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FORCES OF DESTRUCTION
THE COLLAPSE OF THE MEDITERRANEAN BRONZE AGE

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ABSTRACT

There has long been debate over the causes of the destructions that occurred across the Mediterranean at the end of the Late Bronze Age (1250-1050 BCE). Scholars have grappled with numerous theories as to the forces behind the fall of the great empires found in Greece, Anatolia, and Egypt. Key contributing factors to each collapse can be surmised by analyzing environmental factors such as climate, earthquakes, and geography; scholars can also interpret the physical evidence left behind. It is, however, difficult to piece together that which developed out of human agency such as political, social, and economic factors. By utilizing all known information and drawing conclusions regarding the unknown, this thesis discusses the various forces of destruction which led to the collapse of the Bronze Age including catastrophic earthquakes, revolts, total systems disintegration, and mass migrations. Though we may never know just what led to the collapse of some of the most powerful empires in the ancient Mediterranean world, this thesis offers new insights and organizes what we now know regarding the destructive end of the Bronze Age.

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CHAPTER 1

Introduction to the Mediterranean Bronze Age

Introduction

The ancient Mediterranean world has provided epic stories of kings and queens, gods and goddesses, and valiant heroes who faced impossible dangers to solidify their names in history. The Bronze Age in the Mediterranean region, however, did not merely provide myths and legends for future historians to study; it also left behind monumental architecture, elaborate burials, and artifacts ranging from solid gold masks to clay tablets inscribed with various activities of the palace complexes. Though the Near East and Egypt have left behind useful written sources, written documentation from the Bronze Age Aegean world is scarce; therefore, most of our knowledge is derived from the archaeological record. Clay tablets were often recycled and of a delicate nature, and few inscriptions survive on monumental architecture. Clay tablets also contain limited content since they focus solely on inventory records, the movement of goods and personnel, and other economic activities of the palace system. Similarly, inscriptions on monumental architecture found in the eastern Mediterranean, the Near East, and Egypt relate to the accomplishments of an elite or the polity itself and are embellished and/or biased. Basic accounts and discussion of the Aegean Bronze Age were given in detail by Homer and in passing by Thucydides. When documentary evidence is not contemporary, however, and it relates to the realm of ‘myth-history’ (as is the case with the Hebrew Bible or the Homeric Epics), it is vital not to use such sources as accurate historical accounts since they are often

highly exaggerated and poetically embellished. Rather, contemporary written records from Egypt, the Hittites, the Canaanites and other peoples from the Levant as well as the archaeological record left behind, all provide a much more accurate depiction of the ancient Mediterranean world. Through these sources, we get a glimpse into the basic geographic conditions of the Mediterranean, the vast trading systems between the great polities of the time, and the potential names and stories of some of the kings, queens, and heroes who lived during that time.

From the archaeological record left behind, it is evident that the Mediterranean world was very dynamic. In a sea which covers an area of 2.5 million square kilometers (the largest inland sea in the world) (Knapp “Bronze Age Mediterranean Island Cultures and the Near East” 55), archaeologists have uncovered an elaborate trade network rich with luxury goods and natural resources. Perhaps the largest empires of the time—namely, the Mycenaean empire on the Greek mainland as well as the Aegean islands and parts of the shores of Asia Minor, the Hittite empire in Anatolia and extending into Levant, and the Egyptian empire in Northern Africa and also extending into the Levant—all preserve evidence for a substantial amount of trade and correspondence.

The palace systems which stood at the height of these civilizations were ruled by a wealthy elite class who sought to keep their vast empires in order. Yet, with wealth comes competition. Despite an extensive trade network, the Late Bronze Age was a period ransacked with raids and warfare between competing polities. Mycenaean artifacts found primarily in elite burials reflect the emphasis on militaristic power in the Late Bronze Age. The inclusion of weapons in elite burials attests to the importance of soldierly display. Scenes found through inlaid metalwork (such as those from 16th century Shaft Graves) and relief metalwork often

depict battles, a fight between men, or hunting scenes. Such scenes can also be found in various tombs and monuments in Egypt which record the violent raids of the elusive 'Sea Peoples' throughout the 12th century BCE. The broad spectrum of time between the depictions of such scenes attests to the lasting emphasis on warfare.

Though the Mediterranean world in the Bronze Age came to its height during the 13th century BCE, something happened. Within a century of such lavish reigns, nearly all the great empires of the Mediterranean world came to violent ends. Palaces were destroyed, burned, and abandoned, the lands surrounding the palaces were greatly depopulated, trade networks ended, and there was a large decline in material culture.

How did such complex palace systems all across the Mediterranean collapse within a century of the height of their power? What were the ultimate catastrophic forces which led to the demise of some of the most powerful polities of the ancient world? Such are the questions which archaeologists and historians attempt to answer. Though many archaeologists seek the explanation of one cataclysmic event which caused a total systems collapse of all the major Mediterranean empires during the Late Bronze Age, one must consider the possibility of the 'domino effect'. That is, a series of catastrophic events initiated the unrest and instability within the centralized palace systems which were no longer able to support their populations after the collapse of political systems and trade networks.

This paper will therefore discuss the various theories which scholars have proposed concerning the demise of the Bronze Age. After carefully examining each theory, this paper will propose the most suitable argument for the collapse of the Bronze Age and what still remains unknown and therefore unanswerable.

CHAPTER 2

The Environment and Geographic Landscapes

Mycenae

The Mediterranean cannot be defined under one environmental classification. Since the Mediterranean Sea occupies such a large area, it faces various environmental influences. Within the Greek mainland, various scholars discuss environmental conditions before the beginning of the destructions as well as the agricultural effects of a rising population during the Bronze Age.

The Mycenaean landscape has long been manipulated by human occupants. After 2000 BCE, the introduction of the plow spread extensive agricultural practices into the southern Argolid and Messenia on the Greek mainland. Rodney Castleden argues through the scholarship of Zangger that this spread of agriculture caused extensive deforestation (p. 7). Pine forests in Messenia and in the south-west of the Peloponnese were rapidly reduced. This deforestation along with plowing, Zangger argues, led to the accelerated soil erosion on hill slopes and accelerated rates of sedimentation in river mouths and bays. By 1600 BCE, the Greek mainland landscape was undergoing large transformations—just when the Mycenaean civilization was emerging. However, the Mycenaean civilization was not a sudden occurrence. For several centuries before the large palaces of the Mycenaean age emerged, villages had been evolving into towns. Malthi in Messenia, for example, had five successive towns built on it by 1600 BCE. The first two towns were unwallled and destroyed by 1900 BCE. The next three towns were walled and centered on a major building that seems to be a forerunner of the Mycenaean palaces.

Thus, the Mycenaean landscape had been long manipulated by settlements which formed the foundations for the development of the age of Mycenaean palaces.

John Bintliff also worked extensively on Mediterranean alluvial history. He argues that the ‘human use and abuse of a semi-arid landscape already sensitive to erosion’ (419) can have devastating results. The sequence of long-term erosion and deposition studied in the southwest Argolid peninsula in the Peloponnese, Bintliff argues, is almost identical to that from Eastern Attica. Mycenae experienced the growth of smaller satellite communities across its countryside as the palace began to centralize its resources and domains. Such expansion involves the clearance of wood or scrub and heavy soil disturbance which causes soil erosion. With the Mycenaean economy demanding resources, the people dwelling in the countryside heavily manipulated the land. However, farmers seem to have been well-versed in various agricultural practices. Bintliff could not find any major erosion episode during the high population rise of the Late Bronze Age, which implies Mycenaean farmers had an adequate knowledge of soil conservation. Yet, as the Mycenaean world began to feel the pressure of outside and internal forces, the formerly heavily populated countryside was abandoned. Such rapid desertion caused slope failure with the abandonment of terrace maintenance. Repairing the slopes after such an event would have been difficult after only a brief amount of time. Bintliff argues that the dramatic erosion horizon during the Late Early Bronze Age in mainland Greece “may have contributed to the downfall of a ‘high culture’ or marks the latter’s collapse for other reasons” (428). He also states such erosion would have delayed societal recovery for some hundreds of years. (428). Though Bintliff makes a good point, it remains to be demonstrated whether Bronze Age populations were high enough in southern Greece to have lost social stability by nutrient collapse alone. Though slope erosion and land exhaustion did occur, just how much of this can

we blame for the collapse of an enormous polity? The over-use of soils and inadequate manuring may have added to other cumulative effects such as erosional and climatic pressures as well as the political troubles which caused the downfall of the Mycenaean society. Conversely, slope erosion and land exhaustion may have been the *result* of other environmental factors that will be discussed later.

Famine in Hittite Anatolia

Contemporary written records from Egypt indicate that the Hittite Empire undoubtedly experienced a drought shortly before 1200 BCE which caused widespread famine. A Karnak inscription in Egypt during the reign of pharaoh Merneptah (ca. 1236-1223 BCE) tells of a shipment of grain sent to ‘keep alive the land of Hatti’ (Yasur-Landau 96). Also, one of the last letters from Ugarit before its subsequent destructions came from the Hittite king demanding the king of Ugarit send him 2000 measures of grain at once as a matter of life or death (Steibing 16). Other Hittite and Ugaritic documents dating to the second half of the 13th century BCE describe the unstable and deteriorating situation (drought and famine coupled with movements of peoples) in the north-eastern Mediterranean prior to the final collapse of Ugarit and Hattusa at the turn of the century. William H. Steibing proposes that a shift in the trade winds in the Mediterranean Sea caused drought in Anatolia, Crete, and southern Greece whereas a few areas such as Attica, Thessaly, Achaia, Kephallenia, and the western coast of the Peloponnese would have received normal or above normal amounts of rainfall. No evidence for such a famine can be attested in Greece since Pylos records of the distribution of oil and the collection of food show that there was no strain in its systems due to famine or drought. Yet, just as the famine peaked in the Hittite empire (1200-1190 BCE), the Mycenaean palace centers were sacked. Steibing proposes that the

famine and subsequent destructions are not coincidental. Without its distribution system, the supposed large population in Hittite Anatolia could not have been sustained. Perhaps the Hittite Empire was sacked by its neighboring settlements in a time of weakness or by its own starving subjects. The Hittite king had pushed his empire's resources to the limit to maintain power, but he could not defend against the revolts of the people, so the empire disintegrated. At that time, the Hittite Empire was also facing a threat from the Kaska peoples in the north as well as being locked in a rivalry with Egypt in Syria to the south-east. To the east they feared the increasing power of Assyria (Castleden 213). The king of Ugarit, sending a fleet to the western coast of Asia Minor to aid the Hittite king in suppressing such a rebellion, let his kingdom remain behind undefended and powerless against other marauding ships. Thus, Ugarit simultaneously went up in flames (Steibing 17).

Ronald L. Gorny also proposes that the three centuries between 1500-1200 BCE appear to have been cooler and moister throughout most of the ancient Near East region followed by a slightly drier period that lasted from about 1200-900 BCE. The onset of this drier period coincides with the series of catastrophic events which led to the downfall of the Bronze Age. The Hittites for example, despite having arisen to great power, were not able to combat the restraints of their environment—especially with the specialized nature of an urban society. The initial integration of the Hittite state was due in part to the agricultural manipulation of the central plateau. Therefore, Gorny argues, “The end of the empire occurred partly as a result of a general disintegration of this association” (91).

As trade networks were so extensive and palaces were so centralized, it would have been difficult for an economy to survive even a limited period of crop failures. Though an extensive trade network implies the cooperation of multiple polities who would undoubtedly help each

other in a crisis or else all would fall, we cannot know whether the bulk of trade included foodstuffs. Emergency grain supplies were provided by Egypt and sent to polities suffering from famine during the Late Bronze Age. However, archaeological analysis and documentation of goods found in trading vessels indicate that most of the goods traded between polities consisted of luxuries and valuable commodities. Thus, even though the trade network was extensive, it was not necessarily efficient in times of crisis.

The centralization of polities also implies that palaces should have been able to maintain order during a food crisis. If the food, however, was in the hands of its producers who did not live in the palace, the palace had no way to collect food to be redistributed if producers did not offer their supplies. In times of food shortages, food producers were most likely reluctant to share their precious food surplus with an elite power that gave little back. This may have been the case at the Mycenaean palaces. As discussed earlier, the land surrounding Mycenaean palaces would have been the best quality land available during the Bronze Age. With a change in the environment and the exhaustion of soils, the landscapes might have been rendered unusable. Though it is hard to do landscape analysis since coastlines and climates have changed, there is evidence that Tiryns saw a period of elevated rainfall and flooding which aligns with the suggested change in trade winds. In the Late Helladic III B1 (LHIII B1) (ca. 1300-1250), a stream south of Tiryns abandoned its bed and shifted to the north of Tiryns depositing up to 4 meters of sediment in the eastern parts of the palatial tower (Zangger 190).

Tiryns is very well suited for geoarchaeological investigation because of its location in a coastal plain which contains buried ancient surfaces recording the evolution of the landscape. However, due to its location in the shallowest part of the Argive Plain, Tiryns would have easily flooded during this period of elevated rainfall. Similar to the stream at Tiryns, we find a river at

Pylos taking an unusual course. The convenience of the Selas River flowing past the palace suggests that the river was probably artificially diverted during the Late Bronze Age (Zangger et. al 552-553). If we use Tiryns as a model, however, the river may have been naturally diverted based on a rise in flood waters. Pylos, however, does not appear to have seen any serious flooding similar to that at Tiryns. Tiryns was covered by flash flood sediment which prompted the subsequent erection of a dam to divert the offending stream. Zangger favors earthquake effects to account for the flood.

A change in the environment in the Peloponnese may have coincided with similar environmental happenings in the Hittite Empire. While the Hittites experienced unusually low amounts of rainfall, palaces in the Argolid may have seen larger amounts of rainfall—allowing rivers to shift both naturally and artificially. However, an elevation in rainfall and the subsequent flooding of palatial centers cannot be used as evidence for famine. Resources on the Greek mainland may have been stretched due to soil erosion or flooding, but the landscape does not appear to have been ransacked by famine.

The environment clearly was changing and played a large role during the Late Bronze Age. The Hittite Empire seems to have experienced the greatest wrath of nature through a famine which partially led to its demise. However, this famine does not seem to be a reasonable explanation for a collapse in the Mycenaean system. In 1969, following an argument made by Rhys Carpenter in his book entitled “Discontinuity in Greek Civilization”¹, Jack Caskey proposed that:

The Mycenaean centers were not destroyed from without but from within; that the cause was not greed of a foreigner but the desperation of the local populace driven

¹ Cambridge 1966

mad by hunger. The hunger was a result of famine in the land, brought about by an alteration of climate which withered crops and left man and beast without means of survival (Caskey 446).

This theory, however, can be considered disproven by the lack of evidence through records of any famine in Mycenae. As discussed by Zangger, the productivity of the Mycenaean landscape would have been at its height during this time. Though over-use and soil erosion could have caused a depression in food availability, we have no source which calls for aid or discusses famine as seen in Hittite records. The flooding which occurred in Tiryns does coincide with changing environmental conditions, but this evidence alone cannot be used to argue a devastating collapse of the Mycenaean palaces.

CHAPTER 3

Redistribution and Trade

Redistribution in Mycenaean and Near East Systems

As discussed earlier, the trade network between Mediterranean polities was extensive—stopping at various islands and sea ports along the coasts (See Appendix: Figure 1). The trade routes throughout the Mediterranean Sea would have allowed for frequent contact with peoples of other cultures and allowed for the exchange of goods and messages between polities. Since the large palace complexes of the Mediterranean relied so heavily on trade because of the specialization of their systems as well as their consumption of exotic goods and precious materials such as gold, ivory, silver, and bronze, any disruption to the network would have had a catastrophic outcome.

Dimitri Nakassis et al. provide a model of reciprocity and redistribution societies. They claim that reciprocity implies a pattern of exchanges defined by centrality. In a redistributive economy, goods and labor flow into a central authority and back out of it again. Yet, somehow redistribution became equated with the pooling of goods. Dimitri Nakassis et al. provide reasons for this cultural adaptation to agricultural specialization in areas with many ecological niches. For example, big men in egalitarian societies altruistically pooled substantial quantities of goods while skimming off the top of the surplus. As production of goods increased, so did the power of the big men. Eventually, they could emerge as permanent officers or chiefs. Each household under the system carried out a specific specialized craft which would be contributed to the

overall system surplus. Each unit in this system depended wholly on the redistribution of goods since it had become so specialized (Nakassis et al. 179).

The Mycenaean state economy was managed centrally with the royal bureaucracy most likely supervising all aspects of production and distribution. However, most of the smaller transactions by non-elite would not have been recorded, and much of the trade between polities was probably manipulated by the lower classes in a barter system of commerce. As such, early Linear B evidence highlights the absence of equivalences between commodities. Goods and services were exchanged on the basis of rights and obligation; palatial systems utilized an obligatory mobilization of resources which symbolized the inequalities of status enveloping the entire system (Halstead 235). Linear B texts reveal how much the palace kept in relation to how much the people received or were able to keep from their yield. Often in a society with a lavishly wealthy elite there is a poor lower class supporting their needs. Such a society does not participate in a reciprocal redistribution system.

Having a redistribution system manipulated by a wealthy elite meant that the people did not get to appropriate an equal share in the goods within the system. Most Assyriologists agree that Mesopotamian centers supported systems characterized as redistributive. (See Appendix: Figure 2). In the Ur III period, most of the population played an integral role in the redistribution system. However, most laborers who received rations were part-time workers who must have had access to other sources of support when not in the employ of the state (Nakassis et al. 179). Paul Halstead, who focuses on agricultural commodities, argues that the term 'redistribution' has outlived its usefulness as a label for Aegean Bronze Age political economies. Since we know very little of the exact redistribution system because Linear B texts record only a minor part of resource flows to and from Mycenaean palaces, let alone

within Mycenaean regional polities, there is a strong possibility that most economic activity took place outside the recorded redistributive system (Halstead 233).

Aegean economies are perhaps better characterized as systems of mobilization, where goods flow upward to support elites and their staff. This strategy was used by the central elite to consolidate their power and prestige—just as with big men in once egalitarian societies. The palatial resources were largely focused on the production of finely crafted goods, which could then be distributed to supporters or exchanged abroad for other luxury goods. Linear B tablets allude to the fact that distribution in Mycenae was excessively specialized with a reliance on wheat and barley and the raising of some sheep and cattle. Even though the palace drew goods from local food production and local labor force, they hardly gave back to the local population. Though locally grown foodstuffs should have fed the local population, much of the surplus provided the primary products (perfumed oils, wine, and woolen cloth) traded for metals and other raw materials (Stiebing 17) and the rest was consumed by the palace elite and dependants. Since the local population could not rely on an equitable redistribution system, they created their own methods of production and exchange systems outside the jurisdiction of the palace.

Trade in the Mediterranean World

Perhaps the best archaeological evidence we have which gives us a view into the trade pattern between states during the Bronze Age comes from the 14th century BCE Ulu Burun shipwreck deposit off the coast of modern-day Turkey. This wreck included 200-plus copper oxhide ingots, at least 39 copper bun ingots, an unspecified number of two-handled copper ingots, more than 40 tin ingots and ingot fragments, 130 Canaanite amphorae, seven large pithoi,

a variety of Levantine lamps and pilgrim flasks, and the 18 Cypriot vessels and 5 Cypriot or Levantine lamps found in two large pithoi (Knapp “Ethnicity, Entrepreneurship, and Exchange” 120). Such a broad variety of artifacts, particularly the metals, accounts for the metal hungry nature of the Mediterranean world. Clearly from the abundance of metal found on this wreck, there must have been an extensive copper trade between Cyprus and the Mycenaean world.

Also, at a site in Egypt called Marsa’ Matruh, archaeologists identified imported ceramics from the Aegean, the central Mediterranean, Anatolia, Egypt, the Levant, and Cyprus (Knapp “Ethnicity, Entrepreneurship, and Exchange” 121). In the 13th century, the Aegean faced a decline of Cypriot (or ‘Near Eastern’) metal resources and the rise of western sources of metal. This decline corresponds with the rise of the Mycenaean civilization. This implies growing trade connections and the potential manipulation of metal resources by larger western polities (including Mycenae). At Kommos, foreign pottery of all types far outnumbered that from such well-excavated sites as Knossos, Phaistos, Mycenae, or Tiryns (Knapp “Ethnicity, Entrepreneurship, and Exchange” 123). This attests to the vital role a sea port played in the overall movement of goods throughout the Mediterranean.

Though most sites on the Greek mainland have small amounts of Cypriot or ‘Levanto-Helladic’ material, new finds from Tiryns provide the exception. Excavations have uncovered a Cypriot white slip bowl, a Cypriot white shaved juglet, Levanto-Helladic shallow bowls, and at least ten Levanto-Cypriot wall brackets from early 13th century BCE (Knapp “Ethnicity, Entrepreneurship, and Exchange” 122). Prior to 1300 BCE, most Cypriot copper was traded to the Levant or Egypt, yet after 1300 BCE, the Aegean and the west became an increasingly important market for Cypriot copper. In fact, Cypriot copper appears to have travelled as far as Sicily, Lipari, and Sardinia. Trade in copper ox-hide ingots was an island-oriented trade. Three

of the greatest islands within the Mediterranean (Cyprus, Crete, and Sardinia) clearly dominated this trade (Pope and van Andel 55).

It is likely that the Mycenaean polities sought different resources from areas where they were readily available (e.g. gold from Egypt, tin from Anatolia, ivory or lapis lazuli *via* Ugarit). As Knapp argues, it stands to reason that Mycenaean Greeks would have sought copper from Cyprus. The weights of copper allotted to smiths and recorded on the Pylos Jn tablets suggest that the metal came in oxhide ingot form—like those found on the Ulu Burun wreck. However, archaeologists did not find the heavy metal-working tools (hammers, tongs, shovels, etc.) which are so typically found around Cypriot metal production (Knapp “Ethnicity, Entrepreneurship, and Exchange” 137). This implies that neither Mycenae nor Pylos were involved in the primary production of metal goods from imported raw metal ingots within their palaces. However, this does not necessarily indicate a lack of involvement. It stands to reason (based on evidence from the Jn tablets from Pylos) that the palace administration in Pylos controlled industrial scale metal work from some other location.

On Sardinia, however, the evidence for indigenous bronzeworking is overwhelming. Archaeologists have found quantities of bronze artifacts including bronze tools, particularly the bronzesmith’s heavy tools (tongs, hammers, charcoal shovels), a mould of steatite for casting these tools, crucibles, and at least 11 hoard deposits recovered from Nuraghic villages (Knapp “Ethnicity, Entrepreneurship, and Exchange” 141). These villages seem to have been established as early as 1800 BCE and occupied through 1,000 BCE; however, the export of ingots only seems to have become well-rooted with the rise of the extensive Mycenaean exchange network in the 13th century (Knapp “Ethnicity, Entrepreneurship, and Exchange” 143). Despite such a rich archaeological record for bronze production, Sardinia never seems to have reached a

significant level of urbanization and politico-economic integration. The island had no obvious internal organization or authority which oversaw the production of its metals, but the prospect of commercial wealth most likely attracted foreign states to partner with Nuragic elites to oversee larger-scale production. Despite this support, Sardinia did not seem to rise in power as Cyprus did. Perhaps this is because Cyprus began to manipulate its iron resources more, and bronzeworking was already becoming obsolete in the early part of the 12th century BCE.

Metal trade between different states was vast and it intertwined many different systems together. Such interdependence in Bronze Age exchange systems marks a potential factor in the socio-economic collapse at the end of the Late Bronze Age. If one system failed, all the others would feel the impact. The Late Bronze Age collapse, however, had minimal effects on Cyprus since it had already started to employ new technologies and metalworking (Knapp “Ethnicity, Entrepreneurship, and Exchange” 150).

With the rise of Mycenaean civilization in the 15th century BCE, Mycenaean pottery and other artifacts rose in prominence across the Mediterranean. At another site in Egypt called El Amarna, archaeologists have found a trove of 14th century BCE Mycenaean pottery. Likewise, in Saqqarah, Mycenaean pottery has also been found in the tombs of several high-ranking courtiers of the late 18th dynasty. The lack of Mycenaean pottery in residential areas strongly suggests that the pottery was only available to those of royal descent or of elite class. It appears that the pharaoh Akhenaten received not only Greek olive oil, but also living olive trees to be planted in his new capital. Such gifts of an exotic status imply direct contact with the Mycenaean kingdom. Other Mycenaean artifacts in Egypt include the earrings of Queen Nefertiti as well as evidence of Mycenaean amphorae on the walls of the burial chamber of Ramesses III (Kelder 72-81).

The shift in the Mycenaean economy toward larger-scale agriculture produced surpluses which could be exported. By the end of the 14th century, the Mycenaeans had political links with Egypt and the Levant, and by the end of the 13th century, they had control of eastern trade routes. The main route went from Ugarit to Cyprus along the southern Anatolian coast by way of the east-west current from Rhodes sailing westwards across the Aegean to Thera or Melos then to Nauplion and Tiryns. The trade route exploited the north-west winds that commonly blew in September. From Egypt, sea currents carried vessels north to Ugarit (See Appendix: Figure 1) (Castleden 186).

Not only did the Mycenaeans trade within the Mediterranean, but they also appear to have traded with Northern Europe. In 1700 BCE, amber appeared simultaneously in graves at Mycenae (Shaft Grave O in Grave Circle B) and Pylos (one of the early tholos tombs). It was originally thought that amber bead came from the Balkans. However, recent scholarship has suggested that Greek amber was traded *via* Britain. Evidence of amber bead with gold casing from the 16th century BCE in Zurich appears to have been made in Wessex and exchanged or traded halfway across Europe (Castleden 185). In the 15th century BCE, 820 pieces of amber were found in the Argolid and the Pylos area in Messenia with a few pieces in Thebes. This pattern forms an exchange belt from Pylos across Laconia to Mycenae and on to Boeotia and Attica. The first appearance of amber at Knossos is in 1420-1380 BCE, which has been taken as evidence that mainland Mycenaeans were occupying Crete and taking amber with them rather than trading it since it was such a rare luxury good (Castleden 183).

Artifact acquisition around the Mediterranean seems to suggest that centers developed specific trading relationships with distant producers; for example Mycenae with Egypt, Tiryns with Cyprus, Thebes with Assyria, and Kommos with Italy. As rulers formed bonds with one

another or developed tastes for various luxury goods, they may have conducted business with specific ports (Knapp “Bronze Age Mediterranean Island Cultures and the Near East 55). Such trade relationships further bonded distant polities together. If the economy of a foreign trade partner collapsed, the allied polity could also face collapse if they had not rooted relationships with other polities.

Insular Function and Trade

The smaller island polities of the Mediterranean Bronze Age played an integral role in the movement of goods between states. The subsistence of such polities, however, equally depended upon various essential imports. The conditions for farming in mainland environments are far more favorable than those on smaller islands. Also, the limited number of species on an island prevents a broad spectrum of subsistence pursuits. When faced with any social or environmental catastrophes, those on the mainland can divert or diminish any issues by relocating people or redistributing food and other resources. In an insular setting, similar kinds of catastrophic situations may wipe out the entire population if their subsistence diversity or means of sea transport are lacking (Pope and van Andel 55). Since we know little of the exact economic stability of these smaller islands, Cyprus provides a good example of the varying degrees of insular function.

Cyprus, which is the Mediterranean’s third largest island, sits closest to the mainland of ancient western Asia. Since Cyprus was a major supplier of copper, the word ‘Cyprus’ relates to *cuprum*—the Latin word for copper. The subsistence needs on Cyprus before the Bronze Age were met through social networks maintained within the insular system. As the people of Cyprus

began to specialize in the production of woolens and textiles, stone figurines, shell beads, and a variety of tools, traders began to exchange their goods throughout the Aegean and eastern Mediterranean simultaneously with other polities during the Bronze Age. Evidence of personal names in Cyprus shows a closer association with Levantine cultures than those of the Aegean. Despite this close proximity, Cyprus seems to have maintained neutrality in the Egypto-Hittite conflict for control over Syria during the 14th-13th centuries BCE (Pope and van Andel 59).

From 1700-1400 BCE, striking changes of urbanization occurred on Cyprus as public and ceremonial architecture began to appear. The island began to see new fortifications with a relative increase in a weaponry surplus. Burial practices on the island also reveal unprecedented distinctions in social status. Cyprus seems to have begun modeling its political and social structure after the city model introduced to Cyprus from the Levant. The ashlar-built tombs are the most convincing evidence for a distinctive Ugaritic influence on Late Cypriot Enkomi (Negbi 11). Unlike in the Near East and the Aegean, palatial edifices did not exist on Bronze Age Cyprus (Negbi 10). There is no evidence on Cyprus for centralized facilities for food storage which were so typical of palatial control (Knapp “Bronze Age Mediterranean Island Cultures and the Near East” 61).

Hittite texts reveal that during the era of ‘Pax Hethitica’ which followed the peace treaty between the Hatti and Egypt (early 13th century BCE), Alashiya (Cyprus) became a Hittite vassal (Negbi 19). As Cyprus became highly specialized, the island began to hold considerable authority over copper production and trade. Economic records with the Egyptian pharaoh show significant correspondence (Knapp “Bronze Age Mediterranean Island Cultures and the Near East” 61). As said before, Cyprus experienced little destruction during the collapse of other polities and trading networks, which suggests they were able to manipulate enough of their own

resources and that they had developed a solid social structure. Perhaps as iron technology began to take footing as the predominant metal in the Mediterranean, Cyprus was able to manipulate trade with western polities in order to stay afloat in a destructive context. Since Cyprus was such a large island, the resources available on the island would have been abundant. As an area rich in natural resources surrounded by areas bereft of natural resources, Cyprus would have been a pivotal island for other polities to acquire necessary resources.

Knapp provides a model as to how a smaller insular system might be maintained. First it must create disposable surplus for managers. In order for wealthy elite to accrue a dominant rule, they must have goods of a disposable nature for their own personal luxury. Then, it is important for the central system to provide storage facilities for redistribution of agricultural products and for relief of the unpredictable shortages inherently present on islands. If the island has a surplus of subsistence goods, it does not need to fully rely on the importation of goods from mainland supporters. This way, if the mainland faces a social or environmental catastrophe which inhibits its trading abilities, the island might support itself long enough to withstand catastrophe. Islands must also support specialist craftsmen through this surplus since they are not participating in broader subsistence practices to support themselves. Once craftsmen are specialized, the island must enhance opportunities for overseas trade to obtain the necessary resources like metals or prestige goods (Knapp “Bronze Age Mediterranean Island Cultures and the Near East” 65).

Unlike early Cyprus, Thera and Crete established their cities of Akrotiri and Knossos after the palatial model. The Egyptians had the name *Keftiu* which is a term that refers to one of ‘the islands in the midst of the Great Green’; that is, Crete within the Mediterranean. Various inscriptions on Egyptian frescoes that accompany depictions of gift-bearers from *Keftiu* describe them in this way—as inhabitants of the ‘islands in the midst of the sea’. Such a description holds

weight as scholars try to understand the mysterious Sea Peoples, who will be discussed later (Knapp “Bronze Age Mediterranean Island Cultures and the Near East” 66).

The Egyptians also recognized there were various other Aegean nations. On the left side of a statue base from a funerary temple of Amenophis III (ca. 1388-1350 BCE), twelve Aegean place names are recorded including Knossos, Phaistos, and Kydonia on Crete, Mycenae and Nauplion on the Greek mainland, and Kythera in the Aegean. On the right side Keftiu and Dny are inscribed (either the *Danay*—a name for the Greek mainland, or *Tny*—a name for Rhodes or the eastern Aegean) (Knapp “Bronze Age Mediterranean Island Cultures and the Near East” 67). One interpretation of the statue is that the towns mentioned on the left side are to be found in the lands mentioned on the right side. Clearly the Egyptians had a strong understanding of the more powerful and trade oriented nations found in the Aegean and that they were significant enough to record on a funerary statue.

The interlocking systems of the islands within themselves and with the mainland polities allowed for an extensive trade network which spread across the Mediterranean in all directions. This system, however, was doomed to fail if something catastrophically disrupted the function of the network. Thus, beginning in the late 13th century, changes began to occur all around the Mediterranean. The Mycenaean polities faced simultaneous destructions which disrupted the enormous trade systems within the Aegean and beyond, caused massive migrations of people, and sent the Hittite and Egyptian kingdoms into similar devastating ends.

CHAPTER 4

The Mycenaean Collapse

Introduction

The Mycenaean collapse is perhaps one of the most disputed events in ancient Greek history. How did a palace of such extravagant wealth and prominence in trade and cultural influences completely disintegrate over the course of a century? Scholars grapple with numerous theories as to the collapse, but recent archaeological excavations have revealed a confirmed catalyst in the destruction of the Mycenaean palaces. To understand what scholars have confirmed, however, it is vital to understand what they have discredited.

The Dorian Invasion

The late return of the Hellenes from Ilium caused many revolutions, and many factions ensued almost everywhere; and it was the citizens thus driven into exile who founded the cities. Twenty years later the Dorians and the Heraclids became masters of the Peloponnese; so that much had to be done and many years had to elapse before Hellas could attain to a durable tranquility undisturbed by removals, and could begin to send out colonies, as Athens to Ionia and most of the islands, and the Peloponnesians to most of Italy and Sicily and some places in the rest of Hellas. All these places were founded subsequently to the war with Troy

(Thucydides 1.12).

This account given by Thucydides long provided the historical framework in which Mycenae fell. This so-called invasion by the Dorians called the ‘Dorian invasion’ by scholars or the ‘return of the Heraclids’ by Greeks, was said to be an invasion into the Mycenaean realm by Doric-speaking Greeks of the north. As ancient Greek legend tells us, sometime before the Trojan War the sons of Heracles were driven from the Peloponnese by Eurystheus, the king of Mycenae. These people then stayed in Doris in central Greece and thus became the Dorians. Legend says they finally mounted a naval attack across the Corinthian Gulf two generations after the fall of Troy and seized control of much of the Peloponnese—first replacing dynasties in Argos, Sparta, and Messenia and continuing to Ionia (Stiebing 8).

Though archaeologists long supported this theory, the archaeological record doesn’t support such an invasion. The introduction of a new type of sword and the fibula (the early form of a safety pin) were credited to Dorians, but both were found prior to the onset of the great disasters. Also, the use of iron over bronze, the cremation rather than inhumation of the dead, and single or double burials in rectangular, stone-lined graves (cists) instead of chamber tombs all took place gradually. Cist burials had been common in the middle Helladic (ca. 1900-1550 BCE), so they may not have been due to the presence of newcomers. The other features occurred in Attica—an area not conquered by the Dorians— and in Boeotia and Thessaly where the Dorians did not settle. The settlement patterns that occurred in Mycenaean palaces after the destructions also help discredit the Dorian theory. Had the Dorians invaded and settled in the Mycenaean land, how do we explain the massive depopulation of the area (Stiebing 9-10)?

Linguistic specialists do find many similarities in Doric and East Greek dialects such as

the form of Poseidon's name found in Laconia (Doric area) which is closely related to the form used in Arcadia (East Greek area) (Stiebing 10). This implies a fairly long period of close contact between Doric and East dialects—much longer than the chaotic century when the Dorians were supposedly wreaking havoc on Mycenaean civilizations. Perhaps East Greek linguistic elements had survived in the peasants; then, as intermarriages occurred and languages infused themselves, East Greek linguistic elements were gradually infused with the linguistic elements of the Dorian ruling class.

The Wrath of Nature: Earthquake Destruction

Though the Dorian invasion finds little support in the archaeological record, archaeologists do find peculiar structural features added to all the major palaces prior to their destruction. Cyclopean masonry is only one of the several styles of construction employed by the Mycenaean. This Cyclopean style consists of enormous boulders fit together to form a monumental structure (Simpson and Hagel 30) (See Appendix: Figure 3). The walls of Mycenae are some of the thickest and highest walls in ancient history—capable of repelling any enemy. Or so they thought.

The finest architectural achievements of Mycenaean civilization occurred during the LHIIIB period (ca. 1350-1200)². During this period, Mycenaean citadels also added defenses in the form of bastions as well as narrow passages with internal stairs at entrances to bastions and citadels (Simpson and Hagel 30). Both Mycenae and Tiryns were provided defended access to water sources outside their citadels by means of sloping vaults at Mycenae (See Appendix:

² See Nic Fields' *Mycenaean Citadels: ca. 1350-1200*: Oxford 2004 for description of terminology and chronology.

Figure 4) and at Tiryns with tunnels which cut through and under the walls of the Lower Citadel to provide concealed access to ground water outside. In the LHIII B1 period, the broad circuit walls were replaced by Cyclopean stone walls around the citadel and chambers were incorporated within the walls of the Lower Citadel. Similarly, the main entrance on the east side was strengthened and it provided a cunning trap for attackers (Simpson and Hagel 35-37).

Scholars have questioned whether such new constructions were just another sign of Mycenaean desire to construct everything to be as big as possible as a sign of power and grandeur or whether they added the new walls and fortifications as a reaction to a potential hostile threat. Simpson and Hagel argue that the immense fortifications were clearly designed to provide increased defense and security because it makes little sense to define them as mere propaganda devices. However, after the widespread damage in the LHIII B period—especially the destructions in the citadel of Tiryns and of the Oil merchant group and Panayia houses I and II outside the walls at Mycenae, new defensive measures seem to have been taken (Simpson and Hagel 39). Mycenaean officials clearly detected some sort of human threat since they not only strengthened their citadels, but they also increased the centralization of their resources and personnel. At the Mycenaean citadel, archaeologists have discovered increased storage and workshop areas during the LHIII B2 period—especially in the House of Columns. These added features seem to go far beyond the basic display of grandeur and power of the ruler.

Evidence of preparations against a threat also comes from Pylos and Thebes. One tablet from the archives in Pylos outlines deployments of coastguards which suggest an attack was expected from the sea. However, these deployments could have been regular defense mechanisms during certain times of the year. A force of 800 was deployed in Pylos. This hardly seems to be enough men to defend against a large hostile force. Rather than forces of men,

Thebes built a Mycenaean circuit wall at the beginning of the LHIII B (Simpson and Hagel 82). Another peculiar construction was discovered on the Isthmus of Corinth in 1957 by Broneer. Broneer concluded that he found a Mycenaean fortification wall across the Corinthian isthmus ‘intended to protect the cities and towns towards the south from some expected invasion from the north’ (Simpson and Hagel 124). Since the wall is of Cyclopean architecture, the only plausible date for its construction is within the Late Mycenaean period—most likely in the LHIII B2 period when the citadels of Mycenae, Tiryns, and Midea were strengthened in response to a perceived threat of hostile action (Simpson and Hagel 130).

All the citadels clearly detected some sort of threat. So, if the Dorian Invasion is not a viable explanation, where was the threat coming from? Since drought and famine do not seem to have played a role in Mycenaean collapse, were other environmental factors causing an impact on the function of its palatial systems?

After careful investigation regarding the structural foundations from Mycenaean citadels, archaeologists have recently determined that it is clear the citadels suffered from a series of devastating earthquakes starting in the LH III B 2 period (ca. 1250 BCE). Also during this time, great buildings at Tiryns collapsed and some of the outlying settlements were burned. Pylos, the Menelaion, Zygouries, Midea, and Eutresis were also destroyed and never rebuilt. Mycenae and Tiryns were rebuilt only to be later destroyed in the early 12th century BCE by another earthquake (Castleden 218-219). It is likely that the earthquake damage was underestimated by the Mycenaeans. At Mycenae, reconstructions were done with a quicker technique using plastered floors rather than laying down water-resistant materials (Castleden 108). With a second earthquake, this weak reconstruction may have led to the collapse of the terrace supporting the megaron of the palace. Similarly, perhaps the initial strengthening of the fortifications at

Mycenae and Tiryns was in response to future earthquake destruction, and the new passageways were meant to provide more exits out of the palace complex in the event of an emergency. If there were a series of earthquakes, perhaps the first earthquake was virtually undetectable in the archaeological record, but detectable by the Mycenaeans of the time who could have perceived the potential threat of a more massive destruction caused by a more powerful earthquake. Hence, perhaps the elite of ancient Mycenaean palaces had a general understanding of their highly unstable geographic location and thus strengthened their citadels to prepare for a predicted environmental catastrophe rather than an invasion of a powerful army.

The upper citadel of Tiryns and the LHIIIB palace were destroyed by fire at the end of the LHIIIB—probably the result of the same earthquake at Mycenae (Yasur-Landau 67). Similarly, the Midea megaron was severely damaged by earthquake at the end of the LHIIIB period and was repaired and remodeled like the megaron at Mycenae. However, the structure suffered further damage during the LHIIC period (most likely with a second earthquake) and was abandoned (Yasur-Landau 71).

The destruction line in Thebes is also supported in the archaeological record. A burnt LH building was uncovered in 1906 by Antonios Kermapoulos. This large well-built building named the ‘House of Kadmos’ yielded gold, agate, and quartz artifacts along with stirrup-jars inscribed with Linear B. According to myth, the Old Palace of Thebes was destroyed by the appearance of Zeus to Semele. The New Palace was destroyed after the successful siege of Thebes by the Epigonoι, the sons of the Seven Against Thebes.³ However, archaeological evidence provides a much more descriptive picture.

Since the excavations of Kermapoulos, archaeologists have extensively examined

³ See Aeschylus, *Oedipodea*

pottery fragments from the House of Kadmos. After careful examination of three decorated pots, archaeologists determined that the transport stirrup-jars with non-linear decoration were securely contained in the destruction fill. Therefore, the destruction of the building was placed in the LHIIIB period (ca. 1275-1250) (Dakouri-Hild 103). Another burnt LH building was excavated east of the treasury room. Though these destructions show more evidence of burning than earthquake damage, the collapse of the building happened around the same time as the destructions of the other Mycenaean citadels. Also, the large circuit wall around Thebes was destroyed in LHIIIB2—at the time of the earthquake. Other destroyed buildings have been found in the Pelopidou Street excavations which revealed a significant number of Mycenaean buildings containing numerous Linear B tablets destroyed at this time (Simpson and Hagel 83).

After the 1250 BCE earthquake, the citadel at Mycenae was a disaster area. All structural foundations show various levels of instability. Also, archaeologists found widespread fire and collapse evidence as well as evidence of a layer of mud wash covering the areas of the west slope which suggest heavy rainfall (Bachhuber 108-109).

Palaces in Distress

With the collapse of the citadel at Mycenae, chaos broke out. Though we do not know the extent of lives lost or survived during the series of earthquakes, the collapse of the megaron forced the ruling class to flee from their land and from their people. Assaf Yasur-Landau argues that the Mycenaean palace system of the 14th-13th centuries was doomed to fail due to its over-centralized and monopolistic character. Accordingly, the palace system “collapsed like a house of cards when the centers of all polities were dealt a fatal blow at the end of the LHIIIB period

and local powers were able to form small polities, centered on fortresses that sometimes housed a ruler or rulers” (59). These small polities would have had a limited hierarchy of power and no bureaucracy (Yasur-Landau 9). At Tiryns, the archaeological evidence for this is shown by the construction of large well-built structures constructed outside the walls of the acropolis. Once free from palatial constraints, elite families claimed areas in the surrounding citadel for themselves (Yasur-Landau 69). Yasur-Landau suggests that the “collapse of the Mycenaean palatial system and the lifting of its bureaucratic systems of control by taxations, drafts, and corvee duties opened the way for accelerated processes of social mobility in forms of rulership” (95). Such a recovery, however, would have taken centuries.

The people were left to pick up the pieces of a society that had become incredibly specialized. Mycenae shows clear evidence that the people began to rise up against the elite since some of the houses that probably served some kind of administrative purpose suffered destruction by fire sometime during the LHIIIB2 period—most likely shortly after the earthquake (Kelder 62). The sudden or even gradual decline of most of the palaces must have left many of these people (mostly artisans and craftsmen) without a livelihood. With the collapse of the redistribution and trade systems, specialized skills were no longer needed. In Pylos, approximately 4,000 of the total population of between 50,000-100,000 had a direct connection to the palace, and the number at Mycenae must have been significantly larger (Yasur-Landau 101). Thus, without a palace, the people had no work. Workers from the palace and the inhabitants of the hinterland must have felt the sudden chill of destitution and abandonment. Even if the lower classes had developed some systems of exchange independent of palace rule, in a chaotic context, they most likely would not have been able to defend their land or their resources against displaced peoples.

A supposedly exhausted Greek land (as discussed by Zangger) along with a string of earthquakes compelled the Mycenaean Greeks to abandon their devastated land. The people who had long feared the attacks from others now set off to the sea or to the east to save themselves from death. The large number of displaced peoples setting out to sea or migrating over land might attest to the rising documentation of Sea People 'invasions' during this time. Rather than violent raiders, the Sea Peoples were most likely displaced Mycenaeans.

Though the people of Mycenae had long occupied the trade routes of the sea, it is unlikely that long-distance maritime migrations would have been the chosen means of transport for the majority of migrants since it requires a large initial investment of food and other provisions. However, it is clear that those with sufficient knowledge of the sea and who carried enough resources for a longer journey, took to the sea. Thus, the supposed invasions of the Sea Peoples—as described by contemporary Egyptian inscriptions—hold a basis in reality.

CHAPTER 5

Migrations

Sea Migrations and the Sea Peoples

The practice of marauding bands of people devastating areas of land by land or sea for the acquisition of luxury goods or slaves or some other purpose is not a new concept. As Mycenaean civilization gained influence throughout the Aegean and later throughout the Mediterranean, it is likely that bands of raiders sent by Mycenaean palaces or by their own conviction traveled to the coasts of Syria, Egypt, and various island nations to sell or loot goods or to abduct slaves for palace labor or for personal gain of independent traders.

Though not a contemporary source, Herodotus recalls how in times long ago,

On the fifth or sixth day after they had arrived (the so-called Phoenicians), when their goods had been almost sold, there came down to the sea a great company of women...when suddenly they made a rush upon them...So they put them on board their ship, and immediately departed, sailing away to Egypt...In the next generation after this...Alexander the son of Priam...desired to abduct a wife for himself from Hellas...So he carried off Helen...Up to this point...nothing more had happened than the abduction of women on both sides; but after this the Hellenes were very much to blame; for they set the first example of war, making an expedition into Asia before the Barbarians made any into Europe (Herodotus 1.1-4).

Though Herodotus' story lies in myth, he still recalls the Bronze Age as a period of abduction and raids. During the reign of the pharaoh Merneptah in Egypt (ca. 1232 BCE), a Libyan invasion of Egypt was supported by five groups of outsiders: the Sherden, Shekelesh, Akawasha, Lukka, and Tursha. The Egyptians referred to these groups as 'peoples of the sea'. Merneptah turned back this assault, but they returned in 1194 BCE in the fifth year of Ramesses III and again three years later a coalition of land and sea raiders who apparently had already caused havoc in Anatolia and Syria invaded Egypt (Stiebing 12). This third 'attack' however, is not recorded as a massive coalition of forces as the other two were. In relation to the 'peoples of the sea', an Egyptian text reads:

The foreign countries made a conspiracy in their islands. All at once the lands were removed and scattered in the fray. No land could stand before their arms, from Hatti (Hittite Empire), Kode, Carchemish (city in Syria), Arzawa (country in western Anatolia), and Alashiya (Cyprus) on, and being cut off at one time. A camp was set up in one place in Amor (Palestine-Syria). They desolated its people, and its land was like that which has never come into being. They were coming forward toward Egypt, while the flame was prepared before them (Stiebing 12)⁴.

From this account, it is difficult to tell from where the Sea Peoples originated. From Egyptian text, only the Peleset can be identified conclusively as the Philistines mentioned in the Old Testament who settled in the southern Levant and gave their name to the region in which they settled. The Akawasha most likely comes from *Achaiwoi* or Achaeans from the island nations in the Aegean—or, the Mycenaeans themselves (Stiebing 12). The Lukka may be

⁴ Translated by JB Pritchard, *the Ancient Near East: An Anthology of Texts and Pictures*. Princeton 2010.

Lycians of later Greek accounts. The Tursha and Shekelesh are most likely Anatolians; Tyrsenoi or the *Tyrrhenians* is the Greek name for the Etruscans, who, Homer says, journeyed from Asia to Italy; and the Shekelesh may be connected with *Sikeloi* (Sicilians). The Sherden may have been Sardinians (Stiebing 12-13). Though all origins of these so-called Sea Peoples are highly questionable, most scholars agree that the tribes came from western Anatolia and the Aegean.

The Shardanu or Sherden are a group who fought with Ramesses II against the Hittites in the Battle of Kadesh (ca. 1274 BCE) in southern Syria. The Shardanu are also mentioned in Ugaritic administrative texts of the 13th century. In this century (ca. 1232 BCE), however, they changed allegiances and fought alongside the Libyans and the other ‘Sea Peoples’ against the Egyptian pharaoh in the western delta (Knapp “Bronze Age Mediterranean Island Cultures and the Near East” 124).

The Shardanu next appear in the 11th century with the *Plst* (Philistines) and *Skl* (Sicilians?) in an Egyptian text (*The Onomasticon of Amenope*) which refers to the towns and people of Canaan. However, there seem to be no significant settlement patterns or trading stations at western Mediterranean sites any earlier than the 9th century BCE. The dating of a Phoenician inscription found at Nora in Sardinia together with the 11th century dated figurines suggest that the Phoenicians were exploring the central Mediterranean two centuries before they began to reside in that area. Another inscription at Nora indicates a people called *Shardanu* once inhabited the island (Knapp “Bronze Age Mediterranean Island Cultures and the Near East” 112).

Another puzzling group of Sea Peoples fall under the context of the title ‘Ahhiyawa’. This name has often been equated with Rhodes or the Greek city of Miletus on the western coast

of Anatolia. The name of Ahhiyawa is often mentioned in Hittite texts from around 1400-1220 BCE and has confused many scholars as to the location of Ahhiyawa (Kelder 30).

Scholars often suggest that Ahhiyawa comes from *Achaiwa*—referring to the Achaean Greeks of the Homeric epics. When mentioned in Hittite texts, Ahhiyawa implies a forceful presence. Texts dated to the 13th century reveal that the Hittite city of Wilusa suffered several attacks. Some of these attacks directly involved the king of Ahhiyawa. Some of these conflicts clearly provided the basis for the epic tales of *The Iliad* and *The Odyssey* (Knapp “Bronze Age Mediterranean Island Cultures and the Near East” 127).

Jorrit M. Kelder proposes that the kingdom of Ahhiyawa may refer to the large Mycenaean territorial entity which covered most of the Greek mainland, the isles in the Aegean, and the center on the Anatolian west coast that was later known as Miletus. Kelder states this entity was known as the *Tanaju* to the Egyptians. The capital of the kingdom of Ahhiyawa, Kelder argues, was at Mycenae (Kelder 1-5).

Kelder elects Mycenae as the leading palatial center in the Peloponnese for multiple reasons including its quantity and range of grave goods and its degree of wealth found in the shaft graves of Grave Circle A, the nine tholos tombs—six of which belong to one single period, the early construction of cyclopean walls, houses outside the walls containing Linear B tablets, craft production, stone relief work on a large scale (The Lions Gate (See Appendix: Figure 5)), pottery manufacture and support, and roads and bridges. Mycenae also contained a vast amount of foreign objects from Egypt and the Levantine coast (Kelder 94). Nowhere else in the Mediterranean do archaeologists find so many factors indicating a palatial center of such prominence. Though it is tempting to define Mycenae as the center of the vast Mycenaean state

with the ‘Great King’ of Ahhiyawa placed in its court, no evidence of correspondence with the Hittite King have been recovered from Mycenae. Perhaps the Hittite King made contact with his neighbors in Miletus or Rhodes located more closely on the western coast of Anatolia. However, due to the significance of Mycenae within the Mediterranean world, it is more likely that the Hittite King was in fact corresponding with the King of Mycenae and written documentation from Mycenae of this collaboration has not survived.

The Ahhiyawa are also mentioned in the story of Attarissija which tells how Attarissija led the Ahhiyawa and made raids on the lands of Madduwatta with some one hundred chariots and a number of infantry, then retreated to his own land, Ahhija (Kelder 50). Such raids might have been the reason for the Hittite embargo on Ahhiyawan ships into Syria (Kelder 60). Similar to the story in Herodotus, ships arrived under the pretext of trading goods, but ended up abducting women and potentially wreaking havoc in various other ways.

Even though the story of Attarissija describes an event that occurred during the height of Mycenaean power, it is likely that once the Mycenaean empire had fallen, the Mycenaeans were raiding the coast of Anatolia similar to the way the Vikings were to raid the coastal regions of Northern Europe in Medieval times. The raids consisted of small-scale, seaborne attacks, on preferably weak but rich targets. Thus, the already weakened Hittite and Egyptian empires were left to fall victim to small-scale bands of raiders and groups of migrating peoples from Mycenaean lands (Kelder 55). As evidenced in Pylos tablets, accounts were made of large amounts of slaves taken from the Anatolian coast (Castleden 194).

Biblical tradition says the Philistines came from Caphtor, the Hebrew name for Crete⁵. As discussed earlier, the name of Crete in Egypt is *Keftiu*, and its people were depicted wearing

⁵ See Deut. 2:23, Jer 47:4; also, just called Cretans 2 Sam 8:18

Minoan and Mycenaean costumes while bringing gifts of an Aegean type (Stiebing 14). The Philistines, distinguishable by such feathered headdresses, appear among depictions of the Libyans and the Sea Peoples in the reliefs of a mortuary temple at Medinet Habu that describes the Egyptian wars against these allied forces (Genz 130).

Some propose the Sea Peoples may have been the northern invaders to whom the Mycenaean citadels fell victim in their weakness and then who moved to crush the Hittite empire; yet, how could this powerful force of marauders get so far only to fall easily at the hands of a weakened Egypt under Ramesses III? Also, archaeologists have found no Sea People evidence at Boghazkoy—the site of the Hittite capital, Hattusa (Stiebing 14). Though the Sea Peoples do not appear to have come into contact with the Hittite empire, Egyptian texts as early as the reign of Amenhotep III mention some of the groups later associated with the Sea Peoples—most specifically, the Shardanu (Stiebing 14). Clearly, the Sea Peoples were a part of the Mycenaean and Hittite worlds long before ca. 1200 BCE when the various palace systems collapsed.

The elevated presence of the Sea Peoples within the Mediterranean region after the fall of the Mycenaean citadels implies that the Sea Peoples' migration was the *result* of the political, social, and economic collapse which occurred in Anatolia and the Aegean at the end of the 13th century BCE. The so-called marauding bands of invaders were most likely the displaced Mycenaean and Hittites alike searching for new places to inhabit.

The Egyptian account of the invasion of Sea Peoples during the reign of Ramesses III says the Egyptians were victorious over the invaders who were 'hampered by the necessity of protecting their families who accompanied them in slow ox-drawn wagons with heavy solid

wheels' (Leonard 32). This evidence is a clear indication that these so-called Sea Peoples were not the same bands of marauders or groups who fought against the Egyptians with the Libyans. Marauding groups typically did not bring their families and possessions with them unless they intended to stay. In this case, the group of 'invaders' were not marauders, they were simply immigrants.

Further evidence of these migrating peoples occurs on Cyprus in the late 13th century. This period on the island is characterized by the sudden development of 'urban sites'. We see a new set of ashlar buildings, specialist craft production, the development of seals-writing, the institution of a bureaucratic administration, and other signs of new complex regional political entities (Manning 56). At Enkomi, the ancient capital of Cyprus, there is evidence of heavily-fortified external blockades and internal subdivision of a building into small units which might have been aimed at providing shelter for refugees from the northern coast of Syria in the late early 12th century (Negbi 23). Also, the appearance of new predominantly wheel-made ceramic repertory which included fine tableware and coarse kitchenware implied foreign culinary habits since such ceramics were alien to Cypriot tradition (Negbi 24). By the early 11th century BCE, a bronze spit inscribed with a Greek personal name suggests that Greek-speaking people had attained some prominence on the island (Knapp "Bronze Age Mediterranean Island Cultures and the Near East" 120).⁶

Kevin D. Fisher proposes something he calls the 'colonization model' where a great migration of the Aegean people came to Cyprus around 1200 BCE. The people, however, as evidenced by the new constructions at Enkomi were seen as refugees, settlers, or colonists who

⁶ For scholarly opinion on Sea People migration, see Polyzois: Muhly observes new settlers being culturally linked with the west Aegean, but rejects they were actually Aegeans themselves. Redford says they're Aegeans. Schachermeyer concludes they originated from the Helladic themselves, following their destruction. Polyzois argues that migrant populations came to Cyprus and the Levant from the west.

fled their homelands in search of economic opportunities after the collapse of the Mycenaean palatial system. The occupation of new settlers caused dramatic changes within Cypriot social and religious innovations. These new people also brought new innovations in metallurgy, ceramics, art, and architecture. Cyprus then began to locally produce Mycenaean-style pottery (Fisher 81). From the pottery not produced on Cyprus at that time, neutron activation analysis suggests that most of the Mycenaean IIIB pottery found on Cyprus—especially at Enkomi—was manufactured at Tiryns (Fisher 106). This relates to the trade connections discussed earlier where Cyprus and Tiryns allied together. Perhaps this connection allowed migrants from Tiryns to settle Cyprus since the two polities had long partnered in trade and had therefore developed some sort of allied relationship.

This analysis is very interesting because immediately after extensive destruction of the settlements in the Argolid around 1200 BCE, a high proportion of the surviving population probably moved together to the Citadel of Tiryns (Castleden 165). If a high proportion of the population moved to Tiryns, they would have needed to produce basic resources for daily life—including pottery. Perhaps Tiryns served as a launching port for migrations to Cyprus. As Tiryns became overwhelmed, groups of people must have decided to make the journey to Cyprus—with pottery in hand.

Land Migration on the Levantine Coast

From 1400 BCE onward, the presence of Mycenaean objects found in sites in western Anatolia becomes more prevalent with time. Various theories involve the slow acquisition of objects through the vast trade networks between Anatolia and Mycenaean settlements. However, if trade was responsible for the gradual diffusion of Mycenaean objects in Anatolia, one would

expect Anatolian objects to simultaneously occur within the Mycenaean archaeological record. Jorrit M. Kelder proposes that since we have evidence of the direct diplomatic contact between Egypt and Hatti and between Hatti and Ahhiyawa, “the only plausible explanations for the scarcity of the artifacts outside Anatolia are that they are not recognized or they were of a perishable nature” (50).

This explanation, however, does not take into account that by the 13th century, the Hittite empire had already been weakened by war and struck with a famine. Thus, the lack of Hittite artifacts may simply relate to the fact that they had little to trade with foreign nations and had already reverted to small-scale production of resources.

Perhaps one of the most puzzling aspects of Hittite history intertwined with that of the Greeks revolves around the story of the Trojan War. As discussed earlier, Hittite archives provide evidence for repeated contact between the Ahhiyawans and the Hittites. Various texts reference a ‘High King’—argued to be an Agamemnon-type figure at the head of Mycenae or Miletus—as well as campaigns done on the Anatolian mainland by the King of Ahhiyawa himself. Such campaigns bring us curiously close to the Trojan War. Other correspondence relates to the Hittite King claiming that “in the matter of Wilusa over which we were made an enmity, he has changed my mind and we have made friends...A war is wrong for us.” Yet another letter mentions “the matter concerning the town of Wilusa over which we made war” (Castleden 211).

The supposed location of Troy would have been an ideal location at the mouth of the Hellespont for the manipulation of long-distance trade options via the Black Sea route. Access through the Hellespont imposed a toll on foreign traders, so control over the area would have

been a significant success. For the Mycenaeans who traded frequently via the Black Sea route, control of the Hellespont would have been ideal (Castleden 212).

The original dating for the fall of Troy was around 1250 BCE which coincided with the period of the height of Mycenaean power (Castleden 210). The strength of the Mycenaean force at this time would have been able to easily overtake a Hittite empire already weakened by war with Egypt.

Until recently, most scholarship has supported this date and setting for the fall of Troy. However, as Matthew Maher argues, scholars were wrong. New evidence has found that Troy VI was destroyed by a devastating earthquake that hit around 1300 BCE. After analyzing the level of destruction in the walls and the patterns of devastation, archaeologists have found a second destruction which occurred in Troy VII (previously placed in 1250 BCE) (Maher 60). This destruction is characteristically marked by a burnt archaeological layer indicative of a war, if not *the* war. From this period, archaeologists have concluded that the appearance of the destruction of the great walls of Troy VII differs greatly from the damage caused by the 1300 BCE earthquake. Recent scholarship argues that the destruction is undoubtedly of human agency accompanied by violence and fire. The excavated layer included human and cultural remains indicative of military action. Archaeologists also found an arrowhead of mainland Greek type near one of the main walls (Maher 61).

Despite such evidence, Maher proposes the destruction might not have been people, but might have been another earthquake. Carbon-14 dating shows the catastrophe occurred circa 1180 BCE (Maher 61), which is significantly later than previously expected. By this time, the Mycenaean empire had already felt the wrath of its own (or the same) series of earthquakes

which devastated its power. Thus, the Mycenaeans would not have been able to amass any sort of force great enough to attack the walls of Troy. Also, the human remains including the crushed skulls found in the destruction layer of Troy VII may not have been the result of hostile action but rather of the devastating effects of an earthquake. The arrowhead of Greek mainland origin does not necessarily indicate an enemy force. The Mycenaeans and Hittites had been trading since at least 1400 BCE, so the presence of a foreign arrowhead does not necessarily indicate a foreign force.

Though Troy may not have fallen at the hands of a large Mycenaean army, it still most likely saw the migrations of displaced bands of people taking advantage of the land routes from Greece to Anatolia. The archaeological record on the land routes of migration leading from the Aegean world to Cyprus, Southern Anatolia, and further to the Levant clearly shows a trail of material culture left behind from slow integration and occupation (Yasur-Landau 335).

Information recorded by Ramesses III about the ‘camp in the land of Amurru’ together with the depiction of intermarriages with Syrian women, strongly suggests that a substantial number of migrants stayed in Syria for some years before continuing south into Canaan (Yasur-Landau 336).

The evidence for strong Aegean influence along the Levantine during the Late Bronze Age gives rise to the theory that Mycenaeans were also colonizing the Syria-Palestine region following the destruction of the major Helladic palatial centers at the end of the LHIIIB period. After examining the material record of major sites, archaeologists including Ann Killebrew⁷ and

⁷ See Killebrew, Ann. *Biblical Peoples and Ethnicity: An Archaeological Study of Egyptians, Canaanites, Philistines, and Early Israel 1300-1100 B.C.E.* Georgia: Society of Biblical Literature, 2005. Print

Brian Hesse⁸ have discovered an intense Aegean presence in the Levant from ca. 1200-1080 BCE. Such a migration did not happen all at once, but rather involved a gradual process of infiltration (Polyzois 115). The archaeological record has also shown conclusively that the introduction of Mycenaean pottery was initially confined to what is called the ‘Philistine Pentapolis’—that is, the towns of Ashdod, Ekron, Gaza, Ashkelon, and Gath. This initial appearance of Mycenaean pottery has been attributed to the Sea Peoples following their failed attempt to invade Egypt in the eighth year of Ramesses III (ca. 1175) (Polyzois 118).

Similar to the urban development found on Cyprus between ca. 1190 and 1140 BCE, the Levant also shows a complex pattern of urban settlement especially within the ‘Philistine Pentapolis.’ Here archaeologists have found the use of Cyclopean fortifications, Ashlar masonry, and Mycenaean-style central hearths occurring frequently at such sites along the Levantine coast in the early 12th century BCE (Polyzois 118).

Aristomenes Polyzois argues that “the process of immigration appears to have been complex and included many different groups of settlers who originated from parts of the Aegean world and beyond” (118). These migrant populations, Polyzois argues, came to Cyprus and the Levant from the west, bringing with them a highly organized social structure, innovative technologies, and a developed maritime tradition. The gradual process of infiltration and settlement began with trade exchanges during the initial phase of the LHIIB period and then started to taper off during the LHIIC settlement phase of displaced Aegeans at various Levantine coastal sites following the destruction of the Mycenaean palatial centers and the subsequent ‘crisis’ which struck the remaining empires in the eastern Mediterranean world

⁸ See Hesse, Brian and Paula Wapnish. “Can pig remains be used for ethnic diagnosis in the ancient Near East?” *The Archaeology of Israel: Constructing the Past, Interpreting the Present*. Ed. Neil Asher Silberman, Philip and Muriel Berman. England: Sheffield Academic Press, 1997. Print

(Polyzois 120). This argument is well supported in the archaeological record and seems to be the most logical explanation for the gradual migration of Philistines to the Levantine coast.

To support this point, Brian Hesse and David R. Lipovitch's research on the faunal record from Mycenaean and Philistine sites provides the greatest evidence. They argue that if the origin of the Philistines traces back to the Mycenaean world, it is reasonable to assume that upon migrating to the Levantine coast, they brought their diet with them. Thus, the faunal record in Philistine settlements should reflect a LHIII Aegean culinary pattern (Lipovitch 115).

Lipovitch examined the faunal record from a known Philistine site as well as those from three Mycenaean sites—Nichoria, Lerna, and Tiryns. The faunal records from each Mycenaean site, in fact, did significantly compare to that of the Philistine site record. Within the Philistine site, Hesse found an increase in the amount of cattle with the onset of the Iron Age as well as a significant increase in the amount of pig (both animals were manipulated by each region). During the subsequent Iron II, the proportional amounts of both of these species decreased, returning to level similar to those seen in pre-Iron I levels (Lipovitch 150). From this date, it is clear that the Philistine presence at the site did not replace the diet of the local population, but rather augmented it. Lipovitch argues that “the faunal evidence very likely reflects a mixing of Aegean and local dietary practices” (151).

CHAPTER 6

Analysis and Conclusions

Studying the ancient Mediterranean world is a challenging and frustrating discipline. In a world of extravagant wealth, devastating poverty, vast trade networks, rivaling polities, and epic battles between enormous empires, it is nearly impossible to understand everything that happened or how it all started. Anthropologists, archaeologists, historians, and other scholars can attempt to comprehend the ancient world by analyzing contemporary texts from the Hittites and Egyptians as well as by examining the archaeological record left behind; yet, the ancient nature of such texts creates linguistic issues as well as preservation issues, and the archaeological record itself leaves enormous periods of time undocumented and often unexplained. Comprehending the ancient past is like reconstructing a massive puzzle without 60% of its pieces. There are elements regarding the history of the Mediterranean Bronze Age that researchers simply cannot know just from examining what has been left behind.

Based on all the research done for this thesis, a few conclusions have been drawn which appear to be accurate and well-supported with archaeological and textual evidence. To an extent, all the destructions of all the major empires in the Mediterranean world are connected to each other in certain ways. However, each empire experienced its own series of catastrophic events. These events then influenced the function of the trade networks and correspondence connecting all the palaces together. Once in weakened conditions, palaces were easily overcome.

Shortly before the Mycenaean empire fell, the Hittite Empire experienced widespread

drought and famine. With its previous conflict with the Egyptian empire and the threats of invaders and hostile presences on other sides of the empire, the Hittite King could not hold his dominion together. The people starved, rebelled, and the centralized power of the King and all redistributive and trade networks collapsed.

At the same time, the Mycenaean Empire began to feel the wrath of a series of devastating earthquakes beginning shortly after 1250 BCE. Though efforts were made to rebuild the palace complexes, nature's vengeance brought down the palaces indefinitely. With a collapsed palace system and loss of redistribution and trade similar to the Hittite Empire, the people of Mycenaean civilization were forced to look for other methods and locations for survival.

Some of these people looked to the sea—to the vast island networks which scattered across the Mediterranean. As they migrated, the Mycenaean began to be equated with the Sea Peoples who had long devastated coastal cities and island in the Mediterranean. However, those who migrated to Cyprus played an integral role in the development of the island as one of the strongest island powers in the Mediterranean.

Other migrations slowly began to merge down into the weakened Hittite Empire and then further south into the Levantine coastal cities. Though the cities had long been areas of migrations for various peoples of the sea, the gradual influence of the Mycenaean instigated a slight change in the diet of the region as well as the artifacts found in archaeological excavations in Levantine coastal cities. With the increased presence of these migrating peoples, the already weakened Hittite and Egyptian empires could no longer withstand the pressures of a collapsed trade network and a loss of political centralization. The major palaces of the Mediterranean

collapsed into darkness.

At the close of the Late Bronze Age in the Mediterranean, the decline of trade in every state, the loss of any written language in Greece, and the enormous decline in artifacts attests to the complete end of an age. At the height of the Bronze Age, the empires spread throughout Greece, Anatolia, and Egypt commanded vast dominions manipulating all available resources through trade and redistribution and they collaborated with other Mediterranean polities and beyond.

What we still lack from this age is the history of its people. What were they like? Was there an Agamemnon-type leader seated in the megaron of Mycenae who overlooked the affairs of an extensive civilization? Why were so many Mycenaean polities heavily depopulated immediately following their demise? It is difficult to take into account any religious associations with the migrations of the Mycenaean peoples since we know so little of their religion or of the condition of the common people. Though the kings and queens of Mycenae left behind a rich archaeological trail, evidence of the local populace is scarce.

At the demise of every era, one must always consider the light at the end of the tunnel. The collapse of the great Mycenaean empires of the Bronze Age allowed for the rise of the great empires of the Iron Age. The Phoenicians began to control trade and spread their culture throughout the Mediterranean region which gave life to the devastated peoples across the land and sea, and the Near East through the Philistines in Palestine began to rise in power. The Hellenic world experienced the rise of the archaic and classical Greek civilization—one of the most dynamic and fundamentally significant periods to modern civilization.

We may never know the whole tale of the Mediterranean Bronze Age, but every new

excavation and study of the region takes archaeologists, anthropologists, historians, and scholars alike one step closer to understanding the forces of destruction which led to the collapse of one of the most extravagantly wealthy periods of time in the ancient Mediterranean world.

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APPENDIX

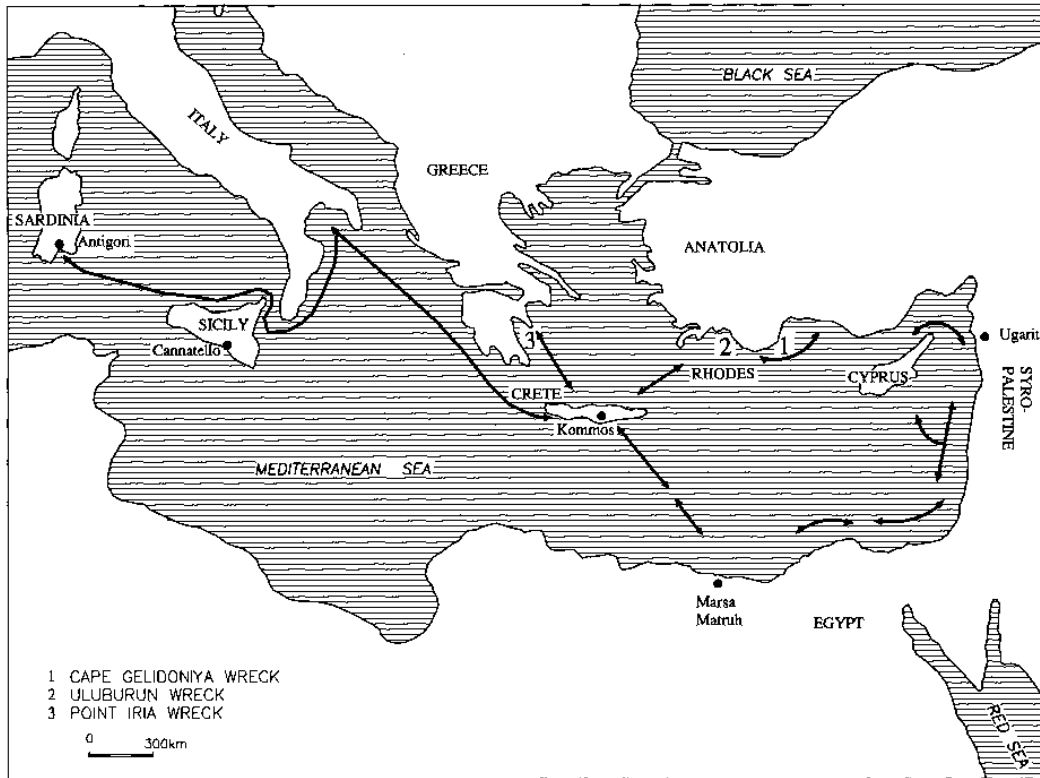


Figure 1. Map of the main maritime routes in the Mediterranean ca. 1300-1200 BCE. (after Negbi 19)

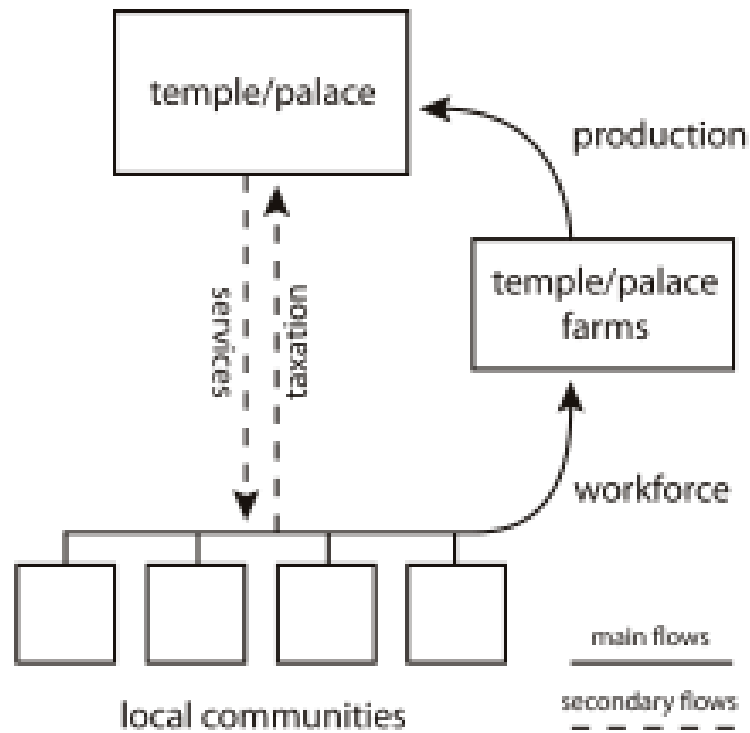


Figure 2. Liverani's model of Bronze Age Near Eastern political economy (after Halstead fig.2)



Figure 3. Example of Cyclopean masonry on a Mycenaean bridge. Photo by Katherine Burlingame

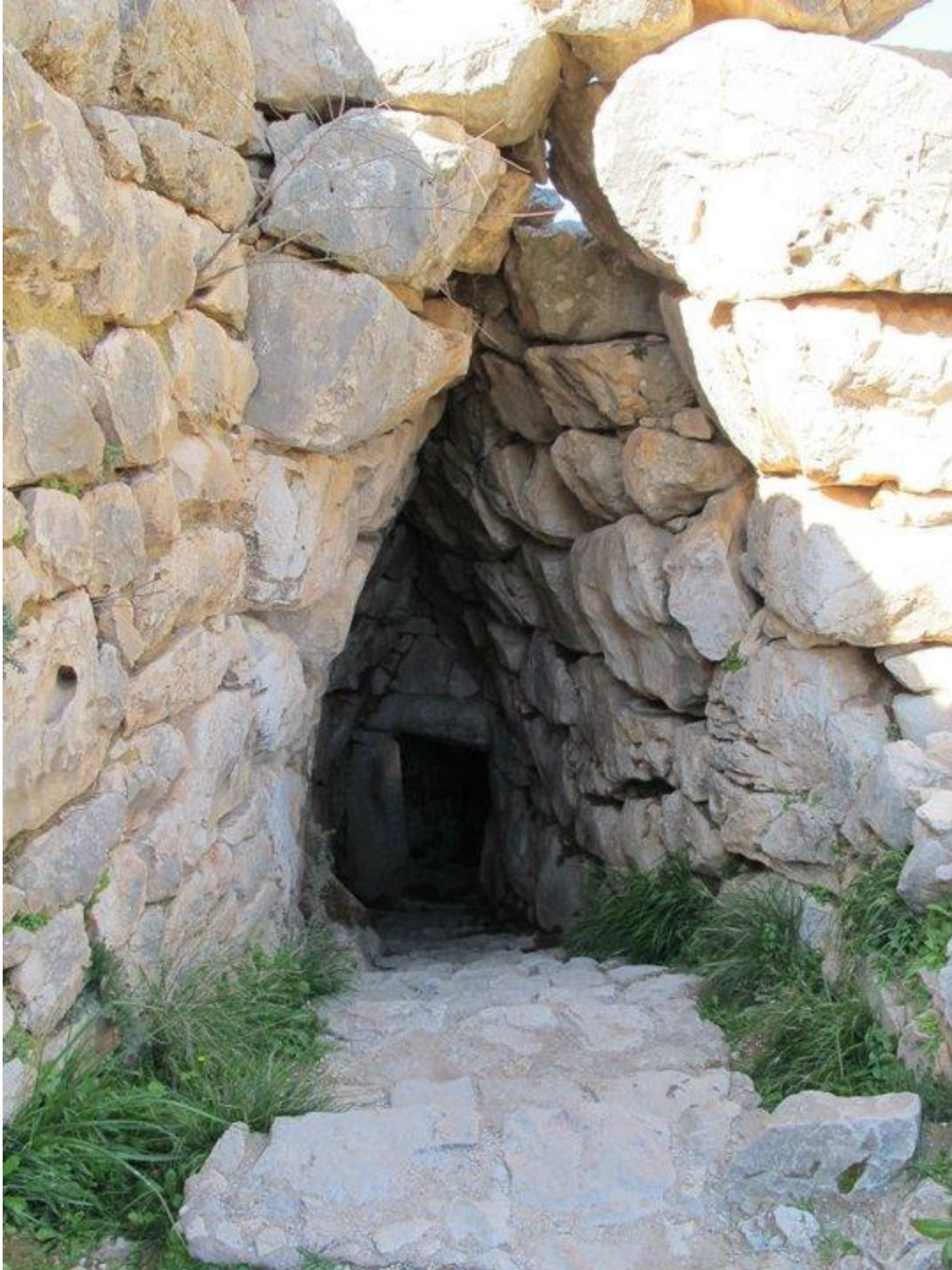


Figure 4. Path to fortified Mycenaean cistern at Mycenae, Greece. Photo by Katherine Burlingame.



Figure 5. Example of Mycenaean stone relief work. The Lion's Gate at Mycenae, Greece.
Photo by Katherine Burlingame.

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