müsgebi was likely accessible only by sea.<sup>375</sup> Miletus could have been the possible distributor and intersection point between Western and

<sup>&</sup>lt;sup>372</sup> Kilian 1988, 291-302; see also Burns 2010, 168.

<sup>&</sup>lt;sup>373</sup> Tartaron 2013, 27.

<sup>&</sup>lt;sup>374</sup> Goetze 1933, 36-7; see also Niemeier 1998, 37-9.

<sup>&</sup>lt;sup>375</sup> Gödecken 1986, 312; see also Mountjoy 1998, 36.

Central Anatolia and the Aegean; this perhaps being the reason for Mycenaean settlement in the area. Miletus had an advantageous position on the Mediterranean, one of the most southern natural harbors of Western Anatolia, and relatively accessible to inland areas.<sup>376</sup>

The settlements of Miletus, Panaztepe and Troy should also be considered. Beşik Tepe is accepted as one of the harbors of Troy<sup>377</sup>, a safe natural harbor and strategic point from which to control areas on land and sea. Panaztepe had a lower town – the Harbour Town – that included port facilities and settlement areas, an acropolis, and two cemetery areas to the west and north.<sup>378</sup> This large fortified area included Mycenaean and local styles of goods in mortuary, settlement, and harbor contexts. Parallels of these levels, especially architectural features and goods, suggests related developments at the site. Also, correspondence of these features in the other cemetery areas, such as Değirmentepe – Ancient Miletus, Pilavtepe, and Müsgebi, supports the view that central areas were where workshops, the main harbors, citadels, and complex in social life clustered, which had control over smaller sites, as seen between the heartland and intra-sites of the Mycenaeans and their hinterlands.<sup>379</sup>

The Mycenaean palatial system and other civilizations, such as the Hittites, collapsed at the end of LHIIIB2 (1200-1190 BC). Although there remained the continuation of the maritime network, for example, of Aegean style pottery in LHIIIC in Western Anatolian coastal graves, the volume and distribution of these goods declined markedly. Palatial administrative organizations, fortifications, buildings, and similar structures were no longer mentioned in the Linear B tablets.<sup>380</sup>

Fire destruction in the Tiryns' citadel and houses, destruction in Boeotia, which affected part of the palace at Thebes, earthquakes, human destruction, and possible sieges, become evident in this period, especially at the end of LHIIIB1. Expansion of the citadel fortifications in Tiryns, Mycenae, Midea, and Athens in this period shows a need to strengthen the walls.<sup>381</sup> External manufacturing areas, such as workshops and storage spaces, were moved inside the walls.<sup>382</sup>

<sup>&</sup>lt;sup>376</sup> Greaves 2003, 22.

<sup>&</sup>lt;sup>377</sup> Korfmann 1986b, 26-8; 1987, 265.

<sup>&</sup>lt;sup>378</sup> Erkanal-Öktü 2005, 53.

<sup>&</sup>lt;sup>379</sup> In Chapter 4, geological details and correlations of the features in five cemetery areas which mentioned in the text are discussed with their geographical, cultural, economic, and political dimensions. Some of these aspects bring more questions about political connection of these sites. <sup>380</sup> Tartaron 2013, 17.

<sup>&</sup>lt;sup>381</sup> Maner 2019.

<sup>&</sup>lt;sup>382</sup> Tartaron 2013, 17-8.

The Linear B "rower tablets" refer to some of the precautions taken to address these dangers, for example, watchers in the coastal area of Pylos are mentioned.<sup>383</sup> The same tablets had entries about 600 rowers<sup>384</sup>, which are enough people for around 20 galleys. These texts give information about coastal settlements, possibly where rowers lived or supported by the kingdom, and nautical connections.<sup>385</sup> Such galleys were for merchandise or battles. These oared ships could also be used in sieges and mass migrations when a force appeared.<sup>386</sup> Herodotus mentions that Phocaeans escape from Ionia before the Persian army arrived in the region, with women and children in 50 oared ships and carried their movable goods with them.<sup>387</sup> Scarcity of metal for weapon production, possible human sacrifices, 600 rowers for a fleet, and watchers in the coastal areas placed in the same period. After a short time of these documents were written, Pylos collapsed.<sup>388</sup>

The immense scale of the Mycenaean networks and Bronze Age civilizations collapsed following a peak period of trade, exchange, cultural, political, and economic connections. However, the power gained by specific social groups and royals also caused instability and conflict. Territorial rights, a share in the culture, and political interaction, despite the exchange of prestige goods, accessibility to resources and their distribution, may have needed more control, which most probably brought more conflict. These issues, combined with natural disasters and possibly other issues yet unknown, intensified the fallout of the collapse.

Reflections of this period can be seen in written documents of the Hittites as set out in Chapter 2. For archaeological evidence of the collapse, it is better to look first at the period of use of cemeteries on the Western Anatolian coast. Panaztepe cemeteries were used from the EBA to the Ottoman period. The phase examined in this thesis ended around 1100 BC (LHIIIB2-C).<sup>389</sup> Pilavtepe, with a single grave and dated to LHIIIA2-C<sup>390</sup>, might show a correlation with high prestige goods such as amber, to illustrate the time frame of the peak and collapse. Müsgebi (LHII and

<sup>&</sup>lt;sup>383</sup> Chadwick 1994: 175; see also Tartaron 2013, 18.

<sup>&</sup>lt;sup>384</sup> Chadwick 1987, 77.

<sup>&</sup>lt;sup>385</sup> Wachsmann 1998, 123-125.

<sup>&</sup>lt;sup>386</sup> Wachsmann 1998, 159.

<sup>&</sup>lt;sup>387</sup> Herodotus I, 163.

<sup>&</sup>lt;sup>388</sup> Wacshmann 1998, 159.

<sup>&</sup>lt;sup>389</sup> Erkanal-Öktü and Çınardalı-Karaaslan 2007, 403; see also Çınardalı-Karaaslan 2008, 645.

<sup>&</sup>lt;sup>390</sup> Mountjoy 1986, 67-92, 134-54; see also Benter 2010, 344-46.

LHIIIA2-C<sup>391</sup> as Pilavtepe) and Değirmentepe cemeteries, and Ancient Miletus settlement layers parallel each other in stratigraphy with Mycenaean goods and architectural features. The Değirmentepe cemetery dates to between the late MHIII and the LHIIIA2-B. The Miletus Mycenaean levels started from LHII. The second building level of Miletus corresponds to Milawanda in Hittite documents according to Niemeier, destroyed in the LHIIIA2-B period.<sup>392</sup> It corresponds to the end of the Bronze Age phase in the Değirmentepe cemetery and to the time burial activities stopped until resumed in the Roman period. Beşik Tepe cemetery dates to LHIIA2-B1<sup>393</sup>, with the use of the cemetery ending before the collapse.

Historical documents, such as Linear B tablets and Hittite documents as discussed in Chapter 2, support an understanding about administrative systems and regional and interregional connections. Correlations between these sites, including their collapse, evident from both material culture and written documents, are significant. Although written and material evidence allows us to interpret the socioeconomy, hierarchical system in administration and social life, politics, and maritime networks in many respects, there are now more questions to answer. These mainly concern the steps and specific links or reasons for the structuring of the cultural and economic networks that arose. The process of how they affected politics in the Aegean and Anatolia is one question. Other questions are how central and local authorities structured and developed their administrative systems on such a large scale in these regions, how it was done, and with what specific links. The entire system of connection between the Aegean sites and sites on the Western Anatolian coastal landscape are also still being questioned. The correlation of material culture with the growth of cultural, political, and economic entities and their organizations and the uniformity of the palatial system in the case of the Mycenaeans, hints at these links, but does not yet reveal them explicitly. One of the most significant limitations for research on the maritime cultural landscape concept of the region are unanswered questions about site connections in the coastal areas of Western Anatolia.

<sup>&</sup>lt;sup>391</sup> Boysal 1963, 70.

<sup>&</sup>lt;sup>392</sup> Goetze 1933, 36-7; see also Niemeier 1998, 37-9.

<sup>&</sup>lt;sup>393</sup> Basedow 2001, 415.

#### 3.4. Mycenaean Burial Customs During the LH Period

#### 3.4.1. Geography at the Greek Mainland during the LH Period

The geography of the Argolid plain encouraged economic and political growth. Several major sites were located on top of high hills or ridges above alluvial plains, such as Argos in the west, Midea-Dendra in the east, Mycenae in the north, and Tiryns and Asine in the south.<sup>394</sup> Geological changes caused the disappearance of some of the LH settlements in these areas. For example, the freshwater lagoon in Lerna, the inland harbor at Asine, and other sites had higher sea levels which make them more connected with water during the LH period. Under the same conditions Tiryns was closer to the sea and separated Lerna from other sites, which affected cultural connections and the political structures of the region.<sup>395</sup>

Mee and William Cavanagh claim that the placement of cemeteries and single monumental graves were not only based on the locations of the citadels and centers mentioned above, but also aligned with local topography for practical reasons. These graves could be territorial boundary markers of the region.<sup>396</sup> Gallou states that people positioned cemeteries in the LH III period based on local topography, rivers, streams, and water sources that could have been considered natural borders between life and death in the Mycenaean tradition. She underlines the importance of the sea in this concept as a part of these borders.

### 3.4.2. Mycenaean Graves: Funerary Architecture, Grave Goods, and Rituals

The funerary architecture of the Mycenaean demonstrates a scale of grave types based on geography, region, and time period. Mycenaean tomb types include tholoi, cist and pit graves, lesser types such as cave and shaft graves, and pithoi in some cemeteries.<sup>397</sup> Kazimierz Lewartowski states the Mycenaeans did not have a standard style for the construction of tombs: types vary based on natural conditions, wealth, belief systems, and the social structure of sites over time.<sup>398</sup>

Lewartowski categorizes simple graves according to chronology and their

<sup>&</sup>lt;sup>394</sup> Bintliff 1977, 345-46; see also Burns 2010, 165.

<sup>&</sup>lt;sup>395</sup> Zangger 1991; see also Burns 2010, 165.

<sup>&</sup>lt;sup>396</sup> Mee and Cavanagh 1990, 242.

<sup>&</sup>lt;sup>397</sup> Lewartowski 2000; see also Gallou 2005; Burns 2010; Gür 2013.

<sup>&</sup>lt;sup>398</sup> Lewartowski 2000, 7-10.

frequency. For example, cist graves peak in the LH period. The second most popular type of simple grave is the pit grave which were cut or dug in rocks and surrounded with stones. Pits had several subcategories in different part of the Greek mainland in the Middle and LH. Some parts of these graves, and some other types, include upright stone slabs as grave markers. Cist graves were generally richer than pit graves in the Aegean.<sup>399</sup>

Grave types in the Mycenaean world may explain social hierarchy at different time scales. Lewartowski describes types of simple pit graves and chamber tombs in hierarchical order. In the LH III period Mycenaeans appear to have constructed chamber tombs when they had the technology and/or wealth to do it. Less elaborate graves such as pit-caves and pit-shafts were preferable for common people because they consumed-fewer resources and required less labor. Another possibility is that since chamber tombs required higher energy and time, they might be preferable for more elaborated single graves.<sup>400</sup>

This point brings us to the importance of tholos tombs in the social and economic structure of Mycenean society. Besides their popularity among elites on the Greek mainland, several examples in Western Anatolia demonstrate the characteristics of tholos tombs in different regions that share this popularity.<sup>401</sup> For example, Thessaly includes a variety of simple grave types from the Middle Helladic to LH periods which display many differences when compared with the Greek mainland examples. Significance of tholoi and Mycenaean prestigious goods in Thessaly and Greek mainland indicate a high similarity.<sup>402</sup>

A variety of grave types including chamber and tholos tombs demonstrate similar social characteristics among indigenous communities of the Cyclades. Most of these types of burials were looted, but preserved examples seem to represent high status people with abundant prestige goods.<sup>403</sup> Lewartowski suggests that the Mycenaean influence on elites and the lack of Mycenaean simple graves in the region supports this contention. Cemeteries in important centers such as Mycenae, Tiryns, Pylos, and Thebes do not contain simple graves. Simple grave cemeteries were more common,

<sup>&</sup>lt;sup>399</sup> Lewartowski 2000, 7-10.

<sup>&</sup>lt;sup>400</sup> Lewartowski 2000.

<sup>&</sup>lt;sup>401</sup> Tholos tombs in Western Anatolia coastal areas are discussed in Chapter 4.

<sup>&</sup>lt;sup>402</sup> Lewartowski 2000, 15.

<sup>&</sup>lt;sup>403</sup> Schallin 1993, 94-108.

and, except in a few mixed cemeteries, were separated from high status graves.<sup>404</sup>

Goods in the tholoi at Dendra represent signs of multiple activities and multiple burials in graves because of the high number of weapons and other goods were found mixed in the tombs. Chamber tombs in the same cemetery area most possibly belonged to outsiders and unlike tholoi, were not monumental; monumental examples mostly identify locals, and present a hierarchy among elites.<sup>405</sup> During the LH IIIA-B periods, distribution of tholoi in different sites of the Argolid areasuch as Dendra and Mycenae demonstrate different concentrations of prestige goods such as faience, agate beads, gold leaf ornaments, and ivory, and resources that hail from Argolid, which explains competition between, and internal stability of, these sites.<sup>406</sup> Therefore, it is plausible that these prestigious imported goods were a Mycenaean luxury enjoyed by elites and royal families who could afford to live in more expensive and wellconnected centers while remaining unknown or inaccessible to common people who dwelled in less populated areas.<sup>407</sup>

Both single and multiple burials in simple graves increased in the LH period. Burial customs in elite and simple graves are similar except for the number and quality of grave goods. Single burials are more common in simple graves, but chamber tombs have several periods of grave goods that demonstrate the chronological range of the tombs' use. The Mycenaeans practiced inhumation, but some of these graves do not include skeletal remains, likely because of poor preservation conditions.<sup>408</sup> Most believe the reason is that empty burials are due to the disintegration of childrens' remains.<sup>409</sup> Some of graves never included bones, but had grave goods including high prestige objects; these graves –cenotaphs- were likely built to memorialize people whose remains could not be accessed but were presumed dead.<sup>410</sup>

Boyd claims two significant explanations for material in Mycenaean graves. Mycenaean grave goods include certain materials and objects found in graves that are requirements for the dead entering the afterlife. Second reason, as discussed in the Western Anatolian burials section (Chapter 3), relates to the wealth and status of the

<sup>&</sup>lt;sup>404</sup> Lewartowski 2000, 16-7.

<sup>&</sup>lt;sup>405</sup> Aström 1977; Whitley 2002, 222; see also Burns 2010, 163-64.

<sup>&</sup>lt;sup>406</sup> Persson 1931, 29-31; see also Voutsaki 1995.

<sup>407</sup> Burns 2010, 164.

<sup>&</sup>lt;sup>408</sup> Lewartowski 2000, 22-5.

<sup>&</sup>lt;sup>409</sup> Kastorchis and Konkadis 1879, 520; see also Frödin and Persson 1938, 122, 143, 148; Gallou 2005, 115.

<sup>&</sup>lt;sup>410</sup> Burns 2010, 188.

individual.<sup>411</sup> Understanding the material culture of the Mycenaeans and how mortuary practices were performed can help us to understand the shared characteristics of Western Anatolian burials.

Pottery is the most common grave good in Mycenaean culture. Pottery in funerary contexts includes containers for pouring, drinking, eating, feeding, mixing, and cultic use. Between the LH II-IIIA periods, increases in specific types are apparent; kylixes were popular in graves, while containers, drinking, alabastra and pouring vessels were the most common types.<sup>412</sup> Kylixes were found in many burial chambers and tholoi in Mycenaean graves, probably as part of a ritual. For example, an image in Tanagra Tomb 36 (Boeotia) represents a female figure holding a kylix in a ceremony scene.<sup>413</sup>

Drinking vessels generally were found in the dromoi of chamber tombs which might indicate that the libation process took place there; but simple graves had fewer and proportionally larger libation jars inside the burial part which might mean that the ritual took place in the graves.<sup>414</sup> Although tholoi and chamber burials are the richest, the richest simple graves are equal to the poorest but rich, chamber tombs.<sup>415</sup> Similar differences of vases in simple graves, tholoi, and chamber tombs represent a hierarchy between different social groups even in child burials indicating that wealth was inherited.

The second most common grave goods are ornaments, with a high number of beads and a variety demonstrating possible evidence for social hierarchy. In the MH and LH II-IIIA periods glass beads are the most common beads, followed by semiprecious stones such as carnelian and steatite. More precious examples such as gold, faience, scarabs, and amber were rare. In the LH IIIA-B periods the popularity of glass continued; chalcedony and faience became the second and third popular material for beads. Beads of amber and gold were still rare, possibly being the most valuable materials. An increase in materials such as faience and glass is also noted, because they are able to be shaped easily and quickly with available technology. They likely represent the higher demand and wealth of Mycenaeans. Many of these beads were

<sup>&</sup>lt;sup>411</sup> Boyd 2014, 195.

<sup>&</sup>lt;sup>412</sup> Lewartowski 2000, 27-33. Inhumation of bodies in pithoi is one of the burial methods employed in this period and pithoi are not included among pottery groups here.

<sup>&</sup>lt;sup>413</sup> Cavanagh and Mee 1995, 50.

<sup>&</sup>lt;sup>414</sup> Lewartowski 2000, 48.

<sup>&</sup>lt;sup>415</sup> Mee and Cavanagh 1984, 49, 62; see also Lewartowski 2000, 49.

found in Mycenaean child and infant burials rather than adults' graves. Beads in different shapes such as rosettes, golden plaques, and figure-of-eight shields were found in the highest status MH and LH graves.<sup>416</sup>

Simple graves and chamber tombs contain thrones, quadrupeds, Minoan types, phi, and psi types terracotta figurines in the LH period. Dendra, Mycenae, and several sites have these figurines, with the highest concentration of cemeteries with figurines occurring in the Argolid. These figurines are found in infant and child burials and are only rarely present in adult burials. For different types of figurines, scholars suggest different functions.<sup>417</sup> For example, Mylonas<sup>418</sup> interprets phi figurines as divine nurses; Blegen interprets animal figurines as toys or symbols of milk source for children.<sup>419</sup> As Mylonas, Iakovidis believes that phi figurines were to help pass children safely to the afterlife.<sup>420</sup>

Weapons and tools such as loom weights, spatulae, and needles were found in several graves. These are assumed to be related to the deceased individual's livelihood or were a significant characteristic of his or her identity. Lewartowski claims that if we can find any fragments of bronze straps or rivets that were used for shields and corselets, it is possible to interpret the grave as a warrior grave. He suggests that tombs that contain weapons belong to warriors, but this means that warriors did not have useful weapons because the weapons found in these tombs are not particularly battleworthy. Weapons might be a sign of status as opposed to a sign of profession. Weapons as prestige goods in graves can be exemplified with Cyprus and medieval tombs. During Early-Middle Cypriot periods, cemeteries such as Lapithos, contained weapons in burials, including female burials, with other prestige goods.<sup>421</sup> In England, during the early medieval period, textual and artefactual evidence prove that weapons in graves were an inheritance of status.<sup>422</sup> Rare object types such as mirrors, shells, seals, and animal bones were found in several simple graves, but seals and animal bones may have been important for symbolizing ritual purposes and social status. Seals as administrative and high-quality objects might be a sign of status and individual's identity but were not enough to explain their exact position in the social

<sup>&</sup>lt;sup>416</sup> Lewartowski 2000, 34-8.

<sup>&</sup>lt;sup>417</sup> Lewartowski 2000, 39.

<sup>&</sup>lt;sup>418</sup> Mylonas 1966, 91-3; see also Lewartowski 2000, 39.

<sup>&</sup>lt;sup>419</sup> Blegen 1937, 256.

<sup>&</sup>lt;sup>420</sup> Mylonas 1966, 91-3; see also Iakovidis 1969, 120-31; Lewartowski 2000, 39.

<sup>&</sup>lt;sup>421</sup> Keswani 2005, 341-401.

<sup>422</sup> Härke 2000, 377-99.

hierarchy. Bones from animals such as dogs, may have been either ritualistic sacrifices or companions for the after-life.<sup>423</sup>

The frequency of grave goods in infant and child burials and adults changed over time. Goods in child burials increased in the MH and LH II-IIA period, while in the LH IIIB-C and SubMycenaean periods grave goods increased in adult burials.<sup>424</sup> Between the MH and end of the LH periods, male burials generally had only pottery as goods (sex differences inn grave goods apparently disappeared in the Submycenaean period); children did not have elaborate pottery in graves, but children's burials included beads and jewellery; male burials contained weapons and shells during the LH and Submycenaean periods.<sup>425</sup> Evidence for social status continues among the same sex in the Mycenaean burials, according to Mee; for example, goods differentiated in women's simple graves and chamber tombs demonstrate status differences of women in Mycenaean society.<sup>426</sup>

The status of chamber tombs in various locations is also seen in a comparison of the location of Mycenaeans tombs and citadels. For example, frescoes depicting female figures with weapons, sheaves, and a scepter in Room 31 of the Citadel House at Mycenae are next to decorated columns which had the same decoration as facades of the Treasury of Atreus and the Tomb of Clytemnestra.<sup>427</sup> These frescoes from the Cult Center as a part of iconography of burial customs, they mirrored the partial reinvention of Shaft Grave Circle A;<sup>428</sup> terracotta idols and snakes in Room 19 possibly symbolize a belief in an underworld according to Moore.<sup>429</sup> Not only decorations of architecture, but goods such as faience and glass in burials have similarities in design and shape with local and imported glass and faience ornaments in Tsountas' House Shrine at Mycenae.<sup>430</sup> Important Mycenaean shaft graves in the citadel area, specifically Grave Circle A and B next to the citadel area, are dated to end of the MH and the beginning of the LH period and the end of MH period respectively. Prestige goods such as swords, daggers, gold, silver, ivory, and amber ornaments, and diadems were found in these graves, which shows that isolated rich burials are those of

<sup>&</sup>lt;sup>423</sup> Lewartowski 2000, 40-3.

<sup>&</sup>lt;sup>424</sup> Lewartowski 2000, 44.

<sup>&</sup>lt;sup>425</sup> Lewartowski 2000, 43-5.

<sup>&</sup>lt;sup>426</sup> Mee 1998, 169; see also Lewartowski 2000, 44.

<sup>&</sup>lt;sup>427</sup> Tsountas and Manatt 1897, 61; see also Burns 2010, 141-42.

<sup>&</sup>lt;sup>428</sup> Gallou 2005, 26-8.

<sup>&</sup>lt;sup>429</sup> Moore 1988; see also Burns 2010, 142.

<sup>&</sup>lt;sup>430</sup> Tsountas 1887, 162-64; see also Burns 2010, 142-45.

privileged royals.431

Kilian suggests each citadel in Argolid territory had its own rural hinterland, and places in coastal areas expanded their power by taking advantage of maritime connectivity with other regions outside of the Greek mainland. This strategic position of the sites is reflected by the wealth in graves.<sup>432</sup> Lewartowski, Voutsaki, and Burns claim that the concentration of certain types of graves such as tholoi increased regionally for every social class. Wealth in funeraries and palatial contexts increased at Mycenae and other sites in the 14<sup>th</sup>-13<sup>th</sup> c. BC. The increased political centralization of Mycenae is suggested by the increasing number of imported prestige goods compared with local products in settlements and graves.<sup>433</sup> Tartaron claims that the apparent limits on the distribution of imported goods for specific elite communities was to control quality and quantity of these goods because the power of exotic materials as prestigious goods decreases when access to these goods increases.<sup>434</sup> As mentioned in the "Western Anatolian Burials" section, citadels, including cultic centers, temples, and shrines, in many cases contain luxury items which demonstrate higher status and the isolation of higher social groups from common people.

Michael J. Boyd identifies two aspects of burial customs as a social behavior that demonstrate connections between the belief system and social interaction for Mycenaeans. He states that the variability of rituals for the dead, goods to use in the grave -both for daily use and ceremonial cups- and the multiple burials emphasize the loss of a member of the community and transferring of the dead to the ancestral community. The Mycenaean tombs comprised the signs of certain traditional behaviors, strategies, and meanings in funerary performance.<sup>435</sup>

#### 3.3.3. Maritime Aspects of Mycenaean Burial Customs

Mycenaean burial customs are not limited to marine impacts on the tradition but could be used to elaborate on the meaning of burials in the maritime cultural landscape. This section is limited to the maritime impacts on graves and burial customs. Mycenaean

<sup>&</sup>lt;sup>431</sup> Iakovidis 2015, 305-16.

<sup>&</sup>lt;sup>432</sup> Kilian 1988, 291-302; see also Burns 2010, 168.

<sup>&</sup>lt;sup>433</sup> Voutsaki 1995; Lewartowski 2000; Burns 2010, 168-70.

<sup>&</sup>lt;sup>434</sup> Tartaron 2013, 27.

<sup>&</sup>lt;sup>435</sup> Gallou 2005; see also Boyd 2014, 200.

funerary art used figures from the natural world that have been interpreted by some scholars as representing death, rebirth, transformation, and the soul. One type of these figures includes marine figures such as octopuses - because of their sinuous body form - to symbolize the moment of death which means separation of the soul from the body.<sup>436</sup> Travel to the underworld may have been part of this concept. Based on iconographic and archaeological evidence both in adult and child burials, some scholars suggest that the Mycenaeans believed that models of chariots and boats are either the means to reach the underworld or votives, with the only difference between these being a second function, as toys, in child burials.<sup>437</sup> The earliest example of a terracotta boat model was found in Laconia, this dating to the end of the MH or the beginning of LH periods. LH IIIA-B boat models made from different materials were found in Argolid and Boetia; another boat model was found in a Mycenaean sanctuary at Methana.<sup>438</sup>

A boat-shaped pyxis made of ivory was found in the stomion of Tomb 88 at Mycenae and dated to the LH IIA1 period. A smaller example of this type was found in a pit cave grave at Zafer Papoura dated to the LM IIIA (1400-1300 BC). A small terracotta boat model was also found in the stomion of Tomb 79 at Mycenae.<sup>439</sup> The Tanagra cemetery in Boetia and Megalo Kastelli at Thebes also include several votive boat models from different materials.<sup>440</sup> Wings on a ship depiction ae interpreted as flying to the afterlife by Gallou.<sup>441</sup> Long believes that the crescent-shaped object held by a male figure in the painting on the Hagia Triadha sarcophagus from the LM (around 1400 BC) at Crete is a boat model. He supports the idea of a journey to the underworld

<sup>&</sup>lt;sup>436</sup> Gallou 2005, 38-41.

<sup>&</sup>lt;sup>437</sup> Karantzali 1999, 406; see also Hamilakis and Konsolaki 2004, 137; Gallou 2005, 44.

<sup>&</sup>lt;sup>438</sup> Hamilakis and Konsolaki 2004, 137; see also Gallou 2005, 44.

<sup>&</sup>lt;sup>439</sup> Evans 1905, 416; see also Sakellarakis 1971, 188-233; Xenaki-Sakellariou 1985, 220-22, 244; Gallou 2005, 44.

<sup>&</sup>lt;sup>440</sup> Pharaklas 1967, 228; see also Gallou 2005, 44-5.

<sup>&</sup>lt;sup>441</sup> Gallou 2005, 48.

on a boat as other scholars above have done.<sup>442</sup> Jean Porter Nauert explains two possibilities for the symbolic meaning of the boat. The first claims that the boat is an offering for a deity for its protection of the maritime activities in Hagia Triadha; the second possibility is that the boat represents a deity's endless journey.<sup>443</sup>

The meaning of boat models and depictions in mythological and cosmological concepts in graves at Egypt and Mesopotamia is not the same as in the Aegean.<sup>444</sup> Gallou suggests that Greek seascape characteristics had a bigger role in funerary habits and created a connection between the deathscape and the sea.<sup>445</sup> Nanno Marinatos associates Minoan larnakes - small coffins for cremation and inhumation - with the depictions of sea creatures such as molluscs, with the sea, and claims that these larnakes symbolized water as a part of life and resting place of the dead. She claims that these creatures correspond to terrestrial reproduction and fertility in the marine realm.<sup>446</sup>

Marine species became a part of the funerary context in Mycenaean lands in the LH I period. Octopuses, squids, and frogs are seen on the shrouds of the dead in the Grave Circle A and in the tholos tomb in Kakovatos. In this case, Robert Laffineur suggests that they adorned the body for protection and for the magic of the deity. The spiritual concept of these creatures related to their body forms, symbolizing transfiguration, reproduction, and perhaps hibernation, which was their nature, in reference to the dead.<sup>447</sup> Marine fauna were no longer used in the iconography of the LH III period, but boat models and depictions continued.<sup>448</sup>

<sup>444</sup> Laffineur 1991, 233.

<sup>&</sup>lt;sup>442</sup> Long 1974, 46-9.

<sup>&</sup>lt;sup>443</sup> Nauert 1965, 96.

<sup>&</sup>lt;sup>445</sup> Gallou 2005, 48.

<sup>446</sup> Marinatos 1993, 231, 288.

<sup>&</sup>lt;sup>447</sup> Laffineur 1985, 259.

<sup>&</sup>lt;sup>448</sup> Gallou 2005, 49.

#### 3.5. Summary

Much of the evidence pertaining to Mycenaean characteristics in burials and rituals is ambiguous. For example, there has been some ambiguity around what evidence to consider as proof of distinctions between the classes. As pointed out above, seeing particular classifications as rigid categories based on a single characteristic does not account for some of the similarities that might be significant in understanding the way Aegean people lived. To understand the process of constructing graves and choosing cemetery areas, it is important to consider, among other circumstances, the topography and environment of the local area. Extramural Western Anatolian coastal burials and Mycenaean cemeteries adapted to the topography of their environment, while other Mycenaean cemeteries such as Prosymna<sup>449</sup> were located close to the harbors and citadels.

Cemeteries have a variety of grave types and goods for several reasons. After the adaptation to topography, the wealth of community, level of technology and labor became factors in influencing funerary architecture and grave goods. These burials included imports and local products at the same time, with the number of import goods increasing with increasing maritime connectivity and wealth. These burials contained locally produced prestige goods and from simple graves to tholoi, each grave type included a hierarchy among each other and with other types. When examining the five coastal cemetery areas and graves in Western Anatolia in the next chapter, details of these shared characteristics will be exposed more elaborately to explain the Mycenaean connection of the region and its placement in the maritime cultural landscape.

<sup>449</sup> Blegen 1937.



# Chapter 4:

# ARCHAEOLOGICAL DATA FROM WESTERN ANATOLIAN SITES

This chapter examines characteristics of the burials and cemeteries of Beşik Tepe, Panaztepe, Değirmentepe, Pilavtepe, and Müsgebi. Funerary architecture, grave goods, burial customs, and geographical conditions of these sites demonstrate a mix of local and imported elements that created a unique common set of cultural traits in the region.

The maritime influence became more important because crucial geographic position of these graves and lack of access to these sites by land made the region more suitable for maritime activities and connectivity. The strong maritime impact on this culture and the Mycenaean influence in the region became more obvious when these five sites are examined together in the same framework.

# 4.1. Beşik Tepe

The cemetery area in Beşik Tepe, a high hill with Beşik bay and consisted only the cemetery from the LBA, is located 7 km from Troy. The cemetery lies 250 m southeast of Yassitepe.<sup>450</sup> Beşik Bay (Fig. 10) is widely accepted to be one of the natural harbors of the city of Troy. Korfmann suggests the natural bay was appropriate as a safe anchorage in the Dardanelles and for unloading goods. By the end of 2<sup>nd</sup> millennium BC the shoreline had already changed since the end of the Miocene<sup>451</sup> (5-6 million years ago). The change was visible from the treeline behind the now sandy area on the shoreline.<sup>452</sup> Earlier shifts in the coastline were also known, but the shift continued to well into Augustan time, abating around 16-17<sup>th</sup> c. AD.<sup>453</sup>

The cemetery (Fig. 11) was excavated to the south to understand its position in relation to the sea. Cores revealed evidence of seashells and seaweed in the alluvial

<sup>&</sup>lt;sup>450</sup> Akyurt 1998, 13.

<sup>&</sup>lt;sup>451</sup> Kayan 1995, 217.

<sup>&</sup>lt;sup>452</sup> Korfmann 1986a, 1-16.

<sup>&</sup>lt;sup>453</sup> Korfmann 1986a, 17-8.

sediments.<sup>454</sup> Results showed that the cemetery was originally situated on a rocky slope about 1.7 meters above sea level and 15 meters from the shoreline in the 13<sup>th</sup> to 12<sup>th</sup> c. BC.<sup>455</sup> The area was sandy in 2<sup>nd</sup> millennium BC when the graves were filled with fine-grained marine sand, while sand from more recent strata is volcanic.<sup>456</sup> The cemetery sits on a cape separated from the sea by a stone wall.<sup>457</sup> The sloping ground was not suitable for agricultural activities and erosion prevented terracing. Basedow suggests that the sea may have been a significant feature with regard to the siting of the cemetery.<sup>458</sup> More than 100 graves were discovered, 58 which were pithos graves.<sup>459</sup> The same kind of pottery remnants and same kind of flat stone used in the graves were also found at sea level. The cemetery dated to Troy late VI-VIIa levels (13<sup>th</sup> c. BC) based on pottery.<sup>460</sup>

# 4.1.1. Grave Types

A number of different grave types (Fig. 12) were identified in the cemetery, including pithos, cist, mudbrick encircled graves, urns and a megaron with a planned burial chamber (Fig. 11).<sup>461</sup> The first usage of the cemetery was in the LH IIIA2 period, a second stage was added which dated to the LH IIIA2-IIIB1 based on the Mycenean pottery.<sup>462</sup> Most of the graves were oriented in a southeasterly direction and were surrounded with flat stones.

Beşik Tepe consisted, as other cemeteries such as Müsgebi and Panaztepe, multiple use of the graves, inhumation and cremation customs were found together.<sup>463</sup> Some of the graves were empty, prompting Korfmann to suggest that they were used as temporary graves for warriors, after which their bones were carried to their homelands. A stone with holes discovered alongside broken pieces of pottery might be connected to libation ceremonies.<sup>464</sup>

<sup>&</sup>lt;sup>454</sup> Korfmann 1986a, 17.

<sup>&</sup>lt;sup>455</sup> Korfmann 1986b, 231-32.

<sup>&</sup>lt;sup>456</sup> Korfmann 1986b, 232.

<sup>&</sup>lt;sup>457</sup> Korfmann 1987, 266.

<sup>&</sup>lt;sup>458</sup> Basedow 2001, 415.

<sup>&</sup>lt;sup>459</sup> Korfmann 1986a, 24; see also Basedow 2001, 415.

<sup>&</sup>lt;sup>460</sup> Korfmann 1986a, 24.

<sup>&</sup>lt;sup>461</sup> Korfmann 1986c, 318.

<sup>&</sup>lt;sup>462</sup> Basedow 2001, 415.

<sup>&</sup>lt;sup>463</sup> Korfmann 1986b, 232-33.

<sup>&</sup>lt;sup>464</sup> Korfmann 1987, 265.

#### Pithos Graves

One stone encircled pithos grave containing two buried individuals was discovered on the north side of the cemetery area. Korfmann suggests it could be a tumulus or tholos grave similar to an example from Panaztepe.<sup>465</sup> Although tholoi did not have pithos graves in Panaztepe, the rectangular stone arrangement around the pithos from Beşik Tepe has the same structure of a pithos burial in a stone enclosure at Panaztepe.<sup>466</sup>

Several pithoi were found lying horizontally and its mouth closed and by flat stones positioned vertically.<sup>467</sup> In some part of these pithoi, multiple individuals were found as couples, such as male and female adults or adults with children, and one of them was found with five children.<sup>468</sup>

Three of the pithoi were positioned in a southwest-northeast direction. Three others were oriented in a south-north direction, while other pithoi were oriented in a southwest-northeast direction.<sup>469</sup> It seems as there was no specific orientation evident in the siting of the pithoi, but they could have arranged according to topography.

# Urns and the Megaron-Planned Chamber Tomb

This section discusses different types of container burials based on interpretations from previous studies. Korfmann describes these graves as urn-type or of a similar smaller vessel, and jar burials (Fig. 13) surrounded with stones. The mouths of the urns were closed with vertical stones like the pithoi and directed to southeast. Similar flat stones were used as grave markers, above the urns according to Korfmann.<sup>470</sup>

Chemical analyses performed on samples from the empty urns show evidence of fats from animal remains; however it is not clear if this is a result of burial rituals or usage prior to the burials.<sup>471</sup> Akyurt<sup>472</sup> compared vessels for daily use with the urns from the cemetery at Troy. The results show that cooking ware was reused as burial

<sup>&</sup>lt;sup>465</sup> Korfmann 1987, 264-65.

<sup>&</sup>lt;sup>466</sup> Erkanal 1987, 255; see also Akyurt 1998, 16.

<sup>&</sup>lt;sup>467</sup> Korfmann 1986c, 318.

<sup>&</sup>lt;sup>468</sup> Korfmann 1987, 264; see also Akyurt 1998, 17.

<sup>&</sup>lt;sup>469</sup> Korfmann 1986c, 320.

<sup>&</sup>lt;sup>470</sup> Korfmann 1986b, 232; 1986c, 318.

<sup>&</sup>lt;sup>471</sup> Korfmann 1986c, 320-28.

<sup>&</sup>lt;sup>472</sup> Akyurt 1998, 15.

gifts or jar burials.<sup>473</sup> As there is no contemporaneous find of a settlement at Beşik Tepe, it has not been possible to compare the pottery from the cemetery with examples from a domestic context. The Beşik Tepe urns may, however, have been used in a similar fashion to the Trojan urns.<sup>474</sup>

In terms of the chamber tomb, it is described as a megaron-planned house with two rooms, both with stone pavements. A burial pithos was placed at the entrance of this tomb chamber, which was then closed with stones.<sup>475</sup>

# A Single Mudbrick Encircled Grave and Cist Graves

A mudbrick encircled grave was destroyed or looted, but still contained some bone fragments. A rectangular planned cist grave made of cut stones was also uncovered in the cemetery. The skeleton inside was surrounded by small stone rows, and its legs lay outside the grave because they were longer than rows and damaged. Pieces of skull, teeth and legs remained in the grave, but the main body parts could not be found.<sup>476</sup>

#### 4.1.2. Grave Goods

The tombs contained damaged grave goods, including metal objects, ornaments and pottery decorated predominating.<sup>477</sup> The variety of funerary architecture and prestige goods in a group of graves present an elite group of people, possibly stratified by social class. Children burials with prestige goods show inheritance tradition.<sup>478</sup> No settlement is associated with the cemetery, suggesting that the grave objects relate to the cemetery directly. Animal remains were not found among the grave goods.<sup>479</sup>

# Pottery

Two main types of pottery were uncovered in the cemetery: Gray and Mycenaean ware of local production, found mostly as sherds. Archaeologists found a Mycenaean alabastron (LH IIIC) with five protrusive beads in an infant burial and a

<sup>&</sup>lt;sup>473</sup> Blegen et al. 1953b, 68.

<sup>&</sup>lt;sup>474</sup> Akyurt 1998, 15.

<sup>&</sup>lt;sup>475</sup> Korfmann 1986c, 318-20.

<sup>&</sup>lt;sup>476</sup> Korfmann 1986a, 22.

<sup>&</sup>lt;sup>477</sup> Korfmann 1986a, 23.

<sup>&</sup>lt;sup>478</sup> Basedow 2001, 416.

<sup>&</sup>lt;sup>479</sup> Korfmann 1986a, 23.

krater in the second room of the burial chamber with a pithos.<sup>480</sup> Kylixes were found in the first stage of northeast of the cemetery; pear-shaped amphorae, which were purposefully positioned in a southwesterly direction, were also found in the graves with valuable burial gifts. Basedow suggests that the placement and positioning of the goods represent a social hierarchy within the cemetery.<sup>481</sup>

# Metals

A bronze or copper ring in one of the urns or urn-like vessels and bronze or copper earrings in pithoi were discovered. A knife and the head of a toggle pin made from copper or bronze was found between the graves.<sup>482</sup>

#### Ornaments

More than 300 beads were found in the burials, made mostly of frit and carnelian. Korffmann comments on five of the beads; four of which were rectangular flat beads with symmetrical holes and the fifth one jointed and made from a sheet of gold.<sup>483</sup>

# Seals and Other Finds

A black stone made into perforated lentoid seal was found in a pithos burial in the chamber tomb with a human face depiction on it (Fig. 14).<sup>484</sup> Seals made from ivory or horn were found in the pithos in the chamber tomb with pieces of bone found in the same tomb.<sup>485</sup>

# 4.2. Panaztepe

Panaztepe is located in İzmir province and sits 13 km southwest of Menemen.<sup>486</sup> The slope of the hill where Panaztepe lies is the part of "The Seven Hills" in the Gediz River delta. Panaztepe is 10 km from the Aegean Sea today (Fig. 14). It was first suggested by excavation team that Panaztepe was an island at the important

<sup>&</sup>lt;sup>480</sup> Korfmann 1986a, 22-4.

<sup>&</sup>lt;sup>481</sup> Basedow 2001, 416.

<sup>&</sup>lt;sup>482</sup> Korfmann 1986a, 23.

<sup>&</sup>lt;sup>483</sup> Korfmann 1986a, 23-4.

<sup>&</sup>lt;sup>484</sup> Korfmann 1986a, 24.

<sup>&</sup>lt;sup>485</sup> Korfmann 1987, 265.

<sup>&</sup>lt;sup>486</sup> Erkanal 1987, 253.

strategic point in the Gulf of İzmir in the LBA. 487

Underwater coring techniques are applied to explain coastal and archaeological stratigraphy in harbor depositional context.<sup>488</sup> The microfossil samples include species adapted to shallow sea and estuarine conditions. Marine layers start in the deeper strata with the increasing samples of marine species' fossils.<sup>489</sup> The alluvium, which was carried by the river, filled the eastern part of Panaztepe in the LBA. For these reasons, it is proposed that Panaztepe was a peninsula at this period.<sup>490</sup> In later research, the hill group, possibly also Değirmentepe, are suggested to be an island located at the mouth of Hermos (Gediz) river until the 1<sup>st</sup> millennium BC.<sup>491</sup>

The location of Panaztepe allows interaction between different regions of the Mediterranean and presents both characteristics of local and foreign cultures. Central Anatolia on the east and the Aegean on the west of Panaztepe are the basis of this cultural network. It underlines the importance of Panaztepe for different aspects of maritime activities, cultural, economic, and political interaction. This position of Panaztepe as a Harbour Town is likely the reason for its connection with Mycenaeans.<sup>492</sup>

The site -acropolis, settlement areas, Harbour Town, and two cemeteries- was occupied from the EBA to the Ottoman period. 785 m<sup>2</sup> of the site has been excavated. Excavated in total. It is thought that the Harbour Town of Panaztepe -on foothills of the mound- was inhabited in the 3<sup>rd</sup> and 2<sup>nd</sup> millennium BC. The Acropolis, Harbour Town and cemetery areas of Panaztepe have been under excavation since 1985.<sup>493</sup> The Harbour Town is Level 5 (LBA) on the eastern slope of Panaztepe. It is divided into six building levels. Architectural remains include a courtyard with paved flat stones, walls in several points, pebble stone pavements, and a building complex with seven rooms were found. Besides extramural northern and western cemeteries, intramural infant burials in kitchenware vessels were found under the two cross walls in the LBA Level 1 building. The first one was under the northern side of the western section wall. The second infant burial was 80 meters away from the southern part of the northern

<sup>&</sup>lt;sup>487</sup> Çınardalı-Karaaslan, 2008, 58.

<sup>&</sup>lt;sup>488</sup> Marriner and Morhange 2007.

<sup>&</sup>lt;sup>489</sup> Kayan and Öner 2015, 11-2.

<sup>&</sup>lt;sup>490</sup> Öner 1999, 32; see also Gür 2014, 87. Marriner and Morhange 2007.

<sup>&</sup>lt;sup>491</sup> Böyükulusoy et al. 2014, see also Erkanal-Öktü 2018, 3.

<sup>&</sup>lt;sup>492</sup> Gür 2014, 88.

<sup>493</sup> Erkanal-Öktü 2005, 53.

oriented wall.494

Pottery samples from the LBA layers of the Harbour Town display similarities with the pottery of the western cemetery.<sup>495</sup> Room 1 in the LBA Level 2 building (LH IIIB- Early IIIC, ca. 1300-1100 BC) includes parallel ornamented pithoi samples with the western cemetery and characteristic rim, body and the base parts of the LBA wares.<sup>496</sup> A flat disc lid and silver polished handle part of the lid, were found. A bowl sample with the rim from the LBA Level 3 (LH IIIB2-C, ca. 1200-1100 BC) building is parallel with the examples from two pithoi in the western cemetery. Lids of Gold Ware and Silver Ware of Panaztepe cemetery were found in the LBA Level 4 building (LH IIIB, ca. 1300-1200 BC).<sup>497</sup> A characteristic example of a Mycenaean painted deep bowl form was unearthed in the same building level (Fig. 15).<sup>498</sup> The cemetery areas of Panaztepe on the west (Fig. 16) and north had been occupied from the middle of the 2<sup>nd</sup> millennium BC and continued until the end of the millennium (Fig. 17). The stratigraphy of the west cemetery area corresponds to materials of the 2<sup>nd</sup> millennium BC Workshops Districts levels.<sup>499</sup>

One hundred fourteen separate burials were found containing a total of 231 individuals. The cemetery has the largest quantity of graves and individuals from the LBA in Western Anatolia. The variety of the burial types and goods is another unique feature of the Panaztepe cemetery areas.<sup>500</sup> The strategic location of Panaztepe in the Gulf of İzmir likely accounts for its role as a transition point between Anatolia and the Aegean which explains the diversities of goods and grave types in the cemetery.

# 4.2.1. Grave Types

One miniature tholos tomb, one rectangular chamber tomb, two urns, two stone box graves, two composite graves, nine cist graves, 16 jar burials, 19 tholoi and 37 pithoi were uncovered in the Panaztepe LBA cemetery.<sup>501</sup>

The north and west cemeteries are being investigated, with the excavation mostly focused on the west cemetery area. The cemetery was established in two phases

<sup>&</sup>lt;sup>494</sup> Erkanal-Öktü and Çınardalı-Karaaslan 2006, 193.

<sup>&</sup>lt;sup>495</sup> Çınardalı-Karaaslan 2008, 58-65.

<sup>496</sup> Erkanal-Öktü and Çınardalı-Karaaslan 2007, 403.

<sup>&</sup>lt;sup>497</sup> Çınardalı-Karaaslan 2008, 64-5.

<sup>&</sup>lt;sup>498</sup> Mountjoy 1999.

<sup>499</sup> Erkanal-Öktü 2008, 72.

<sup>&</sup>lt;sup>500</sup> Erkanal-Öktü 2008, 72-3.

<sup>&</sup>lt;sup>501</sup> Erkanal-Öktü 2008, 73; 2018, 7.

which were connected by a stone pavement (Fig. 18) with an allotment plan. All the individual graves or grave groups are divided by the stones in this plan.<sup>502</sup> A northwest-southeast positioned wall was discovered with the stone-paved platform. Erkanal states that this part of the wall is connected to another wall which was discovered in 1986<sup>503</sup> which might be a *temenos* wall.<sup>504</sup> This stone-covered floor destroyed the older phase, Phase 2, which is an unknown group of structures from the west, southwest and central Anatolia. It is also suggested that the structural difference can be related to a new culture.<sup>505</sup> This suggestion still needs to be confirmed by further study.

The miniature tholos, burial chamber, burial jars, pithoi, urns, stone boxes, cist graves, pit and composite graves were placed in the first phase of the cemetery. This phase is dated to 2<sup>nd</sup> millennium BC through the beginning of 1<sup>st</sup> millennium BC.<sup>506</sup> Tholoi and cist graves exist also in the second phase.<sup>507</sup> Inhumation and cremation burial customs were practiced in the cemetery together, but the majority of the individuals were buried in hocker and half-hocker positions. Cremation examples were discovered in the urns and small pithoi of graves.<sup>508</sup>

#### Tholos Graves

Four types of tholos graves are stylistically dated to different phases of the LBA. Rectangular and oval planned burial chambers with tholoi were constructed using dry-wall technique stone masonry with pseudo-domes. The dromos was located on the southwest of the graves. The four categories are categorized based on their chamber, stomion and dromos structures. The dromos on the southwest of the burial chambers had been closed after the funeral and the ceiling of the tomb was used as the floor for later burials.<sup>509</sup> Inhumations in tholoi were placed in hocker and half hocker positions with the head directed to the dromos. The tholoi must have been utilized multiple times for the families as other categories of graves.<sup>510</sup>

One of the first kinds of tholoi is Tholos AA (Fig. 19). This is the only one of

<sup>&</sup>lt;sup>502</sup> Erkanal-Öktü 2005, 54.

<sup>503</sup> Erkanal 1988, 346.

<sup>&</sup>lt;sup>504</sup> Erkanal 1988, 346; 2005, 307; see also Erkanal-Öktü 2008, 73.

<sup>&</sup>lt;sup>505</sup> Erkanal-Öktü 2005, 54.

<sup>&</sup>lt;sup>506</sup> Erkanal-Öktü 2005, 54.

<sup>507</sup> Erkanal-Öktü 2008, 73.

<sup>&</sup>lt;sup>508</sup> Erkanal 2005, 55.

<sup>&</sup>lt;sup>509</sup> Erkanal 1986, 140-41; 1987, 256-57; see also Akyurt 1998, 22-3; Erkanal-Öktü 2008, 73-4.

<sup>&</sup>lt;sup>510</sup> Erkanal-Öktü 2005, 56; 2018, 528.

its kind presents in the cemetery and is dated to the LBA, but it cannot be dated exactly because of more recent destruction. The tholos with circular chamber also linked to the stomion and dromos parts. The second type is called an oval or bulb-shaped tholos. In this tholos type the stomion and dromos are joined with the main chamber. The dromos of Tholos AV is comparatively long and it appears to be a transitional plan between the first type, type of Tholos AA, and the second type.

The third form is the most common at Panaztepe. The circular-shaped tholos has a short dromos to the main chamber. The third type has two different variations. The first one has an opening at the ceiling and small vault. The opening was filled with stone slabs later. The wall of the second variant was shaped like a dome. The star-shaped opening at the top of the vault is enclosed with smaller stone slabs. The pseudo-dome appears in to be a dome shape from outside. These grave categories are dated to LH IIIA1-2 and B1 periods. The Tholos CO, is the most recent type, is a unique example with a square chamber, short dromos and a dome.<sup>511</sup> During the reuse of the graves, older skeletons in the same graves must have been burned to make more space, because they were burned and pushed aside.<sup>512</sup>

# Pithos Graves

The pithos graves are dated to the second half of the 2<sup>nd</sup> millennium BC. Eleven pithoi were unearthed, but only a few of them were available for analysis (Fig. 20). Pithoi of the first phase were surrounded with stones based on the rectangular allotment plan, and the upper parts of pithoi were filled with rubble. It is possible to claim that the pithoi have a simple monumental feature, presumably a sign of the highstatus inhabitants. The pithoi are of diverse sizes. The large pithoi were for the family use and medium-size pithoi contained children' bones. As with other grave classes below, pithos graves were utilized multiple times. For example, in one of the pithos graves, eight individuals were interred.<sup>513</sup>

#### Cist Graves, Jar Burials, and Stone Boxes

The burial jars were surrounded by stones next to large pithoi in the same plan of the cemetery. As mentioned above, large pithoi were arranged for adults, medium

<sup>511</sup> Erkanal-Öktü 2008, 74.

<sup>&</sup>lt;sup>512</sup> Erkanal 1994, 464-65.

<sup>&</sup>lt;sup>513</sup> Erkanal 1986, 139-40; see also Erkanal-Öktü 2008, 76-7.

sizes were for the children, and burial jars were utilized for the infants.<sup>514</sup> Stone boxes were utilized only for the infants. The depositional conditions resulted in poor preservation of skeletal material. This might also be the reason for the lack of remains of adult and infant bones. Another suggestion is that stone boxes might be used as symbolic graves for the sailors or people who died at sea.<sup>515</sup> Cist graves in the second phase of the cemetery are dated to the 14<sup>th</sup> and 13<sup>th</sup> c. BC based on Mycenaean painted pottery fragments in the graves.<sup>516</sup>

#### Composite Graves

Two different composite graves were obtained in different years at Panaztepe. In 1991, a mixture of a large pithos and cist grave, and in 1992 a combination of cist and tholos graves were discovered. Both are dated to the second half of the  $2^{nd}$  millennium BC.<sup>517</sup>

#### 4.2.2. Grave Goods

Pottery, metal objects such as weapons, jewelry, a large number of beads from different materials, different styles of ornaments, seals and tools were uncovered in the Panaztepe cemetery.<sup>518</sup> The goods of Panaztepe and other sites do not only present a presentation of burial customs but also reflect cultural and economic activities such as sea trade by their diversity.

#### Pottery

The Panaztepe pottery is dated to the LH IIIA and B levels based on the Mycenaean pottery finds. This evidence supports the idea that the cemetery was used between 1425-1200 BC.<sup>519</sup> The form and design of the pottery in the graves suggests that they were used in daily life. It does not appear that pottery was produced specifically for burials. A high number of local, Mycenaean imports and imitated pottery were discovered together.<sup>520</sup> The number of imitated pottery and the variety of

<sup>&</sup>lt;sup>514</sup> Erkanal-Öktü 2005, 54-5; 2018.

<sup>&</sup>lt;sup>515</sup> Erkanal and Erkanal 1986, 71.

<sup>516</sup> Erkanal-Öktü 2005, 56.

<sup>&</sup>lt;sup>517</sup> Erkanal 1994, 464; 1995, 284.

<sup>&</sup>lt;sup>518</sup> Çınardalı-Karaaslan 2012, 125.

<sup>&</sup>lt;sup>519</sup> Erkanal 1987, 258.

<sup>520</sup> Erkanal-Öktü 2008, 78.

pottery are significant to present cultural interactions with Aegean, which is a result of sea trade and sharing knowledge of technology.

Pottery is divided in six groups at Panaztepe: Monochrome (local and Mycenaean), Gold Ware, painted Mycenaean pottery, Silver Ware, and furnished pottery. 48 examples of this pottery vessel type were intact, 19 which were not in the graves; 40 pieces were unearthed from destroyed or robbed graves, and 23 were painted imports and local imitations of Mycenaean pottery. Ten of the pithos graves were medium sized.<sup>521</sup>

The stratigraphic and cultural relationship between the cemetery and Harbour Town is being researched. The important examples of pottery that parallels Harbour Town samples of Gold and Silver Wares were discovered in LBA buildings levels 1, 4 and 5. These gold and silver imitated pottery also have miniature versions in the pithoi layer of the cemetery. They may have used miniature ones to fit in pithoi. These double handled samples were found under a lid in the pithoi. The pithoi sherds were discovered in the LBA Building Level 2. The pithoi phase of the cemetery is dated to the LH IIIB and early C periods, and architectural parallels of these building levels.<sup>522</sup> The workshop district for the pottery, which is located at the southern foothill of Panaztepe, includes the similar material but not architectural remains from the LBA. The materials that were uncovered in the workshop district are parallel with the cemetery area ceramics.<sup>523</sup>

The local and Mycenaean groups of pottery are the largest group of finds in the cemetery. Local ceramics and Mycenaean imitated pottery are different in their materials. The clay composition of the local products features quartz and isinglass inclusions.<sup>524</sup> Geomorphological investigations demonstrate that the soil composition of Panaztepe includes a high amount of these mineral today.<sup>525</sup> The wheel- made local and Mycenaean pottery are separated by their pug and clay elements. Imitated Mycenaean ceramics have the same clay characteristics as the local wares. Imported Mycenaean ceramics were made of much thinner clay paste than local productions.<sup>526</sup>

The rate of the local production is greater than that of Mycenaean products.

<sup>&</sup>lt;sup>521</sup> Erkanal-Öktü 2018, 103-7.

<sup>&</sup>lt;sup>522</sup> Erkanal-Öktü 2008, 76-80.

<sup>&</sup>lt;sup>523</sup> Günel 1999, 25-6.

<sup>&</sup>lt;sup>524</sup> Günel 1999, 29.

<sup>&</sup>lt;sup>525</sup> Kayan and Öner 2015, 11.

<sup>&</sup>lt;sup>526</sup> Günel 1999, 36.

Bowls, bottles, and pots of the LBA cemetery were found in pithoi. Other local products such as a trefoil mouth stoup, vases, and a flask, were discovered in tholos graves. Local imitations of Mycenaean pottery are an alabastron which is relatively common, vases, and amphora. Mycenaean import ceramics were discovered in tholos graves as beak spouted jars and cups. Oenochoe, amphora and stirrup handled cups were also discovered in pithoi. A local Mycenaean kylix and alabastron were unearthed together with imported Mycenaean oenochoe.<sup>527</sup>

It is known that the Panaztepe cemetery areas have been robbed since antiquity.<sup>528</sup> For this reason, there are significant gaps in the evidence available for analysis and interpretation. A group of ceramic finds are in the Manisa Museum and were delivered by villagers or dealers. These were determined to be grave goods of Panaztepe based on their styles. A local three handled lentoid flask, two kraters, a small one handled jug, three and two-handled jars and an amphoriskos are exhibited in the museum. Mycenaean three handled jars, two straight-sided alabastra, a plain kylix and a decorated kylix came from the cemetery to the museum through antiquities dealers. Three handled jars are dated to the LH IIIA 1-2 and are usually found in the Argolid, Attica, Cyprus, and Rhodes. A straight-sided alabastron —a widespread form— is dated to the LH IIIC period.<sup>529</sup> The plain kylix parallels can be seen on the Greek mainland.<sup>530</sup>

### Metals

Weapons, tools, bronze objects, metal ornaments, and gold and silver objects were found in the cemetery.<sup>531</sup> Bronze swords, arrowheads, blades, razor, socketed spearhead, and a single edged knife were among the uncovered metal objects.<sup>532</sup>

The origin of the swords is still debatable. The Panaztepe decorated sword is categorized as a Ci, Di, Gi style Aegean sword.<sup>533</sup> Elaborate and naturalistic spiral decorations enriching the midrib and flanges are the common characteristics of these swords.<sup>534</sup> Swords of this style were produced in Knossos. Different scholars agree that

<sup>&</sup>lt;sup>527</sup> Günel 1999, 78-81.

<sup>&</sup>lt;sup>528</sup> Erkanal 1987, 253-57.

<sup>&</sup>lt;sup>529</sup> Furumark 1941a, 40-3.

<sup>&</sup>lt;sup>530</sup> Ersoy 1988, 73.

<sup>&</sup>lt;sup>531</sup> Erkanal 1987, 256.

<sup>&</sup>lt;sup>532</sup> Ersoy 1988, 59-69.

<sup>&</sup>lt;sup>533</sup> Ersoy 1988, 61.

<sup>&</sup>lt;sup>534</sup> Sandars 1963, 117-53; see also Ersoy 1988, 61.

stylistic evidence is enough to determine the original workshops were in Knossos. It is believed the swords were developed and produced by Minoan craftsmen at Knossos collapse, and use of these swords continued into the Mycenaean period in Crete.<sup>535</sup> The Di class (Fig. 21) of swords which was discovered in the tholos at Mycenae have a similar form of midrib as the Panaztepe example.<sup>536</sup> The spiral decoration of the Panaztepe example is also similar to artifacts such as spearheads from the shaft graves and tholos tombs of Mycenae and Dendra.<sup>537</sup>

The number of the spearheads found in the Aegean graves is greater than that of the swords. One of the spear examples from Panaztepe that has an 'S'-shaped shoulder and hexagonal midrib is a unique example in the Aegean.<sup>538</sup> The spear and knife from Panaztepe have similar and remarkable decorations which can be the subtypes of Siena type knives which were produced in local workshops of Western Anatolia. They are dated to late 13<sup>th</sup> and early 12<sup>th</sup> c. BC because of these characteristic features.<sup>539</sup>

# Ornaments

Two thousand six hundred thirty-one beads, 128 beads in spindle whorl form, 23 necklace fragment, ten dress appliqués, one pendant, two cork-formed objects and a fragment of a chain were uncovered from the cemetery areas of Panaztepe. They were made from different materials such as frit, faience, and glass.<sup>540</sup>

The beads are divided into two groups by their material. The first group was made from soft stone materials such as steatite, serpentine and limestone. The second group was produced from hard minerals such as crystal, amethyst, and carnallite.<sup>541</sup> The soft materials such as limestone and serpentine were used to produce spindle whorl-shaped necklace beads, which sourced buttons and ornament of the hemlines. These necklaces were left with male individuals in the graves<sup>542</sup>, and were unearthed around the legs of the skeletons, particularly in tholos graves.<sup>543</sup> Frit beads (Fig. 22)

<sup>&</sup>lt;sup>535</sup> Sandars 1963, 126; Driessen and Macdonald 1984, 49-74; Ersoy 1988, 61-7.

<sup>&</sup>lt;sup>536</sup> Ersoy 1988, 64.

<sup>&</sup>lt;sup>537</sup> Ersoy 1988, 65.

<sup>&</sup>lt;sup>538</sup> Ersoy 1988, 67.

<sup>&</sup>lt;sup>539</sup> Sandars 1963, 140; see also Ersoy 1988, 67.

<sup>&</sup>lt;sup>540</sup> Çınardalı-Karaaslan 2012, 67.

<sup>&</sup>lt;sup>541</sup> Çınardalı-Karaaslan 2012, 70.

<sup>&</sup>lt;sup>542</sup> Hughes-Brock 1999, 280.

<sup>&</sup>lt;sup>543</sup> Çınardalı-Karaaslan 2012, 71.

are also typical in tholoi, pithoi, composite, and cist graves in Panaztepe, in both phases of the cemetery. It is considered that beads or necklaces made with frit were applied in multiple generations. The frit beads and jewelry were consumed over a widespread area in the Aegean in the LH III period.<sup>544</sup>

Some scholars claim that the appearance of the colored faience in Egypt and the Aegean represented rebirth and death concepts. Faience beads were probably valuable items for rituals. The faience beads were used also for buttons, necklaces, and bracelets.<sup>545</sup>

Gold, glass, frit, amber, faience, limestone, steatite, serpentine and similar materials were discovered in the Panaztepe graves. They represent different cultural and economic circumstances, similar to metals, pottery, and other objects. For example, the width of glass beads in Panaztepe graves, the Aegean and even the Mediterranean, and glass ingots and beads<sup>546</sup> from Uluburun shipwreck from the LBA can be evaluated together.<sup>547</sup>

# Seals

Seals from the site were divided three main groups by their origins: Aegean, the Mediterranean and Anatolian seals. Seals with buttonholes<sup>548</sup> and steatite seals in several shapes such as lentoid and plano-convex<sup>549</sup> were found in pithoi and tholoi. Two specific types of seals were found in the pithos graves of Panaztepe. One is a pyramidal seal with geometrical and linear motifs. This seal type, which is also known from Palestine, is called an 'anchor seal' and is dated to 12<sup>th</sup> and 11<sup>th</sup> c. BC.<sup>550</sup> The second one is a scarab seal (Fig. 23) which has the cartouche of Amenhotep III (ca. 1391-1353 BC). It is known that Egypt in the period of Amenhotep III had strong extensive contacts with the Aegean and the Hittites.<sup>551</sup> A bracelet with a seal impression and a cylinder seal in Palestinian style, were also found in the cemetery.<sup>552</sup>

<sup>&</sup>lt;sup>544</sup> Çınardalı-Karaaslan 2012, 73.

<sup>&</sup>lt;sup>545</sup> Panagiotaki 2008, 52-4; see also Çınardalı-Karaaslan 2012, 75.

<sup>546</sup> Pulak 2001; 2008.

<sup>&</sup>lt;sup>547</sup> Çınardalı-Karaaslan 2012, 76-9.

<sup>&</sup>lt;sup>548</sup> Erkanal-Öktü 2018, 121.

<sup>549</sup> Erkanal-Öktü 2004, 665-69.

<sup>&</sup>lt;sup>550</sup> Keel 1994, 28-9; see also Erkanal-Öktü 2008, 80.

<sup>&</sup>lt;sup>551</sup> Mellink 1983, 139; see also Erkanal 1987, 258.

<sup>552</sup> Erkanal-Öktü 2018, 123-27.

### 4.3. Değirmentepe

Değirmentepe (Fig. 24-25) lies 1,5 km from Miletus<sup>553</sup>, next to Kalabak Tepe and today's Zeytintepe. Both Miletus (Fig. 26) and Değirmentepe lie in an inlet of the Meander River and the Aegean Sea.<sup>554</sup> Tectonic movements that created the sea plain of the Meander Graben<sup>555</sup> and filled it with alluvium have shaped the present Meander coastal plain.<sup>556</sup> The entrance of the Meander shifted to the Aegean Sea in south and west direction because of alluvial silt carried from the mountains. The shoreline of the lowland moved 10 to 17 km inward during the thousand years from 500 BC-500 AD.<sup>557</sup> The process stopped around 700 AD when sand humps arose parallel to the shore (Fig. 27) and the harbor of Miletus today is placed 7 km from the Aegean Sea.<sup>558</sup> The mountains on the east and west prevented easy travel from north to south.<sup>559</sup> Miletus had a more advantageous position on the Mediterranean, one of the most southern natural harbors of Western Anatolia, relatively accessible to inland areas.<sup>560</sup> The exact date of the transformation of Milesian from an island to a peninsula is unknown. The research on cores from Theater Hill, stratigraphy, marine macro and micro fauna demonstrate that people lived in the Milesian era when it was still an island before the MBA.<sup>561</sup> Miletus was available to access both from land and the sea, but some points could be reached only from the sea.

The sea connection between Miletus, the Aegean islands, and harbors in Western Anatolia became more important than land connections.<sup>562</sup> The Theatre Harbor of Miletus was one of the most important harbors in the Bronze Age and Archaic periods, protected from the west winds by Lade island.<sup>563</sup> The location of the site for trade and transport on the way to Anatolia, the Near East, and western harbors ensured the wealth of Miletus.<sup>564</sup>

In terms of minerals, the Milesian region does not have an abundant stock of

<sup>&</sup>lt;sup>553</sup> Mee 1978, 133.

<sup>&</sup>lt;sup>554</sup> Akyurt 1998, 29.

<sup>&</sup>lt;sup>555</sup> Brinkmann 1971, 189; see also Greaves 2003, 17.

<sup>&</sup>lt;sup>556</sup> Aksu et al. 1987, 232-3.

<sup>&</sup>lt;sup>557</sup> Greaves 2003, 17-8.

<sup>&</sup>lt;sup>558</sup> Greaves 2003, 17-8.

<sup>&</sup>lt;sup>559</sup> Greaves 2003, 17, 22.

<sup>&</sup>lt;sup>560</sup> Greaves 2003, 22.

<sup>&</sup>lt;sup>561</sup> Brückner 1998, 251.

<sup>&</sup>lt;sup>562</sup> Greaves 2003, 24.

<sup>&</sup>lt;sup>563</sup> Kleiner 1968, 48; see also Greaves 2003, 24.

<sup>&</sup>lt;sup>564</sup> Greaves 2003, 25.

economically useful mineral ores, necessitating the import of gold, silver, tin, and copper. Unlike the Aegean, the Anatolian interior was valuable to access for mining activities.<sup>565</sup> Local populations and Aegean communities needed metals for tools and weapons, suggesting that mining was important for sites such as Miletus and Müsgebi, Anatolia and the Aegean. The position of Miletus as a harbor between Aegean and Anatolia increased its importance. Like Müsgebi described in the next section, if seasonal settlements or port facilities<sup>566</sup> were constructed as the base for the silver mines<sup>567</sup>, Miletus can be accepted as a part of this network.

Gift exchange and trade in this network include connections between local communities in Western Anatolia. For example, pottery from Miletus workshops was found in Müsgebi cemetery.<sup>568</sup> Regional and interregional maritime connections and activities in Miletus should have gained higher importance in such conditions. Miletus could have been the possible distributor and intersection point between Western and Central Anatolia and the Aegean; this was perhaps the reason for Mycenaean settlements in the area.

Değirmentepe cemetery is a valuable source for research on the Mycenaean connection and maritime culture. The cemetery was used in different periods which can be ascertained by looking at Mycenaean artifacts and settlements in Miletus.<sup>569</sup> For example, Mycenaean pottery remains from the LH period and the corridor structure in one of the houses in Miletus is similar to Mycenaean architectural features on the Greek mainland.<sup>570</sup> The Değirmentepe cemetery (Fig. 28) includes tholos plan graves, Mycenaean and local artifacts dated to 1650-1100 BC, which corresponds to Building Level 3 in Miletus.<sup>571</sup>

## 4.3.1. Grave Types

The cemetery is dated between the 2<sup>nd</sup> millennium BC and the 1<sup>st</sup> millennium AD, with eleven Mycenaean inhumation burials identified out of 100 graves from different periods.<sup>572</sup>

<sup>&</sup>lt;sup>565</sup> M.T.A. 1987, 105-8.

<sup>566</sup> Özgünel 1987, 543.

<sup>&</sup>lt;sup>567</sup> Gür 2014, 40.

<sup>&</sup>lt;sup>568</sup> Gödecken 1986, 312; see also Mountjoy 1998, 36.

<sup>&</sup>lt;sup>569</sup> Gür 2014, 94-5; see also İslam and Aslan 2015, 377-96.

<sup>&</sup>lt;sup>570</sup> Niemeier 1998, 35-6.

<sup>&</sup>lt;sup>571</sup> Niemeier 1998, 36-7; see also Gür 2014, 95; İslam and Aslan 2015, 378.

<sup>&</sup>lt;sup>572</sup> Mylonas 1966, 112; see also Akyurt 1998, 29; İslam and Aslan 2015, 377, 383.

#### **Tholos Graves**

The cemetery area was destroyed by agricultural activities and illegal excavations many times.<sup>573</sup> The last salvage excavation in Değirmentepe was in 2014; Mycenaean type burials were excavated during the 2012-2013 seasons.<sup>574</sup> Semicircular or square planned rock-cut chambers with a dromos and stomion as tholos types of Mycenean were found at Değirmentepe.<sup>575</sup>

A Mycenaean tholos tomb excavated in 2012-2013 was constructed with a passageway and stone masonry wall on the north, separated from each other by an arch. Different types of artifacts and pottery remains were found in the main room and dromos part respectively.<sup>576</sup>

In 2014, a (named G6a) Roman grave, a (G6b) corridor attached to the G6a and (G6c) graves, a reused Mycenaean grave and burial chambers were excavated.<sup>577</sup> G6c was re-used at the end of the 1<sup>st</sup> c. BC and beginning of the 2<sup>nd</sup> c. BC based on the G6a.<sup>578</sup> The west and entrance sections of G6c were excavated in 2013 and the east part of the dromos (Fig. 29) was unearthed in 2014. LH III A and B ceramics were found in the filling of the dromos. A translate wall stands on the opposite side of the west Mycenaean wall. This wall enclosed the Mycenaean entrance stage of the grave and created another entrance on the north-eastern side. Despite the changes, the tholos plan of the semi-circular Mycenaean burial chamber is still recognizable.<sup>579</sup>

## 4.3.2. Grave Goods

A small group of Mycenaean ceramics, ornaments, swords<sup>580</sup>, and horse bits<sup>581</sup> were uncovered in Değirmentepe. The site was probably heavily looted.

### Pottery

The one of tholoi in the last excavation, Tholos II (Fig. 30), consisted ceramic

<sup>&</sup>lt;sup>573</sup> İslam and Aslan 2015, 381.

<sup>&</sup>lt;sup>574</sup> İslam and Aslan 2015, 377; 2016, 103.

<sup>&</sup>lt;sup>575</sup> Mee 1978, 33; see also Islam and Aslan 2015, 378.

<sup>&</sup>lt;sup>576</sup> İslam and Aslan 2015, 383.

<sup>&</sup>lt;sup>577</sup> İslam and Aslan 2016, 104-9.

<sup>&</sup>lt;sup>578</sup> İslam and Aslan 2016, 105.

<sup>&</sup>lt;sup>579</sup> İslam and Aslan 2016, 107-8.

<sup>&</sup>lt;sup>580</sup> Gür 2014, 95.

<sup>&</sup>lt;sup>581</sup> Mee 1978, 133.

samples.<sup>582</sup> A three-handled piriform jar dated to LH IIIC period from Tholos II probably came from Rhodes or Astypalaia. The design on the jar of long multiple stems with spirals on the piriform jar (Fig. 31) was also discovered on similar examples from Kos.<sup>583</sup> Horizontal lines with spirals and a motif, which is similar to a double axe, created a unique mixed style.<sup>584</sup> A LH III B-C type of a basket-shaped Kalathos (Fig. 32) was found in the same tholos.<sup>585</sup> Pottery from the previous excavations dated to LH IIIB and C was exhibited in the Berlin Museum but has been lost since the end of the Second World War;<sup>586</sup> today the Altes Museum in Berlin exhibits the rest of these remains.<sup>587</sup>

## Metals and Other Finds

Flat beads of blue glass and golden rosettes were significant ornament types found in the cemetery. Two horse bits uncovered from the site are suggested to be Mesopotamian types similar to examples from Mycenaean bronze hoards.<sup>588</sup> Two socketed spearheads with holes, an Aegean sword, two Near Eastern, and one Hittite sword types, as well as a seal of Tudhaliya IV/III (ca. 1237-1209) were found in the cemetery. The origin of these weapons is still debatable because of typological and historical ambiguities.<sup>589</sup>

## 4.4. Müsgebi

Müsgebi cemetery is located 9 km from Bodrum in today's Ortakent and 1 km from the Müsgebi village center. It lies on a slope of a valley in the foothills of the Pazar Mountain. The valley extends to the sea from a southerly direction<sup>590</sup> approximately 6 km away. Most parts of the tombs are in private property and agricultural activities in the area destroyed features of the site. The site was divided into three sections to describe different levels and wall sides of the tomb. Yusuf Boysal notes the three sections of the graves as section 'A' close to the road, 'B' in the garden

<sup>&</sup>lt;sup>582</sup> İslam and Aslan 2015, 382.

<sup>&</sup>lt;sup>583</sup> Mountjoy 1998, 54.

<sup>&</sup>lt;sup>584</sup> İslam and Aslan 2015, 382.

<sup>&</sup>lt;sup>585</sup> Mountjoy 1998, 55.

<sup>&</sup>lt;sup>586</sup> Mee 1978, 133.

<sup>&</sup>lt;sup>587</sup> Greaves 2003, 83.

<sup>&</sup>lt;sup>588</sup> Przeworski 1939, 194; see also Sandars 1963, 136; Mee 1978, 133.

<sup>&</sup>lt;sup>589</sup> Niemeier 1998, 39-40; 2005, 13; see also Greaves 2003, 88.

<sup>&</sup>lt;sup>590</sup> Boysal 1967a, 1-2.

of one of the villagers, and 'C' in the acorn garden of another villager (Fig. 33).<sup>591</sup>

Forty-seven rock cut tombs were found in these three sections of Müsgebi (Fig. 34). Area A is in the northwest direction of the village and close to the road. Seventeen graves were identified in A section despite the destruction. B trench is in the northwest direction of the villager's garden. It was positioned on the south and east slopes of the high ground. The entrances of the graves were arranged based on the direction of the slope. The graves on the south slope and those sloping in the other direction have east-facing entrances. Nineteen graves were discovered within 2-3 meters distance from each other.

The C trench is on the west slope of the corn garden. The graves in the C area have similar spacing to those of Trench B, and the entrances were positioned based on the slope direction again (Fig. 35). Erosion destroyed the upper part of the nine tombs in this area. On the north side of the tombs bones and ceramic remains were uncovered. Boysal suggests these findings were from graves of common people and included standardized burial customs. The other suggestion is that tombs of Trench C were used multiple times with a different type of burial custom and the previous interments thrown to this north side of the trench.<sup>592</sup>

## 4.4.1. Grave Types

# **Burial Chambers**

The Müsgebi rock cut tombs were carved as burial chambers with a dromos in pit form and deeper than the burial chamber. The sloping position of the graves prevented rainwater from entering to graves and protected the dromos and burial chamber. The floor of the dromos has a rectangular form and the sides were like a triangle.<sup>593</sup> When the dromos was not aligned along the slope, they were generally built as long, deep and simple pits in graves. The sides of these types of dromoi are typically almost square as one of the examples, no. 39. Stones closed a deep hole that formed an entrance between the dromos and the burial chamber after the funeral. Entrances of the dromoi and burial chambers were plastered. Some of these graves

<sup>&</sup>lt;sup>591</sup> Boysal 1967a, 2.

<sup>&</sup>lt;sup>592</sup> Boysal 1967a, 2-3.

<sup>&</sup>lt;sup>593</sup> Boysal 1963, 68.

included single stone closings which consists of mortar from the same material.<sup>594</sup> The forms of rock cut tombs and dromoi presented are characteristic of Mycenaean graves.<sup>595</sup>

The burial chambers had either a rectangular or circular floor carved into the earth with a vaulted ceiling. If the floor was circular, the form of the grave became an oven shape. Boysal suggests that the body was put on soft soil on the harder floor with plaster in some cases. He claims that funerary ceremonies were long enough to dry the plaster. Plaster layers in different levels in the same graves shows that these graves were used multiple times. The plaster in the graves is a combination of the simple white soil and water, and enough to use without adding any other material; this type of plaster is still used in the houses of the region today.<sup>596</sup>

Tombs contained inhumation and cremation burials together. For example, in the tombs numbered 6 and 8 burials are inhumations and burial number 3 is a cremation in a pot.<sup>597</sup> The cremation pot used during the LH IIIA2-B is the earliest example from Müsgebi. Mee claims that cremation came from Central to Western Anatolia and influenced the Aegean in the LH IIIC period.<sup>598</sup>

The analysis and morphological observations on the small quantities of wellprotected and interred bones presented different sexes and age groups. For example, the teeth of numbers 1, 2, and 3 are evidence of adult individuals' burials. Morphological analyses show that skeleton number 2 is a female and numbers 1 and 3 are male adults. The physical structure of the craniums reveals that the ages of death of number 1 was 41-42, number 2 was 37-38 and number 3 was 42-45 years old.<sup>599</sup>

### 4.4.2. Grave Goods

A hundred seventy-eight cups, jars, bowls<sup>600</sup>, and 20 metal objects, dated to the LH II and III periods were found in the graves.<sup>601</sup> They were found next to the skeletal remains or at the corner of the walls in groups.<sup>602</sup>

<sup>&</sup>lt;sup>594</sup> Boysal 1967a, 6.

<sup>&</sup>lt;sup>595</sup> Boysal 1963, 69.

<sup>&</sup>lt;sup>596</sup> Boysal 1967a, 6-7.

<sup>&</sup>lt;sup>597</sup> Boysal 1963, 69-70.

<sup>&</sup>lt;sup>598</sup> Mee 1978, 137.

<sup>&</sup>lt;sup>599</sup> Çiner 1964, 58.

<sup>&</sup>lt;sup>600</sup> Gür 2014, 98.

<sup>&</sup>lt;sup>601</sup> Boysal 1963, 70.

<sup>&</sup>lt;sup>602</sup> Akyurt 1998, 32-3.

#### Pottery

Various types of pottery were found in the cemetery, including skyphos, pyxides, kylix, amphoriskoi, askoi, basket handled cups, pottery with pacifiers, bowls, cups, alabastra, circular mouthed pitchers, beak spouted jars, stirrup jars, tankards, trefoil mouth pitchers, flasks, and three handled pottery types.<sup>603</sup>

The most common pottery types are pyxis, kylix, and stirrup jar, different sizes of three handled, and pear-shaped pottery fragments in the graves. The form, ornamentation, and quality of kylix and pyxis demonstrate Mycenaean characteristics.<sup>604</sup> Kylix examples (Fig. 36) from different graves have a buff, light grey or cream-colored paste, figures or ornaments in brown tones and red polished, and are dated to the LH IIIA2 and IIIB periods.<sup>605</sup> A greenish, cream polished and a brown ornamented pyxis dated to the LH IIIA, IIIA2 and B.<sup>606</sup>

Stirrup jars dated to the LH IIIA and A2 period were found, with a few examples are from early LH IIIC. They have cream polish, buff-colored and red or brown decorations, and some of them have a second neck with handle. Stirrup jars have a teat shaped mouth and horizontal designs on the upper body. These characteristics of pottery help to date them to these periods (Fig. 37).<sup>607</sup>

The form of Kotyle type pottery includes features of pottery from the LH III A and B periods. The amphorae are dated to the LH II B and III A because of their form of profile. A strainer is dated to the LH IIIA period based on its form (Fig. 38). The form, because of the holes and feet, and design of the perforated cup also reflect features of typical Mycenaean cups.<sup>608</sup>

Mee underlines pottery types dating between the LH IIIA2 and C1 periods. The provenance of the pottery is still debatable, for example, piriform jars from the LH IIIA2 have characteristics of Rhodian and Argolid pottery.<sup>609</sup> The provenance of imported pyxides and alabastron is not certain.<sup>610</sup> Decoration and design of the stirrup jars share the same characteristics with stirrup jars from Mycenae<sup>611</sup> and the

<sup>&</sup>lt;sup>603</sup> Akyurt 1998, 31-2.

<sup>&</sup>lt;sup>604</sup> Furumark 1941a, fig. 12, 16, 17; see also Boysal 1963, 71-2, 74-5.

<sup>&</sup>lt;sup>605</sup> Furumark 1941a, fig. 16, 17, 51; see also Boysal 1963, 71-2.

<sup>&</sup>lt;sup>606</sup> Furumark 1941a, fig. 12; Boysal 1963, 74-5.

<sup>&</sup>lt;sup>607</sup> Boysal 1963, 73; see also Stubbings 1951, pl. 4 fig. 2-4.

<sup>&</sup>lt;sup>608</sup> Boysal 1967b, 124.

<sup>&</sup>lt;sup>609</sup> Mee 1978, 137-39.

<sup>&</sup>lt;sup>610</sup> Mee 1978, 140.

<sup>611</sup> French 1965, 202.

Argolid.<sup>612</sup> The trefoil mouth of jugs from Müsgebi have a form similar to an Anatolian beak spouted jug type found in Eleona and Langada as imports.<sup>613</sup>

Local kylixes from the LH IIIB periods were found with imported kylixes from Rhodes and ornamented examples from the Argolid. As with many kylixes, stemmed bowls are generally accepted to be imports to the region. For example, a spouted stemmed bowl shares features of spouted bowls from Ialysos.<sup>614</sup> Except for the stem part, another deep stemmed bowl is similar with examples from Mycenae.<sup>615</sup> Mee suggests that some of these bowls should be categorized as deep bowls instead of stemmed bowls because of the different depths.<sup>616</sup> Lastly, most of the mugs and daily use cups in Müsgebi appear to have been local products.<sup>617</sup>

As a result of clay analyses on pottery such as a goblet and stipple decorated cups, Mountjoy claims the pottery mostly came from Miletus during the LH IIIA1 period. These pottery types were traced to the Miletus Workshop II.<sup>618</sup> Other examples from the Milesian region in the Müsgebi cemetery are pottery from the LH III A2 and B.<sup>619</sup> Mountjoy states the reddish and ziegelrot pottery types could be imported or local, but not from Rhodes as was previously claimed.

The changes in use of cemetery areas in Ialysos and Müsgebi are similar in the LH IIIB, when the Müsgebi cemetery was used less compared to previous periods; according to Mee, the connection with Rhodes cannot be trade in this period for Müsgebi.<sup>620</sup> The south Rhodian pottery had reddish, and Ialysos pottery had buff colored and silver mica inclusions, which is different than the examples in Müsgebi from this period. To validate provenance of these imports, particularly to determine if they are Rhodian or not, further research about the link between these regions by the sea trade and pottery types from south of Rhodes is necessary. For the present we know that ornamentation of the south Rhodian style does not match with the east Aegean design.<sup>621</sup>

<sup>&</sup>lt;sup>612</sup> Wace 1932, 106-9, pl. 52.

<sup>&</sup>lt;sup>613</sup> Morricone 1965-1966, 155.

<sup>&</sup>lt;sup>614</sup> Mee 1978, 141.

<sup>&</sup>lt;sup>615</sup> French 1965, 167, 187.

<sup>&</sup>lt;sup>616</sup> Mee 1978, 141.

<sup>&</sup>lt;sup>617</sup> Mee 1978, 142.

<sup>&</sup>lt;sup>618</sup> Mountjoy 1998, 36.

<sup>&</sup>lt;sup>619</sup> Gödecken 1986, 312.

<sup>&</sup>lt;sup>620</sup> Mee 1982, 89.

<sup>&</sup>lt;sup>621</sup> Mountjoy 1998, 36.

#### Metals

Bronze weapons, tools such as spearheads and cleavers and a sewing needle were found in different graves. One of the bronze knives with rivet holes on the haft is the closest example of Sandars IB from LH IIIA2 period.<sup>622</sup> The other knives dated to the LH IIIB and C periods of Siena group knives, with a high-quality dagger from the same group and period.<sup>623</sup> These two different types of knives were found in the same tomb, which demonstrate multiple usages of the graves at different times.<sup>624</sup>

Bronze spearheads dated to LH IIIB, similar to Ialysos examples<sup>625</sup>, and other spearheads similar to Panaztepe examples based on their shoulder profiles were found. Five other spearheads are local productions, similar to some of the samples from Panaztepe dated to LH IIIB.<sup>626</sup> The cleavers<sup>627</sup> which were found as a pair in the Mycenaean graves were also found in Müsgebi graves. Larger ones are common in the LH IIIA2 on Greek mainland and Aegean island sites.<sup>628</sup>

#### Other Finds

Frit and bead samples are commonly found in Mycenaean types of graves.<sup>629</sup> In one of these graves a circular golden object, possibly a ring, was found.<sup>630</sup>

#### 4.5. Pilavtepe

Pilavtepe is located between Milas-Bodrum highway 40 km from Bodrum in Muğla province, in the Gulf of Güllük, and on a natural hill which is 75 meters abovesea level today. Matthias Benter states that it was an inner bay of the gulf before alluvium from the Sarıçay River, which is still linked with the Aegean Sea<sup>631</sup>, filled the area. The plain where Pilavtepe lies is the southeastern part of Damlıboğaz, formed

<sup>&</sup>lt;sup>622</sup> Dietz 1984b, 108; see also Akyurt 1998, 32.

<sup>&</sup>lt;sup>623</sup> Sandars 1963, 140; see also Akyurt 1998, 32.

<sup>&</sup>lt;sup>624</sup> Akyurt 1998, 32.

<sup>625</sup> Sandars 1963, 149.

<sup>626</sup> Ersoy 1988, 68; see also Akyurt 1998, 32.

<sup>&</sup>lt;sup>627</sup> Blegen 1937, 347; see also Akyurt 1998, 32. Blegen suggests that large type of cutters which has straight blunt side are similar to today's cleavers. Also, narrower single-edged blades should not be evaluated as razors because of their weight.

<sup>&</sup>lt;sup>628</sup> Sandars et al. 1958-1959, 235 fig. I 8, X 4.

<sup>&</sup>lt;sup>629</sup> Buchholz and Karageorghis 1973, 1336-7 fig.37.

<sup>&</sup>lt;sup>630</sup> Boysal 1967a, 8.

<sup>&</sup>lt;sup>631</sup> Benter 2010, 343.

by the same river and by tectonic movements.<sup>632</sup> Geomorphological research indicates that archaeological remains at Pilavtepe and its foothill are found under the alluvial layers.<sup>633</sup> Pilavtepe was shaped by these geomorphological changes during and before the Bronze Age, similar to other sites such as Panaztepe and Miletus. The changes started much earlier, but the sea and land siltation happened especially after the Middle Holocene in the Aegean. As a result, the locations of Aegean harbor cities eventually became inland areas.<sup>634</sup>

The inner bay of Pilavtepe in the Gulf of Güllük was on an advantageous spot to control the entrance of the gulf during the LBA and later periods. This spot is an intersecting point between various settlements: in the direction of northwest-southeast the Bafa Lake (still connected to the sea by rivers) and Keramos sites, in the direction of southwest-northeast Myndos, Müsgebi, Mylasa, Halicarnassus, and Stratonikeia which are located in the same province today, while the landway of Pilavtepe connects Miletus and Iassos; the acropolis of Iasos is visible from Pilavtepe.<sup>635</sup>

#### 4.5.1. Grave Types

#### **Burial Chamber**

The rectangular burial chamber of Pilavtepe is the single example at the site (Fig. 39). It is located on the southern side of the slope and was found during the water channel construction in the area. During the rescue excavation, the team could access the entrance of the stomion, which was the part of the rock carved burial chamber. The dromos could not be accessed because of the limited time.<sup>636</sup>

The Pilavtepe burial chamber was used multiple times as were the other graves in the LBA Western Anatolia mentioned in the previous sections. The destruction of the bones and grave goods makes them unavailable to test, but rescued artifacts help to confirm that grave belonged to an elite family.<sup>637</sup>

<sup>&</sup>lt;sup>632</sup> Soykan 1997, 319; see also Öner et al. 2017, 275.

<sup>&</sup>lt;sup>633</sup> Öner et al. 2017, 275-76.

<sup>&</sup>lt;sup>634</sup> Kayan 1999, 545; see also Öner et al. 2017, 276.

<sup>&</sup>lt;sup>635</sup> Benter 2010, 343-44.

<sup>636</sup> Benter 2010, 344.

<sup>&</sup>lt;sup>637</sup> Benter 2010, 345-50.

#### 4.5.2. Grave Goods

Thirty pottery vessels, including deep bowls, pear-shaped amphora, amphoriskos, alabastron, flask, kylix, cup, and stoup with seals, bronze tools, faience ornaments, amber beads, and lead weights were found in the grave. They are dated to LH IIIA2-C and are similar to Mycenaean grave goods from the Greek mainland and Aegean islands.<sup>638</sup>

## Pottery

The pottery remains in Pilavtepe were decorated with spirals, lines, faunal, and floral designs. Decorated kylixes and foot of kylixes, monochrome cups, deep bowls, double handled alabastra, a single skyphos, stoup, three handled krater, amphora, rim sherds, polished cups, stirrup handled jars, and pottery sherds were found in and around the grave. An octopus decorated kylix, a pitcher, a stirrup jar with triton decoration, a three handled jar with nautilius decoration, and amphorae with papyrus decoration were uncovered (Fig. 40). According to Benter, at least three individuals were buried to the grave. Research on tombs from Rhodes dating to the LH period by Colin MacDonald suggests that approximately five or six cups were used for each body, which means there should be more than 3 dead in the grave.<sup>639</sup>

The Marine and Floral Styles were common characteristics in the Aegean LH IIIA2-IIIC, but the small pitcher with the triton design is unique. It was decorated only with lines on the shoulder part and S shaped designs on the head part. Another unique example is the amphora with papyrus flower decoration.<sup>640</sup> The similar example of a krater from Pilavtepe, with several other similar types of pottery, was found in the Synkairos chamber burial with lead weights. The Synkairos krater shares similar characteristic in technique with Minyan wares rather than the Pilavtepe example. Both examples are closer to Troy VI and Beycesultan II high-based krater examples. Lastly, the form and decoration of the cups without handles in Pilavtepe are parallel to the cups from Mycenaean layer of Miletus settlements as Müsgebi examples.<sup>641</sup>

<sup>&</sup>lt;sup>638</sup> Mountjoy 1986, 67-92, 134-54; see also Benter 2010, 344-46.

<sup>&</sup>lt;sup>639</sup> MacDonald 1986, 128; see also Benter 2010, 345-46.

<sup>&</sup>lt;sup>640</sup> Benter 2010, 346.

<sup>&</sup>lt;sup>641</sup> Benter 2010, 347.

#### Other Finds

Three seals, six clay and three stone weights, a grindstone and a stone prism, which was identified as a weight, were found in the grave. The design of the two lentil-shaped seals has symmetrical figures as a mirror and probably were made of steatite. The bigger seal has a wild goat figure and the decoration of the smaller sample cannot be distinguished because of damage.<sup>642</sup>

Bronze objects included a chisel, a stylet, a spatula (perhaps for medicine), a curve headed needle, a spiral hoop, and another needle with a golden plated body part (Fig. 41).<sup>643</sup>

Multi-colored faience ornaments are decorated with eight leaved rose, papyrus flowers, lentils, circular, and cardamom seed designs. The rose leaf in the golden and ornamented frame was probably part of a chain.<sup>644</sup> As in the Panaztepe graves, amber beads were found in Pilavtepe, but the grave types that these beads were found are different. The Pilavtepe Mycenaean burial chamber contained amber beads as Panaztepe, but it is the only "chamber tomb" which contained amber beads in Anatolia (Fig. 42).<sup>645</sup>

#### 4.6. Summary

All the five sites have an advantageous geographical position on the coastline Western Anatolia. Geological research on some of these areas continue; similar work is necessary for the entire region's coastline. The geography greatly affected the intensity of the maritime activities on the coast of Western Anatolia and formed the culture by effecting the use of natural harbors, burial customs, funerary architecture, settlements.

No settlement is associated with Beşik Tepe cemetery, as at Müsgebi, although Mycenaean LH IIIB and C pottery remains were found at Beşik Tepe.<sup>646</sup> For this reason, settlements or port facilities of seasonal workers are suggested as the possible population using the Beşik Tepe cemetery.<sup>647</sup> The relationship between the harbor of Beşik Bay and Troy, its geography and the significant finds such as seals -which are

<sup>&</sup>lt;sup>642</sup> Benter 2010, 348-49.

<sup>&</sup>lt;sup>643</sup> Uzel 2000, Lev. LXXXIV; see also Benter 2010, 349.

<sup>&</sup>lt;sup>644</sup> Benter 2010, 349.

<sup>&</sup>lt;sup>645</sup> Harding et al. 1974, 149-52; see also Benter 2010, 350.

<sup>&</sup>lt;sup>646</sup> Korfmann 1985, 110.

<sup>647</sup> Korfmann 1987, 266.

assumed to be votives in Mycenaean practice since they were found in sanctuaries and tombs<sup>648</sup>- suggest that that the harbor and the surrounding area were busy as a central place. This situation is raising expectations that a more permanent settlement should be in or near the area.<sup>649</sup>

A further argument in support of this point is the high percentage of Mycenaean pottery found, comprising 28% of the total, most of which were good local imitations of Mycenaean designs and forms.<sup>650</sup> This suggests a strong connection between the two sides of the Aegean in terms of cultural exchange. Both Beşik Tepe and Beşik Bay are connected with Troy's levels in terms of Mycenaean objects found at both sites, as well as the variety and significance of the objects. Korfmann claims that the cemetery and bay was used during the Trojan War or a battle because of chronological parallels, its closeness to the sea and the possible memorial graves of warriors.<sup>651</sup>

Panaztepe as one of the central harbors in Western Anatolia, is composed of port facilities, a cemetery, and a settlement area in the same territory. Panaztepe included a high diversity of goods and grave types in comparison to the southern coastal area. Its position between the northern and southern parts of the coastline can account for this wealth. Two sides of the cultural landscape which also connected Aegean communities to different extents might have interacted with each other by such central harbors.

The geology of Değirmentepe (Miletus) and Panaztepe put them in a different situation from the other three sites. Based on geomorphological research, both were islands that connected different parts of the Western Anatolian coastal landscape. Both cemeteries were dependent on central harbors, located on the mouth of bays that are connected directly to the sea today. Despite this condition, unlike Aegean islands, they were more connected with sites on the coastal landscape of Western Anatolia. Their position was not independent: they seem to be connected to a centralized authority in terms of sea trade and harbor safety and were linked to other sites in the coastline.

Değirmentepe (as a part of Ancient Miletus) and Panaztepe included large settlement areas and Harbour Towns with extramural cemeteries. The geological changes and material culture of Değirmentepe can give clues about the vicissitudes

<sup>&</sup>lt;sup>648</sup> Dickers 2001, 71-3; see also Pulak 2006, 307-8.

<sup>649</sup> Korfmann 1986a, 26-8; 1987, 265.

<sup>&</sup>lt;sup>650</sup> Basedow 2001, 418.

<sup>&</sup>lt;sup>651</sup> Korfmann 1986a, 26-8; 1987, 265.

and developments in the rest of Western Anatolia. If more investigation can be done at Kalabaktepe adjacent to Değirmentepe and around the site, it may be possible to find more details about the area's maritime cultural landscape and its relationship with the cemetery. Miletus was excavated for many years, and the work around the site unearthed different time periods, varieties of architecture, geology and geography, pottery and other finds. Değirmentepe has not been studied as much as Miletus, but as a part of the site Değirmentepe still maintains its importance.

Mycenaean artifacts and architectural details in the cemetery and well known in Miletus are other aspects of the marine connectivity and the cultural landscape of the region. Miletus was used in different periods as an intersection point between Anatolia, the Aegean and Western Anatolian sites and Değirmentepe parallels Miletus at this point. Furthermore, Milesian pottery of local production at the site and at Müsgebi and Hittite type swords in the Değirmentepe cemetery suggest mining necessities. Miletus likely had geographical advantage and to developed connections between these civilizations which helped boost its geopolitical importance.

Pottery and metal remnants at Müsgebi and Miletus show the maritime connections between these sites, the east Aegean, and with the Aegean islands, especially Kos island. Unlike Miletus, the Müsgebi site did not include any clear evidence for a settlement area yet. Özgünel suggests instead of permanent settlements, that these were seasonal workers, probably miners, who possibly used portable tents or something similar in the region<sup>652</sup>, but no supporting evidence has been found. The Mycenaean presence might be related to Myndos, which has silver mines, and Mycenaean cups were found in the site. Mycenaeans might have known these sources in Western Anatolia and worked around the region seasonally.<sup>653</sup> Mountjoy argues that Müsgebi is not near enough to the shoreline to be a preferred settlement area for the Mycenaeans.<sup>654</sup> However, it is still a connection point for the region and close to the Aegean islands. Even if the population at the site was not permanent, seasonal workers and possibly traders settled down and used the sources of the region. The tombs became a need as a result of these regular and intense activities in the area. However, the lack of evidence might not mean that there has not been settlement in the area

<sup>&</sup>lt;sup>652</sup> Özgünel 1987, 543.

<sup>&</sup>lt;sup>653</sup> Gür 2014, 40.

<sup>&</sup>lt;sup>654</sup> Mountjoy 1998, 36.

considering the size and variety of the graves.

The combination of local and Mycenaean burial customs appeared at this point. The graves were located based on the geographical features, namely the sea connection between the cultures. Maritime activities were shaped by the needs and desires of both cultures. The graves as a part of the coastal landscape include material culture of these activities. In the case of Müsgebi, a settlement has not yet been found which makes the graves the only evidence about the maritime cultural landscape of Müsgebi until a new discovery is made.

The Pilavtepe site consists a single tomb containing a large variety of grave goods. The tomb shares the same characteristics with other four sites: the first geographically, advantageous position in the gulf, the second is rock-cut structure with Müsgebi and Değirmentepe, and the last is prestige goods especially with Panaztepe, Müsgebi, and Beşik Tepe. As with the previous sites, Pilavtepe shares Mycenaean cultural features such as amber in burial, Mycenaean pottery, and inhumation. It shows similarity with the finds, especially amber and faience beads, glass, from the Uluburun shipwreck.

Comparison of Mycenaean and Western Anatolian burial traditions in the context of the maritime cultural landscape is examined in the next and the last section by including all of the data from this and previous chapters (Fig. 43).

#### 4.7. The Mycenaean Connection

This section expands the Mycenaean cultural connections in Western Anatolia, including grave types and grave goods. It examines previous studies about the connections with Mycenaean traditions on the Greek mainland, the Aegean islands, and Western Anatolia. This comprises the relationships between historical geography, settlements, harbors, funerary architecture, burial customs, trade materials, typological similarities, and associated analyses. The section describes the formation of a hybrid culture unique to the coastal areas of Western Anatolia.

The periods covering the four cemetery areas and the Pilavtepe grave overlap, although these areas began to be used in different periods. Panaztepe was in use since the EBA; Beşik Tepe is first dated to the LH IIIB-C (13<sup>th</sup> c. BC); Değirmentepe is dated to LH IIIB-C, specifically late 13<sup>th</sup> and early 12<sup>th</sup> c. BC; Müsgebi started from the LH IIB; and Pilavtepe is dated to the LH IIIA-C.

Tholos tombs and Mycenaean simple grave types such as pit and cist graves, are dated to the LH IIIA1-2 in Panaztepe, which overlaps with the period of Amenhotep III's reign. A scarab seal from his reign was found in Panaztepe cemetery.<sup>655</sup> It was identified in Greek mainland graves during the LH IIIA-B).<sup>656</sup> A faience seal from his reign was found in a cult center at Mycenae.<sup>657</sup> A letter between Arzawa and Egypt shows that Amenhotep proposed a marriage alliance with the Arzawans during this period<sup>658</sup>, a time when the Arzawan borders reached north and to central Anatolia during the reign of the Hittite king Tudhaliya III. Pithoi containing prestigious goods from the Aegean are dated to the LH IIIB, partially covering the time of these conflicts and agreements between major players in the eastern Mediterranean.

The Değirmentepe cemetery is dated from the late MH III to LH IIIA2-B, although Mycenaean levels at Miletus started earlier, possibly in the LH II period. However, they continued to display LM I-II characteristics at the beginning. Mycenaean influence became more obvious during the LH II-III periods, corresponding to Building Level 3 in settlement layers at Miletus. After the Minoan settlement was destroyed in the first half of the 15<sup>th</sup> c. BC, the Mycenaean objects begin to appear among local goods at Miletus. Archaeological data from the tholos tombs of Değirmentepe correspond to Miletus Level V, ending in Level VI, the last phase of the LBA in Miletus (14<sup>th</sup> c. BC).<sup>659</sup>

During the LH IIIA2-B, when Muršili II reigned over the Hittites, the Tawagalawa Letter is an example of a diplomatic solution to rising tensions. The Hittites left an area belonging to the Hittite Kingdom under Ahhiyawan control. Bryce claims that the area corresponds to Mycenaean settlements in Miletus based on archaeological data.<sup>660</sup> For the same reasons, Niemeier believes that it is the second building level in which the Mycenaean community settled down and exerted influence.<sup>661</sup> Bryce claims that the Ahhiyawans (equated with Mycenaeans) were involved in the Western Anatolian coastal regions, possibly their merchants were

<sup>&</sup>lt;sup>655</sup> Erkanal 1987, 258.

<sup>&</sup>lt;sup>656</sup> Lewartowski 2000, 34-8.

<sup>&</sup>lt;sup>657</sup> Cline 1990, 200-12.

<sup>&</sup>lt;sup>658</sup> Moran 1992, 31; see also Bryce 2011, 364.

<sup>659</sup> Niemeier 1998; 2005.

<sup>&</sup>lt;sup>660</sup> Bryce 2011, 371.

<sup>&</sup>lt;sup>661</sup> Goetze 1933, 36-7; see also Niemeier 1998, 37-9.

active in trade in the area.<sup>662</sup>

The rise of Mycenaeans in Western Anatolia during the period of these conflicts<sup>663</sup> is evident from Mycenaean imports and local imitations of these goods in graves and funerary architecture, such as tholoi, whose presence became more common as contacts developed. Panaztepe contains tholoi of different types as on the Greek mainland, namely rectangular and oval plans, with forms of dromos and stomion adapted to the topography in some case in both regions. Tholoi in extramural cemetery areas were located on top of high hills in Western Anatolian and Greek mainland coasts.<sup>664</sup>

Multiple inhumations in tholoi, such as in Dendra<sup>665</sup>, Panaztepe<sup>666</sup>, and Değirmentepe<sup>667</sup>, are seen in both regions. As with the Panaztepe and Değirmentepe tholoi, tholoi in Mycenaean lands are the sign of wealth and technology, belonging to elite owners and families. Lewartowski claims that the number of chamber and tholos tombs increased during the LH, especially in the LH III, when sea trade reached its peak, interregional contacts, and common-wealth increased in the Aegean. The Müsgebi rock-cut tombs (chamber tombs) are comparable with Mycenaean chamber tombs typologically, particularly the tholoi plans in their dromos and stomion.<sup>668</sup> Even simple graves, such as cist graves on the Greek mainland, represented increasing wealth during the LH, because the number of cist graves and prestigious goods in these graves became more prominent during this period.<sup>669</sup>

Lewartowski suggests that when wealthier graves increased in extramural cemeteries, important centers such as Mycenae and Tiryns no longer had simple graves, except in a few mixed cemeteries.<sup>670</sup> Among the five sites, Beşik Tepe and Panaztepe cemeteries have a variety of grave types, the other three sites have tholoi or chamber tombs only. Wealth was not significantly different in these sites, however, except for Panaztepe and Değirmentepe, none of these cemeteries or the Pilavtepe grave were directly located in a center. They are possibly connected with a center; for

<sup>663</sup> Conflicts between the Hittites with Arzawan and Ahhiyawan started earlier as mentioned in the  $2^{nd}$  chapter, but the conflicts in this section overlap with increasing of Mycenaean impact in the region.

<sup>&</sup>lt;sup>662</sup> Bryce 1989, 11.

<sup>&</sup>lt;sup>664</sup> Lewartowski 2000; see also Gallou 2005; Erkanal 2018.

<sup>&</sup>lt;sup>665</sup> Aström 1977, Whitley 2002, 222; see also Burns 2010, 163-64.

<sup>666</sup> Erkanal 2005, 389.

<sup>&</sup>lt;sup>667</sup> İslam and Aslan 2015, 381-83.

<sup>&</sup>lt;sup>668</sup> Boysal 1963, 68-9; 1967a, 6.

<sup>&</sup>lt;sup>669</sup> Lewartowski 2000, 7-10, 15.

<sup>670</sup> Lewartowski 2000, 16-7.

example, Beşik Tepe is one of the bays of Troy, although centers for Müsgebi and Pilavtepe are unknown. However, there were natural harbors, and it may be that their ports and/or settlements may have disappeared.<sup>671</sup> Local Mycenaean imitations of pottery in Müsgebi came from Miletus workshops<sup>672</sup>, and it is suggested that this could be one of the centers that connected to Müsgebi.

Scholars, such as Bryan Burns, suggest that chamber tombs on the Greek mainland were not as monumental as tholoi, despite prestigious grave goods, and that hence these graves were not Mycenaean. They accept tholoi as the local tradition and believe that chamber tombs belonged to outsiders.<sup>673</sup> Mee, Cavanagh, and Lewartowski state that the poorest chamber tombs and the richest cist graves have similar characteristics. The grave types were divided hierarchically based on evidence of prestige goods.<sup>674</sup> How this hierarchy was structured in their world and their burial customs has not yet been solved.

The Müsgebi chamber tombs and tholoi of Değirmentepe and Panaztepe are parallel to these Mycenean graves. They included prestige imports that indicate longdistance sea trade and cultural connections even without evidence of settlement in Müsgebi. Could it be locals who were under the influence of this cultural network, or were they also foreigners as suggested for the Mycenaeans?

Similar issues about the owners of the graves are also relevant for the possible cenotaphs. Empty cist graves with prestigious goods, such as precious ornaments, were found in the Greek mainland cemeteries. No bones were found. Burns and Gallou claim that these graves were Mycenaean, of people who died outside the mainland. In contrast, Lewartowski argues that they were infant burials that were not preserved in the soil.<sup>675</sup>

Erkanal and Korfmann believe that the purpose of the proposed cenotaphs in Beşik Tepe and Panaztepe (urn and stone box graves without grave goods) was to memorialize people who died at sea. They also suggest that burials could be outsiders whose bones were later carried to their homelands.<sup>676</sup> Lewartowki's argument about infant burials parallels the suggestion of Hayat and Armağan Erkanal for Panaztepe's

<sup>&</sup>lt;sup>671</sup> See the first section of the 4<sup>th</sup> chapter.

<sup>&</sup>lt;sup>672</sup> Mountjoy 1998, 36.

<sup>&</sup>lt;sup>673</sup> Aström 1977, see also Whitley 2002, 222; Burns 2010, 163-64.

<sup>&</sup>lt;sup>674</sup> Mee and Cavanagh 1984, 49, 62; see also Lewartowski 2000, 49.

<sup>&</sup>lt;sup>675</sup> Lewartowski 2000, 22-5; see also Gallou 2005, 115; Burns 2010, 188.

<sup>&</sup>lt;sup>676</sup> Erkanal 1986, 71; see also Korfmann 1987, 265.

empty stone box graves. Erkanals concur with Lewartowski's argument about infant burials.<sup>677</sup>

If they were to memorize people who died away from home, identification would again be an issue, in that carrying the bones back to the hometown seems practically difficult. Alternatively, the graves could be for locals who could not return to Western Anatolia. Unfortunately, no evidence, other than the graves themselves, can contribute to these ideas. A broken stone piece with a hole, possibly for libations, was found in Beşik Tepe next to an empty grave, although it did not provide any further elucidation of the issue.<sup>678</sup> Cenotaphs on the Greek mainland as mentioned in the third chapter, consisted of many prestige and common goods which support the contention that mourners wanted to memorize a lost relative or that perhaps infant burials had not been preserved.

Prestige grave goods in Mycenaean and Western Anatolian graves became more prolific during the LH III period. Ornaments such as faience, frit, glass, and carnelian were common in the Aegean. Ivory-made ornaments were rare, but popular for elites in Mycenaean graves. A sole single possibly ivory- or horn-made ornament was found in Beşik Tepe.<sup>679</sup> Amber became more popular during the LH III. While still rare, it was a significant luxury good for elites, and more common in Mycenaean world than in Western Anatolia, Panaztepe and Pilavtepe also featured amber beads in elite graves.<sup>680</sup>

Most of these materials, such as glass, faience, and amber, are signs of longdistance sea trade and different types of trade. For example, amber on the Greek mainland and in Western Anatolia had a predominantly Baltic origin. It is not known how amber arrived in Panaztepe and Pilavtepe.<sup>681</sup> Mycenaeans could have been the middlemen transporting this material to Western Anatolia, or perhaps the owners of the graves were Mycenaean. Glass ingots and beads, faience, carnelian, agate, quartz, and amber beads were found in Uluburun shipwreck dating to the 14<sup>th</sup> c. BC.<sup>682</sup> Many of these materials were common in Mycenaean and Western Anatolian graves, for example carnelian in Beşik Tepe, faience and glass in Panaztepe, and other common

<sup>&</sup>lt;sup>677</sup> Erkanal and Erkanal 1986, 71.

<sup>&</sup>lt;sup>678</sup> Korfmann 1987, 265.

<sup>679</sup> Korfmann 1987, 265.

<sup>&</sup>lt;sup>680</sup> Harding et al. 1974, 149-52; see the first section of 4<sup>th</sup> chapter.

<sup>&</sup>lt;sup>681</sup> Harding et al. 1974, 149-52.

<sup>&</sup>lt;sup>682</sup> Pulak 1988, 1-37; see also Bass 1991, 69-82; Singer 2008, 17-9.

types such as frit and steatite. The most prestigious goods with golden plaques, scarabs, and styles such as rosette, seed, and lentil design, for example in Pilavtepe,were found in the most luxury graves.<sup>683</sup> Some of these materials came from the Mediterranean, such as Egyptian faience<sup>684</sup>, and became more prolific in the LH III, which supports the argument for the stronger maritime network in this period in the Aegean.

Chariot and boat models in Mycenaean graves were possibly the means to the underworld. Phi and psi terracotta figurines and chariot and boat depictions on pottery and wall paintings have a significant place in the rituals of the Mycenaeans, evident from archaeological evidence from cult centers and graves. These elements appear in several locations in Western Anatolia<sup>685</sup>, for example, figurines in Miletus and Ephesos-Ayasoluk<sup>686</sup>, a pottery with chariot motifs, a local imitation of Mycenaean pottery and a painted head of an imported figurine -with imported Mycenaean pottery (LH IIA1-2 and IIIB in Building Level II 1) in Liman Tepe<sup>687</sup>, a single example of horse bits<sup>688</sup> from sites in Değirmentepe, possibly related to chariots and after-life journey.

A large krater from Bademgediği Tepe dated to LHIIIC represents warriors, most probably on a ship deck, and oarsmen below.<sup>689</sup> Wachsmann suggests that these figures depict two antithetical ships and it is the salient two-dimensional depiction of "*rowers plying their oars below deck level from an open rowers' gallery intersected with vertical stanchions.*"<sup>690</sup> Mountjoy<sup>691</sup> and Bernard Knapp<sup>692</sup> suggest that warriors are preparing to board another ship in this naval battle scene. In Liman Tepe, a sherd from LHIII was found, according to Ayşegül Aykurt and Erkanal, depicting an oarsman. The figure holds an object and looks to the left. A part of his knee is visible, which might show a sejant. The design on the head can be either a helmet or hair. Above the figure, legs are in a walking position on a horizontal line. Despite the small size of this piece, the depictions are very close to the Bademgediği krater.<sup>693</sup> Unlike in Mycenaean ritual areas and cemeteries, these are rare finds in Western Anatolia.

<sup>&</sup>lt;sup>683</sup> Lewartowski 2000, 34-8; see the first section of 4<sup>th</sup> chapter.

<sup>&</sup>lt;sup>684</sup> Panagiotaki 2008, 52-4; see also Çınardalı-Karaaslan 2012, 75.

<sup>&</sup>lt;sup>685</sup> Lewartowski 2000; see also Gallou 2005.

<sup>686</sup> Bammer 1994, 28-39.

<sup>&</sup>lt;sup>687</sup> Erkanal 1995, 265; see also Günel 1998; Aykurt 2018.

<sup>&</sup>lt;sup>688</sup> Mee 1978, 133.

<sup>689</sup> Mounjoy 2005; 2011, 486.

<sup>690</sup> Wachsmann 2013, 74.

<sup>&</sup>lt;sup>691</sup> Mountjoy 2011, 487.

<sup>&</sup>lt;sup>692</sup> Knapp 2018, 162-63.

<sup>&</sup>lt;sup>693</sup> Aykurt and Erkanal 2017, 62-6; see also Knapp 2018, 163.

The Mycenaean style of terracotta figurines were found in Miletus V and VI levels, specifically in a Mycenaean type corridor house in level VI.<sup>694</sup> A Mycenaean seal belonging to the "Island Sanctuaries Group", which might have been used to stamp pithoi and consisting of Linear B signs, were also found at the site.<sup>695</sup> Apart from these finds, examples from other sites in Western Anatolia are significant for ritualistic purposes. Two Mycenaean figurines with double axes were found in the Artemision at Ephesus, and Mycenaean pottery found at the same site. A Mycenaean tomb at Ephesus at Ayasoluk Hill contained Mycenaean pottery such as a krater and a piriform jar, which support the existence of a Mycenaean cult center in the area.<sup>696</sup>

Bronze, copper, and golden goods such as beads were produced in large numbers from the MH to LH periods. Loom weights and spatulas, such as the example from Western Anatolian at Pilavtepe, needles, for example at Pilavtepe and Müsgebi, and weapons, including swords and spearheads found at all five sites, are features of Mycenaean burials. Decorated swords from Panaztepe are categorized as Ci, Di, and Gi styles of the Aegean sword typology, midrib and flanges of swords, and spearheads are similar to examples from shaft graves and tholos tombs in Mycenae and Dendra. Some of these goods might have been produced at workshops in Knossos on in Mycenaean period Crete.<sup>697</sup> Knives and the dagger found in Müsgebi belong to the Siena group, and the same type of cleavers was found in both Mycenaean and Müsgebi graves. Larger cleavers were common on the Greek mainland and the Aegean islands.<sup>698</sup>

As mentioned above, pottery includes both local and Mycenaean types. Some vessel displays a mixture of cultural influences typical of Western Anatolia. For example, the marine and floral styles are common in Mycenaean and Western Anatolian graves, and constitute characteristics such as octopuses, molluscs, tritons, waves, and spirals.<sup>699</sup> A stirrup jar with a triton decoration from Pilavtepe was also decorated with local ornamentation.<sup>700</sup> Horizontal lines with spirals and a motif similar to a double axe is a unique and culturally-mixed style in the Değirmentepe

<sup>&</sup>lt;sup>694</sup> Niemeier and Niemeier 1997, 197-98; 2005, 11.

<sup>&</sup>lt;sup>695</sup> Niemeier 1998 36-7; 2005, 12.

<sup>&</sup>lt;sup>696</sup> Mee 1978, 127; see also Bammer 1994, 38; Kelder 2004-2005, 69.

<sup>&</sup>lt;sup>697</sup> Sandars 1963, 117-53; see also Driessen and Macdonald 1984, 49-74;

Ersoy 1988, 61-7; see the metals sections in the 4<sup>th</sup> chapter.

<sup>&</sup>lt;sup>698</sup> Sandars 1963, 140; see also Akyurt 1998, 32.

<sup>&</sup>lt;sup>699</sup> Marinatos 1993, 231, 288; see also Gallou 2005, 118.

<sup>&</sup>lt;sup>700</sup> Benter 2010, 346.

cemetery.<sup>701</sup> Mountjoy notes similar pottery customs in the interface between the east Aegean, that combines aspects of Minoan, Mycenaean, and Anatolian decorative styles.<sup>702</sup>

Marinatos and Gallou interpret the Marine style of pottery decoration in the graves as a representation of death, fertility, and change.<sup>703</sup> Laffineur suggests marine fauna on pottery -because of their body forms and morphological characteristics, including spirals, meanders, and waves on weapons- represent transfiguration, hibernation, reproduction, and the dead .<sup>704</sup>

Certain types of Mycenaean pottery are prevalentin Western Anatolia and the Aegean. The cemeteries contain a variety of imports and imitations. Beşik Tepe includes an alabastron, an amphora, and a kylix. Mycenaean painted deep bowls, vases in Müsgebi and Panaztepe, beak spouted jars in Panaztepe and Değirmentepe were found in graves. Panaztepe graves have oenochoe, stirrup handled cups, piriform jar and a kalathos from Rhodes and the Aegean Islands were found in Değirmentepe cemetery. A skyphos, amphoriskos, basket cups, askos, trefoil mouth pitchers, flasks, and tankards in Müsgebi, kylix, pitchers, and stirrup jars in Pilavtepe are the most significant finds in their sites.<sup>705</sup>

Three handled jars from Panaztepe were found mostly in the Argolid, Attica, Cyprus, and Rhodes. A similar jar from Değirmentepe originated in Rhodes or possibly the Astypalaia Island, and fine wares such as kylix and pyxis types of pottery, stirrup jars, amphorae, and a stainer were Mycenaean imports identified from their clay inclusions, paste, and color in Müsgebi. Some other types, such as piriform jars, could be from Rhodes. Ialysos, Eleona, Langada and local productions came from Miletus workshops destined for Müsgebi. Mountjoy suggests that pottery in Müsgebi, Miletus, and other areas in the same coastal area might have been imported from the east Aegean Islands because typological examinations and clay analyses showed similarity between pottery from Kos, Kalymnos, Astypalaia, and Miletos. It may be that different Mycenaean sites produced their own products.<sup>706</sup>

The octopus design on kylixes evident during the LH IIIB in Kos, Rhodes,

<sup>&</sup>lt;sup>701</sup> İslam and Aslan 2015, 382.

<sup>&</sup>lt;sup>702</sup> Mountjoy 1998, 37.

<sup>&</sup>lt;sup>703</sup> Marinatos 1993, 231, 288; see also Gallou 2005, 118.

<sup>&</sup>lt;sup>704</sup> Laffineur 1985, 259.

<sup>&</sup>lt;sup>705</sup> See the sites in the 4<sup>th</sup> chapter.

<sup>&</sup>lt;sup>706</sup> Mountjoy 1998, 37.

Miletos, and lasos were closely related. It has been suggested that the kylixes were produced in the same workshop at Kos.<sup>707</sup> Pilavtepe imports consisted of octopus decorated kylixes, stirrup jars with triton, three-handled cups with nautilus decorations, and papyrus-decorated amphorae are the most important examples from Pilavtepe. With the exception of a krater, pottery was comprised of Mycenaean wares in the grave.<sup>708</sup>

Mountjoy proposes a concept called "East Aegean - West Anatolia Interface" (Fig. 44) based on the materials that were found in Western Anatolia, the Aegean Islands, and Mycenaean lands. She examines Mycenaean culture in these areas to assess the acculturation process in local communities. She claims that local cultures absorbed aspects of Mycenaean culture, applied them in pottery production and burial customs specifically. She further suggests that acculturation proceeded because trading communities kept the trade networks open, and small Mycenaean and Minoan communities continued to grow in Western Anatolia. The Upper Interface covers the Dodecanese to Troy and is identical with the spread of Gray ware in coastal sites. The Lower Interface comprises Rhodes, the south Western Anatolian coast, and the Dodecanese.<sup>709</sup>

This relationship between interfaces and Mycenaeans can be beyond the political and economic sea trade and exchange. Labor force was mentioned in the Linear B tablets which seems a part of interface networks. These tablets include place names outside of the Greek mainland, entries for people, and commercial goods. Foreign people mentioned in the texts were mostly women, workers for Pylian textile industry especially.<sup>710</sup> They came from different social status such as women servants and Milesian man to be involved in a ritual in Thebes. Assaf Yasur-Landau lists people' names and places where they come from to where in his book.<sup>711</sup> Women from Miletus, Halikarnassos, Knidos, Chios, Lemnos and Asia/Lydia in Pylos were defined in the tablets. Men from Miletus in Thebes, from Chios in Knossos, from Lemnos, Asia/Lydia, and Iasos in Pylos, from Asia/Lydia in Mycenae and Knossos were

<sup>&</sup>lt;sup>707</sup> Mountjoy 1998, 43.

<sup>&</sup>lt;sup>708</sup> See the sites in the 4<sup>th</sup> chapter.

<sup>&</sup>lt;sup>709</sup> Mountjoy 1998, 2015; see also Pavuk 2015, 97.

<sup>&</sup>lt;sup>710</sup> Chadwick 1988; see also Nosch 2003; Yasur- Landau 2010, 38-9.

<sup>&</sup>lt;sup>711</sup> Yasur-Landau 2010, 39-40.

included in the same documents.<sup>712</sup>

Besides these several aspects of interface relationships, the documents present conflicts between Ahhiyawa and Hittites. Conflicts and treaties including territorial issues of Western Anatolia in the previous chapter and show one of the political and economic aspect of Aegean and Anatolian network. Not only trade and exhchange of goods, but also labor force as it was mentioned above, present other aspects of connection between Aegean Islands and Western Anatolian coastal. However, these are not enough to reply identity and connection between their social structures as a result of economy and politics. Typological examinations of pottery, the same style of other goods such as weapons, similar characteristics in burial traditions, geological similarities, and written documents all together contribute some answers. For example, a letter from Hittite king -time of Arnuwanda I (1420-1400 BC<sup>713</sup> / 1360<sup>714</sup>) reveals coastal location of Ahhiyawa and mentions that the islands belong to the king of Ahhiyawa.<sup>715</sup> Geological characteristics<sup>716</sup> which evident possible islands which are connected with Anatolian mainland now as a result of alluvium shifts, may show better geographical connections between the Aegean islands and possible LBA islands or peninsula such as Miletus and Panaztepe.

Charles Gates proposes that the area between the western and eastern Aegean shores and islands were a united area. The area included eastern shore becoming an integral part of the Aegean rather than solely a coastline to transit from the west during the LBA. He suggests that the Mycenaean settled the central and southeastern Aegean shores during the MBA and LBA.<sup>717</sup> Jacob Eerbeek examined grave goods of the Müsgebi cemetery and argued that the site was used by local groups who lived in the area rather than Mycenaeans themselves. Local groups used Mycenaean cultural elements as a means of cultural connection by imitating their style on pottery and importing local imitations of Miletus.<sup>718</sup>

Comparison of the number of imports and local products in the five cemeteries, including Mycenaean and local styles, and the Mycenean remains in Panaztepe and

<sup>&</sup>lt;sup>712</sup> Driessen and MacDonald 1984, 51; see also Palaima 1991, 279–80; Aura-Jorro 1985, 100, 110, 125-26, 199, 237, 290, 360; 1993, 218-19, 453–54; Cline 1994: 130; Bennett 1998, 132; Shelmerdine 1998, 29, 293-95; Yasur-Landau 2010, 38-43.

<sup>&</sup>lt;sup>713</sup> Bryce 2005.

<sup>&</sup>lt;sup>714</sup> Alparslan 2015, fig. 3.

<sup>&</sup>lt;sup>715</sup> Cline 1994, 121; see also Yasur-Landau 2010, 42.

<sup>&</sup>lt;sup>716</sup> Details of geological research in the Western Anatolia is in Chapter 4.

<sup>&</sup>lt;sup>717</sup> Gates 1995.

<sup>&</sup>lt;sup>718</sup> Eerbeeck 2015.

Miletus building levels supports this point. Apart from these, many other coastal and inland sites such as Liman Tepe, Çeşme-Bağlararası, and Kolophon exhibit imported and local Mycenaean wares in settlements areas and graves.

Correlations between the dates in the textual evidence regarding Ahhiyawan, most possibly Mycenaean, occupation in Western Anatolia and archaeological evidence from the Miletus Mycenaean building levels suggest a stronger influence of Mycenaean culture in the cemeteries than of the Mediterranean cultures. This situation included Central Anatolia, which represents the possible existence of Mycenaean groups in several locations in Western Anatolia. Mining activities in particular should be considered, together with possible metal sources belonging to Central Anatolia. Instead of colonizing the coastal area and to keep trade networks, the Mycenaeans might have established a system in their trade networks that accessed Mycenaean communities in Western Anatolia. A possible reason for this is Hittite embargo arising from political and territorial conflicts. against the Mycenaeans.

Knapp and John Cherry claim that controlling the political and economic conditions of trade in the Aegean depends on four steps: "gift exchange, freelance trade, centralized control, and localized control."<sup>719</sup> These four steps are applicable to Western Anatolia and its maritime connections when the Uluburun, Gelidonya<sup>720</sup>, Şeytan Deresi<sup>721</sup>, and Point Iria<sup>722</sup> shipwrecks are considered along with grave goods. Three other shipwrecks aside from Uluburun represent different sorts of trade types. Gelidonya shipwreck is thought to have carried bulk cargo indicated by its dominant copper and tin ingots in different forms.<sup>723</sup> Şeytan Deresi shipwreck consisted a variety of pottery such as pithoi, transportation vessels, and jars, but lack of personal belongings for crew and small cargo might indicate that the ship was a coaster to transport new manufactured pottery between rural areas.<sup>724</sup> Another pottery cargo was found with Point Iria shipwreck without metal finds as Şeytan Deresi. Point Iria is also assumed to be a cargo ship that carried its cargo between regions in Mediterranean such as Cyprus, Crete, and mainland Greece.<sup>725</sup>

Luxury imports evident in the graves presented the extent of the market and its

<sup>&</sup>lt;sup>719</sup> Knapp and Cherry 1994, 123-55.

<sup>&</sup>lt;sup>720</sup> Bass et al. 1967; Bass 1991.

<sup>&</sup>lt;sup>721</sup> Bass 1976; 1977; see also Margariti 1997.

<sup>&</sup>lt;sup>722</sup> Phelps et al. 1999.

<sup>&</sup>lt;sup>723</sup> Bass et al. 1967; 1991.

<sup>&</sup>lt;sup>724</sup> Bass 1976; 1977; see also Margariti 1997.

<sup>&</sup>lt;sup>725</sup> Phelps et al. 1999; see also Bass 2001, 342-43.

connection to sea trade. Aspects of burial customs and the number and manufacturing style of imported and local goods in settlements differentiated in trading centers and smaller settlements. The differences between archaeological evidence in central settlements and their impacts on rural areas illustrate the process of interaction between the centralized authority, trade centers, and local cultures.

Eric Cline proposes that trade between the Aegean and the Mediterranean was directed by palace centers and included commercial trade and gift exchange for diplomacy.<sup>726</sup> Burns underlines the fact that imports showed centralized control and their presence is thus a sign of political and economic stability. For example, Argolid lands vied for dominance with each other before establishing a stable political order and a centralized body of authority could regulate trade.<sup>727</sup>

#### 4.7.1. Summary

The distribution of Mycenaean groups (Fig. 45) around the Mediterranean influenced the coastal landscape of Western Anatolia and inland areas during the LBA. The intensity of Mycenaean cultural effects varied between the north and south. For example, in local Anatolian pottery assemblages, both Mycenaean imitations and local styles such as Gray Ware are evident, whereas in southern areas the Aegean style of pottery was more common, and only rarely goods were found from other regions. The content of these burials was closer to styles of the Aegean. In northern cemeteries such as Panaztepe, there is a greater variety of grave types and goods from Anatolia, the Aegean, and the Mediterranean.

Miletus, Müsgebi, and Pilavtepe together exhibited closer burial types with Mycenaean imports and imitations. Panaztepe and Beşik Tepe exhibited a variety of funerary types, local style goods with lesser numbers of imports, and therefore represented more local characteristics. Nonetheless, both areas absorbed the different cultural connections within a 'melting pot'<sup>728</sup> and adapted these to their own culture thereby creating a unique hybrid culture.

Philipp Stockhammer<sup>729</sup> argues that to have hybridization, purity must exist first. A pure culture, in the Western Anatolian case, might not be possible, but for

<sup>&</sup>lt;sup>726</sup> Cline 1994, 106; 2009, 163-64.

<sup>&</sup>lt;sup>727</sup> Burns 2010, 195-96.

<sup>&</sup>lt;sup>728</sup> Burke 2009, 34–65.

<sup>&</sup>lt;sup>729</sup> Stockhammer 2012, 3.

hybridization, purity in a culture is not necessary. As two different regions, two sides on the same sea, they shared the same pottery styles, including ceremonial cups such as kylix, which imitated and were not used differently in Western Anatolia. Daily use cups, seen in the graves, were used in the settled areas of both regions; the Greek mainland and Western Anatolian coast. Unlike the Levantine example of piriform jars<sup>730</sup>, the Western Anatolian Aegean style of pottery and other goods, such as weapons, are all the same as the examples from the Greek mainland and Aegean Islands. Piriform jars from the Levant were the same size, with upper parts similar to the Aegean style of piriform jars, but the Levantine style is evident in the lower part – entitled entanglement according to Stockhammer–.<sup>731</sup>

Other than imports, imitated pottery in the Aegean style, such as kylix, piriform jars, pyxis, etc., differed only in the clay structure. Still, local examples, such as Gray ware, also existed in some of the sites, such as Troy. It is difficult not to see Mycenaean, and Minoan earlies, influence on the Western Anatolian coast, which was highly developed in the LH, especially in LHIII. For example, all the uncovered pottery in Müsgebi are imitations; pottery from the Miletus workshops, and that from Değirmentepe-Miletus is in Mycenaean style. This points again to the existence of networks between the smaller sites and the centers. In the hybridization process, through cultural networks, mixing cultures and practices became possible in Western Anatolia, through the creation of new social spaces and interactions<sup>732</sup>, and through aspects of politics and economics, especially sea trade and exchange.

Ioannis Voskos and Knapp claim that hybridization does not have to be the result of a domination or colonial process by one authority or culture over another. It is more likely to be an engagement process occurring by interaction and negotiation.<sup>733</sup> In Western Anatolian, material culture and architectural features in burials and settlements is a good example for this engagement process. The region imitates or shares the same style of weapons, pottery, burial customs, rituals, etc. with the Aegean. Written documents, as outlined in Chapter 2, about politics and territorial issues in the Arzawan lands and with the Ahhiyawans, is another aspect of

<sup>&</sup>lt;sup>730</sup> Amiran 1960 et al., 37.

<sup>&</sup>lt;sup>731</sup> Amiran 1960 et al., 37; see also Stockhammer 2012, 54-6.

<sup>&</sup>lt;sup>732</sup> Gophna and Friedman 1995, 84; see also Ashcroft 1998, 118; Young 2003, 79; Knapp 2008, 57.

<sup>&</sup>lt;sup>733</sup> Voskos and Knapp 2008, 661.

this 'melting pot' region. A correlation between the chronological order of Aegean style goods and architecture with the Greek mainland also supports this idea.

The imitating process, architectural features, and burial customs seem to be part of an opening of new spaces for the Aegean culture and allowed Western Anatolia to apply this tradition in its own characteristics. Besides the similarities, some of the traditions did not continue in Western Anatolia. For example, votive figures were seen more in the EBA, but except for a few examples, they disappeared from the region in the LBA, although they were still common on the Greek mainland.<sup>734</sup>

As with Troy, Beşik Tepe, and Panaztepe, Western Anatolian sites continued to include Anatolian characteristics. For example, cremation and inhumation in both tholos and pithos graves, were uncovered in these sites.<sup>735</sup> Another example is cremation in the Müsgebi rock-cut chamber tombs, where the architecture is in the Aegean style, but the cremation is more likely to be Anatolian. Pottery in the same graves was all Mycenaean style from Miletus workshops.<sup>736</sup> As noted at many points in this thesis and by numerous scholars, Knapp, in particular, considers that it is important to research how indigenous or local groups themselves engaged with larger authorities<sup>737</sup> – such as with Miletus-Müsgebi, or with Greek mainland centers, such Mycenae-local areas. With this question in mind, hybridization and cultural interaction, or the transformation processes, can be understood in terms of networks throughout the Aegean islands, the Greek mainland, and Western Anatolia – in both local and central areas.

Through this cultural engagement, geographic differences affected this maritime connectivity. Panaztepe and Değirmentepe (Miletus), islands in the bays of Western Anatolia, both had central locations and were well-suited to influencing regional trade networks. This political and cultural structure is also an Aegean characteristic resulting from similar geography and political conditions, especially in the Mycenaean-controlled areas.

The geographic position of these coastal sites and their proximity to Western Anatolia created a cultural environment that experienced a significant influence from

<sup>&</sup>lt;sup>734</sup> Akyurt 1998, 170.

<sup>&</sup>lt;sup>735</sup> See Chapter 4.

<sup>&</sup>lt;sup>736</sup> Gödecken 1986, 312; see also Mountjoy 1998, 36.

<sup>&</sup>lt;sup>737</sup> Knapp 2008, 64.

the sea. This impact can be traced examining burials, geography, maritime effects and maritime connections, trade, and local culture. To assess these connections using the framework maritime cultural landscape helps build a more sophisticated perspective that could explain economic, social, and hierarchical relationships more accurately in the region during LBA.





# Chapter 5:

## CONCLUSION

At the end of the MH, Hattušili I (1650-1620 BC according to Middle Chronology<sup>738</sup>) attacked Arzawan lands due to a struggle over the borders. The Palace Chronicle describes partial Hittite control over Arzawan lands in period of Hattušili I or Muršili I. It is during this time that Mycenaeans likely settled in Western Anatolia. Number of Mycenaean goods increased at the same time and the name of Arzawa appeared in the Hittite texts.<sup>739</sup> During the LHII-III a transition in the local cultures to a new hybrid culture becomes evident. The region moves further away from the Minoan influence<sup>740</sup>, but is not disconnected completely, since Minoan elements continue in Mycenaean culture, such as the continued production of Marine style pottery.

The Ahhiyawans were seen for the first time in written documents after the reign of Muršili I. In the period of Tudhaliya I/II, which corresponded to the LH IIB-IIIA, the Ahhiyawans became prominent in Western Anatolia, according to Hittite documents.<sup>741</sup> The earliest grave goods in the five cemeteries date to the LHIIA. The beginning of the increase in the number of Mycenaean goods and funerary type of goods in Western Anatolia represents a correlation between the archaeological evidence and the written documents about the impact of the Ahhiyawans.

During his reign, Tudhaliya I/II (ca. 1430-1390 BC), attacked Arzawa and secured the borders, but he could not conquer the Arzawan lands.<sup>742</sup> Thegeography of the region created natural avenues and borders between Western and Central Anatolia. Some of these political units began to be designated for the first time in the documents as distinct areas, such as the Šeha River Land<sup>743</sup>, representing transition points between these two regions and denoting part of inland Western Anatolia. Thus, besides the competition for power, the new political dynamics were also influenced by geography.

Coastal areas were linked to inland Western Anatolia not only by the land, but

<sup>&</sup>lt;sup>738</sup> Bryce 2011.

<sup>&</sup>lt;sup>739</sup> Beckman 2006, 220; see also Bryce 2011, 364.

<sup>&</sup>lt;sup>740</sup> Niemeier 1998; 2005.

<sup>&</sup>lt;sup>741</sup> Alparslan 2015, 134-35.

<sup>&</sup>lt;sup>742</sup> Garstang and Gurney 1959, 121; see also Bryce 2003, 50-1; 2011, 136.

<sup>&</sup>lt;sup>743</sup> Roosevelt and Luke 2017, 122-39; see also the 2<sup>nd</sup> chapter, 18-20.

also by rivers, thus making inland Western Anatolia accessible primarily from the areas. These geographical conditions affected the political and military struggles in the area. The geographical barriers of coastal Western Anatolia isolated the region from many dangers, but also made it attractive for outsiders to reach Western Anatolia and hence for Anatolians to control the sea.

The coalition between Ahhiyawans and Arzawans against the Hittites in Western Anatolia continued to develop. During the reign of Tudhaliya III, which corresponded the LH IIB-IIIA1, evidence suggests that other authorities in the region recognized these powers. The scarab seal found in Panaztepe<sup>744</sup> and the faience seal of Amenhotep III, found in Mycenae<sup>745</sup>, together with the letter sent by Amenhotep III concerning a marriage alliance<sup>746</sup> between Arzawa and Egypt illustrate diplomatic aspects of this relationship. The impact of the sea trade on economic conditions and influence of political conditions on the sea trade network is visible in grave goods, specifically in imported beads as well as in the seals. Egyptian faience beads<sup>747</sup> and possibly other kinds with both Mediterranean and Aegean style ornamentations were found in graves at places such as Panaztepe, where the scarab seal was found. The increase in wealth of Ahhiyawa and Arzawan lands increased the territorial problems of the Hittites and corresponded to the time of Tudhaliya IV's attack on Western Anatolia, most probably as an attempt to stop these coalitions and rebellions.<sup>748</sup>

The conflicts are evidenced in the archaeological evidence in settlement layers that again correlate with written documents. According to written documents Muršili II conquered Arzawan lands, although the documents fail to mention the name 'Arzawa' after the conquest of the Arzawan lands, the River Land, Hapalla, and Mira.<sup>749</sup> Millawanda is a significant example that epitomizes the coincidence of the evidence. Muršili II destroyed Millawanda because the ruler of the area took Ahhiyawa's side against the Hittites. The impact of Ahhiyawa –or the Greek mainland– in the area continued after the attack, although it decreased. Millawanda is generally accepted by scholars to be Miletus, and the level of destruction in Miletus, particularly in building Level II, and the remnants of Mycenaean architecture -corridor

<sup>&</sup>lt;sup>744</sup> Mellink 1983, 139; see also Erkanal 1987, 258.

<sup>&</sup>lt;sup>745</sup> Cline 1990, 200-12.

<sup>&</sup>lt;sup>746</sup> Moran 1992, 31; see also Bryce 2011, 364.

<sup>&</sup>lt;sup>747</sup> Panagiotaki 2008, 52-4; see also Çınardalı-Karaaslan 2012, 75.

<sup>&</sup>lt;sup>748</sup> Beckman 1999, 144-46.

<sup>&</sup>lt;sup>749</sup> Roosevelt and Luke 2017, 122.

houses-, votive figurines, and pottery evident before the destruction supported this suggestion.<sup>750</sup> This situation also corresponds to the time of the disappearance in the LH IIIA2 of Ephesos-Ayasoluk (Apasa), possibly the capital of Arzawa.<sup>751</sup>

The local and Mycenaean characteristics of funerary architecture, burial customs, and grave goods provide evidence for these changing dynamics in coastal Western Anatolia. These features of cemeteries and sites do not only exhibit rituals of community, but also the dimensions of maritime connectivity and its influence on the local maritime cultural landscape, as well as the related impacts of geography on this network. The maritime network between Mycenaeans and sites in Western Anatolia represent the impact of Aegean, but local characteristics combine with this Aegean influence at these sites. Also, a Myceanaean population, of unknown size, existed in these sites, and possibly adapted themselves to some cultural features of Western Anatolian communities. Since these cultural relics are mixed in graves, it is also hard to define the origin of the deceased. This connection between burials and maritime aspects includes the structure of local and centralized authorities and the relationships between the coastal sites of Western Anatolia.

Different burial customs are apparent in graves in the region. The hocker and half-hocker position of interments is seen in the burials of Panaztepe (similar to Mycenaean burials from mainland Greece), with adults in Beşik Tepe and Müsgebi buried in the dorsal position. Cremation, rare in the Aegean Bronze Age, was also used in these places. The interesting point is that the Müsgebi graves consisted of interments in the dorsal position. Müsgebi, with its funerary architecture and burial goods, reflected the Aegean culture more intensely than other sites, except for Değirmentepe. For example, even the local pottery, which came from Miletus workshops, was designed in the Mycenaean style, but Müsgebi showed evidence of the dorsal position in burial chambers, which was not a Mycenaean tradition. They might be Anatolians adopting Mycenaean customs or Mycenaeans adopting Anatolian ones.

Who the owners of the graves were, is also debatable, including in many at the five cemeteries. Panaztepe and Beşik Tepe consisted of several grave types, namely inhumation and cremation, with local and Mycenaean grave goods, that also included

<sup>&</sup>lt;sup>750</sup> Niemeier 1997, 197-98; 1998, 37-9; 2005, 11.

<sup>&</sup>lt;sup>751</sup> Alparslan 2015, 138-40.

weapons in some graves. In empty graves, (cenotaphs) assuming they were not for infants, merchants, warriors and sailors are suggested. The graves with weapons were mostly accepted as warrior graves, or as a display of prestige in Mycenaean style. Infant and family burials, as well as gender and age groups in some cases, were distinguished. In Müsgebi, Değirmentepe, and Pilavtepe, the grave types were the same and the goods were similar, but the variety is different, possibly because of the conditions of preservation and perhaps also related to looting.

Examining the burial customs, the funerary architecture, and the high number of imitations of Mycenaean pottery and Aegean style weapons, besides the cultural influence, suggests that outsiders settled down with the local inhabitants. Mycenaean building levels are known in Miletus, but they appear to be in different centers in the Western Anatolian coastal landscape. Small groups or communities could have settled down to keep the economic and political relationship secure and to bridge between the different communities.

All five sites included prestigious goods in all the graves, but the scale of the goods presented another order of hierarchy. Most of them were elite graves, except the the destroyed section of Müsgebi in the C trench and the simple graves in Panaztepe and Beşik Tepe. The number of high-status graves is the highest, with pithoi, burial chambers, and tholoi being the richest examples. It is not certain which grave corresponded to which status, whether weapons were prestige goods and possibly part of the ritual, meaning that weapons do not necessarily signify warrior graves. Weapons could be placed as a part of burial rituals for merchants, and/or elite families, even though they were not of importance while deceased was alive for prestige. Administrative seals were the rarest of all, but they could indicate the grave of an area administrator (or the use of seals as jewellery) who also connected with maritime activities as suggested from other prestigious goods in the grave.

Beads were found in plentiful supply even in infant burials, including in pithos graves. Amber examples from Panaztepe and Pilavtepe are unique to the region. The connection between the Baltic and Mycenaean regions for the amber trade is known. These graves could belong to Mycenaeans, who were likely the transporters of amber to Western Anatolia. Graves include not only the most prestigious beads, such as faience, but also less valuable and more common beads, such as semi-precious carnelian and steatite that appeared in many graves.

In Müsgebi among A, B, and C trenches, the north side of the C trench could

have been for seasonal workers, suggested because of the lack of settlement in the area. According to Boysal, uncovered tombs, bones, and ceramic remains in C trench were from graves of common people and included standardized burial customs. The other suggestion is that tombs of Trench C were used multiple times with a different type of burial custom and the previous interments thrown to this north side of the trench.<sup>752</sup> However, most of the graves in the other sections included high prestige goods and Mycenean fine ware, which did not belong to lower social classes. Travel as a reason to connect the sites to act as a landmark for people for anchorage could account for the building of the cemetery in this location.

All five cemeteries were located on natural harbors some of which included old ports, that changed geographically because of the later alluvium shift. Beşik Tepe cemetery, as one of the harbors of Troy during the LH IIIB-C, reflected a mixed culture with variations of grave types and goods. The cemetery located on Beşik Bay, was on top of the hill and visible from the sea, as were the other four cemetery areas. The position of the cemetery and the bay allowed for safe anchorage from the Dardanelle currents. It was also a transit point between major centers, such as Troy. Mycenaean goods in Troy and Beşik Tepe, the urn graves and pottery remnants in the graves parallel the daily use pottery finds, both local and Mycenaean at Troy.

Inhumation and cremation customs in Beşik Tepe connected with local and Mycenaean grave goods reflected the hybridization of different cultures. Some of the popular beads and seal forms of the Aegean elite, carnelian, frit, gold, and lentoid seals are the most important finds to describe social rank and hierarchy in the site. Having these goods and the visibility of the graves, which were almost monumental in some cases, required wealth. These beads and golden sheets of ornament, as exotic goods, became available via trade, or their decoration was brought in from the outside mostly by sea. Even infant burials had prestige goods in the pithoi and in family graves.

The Mycenaean style of pottery was found in the graves, both imported and local types from the LH IIIB-C period until after the Arzawan lands were separated. The Mycenaean import of an alabastron in a pithos grave together with valuable beads and golden pieces of ornament differentiated these pithoi from others. This infant interment was surrounded by stones and seems monumental in comparison to others. Prestige goods were used in infant burials in Mycenaean lands, but these were

<sup>&</sup>lt;sup>752</sup> Boysal 1967a, 2-3.

generally not built in a monumental style.

An example of memorializing the dead in their own tradition or a hybrid culture with specific grave types is seen in the "cenotaphs" from the sites. Empty urn, stone box, and cist graves both in Panaztepe and Beşik Tepe cemeteries had no graves goods, assuming they were not looted, unlike empty graves on the Greek mainland, which had a variety of prestigious goods. The belief could be to memorize dead who could not return from their journey. However, these graves were not monumental, but simple graves in Western Anatolia, if they are not unfinished graves or contained poorly preserved skeletal remains.<sup>753</sup> In Homer's texts burials for people who died at sea were marked with an oar, but markers were also visible from the sea.<sup>754</sup> The locations of these graves allowed visibility from the sea, but these empty graves were not specifically visible.

Various types of graves at Panaztepe reflect characteristics similar to Beşik Tepe graves, but in a higher diversity. The number and variety of tholoi and pithoi in the cemetery areas were higher than for other types of graves. Most of the prestigious goods came from tholoi. The different types of pottery could be based on two reasons. Firstly, the topography forced people to build graves in different ways in the coastal landscape of Western Anatolia. Second reason cannot be separated from the first but adds local technology and cultural factors into the building process.

Pottery in Müsgebi, Pilavtepe, and Miletus are the closest examples to each other within the sites. Based on clay analyses, the provenience of Müsgebi local pottery was Miletus. The origin of imports is still a debate, because of similarities in the clay structures. Specifically, the pottery dated to the LH IIIA2-C, presented Argolid, Rhodes, and Kos pottery characteristics. However, the LH IIIB pottery types were differentiated from Rhodes (Ialysos). Mountjoy claims that pottery in Müsgebi, Miletus, and other areas in the same coastal region might be imported from Kos, Kalymnos, Astypalaia, and Miletus based on typological examinations and clay analyses. Mycenaean sites may have produced pottery locally in a unified style.<sup>755</sup>

Seals as votives for burials were found in pithoi and tholoi at Panaztepe. Seals made from steatite were in lentoid and spindle whorl form, with button shaped seals

<sup>&</sup>lt;sup>753</sup> Gür 2013, 40-2.

<sup>&</sup>lt;sup>754</sup> Gambin 2014, 8-10.

<sup>&</sup>lt;sup>755</sup> Mountjoy 1998, 37.

found with prestigious goods. Mycenaean style pottery and local imitations were of a higher number than imports and were also used in daily life. The cemetery dated to LH IIIA-B, based on these pottery finds. Building Level 1, 4, and 5 included a parallel Mycenaean style of gold and silver pottery remnants with the cemetery, pottery sherds in pithoi corresponded to Building Level II in the Harbour Town of Panaztepe.

Figurines were not found in the graves, but votives and beads, especially faience and glass, were signs of a ritualistic process or belief system. The color of these materials, namely blue and green, symbolized life and death for Egyptian and Aegean communities. Pottery and other goods do not include boat depictions as a sign of-an after-life journey as for the Mycenaeans, but marine creatures, waves, and spirals on pottery possibly symbolized transformation from the living form to that of an ancestor. The marine impact on pottery cannot be only a Mycenaean influence, or Minoan in its earlier stages. Since coastal landscapes around the Aegean Sea shared many geological and maritime characteristics, it is expected that they used such familiar fauna in their art.

Besides the symbolic meanings of pottery, seal, and bead decorations, Mycenaean lands had chariot and boat depictions and models. In Western Anatolia, a chariot scene on a local pottery object in Mycenaean style was found at Liman Tepe. No other examples have yet been found. This can be related to ship building as there is no evidence to suggest locally built long-distance seafaring technology was found in Western Anatolia at the time. Still, a ship depiction with warriors and oarsmen on Bademgediği Tepe krater and possibly the same scene on a sherd from Liman Tepe were found. Despite the sea trade and possible boat journeys along rivers between coastal landscapes and inland Western Anatolia, people might not have had a place for ships in their symbolism. In this regard further research is needed to interpret which objects were significant and how they reflected a maritime impact on religion in Western Anatolia. Since most of the pottery were comprised of daily use ware, except ritualistic objects, such as kylixes, it is hard to determine their initial purpose or how they later linked with rituals. Also, figurines after the EBA, were not used in graves, and this must be related to a change in tradition. After pottery and beads, weapons were specific to Aegean styles with a few Anatolian and Near Eastern exceptions. Mining and metal work activities, in the case of maritime connectivity between the Aegean and Western Anatolia, appeared in the graves. Despite the Aegean style of weapons, the location for the provenance of production is unknown. Scholars

suggest that a percentage of these swords came from a Knossos workshops during the Mycenaean period on Crete.<sup>756</sup>

Although no workshop was located, the weapons could be local products. Perhaps Mycenaean craftsmen fulfilled orders for people who lived in Western Anatolia or who could access the metal sources of Anatolia via Western Anatolia. Another possibility is that Mycenaean style weapons were adapted in Anatolia in this period. Metal sources were important for weapons not only for battle and protection, but also for prestige. The connection between Mycenaean lands and Western Anatolia directly related to economic and political power, which was shaped in part by access to the sea and maritime routes. The sea separated powers geographically but connected them culturally, and politically as alliances against the Hittites were formed. The topography and the mountain- and island-like geography of the coastal landscape of Western Anatolia, contributed to these conditions. The way to reach Central Anatolian and Western Anatolian sources of metals, such as silver mines at Myndos, which is near to Müsgebi and Pilavtepe, was to keep a strong relationship with the coastal region.

These conditions also can explain the Mycenaean occupation at Western Anatolian sites. Votive figurines in the Ayasoluk cult center, settlement layers of Mycenaeans in Miletus, and parallel Mycenaean goods in graves and settlements exemplify a permanent Mycenaean presence in some of the sites. These areas in the coastal landscape were divided into centers and smaller sites. Multi-cultural characteristics, port facilities, settlement connections, and distribution of goods contributed to the division between these areas. For example, Panaztepe and Miletus had bigger and better harbors with settlement and cemetery areas. They connected to other sites, for example, Miletus distributed local Mycenaean imitation pottery to other sites, such as Müsgebi.

The Western Anatolian cultural, economic, and political structure connected to sites in the coastal areas, and possibly inland, and is similar to Mycenaean connectivity between the central and local authorities. Initially this may have been for geographical reasons. Having more sites available to control seafaring activities and for developing harbors or port facilities could represent the link between central areas and smaller anchorage sites, which could also be sources of trade material. Panaztepe in the north

<sup>&</sup>lt;sup>756</sup> Akyurt 1998, 131-32.

and Miletus in the south linked many harbors, as is evident from the funerary architecture and grave goods mentioned earlier. Both sites had advantages for control of the coastal areas and seafaring activities since they were located at transit points. They were close to small rural areas, which could connect them with Anatolian resources and leave a sufficiently large area for settlements and to enlarge the area, when needed.

Pilavtepe, located on the inland harbor of the Gulf of Güllük, lies close to the Sarıçay River that connects to the inland. The position of the graves allowed the ships that enter the gulf to follow the bays along the same coastline. Pilavtepe links the Bafa Lake and the Keramos sites of Myndos, Müsgebi, Mylasa, Halicarnassus, Stratonikeia, while the land route of Pilavtepe connects it to Miletus and Iassos. The acropolis of Iasos is visible from Pilavtepe.<sup>757</sup> As with Pilavtepe, the location of Müsgebi was strategic. It created a shelter for the ships and access to near sites, such as Myndos, possibly for mining and metal work activities in the coastal areas.

The geographical position of these cemetery areas was thus strategic to control the bay and for navigation of ships. It seems that both the Mycenaean and Western Anatolian coastal cemeteries shared these characteristics, and also used graves to declare their territory. In this regard, the cultural connection, which came from the initial geographical effects, connected the two different sides of the Aegean. It turned later to the need and desire to trade, which affected economic and political conditions, and caused conflicts between the Hittites and the Mycenaeans. The maritime cultural landscape concept of the in Western Anatolia during the LBA cannot be evaluated without considering the Mycenaean connection, since it is the most evident external cultural connection of Western Anatolia.

Cultural proximity with common geography affected not only the belief systems, but also political conditions. With outsiders settled in the Western Anatolian coastal landscape, cultural bonds help to protect the sea trade traffic and access to sources that the Mycenaeans needed. Instead of a process of Mycenaean domination in the region, it is more likely that the Mycenaeans needed a transit point to exchange goods and reach sources, although it appears that they needed to struggle to do so at times, based on evidence from Hittite archives. This may also have made Western Anatolia ideologically and culturally closer to the Aegean than the interior of Anatolia.

<sup>&</sup>lt;sup>757</sup> Benter 2010, 343-44.

A description of the maritime cultural landscape in these conditions must include the Mycenaean involvement in the region. The geography itself created a maritime environment bound to the Aegean more so than to Anatolia in the coastal areas, related to the increasing wealth of civilizations in the LBA owing to the sea trade. The elite classes improved the maritime network for prestigious goods besides raw materials, which sometimes caused political conflict in Western Anatolia through an increasing proximity to the Aegean communities.

The network is not only related to the Greek mainland, but also its communities in the islands, where the south Aegean islands especially had a strong connection to Western Anatolia. However, it is still not certain who the islanders were. Were they influenced by Mycenaean culture or was the style of products, such as pottery, already a common practice without influence? The islands and Western Anatolia may be similar in this regard. They had the same maritime network and the Mycenaeans moved around and settled in these regions. The islanders would have almost as much of an impact as the Mycenaeans, since their settlement sites were available for use as ports and anchorages, thus giving them control of sea traffic.

The maritime cultural landscape covers harbors, bays, ports, landmarks, sea trade goods, and cultural connections, which came with sea trade, apart from the geography of the region. The focus in this research was not directly the coastline structures, but the process by which Western Anatolian communities related to the maritime environment shaped their own unique culture. Applying the maritime cultural landscape concept in Western Anatolia requires evaluating different dimensions to understand how the culture was structured in this maritime environment and how it contributed to the features that came from this culture.

Developing the maritime cultural landscape concept in Western Anatolia requires more research. This research should focus on form and process of relationships between coastal and inland sites. Before taking these steps in further research, these sites should be studied together as part of this concept. They cannot be separated since their cultural and environmental characteristics were shared but separating local chronologies or using the LH and LBA chronologies has caused problems in identifying a unified structure of the sites. Local characteristics should be examined not only to understand site-specific conditions, but also for understanding the whole cultural process. This can go a step further and help to clarify the impact of the maritime cultural landscape of Western Anatolia on other regions.



## BIBLIOGRAPHY

- Aksu, A. E., Piper, D. J. W., and T. Konuk, 1987. "Quaternary Growth Patterns Of Büyük Menderes and Küçük Menderes Deltas, Western Turkey." Sedimentary Geology 52:227-50.
- Akyurt, İ. M. 1998. *M.Ö. 2. Binde Anadolu'da Ölü Gömme Adetleri*. Ankara: Türk Tarih Kurumu.
- Alparslan, M. 2015. "The History of the Arzawan State during the Hittite Period." In NOSTOI. Indigenous Culture, Migration, and Integration in the Aegean Islands and Western Anatolia during the LBA and Early Iron Age, edited by N. C. Stampolidis, Ç. Maner, K. Kopanias, 131-42. Istanbul: Koç University Press.
- Amiran, R., Y. Yadin, Y. Aharoni, T. Dothan, I. Dunayevsky, and J. Perrot. 1960.
   Hazor II. An Account of the Second Season of Excavations 1956. Jerusalem: Oxford University Press.
- Ashcroft, B. 1998. Post-Colonial Studies: The Key Concepts. London: Routledge.
- Aström, P. 1977. "The Cuirass Tomb and Other Finds at Dendra Part 2: Excavations in the Cemeteries, the Lower Town and the Citadel." SIMA 4:2. Göteborg: Paul Aströms Förlag.
- Aura-Jorro, F. 1985. Diccionario Griego-espa<sup>^</sup>nol, Anejo I: Diccionario mic'enico,*1*. Madrid: Consejo Superior de Investigaciones Científicas.
- Aykurt, A. 2006. "Kocabaş Tepe seramik fırını." In Hayat Erkanal'a Armağan.
  Kültürlerin yansıması = Studies in Honor of Hayat Erkanal, Cultural
  Reflections, edited by A. Erkanal–Öktü et al., 113–9. Ankara: Homer Kitabevi ve Yayıncılık.
- Aykurt, A. and H. Erkanal, 2017. "A Late Bronze Age Ship from Liman Tepe with Reference to the Late Bronze Age Ship From Izmir/Bademgediği Tepesi and Kos/Seraglio." *OJA* 36:61-70.
- Bammer, A. 1994. "Geschichte-neu geschrieben: Mykene im Artemision von Ephesos." *JOAI* 63:28–39.

Basedow, M. 2001. "Beşik Tepe, Son Tunç Çağı Mezarlığı." In *Troy: Düş ve Gerçek*,

edited by J. Latacz, 415-18. Stuttgart: Konrad Thesis Verlag.

- Bachhuber, C. 2006. "Aegean Interest on the Uluburun Ship." AJA 110:345-63.Basch, L. 1987. Le Musée Imaginaire de la Marine Antique. Athens: Institut Hellénique pour la Préservation de la Tradition Nautique.
- Bass, G. 1976. "Sheytan Deresi: Preliminary Report." IJNA 5.4:293-303.
  - \_\_\_\_\_1977. "The Wreck at Sheytan Deresi." Oceans 10.1:34-39.
- \_\_\_\_\_1986. "A Bronze Age Shipwreck at Ulu Burun (Kaş): 1984 Campaign." *AJA* 90:269–96.
- \_\_\_\_\_1991. Evidence of Trade from Bronze Age Shipwrecks." In Bronze Age Trade in the Mediterranean Studies in Mediterranean Archaeology, edited by N. H. Gale, 69-82. Jonsered. Paul Aströms Förlag.
  - 2001. Review of *The Point Iria Wreck: Interconnections in the Mediterranean ca. 1200 BC*, by W. Phelps, Y. Lolos, and Y. Vichos. *AJA* 105:341-43.
- Bass, G., P. Throckmorton, J. Taylor, J. B. Hennessy, A. R. Shulman, and H. G.
  Buchholz. 1967. *Cape Gelidonya: A Bronze Age Shipwreck*. Transactions of the American Philosophical Society 57 (8). Philadelphia: American Philosophical Society.
- Beal, R. H. 2011. "Hittite Anatolia: A Political History." In *The Oxford Handbook of Ancient Anatolia*, edited by G. McMahon and S. Steadman, 579-603. New York: Oxford University Press.
- Beckman, G. 1999. Hittite Diplomatic Texts. Society of Biblical Literature Writings from the Ancient World Series Vol. 7, edited by H. A. Hoffner. Atlanta: Scholars Press.
  - \_\_\_\_\_2006. "The Hittite Historical Texts." In *The Ancient Near East. Historical Sources in Translation*, edited by M. W. Chavalas, 215-52. Oxford: Blackwell Publishing.
- Beckman, G., T. Bryce, and E. Cline. 2011. *Ahhiyawa Texts*. Atlanta: Society of Biblical Literature.
- Becks, R. 2015. "Settlement Patterns and Socio-Political Landscape of Western Anatolian in the Middle and LBA: A Geoarchaeological View." In NOSTOI. Indigenous Culture, Migration, and Integration in the Aegean Islands and Western Anatolia during the LBA and Early Iron Age, edited by N. C. Stampolidis, Ç. Maner, K. Kopanias, 115-30. İstanbul: Koç University Press.

Behn, F., V. Duhn, and G. Karo. 1926. "Hausurne." RLV 5:221-8.

Benter, M. 2010. "Milas'taki Pilavtepe Miken Oda Mezarı." *Belleten* 270:343-50.Berg, Ina. 2019. *The Cycladic and Aegean Islands in Prehistory*. Oxon: Routledge.Betts, J. H. 1973. "Ships on Minoan Seals." In *Marine Archaeology: Proceedings of* 

- *the 23<sup>rd</sup> Symposium of the Colston Research Society held in the University of Bristol April 4-8th 1971*, edited by D. J. Blackman, 325-38. London: Butterworths.
- Bienkowski, P. A. 1982. "Some Remarks on the Practice of Cremation in the Levant." *Levant* 14:80-9.
- Bintliff, J. L. 1977. *Natural Environment and Human Settlement in Prehistoric Greece Based on Original Fieldwork. BAR* 28. Oxford: British Archaeological Reports.
- Blegen, C. W. 1937. *Prosymna: The Helladic Settlement Preceding the Argive Heraeum*. Cambridge: University Press.
  - \_\_\_\_1995. *Troy and The Trojans*. New York: Barnes and Nobles Books.
- Blegen, C. W., J. L. Caskey, and M. Rawson. 1953a. Troy III. The Sixth Settlement. Vol. 1. New Jersey: Princeton University Press.
  - \_\_\_\_\_1953b. *Troy III. The Sixth Settlement. Vol. 2.* New Jersey: Princeton University Press.
- Bittel, K. 1940. "Hethitische Bestattungsbräuche." MDOG 78:12-28.
  - \_\_\_\_\_1942. Kleinasiatische Studien. Istanbul: *IstMitt* 5.
- Boyd, M. J. 1905. "Gournia. Report of the American Expolaration Society's Excavations at Gournia, Crete." In *Transactions of the Department of Archaeology, Free Museum of Science and Art*, 177-190. Philadelphia: University of Pennsylvania.
- \_\_\_\_\_2014. "The Materiality of Performance in Mycenaean Funerary Practices." *World Archaeology* 46:192-205.

Boysal, Y. 1963. "Müskebi Kazısı 1963 Kısa Raporu." Belleten 121:67-83.

- \_\_\_\_\_1967a. "Karya Bölgesinde Yeni Araştırmalar." Anatolia 11:1-30.
  - \_\_\_\_1967b. "1964 Müsgebi Kazıları Hakkında Kısa Rapor." TAD 14:123-26.
- Böyükulusoy, Ü. Ç., V. Şahoğlu, Y. H. Erbil, H. Erkanal, and İ. Tuğcu. 2014. "2012 Yılı Çeşme-Bağlararası Kazıları." *Anadolu/Anatolia* 40: 179-194.
- Brein, G. 2000. "Astrochronology and Ancient Egyptian Chronology (Absolute Chronology II)." In *The Synchronisation of Civilisations in the Eastern*

Mediterranean in the Second Millennium B. C. III. Proceedings of the SCIEM
International Symposium, Vienna 11th of May–12th of May 1998, edited by
M. Bietak, 53–6. Contributions to the Chronology of the Eastern
Mediterranean 1. Vienna: Verlag der Österreichischen Akademie der
Wissenschaften.

- Brinkmann, R. 1971. "The Geology of Western Anatolia." In *Geology and History of Turkey*, edited by A. S. Campbell, 171-90. Castelfranco Veneto: Grafische Trevisan.
- Broodbank, C. 1989. "The Longboat and Society in the Cyclades in the Keros-Syros Culture." *AJA* 93:319–37.
  - \_\_\_\_2000. *An Island Archaeology of the Early Cyclades*. Cambridge and New York: Cambridge UP.
- 2010. "Ships A Sail from over the Rim of the Sea: Voyaging, Sailing and the Making of Mediterranean Societies c. 3500–800 BC", In *The Global Origins and Development of Seafaring*, edited by Anderson, J. H. Barrett, and K. V. Boyle, 249–64. Cambridge: McDonald Institute for Archaeological Research.
   2013. *The Making of the Middle Sea: A History of the Mediterranean from the Beginning to the Emergence of the Classical World*. London: Thames and Hudson.
- Brown, J. A. 1981 "The Search for Rank in Prehistoric Burials." In *The Archaeology* of Death, dited by R. Chapman, I. Kinnes, and K. Randsborg, 25-37. London: Cambridge University Press.
- Brown, L. M. 1979. "The Ship Procession in the Miniature Fresco." In *Thera*, edited by C. G. Doumas, 629-44. London: Thera and the Aegean World.
- Brück, J. 2011. "Fire, Earth, Water: An Elemental Cosmography of the European Bronze Age." In Oxford Handbook of the Archaeology of Ritual and Religion, edited by T. Insoll, 387-103.
- Brückner, H. 1998. "Coastal Research and Geoarchaeology in the Mediterranean Region." In *German Geographical Coastal Research: The Last Decade*, edited by D. Kelletat, 235-59. Tübingen: Institute for Scientific Co-operation.
- Bryce, T. R. 1989. "The Nature of Mycenaean Involvement in Western Anatolia." *Historia* 38(1):1-21.
  - 2003. "History." In *The Luwians*. HdO 68, edited by H. C. Melchert, 27–127. Leiden and Boston: Brill.

2005. The Kingdom of the Hittites. Oxford: Oxford University Press.

- \_2006. The Trojans and Their Neighbours. London: Routledge.
- \_\_\_\_\_2011. "The LBA in the West and the Aegean." In *The Oxford Handbook of Ancient Anatolia*, edited by G. McMahon and S. Steadman, 363-75. New York: Oxford University Press.
- Buchholz, H. G. and V. Karageorghis. 1973. Prehistoric Greece and Cyprus: An Archaeological Handbook. Translated by Francisca Garvie Buchholz. London: Phaidon.
- Burke, P. 2009. Cultural Hybridity. Cambridge and Malden: Polity Press.
- Burns, B. 2010. *Mycenaean Greece, Mediterranean Commerce, and the Formation of Identity.* New York: Cambridge University Press.
- Carpelan, C. 1999. "Käännekohtia Suomen esihistoriassa aikavälillä 5100...1000
  e.Kr." In *Pohjan poluilla. Suomalaisten juuret nykytutkimuksen mukaan*, edited by P. Fogelberg, 249–80. Helsinki: Finska Vetenskaps- Societen.

Casson, L. 1954. "The Sails of the Ancient Mariner." Archaeology 7(4):214-19.

- \_\_\_\_\_1975. "Bronze Age Ships: The Evidence of the Thera Wall Paintings." *IJNA* 4:3–10.
- Cavanagh, W. G. and C. Mee. 1995. "Mourning before and after the Dark Age." *Klados* 40:45-61.
  - and \_\_\_\_\_ 1998. "A Private Place: Death in Prehistoric Greece." *SIMA* 125. Jonsered: Paul Aström Förlag.
- Chadwick, J. 1987. "The Muster of the Pylian Fleet." In *Tractata Mycenaea*, edited by P. H. Ilievski and L. Crepajac, 75-84. Skopje: Macedonian Academy of Sciences and Arts.
  - \_1994. *The Mycenaean World*. Cambridge: Cambridge University Press.
- Cline, E. 1990. "An Unpublished Amenhotep III Faience Plaque from Mycenae." *JAOS* 110:200-12.
  - \_\_\_\_\_1994. Sailing the Wine-Dark Sea: International Trade and the LBA Aegean. British Archaeological Reports International Series 591. Oxford: Tempus Reparatum.
- 2009. "Bronze Age Interactions between the Aegean and the Eastern Mediterranean Revisited: Mainstream, Periphery, or Margin?." *In Archaic State Interaction: The Eastern Mediterranean in the Bronze Age*, edited by W. A. Parkinson and M. L. Galaty, 161-80. Santa Fe: School for Advanced Research

Press.

- Cornell, T. J. 1995. *The Beginnings of Rome: Italy and Rome from the Bronze Age to the Punic Wars (c. 1000–264 BC).* London and New York: Routledge.
- Courtois, J.C. 1979. "Ras Shamra Archéologie." In *Supplément au dictionnaire de la Bible*, edited by E. Jacob and H. Cazelles, 1126- 95. Paris: Letouzey and Ané.
- \_\_\_\_\_1981. *Alasia II. Les Tombes d'Enkomi. Le Mobilier Funéraire*. Paris: Boccard.
- Çınardalı-Karaaslan, N. 2008. "Recent Investigations at Panaztepe Harbour Town." In Batı Anadolu ve Doğu Akdeniz Geç Tunç Çağı Kültürleri Üzerine Yeni Araştırmalar, edited by A. Erkanal-Öktü, S. Günel and U. Deniz, 53-64.
  Ankara: Hacettepe Üniversitesi Yayınları.
  - \_2012. "Panaztepe: Geç Tunç Çağı Boncuk Üretimi İle İlgili Bir Çalışma." Anatolia 38:67-87.
- Çiner, R. 1964. "Bodrum- Müskebi Kazısı İskelet Kalıntılarının Tetkiki." *Antropoloji Dergisi* 2:56-79.
- D'Agostino, B. 1977. "Grecs et 'Indigènes' sur la Côte Tyrrhénienne au VII Siècle: La Transmission des Ideologies entre Élites Sociales." Annales: Économies, Sociétés, Civilisations 32:3–20.

Dahlström, S. 1940. "En Sjömans Grav på Obebodd ö." Budkavlen 1-2:1-23.

- Deger-Jalkotzy, S. 2006. "Late Mycenaean Warrior Tombs." In Ancient Greece: From the Mycenaean Palaces to the Age of Homer, edited by S. Deger-Jalkotzy, 151-79. Edinburgh: Edinburgh University Press.
- Dickers, A. 2001. Die spätmykenischen Siegel aus weichem Stein: Untersuchungen zur spätbronzezeitlichen Glyptik auf dem griechischen Festland und in der Ägäis. Rahden: Verlag Marie Leidorf.
- \_\_\_\_\_1998. The Aegean Bronze Age. Cambridge: Cambridge University Press.
  Dietz, S. 1984a. Lindos IV, 1. Excavations in Southern Rhodes: The
  Mycenaean Period. V. 22/1. Odense: Publications of the National Museum of
  Denmark.

\_\_\_\_\_1984b. Excavations and Surveys in Southern Rhodes: The Mycenaean Period. Results of the Carlsberg Foundation Excavations Rhodes 1902–1914. (Lindos IV, 1.). Copenhagen: The National Museum of Denmark.

Dickinson, O. T. P. K. 1994. The Aegean Bronze Age. Cambridge: Cambridge

University Press.

- Dinçol, A. M. 1969. "Rez.: W. Orthmann, Das Gräberfeld bei Ilıca. Weisbaden, 1967." *BiOr* 26/3-4:220-3.
- Dikaios, P. 1969 Enkomi. Excavations 1948-1958. Vol. I: The Architectural Remains; the Tombs. Mainz am Rhein: Philipp von Zabern.
- Driessen, J. M. And C. MacDonald. 1984. "Some Military Aspects of the Aegean in the Late Fifteenth and Early Fourteenth Centuries B.C." *BSA* 79:49-74.
- Edgren, H. 1984. "On the Continuity of Settlement in the Early Iron Age on the Åland Islands." *Iskos* 4:121–25.
- Eerbeek, J. 2015. "The "Mycenaeans" In the Southeast Aegean Revisited: An Inter-Regional Analysis." In NOSTOI. Indigenous Culture, Migration, and Integration in the Aegean Islands and Western Anatolia during the LBA and Early Iron Age, edited by N. C. Stampolidis, Ç. Maner, K. Kopanias, 289-310. Istanbul: Koç University.
- Emre, K. 1978. Yanarlar. Afyon Yöresinde Bir Hitit Mezarlığı/A Hittite Cemetery near Afyon. Ankara: Türk Tarih Kurumu Yayınları.
- Enghoff, I. B. 1996. "A Medieval Herring Industry in Denmark- and the Importance of Herring in Eastern Denmark." *Archaeofauna* 5:47-55.
- Erkanal, A. 1986. "Panaztepe Kazısının Tarihsel Açıdan Değerlendirilmesi." *10. TTK* 1:139-46.
- \_\_\_\_\_1987. "Panaztepe Kazıları 1985 Yılı Sonuçları." 8. *KTS* 1:253-62.
- \_\_\_\_\_1988. "Panaztepe Kazıları 1986 Yılı Sonuçları." 9. KTS 1:345-50.
- \_\_\_\_\_1994. "1992 Panaztepe Kazısı Sonuçları." *15. KTS* 1:461-66.
- \_\_\_\_\_1995. "1993 Panaztepe Kazıları Sonuçları." *16. KTS* 1:281-86.
- \_\_\_\_\_2002. "2000 Yılı "Panaztepe Kazı Sonuçları." 23. KTS 1:305-12.
- \_\_\_\_\_2008. "The LBA Cemeteries of Panaztepe." In *Bati Anadolu ve Doğu Akdeniz Geç Tunç Çağı Kültürleri Üzerine Yeni Araştırmalar*, edited by A. Erkanal-Öktü, S. Günel and U. Deniz, 65-75. Ankara: Hacettepe Üniversitesi Yayınları.
  \_\_\_\_\_2005. "Yeni Buluntular Işığında Panaztepe Kazısı." 14. TTK 1:53-60.
- 2008. "The LBA Cemeteries of Panaztepe." In *Batı Anadolu ve Doğu Akdeniz Geç Tunç Çağı Kültürleri Üzerine Yeni Araştırmalar*, edited by A. Erkanal-Öktü, S. Günel and U. Deniz, 65-75. Ankara: Hacettepe Üniversitesi Yayınları.
- Erkanal-Öktü A. 2018. *PANAZTEPE I: Die Friedhöfe von Panaztepe*. VI. 51 A/1-2. Ankara: TTK.

- Erkanal, A. and H. Erkanal. 1986. "A New Archaeological Excavation in Western Anatolia: Panaztepe." *Turkish Review Quarterly Digest* 1/3:67-76.
- Erkanal-Öktü, A. and N. Çınardalı-Karaaslan. 2006. "Panaztepe 2004 Yılı Kazıları." 27. KTS 1:191-2014.
  - \_\_\_\_\_2007. "Panaztepe 2005 Yılı Kazıları." 28. KTS 1:391-412.
- Erkanal, H. 2000. "1998 Yılı Liman Tepe Kazıları." 21. KTS 1:251–62.
- Erkanal, H. and A. Aykurt. 2017. *LBA Graves of Bakla Tepe*. Ankara: Ankara University Press.
- Erkanal, H. and S. Günel. 1995. "1993 Liman Tepe Kazısı." *16. KTS* 1:263–79. \_\_\_\_\_1996. "1994 Liman Tepe Kazısı." *17. KTS* 1:305–328.
- Erkanal, H. and H. Karaturgut. 2004. "2002 Yılı Çeşme–Bağlararası Kazıları." 25. *KTS* 1:153–64.
- Erkanal, H. and T. Özkan. 1999. "Bakla Tepe Kazıları." In *Tahtalı Barajı Kurtarma Kazısı Projesi*, edited by H. Erkanal and T. Özkan, 12-42. İzmir: İzmir Arkeoloji Müzesi Müdürlüğü.
- Ersoy, Y. E. 1988. "Finds from Menemen. Panaztepe Finds in the Manisa Museum." BSA 83:55-82.
- Evans, A. J. 1905. "The Prehistoric Tombs of Knossos." *Archaeologia* 59:391-562.
  \_\_\_\_\_1921. *The Palace of Minos*. London: Macmillan.
- Firth, A., K. Watson, and C. Ellis. 1998. Tamar Estuaries Historic Environment. A Review of Marine and Coastal Archaeology. Plymouth: Plymouth Archaeology Occasional Publication.
- Finkelstein, I. and N. A. Silberman. 2006. David and Solomon: In Search of the Bible's Sacred Kings and the Roots of Western Tradition. New York: Free Press. London: Simon & Schuster.
- Forrer, E. 1924. "Die Griechen in den Boghazköi-Texten." OLZ 27:113-8.
- French, E. 1963. "Pottery Groups from Mycenae: A Summary." BSA 58:44-52.
  - \_\_\_\_\_1965. "LH IIIA 2 Pottery from Mycenae." BSA 60:159-202.
    Frost, H. 1982. "On a Sacred Cypriot Anchor." In Archéologie au Levant.
    Recueil à la mémoire de R. Saidah, edited by Jean Pouilloux, 12:161-166.
    - Lyon: Maison de l'Orient et de la Méditerranée.
    - \_\_\_\_1966. "A Group of LH IIIB1 Pottery from Mycenae." *BSA* 61: 216–38.
- Frödin, O. and A. W. Pearson. 1938. Asine: Results of the Swedish Excavations 1922-1930. Stockholm: Generalstabens Litografiska Anstalt.

- Furumark, A. 1941a. The Mycenaean Pottery Analysis and Classification. Stockholm: Victor Pettersons Bokindustriaktiebolag.
- \_\_\_\_\_1941b. *The Chronology of Mycenaean Pottery Vol.* 2. Stockholm: Kungl. Vitterhets, Historie och Antikvitets Akademien.

Gallou, C. 2005. The Mycenaean Cult of the Dead. Oxford: Archaeopress.

- Gambin, T. 2014. "Maritime Activity and The Divine- An Overview Religious Expression by Mediterranean Seafarers, Fishermen, and Travelers." In *Ships, Saints, and Sealore: Cultural Heritage and Ethnography of the Mediterranean and the Red Sea*, edited by D. A. Agius, T. Gambin, and A. Trakadas, 3-12. Oxford: Archaeopress.
- Garstang, J. and O. R. Gurney. 1959. *The Geography of the Hittite Empire*. London: British Institute of Archaeology.
- Gates, C. 1995. "Defining Boundaries of A State: The Mycenaeans and Their Anatolian Frontier' In *Politeia. Proceedings of the 5th International Aegean Conference, 10–13 April 1994, University of Heidelberg*, edited by R. Laffineur, W. D. Niemeier, 289–98. Liege: Universite de Liege.
- Georgiadis, M. and C. Gallou. 2008. "The Cemeteries of The Argolid and The South Eastern Aegean During the Mycenaean Period: A Landscape and Waterscape Assessment." OpAth 31-32:171-82.
- Gjerstad, E., J. Lindres, E. Sjöqvist, and A. Westholm 1934. Finds and results of the Excavations in Cyprus 1927-1931. Vol. I. Stockholm: The Swedish Cyprus Expedition.
- Goetze, A. 1933. *Die Annalen des Muršilis*. Leipzig: Mitteilungen der vorderasiatisch-Ägyptischen Gesellschaft 38.
  - \_\_\_\_1967. *Die Annalen des Muršilis*. Darmstad: Wissenschaftliche Buchgesellschaft.
- Gophna, R. and Friedmann, E. 1995. "The Flint Implements from Tel En Besor." In *Excavations at En Besor*, edited by Gophna, R., 105-22. Tel Aviv: Ramot Pub. House.
- Gödecken, K. 1986. "A Contribution to the Early History of Miletus: In the Settlements in Mycenaean Times and its Connections Overseas." In *Problems in Greek Prehistory*, edited by E. B. French and K. A. Wardle, 307-18. Bristol: Bristol Classical Press

Greaves, A. 2003. Miletos, Bir Tarih. Istanbul: Homer Kitabevi.

Gurney, O. R. 1976. The Hittites. Middlesex: Pelican Books.

- Günel, S. 1998. "Liman Tepe'de Ele Geçen Bir Miken Figürin Parçası." Belleten 62/233:25-30.
- \_\_\_\_\_1999."Vorbericht über die mittel- und spätbronzezeitliche Keramik von Liman Tepe." *IstMitt* 49:41–82.
- 2008. "Çine-Tepecik Kazıları ve Bölge Arkeolojisine Katkıları." In *Batı* Anadolu ve Doğu Akdeniz Geç Tunç Çağı Kültürleri Üzerine Yeni Araştırmalar, edited by A. Erkanal-Öktü, S. Günel and U. Deniz, 129-50. Ankara: Hacettepe Üniversitesi Yayınları.
- Gür, B. 2013. "Miken Buluntulu Batı Anadolu Mezarlarının Tanımlanmasına Yönelik Öneriler." *Arkeoloji ve Sanat* 142:31-52.
  - 2014. Miken Uygarlığı ve Ahhiyawa. İstanbul: Arkeoloji ve Sanat Yayınları.
- Güterbock, H. G. 1984. "Hittites and Akhaeans: A New Look." Proc. Amer. Philos. Soc. 128:114–22.
- \_\_\_\_\_1986. "Troy in Hittite Texts? Wilusa, Ahhiyawa, and Hittite History." In *Troy* and the Trojan War. A Symposium Held at Bryn Mawr College, October 1984, edited by M. J. Mellink, 33–44. Pennsylvania: Bryn Mawr College.
- Halstead, P. 1988. "On Redistribution and the Origin of Minoan-Mycenaean Palatial Economics." In *Problems in Greek Prehistory*, edited by E. B. French and K. A. Wardle, 519-30. Bristol: Bristol Classical Press.
- Hamilakis, Y. and E. Konsolaki. 2004. "Pigs for the Gods: Burnt Animal Sacrifices as Embodied Rituals at A Mycenaean Sanctuary." *Hesperia* 23:135-51.
- Harding, A., H. Hughes-Brock. and C. W. Beck. 1974. "Amber in the Mycenaean World." *BSA* 69:145-72.
- Härke, H. 2000. "The circulation of Weapons in Anglo-Saxon Society." In *Rituals Of Power From Late Antiquity To The Early Middle Ages (The Transformation Of The Roman World 8)* edited by F. Theuws & J. L. Nelson, 377–399. Leiden: Brill.

Hawkins, J. D. 1998. "Tarkasnawa King of Mira." AnaSt 48:1-31.

 2015. "The Political Geography of Arzawa (Western Anatolia)." In NOSTOI. Indigenous Culture, Migration, and Integration in the Aegean Islands and Western Anatolia during the LBA and Early Iron Age, edited by N.
 C. Stampolidis, Ç. Maner, K. Kopanias, 15-35. İstanbul: Koç University Press.

Heinhold-Krahmer, S. 1977. "Arzawa. Untersuchungen zu seiner Geschichte nach

den hethitischen Quellen." *THeth* 8. Heidelberg: Universitaetsverlag Winter. \_1980–1983. "Kuwalija." *RLA* 6:397.

- Herodotus. 1975. *Herodotus I*. Translated by A. D. Godley. London: Loeb Classical Library.
- Hood de Jong, M. F. S. 1952. "LM Warrior Graves from Ayios Ioannis and the New Hospital Sites at Knossos." *BSA* 47:243-77.
- Hope-Simpson, R. and O. T. P. K. Dickinson. 1979. A Gazetteer of Aegean Civilizations in the Bronze Age, Vol I: The Mainland and Islands. Göteborg: Paul Aströms Förlag.
- Houwink ten Cate, P. H. J. 1983. "Sidelights on the Ahhiyawa Question from Hittite Vassal and Royal Correspondence." *JEOL* 28:33–79.
- Hughes-Brock, H. 1999. "Mycenaean Beads: Gender and Social Contexts." *OJA* 18(3):189-213.

Iakovidis, S. E. 1969. "τα μυκηναϊκα έθιμα ταφής." AAA 2:120-31.

- 2015. "Royal Shaft Graves Outside Mycenae." In *Temple University Aegean Symposium: A Compendium*, edited by P. P. Betancourt, 305-16. Philadelphia: INSTAP Academic Press.
- Ingram, R. 2014. "Vitreous Beads from the Uluburun Shipwreck". PAM 23/2:222-46. İslam, H. A. and A. Aslan. 2015. "Milet Nekropolü, Değirmentepe Mevkii Kazı Çalışmaları (2012-2013)." 23. Müze Çalışmaları ve Kurtarma Kazıları Sempozyumu:377-96.
  - 2016. "Milet Nekropolü, Değirmentepe Mevkii Kazı Çalışmaları (2014)." 23. Müze Çalışmaları ve Kurtarma Kazıları Sempozyumu ve 1. Uluslararası Müzecilik Çalıştayı:103-18.
- Jablonka, P. 2011. "Troy in Regional and International Context." In *The Oxford Handbook of Ancient Anatolia*, edited by G. McMahon and S. Steadman, 717-33. New York: Oxford University Press.
- Johnstone, W. 1971. "A Late Bronze Age tholos tomb at Enkomi." In *Alasia I*, edited by Schaeffer, C. F. A., 51-122. Paris: Klincksieck.
- Karageorghis, V. 1974. *Excavations at Kition I. The Tombs*. Nicosia: Department of Antiquties.
- \_\_\_\_\_1976. *Kition. Mycenaean and Phoenician discoveries in Cyprus*. London: Thames and Hudson.
- Karantzali, E. 1999. "New Mycenaean Finds from Rhodes." Meletemata II:403-7.

- Kastorchis, E. K. and I. A. Kondakais. 1879. "Αρχαιολογικές ειδήσεις: περί των εν ναυπλια παν αρχαιων ταφων και των αυτθι υπο Σtraβωνος μνήμονευμενων λαβυρίνθων." *Αθ*ήναιον 8:515-21.
- Kayan, İ. 1995. "The Troia Bay and Supposed Harbor Sites in the Bronze Age." *Studia Troica* 5:211-35.
  - \_\_\_\_\_1999. "Holocene Stratigraphy and Geomorphological Evolution of the Aegean Coastal Plains of Anatolia." *Quaternary Science Reviews* 18:542-48.
- Kayan, İ., and E. Öner. 2015. "Research on the Alluvial Geomorphology of theGediz Delta Plain (İzmir) Based on Sedimentological and Paleontological Evidence." *Aegean Geographical Journal* 24/2:1-27.

Keel, O. 1994. "Philistine Anchor Seals." IEJ 44:21-35.

Kelder, J. M. 2004-2005. "Mycenaeans in Western Anatolia." TAL 36/37:49-85.

\_\_\_\_\_2009. *The Kingdom of Mycenae: A Great Kingdom in the LBA Aegean.* Amsterdam: Free University.

\_\_\_\_\_2009. "Royal Gift Exchange between Egypt and Mycenae." *AJA* 113/3:339-52.

- Keswani, P. S. 1989. "Dimensions of Social Hierarchy in Late Bronze Age Cyprus: An Analysis of the Mortuary Data from Enkomi." *JMedA* 2/1: 49-86.
  - 2005. "Death, Prestige, and Copper in Bronze Age Cyprus." *AJA* 109/3:341-401.
- Kilian, K. 1988. "The Emergence of Wanax Ideology in the Mycenaean Palaces." *OJA* 7:291-302.
- Kitchen, K. A. 2000. "The Historical Chronology of Ancient Egypt, A Current Assessment." In *The Synchronisation of Civilisations in the Eastern Mediterranean in the Second Millennium B. C. III. Proceedings of the SCIEM– International Symposium, Vienna 11th of May–12th of May 1998*, edited by M. Bietak, 39–52. Contributions to the Chronology of the Eastern Mediterranean 1. Vienna: Verlag der Österreichischen Akademie der Wissenschaften.
- Kleiner, G. 1968. Die Ruinen von Milet. Berlin: Walter de Gruyter.
- Knapp, A. B. 2008. Prehistoric and Protohistoric Cyprus. Identity, Insularity, and Connectivity. Oxford: Oxford University Press.
  - \_\_\_2018. Seafaring and Seafarers In the Bronze Age Eastern Mediterranean. Leiden: Sidestone Press.

- Knapp, A. B. and J. F. Cherry. 1994. *Provenience Studies and Bronze Age Cyprus: Production, Exchange and Politico-economic Change*. Madison: Prehistory.
- Knappet, K. 2001. "Overseen or Overlooked? Ceramic Production in A Mycenaean Palatial Ssytem." In *Economy and Politics in the Mycenaean Palace States, Supplementary Volume 27*, edited by S. Voutsaki and J. Killen, 80-95.
  Cambridge: Cambridge Philological Society.
- Korfmann, M. 1985. "Beşik -Yassıtepe, Beşik-Sivritepe ve Beşik Mezarlığı 1983 Ön Raporu." 6. KTS 107-20.
- \_\_\_\_\_1986a. "Beşik Tepe: New Evidence for the Period of the Trojan Sixth and Seventh Settlements." In *Troy and the Trojan War. A Symposium Held at Bryn Mawr College, October 1984*, edited by M. J. Mellink, 17-28. Bryn Mawr: Bryn Mawr, PA.
  - \_\_\_\_1986b. "Vorbericht über die Ergebnisse der Grabungen am Beşik-Yassıtepe, Beşik-Sivritepe und Beşik-Gräberfeld." *AA* 3:303-29.
- \_\_\_\_\_1986c. "Beşik -Yassıtepe, Beşik-Sivritepe ve Beşik Mezarlığı 1984 Ön Raporu." 7. *KTS* 229-38.
  - \_\_\_\_1987. "Beşik-Yassıtepe ve Beşik Mezarlığı 1985 Ön Raporu." 8. *KTS* 1:263-72.
- Korfmann, M., B. Krommer, and P. Jablonka. 2003. "Heidelberg Radiocarbon Dates for Troy I to VIII and Kumtepe." In *Troy and the Troad. Scientific Approaches*, edited by G.A. Wagner, E. Pernicka, and H. P. Uerpmann, 43–54. Berlin-Heidelberg-New York: Springer Science&Business Media.
- Lackenbaher, S. and F. Malbroan-Labat. 2005. "Ugarit et les Hittites dans les Archivesde la 'Maison d'Urtenu'." Studi Micenei ed Egeo-Anatolici 47:227-40.
- Laffineur, R. 1985. "Iconographie minoenne et iconographie mycénienne à l'époque des tombes à fosse. L' Iconographie Minoenne 11:245-66.
  - 1991. "La Mer et l' Au-Déla dans l' Egée Préhistrique." In the *Thalassa: L'Egée préhistorique et la mer*, edited by R. Laffineur and L. Basch, 231-8.
     Liège: Universitè de Liège.
- Lagarce, J., E. Lagarce 1985. "Deux tombes du Chypriote Récent d'Enkomi (tombe 1851 et 1907)." In Alasia IV, edited by J. C. Courtois and C. F. A. Schaeffer, 526-31. Paris: Mémoire de l'institut Mauritanien de la Recherche Scientifique.
  Latacz, J. 2004. *Troy and Homer*. Oxford: Oxford University Press.

Lewartowski, K. 2000. LH Simple Graves. Oxford: Archaeopress.

- Lichter, C. 2005. "Western Anatolia in the Late Neolithic and Early Chalcolithic: The Actual State of Research."
- Long, C. 1974. "The Ayia Triadha Sarcophagus: A Study of LM and Mycenaean Funerary Practices and Beliefs." *SIMA* 41. Göteborg: Paul Aströms Förlag.
- MacDonald, C. 1986. "Problems of the Twelfth Century BC in the Dodecanese." *BSA* 81:125-51.
- Maner, Ç. 2015. "When East Meets West: The Social Identity of Western Anatolia."
  In NOSTOI. Indigenous Culture, Migration, and Integration in the Aegean Islands and Western Anatolia during the LBA and Early Iron Age, edited by N. C. Stampolidis, Ç. Maner, K. Kopanias, 835-45. İstanbul: Koç University Press.
  - \_\_\_\_2019. "Du sollst für die Ewigkeit bauen!" Untersuchungen zu hethitischen und mykenischen Befestigungen. Bonn: Habelt Verlag.
- Mangaloğlu-Votruba, S. 2015. "Liman Tepe during the LBA." In NOSTOI. Indigenous Culture, Migration, and Integration in the Aegean Islands and Western Anatolia during the LBA and Early Iron Age, edited by N. C. Stampolidis, Ç. Maner, K. Kopanias, 647-68. İstanbul: Koç University Press.
- Manning, S. 2012. "Chronology and Terminology." In *The Oxford Handbook of The Bronze Age Aegean*, edited by E. H. Cline, 11-28. New York: Oxford University Press.
- Manning, S., W. Ramsey, W. Kutschera, T. Higham, B. Kromer, P. Steier, and E. M. Wild. 2006. "Chronology for the Aegean LBA 1700-1400 BC." *Science* 312:565–69.
- Manning, S. W., C. B. Griggs, B. Lorentzen, G. Barjamovic, C. B. Ramsey, B.
  Kromer, and E. M. Wild. 2016. "Integrated Tree-Ring-Radiocarbon High-Resolution Timeframe to Resolve Earlier Second Millennium Bce Mesopotamian Chronology." *Plos One* 11 (7).
- Margariti, R. 1997. "The Şeytan Deresi Wreck." In *Encyclopedia of Underwater and Maritime Archaeology*, edited by J. P. Delgado, 371. New Haven and London: Yale University Press.
- Marinatos, N. 1993. "The Bull as Adversary: Some Observations on Bull-Hunting and Bull-Leaping." *Ariadne* 3:23-82.
- Marriner, N. and Morhange, C. 2007. "Geoscience of Ancient Mediterranean Harbors." *Earth-Science Reviews* 80:137-94.

- Mazarakis–Ainian, A. 1989. "LBA Apsidal and Oval Buildings in Greece and Adjacent Areas." *BSA* 84:269–88.
- Mee, C. 1978. "Aegean Trade and Settlement in Anatolia in the Second Millenium BC." *AnSt* 28:121-56.
- \_\_\_\_\_1982. *Rhodes in the Bronze Age.* Warminster: Aris & Phillips.
- \_\_\_\_\_1998. "Gender Bias in Mycenaean Mortuary Practices." In *Cemetery and* Society in the Aegean Bronze Age, edited by K. Branigan, 165-70. Sheffield: Academic Press.
- \_\_\_\_\_2008. "Mycenaean Greece, The Aegean and Beyond." In *The Cambridge Companion to the Aegean Bronze Age*, edited by C. W. Shelmerdine, 362-86. New York: Cambridge University Press.
- Mee, C. B. and W. G. Cavanagh. 1984. "Mycenaean Tombs as Evidence for Social and Political Organization." *OJA* 3:45-64.
- \_\_\_\_\_ and \_\_\_\_\_1990. "The Spatial Distribution of Mycenaean Tombs." *OJA* 3:45-64.
- Meinander, C. F. 1954. *Die Bronzezeit in Finnland*. Helsinki: Suomen Muinaismuistoyhdistys.
- Mellink, M. J. 1956. A Hittite Cemetery at Gordion. Philadelphia: University Museum.
   1983. "The Hittites and the Aegean World: Part 2. Archaeological Comments on Ahhiyawa-Achaians in Western Anatolia." AJA 87/2:138-41.
- Meriç, R. and A. K. Öz. 2015. "Bademgediği Tepe (Puranda) Near Metropolis." In NOSTOI. Indigenous Culture, Migration, and Integration in the Aegean Islands and Western Anatolia during the LBA and Early Iron Age, edited by N.
- C. Stampolidis, Ç. Maner, K. Kopanias, 609-26. İstanbul: Koç University Press.
- Moore, A. D. 1988. "The Large Monochrome Terracotta Figures from Mycenae: The Problem of Interpretation." In *Problems in Greek Prehistory*, edited by E. B.
   French and K. A. Wardle, 219-28. Bristol: Bristol Classical Press.

Moran, W. L. 1992. The Amarna Letters. Baltimore: Johns Hopkins University Press.

- Morricone, L. 1965-1966. "Eleona e Langada Sepolcreti della Tarda Eta del Bronzo a Coo." *Annuario* 43-44:5-311.
- Mountjoy, P. 1986. *Mycenaean Decorated Pottery: A Guide to Identification*. Göteborg: Paul Åströms Förlag.
  - \_\_\_\_\_1998. "The East Aegean-West Anatolian Interface in the LBA." *AnSt*48:33-67.

- \_1999. *Regional Mycenaean Decorated Pottery 1-2*. Rahden: Verlag Marie Leidorf.
- 2005. "Mycenaean Connections with the Near East in LH IIIC: Ships and Sea Peoples." In *Emporia: Aegeans in the Central and Eastern Mediterranean: Proceedings of the 10th International Aegean Conference, 14–18 April 2004,* edited by R. Laffineur and E. Greco, 423-27. Athens: Italian School of Archaeology.
  - \_2008. The Mycenaean and the Minoan Pottery. Wiesbaden: Reichert Verlag.
- M.T.A 1987. "Mining in Turkey and M T A." *Turkish Review Quarterly Digest* 7-10:105-12.
- Murray, A.S., A. H. Smith, and H. B. Walters. 1900. *Excavations in Cyprus*. London: British Museum.
- Müller-Karpe, H. 1980. *Handbuch der Vorgeschichte, Band 4, Bronzezeit.* München: Verlag C. H. Beck.
- Mylonas, G. E. 1966. Mycenae and Mycenaean Age. Princeton: University Press.
- Nauert, J. P. 1965. "The Hagia Triadha Sarcophagus: An Iconographical Study." *AntK* 9:91-8.
- Niemeier, B. and W. D. Niemeier. 1997. "Projekt "Minoisch-Mykenisches bis Protogeometrisches Milet: Zielsetzung und Grabungen auf dem Stadionhugel und am Athenatempel." *AA*: 189–248.
- Niemeier, W. D. 1998. "The Mycenaeans in Western Anatolia and the Problem of the Origins of the Sea Peoples." In *Mediterranean Peoples in Transition*, edited by S. Gitin, A. Mazar, E. Stern, 17-65. Kudüs: Israel Exploration Society.
  \_\_\_\_\_2005. "Minoans, Mycenaeans, Hittites and Ionians in western Asia Minor.
  - New Excavations at Bronze Age Miletus- Millawanda.' In *The Greeks in the East*, edited by A. Villing, 1-36. London: The British Museum.
- Nordquist, G. C. A. 1987. *Uppsala Studies in Mediterranean and Near Eastern Civilizations 16*. Uppsala and Stockholm: Academia Upsaliensis.
- Noort, R. 2003. "An Ancient Seascape: The Social Context of Seafaring in the EBA." World Archaeology 35/3:404–15.
- Novák, M. 2018. "Elites behind Walls Citadels and the Segregation of Elites in Anatolia, the Levant and Mesopotamia." In Anatolian Metal VIII Eliten-Handwerk– Prestigegüter, edited by Ü. Yalçın, BEIHEFT 39:255-68. Bochum: VML Verlag Marie Leidorf.

Orsi, P. 1895. "Thapsos." MonAnt 6:90-150.

- Orthmann, W. 1967. *Das Gräberfeld bei Ilıca*. Wiesbaden: Franz Steiner Verlag. Otten, H. 1972–1975. "Hapalla." *Reallexikon der Assyriologie und Vorderasiatischen Archaeologie* 4:111.
- Öner, E. 1999. Gediz Delta Ovasının Doğal Çevre Özellikleri. Vol. 2, Sulak Alanların Yönetimi Projesi Gediz Deltası Sulakalan Yönetim Planı Alt Projesi. Final Raporu. İzmir: T.C. Çevre Bakanlığı Çevre Koruma Genel Müdürlüğü and T.C. Ege Üniversitesi Su Ürünleri Fakültesi.
- Öner, E., S. Vardar, M. Doğan. and S. Başar. 2017. "Damlıboğaz ve Pilav Tepe Çevresinde (Milas, Muğla) Paleocoğrafya-Jeoarkeoloji Araştırmaları." *33. AST* 1:275-92.
- Özgüç, T. 1946. "VI. Troy'nın Anadolu Arkeolojisindeki Yeri." Belleten 10/37:13-28.
- Özgüç, T., N. Özgüç, E. Bilgiç, U. B. Alkım, K. T. Erim, R. Naumann, G. Bass, J. Birmingham, D. C. Biernoff, and D. H. French. 1964. "Recent Archaeological Research in Turkey." *AnSt* 14:21-37.
- Özgünel, C. 1983. "Batı Anadolu ve İçerlerinde Miken Etkinlikleri." *Belleten* 47/187:697-743.
  - \_\_\_\_\_1987. "Selçuk Arkeoloji Müzesinde Saklanan Miken Pyxisi ve Düşündürdükleri." *Belleten* 200:535-47.
    - \_\_\_\_2013. *Anadolu'da Miken Seramiği. Anadolu Ek Dizi II.1 Monografi Serisi.* Ankara: Ankara Üniversitesi Basımevi.
- Palaima, T. G. 1991. "Maritime Matters in the Linear B Tablets." In Aegaeum 7.
  Thalassa: L' Egèè prehistorique et la mer, edited by Laffineur, R., 273-301.
  Liège: l'Université de Liège.
- Panagiotaki, M. 2008. "The Technological Development of Aegean Vitreous Materials in the Bronze Age". In *Vitreous Materials in the LBA Aegean*, edited by C M. Jackson and E. C. Wager, 34-63. SCAA 9. Sheffield: Oxbow Books.

Parker, A. J. 2001. "Maritime Landscapes." Landscapes 2(1):22-41.

- Pavuk, P. 2002. "Troy VI and VIIa. The Blegen Pottery Shapes: Towards a Typology." *Studia Troica* 12:35–71.
  - 2007. New Perspectives on Troy VI Chronology. In *The Synchronisation of Civilisations in the Eastern Mediterranean in the Second Millennium BC. III. Proceedings of the SCIEM 2000 – 2nd EuroConference, Vienna 28th of May– 1st of June 2003*, edited by M. Bietak, and E. Czerny, 473–78. Contributions to

the Chronology of the Eastern Mediterranean 9. Vienna: Verlag der Österreichischen Akademie der Wissenschaften.

- 2014. *Troy VI Früh und Mitte. Keramik, Stratigraphie und Chronologie.* Studia Troica Monographien, Mainz: Verlag Philipp von Zabern.
- 2015. "Between the Aegeans and the Hittites: Western Anatolia in the 2<sup>nd</sup> Millenium BC." In *NOSTOI. Indigenous Culture, Migration, and Integration in the Aegean Islands and Western Anatolia during the LBA and Early Iron Age*, edited by N. C. Stampolidis, Ç. Maner, K. Kopanias, 81-113. İstanbul: Koç University Press.
- Pharaklas, N. 1967. "Mykenaikoi taphoi eis lophon Megalo Kastelli." ArchDelt:34-8.
- Pelon, O. 1976. Tholoi tumuli, et Cercles Funéraires. Recherches sur les Monuments Funéraires de Plan Circulaire dans l'Egée de l'âge du Bronze (IIIe et IIe millénaires av. J.-C). Paris: Diffusion de Boccard.
- Persson, A. W. 1931. *The Royal Tombs at Dendra near Midea*. Lund: C.W.K. Gleerup.
  Phelps, W., Y. Lolos, and Y. Vichos, 1999. *The Point Iria Wreck: Interconnections in the Mediterranean ca. 1200 BC*. Athens: Hellenistic
  Institute of Marine Archaeology.
- Postgate, N. 2001. "System and Style in Three Near Eastern Bureaucracies." In Economy and Politics in the Mycenaean Palace States, Supplementary Volume 27, edited by S. Voutsaki and J. Killen, 181-94. Cambridge: Cambridge Philological Society.
- Prins, A. H. J. 1965. Sailing from Lumu. A Study uf Maritime Culture in Islamic East Africa. Assen: Van Gorcum Comp. N.V.
- Przeworski, S. 1939. *Die Metallindustrie Anatoliens in der Zeit von 1500–700 vor Chr.* Leiden: E. J. Brill.

Pulak, C. 1988. "The Uluburun Shipwreck. An Overview." IJNA 27:188-224.

- 2001. "The Cargo of the Uluburun Ship and Evidence for Trade with the Aegean and Beyond" In *Italy and Cyprus in Antiquity, 1500–450 BC: Proceedings of an International Symposium Held at the Italian Academy for Advanced Studies in America at Columbia University, November 16–18 2000,*edited by L. Bonfante and V. Karageorghis, 13–60. Nicosia: Costakis and Leto Severis Foundation.
  - \_2006. "Uluburun Batığı." In *Uluburun Gemisi 3000 Yıl Önce Dünya Ticareti,* edited by C. Pulak, R. Slotta, and Ü. Yalçın, 57-104. İstanbul: Ege Yayınları.

2008. "The Uluburun Shipwreck and Late Bronze Age Trade." In *Beyond Babylon. Art, Trade and Diplomacy in the Second Millennium B.C., e*dited by J. Aruz, K. Benzel, and J. M. Evans, 289-310. New York: MET.

- Roosevelt, C. and C. Luke. 2017. "The Story of a Forgotten Kingdom? Survey Archaeology and the Historical Geography of Central Western Anatolia in the Second Millennium BC." *European Journal of Archaeology* 20(1):120–47.
- Roosevelt, C. H., C. Luke, C. Ünlüsoy, C. Çakırlar, J. M. Marston, C. R. O'Grady, P.
  Pavuk, M. Pieniazek, J. Mokrisova, N. Shin, F. Slim. 2018. "Exploring Space, Economy, and Interregional Interaction at a Second-Millennium BCE citadel in Central Western Anatolia: 2014-2017 Research at Kaymakçı." *AJA* 122/4:645-88.
- Rutter, J. B. 2012. "Mycenaean Pottery." In *The Oxford Handbook of The Bronze Age Aegean*, edited by E. H. Cline, 415-29. New York: Oxford University Press.
- Saadé, G. 1995 "Le port d'Ougarit." In *Le pays d'Ougarit autour de 1200 av. J.C.*, edited by Yon, M., M. Snycer, and P. Bordreuil, 221-25. Paris:RSO XI.
- Sakellarakis, J. A. 1971. "Ελεφντινον πλοίον εκ Μυκηνων." ArchEph:188-233.
- Salo, U. 1981. *Satakunnan Pronssikausi. Satakunnan Historia I,2*. Rauma: Satakunnan Maakuntaliitto.
- Sandars, N. K. 1963. "Later Aegean Bronze Age Swords." AJA 67/2:117-53.
- Sandars, N. K., S. Hood, G. Huxley, and A. E. Werner. 1958-1959. "A Minoan Cemetery on Upper Gypsades (Knossos Survey 156)." *BSA* 53/54:194-262.
- Schallin, A. L. 1993. Islands Under Influence: The Cyclades in the LBA and the Nature of Mycenaean Presence. Jonsered: Paul Aströms Förlag.
- Schiering, W. 1959-1960. "Südabschnitt." IstMitt 9/10:4-30.
- Schoep, I. 2009. "The Excavation of the Cemetery (Zone 1)." In *Excavations at Sissi: Preliminary Report on the 2007–2008 Campaigns*, edited by J. Driessen, 45– 56. Aegis 1. Louvain-la-Neuve: Presses Universitaires de Louvain.
- Seeher, J. 2005 "Überlegungen zur Beziehung zwichen dem hethitische Kernreich und der Westküste Anatoliens im 2. Jahrtausend v. Chr." In *Interpretationsraum Bronzezeit. Bernhard Hänsel von seinen Schülern gewidmet*, edited by B. Horejs, R. Jung, E. Kaiser, and B. Terzan, 33–44. Bonn: R. Habelt.
- Shelmerdine, C. 1998. "Where Do We Go from Here? and How Can the Linear B Tablets Help Us Get There?" In *Aegaeum 18. The Aegean and the Orient in*

*the Second Millennium*, edited by Cline, E. and D. Harris-Cline, 292-98. Liége: l'Université de Liège.

2001. "The Evolution of Administration at Pylos." In *Economy and Politics in the Mycenaean Palace States, Supplementary Volume 27*, edited by S.
 Voutsaki and J. Killen, 113-28. Cambridge: Cambridge Philological Society.
 2008. "Background, Sources, and Methods." In *The Cambridge Companion to the Aegean Bronze Age*, edited by C. W. Shelmerdine, 1-14. Cambridge and New York: Cambridge University Press.

 Sherratt, S. 2001. "Potemkin Palaces and Route-based Economies In *Economy and Politics in the Mycenaean Palace States, Supplementary Volume 27*, edited by
 S. Voutsaki and J. Killen, 214-38. Cambridge: Cambridge Philological Society.

Singer, G. G. 2008. "Amber in the Ancient Near East." i-Medjat 2:17-9.

- Singer, I. 2006. "Ships Bound for Lukka: A New Interpretation of the Companion Letters RS 94.2530 and RS 94.2523." Altorientalische Forschungen 33:242-62.
- Starke, F. 1997. "Troia im Kontext des Historisch-Politischen und Sprachlichen Umfeldes Kleinasiens im 2. Jahrtausend." Studia Troica, 7:446–87.
  2001. "Šeha." *Der Neue Pauly* 11:346-7.
- Stewart, D.J. 2004. "Rocks and Storms I'll Fear No More": Anglo-American Maritime Memorialization, 1700–1940. Unpublished PhD dissertation, Texas A&M University.
- \_\_\_\_\_2007. "Gravestones and Monuments in the Maritime Cultural Landscape: Research Potential and Preliminary Interpretations." *IJNA* 36(1):112-24.
- Soykan, F. 1997. "Üç Fonksiyonlu Küçük Bir Kıyı Yerleşmesi: Güllük." Ankara Üniversitesi Türkiye Coğrafyası Araştırma ve Uygulama Dergisi 6:317-36.
- Stubbings, F. H. 1951. *Mycenaean Pottery from the Levant*. Cambridge: Cambridge University Press.
- Şahoğlu, V. 2015. "A Western Anatolian Harbor Settlement at the beginning of the LBA." In NOSTOI. Indigenous Culture, Migration, and Integration in the Aegean Islands and Western Anatolia during the LBA and Early Iron Age, edited by N. C. Stampolidis, Ç. Maner, K. Kopanias, 593-608. İstanbul: Koç University Press.
- Şahoğlu, V., Ü. Çayır., Ü. Gündoğan, and İ. Tuğcu. 2008. "Çeşme-Bağlararası: Batı Anadolu Sahil Kesiminde Bir Tunç Çağı Yerleşimi." *Anatolia* 44:371-89.

Tartaron, T. F. "Between and Beyond: Political conomy in Non-Palatial Mycenaean

Worlds." In *Political Economies of the Aegean Bronze Age*, edited by D.Pullen, 161-83. Oxford: Oxbow Books.

- \_\_\_\_\_2013. *Maritime Networks in the Mycenaean World*. New York: Cambridge University Press.
- Tartaron, T. F., D. J. Pullen, and J. S. Noller. 2006. "*Rillenkarren* at Vayia: Geomorphology and a New Class of EBA Fortified Settlement in Southern Greece," *Antiquity* 80:145–60.
- Taylour, W. 1958. *Mycenaean Pottery in Italy and Adjacent Areas*. Cambridge: Cambridge University Press.

Tsountas, C. 1887. "Archaiotetes ek Mykenon." ArchEph: 155-72.

- Tsountas, C. and Manatt, J. 1897. *The Mycenaean Age. A Study of the Monuments and Culture of Pre-Homeric Greece*. Boston: Houghton Mifflin.
  - and \_\_\_\_\_1969. Reprint. *The Mycenaean Age. A Study of the Monuments and Culture of Pre-Homeric Greece*. Chicago: Argonaut, Houghton Mifflin, 1897.
- Tuovinen, T. 2002. "The Burial Cairns and The Landscape in the Archipelago Of Åboland, SW Finland, in the Bronze Age and the Iron Age." PhD diss., University of Oulu.
- Tusa, S. 1983. La Sicilia nella Preistoria. Palermo: Sellerio.
- Uzel, İ. 2000. *Anadolu'da Bulunan Antik Tıp Aletleri*. Ankara: Türk Tarih Kurumu Yayınları.
- Ünal, A. 1991. "Two Peoples on both Sides of the Aegean Sea: Did the Achaeans and the Hittites Know Each Other?" In *Essays on Ancient Anatolian and Syrian Studies in the 2<sup>nd</sup> and 1<sup>st</sup> millennium BC.*, edited by T. Mikasa, *BMECCJ* IV:16-44.
- Vallois, H.V. and D. Ferembach. 1962. "Les Restes Humain de Ras Shamra et de Minet el-Beida: étude Anthropologique", edited by Schaeffer, C.F.A., 565-622.Paris: Ugaritica IV.
- Van Effenterre, H. 1980. Le palais de Mallia et la cité minoenne: Étude de synthèse. Incunabula Graeca 76. Roma: Edizioni dell'Ateneo.
- Vaessen, R. 2016. "Cosmopolitanism, Communality and the Appropriation of Mycenaean Pottery in Western Anatolia." AnSt 66:43-65.
- Vagnetti, L. 1989 "Alcuni Pezzi Importati e I Pezzi di Bronzo." In La Grotta Cardini (Praia a mare - Cosenza): Giacimento del Bronzo, edited by L. Bernabò-Brea,

159-62. Roma: Istituto Italiano di Paleontologia Umana.

- Vavouranakis, G. 2011. "Funerary Customs and Maritime Activity in Early Bronze Age Crete." In *The Seascape in Aegean Prehistory*, Monographs of the Danish Institute at Athens, Volume 14, edited by G. Vavouranakis, 91-118. Athens: Danish Institute at Athens.
- Vermeule, E. and V. Karageorghis. 1982. *Mycenaean Pictorial Vase Painting*. Cambridge, Mass, and London: Harvard University Press.
- Voskos, I. and Knapp, B. 2008. "Cyprus at the End of the Late BronzeAge:Crisis and Colonization or Continuity and Hybridization?" *AJA* 112:659–84.
- Voutsaki, S. 1995. "Social and Political Process in the Mycenaean Argolid: The Evidence from the Mortuary Practices." In *Aegaeum* 12. *POLITIEIA: Society and State in the Aegean Bronze Age*, edited by R. Laffineur and W. D. Niemeier, 55-66. Austin: University of Texas.
  - 2001. "Economic Control, Power and Prestige In The Mycenaean World: The
    - Archaeological Evidence." In *Political Economies of the Aegean Bronze Age*, edited by D. Pullen, 195-213. Oxford: Oxbow Books.
  - 2010. "From the Kinship Economy to the Palatial Economy: The Argolid in the Second Millennium BC." In *Political Economies of the Aegean Bronze Age*, edited by D. Pullen, 86-111. Oxford: Oxbow Books.
- Voutsaki, S. and J. Killen, 2001. "Introduction." In *Economy and Politics in the Mycenaean Palace States, Supplementary Volume 27*, edited by S. Voutsaki and J. Killen, 1-14. Cambridge: Cambridge Philological Society.
- Voza, G. 1972 "Thapsos. Primi risultati delle più recenti scoperte." In Atti della XIV Riunione Scientifica, 175-204. Firenze: Istituto Italiano di Preistoria e Protostoria
- \_\_\_\_\_1973a. "Thapsos. Resconto Sulle Campagne di Scavo del 1970-1971." In *Atti della XV Riunione Scientifica*, 133-75. Firenze: Istituto Italiano di Preistoria e Protostoria.
  - \_\_\_1973b. Archeologia nella Sicilia Sud-Orientale. Napoli: Centre Jan Berard.
- Wace, J. B. 1932. Chamber Tombs at Mycenaea. Archaeologia 82. Oxford: J. Johnson for The Society of Antiquaries.
- Warren, P. M. and V. Hankey. 1989. Aegean Bronze Age Chronology. Bristol: Bristol Classical Press.

- Wachsmann, S. 1986. "Shififons: Early Bronze Age Anchor-Shaped Cult Stones from the Sea of Galilee Region." In *Thracia Pontica III*: Troisieme Symposium International: Theme Generale 'Les Thraces Et Les Colonies Grecques, VII - V S.av.n.e.', edited by A. Fol, 395-403, 542-54. Sofia: Assotiation.
- \_\_\_\_\_2009. Seagoing Ships and Seamanship in the Bronze Age Levant. College Station: Texas A&M University Press.
- \_\_\_\_\_2013. *The Gurob Ship-cart Model and its Mediterranean Context*. Texas: Texas A&M University Press.
- Wallinga, H. T. 1995. "The Ancestry of the Trireme 1200–525 BC." In *The Age of the Galley:Mediterranean Oared Vessels since Pre-Classical Times*, edited by Gardiner, R. and J. Morrison, 36-48. London: Book Sales.
- Ward, C. A. 2000. Sacred and secular: Ancient Egyptian Ships and Boats. Boston: Archaeological Institute of America.
  - 2004. "Boatbuilding in Ancient Egypt." In *The Philosophy of Shipbuilding*, edited by F. Hocker and C. Ward, 13–24. College Station, TX: Texas A&M University Press.
- Warden, P. G. 2010. "Etruscans: Art and Archaeology." In *The Oxford Encyclopedia* of Ancient Greece and Rome, Volume 1, edited by M. Gagarin, 119-124. Oxford: Oxford University Press.
- Weickert, C. P. 1957. "Die Ausgrabungen beim Athena Tempel in 1955." *IstMitt* 7:102-32.
- Weickert, C. P., G. K. Hemmel, A. Mallwitz, and W. Schiering. 1959. "Die Ausgrabungen beim Athena Tempel in 1957." *IstMitt* 9/10:1-85.
- Westerdahl, C. 1978. *Marinarkeologisk inventering med utgdngspunkt frdn eft norrlandrkr exempel. C-uppsats, arkeologi.* Unpublished PhD dissertation, University of Stockholm.
- \_\_\_\_\_1992. "The Maritime Cultural Landscape." *IJNA* 21/1:5-14.
- \_\_\_\_\_1994. "Maritime Cultures and Ship Types: Brief Comments on the Significance of Maritime Archaeology." *IJNA* 23/4:265-70.
  - \_\_\_\_\_2005. "Seal on Land, Elk at Sea: Notes on and Applications of the Ritual Landscape at the Seaboard." *IJNA* 34/1:2-23.
- 2013. "The Maritime Cultural Landscape." In *Oxford Handbook of Maritime Archaeology*, edited by B. Ford, D. L. Hamilton, and A. Catsambis, 735-62. Oxford: Oxford University Press.

- Whitelaw, T. 2001. "Reading Between the Tablets: Assessing Mycenaean Palatial Involvement in Ceramic Production and Consumption." In *Economy and Politics in the Mycenaean Palace States, Supplementary Volume 27*, edited by S. Voutsaki and J. Killen, 51-79. Cambridge: Cambridge Philological Society.
- Whitley, J. 2002. "Objects with Attitude: Biographical Facts and Fallacies in the study of the LBA and Early Iron Age Warrior Graves." *CAJ* 12:217-32.
- Wiener, M. 2003. "The Absolute Chronology of the LH IIIA2 Revisited." *ABSA* 98:239-50.
- Wijngaarden, G. J. 2002. Use and Appreciation of Mycenaean Pottery in the Levant, Cyprus, and Italy. Amsterdam: Amsterdam University Press.
- Wright, J. C. 2008. "Early Mycenaean Greece." In *The Cambridge Companion to The Aegean Bronze Age*, edited y C. W. Shelmerdine, 230-57. New York: Cambridge University Press.
- Xanthoudides, S. 1924. *The Vaulted Tombs of Mesara*. *An Account of Early Cemeteries of Southern Crete*. London: Edinburgh University Press.
- Xenaki-Sakellariou, A. 1985. Οι θαλαμωτοί ταφοί των Μυκηνων ανασκαφων Xp. Τσουνωτα 1887-1898. Paris: Diffusion de Boccard.
- Yakar, J. 2011. "Anatolian Chronology and Terminology." In *The Oxford Handbook* of Anatolia, edited by G. MacMohan and S. Steadman, 56-94. Oxford: Oxford University Press.
- Yasur-Landau, A. 2010. *The Philistines and Aegean Migration at the End of the Late Bronze Age.* Cambridge: Cambridge University Press.
- Yon, M. 1986. "Instruments de Culte en Méditerranée Orientale." In *Cyprus between* the Orient and the Occident, edited by V. Karageorghis, 265-88. Nicosia: Department of Antiquities.
- Young, J. C. 2003. *Postcolonialism: A Very Short Introduction*. Oxford: Oxford University Press.
- Zaccagnini, C. 1987 "Aspects of Ceremonial Exchange in the Near East during the Late Second Millennium BC." In *Centre and Periphery in the Ancient World* edited by Rowlands, M., M. Larsen, and K. Kristiansen, 57-65. Cambridge: Cambridge University Press.
- Zangger, E. 1991. "Prehistoric Coastal Environments in Greece: The Vanished Landscapes of Dimini Bay and Lake Lerna." *JFA* 18:1-15.



## FIGURES



Figure 1: Western Anatolia: The Coastal Cemeteries

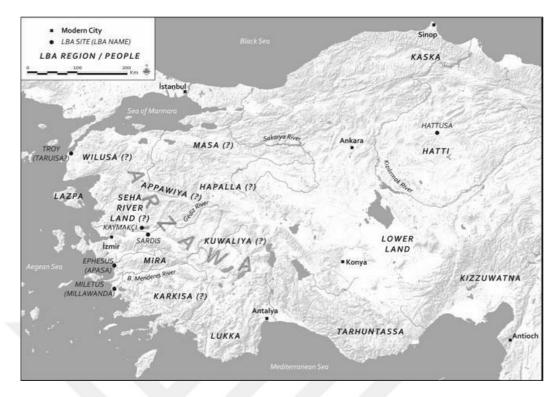


Figure 2: Western Anatolia during the Late Bronze Age and Possible Locations of Kingdoms (Roosevelt and Luke 2017, fig. 1, after Starke 1997 and Hawkins 1998)

Hittite Kings	Dinçol 2006	Miller 2007	Bryce 1998
Tudhaliya I.			1400-
Arnuwanda			-1360
Tuthaliya II			1360-1344
Suppiluliuma	1380-1345	-1330	1344-1322
Arnuwanda II	1345-1343	1330-1329	1322-1321
Muršili II	1343-1310	1329-	1321-1295

Figure 3: Different Dates for the Period of Muršili II (After Alparslan 2015, Fig. 3)

Hittite King List	Middle Chronology (BC)
	Old Hittite Period
Hattusili I	1650-1620
Mursili I	1620-1590
Hantili I	1590-1560
Zidanta I	1560-1550
Ammuna	1550-1530
Huzziya I	1530-1525
Telipinu	1525-1500
	Middle Hittite Period
Tahurwaili	1500-
Alluwamma	
Hantili II	
Zidanta II	
Huzziya II	
Muwatalli I	1450?
Tudhaliya I/II	1450-1420
Arnuwanda I	1420-1400
Tudhaliya II/III	1400-1380
Tudhaliya III?	1380?
Hattusili II?	?
	Empire Period
Suppiluliuma I	1380-1340
Arnuwanda II	1340-1339
Mursili II	1339-1306
Muwatalli II	1306-1282
Mursili III	1282-1275
Hattusili III	1275-1250
Tudhaliya IV	1250-1220
Kurunta?	?
Arnuwanda III	1220-1215
Suppiluliuma	1215-1200

Figure 4: Anatolian Middle Chronology (Modified from Glatz and Plourde 2011, table 1. Reference: Bryce 2005.)

Beycesultan	Milet	Troy	Panaztep	е
Phyrig Level	Geometric	Troy VIII	Atelier	Cemetery
	Protogeo.			
Beyce I	Milet VI			MI∨
		Troy VIIb		Cemetery
Beyce II	-	Troy VIIa	1180	LHIIIC
				LHIIIB
	ca. 1300		Atelier la	
	Milet V	Troy Vlh		MIII
		Troy Vlg,f,e		Cemetery
Beyce III	Creamy Wa			LHIIIA1-2
	LHIIIA2		1460	
	LHIIIA1	Troy Vld		мп
1450	1450	1500		Cemetery
		Troy		LHIIIA-B LHI
BeyceIVa 1550		VIc,b LMIA		
	MİLET VI	1575		1575
Beyce IVb	-			MI
Deyce IVD			Atelier	Cemetery
1650	Thera Eruptic		lb	
Beyce IVc 1750		TroyVla,b	TroyVIa,b	
		1750	1750	MBA
Beyce V				
1900	-			1900

Figure 5: Panaztepe and "Related Sites" (Modified from Meriç and Öz 2015, fig. 4a)

High Dating BCE	Crete	Greece	Low Dating BCE	Egypt
1750 <b>г</b>			1700 <b>-</b>	
	MM III	MH III		
1700 -			1600	
1600 -	LM IA	LH I	1500	
1000	LM IB	LH IIA	- 1430	Hatshepsut/Tuthmosis II
1490 -			1430	(1479-1425)
1430 -	LM II	LH IIB	1390	
1150	LM IIIA1	LH IIIA1	1270/12/0	Amenhotep III (1391-1353)
1390 -			- 1370/1360	News See MI
1200	LM IIIA2	LH IIIA2	1200	
1300	LM IIIA2	LH IIIA2	1300	

Figure 6: "Unreconciled High and Low Aegean Chronologies"

(Shelmerdine 2008, Fig. I.2, table by Dan Davis)

Chron	ology	Crete	Cyclades	Greece	Egypt
High	Low 3100 3000 2900	EMI	ECI	EHI	1 <sup>st</sup> and 2 <sup>nd</sup> Dynasty 3100/3000-2700
	2800 2700 2600	EM IIA		EH IIA	
	2500 2400	EM IIB	ECII	EH IIB	Old Kingdom 2700-2136
	2300 2200	EM III	EC III	EH III	
	2100				1 <sup>st</sup> Intermediate Period 2136-2023
	2000				Middle Kingdom
		MM IA	MC I	MHI	2116-1795
	1900	MM IB			
	1800	MM II	MC II	МН ІІ	2 <sup>nd</sup> Intermediate Period
					1795-1740
	1700	MM III	MC III	MH III	-
1700	1600	LM IA	LC I	LH I LH IIA	New Kingdom
				LH IIB	1540-1070
1600 1500	1500	LM IB	LC II	LH IIIAI	
	1400		-	LH IIIA2	
1400	1000	LM IIIA1 LM IIIA2	LC III	LH IIIB	
	1300 1200	LM IIIB	-		
	1100			LH IIIC	-
		LM IIIC			
	1000	SubMinoan		SubMycenaean	

Figure 7: Minoan, Helladic, Cycladic Islands, and Egyptian Chronologies (Modified from Shelmerdine 2008, Fig. I.1, table by Dan Davis)

			Aegean High Chronology	Liman Tepe	Troia	Demirci hüyük	Boğazköy BK	Kültepe Middle Chronology	Gordion	Beyce sultan	Miletus	Kreta High Chronology
	1200	LB 2B	LH IIIB	11:2	VIIa		111	Empire	9-5 (=YHSS 8)	lb	VI	LM IIIB
	1300			11:3				Period		Ш	V	
	1400	LB 2A	LH IIIA	11.5	Vlg-h		IVa	Middle	11-10		Ŷ	LM IIIA
	1500	LB 1B	LH IIB		VIe-f	Surf.	IVЬ	Hittite		IVa	IV/h	LM II
			LH IIA	Disturbed	VId	5		Old	с 13-12 е	IVb	IVb	LM IB
	1600	LB 1A	LHI	:1-2	Ville / a	4	IVc	Hittite	m	IVc		LM IA
	1700	AAD D	MHIII		VIb/c	2/3	Hiatus	la	е	IVC	IVa	MM III
		MB 2		111:3	III:3 Vla	1	IVd	lb	16-14 t	V		MMII
	1800	MB 1	MH II	111:4	V		а	Hiatus	е 18-17 г	VI	111	
	1900	2		IV:4		Bahçehisar ??	IVb c	II (no tablets)	у	VII		MM IB

Figure 8: Aegean, Liman Tepe, Troia, Beycesultan, and Miletus Correlations (Pavuk 2015, Fig. 1; Günel 1999, table 1)

LEVELS	PERIOD	PARALLELS
Çeşme-Bağlararası 0	LBA	LH IIIA-IIIB
Çeşme-Bağlararası 1	LBA	LM IA
Çeşme-Bağlararası 2a	End of MBA	MM III
Çeşme-Bağlararası 2b	End of MBA	MM III
Çeşme-Bağlararası 3	EBA II	EM II/EC II

Figure 9: Stratigraphy of Çeşme-Bağlararası (After Şahoğlu 2015, table 1)



Figure 10: Beşik Bay (Basedow 2001, 415: fig. 470)

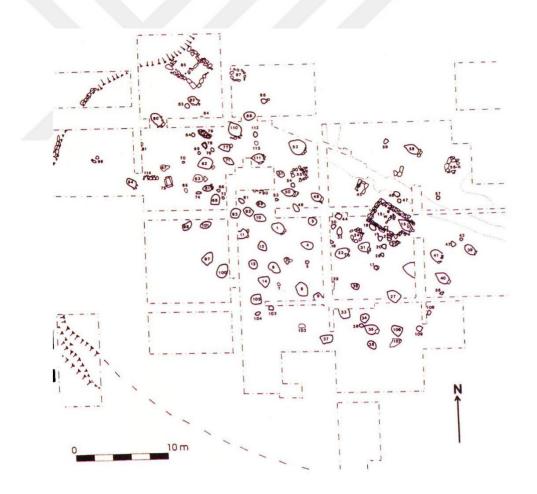


Figure 11: The Plan of Beşik Tepe Cemetery (Basedow 2001, 416: fig. 472)

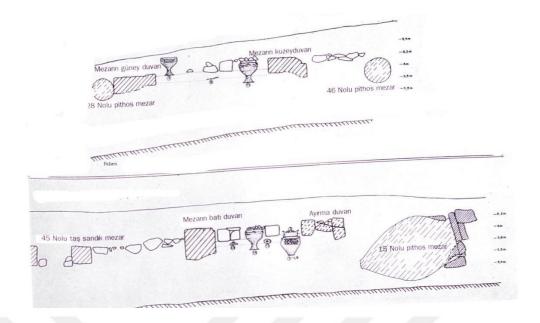


Figure 12: Beşik Tepe Above: A-A Section, Below: B-B Section of Grave no.15 (Basedow 2001, 418: fig. 474)

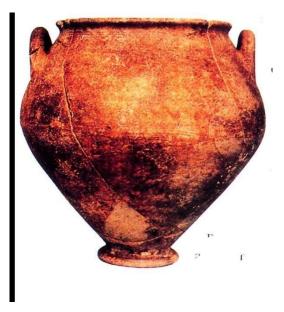


Figure 13: Beşik Tepe A Jar Burial from Grave no.15 (Basedow 2001, 418: fig. 476.)



Figure 14: Beşik Tepe Stone Seal with Human Representation (Basedow 2001, 418: fig. 477)



Figure 15: Panaztepe Building Level 4 – Deep Bowl Pottery Remains (Çınardalı-Karaaslan 2008, 65: fig. 9)



Figure 16: The Western Cemetery of Panaztepe (Erkanal-Öktü 2008, 72: fig. 4)

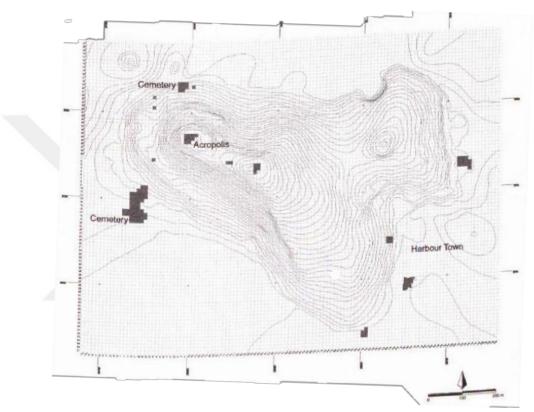


Figure 17: The Topography of Panaztepe (Erkanal-Öktü 2008, 71: fig. 3)

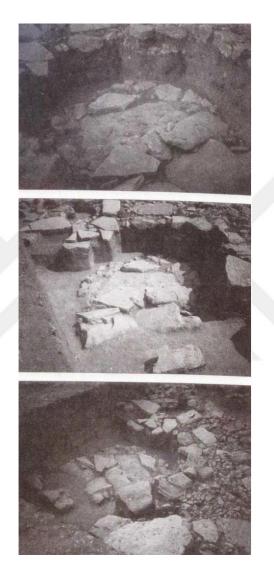


Figure 18: Panaztepe Stone Pavement and Tholos Connection (Erkanal-Öktü 2008, 77: fig. 8a-c)

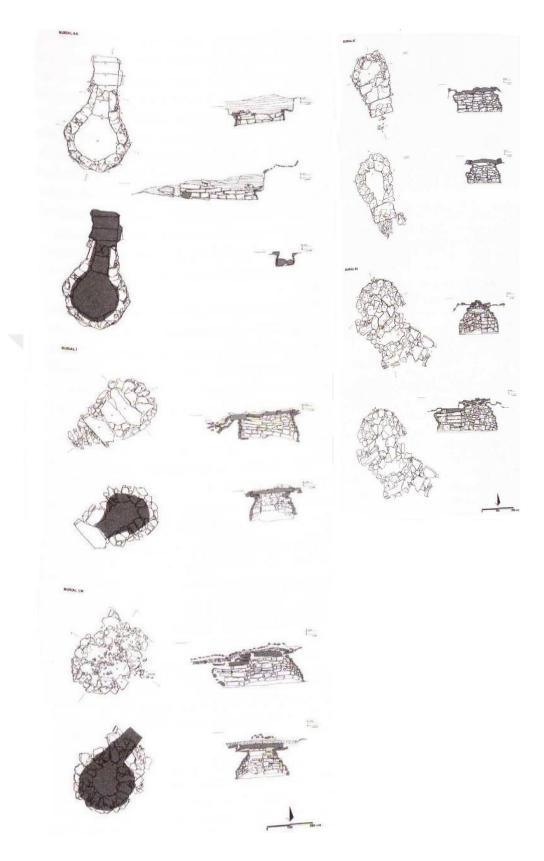


Figure 19: Panaztepe Tholos Types (Erkanal-Öktü 2008, 75: fig. 5a-c, 6a-b)

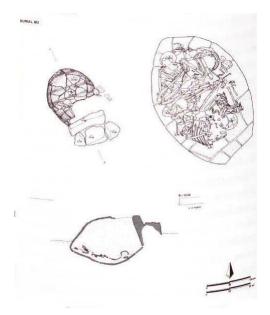


Figure 20: Panaztepe Pithos Graves (Erkanal-Öktü 2008, 78: fig. 9)



Figure 21: Di Class Blade - Ornamented Section from Manisa Museum (Ersoy 1988, Plate 5: fig. 3 MM 6192)



Figure 22: Panaztepe Frit Beads (After Erkanal-Öktü 2018, taf. 369)





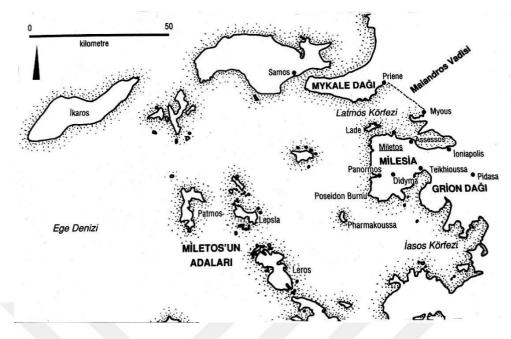
Figure 23: Panaztepe Scarab Seal (After Erkanal-Öktü 2018: taf. 366)

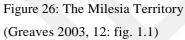


Figure 24: Değirmentepe from Miletus Ancient Theater (Photo by the Author)



Figure 25: Değirmentepe (İslam and Aslan 2016, 113: fig. 2)





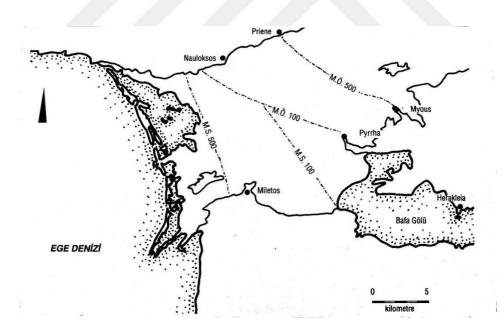


Figure 27: Alluvial Changes at Miletus (Aksu et al. 1987, 230: fig. 3)

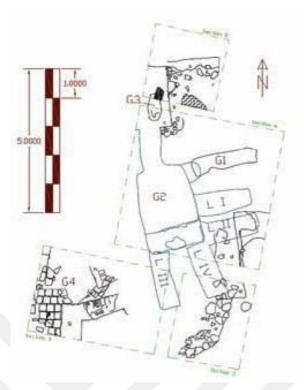


Figure 28: Değirmentepe Cemetery Plan (İslam and Aslan 2015, 392: Plan 3)



Figure 29: Değirmentepe The Burial Chamber from the Dromos (İslam and Aslan 2015, 395: fig. 8)

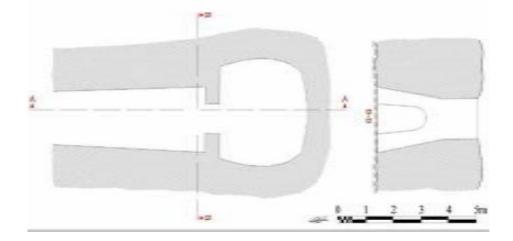


Figure 30: Değirmentepe Tholos II Plan (İslam and Aslan 2015, 391: Plan 2)





Figure 32: Değirmentepe Kalathos (İslam and Aslan 2015, 394: fig. 6)

Figure 31: Değirmentepe Three Handled Piriform Jar (İslam and Aslan 2015, 394: fig. 5)

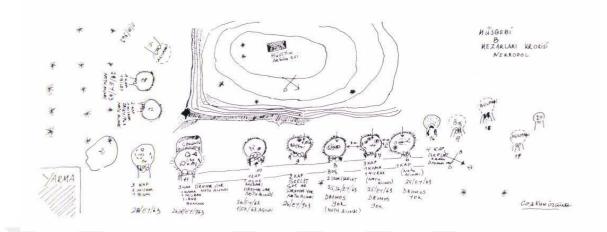
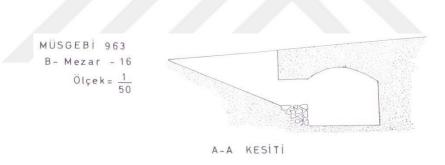


Figure 33: Müsgebi Cemetery Plan (Özgünel 1987, Drawing 1)



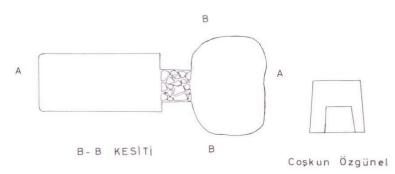


Figure 34: Müsgebi Section of the Graves (Boysal 1963, fig. 1)

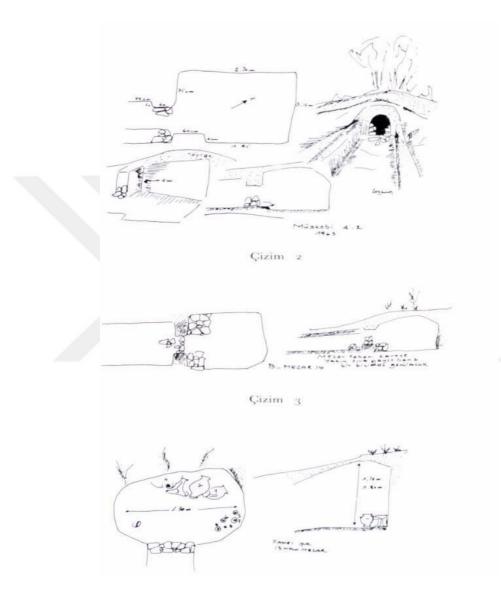


Figure 35: Müsgebi Graves (Özgünel 1987, Drawings: 2,3,4)



Figure 37: Kylix Examples from Müsgebi (Boysal 1963, 121: fig. 2, 3)



Figure 38: Strainer from Müsgebi (Boysal 1967b, 14: 126, fig. 5)

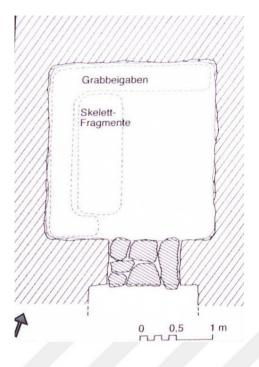


Figure 39: Pilavtepe Chamber Tomb Plan (Benter 2010, fig. 4)

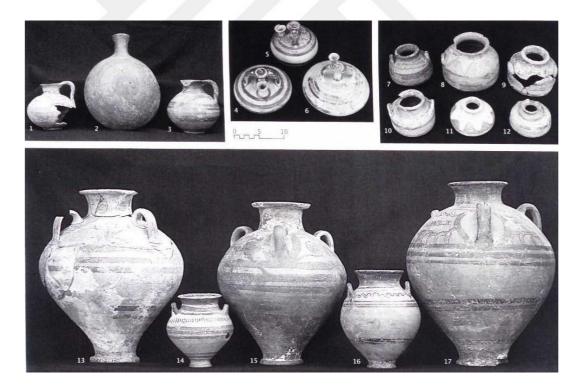


Figure 40: Pottery Remains from Pilavtepe (Benter 2010, fig. 7)



Figure 41: Pilavtepe Bronze Tools and Ornaments (Benter 2010, fig. 10/1)



Figure 42: Pilavtepe Ornaments of Different Materials (Benter 2010, fig. 10/2-6)

	Grave Types	Grave Goods	Period	
Beşik Tepe	Pithos Graves Urns and the Megaron- planned Chamber Tomb Mudbrick Encircled Grave and Cist Graves	Pottery: Gray and Mycenaean wares Metals: Knife, vessels, and rings Ornaments: Frit, carnelian, and golden sheet Seals: Lentoid shape and ivory or horn seal (?)	LH IIIB-C	
Panaztepe	Tholos Graves Pithos Graves Cist Graves, Jar Burials, and Stone Boxes Composite Graves	Pottery: Local and Mycenaean wares Metals: Swords, arrowheads, blades, razors, spearheads, knife, ornaments. Ornaments: 2631 beads Seals (specific e.g.): Scarab seal, anchor seal, cylinder seal	LH IIIA-C	
Değirmentepe	Tholos Graves	Pottery: Local and Mycenaean wares (Rhodes and Aegean Island origin?) Metals: Horse bits, spearheads, swords. Ornaments: Beads of Glass, golden rosettes Seal: Tudhaliya IV/III	LH IIIA-C	
Müsgebi	Rock-Cut Burial Chambers	Pottery: Local (Müsgebi, Aegean Island, Rhodes?) and Mycenaean wares Metals: Bronze weapons, spearheads, choppers, sewing needle, knives Ornaments: Golden ring, frit and bed beads	LH IIA-III	
	Rock-Cut Burial Chamber	Pottery: Local and Mycenaean wares Metals: Chisel, stylet, spatula, needle, sprial hoop, needled with golden body part Beads: Faience and amber beads, golden leaf, Seals: Lentil shape Stone and clay weights	LH IIIA2-0	
Pilavtepe				

Figure 43: The Summary of Sites Data

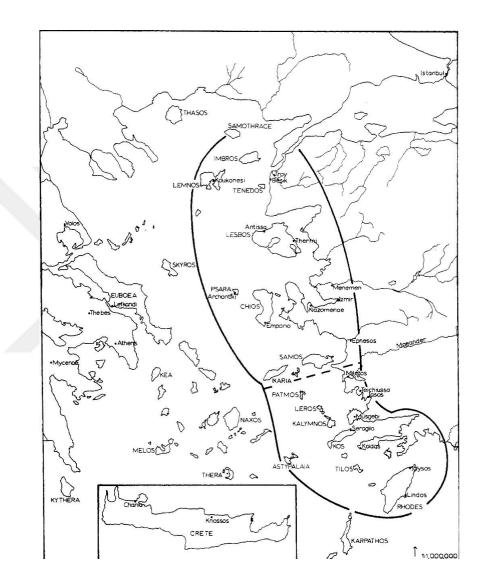


Figure 44: The East Aegean- West Anatolian Interface (Mountjoy 1998, 38: fig. 1)

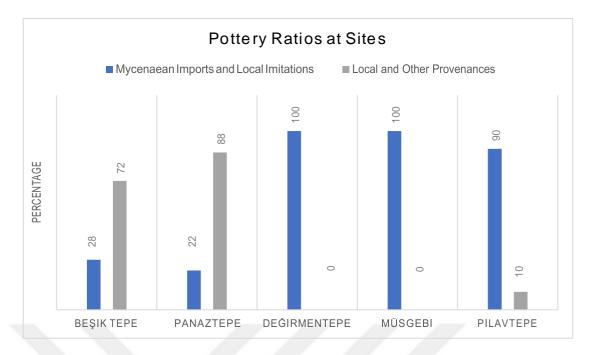


Figure 45: Pottery Ratios at Cemetery Areas

For references: Boysal 1963; Mee 1978, 133; Akyurt 1998, 31-2; Mountjoy 1998, 54-5; Basedow 2001, 418; Greaves 2003, 83; Benter 2010; İslam and Aslan 2015, 382; Erkanal-Öktü 2018.