

THE LIGHT OF DARK-AGE ATHENS:  
FACTORS IN THE SURVIVAL OF ATHENS AFTER THE FALL OF MYCENAEAN  
CIVILIZATION

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When looking at Dark Age Greece, one of the most important sites to consider is Athens. The Dark Age was a transitional period between the fall of Mycenaean Greece of the Bronze Age, and Archaic Greece of the Iron Age. This period is called the Dark Age because the palaces that ruled the Mycenaean age collapsed, and with them fell civilization in mainland Greece. Writing, fine art, massive architecture, trade, and luxury goods disappear from mainland Greece. But Athens survived the fall of the Mycenaeans. In order to understand the reason why Athens survived one must look at what the causes of the fall of the Mycenaeans were. Theories range from raiders and invasion, to natural disasters, such as earthquakes, droughts, and plagues. One must also examine Greece itself. The landscape and climate of Greece have a large impact on the settlement of the Greeks. The land of Greece also affects what Greek communities were able to do economically, whether a city would be rich or poor. It is because Athens is located in Attica that it survived. Attica had the poorest soil in the Mycenaean world, and was the poorest of the major cities, therefore, when looking at the collapse of the Mycenaeans being caused by people, there would be no reason for said people to raid or invade Athens and Attica. It is because Athens survives that it is such an important site. Athens survived the fall of the Mycenaeans and in doing so acts as a refugee center and a jumping off point for the remaining Mycenaeans to flee east, to the Aegean islands and Anatolia. Athens also stayed occupied during the Dark Age and because of this it was able to make some advancements. In particular Athens was a leader in mainland Greece

in the development of iron. Not only this, but Athens became a cultural center during the Dark Age, inventing both proto-geometric and geometric pottery. These styles were adopted by the rest of the Greek world, and Athens was looked to as the influence for these styles. It is because Athens was the poorest city and Attica the poorest area during the Mycenaean age that it survived. Because it survived it was able to continue to develop and in turn influence the rest of mainland Greece.

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## ABBREVIATIONS

EHI	Early Helladic I
EHII	Early Helladic II
EHIII	Early Helladic III
MH	Middle Helladic
LHI	Late Helladic I
LHII	Late Helladic II
LHIIIA	Late Helladic IIIA
LHIIIB	Late Helladic IIIB
LHIIIC	Late Helladic IIIC
SM	Sub Mycenaean
PG	Proto Geometric
G	Geometric

## CHAPTER 1

### THE DARK AGE: WHAT MADE IT DARK

Greece went through several distinct periods. Greek civilization started in the Bronze Age with the Mycenaean Greeks. The Bronze Age and the Mycenaeans ended at the same time, with the start of the Greek Dark Age. After the Dark Age the Iron Age started in Greece and the Archaic Age began. The Classical and Hellenistic periods follow before the Romans took over.<sup>1</sup> What we will be looking at is Athens during the transition between the Mycenaean Period and the Archaic Period, the Dark Age of Greece. This will encompass the end of the Mycenaean Period, the fall of the Mycenaeans, and the survival of Athens after the fall of the Mycenaeans. With the survival of Athens it is important to look at how it prospered during the Dark Age, helping to bring about the revival of Greek culture and the Archaic Age. To begin one must examine why the Dark Age was called dark.<sup>2</sup>

The Mycenaean Age was ruled by *wa-na-ka* from palaces that were spread across Greece.<sup>3</sup> *Wa-na-ka* is the Mycenaean word for king or leader. With the fall of the Mycenaeans many things disappeared. Among these are luxury items such as gold, silver, ivory, and monumental stone architecture.<sup>4</sup> The *wa-na-ka* and palaces controlled many aspects of Greek life and, in many ways, without them one would know very little about the Mycenaeans. It was for the *wa-na-ka* that art and writing were used and after there were no more *wa-na-ka* the need and

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<sup>1</sup> See appendix Figure 1, time line.

<sup>2</sup> William R. Biers, *The Archaeology of Greece: An Introduction* (Ithaca: Cornell University Press, 1992), 97.

<sup>3</sup> See appendix Figure 2, map of Mycenaean sites.

<sup>4</sup> John Camp and Elizabeth A. Fisher, *Exploring the World of the Ancient Greeks* (London: Thames & Hudson, 2010), 60.



use of these disappeared.<sup>5</sup> One of the most important things that defines a civilization and gives clues to how a people lived is their writing. In the case of the Mycenaeans it was the writing of Linear B.<sup>6</sup> As far as we know Linear B was written only by palace scribes for official business.<sup>7</sup> When the *wa-na-ka* and the ruling class disappeared, killed in wars and fleeing to other parts of the world, one sees that writing completely disappeared. This proves that the illiteracy in Mycenaean Greece was prevalent. Only the palace and the scribes were able to read or write and the peasants were not able to do so.<sup>8</sup>

The *wa-na-ka* and ruling class also controlled luxury items in Mycenaean Greece and the peasants had no need for these items. So, when the *wa-na-ka* went by the wayside the luxury goods and art disappeared as well. Before the fall there were many examples of gold, silver, and fine art. After this time there is no evidence of these items, almost no graves with gold, gems, or objects of fine craftsmanship.<sup>9</sup> It is assumed that when the *wa-na-ka* and all types of luxury goods disappeared, the people who made these luxury goods disappeared. The population was severely depleted after the fall of the palaces.<sup>10</sup>

It was not only luxury items that were controlled by the *wa-na-ka* and palaces; they also controlled the economy and most of the excess food that was produced in the area. In fact, the

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<sup>5</sup> Biers, *The Archaeology of Greece*, 97; V.R.D'A Desborough, *The Last Mycenaeans and Their Successors; An Archaeological Survey, c. 1200-1000 B.C.* (Oxford: Clarendon Press, 1964), 244.

<sup>6</sup> Paul Cartledge, *Ancient Greece: A History in Eleven Cities* (Oxford: Oxford University Press, 2009), 30.

<sup>7</sup> Anthony M. Snodgrass, *Archaic Greece: The Age of Experiment* (Berkeley: University of California Press, 1981), 79.

<sup>8</sup> M. I. Finley, *Early Greece; The Bronze and Archaic Ages* (New York: Norton, 1981), 61.

<sup>9</sup> Finley, *Early Greece*, 70; Camp and Fisher, *Exploring the World of the Ancient Greeks*, 60; Biers, *The Archaeology of Greece*, 97; Dan Stanislawski, "Dark Age Contributions to the Mediterranean Way of Life," *Annals of the Association of American Geographers* 63, no. 4 (1973), 399; Desborough, *The Last Mycenaeans and Their Successors*, 243.

<sup>10</sup> Oswyn Murray, *Early Greece* (Cambridge: Harvard University Press, 1993), 12; R.A. Tomlinson, *Argos and the Argolid: From the End of the Bronze Age to the Roman Occupation* (Ithica: Cornell University Press, 1972), 53.

palaces controlled a large portion of the Mycenaean Greek economy; both food and other items went through the palaces, as attested by the tablets found in storage places.<sup>11</sup> This will be shown in chapter 4. When the Mycenaean Age ended, the palaces no longer functioned. With the fall of the palaces comes major economic disruption.<sup>12</sup> Trade seemed to stop and whatever travel did happen was for survival and not trade.<sup>13</sup> Items stored and controlled by the palace were numerous, not only luxury items like gold, but also things produced by the peasants, such as wool and food. In the largest storage rooms there is evidence that the palaces were concerned with food and wanted to be able to control and distribute it as they saw fit. One also finds wool and flax, wheat, barley, honey, wine, and olives.<sup>14</sup>

The interesting thing about some of these items is that they were produced by farmers, but were not used for food, or even by the locals in large amounts. Olives, for instance, were not a major food item; instead they were used for their oil. Olive oil today is one of the most used oils for cooking but there is little evidence that this is what the Mycenaean and other cultures used it for at this time. It seemed that olive oil was used mostly for oil lamps, perfume, religious rituals, and medicinal ointments. While olives grow wild in Greece, even at this time they were cultivated; because cultivated olives produce more oil. In fact, it seemed that a significant amount of the olive oil produced in Greece was sold to foreign peoples.<sup>15</sup> An example of this is the Egyptian city of Amarna, the capital during the reign of Akhenaten, ca. 1351-1334 BC. In

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<sup>11</sup> William H. Stiebing, "The End of the Mycenaean Age," *The American Schools of Oriental Research: The Biblical Archaeologist*, 43, no. 1 (1980), 17.

<sup>12</sup> Stanislawski, "Dark Age Contributions to the Mediterranean Way of Life," 399.

<sup>13</sup> Louise Schofield, *The Mycenaean* (Los Angeles: J. Paul Getty Museum, 2007), 170.

<sup>14</sup> Foxhall, "Bronze to Iron: Agricultural Systems and Political Structures in Late Bronze Age and Early Iron Age Greece," *The Annual of the British School at Athens*, 90 (1995), 241.

<sup>15</sup> Foxhall, "Bronze to Iron," 242; Leonard Palmer, *Mycenaean and Minoan; Aegean Prehistory in the Light of the Linear B Tablets* (New York: Knopf, 1965), 113.

this city, which was only occupied for twenty years, are the remains of 600 Mycenaean vessels, most of which were stirrup jars used for olive oil.<sup>16</sup> This means that when the palaces fell, and the economic structure behind olives was no longer active, many farmers who had relied on income from olive oil production had to find something else to do or leave the area, yet another cause of the depopulation.

The last things that disappeared with the fall of the *wa-na-ka* and palaces were stone buildings and massive architecture.<sup>17</sup> The use of large buildings were not needed without the *wa-na-ka* and palaces. Instead, the use of small huts took place and, instead of using stone, they used mud bricks.<sup>18</sup> It seems that the only reason that there had been stone buildings and monumental architecture was for the *wa-na-ka*. The ordinary peasant did not need or see the point in having massive stone dwellings. The other type of building that used massive stone architecture were the temples, but these too were built by the *wa-na-ka* and elites, so they also disappeared with the fall of the palaces. In fact even during the Mycenaean Age temples were not numerous and they do not start to reappear on mainland Greece until the end of the Dark Age during the late Geometric Period, around 800 BC.<sup>19</sup> Only three temples are found dating to the Dark Age in

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<sup>16</sup> Jorrit Kelder, "The Egyptian Interest in Mycenaean Greece," *Vooraziatisch-Egyptisch Genootschap "Ex Oriente Lux,"* 42 (Jaarbericht: Annuaire de la Societe Orientale, 2010), 130.

<sup>17</sup> Desborough, *The Last Mycenaeans and Their Successors*, 32; John Coulton, *Ancient Greek Architects at Work: Problems of Structure and Design*, (Ithaca: Cornell University Press, 1977), 30.

<sup>18</sup> Anthony M. Snodgrass, *The Dark Age of Greece: An Archaeological Survey of the Eleventh to the Eighth Centuries BC* (New York: Routledge, 2001), 361.

<sup>19</sup> Susan Langdon, *New Light on a Dark Age: Exploring the culture of Geometric Greece* (Columbia: University of Missouri Press, 1997), 125; Peter James, I.J. Thorpe, *Centuries of Darkness: A Challenge to the Conventional Chronology of Old World Archaeology* (New Brunswick: Rutgers University Press, 1993), 88; Bernhard Schweitzer, *Greek Geometric Art* (New York: Phaidon, 1971), 221; Christiane Sourvinou-Inwood, "Early Sanctuaries, The Eight Century and Ritual Space: Fragments of a Discourse," In *Greek Sanctuaries New Approaches*, ed. Nanno Marinatos and Robin Hägg, (London: Routledge, 1993), 10; Desborough, *The Last Mycenaeans and Their Successors*, 46-47; Oliver Dickinson, *The Aegean from Bronze Age to Iron Age: Continuity and Change between the Twelfth and Eighth Centuries BC* (London: Routledge, 2006), 235; Biers, *The Archaeology*

mainland Greece, all in Attica, and it appears that small natural shrines and sanctuaries were primarily used.<sup>20</sup>

As previously hinted the causes of the Dark Age were many and in several ways very complex. The invasion of non-Mycenaeans caused much strife in Greece. The *wa-na-ka* struggled to defend themselves by building walls and fortification in parts of Greece and around their cities, but this did not help. The Mycenaeans fell victim to the invasions and raids of outside peoples, and the *wa-na-ka* and palace structures were destroyed. Ramifications of the fall of the palaces were wide. The palaces controlled many aspects of Mycenaean life. Without palace administration it was very hard to survive, with the fall of the *wa-na-ka* and the palaces many other aspects of life were affected. The economy failed without the palaces there to control the flow of goods. The technology used by the palaces- writing, food storage, fine craftsmanship, and monumental architecture was no longer needed, and so these too disappeared.

With all of these things, there was, lastly, a large depopulation all across the Mycenaean world.<sup>21</sup> When the palaces fell there was a drop in population, almost as if the *wa-na-ka* and their palaces had kept people gathered, and when there was no one to rule over them, the people migrated elsewhere and ruled over themselves.<sup>22</sup> But, Athens was different. Athens also saw the disappearance of technology, luxury goods, and writing, but it survived the collapse and stayed

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*of Greece*, 113; Finley, *Early Greece*, 129; Snodgrass, *Archaic Greece*, 33; Chester Starr, *The Origins of Greek Civilization: 1100-650 B.C.* (New York: Norton, 1991), 173; John Pedley, *Sanctuaries and the Sacred in the Ancient Greek World* (New York: Cambridge University Press, 2005), 62; Emily Vermeule, *Greece in the Bronze Age* (Chicago: Chicago University Press, 1964), 160.

<sup>20</sup> Langdon, *New Light on a Dark Age*, 118-119; George Mylonas, *Mycenae and the Mycenaean Age* (Princeton: Princeton University Press, 1966), 148; James Whitley, *The Archaeology of Ancient Greece* (Cambridge: Cambridge University Press, 2010), 134.

<sup>21</sup> Stanislawski, "Dark Age Contributions to the Mediterranean Way of Life," 399.

<sup>22</sup> Biers, *The Archaeology of Greece*, 99; Foxhall, "Bronze to Iron," 24; M. I. Finley, *The Ancient Greeks* (New York: Penguin, 1987), 16.

populated.<sup>23</sup> The fact that Athens survived the fall of the Mycenaeans was known to later generations of Greeks. When writing returned many things were recorded. One of the first and best of the ancient historians in Greece, Thucydides, wrote about the fall of the Mycenaeans and even wrote why it happened.

For instance, it is evident that the country now called Hellas had in ancient times no settled population; on the contrary, migrations were of frequent occurrence, the several tribes readily abandoning their homes under the pressure of superior numbers. [2] Without commerce, without freedom of communication either by land or sea, cultivating no more of their territory than the necessities of life required, destitute of capital, never planting their land (for they could not tell when an invader might not come and take it all away, and when he did come they had no walls to stop him), thinking that the necessities of daily sustenance could be supplied at one place as well as another, they cared little about shifting their habitation, and consequently neither built large cities nor attained to any other form of greatness. [3] The richest soils were always most subject to this change of masters; such as the district now called Thessaly, Boeotia, most of the Peloponnesus (Arcadia excepted), and the most fertile parts of the rest of Hellas. [4] The goodness of the land favored the enrichment of particular individuals, and thus created faction which proved a fertile source of ruin. It also invited invasion. [5] Accordingly Attica, from the poverty of its soil enjoying from a very remote period freedom from faction, [6] never changed its inhabitants. And here is no minor example of my assertion that the migrations were the cause of there being no correspondent growth in other parts. The most powerful victims of war or faction from the rest of Hellas took refuge with the Athenians as safe retreat; and at an early period, becoming naturalized, swelled the already large population of the city to such a height that Attica became at last too small to hold them, and they had to send out colonies into Ionia.<sup>24</sup>

Athens was poor, therefore when the rest of Mycenaean Greece fell, Athens survived.<sup>25</sup>

The other cities in Mycenaean Greece fell because they were richer and underwent more change and population shifts.<sup>26</sup> Athens and the surrounding area of Attica was much poorer than the rest of mainland Greece inhabited by the Mycenaeans: Boeotia and the Peloponnesus. Because of this,

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<sup>23</sup> Finley, *Early Greece*, 61.

<sup>24</sup> Thucydides, 1.2 (Crawley trans., *Landmark Thucydides* edn).

<sup>25</sup> Thucydides, 1.2.3-4.

<sup>26</sup> Thucydides, 1.2.5.

whatever force that caused the end of the Mycenaean period had a much smaller impact on Athens. Even though Athens lost writing and luxury goods, Athens survived and even prospered during the Dark Age. Because of this, it contributed to the survival of Greece and would eventually become a leading *polis*, a Greek city state, enough that it became the capital of modern Greece.

## CHAPTER 2

### THE FALL OF THE MYCENAEANS: THEORIES ABOUT THE FALL OF THE MYCENAEANS

If one examines the transitional period between the Bronze Age and the Iron Age one sees that it was started by what appeared to be a massive level of destruction in the ancient eastern Mediterranean world. In the years between 1250 BC and 1150 BC there were many disruptions to the Mediterranean and near eastern world.<sup>1</sup> There are many theories about what happened to the civilizations around the ancient world at this time. Drought, famine, earthquakes, internal strife, war, invasion, and raiders are some of the theories, although no one has ever proven exactly what happened. But, there were written records of raiders and invaders in Egyptian hieroglyphs, and in Hittite and Ugarit tablets. These disruptions were sometimes attributed to the “Sea Peoples.” The Egyptians used this term to describe the tribes that were attacking them and others during this time period. This happened during two different pharaohs’ reigns, Merneptah (1213-1203 BC) and Ramses III (1186-1155 BC), and so it can be seen that this was an ongoing trouble that lasted for several decades.<sup>2</sup> The Egyptians even listed off several different tribes that were committing these acts, and some are even believed to be from Greece.<sup>3</sup> These attacks that were happening across the eastern Mediterranean appear to be

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<sup>1</sup> See appendix Figure 3, map of disruptions.

<sup>2</sup> Finley, *Early Greece*, 56-57; Robert Drews, *The End of the Bronze Age: Changes in Warfare and the Catastrophe Ca. 1200 B.C.* (Princeton: Princeton University Press, 1993), 48; Vermeule, *Greece in the Bronze Age*, 272-273.

<sup>3</sup> The ekwesh- believed to be the Greek Achaeans, the denyen- possibly the Greek danaoi, the teresh, the tyrrhenians- believed to be the Etruscans, the luka- Anatolians from the region of Lycia, the sherden- believed to be Sardinians, the shekelesh- from Sicily, the peleset- Greeks from Crete, the thekrur- believed to be Greek teucrians, the Libyans, the meshwesh- from the area of Tunis, the weshesh, the tursha, the tjekker.

<sup>4</sup> Drews, *The End of the Bronze Age*, 49-54; James Henry Breasted, *Ancient Records of Egypt: Historical Documents from the Earliest times to the Persian Conquest*, vol. 3 (New York: Russell & Russell, 1962), 238-264; James Breasted, *Ancient Records of Egypt: Historical Documents from the Earliest times to the Persian Conquest*, vol. 4 (New York: Russell & Russell, 1962), 18-67; Kelder, “The Egyptian Interest in Mycenaean Greece,” 126-127; N. K. Sandars, *The Sea Peoples: Warriors of the Ancient Mediterranean, 1250-1150 B.C.* (London: Thames &

almost like the Germanic tribes that invaded Rome, or even the Viking raiders of the Middle Ages.<sup>5</sup> They are acts of different peoples with different purposes, depending on the time, to raid and pillage, or to invade and settle. There was settlement during the second attack on Egypt, down the Levant during the reign of Ramses III, 1181 BC to 1176 BC, between the fifth and tenth years of his reign.<sup>6</sup> The area that was invaded and settled was named Philistine, after the tribe that eventually settled there, which had many Mycenaean characteristics and names, including pottery.<sup>7</sup> Those people are believed to have come from Mycenaean Greece.<sup>8</sup>

The Hittites also had trouble at this time.<sup>9</sup> The records of the Hittites at the end of their rule indicate troubles from bands that were infringing on their territory and raiding along the coast and inland from the coast.<sup>10</sup> The Hittites mentioned the name of a people from the islands and coast, the *Achchiyawa*, which some believe refers to the Achaeans, the name Homer used for the Mycenaean Greeks.<sup>11</sup> The Hittite texts mentioning the *Achchiyawa*, describe them as coming

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Hudson, 1985), 105-137; Pierre Demargne, *The Birth of Greek Art*, trans. Stuart Gilbert and James Emmons (New York: Golden Press, 1964), 281; Vermeule, *Greece in the Bronze Age*, 271.

<sup>5</sup> Tomlinson, *Argos and the Argolid*, 51-52; Nancy Sandars, "North and South at the End of the Mycenaean Age: Aspects of an Old Problem," *Oxford Journal of Archaeology*, 2, no. 1, (1983), 63-64.

<sup>6</sup> Breasted, *Ancient Records of Egypt*, vol. 4, 35-114; Sandars, *The Sea Peoples*, 117-121.

<sup>7</sup> Sandars, *The Sea Peoples*, 67; Desborough, *The Last Mycenaeans and Their Successors*, 237-238; Manuel Robbins, *Collapse of the Bronze Age: The Story of Greece, Troy, Israel, Egypt, and the Peoples of the Sea* (San Jose: Authors Choice Press, 2001), 316; Trude Dothan, *The Philistines and Their Material Culture*, (New Haven: Yale University Press, 1982), 96; Trude Dothan, "Mycenaean IIIC: 1b Pottery," In *The Sea Peoples and Their World: A Reassessment*, ed. Eliezer Oren (Philadelphia: University Museum, 2000), 153; Ann Killebrew, "Aegean-Style Early Philistine Pottery in Canaan During the Iron I Age: A Stylistic Analysis of Mycenaean IIIC: 1b Pottery and Its Associated Wares," In *The Sea Peoples and Their World: A Reassessment*, ed. Eliezer Oren (Philadelphia: University Museum, 2000), 234.

<sup>8</sup> Finley, *Early Greece*, 57; Drews, *The End of the Bronze Age*, 55; Kelder, "The Egyptian Interest in Mycenaean Greece," 126-127; Robbins, *Collapse of the Bronze Age*, 317.

<sup>9</sup> The Hittites controlled parts of the areas of modern day Turkey and the upper Levant.

<sup>10</sup> Sandars, *The Sea Peoples*, 139-141.

<sup>11</sup> Finley, *Early Greece*, 56; Hans G. Guterbock, "The Hittites and the Aegean World: Part 1. The Ahhiyawa Problem Reconsidered." *American Journal of Archaeology* 87, no. 2 (1983), 133-138; Hans G Guterbock, "Hittites and Akhaeans: A New Look." *Proceedings of The American Philosophical Society*, 128, no. 2 (1984), 114-122; Trevor Bryce, *The Kingdom of the Hittites* (Oxford: Clarendon Press, 1998), 60; Machteld J. Mellink, "The Hittites and the Aegean World: Part 2. Archaeological Comments on Ahhiyawa-Achaians." *American Journal of Archaeology*, 87, no. 2 (1983), 138-141.



from the coast, islands, and landmass across the sea.<sup>12</sup> It was during this time period that the city of Troy fell, and according to Homer it was the Mycenaeans who raided it.<sup>13</sup> While there is no positive evidence of what happened, it is true that around the year 1200 BC Troy VII fell, the Hittite empire fell, and there was an oral tradition that the Mycenaeans raided the coast of Anatolia.<sup>14</sup> This is even backed up by foreign texts. Both Hittite and Phoenician texts talk about names in Greek legends in Anatolia, even associated with the city from the legends. This is the legend that a Theban, Mopsus, fled Greece before the Trojan War, and founded the kingdom of Cilicia at the settlement of Tarsus.<sup>15</sup> This time period was one with much upheaval. The Mycenaeans came under attack, the Hittites were wiped out, the Egyptians were forced to defend themselves, their territory shrank and they never recovered.<sup>16</sup>

One of the places that had this disruption was Greece. The Mycenaeans controlled mainland Greece, some of the islands of the Aegean Sea and parts of the coast of Anatolia. In the years between 1250 BC and 1150 BC, a series of invasions took place all over the ancient world. These invasions were attributed to the “Sea Peoples”, this is not one people but groups of tribes that at this time seemed to conduct raids and even settlement invasions in different areas around the eastern Mediterranean world.<sup>17</sup> While Greece was not absent from these attacks, according to Greek legend, it was a group called the Dorians who were responsible for the invasion and destruction of Mycenaean Greece.<sup>18</sup> Whether the Dorians or the Sea Peoples, the years 1200 BC

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<sup>12</sup> Vermeule, *Greece in the Bronze Age*, 272.

<sup>13</sup> Finley, *Early Greece*, 60.

<sup>14</sup> Desborough, *The Last Mycenaeans and Their Successors*, 238-239; Demargne, *The Birth of Greek Art*, 284.

<sup>15</sup> George Huxley, *The Early Ionians* (London: Faber, 1966), 20-21.

<sup>16</sup> Thomas R. Martin, *Ancient Greece: From Prehistoric to Hellenistic Times* (New Haven: Yale University Press, 2013), 31; Finley, *Early Greece* 56-57; Vermeule, *Greece in the Bronze Age*, 273.

<sup>17</sup> Tomlinson, *Argos and the Argolid*, 52.

<sup>18</sup> Herodotus, 2.171.8, 9.26.8-24; Thucydides, 1.12.10-17.

to 1150 BC are the most recognized dates for the destruction of the Mycenaeans.<sup>19</sup> The first cities seemed to have been destroyed around 1200 BC, on the outlying parts of the Greek world, and by 1150 BC the major centers for the Mycenaean Greek world Mycenae, Pylos, and Tiryns had fallen.<sup>20</sup> During the Bronze Age, it was the Mycenaeans that ruled over Greece, but this stopped with the disruptions that happened in Greece. Between 1200 BC and 1150 BC almost every city in Mycenaean Greece was destroyed.<sup>21</sup> By the end of 1100 BC, all but Athens had either been burned or abandoned.<sup>22</sup>

When examining the destructions, one notices that they seem to start in the north and move southward in Greece.<sup>23</sup> Note that the Mycenaeans knew these people were coming.<sup>24</sup> Rulers of Peloponnesian cities tried to prepare for invasions from the north. They rebuilt and strengthened the fortifications around their cities with massive stone walls and battlements.<sup>25</sup> Later Greeks would call these “cyclopean walls,” because they could not believe that ordinary men could build with such huge stones.<sup>26</sup> Preparations by cities across Greece for fending off invasion and raids were impressive. Almost all the cities in Greece showed signs of fortification. Mycenae, the city after which the Mycenaean Greeks were named, shows signs of substantial fortifications and preparations. The walls were reinforced and enlarged twice, the second time to encompass more area and to give better access to a fortified well that was dug deeply. Tiryns

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<sup>19</sup> Finley, *The Ancient Greeks*, 15.

<sup>20</sup> Tomlinson, *Argos and the Argolid*, 52; Vermeule, *Greece in the Bronze Age*, 270.

<sup>21</sup> Murray, *Early Greece*, 8.

<sup>22</sup> James Wiseman, "Greece and Early Greeks," *Arion*, 4, no. 4 (1965), 717; Desborough, *The Last Mycenaeans and Their Successor*, 34-35.

<sup>23</sup> Camp and Fisher, *Exploring the World of the Ancient Greeks*, 56; Mylonas, *Mycenae and the Mycenaean Age*, 232-233.

<sup>24</sup> Jonathan M. Hall, *A History of the Archaic Greek World: Ca. 1200-479 BCE* (Malden: Blackwell, 2007), 43.

<sup>25</sup> Pierre Leveque, *The Greek Adventure* (Cleveland: World Pub., 1968), 79; Palmer, *Mycenaeans and Minoans*, 154.

<sup>26</sup> Camp and Fisher, *Exploring the World of the Ancient Greeks*, 39.

also fortified itself better, if not to the same degree as Mycenae.<sup>27</sup> Mycenae and Tiryns are in the same region, the Argolid, and evidence shows that both cities were reinforced around the same time; Gla's walls were massive and surrounded an area of two miles.<sup>28</sup> These new reinforcements only delayed destructions; they both fell within fifty years of the fortification and were completely abandoned by 1150 BC.<sup>29</sup>

One of the best places for evidence of the preparation for the attacks and the subsequent destruction is at Pylos, on the southwest coast of the Peloponnese.<sup>30</sup> Pylos is a great example of a Mycenaean city and a great archaeological site because the fire that destroyed it left us the remains of Linear B tablets cooked to a hardness, and it was not re-inhabited after it fell.<sup>31</sup> This has provided ample evidence of what the last days of the city were like. Like the rest of the Mycenaean world, Pylos was undergoing preparations for fortification and the possibility of defending itself. The fortification walls were emplaced and Pylos began to stockpile weapons and armor, all of this is recorded on Linear B tablets.<sup>32</sup> According to the tablets, other than preparing for invasion, the palace was undergoing fairly normal operations. The end and destruction happened very suddenly.<sup>33</sup> Something else in the Linear B tablets of Pylos concerning the preparations was troop movements.<sup>34</sup> These tablets give some detailed movement

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<sup>27</sup> Arnold Lawrence, *Greek Architecture*, 5<sup>th</sup> ed. (New Haven: Yale University Press, 1996), 45-48; Jacquetta Hawkes, ed., *Atlas of Ancient Archaeology* (New York: McGraw-Hill, 1975), 122; Martin, *Ancient Greece*, 34; Schofield, *The Mycenaeans*, 171-172; Tomlinson, *Argos and the Argolid*, 51.

<sup>28</sup> Lawrence, *Greek Architecture*, 43, 54; Vermeule, *Greece in the Bronze Age*, 226.

<sup>29</sup> Carol G. Thomas and Craig Conant, *Citadel to City-state: The Transformation of Greece, 1200-700 B.C.E.* (Bloomington: Indiana University Press, 1999), 16-17; Anthony M. Snodgrass, *Archaeology and the Emergence of Greece* (New York: Cornell University Press, 2006), 118-119; Finley, *Early Greece*, 64.

<sup>30</sup> The modern city of Pylos is on the opposite side of the bay from the ancient site.

<sup>31</sup> Biers, *The Archaeology of Greece*, 71.

<sup>32</sup> Louis Rawlings, *The Ancient Greeks at War* (Manchester: Manchester University Press, 2007), 20-21; Robbins, *Collapse of the Bronze Age*, 124.

<sup>33</sup> Sigrid Deger-Jalkotzy, "Decline, Destruction, Aftermath," In *The Cambridge Companion to the Aegean Bronze Age*, ed. Cynthia W. Shelmerdine (Cambridge: Cambridge University Press, 2008), 390.

<sup>34</sup> Raffaele D'Amato, A. Salimbeti, and Giuseppe Rava, *Bronze Age Greek Warrior 1600-1100 BC* (Oxford: Osprey Pub, 2011), 7; Rawlings, *The Ancient Greeks at War*, 21; Martin, *Ancient Greece*, 34.

of Pylos positioning around eight hundred men to watch the coastline for invasion.<sup>35</sup> These troops were stationed along the coast in multiples of ten, and the tablets even go into the detail about which detachments from which commands were placed where.<sup>36</sup>

*Io-u-ru-to o-pi-a-ra e-pi-ko-wo 2ma-re-wo o-ka o-wi-to-no 3a-pe-ri-ta-wo  
o-re-ta e-te-wa ko-ki-jo 4su-we-ro-wi-jo o-wi-ti-ni-jo o-ka-ra MEN 50  
6ne-da-wa-ta-o o-ka e-ke-me-de 7a-pi-je-ta ma-ra-te-u ta-ni-ko 8a-ru-wo-te  
ke-ki-de ku-pa-ri-si-jo MEN 20 10ai-ta-re-u-si ku-pa-ri-si-jo ke-ki-de MEN 10  
11me-ta-qe pe-I e-qe-ta ke-ki-jo 12a-e-ri-qo-ta e-ra-po ri-me-ne 13o-ka-ra  
o-wi-to-no MEN 30 ke-ki-de-qe q-pu-ka-ne 14MEN 20 me-ta-qe pe-I ai-ko-ta  
e-qe-ta*

Command of Maleus at *O-wi-to-no*: Ampelitawon, Orestas, Etewas, Kokkion. Fifty *su-we-ro-wi-jo* men of *Oo-wi-to-no* at Oikhalia.

Command of Nedwatas: Ekhemedes, *Amphi-e-ta* the *ma-ra-te-u*, *Ta-ni-ko*. Twenty Kugarissian *ke-ki-de* men at *A-ru-wo-te*, ten Kugarissian *ke-ki-de* men at *Aithalewes*, and with them the Follower Kerkios.

Aeriqhoitas, Elaphos, *Ri-me-ne*. Thirty men from Oikhalia to *O-wi-to-no*, and twenty *ke-ki-de* men from *A-pu-ka*, and with them the Follower *Ai-ko-ta*<sup>37</sup>

It is evident that the rulers of Pylos feared an attack coming from the sea.<sup>38</sup> More generally, this fear of outside invaders gripped the Mycenaean world.<sup>39</sup> With the fortifications, the tablets listing stockpiles of arms, and the troop movements to guard against invasion it is quite obvious that there was something going on in the Greek world at this time and that there was the fear of someone.

However, there is no solid evidence that there was an invasion by people called the Dorians at this time. They left no archaeological evidence. Nonetheless, it is not unreasonable to

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<sup>35</sup>A. R. Burn and Mary Burn, *The Living Past of Greece* (New York: IconEditions, 1993), 73; Schofield, *The Mycenaean*, 172-173; Palmer, *Mycenaean and Minoans*, 146.

<sup>36</sup> Deger-Jalkotzy, "Decline, Destruction, Aftermath," 389; John Chadwick, *The Decipherment of Linear B* (Cambridge: Cambridge University Press, 2003), 10; Leonard Palmer, *The Interpretation of Mycenaean Greek Texts* (Oxford: Clarendon Press, 1963), 147-151.

<sup>37</sup> Michael Ventris and John Chadwick, *Documents in Mycenaean Greek: Three Hundred Selected Tablets from Knossos, Pylos, and Mycenae* (Cambridge: University Press, 1956), 188-189.

<sup>38</sup> Imre Tegye, "Messenia and the Catastrophe at the End of Late Helladic IIIB," in *Bronze Age Migrations in the Aegean; Archaeological and Linguistic Problems in Greek Prehistory*, ed. R.A. Crossland and Ann Birchall, (Park Ridge: Noyes Press, 1974), 230.

<sup>39</sup> Thomas Kelly, *A History of Argos to 500 BC* (Minneapolis: University of Minnesota, 1976), 14.

assume that the Dorians were real.<sup>40</sup> The Dorians are an archaeologically invisible people, similar to the Vikings of the European Dark Age, where in some settlements if there was not a written testimony we would not know they ever existed.<sup>41</sup> The Dorians came from a pastoral semi nomadic region of Greece and therefore little trace of settlement would be left archaeologically.<sup>42</sup> Even so there have been some archaeological discoveries indicating the Dorians inhabited the Peloponnese. There are signs at Argos of temporary structures that would have been used by a transhumance pastoral people during the Dark Age, the Dorians.<sup>43</sup>

Also if one examines the different Greek dialects, the Doric dialect is centered in the areas that the Greeks claimed the Dorians settled.<sup>44</sup> These were the old centers of power of the Mycenaean Greeks: Pylos, Mycenae, Tiryns and most of the Peloponnese.<sup>45</sup> Furthermore, Mycenaean Greeks in the Peloponnese were afraid of invaders from the north, where the Dorians are supposedly from.<sup>46</sup> One indication of this Dorian path is the wall built across the isthmus north of Corinth dating to the same time period, around 1200 BC.<sup>47</sup> The wall was to prevent invasion from the north because it faced north and the battlements and places to be manned were all on the Peloponnesian side, the south.<sup>48</sup> This wall would have been a massive undertaking. The remains of the wall are twelve feet thick with stone facing on both sides with earth and rubble filling the center; this type of wall is called a composite wall. It also has the remains of

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<sup>40</sup> Starr, *The Origins of Greek Civilization*, 62.

<sup>41</sup> Peter Soesbergen, "The Coming of the Dorians," *Kadmos*, 20, no. 1 (1981), 40; Sandars, "North and South at the End of the Mycenaean Age," 63-64.

<sup>42</sup> N. Hammond, "The Literary Traditions for the Migrations," *The Cambridge Ancient History*, 2, no. 2 (1975), 685; John Chadwick, "Who Were the Dorians?" *Parola Del Passato*, 31 (1976), 109; N. Hammond, "The Peloponnese," *The Cambridge Ancient History*, 3, no.1 (1982), 703.

<sup>43</sup> Chadwick, "Who Were the Dorians?" 712.

<sup>44</sup> See appendix Figure 3 map of dialects.

<sup>45</sup> Murray, *Early Greece*, 11.

<sup>46</sup> Vermeule, *Greece in the Bronze Age*, 278-279; Chadwick, "Who Were the Dorians?" 108.

<sup>47</sup> Wiseman, "Greece and Early Greeks," 718; Drews, *The End of the Bronze Age*, 23; Tomlinson, *Argos and the Argolid*, 51; Leveque, *The Greek Adventure*, 79; Desborough, *The Last Mycenaean and Their Successors*, 30.

<sup>48</sup> Snodgrass, *Archaeology and the Emergence of Greece*, 119; Desborough, *The Last Mycenaean and Their Successors*, 85.

fortification towers facing north in the same fashion as Troy VII (1300-950BC) and Hattusa.<sup>49</sup>

To do this meant that the builders knew an attack would be coming from the north by land and the cities fell in the north first.<sup>50</sup> The wall started at Corinth and presumably went straight across the isthmus, but very little remains.<sup>51</sup> These preparations proved to be useless as the major centers were still attacked and others abandoned.

While there is little physical evidence for the Dorians, there is, in addition to language, Greek sources that talk about the Dorians.<sup>52</sup> These Greek texts fall into three categories; the first are sources that talk about the descendants of Herakles, the Herakleid, living among the Dorians.<sup>53</sup> The second is how the Dorians and the Herakleid return to; and take over the Peloponnese.<sup>54</sup> The last type of Greek reference to the Dorians and Herakleid talk about how certain modern Greeks, the Spartans and others from the Peloponnese and some islands are descendants of them.<sup>55</sup> When it comes to the Dorians there are three theories; that they caused the fall of the Mycenaeans, that the sea people caused the fall of the Mycenaeans and the Dorians came in after them, and that a combination of the sea people and Dorians brought about the collapse of the Mycenaeans.<sup>56</sup> But no matter which one of these theories may be true, to the Greeks of the Iron Age, the Dorian invasion marks the end of Mycenaean times.<sup>57</sup>

Some people doubt the veracity of Homer and other Greek writings based on oral tradition. They say that what he talks about is from his own time and that the oral tradition he

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<sup>49</sup> Robbins, *Collapse of the Bronze Age*, 125.

<sup>50</sup> Leveque, *The Greek Adventure*, 79.

<sup>51</sup> William Taylour, *The Mycenaeans* (New York: Praeger, 1964), 172; Snodgrass, *The Dark Age of Greece*, 311; Oscar Broneer, "The Cyclopean Wall on the Isthmus of Corinth, Addendum," *Hesperia*, 37, no. 1 (1968), 25-31.

<sup>52</sup> Pausanias, 8.5.1-6.

<sup>53</sup> Diodorus Siculus, 4.58.1-5; Pindar, *Pythian Odes*, 1.63-65.

<sup>54</sup> Thucydides, 1.12.3, 4.42.2; Herodotus, 9.26.2-5; Pindar, *Pythian Odes*, 5.65; Apollodorus, 2.8.2-5; Strabo, 8.3.33; Diodorus Siculus, 7.9.1-4; Pausanias, 2.18.7, 4.3.5, 5.3.6.

<sup>55</sup> Herodotus, 1.56.2-3, 8.114.2; Thucydides, 1.107.2.

<sup>56</sup> Irene Lemos, *The Protohistoric Aegean: The Archaeology of the Late Eleventh and Tenth Centuries BC* (Oxford: Oxford University Press, 2002), 191-192.

<sup>57</sup> Starr, *The Origins of Greek Civilization*, 73-74.

used meant that by the time he got it, it would have changed too much to be accurate. But with the archaeological finds it is becoming clearer and clearer that, even if some of what Homer mentions is from his time, a lot of it is not, and had not been seen in centuries. For instance, Homers description of the palaces are consistent with the Mycenaean palace, and not any structure from his time.<sup>58</sup> Part of this is because during the Dark Age there were no massive stone buildings and part is that when the Greeks started building massive stone architecture, it was different than what the Mycenaeans did. One of the primary examples of Homers accuracy for things Mycenaean is his description of armor and weapons. It is true that the weapons could not have done what he claims they could have done, nor is it possible for many of the things that happen in the Iliad and Odyssey to take place. But Homers description of the weapons and armor is highly accurate. For instance the use of a boars tusk helmet; this item has been found in several sites in Greece, all dating to Mycenaean times.<sup>59</sup> There is also Homers description of the soldiers wearing shining bronze plate and being carried to the battle field in a chariot.<sup>60</sup> This matches up with a plate suit found in Dendra dating to the Mycenaean Age, which was not seen again until the Archaic Age. This bronze plate was probably used by charioteers as well considering how heavy it was.<sup>61</sup> As we can see, Homer has some accurate observances that are backed up by archaeological evidence; so while there might be some inaccuracies there are also

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<sup>58</sup> William Dismoor, *The Architecture of Ancient Greece: An Account of Its Historic Development*, 4<sup>th</sup> ed. (New York: Norton, 1975), 22.

<sup>59</sup> Nic Fields and Donato Spedaliera, *Mycenaean Citadel C. 1350-1200BC* (Oxford: Osprey, 2008), 55; Peter Connally, *The Greek Armies* (London: Macdonald Educational, 1979), 13; H.R. Hall, *The Civilization of Greece in the Bronze Age* (New York: Cooper Square Publishers, 1970), 136; Anthony Snodgrass, *Arms and Armor of the Greeks* (Baltimore: Johns Hopkins University Press, 1999), 18; A. F. Harding, *The Mycenaeans and Europe* (London: Academic Press, 1984), 177; Oliver Dickinson, *The Aegean Bronze Age* (Cambridge: Cambridge University Press, 2010), 202; John Warry, *Warfare in the Classical world: An Illustrated Encyclopedia of Weapons, Warriors, and Warfare in the Ancient Civilisations of Greece and Rome* (Norman: University of Oklahoma Press, 1995), 21; Homer, *Iliad*, 10.260-265.

<sup>60</sup> Homer, *Iliad*, 4.486, 23.30-3.1.

<sup>61</sup> D'amato, *Bronze Age Greek Warrior*, 27-30; Connolly, *The Greek Armies*, 12; Snodgrass, *Arms and Armor of the Greeks*, 24; Harding, *The Mycenaeans and Europe*, 174; Drews, *The End of the Bronze Age*, 175.

truths. With these truths it is reasonable to assume that Greeks writing about the Dorians knew something about what they were recording.

The end of the Mycenaean Age is marked by mass migration and permanent settlement of non-Mycenaean Greeks in the Peloponnesus.<sup>62</sup> Even with all of the fortification and military movements there was no stopping the destruction of the Mycenaean Greeks. No palace survives the abandonment and destruction that ended the Mycenaean age.<sup>63</sup> The palaces that were destroyed show massive signs of destruction and fire, and this indicates some type of warfare.<sup>64</sup> The biggest cause for abandonment, destructions, and fires is violence.<sup>65</sup> The destruction of a violent attack is different than the destruction of an earthquake, and most of the palaces in Mycenaean Greece show the former.<sup>66</sup> The depopulation after the fall of the Mycenaean was quite large and can be seen by the number and size of the sites in Greece.<sup>67</sup> At the end of the thirteenth century BC, there were 320 sites that show evidence of population. At the end of the twelfth century BC, there are only 130 sites. Within 100 years the populated sites decrease by more than half. By the end of the eleventh century BC, there were only forty sites in mainland Greece that show any signs of habitation. This shows a loss of roughly ninety percent over just two hundred years.<sup>68</sup>

The last human factor is that of internal strife. This has both good and bad points. On the one hand there is a Greek source that backs up the theory that after the Mycenaean returned

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<sup>62</sup> Camp and Fisher, *The World of the Ancient Greeks*, 63; Tomlinson, *Argos and the Argolid*, 53.

<sup>63</sup> Drews, *The End of the Bronze Age*, 21-25.

<sup>64</sup> John Camp, *The Archaeology of Athens* (New Haven: Yale University Press, 2001), 20; Oliver Dickinson, "Drought and the Decline of Mycenae: Some Comments," *Antiquity*, 48 (1974), 229.

<sup>65</sup> Kelly, *A History of Argos to 500 BC*, 13; Lawrence, *Greek Architecture*, 54.

<sup>66</sup> Hall, *A History of the Archaic Greek World*, 49; Dickinson, *The Aegean from Bronze Age to Iron Age*, 43.

<sup>67</sup> Depopulation means either the death of a population, the migration of a population from one place to another, or a combination of both.

<sup>68</sup> Maurice Pope, *The Ancient Greeks* (Newton Abbot: David and Charles, 1976), 19; Snodgrass, *The Dark Age of Greece*, 364; Gordon Shrimpton, "New Reflexions on the Dorian Invasion," *Echos Du Monde Classique*, 31, (1987), 137.



from Troy the peasants left behind to fend for themselves for so long were upset.<sup>69</sup> One aspect that could lend credence to this is the theory that the Dorians were the peasants, and that the ruling class were the only ones that spoke Mycenaean Greek. With this theory it was the Dorian peasants that rose up and got rid of the Mycenaeans.<sup>70</sup> According to this theory the peasants rise up, get rid of the Mycenaean oppressors and take their riches, and this would not necessarily leave any evidence, because they were already there and not newcomers.<sup>71</sup> There is also the theory of wars between the different cities, as happens in Greece during the Iron Age. The problem with these theories is that there is little evidence for this, and that internal strife could not be solely responsible for the fall of the Mycenaeans, especially with all the other evidence.<sup>72</sup> Internal conflict would not account for the abandonment of the cities or the depopulation of mainland Greece.

As specified earlier there are other schools of thought about how the Mycenaeans and the rest of the people of the eastern Mediterranean fell into disarray; drought, famine, disease, and earthquakes are the natural disasters that are some of the theories. As for the human ones, invasion and raiders have already been touched on. Among common theories is that a series of earthquakes brought about the destructions. Greece is in a seismically unstable area. There have been a number of earthquakes and volcanoes over the years that have wrought a high level of destruction. One big one would be what happened at Akrotiri, when half of the island of Thera sank because of the explosion of the volcano and ensuing earthquakes around 1500 BC.<sup>73</sup> On the one hand, the fact that earthquakes do happen and can be very destructive is true; however,

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<sup>69</sup> Thucydides, 1.12.1-2.

<sup>70</sup> Chadwick, "Who Were the Dorians?" 103-117.

<sup>71</sup> Peter Warren, *The Aegean Civilizations* (London: Elsevier-Phaidon, 1975), 134.

<sup>72</sup> Tegye, "Messenia and the Catastrophe at the End of Late Helladic IIIB," 230.

<sup>73</sup> Charles Freeman, *Egypt, Greece, and Rome: Civilizations of the Ancient Mediterranean* (Oxford: Oxford University Press, 2004), 122; Jack Davis, "Minoan Crete and the Aegean Islands" In *The Cambridge Companion to the Aegean Bronze Age*, ed. Cynthia W. Shelmerdine (Cambridge: Cambridge University Press, 2008), 189.

there are flaws with this idea. The problem with this theory about the disruptions at the end of the Bronze Age, is that there were several civilizations that experience disruptions. And from these civilizations there are writings. While Linear B of the Mycenaeans was used for official functions like lists of the palace supplies, other civilizations, like the Egyptians and Hittites, used writing for many varied things. At the time of the destructions there was no written evidence from any of the civilizations in the Near East, Africa or the Mediterranean of earthquakes, just records of raiders and invasions.<sup>74</sup>

Not only is there no written record of earthquakes, the physical evidence of earthquakes striking during this period is small. Earthquakes cause destruction, but they do it in a very particular way; walls collapse in a certain pattern and there is noticeable shifting in the ground both in general and where there are buildings. There is no evidence of an earthquake hitting the Argolid at the time of the destruction of Mycenae.<sup>75</sup> An earthquake would also not explain how the different cities in Greece were destroyed over a period of time.<sup>76</sup> Not only are there no signs of an earthquake, but the destruction caused by earthquakes in the ancient world is different than today. In modern times when a large earthquake happens there are usually fires breaking out and burning down of buildings. This is because there are gas lines and electricity in modern buildings and streets. But during ancient times the only thing used for fire would be wood or oil lamps. Earthquakes in the ancient world did not usually cause large fires because when a wall fell down the amount of fuel for a fire was much smaller than today, especially where there were stone buildings, like the palaces in Mycenaean Greece.<sup>77</sup> So, the fact that most of the palaces that were destroyed at the end of the Mycenaean period had massive fires shows that these fires were set

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<sup>74</sup> Drews, *The End of the Bronze Age*, 38.

<sup>75</sup> Dickinson, *The Aegean from Bronze Age to Iron Age*, 44.

<sup>76</sup> Warren, *The Aegean Civilizations*, 134.

<sup>77</sup> Drews, *The End of the Bronze Age*, 39.

deliberately and not accidentally lit by an earthquake. Lastly, when it comes to people, we do not change all that much. In ancient times, just like today when we have a natural disaster, like an earthquake, we pick ourselves up and rebuild. It can be seen that in ancient times after an earthquake the cities were usually rebuilt and re-inhabited.<sup>78</sup>

The other types of natural disasters are drought, which causes famine; and plague. Now, these are always a big concern, especially in the ancient world when they had much less control over the environment. A devastating drought could destroy a society, if it lasts for several years. Greece is not the wettest area in the world, far from it, and if it did not rain for several years it could easily be devastated. The problem with this is that there would be evidence of a drought hitting Greece and there is none.<sup>79</sup> One way to find evidence of a drought would be a pollen sample, where core samples are taken from different locations and then analyzed. Over the years, there have been core samples taken and pollen analysis indicates that there were not drought conditions in Greece during the time before the fall of the Mycenaeans. Not only does this contradict the theory of a drought but there is also the method of tree rings. By reading these rings from trees dating to this time period we are able to read the growth rates of the trees and this tells us the weather and more importantly, the amount of rain that fell. By doing this it has been determined that the area goes through generational periods of dry spells; every twenty to thirty years; there are several years of lower rain fall. But this is something that happens often and it is not to a degree so great as to cause extreme drought and famine. Nor are there any tree rings that show periods of this type of drought.<sup>80</sup> And certainly nothing to explain the amount of

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<sup>78</sup> Thomas and Conant, *Citadel to City-state*, 23.

<sup>79</sup> Drews, *The End of the Bronze Age*, 79; J.L. Bintliff, "Climatic Change, Archaeology and Quaternary Science in the Eastern Mediterranean Region," In *Climatic Change in Later Prehistory*, ed. Anthony Harding, (Edinburgh: Edinburgh University Press, 1982), 150; Warren, *The Aegean Civilizations*, 134; Robert Drews, "Herodotus 1.94, the Drought Ca. 1200 BC, and the Origin of the Etruscans," *Historia*, 41, no. 1 (1992), 15; Shrimpton, "New Reflexions on the Dorian Invasion," 152.

<sup>80</sup> Drews, "Herodotus 1.94, the Drought Ca. 1200 BC," 16.

depopulation that occurred.<sup>81</sup> There are also the Linear B tablets from different locations in Greece. In studying these tablets, it can be observed that there does not appear to be a drought, and that the large numbers of animals and crops would indicate that there was an abundance of food.<sup>82</sup> Evidence of a drought would be present in Linear B tablets because they were only used for official palace business, including inventorying food stuffs. These records are examined more closely in chapter 4. These records are only for short term use and only record information pertaining to that year.<sup>83</sup> Not only is there no evidence of a drought in the Linear B tablets but there are no legends or stories about a drought striking Greece at this time. There are legends and stories about great droughts devastating Greece and other parts of the world, but there are none that talk about it happening during this time period.<sup>84</sup> For instance Herodotus talks about a drought that struck Lydia and caused a famine and subsequent migration to Italy, which established the Etruscans.<sup>85</sup> While this drought is recorded, there is no mention of a drought ever hitting Greece.

The last natural disaster is a plague. There have been many plagues over the millennia and, as such, it is a fairly understandable disaster that can strike and devastate, especially in the ancient world where medical facilities and abilities were not great. A plague could easily kill a large portion of the population.

As we examine the evidence of plagues we can look at several devastating plagues that happened over the years. Two devastating plagues are Justinian's plague and the Black Death. Both of these plague struck at times when there was not advanced medicine to help fight back

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<sup>81</sup> Shrimpton, "New Reflexions on the Dorian Invasion," 137.

<sup>82</sup> Stiebing, "The End of the Mycenaean Age," 17; Schofield, *The Mycenaean*, 180; Drews, *The End of the Bronze Age*, 81; Drews, "Herodotus 1.94, the Drought Ca. 1200 BC," 16; Dickinson, "Drought and the Decline of Mycenae," 229.

<sup>83</sup> Chadwick, *The Decipherment of Linear B*, 33.

<sup>84</sup> Drews, *The End of the Bronze Age*, 80.

<sup>85</sup> Herodotus, 1.94.3-7.

the diseases. First, Justinian's plague happened roughly 1700 years after the fall of the Mycenaean's in 541-542 AD. Another plague not as devastating but closer in time and in Greece is the Athenian plague of 429-427 BC during the Peloponnesian war.<sup>86</sup> Justinian's plague is good to look at because it takes place in the eastern Mediterranean and the Aegean, a similar environment to that which the Mycenaeans lived. Now while there are no mention of a plague in Mycenaean records, there are records during the time of Justinian and the Peloponnesian war. Using these records we can examine the lethality of the plagues and of their impact on the area. Now looking at the record, we can estimate that the mortality rate of the plague that struck was between 25-33%, and the survival rate was only one in three.<sup>87</sup> What this means is that between one quarter and one third of the population became infected with the disease and if you became infected you only had a one in three chance of living. In Constantinople the death rate is estimated to be between 10-40%; with a population starting at half a million it is estimated to have lost between 60,000 and 200,000 people.<sup>88</sup> The entire Byzantine Empire at this time was around 26 million. In the two years of the plague the empire lost four million people, roughly 15% of its population, and in the next sixty years the population dropped to 17 million, an overall drop of 30%.<sup>89</sup> While a loss of 4 million in two years and 9 million over sixty years seems like a lot of people, and is, overall a major percentage of the population remains intact. With the plague in Athens Thucydides makes a note of the dead, in particular how many soldiers

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<sup>86</sup> Thucydides, 2.47.2-2.54.2.

<sup>87</sup> William Rosen, *Justinian's Flea: Plague, Empire, and the Birth of Europe* (New York: Viking, 2007), 214; John Kelly, *The Great Mortality: An Intimate History of the Black Death, the Most Devastating Plague of All Time* (New York: HarperCollins Pub., 2005), 43.

<sup>88</sup> Rosen, *Justinian's Flea*, 209-210.

<sup>89</sup> Rosen, *Justinian's Flea*, 261.

died because of it, a total of 4700.<sup>90</sup> With these numbers it is possible to estimate how many people died in total; the figures come out to be about one third of the population.<sup>91</sup>

The next big plague to look at is the Black Death. This is considered the most devastating plague to ever hit. The Black Death killed tens of millions; every country in Europe was affected, to differing degrees and the entire population of Europe decreased between 30% and 60%, with the average rate being at 33%.<sup>92</sup> In England for instance the highest mortality rate was 50% in some areas, but in most of the country it was at between 30% and 40%.<sup>93</sup> The mortality rate in France was at around 50%, which is on the higher end of the spectrum.<sup>94</sup> But the country that matters most to our inquiry would be Italy. Environmentally Italy is similar to Greece and we have very good records from Italy keeping track of population and deaths. These records show how the warm and dry climate of Italy might have had an effect on the progress of the disease; because the death rate in Italy was between 50% and 60%, which is on the upper threshold of the mortality rate of the plague.<sup>95</sup>

There are just a couple of problems with the theory of a plague. One would be that the population of Greece decreased by 90%, an extremely high rate even compared to the devastating plagues to hit Europe and the Mediterranean which had mortality rates between 25% and 60%. Now while a plague could have hit and then the survivors could have migrated elsewhere, which is very plausible, that does not explain one thing, lack of bodies.

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<sup>90</sup> Thucydides, 3.87.3.

<sup>91</sup> Donald Kagan, *The Peloponnesian War* (New York: Viking, 2003), 78, 327.

<sup>92</sup> Suzanne Alchon, *A Pest in the Land: New World Epidemics in a Global Perspective* (Albuquerque: University of New Mexico Press, 2003), 21; Kelly, *The Great Mortality*, 11-12.

<sup>93</sup> Norman F. Cantor, *In the Wake of the Plague: The Black Death and the World It Mad* (New York: Free Press, 2001), 22, Kelly, *The Great Mortality*, 112.

<sup>94</sup> Kelly, *The Great Mortality*, 161.

<sup>95</sup> J.M.W. Bean, "The Black Death: The Crisis and Its Social and Economic Consequences" In *The Black Death: The Impact of the Fourteenth-Century Plague*, ed. Daniel Williman, (Binghamton: Center For Medieval & Early Renaissance Studies, 1982), 27.

When a plague hits a population the people living there have to do something with the bodies of the dead, and if it is a devastating plague, which tends to happen in cultures that do not have advanced medicine, then bodies pile up rapidly. This is attested to in both Justinian's plague and the Black Death; cemeteries quickly filled up and large pits with mass graves start to sprout to try to bury the number of dead bodies.<sup>96</sup>

So, if a plague had hit, there would be evidence in the form of mass graves for bodies or cremated remains, which there are not.<sup>97</sup> In fact, to back this up there has been found a mass grave, of 1000 tombs, dating to the Athenian plague.<sup>98</sup> This shows that in Greece mass graves were used in conjunction with plagues. The other problem is that a plague kills the population and can cause the abandonment of cities, but it would not cause the widespread destruction and burning that swept across Greece and the rest of the ancient world.<sup>99</sup> Because a plague just kills people and does not cause destruction, and the fact that there is such a large amount of destruction, means a plague would not explain the fall of the Mycenaeans.

So, for natural causes of the destruction and fall of the Mycenaeans, there is not enough evidence to support earthquakes, drought, or plagues. Furthermore they do not adequately explain the amount of physical destruction across the whole of the Mycenaean Greek world.<sup>100</sup>

When we examine the end of the Mycenaean Greeks and what the many causes could be we see that some of them do not offer up much proof. While a drought can be devastating, especially in the climate of Greece; which I will discuss in the next chapter, there is no evidence

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<sup>96</sup> Cantor, *In the Wake of the Plague*, 15, Rosen, *Justinian's Flea*, 215.

<sup>97</sup> Philip Bentancourt, "The Aegean and the Origin of the Sea Peoples," In *The Sea Peoples and Their World: A Reassessment*, ed. Eliezer Oren (Philadelphia: University Museum, 2000), 300.

<sup>98</sup> Nikos Axarlis, "Plague Victims Found: Mass Burial in Athens," *Archaeology*, 51, no. 2, (1998)

<sup>99</sup> Thomas and Conant, *Citadel to City-state*, 77.

<sup>100</sup> Deger-Jalkotzy, "Decline, Destruction, Aftermath," 391.

of a drought.<sup>101</sup> Also records found at the palaces show that there were large stores of plant and animal products at the time of the destruction. While Greece is seismically active, there is little evidence for an earthquake at the times that the Mycenaean cities fell, like the fact that earthquakes during this time do not cause massive fires, which are evident at the Mycenaean cities. In conjunction with that the fact that they fell over a period of around fifty years would also show that an earthquake, while it might have hit an area, would not cause cities to fall at different times. In addition, people have changed little over the millennia, and when a natural disaster hits, then and now, people tend to rebuild, but there is no rebuilding taking place for a couple of centuries. The last natural disaster discussed, plague, also offers up little evidence. While it is true that a plague is devastating to a culture without advanced medicine, it can be seen that even the most devastating plagues leave a good sized portion of the population intact. Not only that but plagues leave evidence in the form of bodies and graves, and there is no evidence of graves and cemeteries that would have housed these victims.

As a result of the natural causes showing little promise, it falls to the man-made problems. While it cannot be proven what happened, or who did it, the most plausible explanation of what happened to the Mycenaeans is a combination of factors. A combination of raiders after loot, the Mycenaean's migrating to escape the raiders, and an invasion and settlement of northern Greeks into the area effectively ends the Mycenaean period. Raiders would offer no evidence because they would be coming in for riches and then leaving. The chief reason for a raid is the loot and not to settle so they would come, destroy, and leave after.<sup>102</sup> Internal strife, while talked about by Thucydides, does not explain all that happened and could not be solely responsible. There is evidence of the Mycenaean migration out of their former homes, both discussed in this chapter

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<sup>101</sup> Shrimpton, "New Reflexions on the Dorian Invasion," 141; Bryson, Lamb and Donley, "Drought and the Decline of Mycenae," *Antiquity*, 48 (1974), 48.

<sup>102</sup> Coulton, *Ancient Greek Architects at Work*, 36.



and also to be discussed further in chapter five. Finally the invasion and settlement of northern, or more precisely northwestern Greeks, into the areas formerly occupied by the Mycenaean's. While there is no archaeological evidence of this, the linguistic evidence and the legends talk about later on in Greece offer some evidence, if not altogether great scientific evidence. But a combination of these three human factors would seem to be the most plausible explanation to what happened to the majority of the Mycenaean's cities, with the exception of Athens. Athens is neither destroyed nor depopulated, the reason for this will be shown in chapter 5.

## CHAPTER 3

### THE LAND AND CLIMATE: HOW THEY AFFECT SETTLEMENTS

When considering ancient civilizations one must look at the land in which they settled, because the land and climate have a huge impact on how a people survive. The three first civilizations, the Sumerians, the Egyptians, and the Indus River people all settled on or near rivers and used these rivers to grow food and prosper. The Greeks settled in a similar pattern to the rest of the ancient world. Most of the major Mycenaean sites are very close to the coast and are on rivers, streams, or lakes. Greece is a very mountainous country; approximately eighty percent of Greece is mountainous. This makes it very difficult to find areas that are flat enough to farm; only about twenty percent of the land was arable.<sup>1</sup> Greece is made up of fertile valleys and plains framed by high mountains.<sup>2</sup> Because of these mountains and valleys all settlements in Mycenaean Greece are within forty miles of the coast, and most are within one day's walk; the sea is a very important part of Greek life.<sup>3</sup>

When studying the ancient world one thing to consider is how the people impacted the landscape. Crete, for instance, has undergone major deforestation. As far as mainland Greece is concerned, there has been no major impact and the landscape today, other than cities, is very much the same as it was in ancient times.<sup>4</sup> In fact, studies have shown that the landscape has been fairly stable in Greece for tens of thousands of years, going well back to before the earliest

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<sup>1</sup> Martin, *Ancient Greece*, 1; Peter Green, *Ancient Greece; An Illustrated History* (New York: Viking Press, 1973), 16.

<sup>2</sup> D. V. Ager, *The Geology of Europe: A Regional Approach* (New York: Halsted Press, 1980), 504.

<sup>3</sup> Robert Hopper, *The Early Greeks* (London: Weidenfeld and Nicolson, 1976), 1-2; Martin, *Ancient Greece*, 2.

<sup>4</sup> Anthony Snodgrass, *An Archaeology of Greece: Present State and Future Scope of a Discipline* (Berkeley: University of California Press, 1992), 72.

human settlements.<sup>5</sup> Some people would argue that any human interference would change things. But in the case of Greece, so little of it is habitable for agrarian cultures<sup>6</sup>, the areas that were inhabited by humans would have had very little impact. Whatever deforestation might have happened, soil erosion would be insignificant because other plants, olive trees, vines, and cereals, would have taken their place, and this would stop soil erosion and keep the landscape the same.<sup>7</sup> Because of this one can observe the landscape today and see what it was like thousands of years ago. The coastline has also seen little change because sea level changes have not been significant.<sup>8</sup>

When it comes to the landscape of Greece there are several different regions that must be looked at, because the different regions have slightly different landscapes and climates. The first and most important region of the Mycenaean Greeks was the Peloponnese. The Peloponnese is a large section of southern Greece, it is separated from the rest of the country by the Gulf of Corinth, and is connected by a narrow isthmus only four miles wide. The Peloponnese itself has four small peninsulas on the southern end and has mountain ranges running down the center of it and of each individual peninsula.<sup>9</sup> Because of this, the areas of settlements are quite limited. There are four basic areas of settlement in the Peloponnese. The north where Corinth is located, on the Corinthian gulf, the west coast, where Pylos is located, the middle, Laconia, where Sparta is located, and the east, the Argolid, where Argos, Tiryns, and Mycenae are located. What makes the Peloponnese such a good area despite the limited areas of settlement, is that there are a large

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<sup>5</sup> Andel, Zangger and Demitrack, "Land Use and Soil Erosion in Prehistoric and Historical Greece," *Journal of Field Archaeology*, 17, no. 4, (1990), 390.

<sup>6</sup> An agrarian society is one that relies on agriculture for sustenance and economy.

<sup>7</sup> Robin Osborne, *Greece in the Making 1200 - 479 BC* (London: Routledge, 2009), 23; Signe Isager and Jens Erik Skydsgaard, *Ancient Greek Agriculture: An Introduction* (London: Routledge, 1992), 1.

<sup>8</sup> Shrimpton, "New Reflexions on the Dorian Invasion," 147.

<sup>9</sup> See appendix Figure 4, map of the Peloponnese.

number of rivers and large areas of alluvial plains. These areas have the best soil.<sup>10</sup> Starting with the east side of the Peloponnese, the Argolid, is a massive alluvial plain.<sup>11</sup> The Argolid is at the apex of two of the peninsulas of the Peloponnese and has mountains to the north, the west and the east; to the south is the Argolic Gulf. To the northeast is the isthmus that joins the Peloponnese to the rest of Greece. The coastal plain of the Argolid is about two hundred and fifty square miles; this was large enough to support many cities and towns during the Mycenaean Age. The most famous of these sites were Argos, Tiryns, and Mycenae.<sup>12</sup>

Argos was located about five miles north from the coast, the Argolic Gulf, on a river, the Charadros. This river joined up with the Inachos, which was the headwaters of the Argive flood plain, and so was situated on the northern part of the flood plain. Because of the river and flood plain, Argos had very excellent access to water and the soil that it had would have been of a superior quality. The palace of Tiryns was on the northwest side of the Argolic gulf, about two miles from the coast, next to a stream. Tiryns was located close enough to the river Inachos that it too benefitted from the flood plain. The stream would provide a good water source when the rain was good, during the winter, and the soil around Tiryns would have been of fairly decent quality as well.<sup>13</sup> The last major site in the Argolid is the one that is perhaps the most famous, Mycenae. Mycenae was located north of the Argolic gulf, around eleven miles from the coast, one of the farthest of the Mycenaean sites from the coast. What made Mycenae interesting was that it was located so far from the coast, it was not on the flood plain, it was on the very edge of the alluvial plain, and it was not next to a river or stream. It was located in the foothills of a mountain. The site appears to have been chosen for its defensive capabilities. There are several

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<sup>10</sup> Encyclopedia Britannica, 15<sup>th</sup> ed., s.v. "Greece".

<sup>11</sup> Kelly, *A History of Argos to 500 BC*, 3.

<sup>12</sup> Tomlinson, *Argos and the Argolid*, 7-14; Kelly, *A History of Argos to 500 BC*, 3-5.

<sup>13</sup> Lawrence, *Greek Architecture*, 45-48.

streams near Mycenae, within five miles, which would have been used for the farmland surrounding the palace and city, but the palace relied on wells.<sup>14</sup> What was beneficial about Mycenae's location at the head of the Argive plain was that it was able to control trade and passage into and out of the Argolid by land.<sup>15</sup> This was a great advantage and helped make Mycenae rich.

Going north from the Argolid, on the north coast, on the Corinthian gulf is a small coastal plain called Corinthia and this was the site of Corinth. The coastal plain in which Corinth resides is small, around sixty square miles. It is crescent shaped and is backed by mountains to the south with the gulf to the north. Corinth was located about one and a half miles south of the coast next to a stream that flows north into the gulf. This stream would have provided some water during the wet times of the year and the coastal plain would have provided good soil. Corinth was located at the base of the isthmus, just a couple miles from the narrowest point and as a result it is one part of the protection for the Peloponnese; the wall across the isthmus started at Corinth, which is on the west side, and went southeast.<sup>16</sup>

To the far south in the Peloponnese is the area of Laconia. The two most southern peninsulas of the Peloponnese surround the Laconic Gulf and a small coastal plain with a flood plain. This and the area stretching twenty-five miles to the north is Laconia. Most of this area is located between two mountain ranges, the Parnon to the east and the Taygetos to the west. This area is a high valley, most of which is five hundred feet above sea level, with a river, the Eurotas, running down the center. It was here, twenty miles from the coast, on the river, that Sparta is located. Now being in a high valley, the soil is not as good as flood or coastal plains, but it is on

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<sup>14</sup> Richard J. A. Talbert, ed. *Barrington Atlas of the Greek and Roman World: Map-by-map Directory* (Princeton, NJ: Princeton University Press, 2000), 58; Lawrence, *Greek Architecture*, 48-52.

<sup>15</sup> Peter D. Arnott, *An Introduction to the Greek World* (London: Macmillan, 1967), 23.

<sup>16</sup> Talbert, *Barrington Atlas of the Greek and Roman World*, 58.

a major river, and as such it has a constant source of water. Also, being twenty miles from the coast, one of the farthest settlements from the coast, offered more protection from the sea than most Greek sites.<sup>17</sup>

To the far west, on the coast of the Peloponnese, is the site of Pylos. The western half of the Peloponnese has large areas of coastal plains with many rivers and streams to give access to fresh water and create flood plains. Pylos was in the southwestern part of the Peloponnese, in an area called Messenia. Messenia makes up the most westerly peninsula on the Peloponnese and has the most fertile soil in the Peloponnese.<sup>18</sup> The mountain range going down the middle of it is split into two. The northern range is called the Aigaleon and the southern is called the Mathia. This range is small and surrounded by coastal plains and many rivers and streams come out of the mountains. Pylos was located on the west coast, on the bay of Navarinou. To the northeast of Pylos is the Aigaleon and to the southeast is the Mathia. The palace and city of Pylos were located next to a stream and the entire area is one massive coastal and flood plain. This would make the soil of the area very rich and give Pylos and the surrounding area a lot of access to water. Also, being located right on the water, Pylos was a major port city during Mycenaean times and so had large interests in trading and naval operations. Pylos was an important port because it was a protected bay, with the island of Sphakteria covering most of the mouth of the bay, and therefore protecting it from the waves and powerful winds.<sup>19</sup>

Moving into Greece from the Peloponnese using the isthmus are two other major areas, Boeotia to the west of the isthmus and Attica to the east of the isthmus. Boeotia, had more major

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<sup>17</sup> Talbert, *Barrington Atlas of the Greek and Roman World*, 58.

<sup>18</sup> Hammond, "The Peloponnese," 696.

<sup>19</sup> John Chadwick, *The Mycenaean World* (Cambridge: Cambridge University Press, 1976), 35-37; Talbert, *Barrington Atlas of the Greek and Roman World*, 58; Lawrence, *Greek Architecture*, 52-53; Hammond, "The Peloponnese," 698-701; Hawkes, *Atlas of Ancient Archaeology*, 123.

Mycenaean sites, is located on a small narrow section between Attica and the isthmus to the east, and the rest of Greece to the west, Phocis, Aetolia, and Thessaly being the major regions close by. To the south is the Corinthian gulf and to the north is the gulf of Euboea. On the east, bordering Attica is a mountain range, the Parnes, and to the west are the Parnassus and the Knemis ranges. On the southern coast, the Gulf of Corinth, is the Helicon mountain range, and therefore not very habitable. The major sites in Boeotia are in the middle of the region, which is dominated by several lakes, the largest of which was Lake Copias.<sup>20</sup> Boeotia also has several rivers, most of which flow into these lakes. This makes the soil in Boeotia far superior to that of other areas, like Attica.<sup>21</sup> There were three major Mycenaean sites in Boeotia, Orchomenus, Gla, and most importantly Thebes.<sup>22</sup>

Orchomenus was located on the western coast of the largest lake, Copais, on a small peninsula that juts out into it. This offered Orchomenus both an endless amount of fresh water and a large fertile plain in which to grow food and raise livestock. The soil from this plain would have been very rich.<sup>23</sup> Also on this lake was the site of Gla. Gla was located to the north and was located on what was during classical times an island. But, during the Mycenaean times the lake was drained and controlled and Gla occupied a large fertile flood plain. This was a very impressive feat, but it would fall into ruin after the destruction of Gla and the end of the Mycenaean age.<sup>24</sup> Because the area around Gla was a lake that was drained, the soil was extremely fertile and this area could even have been considered a breadbasket of the Mycenaean

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<sup>20</sup> Lake Copias was drained by the government in the 1900's.

<sup>21</sup> Strabo, 9.2.1.

<sup>22</sup> Robert Drews, *The Coming of the Greeks: Indo-European Conquests in the Aegean and the Near East* (Princeton, NJ: Princeton University Press, 1988), 187; Lévêque, *The Greek Adventure*, 46; Hawkes, *Atlas of Ancient Archaeology*, 120.

<sup>23</sup> Talbert, *Barrington Atlas of the Greek and Roman World*, 55.

<sup>24</sup> Taylour, *The Mycenaean*, 109-110; Paul Lachlan MacKendrick, *The Greek Stones Speak; the Story of Archaeology in Greek Lands* (New York: St. Martin's Press, 1962), 89-90; J. T. Hooker, *Mycenaean Greece* (London: Routledge & K. Paul, 1976), 104; Schofield, *The Mycenaean*, 96.

age.<sup>25</sup> Not only did this allow a lot of space for crops, but it also allowed space for the raising of livestock. This was excellent pastureland and the city of Gla was known for cattle.<sup>26</sup> Thebes, a major site both during Mycenaean times and during the Iron Age was located to the east of Lake Copais and to the south of another lake, Trepchia. It was located at the edge of a large flood plain created by these two lakes. Thebes was roughly eight miles east of Lake Copais, four miles south of Lake Trepchia, and about one mile away from a river that flowed into Lake Trepchia. All of this gave Thebes reliable access to water and fertile soil from the flood plain.<sup>27</sup> This location also put Thebes on a major trade route; it was the major trading center connecting Attica, the Peloponnese, Boeotia, and western Greece.<sup>28</sup>

The last area to examine is Attica, this is the area in which Athens is located. Attica is the eastern most part of the Greek mainland. It has a mountain range separating it from the rest of Greece, the Parnes.<sup>29</sup> This helps form a natural defensive barrier against people in the rest of mainland Greece. It is surrounded by water on three sides. This helps isolate it from the rest of Greece and helps add cohesion, a true sense of being Athenian and Attic.<sup>30</sup> There are a few mountains in Attica and around Athens ranging from one to three thousand feet high, but most of the area is flat. This is very advantageous because it is easier to farm in a flat area and to spread out. Except for the odd mountain, around a half dozen, Attica's elevation is less than six hundred feet above sea level, Athens, and most of Attica, are at less than two hundred feet above sea level.<sup>31</sup> This makes Attica one large coastal plain, around one thousand square miles. The

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<sup>25</sup> Talbert, *Barrington Atlas of the Greek and Roman World*, 55; Fields and Spedaliere, *Mycenaean Citadels*, 39-43.

<sup>26</sup> Oliver Dickinson, "Gla" In *The Oxford Classical Dictionary*, 3<sup>rd</sup> rev. ed., ed. Simon Hornblower and Antony Spawforth, (Oxford: Oxford University Press, 2003), 637; Green, *Ancient Greece*, 18.

<sup>27</sup> Talbert, *Barrington Atlas of the Greek and Roman World*, 55.

<sup>28</sup> Schofield, *The Mycenaeans*, 93-94.

<sup>29</sup> Talbert, *Barrington Atlas of the Greek and Roman World*, 59.

<sup>30</sup> Thomas and Conant, *Citadel to City-State*, 62.

<sup>31</sup> Richard J. A. Talbert, ed. *Atlas of Classical History* (London: Routledge, 1988) 28.



landscape right around Athens is relatively flat. While being one large coastal plain might be a good thing in most cases, with Attica it did not make a difference. The soil in Attica is thin and poor, comprised of limestone and rocks.<sup>32</sup> One reason for this is a lack of water. Where Boeotia and the Peloponnese have lakes and an abundance of rivers, Attica has only two rivers, the Cephissus and the Ilissus, along with a few streams. Not only does Attica lack in sources of water, but, these sources of water are not constant. All of these rivers and streams are seasonal, if there is good rain, and dry up completely during the summer.<sup>33</sup> It is because of this that the area of Attica has poor soil and is not as fertile as the rest of Greece.<sup>34</sup>

Something else to consider is that Greece is so mountainous and has such a varied terrain it was very difficult to find safe harbors.<sup>35</sup> Because of this Attica and Athens became very important. Attica is a large coastal plain and so there are many areas that a ship can beach itself and land. This is advantageous because it gives easy access to almost all of Attica from the sea. Athens itself also has two excellent harbors. Phaleron is just three miles away and the more famous Piraeus is five miles away.<sup>36</sup> These are both very decent harbors, Phaleron was used during the Bronze Age, and Piraeus became the most used harbor during the Archaic Period, the reason for this being because it was a sheltered harbor.<sup>37</sup> Having easy access to the sea was very important because it allowed for fishing which brought in meat, but more importantly it made trade much easier. This would prove invaluable later on in the Dark Age and into the Archaic and Classical Ages.

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<sup>32</sup> Encyclopedia Britannica, 15<sup>th</sup> ed., s.v. "Greece"; Strabo, 8.1.2.

<sup>33</sup> Thomas and Conant, *Citadel to City-state*, 63; Strabo, 9.1.24.

<sup>34</sup> Finley, *Early Greece*, 116.

<sup>35</sup> Osborne, *Greece in the Making 1200 - 479 BC*, 19.

<sup>36</sup> Strabo, 9.1.15.

<sup>37</sup> Talbert, *Barrington Atlas of the Greek and Roman World*, 59.

The other thing to look at in regards to the land in Greece is the climate. First, while the climate in some parts of the world have changed over the last few thousand years, Greece is still basically the same today as it was three thousand years ago.<sup>38</sup> Greece in general has a Mediterranean climate.<sup>39</sup> Now, while this is true, because of how Greece is shaped and the number of mountains, the weather, while similar, is also different for the different regions, and areas within the regions. For instance, the western parts of Greece get more rain than the eastern parts because of the mountains that go down the center of Greece. Attica is also the driest and most arid part of Greece.<sup>40</sup> This is because the rains start in the west and travel eastward. Because of this, the rain clouds must travel over the mountains that dominate Greece, so to get to Attica the clouds must go over the mountains in western Greece, central Greece, and then the last range, the Parnes, before it gets to Attica and Athens. This pattern is noticeable by looking at the weather records.<sup>41</sup> Athens gets significantly less rain than some areas of Greece. Pylos gets more than twice as much rain a year, at an average of thirty-two inches, than does Athens, with just fourteen, and the Argolid gets more than ten inches more at twenty-five. The areas that are the closest to Athens and Attica also vary. Corinth gets around sixteen inches, which is on par with Athens, as does Thebes with fourteen inches. But, just a few miles to the west of Thebes, the city of Orchomenus gets twenty inches a year.<sup>42</sup> So, some areas seem to have the same weather as Athens, but those areas, Corinth and Thebes, also have rivers and lakes in which to turn to for water. It is because of this lack of rain and lack of year round water that Attica and Athens are the driest and have the worst soil out of all Greece. It is because Athens is the driest and has the

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<sup>38</sup> Osborne, *Greece in the Making 1200 - 479 BC*, 21; Hopper, *The Early Greeks*, 7; Isager and Skydsgaard, *Ancient Greek Agriculture*, 11; Dickinson, *The Aegean from Bronze Age to Iron Age*, 79.

<sup>39</sup> A climate distinguished by warm, wet winters under prevailing westerly winds and calm, hot, dry summers.

<sup>40</sup> Isager and Skydsgaard, *Ancient Greek Agriculture*, 11.

<sup>41</sup> See appendix Figure 5A-B, graph of temperature.

<sup>42</sup> See appendix Figure 6A-B, graph of rain.

worst soil that it is able to survive the fall of the Mycenaean when no other city did. The raiders and invaders that struck Mycenaean Greece did not bother with Attica because it did not have anything.

## CHAPTER 4

### LAND USE: HOW THE MYCENAEANS USED THE LAND

Now that we have seen what the land and climate of Greece is like we must pay close attention to what that land was used for and how that profited the cities that controlled that land. Land in the ancient world was used to grow crops, raise animals, and in some places, it was mined for minerals. For the Mycenaeans, the most important use of land was for the growing of crops and the raising of animals. The palaces controlled a large portion of the area in Greece and many towns provided payment to the palaces, of both flora and fauna, on a monthly basis.<sup>1</sup> This would include food for eating, olives and wine for economic purposes, and animals that would be sacrificed and then eaten. These payments would vary from town to town, depending on the population and richness of the town. These items would also vary from town to town, but the basic crops controlled by the palaces were olives, flax, cereals, wine, and animals, like sheep.<sup>2</sup>

First, the cereals, wheat and barley, were tightly controlled by the palaces. They were taken in and then redistributed in rations to people who did not farm, including servants, slaves, smiths and other laborers. The palaces controlled and rationed out vast sums of food stuffs, the Linear B tablet F(2) 852 from Knossos records a minimum of ten thousand units of wheat; in modern measurements that is around seven hundred and seventy five tons.<sup>3</sup> The Linear B tablets E668, E749, and E777 from Knossos show that in one month the palace distributed rations ranging from 1000 liters to 30000 liters.<sup>4</sup> Taking in a minimum of three quarters of a million tons of wheat, and then redistributing it as rations, shows that the palaces had control over the lands

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<sup>1</sup> Ventris and Chadwick, *Documents in Mycenaean Greek*, 220-221.

<sup>2</sup> Foxhall, "Bronze to Iron," 241; Susan Alcock, "Environment," In *The Cambridge Illustrated History of Ancient Greece*, ed. Paul Cartledge (Cambridge: Cambridge University Press, 1998), 25.

<sup>3</sup> Yves Duhoux and Anna Morpurgo Davies, *A Companion to Linear B*, vol. 1 (Louvain-la-Neuve: Peeters, 2008), 172.

<sup>4</sup> Ventris and Chadwick, *Documents in Mycenaean Greek*, 214.

surrounding them and exercised this control for the benefit of the palace and workshop workers. When it came to the cereals that were grown in Greece, they preferred wheat, but this was not always possible. Winter sown durum wheat was the wheat that grew best in Greece.<sup>5</sup> Bread wheat requires a colder wetter climate.<sup>67</sup> What was grown more often during the year was barley.<sup>8</sup> The Linear B tablets Fn02 from Pylos lists barley rations to individual people under the control of the palace on a monthly basis. The importance of the man determined how much rations were received: a shore man got 2 L, an armorer got 4 L, and i-za-a cutters got 6 L.<sup>9</sup> There are many lists that demonstrate how the palaces rationed out food, but suffice it to say they controlled a lot of it, and said who got what and in what amount. There were also foods that were not listed in the Linear B tablets that have been found in the remains of the palaces, like a large variety of legumes.<sup>10</sup> This could either indicate that they were not important enough to mention in the records, or that the records that pertain to them are lost.<sup>11</sup>

One thing to consider is that whatever food was grown for the palaces, it was the same that was grown in later periods of Greek history. There is a direct correlation between the ancient plants and the modern ones, the ancient plant evolving over the last four thousand plus years into the modern plants grown in Greece today.<sup>12</sup> Not only are the plants the same, but the methods for growing them have not changed. Hesiod described the plow used in his day, it was also described

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<sup>5</sup> Jane Renfrew, *Palaeoethnobotany: The Prehistoric Food Plants of the Neareast and Europe* (New York: Columbia University Press, 1973), 66.

<sup>6</sup> Osborne, *Greece in the Making 1200 - 479 BC*, 27; Renfrew, *Palaeoethnobotany*, 65.

<sup>7</sup> Winter wheat and bread wheat are two different types, bread wheat has a greater yield that makes it better for flour.

<sup>8</sup> Renfrew, *Palaeoethnobotany*, 81.

<sup>9</sup> Ventris and Chadwick, *Documents in Mycenaean Greek*, 216.

<sup>10</sup> Foxhall, "Bronze to Iron," 23.

<sup>11</sup> Daniel Pullen, "Crafts, Specialists, and Markets in Mycenaean Greece. Exchanging the Mycenaean Economy," *American Journal of Archaeology*, 117, no. 3 (2013), 439.

<sup>12</sup> Isager and Skydsgaard, *Ancient Greek Agriculture*, 22.

by Homer on the shield of Achilles. This is the same plow seen in pottery<sup>13</sup> and with terracotta figures<sup>14</sup>, and is the same plow<sup>15</sup> that is used in the low socio-economic areas of rural Greece even today.<sup>16</sup> Because of this great continuity and the fact that the climate and land in Greece have not had any significant change in the last few thousand years, it is easy to measure how much agricultural production there was, not only how much was produced, but when it was produced and how much flour was made. Hesiod went into details about how to plant and when; grain being harvested three times a year.<sup>17</sup> Archaeological evidence of the mills that were used by the Mycenaeans shows that they were of the same type used in other parts of the ancient world and even later during Classical Greece.<sup>18</sup> Because of this, the amount of flour that could be milled from a certain amount of grain was relatively the same. Therefore, the amounts of crops listed in the Linear B tablets represent a fairly accurate number, based on the continuity between the Bronze Age and the Iron Age in Greece about how crops were grown and the conditions in which they were grown.

Food crops, like wheat and barley, are of course forms of subsistence farming, but olives would have been considered a “cash crop” back in the Bronze Age and would have been the most important of all crops.<sup>19</sup> While olives were used as food, they were most often pressed into olive oil and this oil was used for a variety of things and has many different classifications, lamp oil, perfume, bathing, religious rituals, and medicine.<sup>20</sup> There are two types of olives, wild and

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<sup>13</sup> See appendix Figure 7, Pottery depicting ploughman.

<sup>14</sup> See appendix Figure 8, Boeotian terracotta figure of ploughman.

<sup>15</sup> See appendix Figure 9, Ard, plough.

<sup>16</sup> Isager and Skydsgaard, *Ancient Greek Agriculture*, 46-49; Hesiod, *Works and Days*, 427; Homer *Iliad*, 23.834, 18.541.

<sup>17</sup> Hesiod, *Works and Days*, 173.

<sup>18</sup> L. A. Moritz, *Grain-mills and Flour in Classical Antiquity* (Oxford: Clarendon Press, 1958), 19, 34.

<sup>19</sup> Osborne, *Greece in the Making 1200 - 479 BC*, 27; Hammond, “The Peloponnese,” 696.

<sup>20</sup> Lin Foxhall, “Olive” In *The Oxford Classical Dictionary*, ed. Simon Hornblower, Antony Spawforth, 3<sup>rd</sup> rev. ed. (Oxford: Oxford University Press, 2003), 1064-1065; Martin, *Ancient Greece*, 2; Christopher Mee, “Death and Burial” In *The Oxford Handbook of the Bronze Age Aegean: (ca. 3000-1000 BC)*, ed. Eric H. Cline, (Oxford:

domesticated. Wild olives produce much less oil than domesticated olives.<sup>21</sup> It was originally thought that olives were not domesticated until the Iron Age but new evidence shows that the olives that the Mycenaeans used were domesticated olives.<sup>22</sup> Olives made up a very large portion of the Mycenaean economy and of the Greek farmers' land. The process of growing olives has changed very little over the years, and the process in which to press olives for oil is the same from the Bronze Age down into the Classical Period.<sup>23</sup> Olives were the economic center of the Mycenaeans, and olive oil was transported across the ancient world. There has even been found Mycenaean pottery and stirrup jars from MH to LHIIIB found in Italy and its islands.<sup>24</sup> The Linear B tablet k700 lists 1800 stirrup jars of olive oil which is a lot more than necessary for local use and indicates trade.<sup>25</sup> The stirrup jars were special pottery for the transportation and use of olive oil and wine.<sup>26</sup> They were primarily for oil, with 80% of jars found having been used to store oil.<sup>27</sup> The amount of olives from different sites varied, but the palaces required olive and olive oil payments, and rationed these out to the people. Linear B tablets list hundreds, even thousands of liters of olives and olive oil made in payments and used as rations.<sup>28</sup> The palace kept a tight control over olive oil production. The only oil workshops at Pylos are found at the

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Oxford University Press, 2010), 287; J. Alexander Macgillivray, L Hugh Sackett, "Palaikastro," In *The Oxford Handbook of the Bronze Age Aegean: (ca. 3000-1000 BC)*, ed. Eric H. Cline, (Oxford: Oxford University Press, 2010), 579; Ventris and Chadwick, *Documents in Mycenaean Greek*, 128; Vermeule, *Greece in the Bronze Age*, 181.

<sup>21</sup> Foxhall, "Bronze to Iron," 242.

<sup>22</sup> Isager and Skydsgaard, *Ancient Greek Agriculture*, 33.

<sup>23</sup> Isager and Skydsgaard, *Ancient Greek Agriculture*, 63.

<sup>24</sup> Thyrza Smith, *Mycenaean Trade and Interaction in the West Central Mediterranean: 600-1000 BC* (Oxford: BAR, 1987), 114-124.

<sup>25</sup> Duhoux and Davies, *A Companion to Linear B*, vol. 1, 144; Halford Haskell, "Pylos: Stirrup Jars and the International Oil Trade," In *Pylos Comes Alive: Industry Administration in a Mycenaean Palace: Papers of a Symposium*, ed. Cynthia Shelmerdine and Thomas Palaima (New York: Fordham University, 1984), 100.

<sup>26</sup> Halford W. Haskell, "The Origin of the Aegean Stirrup Jar and Its Earliest Evolution and Distribution (MB III-LBI)," *American Journal of Archaeology* 89, no. 2 (1985), 221; Vermeule, *Greece in the Bronze Age*, 225; Iphigenia Tournavitou, "Aspects of Trade and Production in Mycenaean Greece," *Hydra*, 7 (1990), 6-7; Haskell, *Pylos: Stirrup Jars and the International Oil Trade*, 103.

<sup>27</sup> Haskell, "Pylos: Stirrup Jars and the International Oil Trade," 98.

<sup>28</sup> Ventris and Chadwick, *Documents in Mycenaean Greek*, 217-219.

palace.<sup>29</sup> The palace kept records that show the steps of the oil making process and the distribution of the ingredients required for making different kinds of oil. These tablets kept track of the raw materials, the allocation of said materials to the workers, the stock of the finished oil, and the distribution of the oil.<sup>30</sup> The large amounts of olives, and subsequent olive oil production would have made a Mycenaean city very rich and therefore areas that were able to grow a significant amount of olive trees would have become very prosperous.

The last aspect of how the land was used was for animals. The animals that were raised would have had several different purposes, as beasts of burden, as sources of income; sheep for wool, and as sacrifices that would then be eaten. Most farms would have had some animals that would have been eaten after a sacrifice.<sup>31</sup> The list of animals includes, distinguished separately, male, female, and adolescent goats, sheep, pigs, cows, horses, asses, deer, and distinguished differently oxen.<sup>3233</sup> The Mycenaean palace scribes were very meticulous about the payments made and there are detailed lists of the animals that are associated with the palaces. Because the tablets list the animals in round numbers, usually by tens or hundreds, it means that the lists are not for the total number of animals, but just ones made as payments to the palace and therefore represent just a small number of the total animals. An example of this is the Linear B tablets from Pylos Cn04 131 and Cn655, they list off rams and ewes, mostly in multiples of ten, made from different people and places.<sup>34</sup> Just like with plants, animals were paid to the palaces, the

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<sup>29</sup> Haskell, "Pylos: Stirrup Jars and the International Oil Trade," 104.

<sup>30</sup> Cynthia Shelmerdine, "The Perfumed Oil Industry at Pylos" In *Pylos Comes Alive: Industry Administration in a Mycenaean Palace: Papers of a Symposium*, ed. Cynthia Shelmerdine and Thomas Palaima (New York: Fordham University, 1984), 81.

<sup>31</sup> Alcock, "Environment," 25.

<sup>32</sup> Ventris and Chadwick, *Documents in Mycenaean Greek*, 210-213.

<sup>33</sup> Oxen are castrated bulls.

<sup>34</sup> Ventris and Chadwick, *Documents in Mycenaean Greek*, 199-200; Palmer, *The Interpretation of Mycenaean Greek Texts*, 170-172.



largest number being of sheep. Knossos Linear B tablets Da-Dg lists around 100,000 sheep.<sup>35</sup> This is a lot of sheep for a city that only controls a small part of the island of Crete. This number of sheep could produce between 30 and 50 tons of wool.<sup>36</sup> A comparison between Pylos and Knossos can be seen in the tablets, Knossos lists 50 women and 200 men as textile workers, and Pylos lists 600 women in the same occupation.<sup>37</sup> This is a fairly comparable number and as such it is reasonable that Pylos would have produced similar amounts of wool as Knossos. Sheep were a very important animal in the ancient world. They were used for the same reason as today, for their wool. But unlike today, the Greeks did not have synthetic materials with which to make cloths. They used either flax or wool. This is observed in the Linear B tablets, lists of both sheep and wool being seen in the D, Dk, and DI tablets.<sup>38</sup> Wool would have had been used both for personal items, and was used economically, to be used as trade goods across the ancient world. Textile production was mentioned in many tablets from several sites, and it was a very important economic asset.<sup>39</sup>

In addition to the economic aspects, the animals had other jobs, a primary one would have been as a beast of burden. This could entail many aspects for different animals. Oxen and asses, for instance, were used as farm animals. Hesiod wrote that an oxen aged nine years was to be used to pull the plow.<sup>40</sup> The use of animals to help out with heavy labors was not a new concept and using them to pull the plow, cart or wagon would have been an everyday task. Horses were also beasts of burden, their primary use would have been to pull chariots. Some of these animals would have had no other purpose but sacrifice and consumption. Linear B tablet

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<sup>35</sup> Snodgrass, *The Dark Age of Greece*, 378; John Killen, "The Textile Industries at Pylos and Knossos," In *Pylos Comes Alive: Industry Administration in a Mycenaean Palace: Papers of a Symposium*, ed. Cynthia Shelmerdine and Thomas Palaima (New York: Fordham University, 1984), 49.

<sup>36</sup> Killen, "The Textile Industries at Pylos and Knossos," 50.

<sup>37</sup> Killen, "The Textile Industries at Pylos and Knossos," 52.

<sup>38</sup> Ventris and Chadwick, *Documents in Mycenaean Greek*, 203-204.

<sup>39</sup> Duhoux and Davies, *A Companion to Linear B*, vol. 1, 142.

<sup>40</sup> Hesiod, *Works and Days*, 405.

Cn02 608 has a list of pigs made in payment to Pylos.<sup>41</sup> Pigs were not a beast of burden, nor a producer of some good, like wool or milk. The only purpose of pigs would have been for sacrifice and consumption. Animal sacrifice was an ancient tradition to worship the gods, but the people knew not to let the meat go to waste. Therefore most animals that were sacrificed, be it sheep, pig, or bull would then be eaten.<sup>42</sup> Sometimes many animals were sacrificed at one time, especially if there was a festival that would have a feast. The sacrifices were also used for battles; oxen in particular were a popular animal for such practice.<sup>43</sup> As we can see Mycenaean Greece, like most of the ancient world, was an agrarian society. It relied on the land and what the land was able to produce in order to survive and to trade. In order to become a rich and powerful city in Mycenaean Greece a surplus of goods is needed in order to trade. Mycenaean Greece used cash crops like olive oil in order to get metals and luxury items. Athens, being in area of Greece with both bad soil and bad weather was not able to have large surpluses. Because of this Athens did not have the riches that the other Mycenaean cities had and so when the raiders and invaders that caused the downfall of the Mycenaean came looking for riches, Athens had none and was left alone.

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<sup>41</sup> Ventris and Chadwick, *Documents in Mycenaean Greek*, 205-206.

<sup>42</sup> Hesiod, *Theogony*, 532-542.

<sup>43</sup> Ventris and Chadwick, *Documents in Mycenaean Greek*, 206-207.

## CHAPTER 5

### ATHENS: WHAT ATHENS DID DURING THE DARK AGE

Athens is an important site in Greek history because it is ancient and has been continuously occupied since the Stone Age. Because of this one can study the many different periods of Greek history through which Athens has survived. Athenian history begins in the Stone Age, and has seen continuous habitation for the last six thousand years.<sup>1</sup> Ancient artifacts like stone tools and pottery demonstrate this. Because Athens has had continuous occupation, one can see the evolution of the pottery, and vice versa, the pottery is the indication of the continued habitation and physical continuity.<sup>2</sup> One way to show that Athens has remained populated is its many cemeteries.<sup>3</sup> The Keramikos cemetery shows how important Athens was, with five hundred years of uninterrupted use.<sup>4</sup> This use covers the end of the Mycenaean Age, the subsequent Dark Age, and the beginning of the Archaic Age. It is the only site in all of mainland Greece that has this uninterrupted record.<sup>5</sup> In comparison no cemetery outside of Attica has the remains of any population greater than fifty people at any given time till the Geometric Period.<sup>6</sup> Messenia, the area of western Peloponnesus does not show habitation through pottery past LH IIIB, not till the geometric period.<sup>7</sup> Corinth is the same, the last Mycenaean pottery is

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<sup>1</sup> MacKendrick, *The Greek Stones Speak*, 118.

<sup>2</sup> Biers, *The Archaeology of Greece* 9; Thomas and Conant, *Citadel to City-state*, 67-68; Schweitzer, *Greek Geometric Art*, 24; Mario Benzi, *Ceramica Micenea in Attica* (Milano: Instituto Editoriale Cisalpino-La Goliardica, 1975), 387-388.

<sup>3</sup> Whitley, *The Archaeology of Ancient Greece*, 352; Desborough, *The Last Mycenaean and Their Successors*, 35.

<sup>4</sup> MacKendrick, *The Greek Stones Speak*, 125.

<sup>5</sup> Starr, *The Origins of Greek Civilization*, 84.

<sup>6</sup> Snodgrass, *Archaeology and the Emergence of Greece*, 133; Desborough, *The Last Mycenaean and Their Successors*, 34-35.

<sup>7</sup> Tegye, "Messenia and the Catastrophe at the End of Late Helladic IIIB," 228.

from LHIII B, but it is re-inhabited earlier for there has been found proto-geometric pottery.<sup>8</sup> The Argolid on the other hand has pottery as far back as the LHIIIC period, but then it too shows no sign of habitation until the proto-geometric period and has identifiable permanent settlement and structures in the geometric period.<sup>9</sup>

As previously seen the soil of Attica is of very poor quality. But even with this, Athens was a Mycenaean city with a palace and it, like the rest of the Mycenaean world, underwent fortification of its acropolis, where the palace was located, at around 1200 BC.<sup>10</sup> Like other sites in the Mycenaean world, it built massive cyclopean walls to protect the palace structure from aggressors.<sup>11</sup> The Mycenaeans of Athens even dug a protected well that went down several stories into the bedrock of the acropolis.<sup>12</sup> Unlike the rest of Greece however, Athens survived the fall of the Mycenaean Age and one can still see some small evidence of the Bronze Age fortifications that have not been built over or destroyed in later generations.<sup>13</sup> The reason it was not destroyed, like the rest of the Mycenaean sites, was not because it was better fortified. There were much better fortified cities in Mycenaean Greece that did not survive and show very violent signs of destruction.<sup>14</sup> One can even see that Athens took in refugees because it was not touched by the wave of destruction that ended the Mycenaean Age.<sup>15</sup>

The reason Athens was not destroyed was because of where it was located. Attica is one of the worst places to grow food in all of Greece. It is the most arid and has the worst soil.

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<sup>8</sup> Desborough, *The Last Mycenaeans and Their Successors*, 85; Hammond, "The Peloponnese," 717-718.

<sup>9</sup> Desborough, *The Last Mycenaeans and Their Successors*, 75; Hammond, "The Peloponnese," 705-709, 712.

<sup>10</sup> See appendix Figure 10, Diagram of fortification at Athens.

<sup>11</sup> Camp, *The Archaeology of Athens*, 16; Thomas and Conant, *Citadel to City-state*, 64; Penelope Mountjoy, *Mycenaean Athens* (Jonsered: P.Aströms Förlag, 1995), 22; Ida Hill, *The Ancient City of Athens: Its Topography and Mounuments* (London: Methuen, 1953), 12-13.

<sup>12</sup> See appendix Figure 11, Athens' well.

<sup>13</sup> Robbins, *Collapse of the Bronze Age*, 120.

<sup>14</sup> Hooker, *Mycenaean Greece*, 148-149; MacKendrick, *The Greek Stones Speak*, 121; Stiebing, "The End of the Mycenaean Age," 8.

<sup>15</sup> Wiseman, "Greece and Early Greeks," 717; Vermeule, *Greece in the Bronze Age*, 270.

Because of this Athens was one of the poorest of Mycenaean sites and it continued to be very poor in food production into the Iron Age. In fact, during the height of Athenian power it imported most of its food.<sup>16</sup> During the Mycenaean Age, urban wealth required a stable supply of food products. Olives were grown for olive oil, grain to provide surplus food for the people who were not farmers, and vines for wine to drink domestically and export. Olive oil was very important because it was one of the major exports used for trade in the Mycenaean world. Olive oil was not used for food, but was turned into perfume, it was used as lamp oil, for religious ceremonies, soaps, and even as a form of medication. Wine was also a major export. Greek amphora can be seen across the ancient world. The richer areas of Greece were the areas that had surplus of agricultural products because the areas that they were in had the soil and weather conditions that enabled them to grow enough to export.<sup>17</sup> Athens and Attica barely had the ability to support itself and even though it has always been inhabited, going back to the Stone Age, it remained a small and poor city. Even during the Iron Age, during the archaic and classical period the fact that food was hard to grow because of soil and climate was something that was noticed and laws were even made in order to try to help; Solon, who wrote his laws in the year 594 BC, wrote some concerning this. Solon wrote that the only crop allowed for export was to be olive oil, because it is hard to grow much food in Attica and all that is grown is needed there.<sup>18</sup> Before this law other crops were sold, but Solon recognized the need to keep food stuffs in Attica. Solon also wrote a law concerning water. As water is so important and yet surface water scarce in Attica, Solon wrote a law stating that if there was a well within half a mile

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<sup>16</sup> Freeman, *Egypt, Greece, and Rome*, 221.

<sup>17</sup> Thucydides, 1.2.3.

<sup>18</sup> Plutarch, *Solon*, 24.

everyone was allowed to use it, but if not then a well should be dug.<sup>19</sup> This ensures that everyone has access to water and that there would be plenty of wells.

The fact that Athens was poorer than other major Mycenaean sites can also be seen by examining some of the archaeological evidence left behind. Now while the rest of the more important Mycenaean cities were destroyed and looted there still remains a significant amount of gold and other luxury items. Looking at a list of these finds we can see that Athens is poorer during the Mycenaean age. Between MH and LHIIIC there are only six graves with gold and one with silver found in Athens; in comparison the number of pottery shards is in the thousands.<sup>20</sup> This means that over several hundred years, there are less than ten graves that merit riches that have not already disappeared. Compared to the other cities in Mycenaean Greece, this is a small number. Pylos, Argos, Tiryns and Mycenae all were destroyed and looted, but there have still been found numerous graves and other sites with gold and other riches.<sup>21</sup> So when comparing Athens and the other major Mycenaean cities we can see that because the land in Attica is poor, therefore there is less trade in crops, and less luxury goods like gold.

Because it was so poor, when the destructions struck the Mycenaean world, caused by raiders and Dorian invaders, Athens was ignored. It was the wealthier cities in the fertile areas that were targeted, for they offered the most gain.<sup>22</sup> It can be seen that places like Mycenae, Tiryns, Pylos, and Orchomenus had riches; graves and remains at the palaces prove this. Athens

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<sup>19</sup> Plutarch, *Solon*, 23.

<sup>20</sup> Mountjoy, *Mycenaean Athens*, 13-73.

<sup>21</sup> Mylonas, *Mycenae and the Mycenaean Age*, 92-110; Robert Laffineur, "Jewelry," In *The Oxford Handbook of the Bronze Age Aegean: (ca. 3000-1000 BC)*, ed. Eric H. Cline (Oxford: Oxford University Press, 2010), 446-452; William Cavanagh, "Death and the Mycenaean" In *The Cambridge Companion to The Aegean Bronze Age*, ed. Cynthia Shelmerdine (Cambridge: Cambridge University Press, 2008), 337; Kelly, *A History of Argos to 500 BC*, 15.

<sup>22</sup> Thucydides, 1.2.4.

lacked this abundance of riches, and so there would be no point in raiding an area that had no gold or jewels.<sup>23</sup>

As far as invasion and settlement, Attica would be a poor choice because of its land. Invaders picked the best and most fertile land to settle. Attica has the worst soil and is the driest area of Greece; therefore settling there instead of an area like the Argolid or Pylos, which are rich in both soil and water, would make very little sense.

This fact can also be seen with burials and other sites during the Dark Age. While trade had shrunk and there were less people, there were still people in charge in some places, just not the Mycenaeans. Examining the archaeological remains shows that even though Athens remained intact and inhabited, it still remained poor. Lefkandi was a site on the island of Euboea just north of the Attic peninsula. Lefkandi is the best example of a thriving Dark Age settlement. What is both good and bad about Lefkandi is the time frame that it was inhabited. Lefkandi is a Dark Age settlement only, and was only occupied for 200 years.<sup>24</sup> Because of this there is no corruption from later generations covering up the site, but it also shows that even though it was an active site during the Dark Age, being rich does not always mean a city will survive. And Lefkandi was a rich city when compared to other sites on mainland Greece. Archaeological excavations have found numerous gold objects from the Dark Age across Greece. Athens, Tiryns, Argos, and Lefkandi all have gold wire found in graves. Athens has 8 examples, Tiryns 4, Argos 9, and Lefkandi 8. Three of these sites have a comparable amount of gold wire during the Dark Age, especially considering Tiryns and Argos had been destroyed and abandoned for several generations. But this is where that comparable amount ends. Lefkandi is the richest Dark Age site for a reason. Also found at Lefkandi are gold coils, rings, pins, discs, and random

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<sup>23</sup> Thucydides, 1.2.5.

<sup>24</sup> Lamos, *The Protohistoric Aegean*, 196.

attachments. A total of 140 gold objects found at Lefkandi and only 22 gold objects found in mainland Greece sites.<sup>25</sup> This shows that it was because Athens was so poor and is located in such a bad area that it was able to survive and then prosper.

Another way to see how Athens and Attica was poorer than the rest of the Mycenaean cities is Homer. Homer talks about the Mycenaean a great deal, but he only mentions Athens once in the entire *Iliad*, during the catalogue of ships, and only three times in the *Odyssey*. In the catalogue of ships Athens contributes 50 ships, Orchomenus 60, Boeotians- which includes Thebes and Gla- 50, Argos and Tiryns 80, Mycenae 100, Pylos 90, and Knossos 80.<sup>26</sup> We can see that to Homer while Athens was important and could contribute a good number of ships, it could not contribute to the same degree as other Mycenaean cities, and as a smaller city Athens earns what could be seen as a token remembrance in the *Iliad* and *Odyssey*.

Because of the fact that Athens was not destroyed, Athens was able to accomplish many things because it stayed inhabited and we will be examining three of those. Athens acted as a refuge for the displaced Mycenaean and a starting point for the subsequent migration across the Aegean. During the Dark Age Athens was the leader in the development and use of iron, with iron replacing bronze, thus beginning the Iron Age in Greece. Athens was also was the cultural center during the Dark Age for mainland Greece and developed two types of pottery and then went on to influence the rest of the Greek world with these styles. Because of these things, Greece was able to survive in some fashion, and at the end of the Dark Age emerge far better for it.

#### CENTER FOR REFUGEEES AND MIGRATIONS

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<sup>25</sup> Lamos, *The Protoegeometric Aegean*, 126-133; Jane Walbaum, *From Bronze to Iron: The Transition from the Bronze Age to the Iron Age in the Eastern Mediterranean* (Göteborg: P. Aström, 1978), 50.

<sup>26</sup> Homer, *Iliad*, 2.494-645.



One aspect of Athens not being abandoned is a legend that Athens and Attica was both a refuge and a staging point for migration to the Aegean islands and the Ionian coast.<sup>27</sup> Now this is a disputed concept, it is a legend passed down through the years and many Greeks wrote about how after the destructions that encompassed the Mycenaean world many sought refuge with Athens, as it remained relatively untouched.<sup>28</sup> The theory of migrations in the Greek world is not as far-fetched as it may seem; as there is a certain correlation between the legend of migration and the Greek dialects during the Iron Age. The Doric dialect is traceable to northwest Greece, one of the locations from which legend says the Dorians migrated.<sup>29</sup> As the legends go, the Dorians came from northern Greece, the area northwest of Boeotia, invaded Greece, and settled in the Peloponnese.<sup>30</sup> As seen earlier, the cities of the Mycenaean Greeks were destroyed and or abandoned starting in the north and going south into the Peloponnese. In the Iron Age the dialect of most of the Peloponnese is Doric, except for one small isolated part. The migration of the Dorians and the Mycenaean's exodus to the islands and Ionia fits with the legends, the languages of later Greeks, and with archaeological evidence.<sup>31</sup> The Mycenaean sites were abandoned. Even with the destruction that is evident at many of them, some of the population would have survived. With the fact that the population does not stay in the area and the population dropped by about 90%, a migration eastward would make perfect sense.<sup>32</sup> Where better to start that migration than the one place that survived the troubles, Athens. As tradition holds, Athens offered refuge to the

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<sup>27</sup> Thucydides, 1.2.6; Pausanias, 7.1.9.

<sup>28</sup> Christiane Sourvinou-Inwood, "Movements of Populations in Attica at the End of the Mycenaean Period," In *Bronze Age Migrations in the Aegean; Archaeological and Linguistic Problems in Greek Prehistory*, ed. R. A. Crossland and Ann Birchall (Park Ridge: Noyes Press, 1974), 215.

<sup>29</sup> Green, *Ancient Greece* 45; Palmer, *Mycenaeans and Minoans*, 156.

<sup>30</sup> Desborough, *The Mycenaean and Their Successors*, 245-247.

<sup>31</sup> Camp and Fisher, *Exploring the World of the Ancient Greeks*, 63; Biers, *The Archaeology of Greece*, 98.

<sup>32</sup> Finley, *Early Greece*, 64; Murray, *Early Greece* 8; Biers, *The Archaeology of Greece*, 97; Snodgrass, *The Dark Age of Greece*, 311; Pope, *The Ancient Greeks*, 19; Tomlinson, *Argos and the Argolid*, 52-53.

people from the Peloponnese and helped stage migrations across the Aegean.<sup>33</sup> One thing that helps strengthen this theory is the fact that if you go straight east from Attica, to the Aegean islands and Greek Ionia, you see a direct relationship in language, religious festivals and cults, names of things like months and tribes, and other physical remains.<sup>34</sup> One also sees that Athens and Attica increased in population after the fall of the Mycenaeans. In a time where the rest of Greece became depopulated, Athens and Attica actually grew, which indicates an influx of refugees.<sup>35</sup>

While some people may doubt legends as events that never happened and just a way of explaining things unknown, there is also the possibility that legends are remembrances of the past, where absolute truth has been lost. Take the fact that legend speaks of Athens as a refuge for Pylos in particular.<sup>36</sup> It is a fact that the people of Pylos were able sailors, were on the lookout for invasion and were making preparations for defense. There is evidence that Pylos maintained a fleet of some kind, be it military or for trade; the Pylos tablets talk about it among other archaeological evidence.<sup>37</sup> Looking at the archaeological evidence in the locations that tradition holds the Pylians settled shows that they had much stronger sailing traditions than the rest of Attica. There are also similarities with the pottery at the end in Pylos with the sites that legend hold the Pylians settled. The traditional telling of what the refugees did also coincides

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<sup>33</sup> Finley, *Early Greece*, 78; Thucydides, 1.12.4; Herodotus, 1.145-146; Strabo, 14.1.3; Pausanias, 7.2.1-4; Michaël Sakellariou, *La Migration Grecque En Ionie* (Athens: Institut Francais D'Athenes, 1958), 39.

<sup>34</sup> Thomas and Conant, *Citadel to City-state*, 72-73.

<sup>35</sup> Camp, *The Archaeology of Athens*, 21; Sourvinou-Inwood, "Movements of Populations in Attica at the End of the Mycenaean Period," 215; Desborough, *The Mycenaeans and Their Successors*, 231.

<sup>36</sup> Strabo, 14.1.3; Pausanias, 2.18.9; Herodotus, 5.65.3-4.

<sup>37</sup> John Chadwick, "The Muster of the Pylian Fleet," *Tractata Mycenaea*, (1987), 75-84; Leonard Palmer, "Military Arrangements for the Defense of Pylos," *Seminario De Filología Clásica*, (Salamanca: Universidad De Salamanca, 1956), 120-145; Thomas Palaima, "Maritime Matters in the Linear B Tablets," *Aegaeum*, 7(1991), 285-286, 301.

with the archaeological evidence.<sup>38</sup> First, settling for a time in several places, and then leaving some of those places to travel across the Aegean.<sup>39</sup> It can even be seen that some of these legends are backed up by foreign texts, many which talk about the same people and places.<sup>40</sup> While tradition and legends should not be believed solely by themselves, they are a good starting point for what may have happened, and can sometimes be backed up by archaeological evidence. Troy was thought to be a myth, but using Homer as a guide it was found and proved to be a real place, even if some legends about it might not be real. The Hittites were also thought to be a myth, only mentioned in the Bible, but they too were proven real.

Using both traditions and archaeological evidence, it is clear that, because Athens survived the fall of the Mycenaeans, it became a refuge for the displaced Mycenaeans, and a jump-off point for them to travel across the Aegean in search of new homes.<sup>41</sup>

## IRON

What defines the title of an age is the primary material used in everyday life. This means tools, weapons, and different types of utilitarian objects. First is the Stone Age, then the Bronze Age, and then Iron Age.<sup>42</sup> Different parts of the world underwent the different phases at different times depending on how the civilizations evolved and what raw materials were available in the area. When it came to Greece, bronze was a very dominant metal; even during the Iron Age bronze was still used for a wide variety of objects, including armor, fire braziers, and cauldrons.

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<sup>38</sup> Palmer, *Mycenaeans and Minoans*, 158-161; Desborough, *The Mycenaeans and Their Successors*, 232; Sandars, *The Sea Peoples*, 183.

<sup>39</sup> Sourvinou-Inwood, "Movements of Populations in Attica at the End of the Mycenaean Period," 215-221; Tomlinson, *Argos and the Argolid*, 55.

<sup>40</sup> Hammond, "The Literary Traditions for the Migrations," 680; Huxley, *The Early Ionians*, 20-21.

<sup>41</sup> Thucydides, 1.2.6.

<sup>42</sup> For the ancient eastern Mediterranean the Stone Age ends between 3500 BC and 2500 BC, and the Bronze Age ends between 1200 BC and 800 BC.

This was when Greece was prosperous, because bronze is a metal alloy, a combination of copper and tin. The composition of bronze varies depending on the quality and type of materials available. But one thing for sure is that bronze uses a large amount of copper. The breakdown of ancient bronzes show that most range from 65% to 95% copper. The rest of it would ideally be made up of tin, usually ranging from 5% to 25%. But when tin was scarce lead and zinc were used as a substitutes making up 0% to 20% of the alloy.<sup>43</sup>

The problem is that tin, the metal that gives bronze its hardness, is very scarce in the ancient world; there are no tin deposits in Greece at all, so it was all imported. Not only this, but copper, the primary element in bronze, is found only in small deposits in Greece. Most of these are in the Peloponnese, so copper was usually imported as well.<sup>44</sup> Because of this fact, when there is no economy to speak of, it is very difficult to import the materials necessary to make bronze. Thus, at the end of the Bronze Age, when the Mycenaean palaces fell, and with them the economy and trade, the supply of bronze dried up. One can observe the amounts of bronze used during the Mycenaean Age and it was all imported. Metal was a very important aspect of society and the Mycenaean employed large numbers of smiths to make a vast amount of bronze objects, as attested to in the Linear B tablets found at several Mycenaean sites.<sup>45</sup> In fact, during the Bronze Age, iron was considered a precious metal in Greece and was used for jewelry.<sup>46</sup> The amount of iron used in the Bronze Age is difficult to determine because, unlike bronze, iron

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<sup>43</sup> George Brinton Phillips, "The Composition of Some Ancient Bronze in the Dawn of the Art of Metallurgy," *American Anthropologist* 24, no. 2 (1922), 129-143; Maria Kayafa, "From Late Bronze Age to Early Iron Age Copper Metallurgy in Mainland Greece and Offshore Aegean Islands," In *Ancient Greece: From the Mycenaean Palaces to the Age of Homer*, ed. Sigrid Deger-Jalkotzy and Irene Lamos (Edinburgh: Edinburgh University Press, 2006), 214-226; Colin Renfrew, "Cycladic Metallurgy and the Aegean Early Bronze Age," *American Journal of Archaeology*, 71, no. 1 (1967), 20.

<sup>44</sup> Snodgrass, *Archaeology and the Emergence of Greece*, 127; Snodgrass, *The Dark Age of Greece*, 231; Waldbaum, *From Bronze to Iron*, 3, 63.

<sup>45</sup> Duhoux and Davies, *A Companion to Linear B*, vol. 1, 142-143; Snodgrass, *Archaeology and the Emergence of Greece*, 132.

<sup>46</sup> V. R. D'A. Desborough, *The Greek Dark Ages* (New York: St. Martin's Press, 1972), 314.

erodes and disappears. But even with this taken into account, the amount of iron used during the Bronze Age in Greece is quite small with only fourteen known examples. Most of those came from the end of the age, in Helladic III, ten of these were iron rings and only one was a tool, the earliest iron tool in Greece.<sup>47</sup>

With the fall of the Mycenaeans came a change in what the Greeks that still inhabited the Greek mainland were capable of doing. The quality of life was much poorer, this included the ability to make objects out of metal like tools or weapons. At the beginning of the Dark Age, bronze was still the metal of choice, but the quality of the metal was much poorer, almost as if the smiths were recycling scraps of bronze. But, because of the lack of trade, and the limited amount of the materials necessary to make bronze, other sources were sought. Iron was this choice, and it happened first in Athens. Now Greece does not have a lot of natural resources, the lack of tin and copper are proof of this, but Greece does have some iron sources, if just a few. These sources are primarily in Attica and Boeotia, which is one reason why Attica became the leading force of iron use during the Dark Age.<sup>48</sup> While these deposits of iron are not large, certainly not enough to export, they are large enough to replace bronze in the use of tools and weapons.<sup>49</sup> At the start of the use of iron, the quality is poor, the smiths had no practice smelting the ore, but over time the quality improved.<sup>50</sup> It was more like scrap in the beginning because iron is not as easy as bronze to smelt down and requires a lot of trial and error.<sup>51</sup> But the smiths eventually get the hang of it and the iron quality improved.

It improved to the point that it was quite obvious that iron is a superior metal to bronze in many ways. Iron is lighter, stronger, easier to sharpen, keeps its edge better, and does not require

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<sup>47</sup> Waldbaum, *From Bronze to Iron*, 18.

<sup>48</sup> Waldbaum, *From Bronze to Iron*, 2.

<sup>49</sup> Snodgrass, *The Dark Age of Greece*, 231.

<sup>50</sup> Biers, *The Archaeology of Greece*, 109.

<sup>51</sup> Smelting is the process of melting down raw ore in order to make it into useable metal.

a mixture of multiple metals.<sup>52</sup> Bronze is a fairly soft metal, because its primary element is copper. Because of this, it breaks and bends easily and does not hold an edge very well, and the edge it does hold is not as sharp as other materials can get. Iron, on the other hand, is very strong so it does not break or bend easily, although when it does break, it often shatters because it can be brittle. Iron also takes an edge much better than bronze and keeps this edge much longer. Because of this, iron is an ideal metal for tools and weapons because it takes less effort to maintain while in use. Because of this, iron took the place of bronze over the course of the Dark Age.<sup>53</sup> In fact during the Iron Age, except for the use as armor, over the Dark Age and into the later Archaic and Classical Ages bronze takes the place of iron as a decorative metal.<sup>54</sup>

Over the Dark Age iron took the place of bronze and this can be seen in all of Greece but most noticeably in Attica.<sup>55</sup> Athens was the leader in the development and the use of iron.<sup>56</sup> At the beginning of the Dark Age the use of iron was small; just eight pieces are recovered from twelfth century BC mainland Greek sites, but Athens was the star of the show having six of those pieces. Two of these were knives, and the rest were jewelry. The pace grows steadily, and there are thirty-one iron pieces recovered from eleventh century BC sites in mainland Greece. Athens, as a site that was not abandoned, was the dominant force and took the lead with use of iron. Out of thirty-one examples, twenty-one are from Athens. This includes jewelry, clothing pins, and weapons. The pace is increased and by the tenth century BC there are one hundred and fifteen examples of iron from mainland Greece. It was much more widespread and common, but Athens was still the driving force and was very influential on the other parts of Greece. In Athens there are eighty-three examples of iron used, with the distribution high on the items like pins and

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<sup>52</sup> Dickinson, *The Aegean from Bronze Age to Iron Age*, 146.

<sup>53</sup> Finley, *Early Greece*, 70-72; Martin, *Ancient Greece* 40.

<sup>54</sup> Snodgrass, *The Dark Age of Greece*, 232.

<sup>55</sup> See appendix Figure 12, Iron use graphs.

<sup>56</sup> Snodgrass, *The Dark Age of Greece*, 238, 233-234.

fibula, used with clothing, with more than half. The rest is made up of tools and weapons.<sup>57</sup> What must be remembered is that this is a small representation of what would have been in actual use, all of these objects come from graves. Iron rusts and therefore any iron objects not preserved in the pottery of a grave would have disappeared over the last three thousand years, but the steady increase in usage that can be seen from the graves is a real indication that iron had become the dominant metal by the end of the Dark Age.<sup>58</sup>

The importance of iron can be noted in the various manners in which the Dark Age Greeks used iron tools and weapons. While the plough was still made from wood, many other farm tools were beginning to be made from iron. Because of its hardness and sharpness, it increases the ability for said tools to do their jobs. What can also be seen is that iron is much better for weapons and it takes that role fairly well. At first, there are more knives than any other weapon but eventually all of the weapons are made from iron. The sword was the dominant weapon until the end of the Dark Age and the spear does not appear until the tenth century BC, and does not dominate the Greek military till the Archaic Age.<sup>59</sup>

## POTTERY

When looking at what Athens was able to accomplish during the Dark Age one of the most important and influential aspects was the pottery. Athens was so influential with pottery that some of the techniques developed during the Dark Age are still studied and even used today.<sup>60</sup> Athens was so important during the Dark Age when it came to pottery that it was the driving force for change in styles in other parts of Greece and Athens was looked to as a leader

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<sup>57</sup> Waldbaum, *From Bronze to Iron*, 31-32.

<sup>58</sup> Snodgrass, *Archaeology and the Emergence of Greece*, 129.

<sup>59</sup> Snodgrass, *Arms and Armor of the Greeks*, 37-38.

<sup>60</sup> Stanislawski, "Dark Age Contributions to the Mediterranean Way of Life," 406.

in the arts.<sup>61</sup> What also makes Athens so important was because it survived, it shows how the pottery styles changed and evolved over the Dark Age.<sup>62</sup> The pottery of the Mycenaean Greeks was controlled by the palace structure and as such was fairly uniform across Greece.<sup>63</sup> It was not until the destructions of the palaces and the fall of the Mycenaean Greeks that the pottery styles start to change and are defined by the local regions.<sup>64</sup> With the fall of the Mycenaeans, a period begins where the pottery is substandard, called sub-Mycenaean.<sup>65</sup> Sub-Mycenaean was of very poor quality, being small, heavy, globular, misshapen, and made from poor quality clay.<sup>66</sup> Sub-Mycenaean can be seen in several sites across Greece and is linked to late Mycenaean but is of a much poorer quality, as if the people did not have the time, inclination, or more likely, ability to make the pottery better.<sup>67</sup>

It was in Athens that one sees the first signs of the Greeks regaining a cultural identity after the fall of the Mycenaeans. Athens was the first to show any interest in making higher quality pottery, better glaze, not misshapen, cleaner lines.<sup>68</sup> This pottery style is called proto-geometric and while it has some roots in earlier styles, it is distinct and separate.<sup>69</sup> There are several things that make proto-geometric better than sub Mycenaean, the simplest is quality. Proto-geometric pottery is better proportioned and has a better finish than sub-Mycenaean.<sup>70</sup> Another aspect of proto-geometric is the use of a compass.<sup>71</sup> Multiple brushes had been used before in many different parts of the world, but the first time that they are used in conjunction

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<sup>61</sup> John Boardman, *Greek Art* (New York: Thames & Hudson, 2006), 32, 2.

<sup>62</sup> Thomas and Conant, *Citadel to City-state*, 67-68.

<sup>63</sup> Reynold Alleyne Higgins, *Minoan and Mycenaean Art* (London: Thames & Hudson, 2005), 172.

<sup>64</sup> Higgins, *Minoan and Mycenaean Art*, 118; Finley, *Early Greece*, 65.

<sup>65</sup> Robert Cook, *Greek Painted Pottery*, 3<sup>rd</sup> ed. (London: Routledge, 1997), 6

<sup>66</sup> Starr, *The Origins of Greek Civilization*, 92.

<sup>67</sup> See appendix Figure 13, sub-Mycenaean pottery.

<sup>68</sup> John Boardman, *Early Greek Vase Painting: 11th to 6th Centuries BC: A Handbook* (London: Thames and Hudson, 1998), 13; John Boardman, *The History of Greek Vases: Potters, Painters, and Pictures* (London: Thames & Hudson, 2006), 14.

<sup>69</sup> Finley, *Early Greece*, 70; Cook, *Greek Painted Pottery*, 7.

<sup>70</sup> Boardman, *Early Greek Vase Painting*, 13.

<sup>71</sup> Whitley, *The Archaeology of Ancient Greece*, 90.



with a compass was with proto-geometric. Athenian craftsmanship was a game changer when it came to making pottery, as the innovator of proto-geometric Athens was the first to use a compass.<sup>72</sup> What made this important was that the potter could make multi line designs with much greater precision and with much cleaner lines. With the use of a compass the geometric designs, like circles and half-moons, became much clearer and made a much bigger impact. The compass was not the only innovation that Athens came up with to invent the new style. The pot shapes were gradually changed to larger taller pottery; which was helped by a faster pottery wheel. The glaze that was used made the paints used in decoration brighter, and the decoration itself changed. With the use of geometric shapes and horizontal lines, Athens started to emphasize the lines of the pot, to show greater definition.<sup>7374</sup>

While dating is not always an easy thing to do, proto-geometric started in Athens.<sup>75</sup> There are a few of different dates for the start of proto-geometric, depending on location and the dating method. Most agree between 1075 BC and 1050 BC in Athens and 1025 BC and 1000 BC for the rest of Greece.<sup>76</sup> While the dates vary a little, one thing is certain, that proto-geometric started in Athens and spread out from there.<sup>77</sup> There is a gap of two to four generations between the start of proto-geometric in Athens and other parts of Greece.<sup>78</sup> In Euboea, for example, sub proto-geometric pottery was just starting when Athens entered middle proto-geometric.<sup>79</sup> What can be

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<sup>72</sup> Jeffrey M. Hurwit, *The Art and Culture of Early Greece: 1100-480 B.C.* (Ithaca: Cornell University Press, 1987), 7; Pope, *The Ancient Greeks*, 21.

<sup>73</sup> Hurwit, *The Art and Culture of Early Greece*, 56.

<sup>74</sup> See appendix Figure 14, Attic proto-geometric amphora.

<sup>75</sup> Biers, *The Archaeology of Greece*, 97; Hurwit, *The Art and Culture of Early Greece*, 37; Finley, *Early Greece*, 78; Cook, *Greek Painted Pottery*, 30.

<sup>76</sup> Murray, *Early Greece* 12; Starr, *The Origins of Greek Civilization*, 96; Lévêque, *The Greek Adventure*, 89.

<sup>77</sup> Biers, *The Archaeology of Greece*, 99; Whitley, *The Archaeology of Ancient Greece*, 90; Snodgrass, *The Dark Age of Greece*, 239-246; Demargne, *The Birth of Greek Art*, 285-287; John Coldstream, *Geometric Greece* (New York: St. Martin's Press, 1977), 45.

<sup>78</sup> Cook, *Greek Painted Pottery*, 7.

<sup>79</sup> Boardman, *Early Greek Vase Painting*, 15; Robert Cook, *Greek Art: Its Development, Character, and Influence* (New York: Farrar, Straus, Giroux, 1973), 30.

seen is that proto-geometric in the rest of Greece is greatly influenced by Athens.<sup>80</sup> Because proto-geometric started in Athens and spread out, other sites in Greece look to Athens for inspiration. While proto-geometric did eventually travel to all corners of the Greek world, Athens' influence is noticeable among them.<sup>81</sup> It is also because of the fact that Athens invented the style that it is in Athens that we find the most examples. It also shows that while the rest of the Greek world may have adopted the proto-geometric style, Athens was the progenitor and, as such, it was the best at the style and all examples of pottery found are compared against the Attic samples.<sup>82</sup>

The last item of note is an item of Attic proto-geometric pottery, the figure of a horse. This is important because after the fall of the Mycenaeans there had been no figurative drawings on pottery. While there are only three examples of this, it is important because it derives from the late proto-geometric period in Athens 975-950 BC. This was around two hundred years after the last pottery that had figures on them were made. This is important as it marks the prelude of what was to come in Greek pottery.<sup>83</sup>

The end of the Dark Age was dominated by a style of pottery called geometric. As the name implies, its roots are in proto-geometric and it used geometric designs as well, just in much more elaborate detail. It has even been noticed that the intricacies of the designs look similar to the interweaving of basketry.<sup>84</sup> What really differentiates geometric from proto-geometric is the quantity and variety of geometric designs. Whereas in proto-geometric the compass was very important, in geometric it was still used, but it takes a back seat. Also the large bands and

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<sup>80</sup> Cook, *Greek Art*, 30.

<sup>81</sup> Biers, *The Archaeology of Greece*, 105-106; Osborne, *Greece in the Making 1200 - 479 BC*, 43; Starr, *The Origins of Greek Civilization*, 96; Boardman, *Early Greek Vase Painting*, 15.

<sup>82</sup> Starr, *The Origins of Greek Civilization*, 96; Boardman, *Early Greek Vase Painting*, 13; Lévêque, *The Greek Adventure*, 90; Hurwit, *The Art and Culture of Early Greece*, 58.

<sup>83</sup> Hurwit, *The Art and Culture of Early Greece*, 58-59.

<sup>84</sup> Boardman, *Greek Art*, 38.

multiple lines of proto-geometric are replaced with bands of geometric designs.<sup>85</sup><sup>86</sup> One of the major events with the advent of geometric pottery was an increase in grave goods. This is a good indication that Greece is finally starting to recover from the fall of the Mycenaeans.<sup>87</sup>

Athens, just like for proto-geometric, was the leader when it came to pottery during the Dark Age and was the first to start using the geometric style. Just like proto-geometric, Athens invented the geometric style.<sup>88</sup> Athens started using the geometric style around 900 BC and this is the earliest that it is seen anywhere in Greece.<sup>89</sup> Euboea does not start using geometric until after 800 BC.<sup>90</sup> Just like with proto-geometric, Athens dominated the geometric period and has the most and finest examples of geometric pottery.<sup>91</sup> The influence that Athens had on the geometric period was strong, but not as strong as during the proto-geometric period. Greece was recovering and the Dark Age was starting to come to an end. Other cities in Greece were starting to prosper and as such, even though Athens was still the leader and the inventor of the geometric style, other cities started to develop their own way of making geometric pottery. Athens was still a major influence, and all early geometric pottery was directly related to Attic pottery. Athens also set the pace for the development of the geometric style.<sup>92</sup> Some areas, like Boeotia,

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<sup>85</sup> Boardman, *Early Greek Vase Painting*, 23.

<sup>86</sup> See appendix Figure 15, Attic geometric pyxis.

<sup>87</sup> Osborne, *Greece in the Making 1200 - 479 BC*, 61.

<sup>88</sup> Dickinson, *The Aegean from Bronze Age to Iron Age*, 136; Whitley, *The Archaeology of Ancient Greece*, 90; Boardman, *The History of Greek Vase*, 17; James Whitley, "Social Diversity in Dark Age Greece," *The Annual of the British School at Athens*, 86 (1991), 356; Cook, *Greek Art*, 32.

<sup>89</sup> Boardman, *Early Greek Vase Painting*, 23; Cook *Greek Painted Pottery*, 18; Demargne, *The Birth of Greek Art*, 287; Coldstream, *Geometric Greece*, 25.

<sup>90</sup> Boardman, *Early Greek Vase Painting*, 28; Boardman, *The History of Greek Vases*, 28; Coldstream, *Geometric Greece*, 25.

<sup>91</sup> Boardman, *Greek Art*, 32; Lévêque, *The Greek Adventure*, 92; Cook, *Greek Painted Pottery*, 18; Demargne, *The Birth of Greek Art*, 283; Jean Davison, *Attic Geometric Workshops* (New Haven: Yale University Press, 1961), 1.

<sup>92</sup> Boardman, *Early Greek Vase Painting*, 23; Starr, *The Origins of Greek Civilization*, 96; Coldstream, *Geometric Greece*, 25; Cook, *Greek Art*, 33.

continued to be influenced by Athens right up to the end of the Dark Age.<sup>93</sup> But, in areas like the Argolid and Corinth, Athens was the influence in the beginning, but by the late geometric period they have their own distinct style.<sup>94</sup> This has to do with the fact that with geometric the Argolid and Corinth adopted the style within one generation. Between 10 and 25 years after the first appearance of geometric pottery in Athens it starts in Argos and then Corinth.<sup>95</sup> The opposite happened as well, where Corinth and the Argolid adopt the styles early, western Greece is a late comer and has very little influence from Athens in pottery till middle to late proto-geometric, and that remains through geometric, behind other parts of Greece.<sup>96</sup>

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<sup>93</sup> Lévêque, *The Greek Adventure*, 92.

<sup>94</sup> Boardman, *Early Greek Vase Painting*, 50.

<sup>95</sup> Cook, *Greek Art*, 32; Cook, *Greek Painted Pottery*, 23-24.

<sup>96</sup> William Coulson, "The 'Protogeometric' From Polis Reconsidered," *The Annual of the British School of Athens*, 86 (1991), 44.

## CHAPTER 6

### CONCLUSION

So, when considering the Dark Age of Greece, in Athens in particular, one must look at a variety of factors. First, what was the cause of the Dark Age? The political structure of Mycenaean Greece is one of kings, the *wa-na-ka* and their palaces. Art, writing, agriculture, metalworking, and the economy are all aspects controlled by the palace. When the palaces fell, all of these parts of life were swept away as well. It was the Dark Age because comparatively, Greece became dark. It lost the ability to write and art suffered, with the only pieces of art being pottery in its most basic forms. Trade halted, which caused luxury goods to no longer be produced and the import of bronze ceases, which affected the ability for Greeks to make tools and weapons. Greece was turned back in time and was doing all it could to simply survive. The cause of this decline was the fall of the Mycenaean palaces.

There are many theories about what happened to cause the Mycenaeans to fall, but no way to prove definitively what the primary cause was. For those who do not like to believe in legend and myths, it is natural disasters. The problem with this explanation is that of all the natural disasters that could have befallen the ancient world, there is little or no evidence for them. Earthquakes can cause destruction, but not on the wide spread scale that hit the eastern Mediterranean at this time. Also, after earthquakes people usually rebuild and carry on. In places of earthquakes in the ancient world, unless it was so massive that there is no one left, the people pick themselves up and rebuild. But there is no sign of an earthquake this massive, and there is no sign of rebuilding, so the thought that an earthquake was the cause does not fit.

Other natural disasters, like a drought and a plague do not fit either. A plague can kill a population, but not to the extent that the depopulation of Mycenaean Greece was, ninety percent.

Plague also does not cause destruction of buildings and fire. As far as drought goes, it does not cause destruction and fire either. There would also be evidence of a drought, but samples have been taken and there is no sign of one. The documents left over also suggest that the economy, which is based on crops, was functioning normally. So that knocks out plagues and droughts. Natural disasters just do not fit the evidence one sees for the end of the Mycenaeans.

What does fit in with archaeological evidence, written records, and legend, are the raids and invasions. The entire ancient world at this time was rocked by a series of raids and invasions from different peoples and locations. In Egyptian records one notes “Sea Peoples” conducting raids and invasions, and the Egyptians listed several peoples, not just one. There are records from other areas in the ancient world of raiding and invasions. Even the Mycenaeans recorded in Linear B tablets that they were worried about invaders. Not only is it in written records, but one sees that the Greeks all across the Mycenaean world started to strengthen their defenses for possible invasion or raids. This is also what Greek legends state, that the Mycenaeans were invaded by northern Greeks, the Dorians. While there is no evidence showing who caused the destructions, the theory that the Dorians were responsible does hold some weight, although the proposed times of the Dorians and the destruction do not match up. The biggest evidence from later Greece is the languages. The different dialects in Greece reflect what the legends say happened. This, of course, could be coincidence. The cause of the destructions and collapses of the Mycenaeans is most likely a combination of factors. As far as the destructions I propose that it was a combination of sea people raids and subsequent Dorian migration south.

Now, all of the Mycenaean cities fell except for one, Athens. The reason for this is because of the might have caused the fall of the Mycenaeans. With the cause of the fall of the Mycenaeans being by an outside force, going to the best places would be the logical step. Greece

at this time relied on agriculture for economic success. Greece is a harsh land and has a harsh climate. Most of Greece is mountainous and there are very little areas in which to grow crops and raise animals. Because of this, the best areas were always inhabited. Attica, where Athens is located, is far from the best of areas. Attica is the driest area of Greece and it has the worst soil of the inhabitable areas. Because of this, it was a poor city during the Mycenaean Age, when the economy was based on crop yield. Being able to produce large crops, especially of olives and vines, which were used as cash crops, and being able to raise large flocks of sheep, for their wool, was paramount. This is because if a city is not able to have large amounts of cash crops, then the trade is limited and luxury goods like gold and ivory will be harder to obtain.

Without the land to do this Athens remained a minor city during the Bronze Age. Even though Athens is a very important site, going back to the Stone Age, it is in a bad area for an agrarian civilization. It is because of this that Athens survives the fall of the Mycenaeans. Athens was poor, it had no riches, and it was not a good area to settle. And because of this, there was no reason for raiders or invaders to go there. Whereas the rest of the Mycenaean world was rich and had the best land in southern Greece, Athens survived because it just was not worth the invaders' resources.<sup>1</sup>

Because Athens survived the fall of the Mycenaeans and stayed populated during the Dark Age, it was able to accomplish many things. The first thing that Athens did, both according to legend and attested to with archaeological evidence, is act as a refuge for the Mycenaeans displaced from the rest of Greece. As the only place that was not destroyed Athens was seen as a safe place to go. But because Attica is such a poor land, most of the refugees could not stay there. So, in addition to taking in refugees, Athens acted as a jump-off point for the Mycenaeans to

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<sup>1</sup> Mountjoy, *Mycenaean Athens*, 27; Hill, *The Ancient City of Athens*, 316.

migrate east, to the Greek islands and to Anatolia, the western coast of Asia Minor, which would become Greek Ionia.

Not only does Athens help the survivors of the destructions but, because it stayed populated, it became a cultural beacon for the rest of Greece. Two very important aspects of what Greece was to become are born in Athens, iron and Proto Geometric and Geometric pottery. Because Greece does not have any natural sources of tin and only small amounts of copper, the two main ingredients of bronze, it was forced to look elsewhere. Before, iron was seen as a precious metal, used in jewelry, but over the course of the Dark Age this changed. Attica has natural sources of iron, and because of this and because of the lack of bronze sources, iron took the place of bronze. It was a slow process, but eventually it was seen that iron is better than bronze and it becomes the dominant metal of Greece. It was Athens where the conversion from bronze to iron happened the most. Looking at all the sources of iron, it was Athens that became the leader in the development of iron. Between two thirds and three quarters, depending on the century, of all Dark Age iron goods are from Athens. Iron's use increases over all of Greece, and it was Athens that spread its glory.

In addition to iron, perhaps Athens' most important contribution, which would continue on throughout the Iron Age, was pottery. With the fall of the palaces the ability, or demand, to make good pottery disappears. It was Athens that first shows signs of regaining any type of cultural identity. After the fall of the Mycenaeans, the pottery style that develops is called sub-Mycenaean, because it is basically a much cruder version of the pottery from Helladic III. It was in Athens that proto-geometric and then geometric styles began. Athens was the first to produce both of these styles, and it was the best at producing this pottery. Athens was the innovator of art during the Dark Age, and it influenced the rest of Greece. All over the Greek mainland these



styles were slowly adopted and copied from the Athenian sources. One of the biggest innovations that Athens developed was using a compass in conjunction with a multi brush to paint on precise and intricate geometric designs.

It was because Athens stays populated that it became a cultural center and a leader in the arts that lasted past the Dark Age and into the Iron Age. One can see that Athens was small and unimportant during the Mycenaean Age. Athens survived the fall of the Mycenaeans because of this. And because Athens survived the fall of the Mycenaeans, Athens became important for the future of Greece, becoming a center of advancement and culture.

APPENDIX A:  
MAPS AND FIGURES

<i>Greece</i>	
40,000	definite human occupation
6000	Nea Nikomedeia
4000	
3000	Early Helladic I II III
2000	Middle Helladic
1600/1550	Late Helladic I II IIIA
1500	
1450	
1400	
1300	IIIB
1200	IIIC
Neolithic	
Bronze Age	
1100	Protogeometric pottery
1050	
900	Geometric pottery
800	Phoenician alphabet
Dark Age	
776	Olympic Games instituted
750	Western 'colonization' begins
650	'Colonization' begins around Black Sea
630	Cylon's attempted <i>coup</i> in Athens
621	Draco's codification
594	Archonship of Solon
Archaic Age	
545-	
510	Tyranny of Peisistratids
520-	
490	Cleomenes I king of Sparta
508	Cleisthenes reforms Athenian constitution
490-	
479	Persian Wars

Figure 1 Finley, Early Greece, viii, Time Table.



Figure 2 wiki commons, Map of Mycenaean cities.

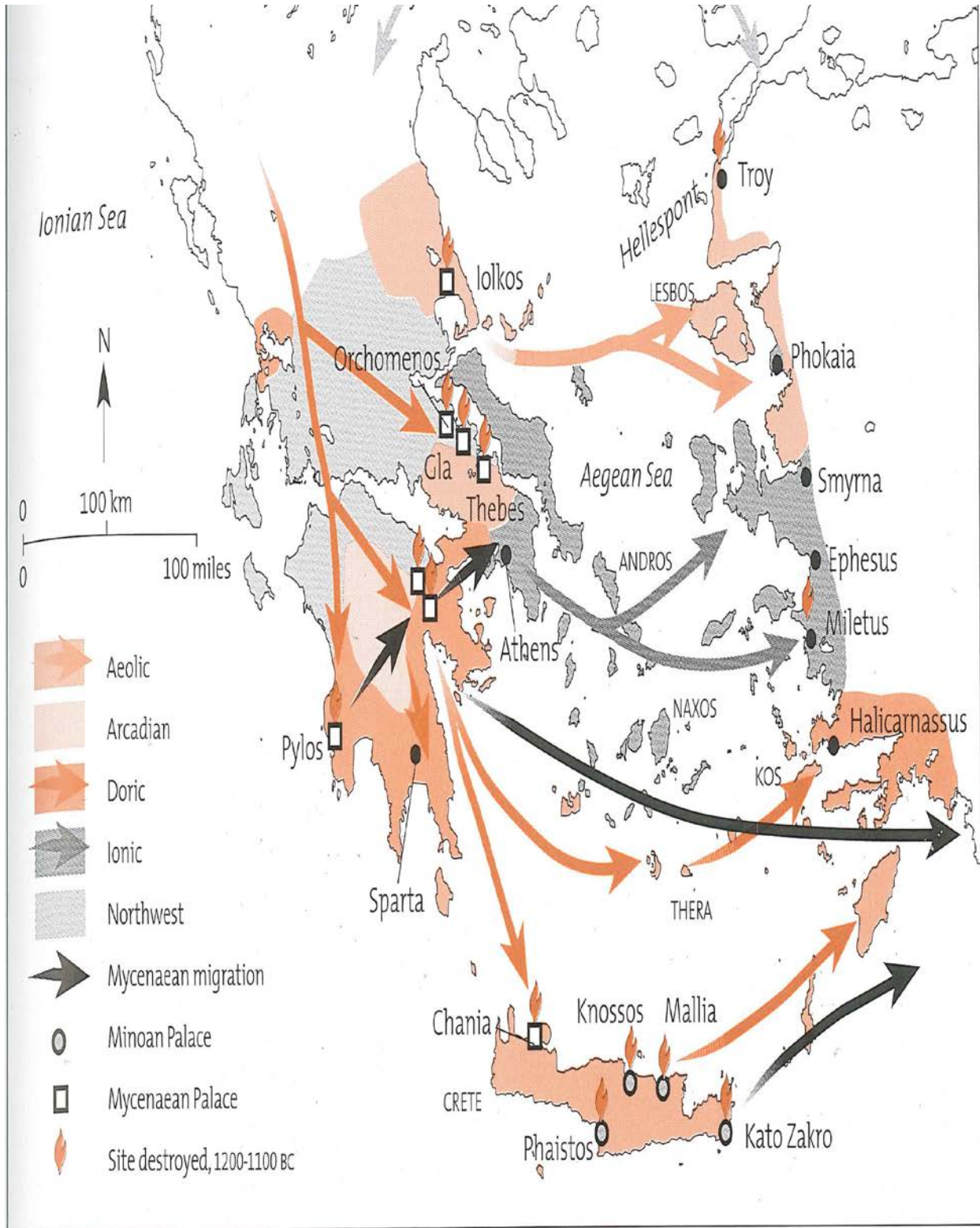


Figure 3 Camp, Fisher. *The Ancient Greeks*, 57, Map of Invasions and Language Migration.





Figure 4 wiki commons, Map of Greek Landscape.

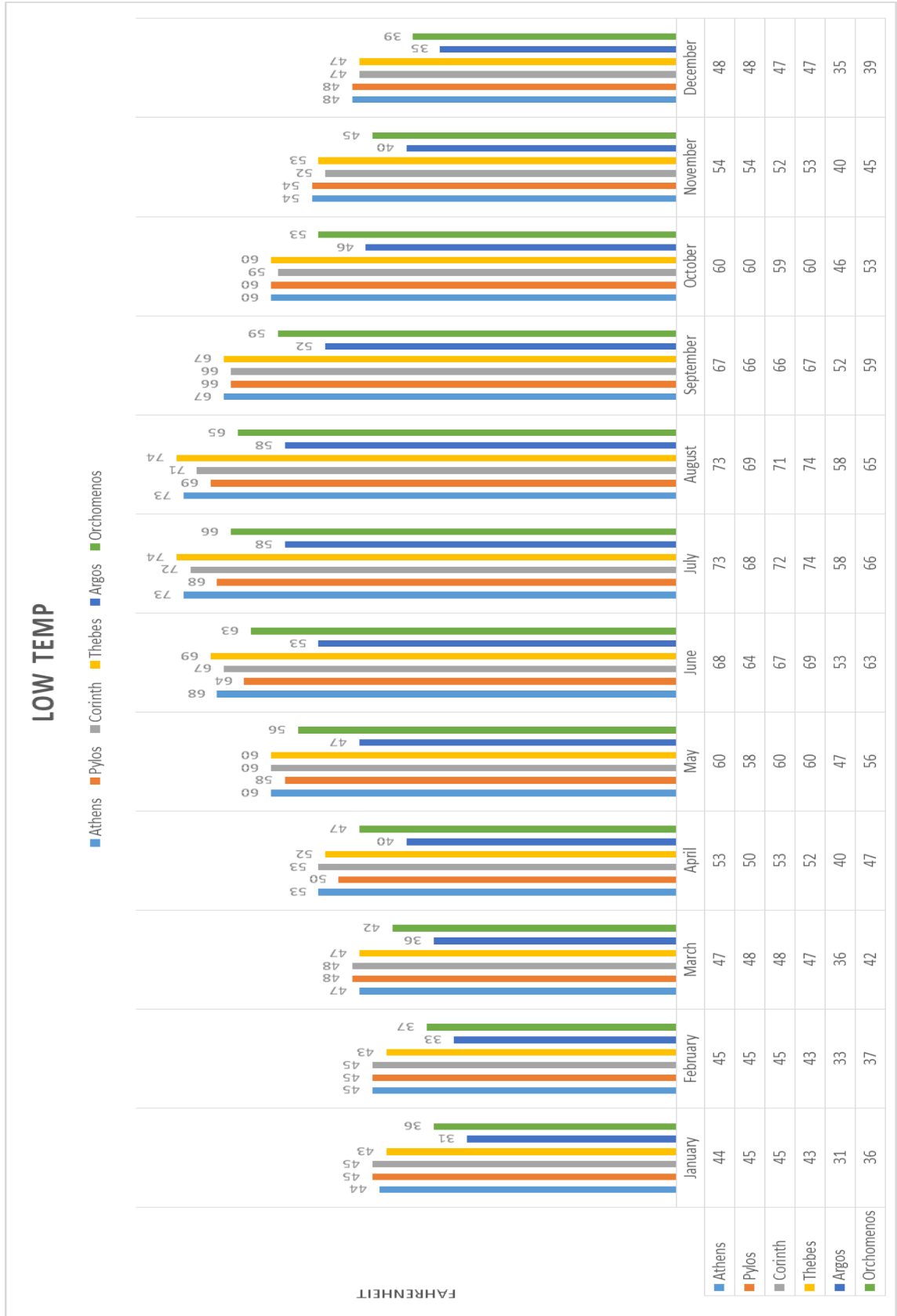


Figure 5A Low Temperature Graph.

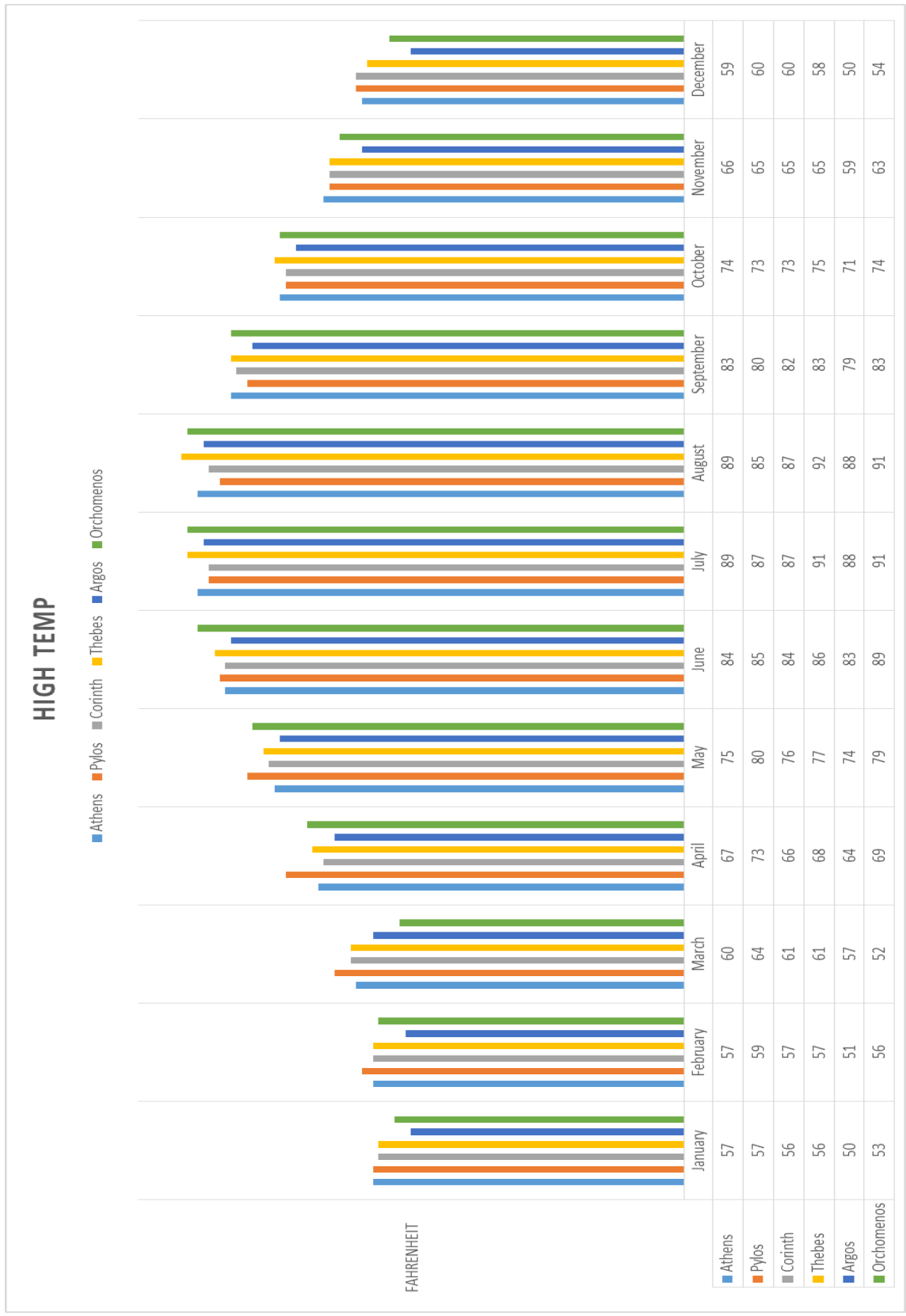


Figure 5B High Temperature Graph.

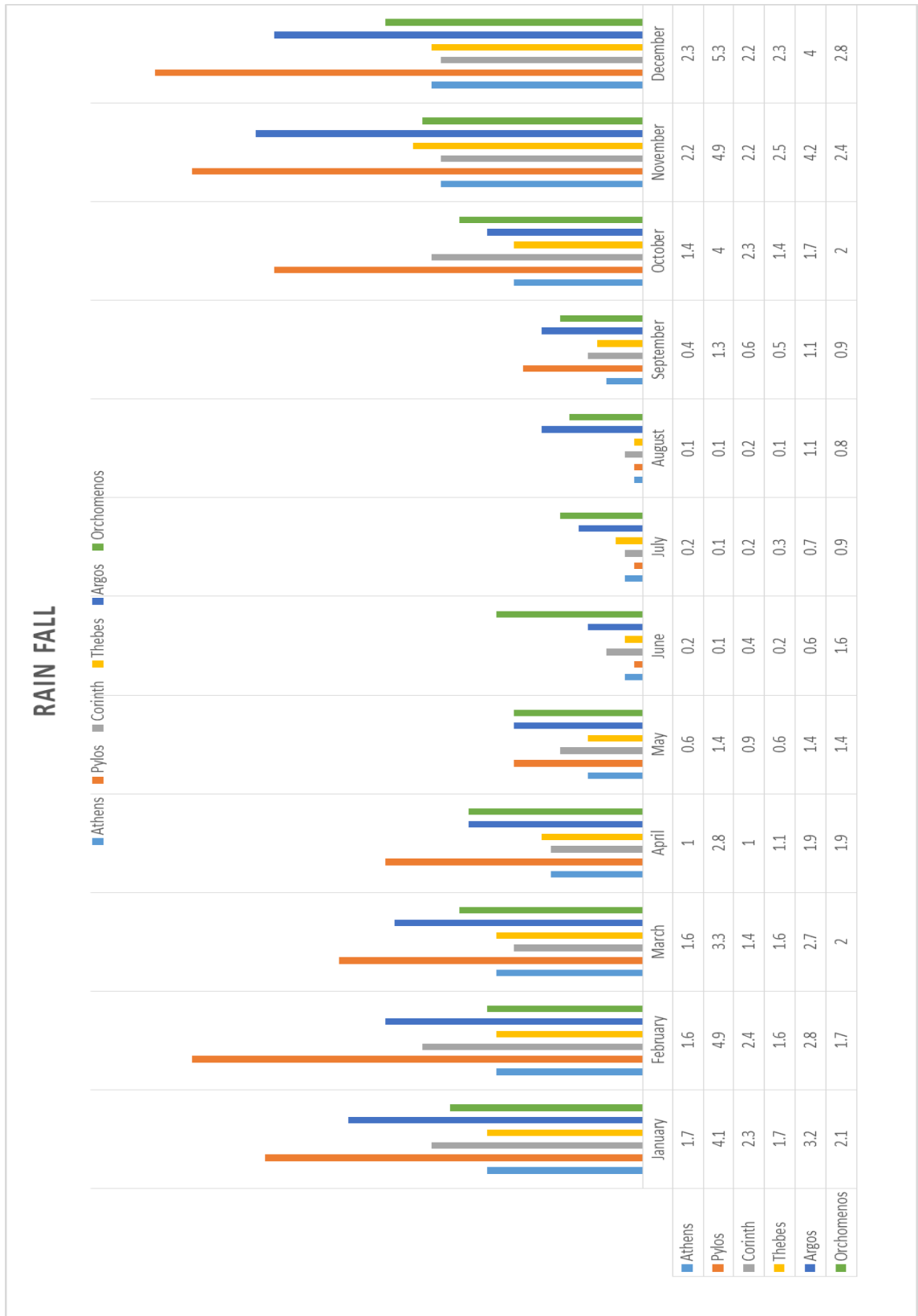
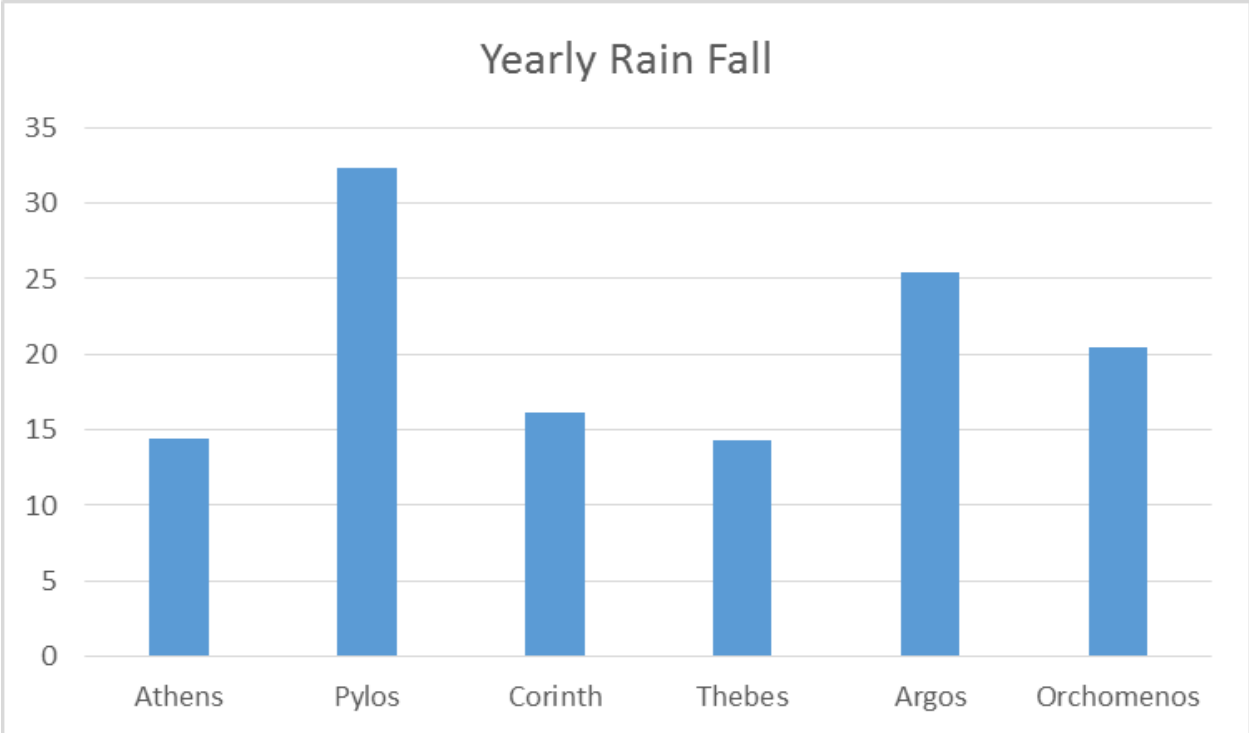


Figure 6A Monthly Rain Fall Graph.





**Figure 6B Yearly Rain Fall Graph.**



Figure 7 wiki commons, Pottery Featuring Plowman.



Figure 8 Wiki commons, Ceramic Figure of Plowing.

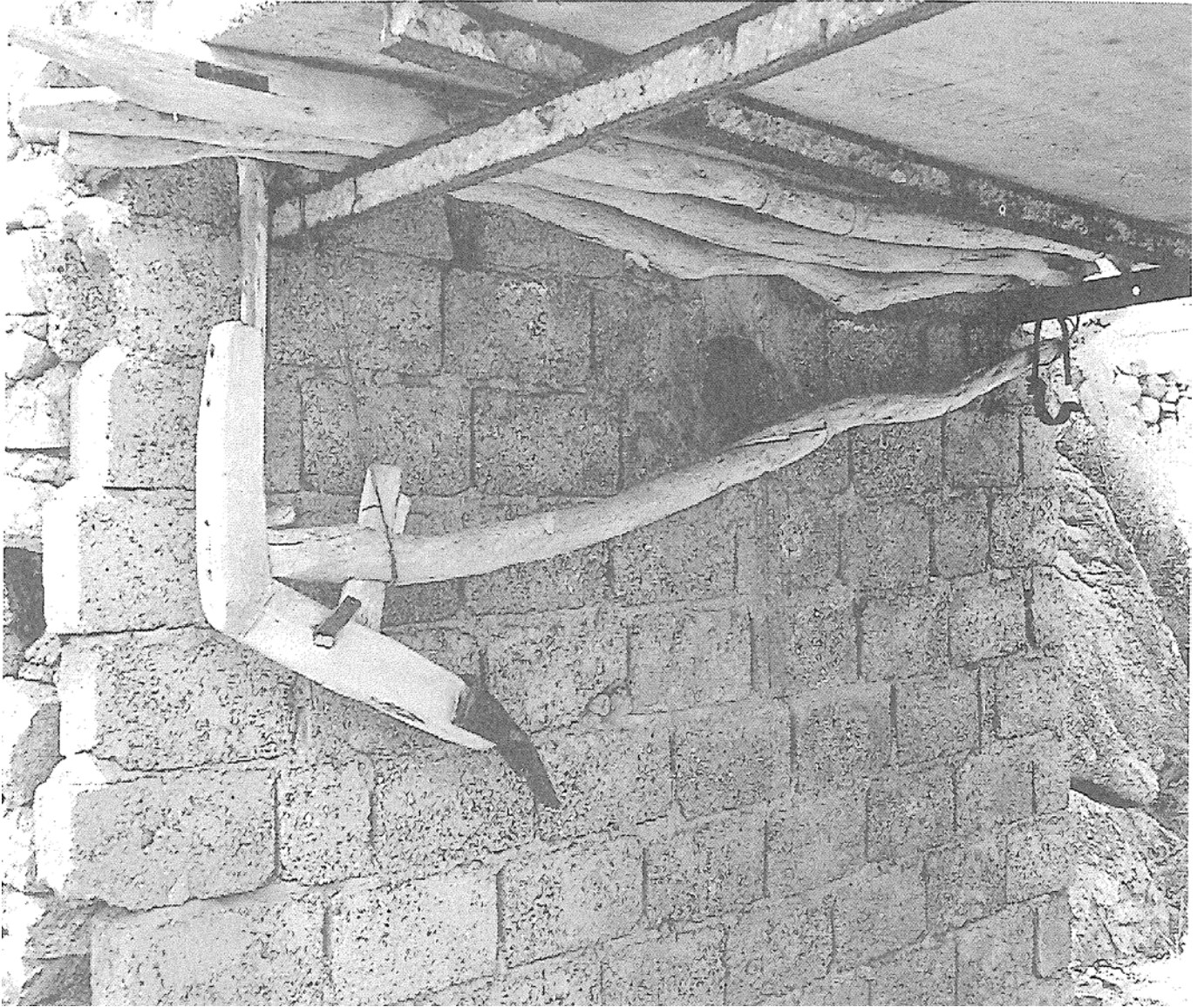


Figure 9 Isager and Skydsgaard, *Ancient Greek Agriculture*, 48, Ard-plow.



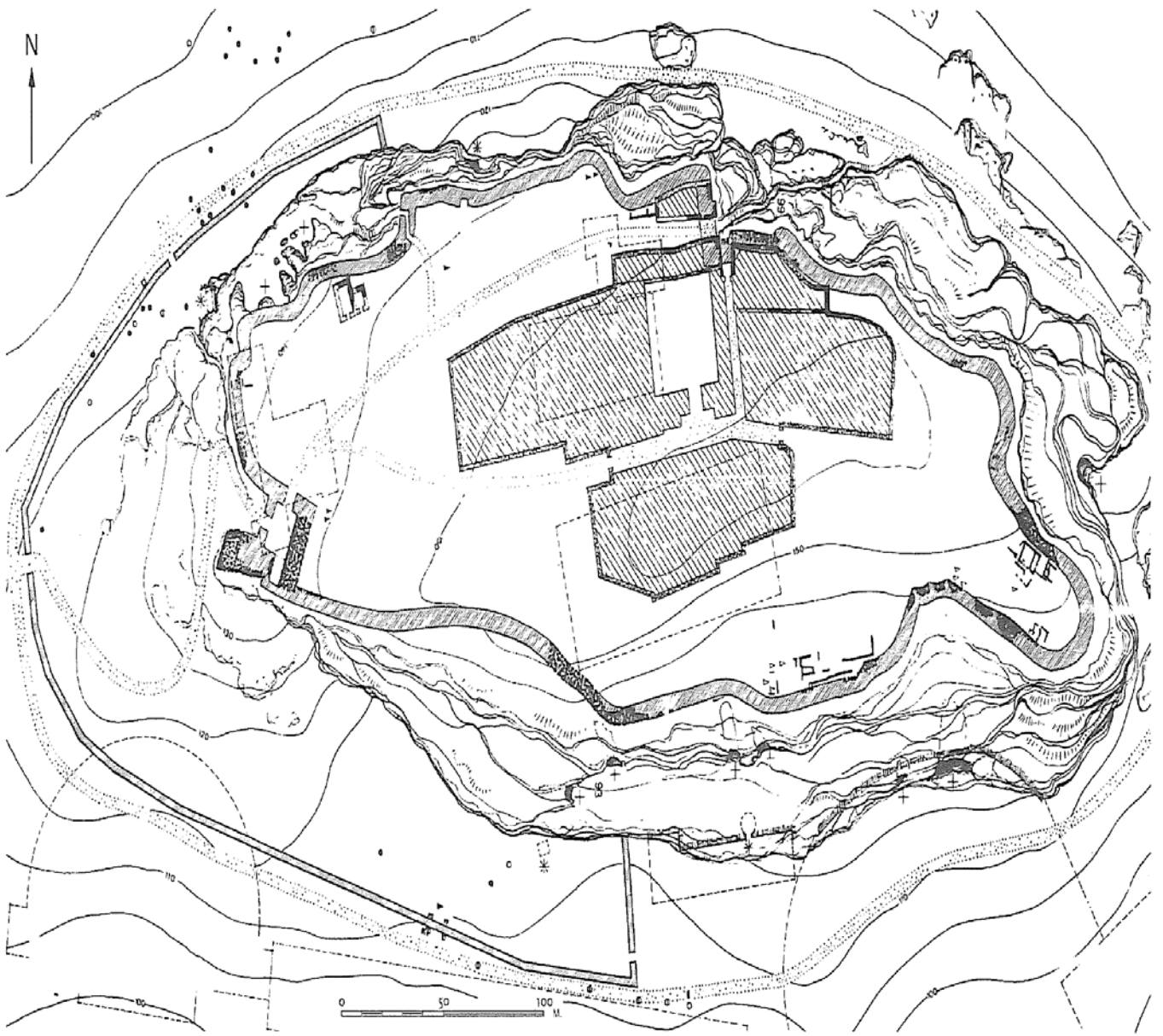
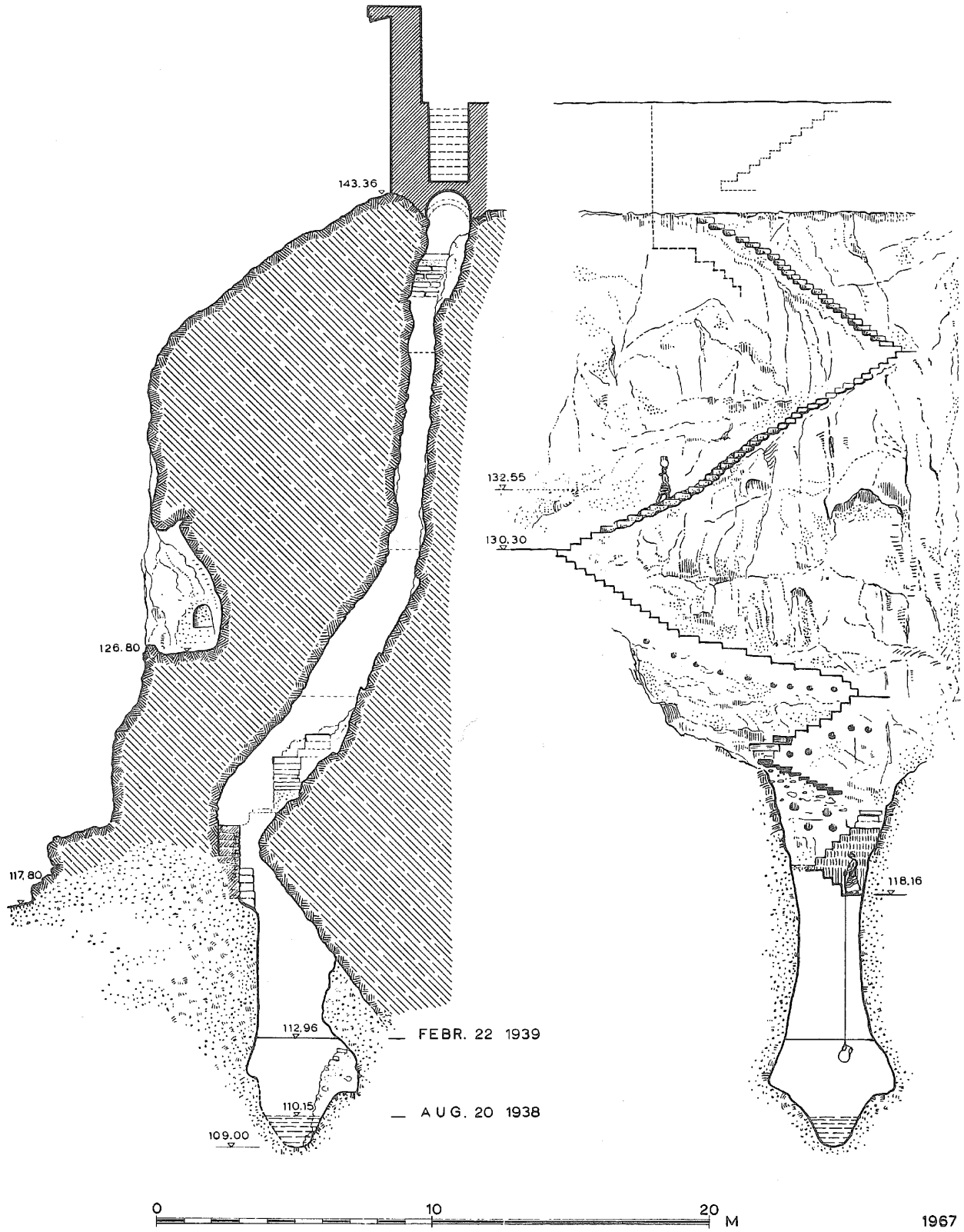
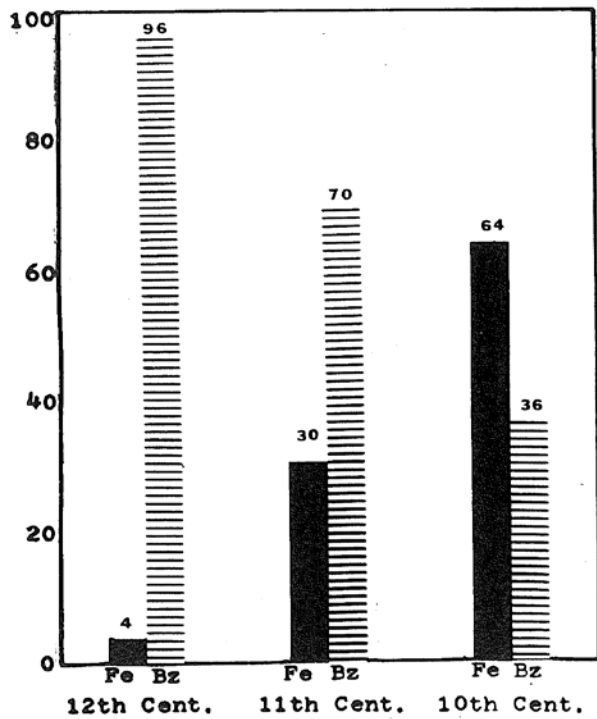


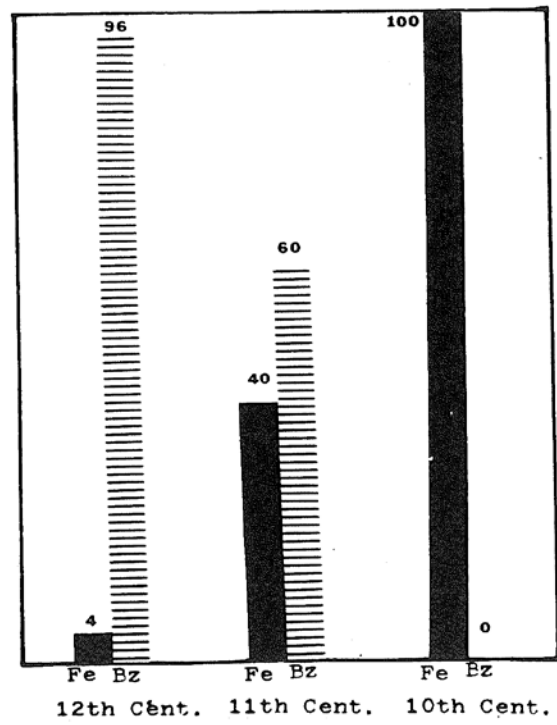
Figure 10 Camp, *The Archeology of Athens*, 17, Map of Mycenaean Athens Fortifications.



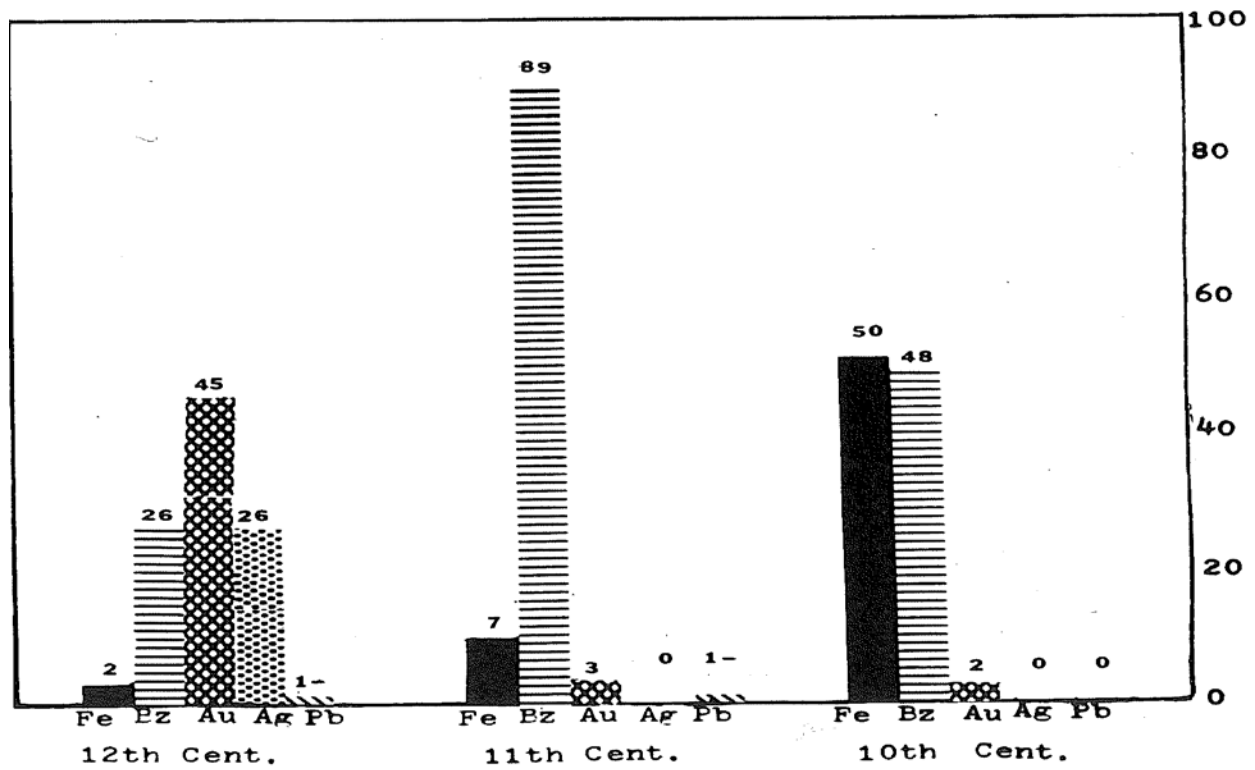
15. Mycenaean stairway and spring on the north side of the Acropolis.  
 Figure 11 Camp, *The Archeology of Athens*, 18, Diagram of Mycenaean Athens Well.



Weapons and Armor



Tools



Jewelry

Figure 12 Waldbaum, *From Bronze to Iron*, 49, Graphs of Metal Usage.



Figure 13 Wiki Commons, Sub-Mycenaean Pottery.



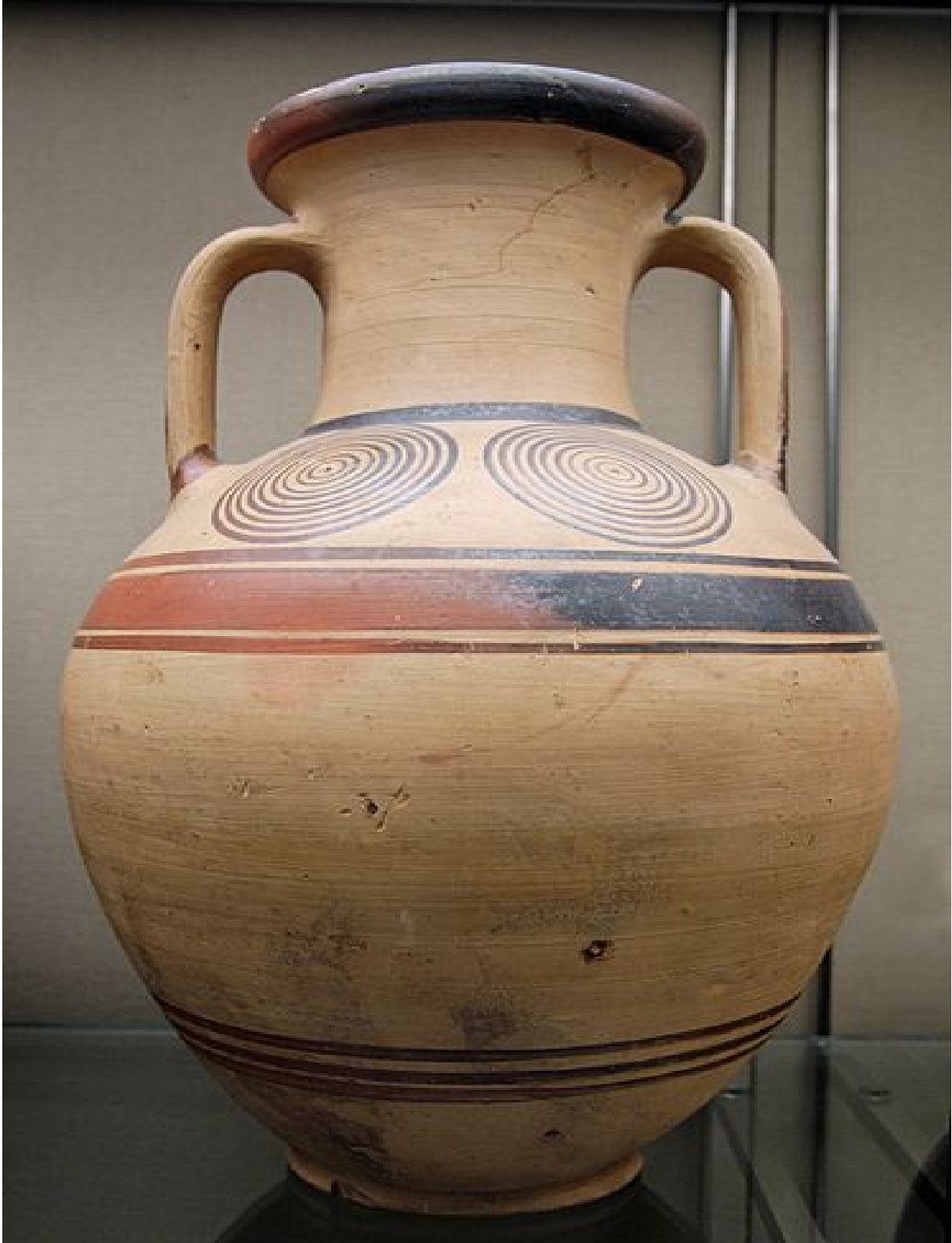


Figure 14 Wiki Commons, Proto-geometric Pottery.



Figure 15 Wiki Commons, Geometric Pottery.

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