

**Trade relations between the Mycenaean Greeks and the civilizations of the  
Eastern Mediterranean in the Late Bronze Age**

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A thesis submitted to the Graduate Program in Classics  
in conformity with the requirements for the  
Degree of Master of Arts

Queen's University  
Kingston, Ontario, Canada  
Final Submission June 2016

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## **Abstract**

The Mycenaean Greeks are often assumed to have been in contact with the civilizations of the Mediterranean throughout the Late Bronze Age. The extent of this contact however is not as clearly understood, and the archaeological evidence that has survived provides a sample of what must have exchanged hands. This thesis will examine the archaeological, textual and iconographic evidence from a number of sites and sources, from the Anatolian plains to the Kingdom of Egypt and major settlements in-between during the Late Bronze Age to examine what trade may have looked like for the Mycenaeans. Due to the extensive finds in some regions and a lack of evidence in others, this paper will also try to understand the relationship between the Mycenaeans and other cultures to determine whether a trade embargo was enacted on the Mycenaeans by the Central Anatolian Hittites during this period, or whether other factors contributed to the paucity of objects in Central Anatolia.

## **Acknowledgements**

This paper is the culmination of three years of thought on economic relations in the Late Bronze Age, not only from the perspective of the Mycenaean Greeks, but also the many nations that border the Mediterranean Sea. This paper would not have been written without the influence of Dr. N. Marinatos, whose thoughtful discussions on the relations between the Greeks and other Mediterranean cultures ignited in my mind the idea of trade and economic study in the Aegean. Thanks also to my family and friends for their support and encouragement, for without it I would not have maintained a level head throughout this process. Most importantly I would like to thank Dr. G. Bevan for the insights he has provided into Greek civilizations and the cultural interactions of these early civilizations, but most importantly to my supervisor Dr. A. Foley for her tireless efforts to ensure that this paper met the highest standards and for invoking serious conversation and debate over Late Bronze Age interactions. Any other mistakes are through the fault of my own.

## Table of Contents

Abstract .....	ii
Acknowledgements.....	iii
Table of Contents.....	iv
Chronology .....	v
List of Illustrations.....	vi
<b>Chapter 1: Introduction .....</b>	<b>1</b>
<b>Chapter 2: Eastern Mediterranean Trade Relations .....</b>	<b>3</b>
Anatolia and Mesopotamia .....	5
Syro-Palestine and the Levantine Coast.....	11
The Egyptian New Kingdom .....	16
Cyprus .....	23
The Cape Gelidonya and Ulu Burun Shipwrecks .....	31
What conclusions can be drawn?.....	37
<b>Chapter 3: A Hittite Trade Embargo?.....</b>	<b>38</b>
<b>Chapter 4: Conclusion.....</b>	<b>51</b>
Appendix I: Maps .....	54
Appendix II: Catalogue of Mycenaean objects in the Eastern Mediterranean .....	59
Appendix III: Catalogue of Late Bronze Age objects in Greece .....	65
Bibliography .....	69



## List of Illustrations

1. Map of Late Helladic objects in the Mediterranean. Photo: O. Dickinson. (1994) .....3
2. Number of Mediterranean Imports by period and findspot. Photo: E. Cline (2007) .....4
3. Silver Stag Rhyton; Mycenae (Grave Circle A). Photo: G. McMillan (2012) .....6
4. The ‘Aegean List’; Kom el-Hetan. Photo: J. Strange (1980) .....21
5. Section of the *Flotilla Fresco*: Akrotiri (West House). Photo: The Thera Foundation (1992).....32

## **Chapter 1: Introduction**

It is assumed that the Mycenaean Greeks were heavily integrated in long distance trading networks in the Mediterranean. Archaeological evidence has indicated that these early Greek peoples had interactions with the great civilizations of the Near East and Egypt, operating on a global scale according to the standards of the time, while maintaining local trading at home on the mainland and on the islands. Their interactions with such diverse groups of people led to greater developments in Mycenaean society, visible from the material evidence at the many Bronze Age sites across the region.

Trade comes in a number of forms and influences a number of societal functions; the transmission of ideas and beliefs, the movement of goods, and the administrative and governmental policies that are established are all results of trade and contact with outside groups and peoples, all of which can be identified throughout the citadels and towns of the Late Bronze Age. The most evident of these is the movement of goods, transferred in pottery and therefore the most common mark of trade.

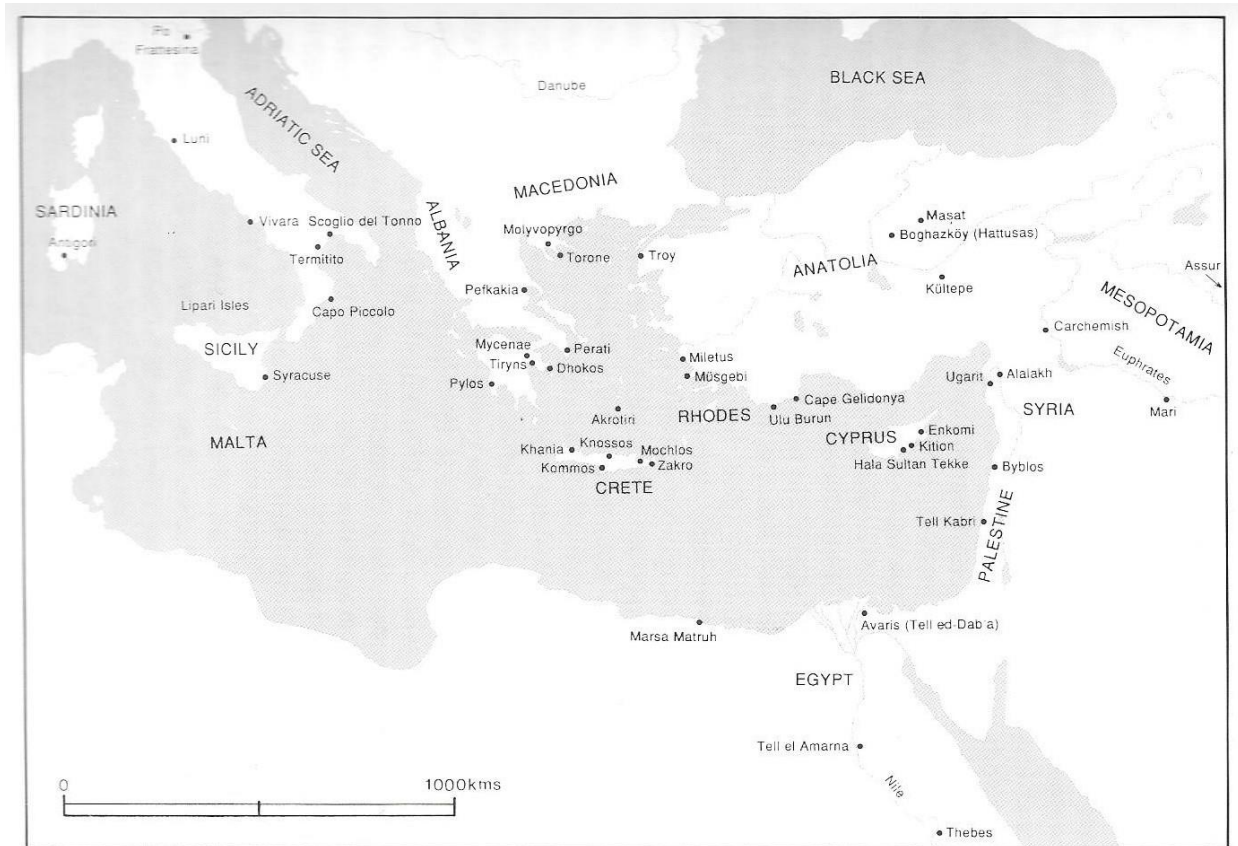
The information extracted from pottery is great; scholars are able to identify, based on the shapes and the decoration (if any), the origins of the goods that once lay inside. The study of Mycenaean pottery (conducted and perfected by Wace, Blegen, Furumark and Mountjoy to name a few) has resulted in a greater understanding of the complex network that once existed amongst the various Bronze Age civilizations. The widespread appearance of Mycenaean pottery not only on the Greek islands, but also throughout the Near Eastern civilizations and Egypt demonstrates the importance of trade to the Mycenaean peoples. Unfortunately there is very little to no surviving evidence for the goods that were once traded – our understanding of the goods comes

from guess work based on the size and shape of vessels, but even this method is not without its faults.

One of the more complex results of trade and interaction with other peoples is the role of governments and other administrative bodies. This aspect of trade has been one of the major focal points in 21<sup>st</sup> century politics because today's society is heavily integrated and globalization of this magnitude has never been witnessed. Nonetheless the connection between an administrative body and trade has been identified at Late Bronze Age sites and similar (yet less complex) policies were applied to these sites. While policies are put in place to ensure safety for those conducting trade, some policies are put in place to hinder an economy, and are most often done for political reasons. A group of Hittite texts have been argued to refer to an embargo against the *Ahhiyawa*, widely considered to be the people Schliemann named the Mycenaean Greeks. The problems though are fairly straightforward: who exactly were the *Ahhiyawa*, and is the interpretation of the texts accurately depicting an embargo against them?

Each of these aspects of trade comes together to form a picture of the interconnectedness of the Late Bronze Age Aegean and the trading networks throughout the Eastern Mediterranean. What I aim to explore in the pages that follow is an analysis of the material evidence across the Aegean and the surrounding kingdoms to bring to light details of the Late Bronze Age trade networks that existed, observing the pottery styles and the writing in an attempt to see with whom the Late Bronze Age Greeks were trading, as well as trying to see what goods were being traded. Though there are numerous sites throughout Greece and the coast of Asia Minor and into Asia that have produced evidence for trade amongst these peoples, only a select few will be taken into consideration; those sites that produce a greater amount of material goods and allow for greater study will be considered.

## Chapter 2: Eastern Mediterranean Trade Relations

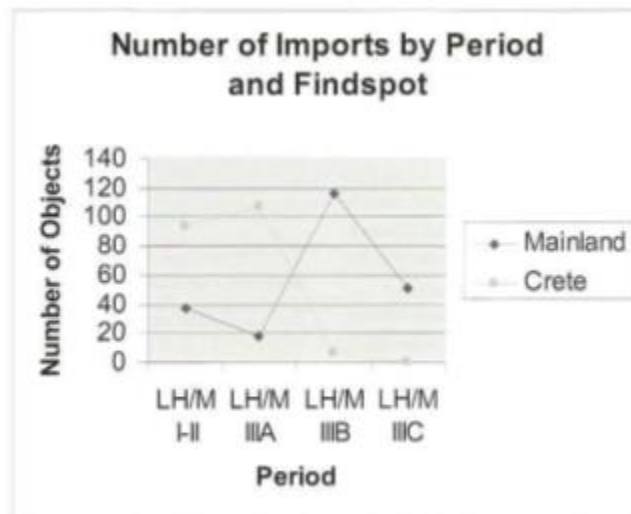


**Figure 1:** Location of Late Helladic objects in the Mediterranean.

Extending outwards from the Mycenaean controlled territories, evidence for Mycenaean Greek contact has been observed around the Near East and south into Egypt<sup>1</sup> where the Mycenaean appear to have had a huge presence. What remains today of the contact the Mycenaean had with these groups is merely a fraction of what no doubt changed hands, and in some cases the evidence is not only found in physical archaeological objects but also in the art (such as frescoes) and the epigraphic record. While the physical objects confirm contact with the Mycenaean the art and epigraphy present further challenges which will be discussed below.

<sup>1</sup> Objects of Mycenaean origin have also made their way north and west to Italy and Sicily, but for the purposes of this essay they will not be discussed.

Eric Cline has approached the subject of overseas exchanges systematically and has created a catalogue of objects found throughout the Mediterranean,<sup>2</sup> both as imports to Greece and exports from the Mycenaeans all across the Mediterranean. In producing a list of objects found “in good LH/LM I-III C contexts”<sup>3</sup> Cline has provided scholars with a database of all Late Bronze Age objects found within Greek borders, which at the time of publication totalled nearly 950 objects.<sup>4</sup>



**Figure 2:** Number of Mediterranean Imports by Period and Findspot

The kingdoms that appear to have been in contact with the Mycenaeans are numerous, and so what follows are the major sites that have been grouped according to geography and not individually. Some clarification must be made before such a discussion can commence, as the regions discussed are often grouped together based on different ideas of ancient boundaries. The territories below that are going to be discussed fall into three general regions while two of them require natural boundaries for the purpose of this discussion; the Near East, the Levant, Egypt and Cyprus.<sup>5</sup>

<sup>2</sup> E. Cline. (1994). *Sailing the Wine-Dark Sea: International Trade and the Late Bronze Age Aegean*.

<sup>3</sup> Cline (1994) p.9.

<sup>4</sup> Cline further breaks down these objects by civilization of origin which indicates the strength of trade being conducted amongst the Mediterranean nations. It also allows for further discussion on what the state of contact was with each nation, for territories with less objects attested may be the result of indirect trade or political grievances. Since Cline’s publication in 1994 more objects have been found but they do not substantially change the overall numbers found in Cline. See **Tables 1-4** for a breakdown of Orientalia (and Occidentalia) in the Late Helladic period, by date and by findspot.

<sup>5</sup> The Near East is considered the territories of modern day Turkey, Iraq, Iran and Afghanistan. This region is the largest of the three, bordered on the north by the Black Sea, the Caspian Sea to the East and to the edges of the Persian Gulf. The territory of the Canaanites, the Syro-Palestinians and the various peoples who inhabit the territory from the west banks of the Euphrates to the north banks of the Red Sea, covered by modern day Israel, Palestine,

One final note should be made and that is the time period covered in this paper. The chronology of the Late Bronze Age is as complex and expansive as the topic being discussed because of the different methods in dating a site. For the purposes of this paper a specific chronology will be used, which dates the Late Bronze Age from an Aegeocentric perspective. This falls into the following rough dates: LBA I (ca. 1600-1500 BC), LBA II (ca. 1500-1400 BC) and LBA III (1400-1100 BC).<sup>6</sup> The date range therefore will cover the history of trade and trade relations amongst Eastern Mediterranean civilizations between 1600 BC and 1100 BC, however some overlap may be made with periods before or after the date range, as these dates are generic.

### *Anatolia and Mesopotamia*

The history of contact between the Mycenaean Greeks and the people of Western Anatolia is widely known due to Homer and the Trojan War cycle. The extent of contact between the two regions dates to the beginning of the Bronze Age as is apparent at Troy as well as the establishment of Miletus (Millawanda in Hittite texts) as a Minoan colony sometime in the Middle Bronze Age.<sup>7</sup> When the Mycenaean Greeks took control of Crete in the later part of the Late Bronze Age Miletus fell into Mycenaean control and trade relations between the Aegean and Anatolia expanded. Beyond the west coast of Anatolia the extent of contact between the Mycenaean and other peoples is varied. Some sites like Troy provide a greater amount of

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Syria, Jordan and Lebanon, fall into the classification of the Levant. Egypt covers the territory within the modern Egyptian borders. In a number of scholarly works the Levant also includes Cyprus, however the importance of Cyprus in Late Bronze Age trade networks requires Cyprus to be discussed separately.

<sup>6</sup> These dates are based on D. Preziosi and L. Hitchcock's dating found in *Aegean Art and Architecture* (1999), p. 8, and correspond to the dates given for Late Helladic activity. These correspond roughly with the beginning of the New Kingdom in Egypt. These specific categories may be broken down into further subcategories which correspond with more specific date ranges which will be addressed where need be.

<sup>7</sup> Mee (1998) p. 137. Mee states that the first evidence of Minoan presence at Miletus dates to roughly MM I-II and that by MM III-LM I the site must have been assimilated into the Minoan culture based on the architecture, frescoes, jewelry and pottery.

evidence over an extensive period of time indicative of continuous contact, while other sites like Knidos, Mersin or the Hittite capital Hattusa provide only fragmentary evidence.<sup>8</sup>

Objects of Central Anatolian provenance are by far the least represented in the archaeological record on both the Greek mainland and the Aegean islands. Roughly a dozen objects have been found that could possibly trace their origins back to Anatolia and have been dated to every period of the Late Bronze Age (LH I-LH IIIC).<sup>9</sup> The question of whether these objects arrived in Greece through direct or indirect contact is still to be determined. However it is



**Figure 3:** Silver Stag Rhyton from Grave Circle A.

important to note that these objects are not restricted to one particular site or time period which suggests that though contact with the Greeks was limited the extent of contact was far-reaching and continuous in the Late Bronze Age.<sup>10</sup>

Much of the evidence that has survived in Anatolia and the Near East dates to LH III as this is the period in which the Mycenaean extended their influence beyond the Greek mainland and islands.<sup>11</sup> These objects are also contained within certain areas within Anatolia, mostly along

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<sup>8</sup> Bryce (1989), p. 1. See Mee (1978) for a comprehensive catalogue of published Mycenaean objects in Anatolia.

<sup>9</sup> Cline (1994, 2007). These objects consist of a serpentine sphinx, a silver 'Smiting God' figurine, various ceramic and stone objects (bowls, flasks, seals) and a silver rhyton (**figure 3**) which was found as part of the grave goods from Grave Circle A.

<sup>10</sup> Cline (1994) p. 68.

<sup>11</sup> Not only are objects of LH III origin plentiful (the most extensive finds date to LH IIIA-B, but have been found in LH IIIC contexts in some occurrences), evidence of Helladic style architecture is also common in Anatolia at this time suggesting that in some places contact was maintained as a result of colonization (cf. Cline 1994, Bryce 1989). Earlier contact is evident from the number of Minoan objects throughout Anatolia.

the west coast, stretching from North to South.<sup>12</sup> LH III interaction with the Aegean draws support mostly from chamber tombs along the Western Anatolian region which have produced a number of vessels.<sup>13</sup> Moving into the central part of Anatolia there is a drop in Mycenaean wares which will be discussed elsewhere.

One of the first problems encountered in the relationship between the Mycenaeans and the Anatolians is the extent of influence in the region. Though the archaeological evidence shows that sites like Miletus, Iasos and Musgebi had strong ties to the Mycenaeans on the mainland, there is evidence at these sites along the west coast of Turkey that show Anatolian influence as well. It has been suggested by P. Mountjoy (1998) that a new boundary be considered in the region – the East Aegean-West Anatolian interface – to explain the mixture of both Anatolian and Mycenaean influences.<sup>14</sup> The need for such a regional division is especially evident at a site like Miletus where extensive study has shown the influence of both civilizations.<sup>15</sup>

Three Bronze Age levels have been identified at Miletus and provide evidence of contact with the Aegean since MMIII.<sup>16</sup> The first evidence of Mycenaean presence at Miletus dates to LH IIB which corresponds with the expansion of Mycenaean influence in the East

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<sup>12</sup> See **Map 1** in *Appendix I* for distribution of Mycenaean objects in the Eastern Mediterranean, as well as *Appendix II* for a list of sites in Anatolia.

<sup>13</sup> Mee (1998) p. 138. The first appearance of chamber tombs occurs at this time which, given their popularity on the mainland would suggest a strong Mycenaean presence, coupled with the variety of Mycenaean pottery.

<sup>14</sup> Mountjoy defines the region as the west coast of Turkey from the north at Troy to the south and includes the Aegean islands that are situated off the coast of Turkey (Samos, Lesbos) and further south to Rhodes. Mee (1978) p. 135 first suggested that Miletus be viewed as a link between the Mycenaeans and the Hittites which adds support to Mountjoy's suggestion of an interface between the two civilizations, separate of direct influence strictly from either the Mycenaeans or the Anatolians.

<sup>15</sup> While the archaeological evidence suggests Miletus was a Mycenaean settlement it is noted by several authors (Mallwitz (1959), Voigtlander (1975), Mountjoy (1998)) that the architecture at Miletus borders on Anatolian/Hittite influence. The idea was rejected by Kleiner (1969 cited by Mee 1978 p. 135) on the argument that the design of the fortification wall in the third phase of occupation was Mycenaean (noting the similarities between the fortification wall at Enkomi as a prototype to the one at Miletus). However based on the enceinte at Miletus, Voigtlander (1975) argued that it contained Hittite characteristics (cited in Mee 1978 p. 135). Mountjoy (1998 p. 36) agrees that the architecture at Miletus does have Hittite/Anatolian elements but that Mycenaean parallels may also be drawn.

<sup>16</sup> Mee (1978) p. 134 based on fragments of Minoan pottery.

Mediterranean.<sup>17</sup> From LH IIIA archaeologists have noticed a steady increase in ceramic wares and the presence of kilns indicates that the site was now controlling local production.<sup>18</sup> Outside the settlement, a number of graves have been uncovered which have allowed for more accurate dating as well as further highlighting a strong Mycenaean presence at Miletus.<sup>19</sup> By the end of this period Mycenaean pottery is found in greater numbers, and it is also the first time that Mycenaean ritual activity is taking place.<sup>20</sup> Destruction at the end of the second phase (ca. LH IIIA2) led to the construction of a fortification wall in the third phase, consistent with the fortification of mainland citadels.

What has thus far been discussed is the likelihood that Miletus was a major centre of Mycenaean activity in western Anatolia, but what evidence is there for trade and economic activity at Miletus? It seems that once it was established as a colony, the site began to produce local wares, probably for export. Certainly the presence of a number of kilns during the second phase of occupation (LH IIIA) at the site shows the importance of a local ceramic industry, and the movement of Mycenaean goods around the Eastern Mediterranean further exemplifies this.<sup>21</sup> Of particular interest are fragments of kraters that have been identified as LH IIIB/C from Ugarit which probably came from Miletus but have also been found at Astypalaia, Kos and Iasos.<sup>22</sup>

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<sup>17</sup> Kelder (2005) p. 72.

<sup>18</sup> Based on ceramic evidence, Mountjoy (1998, p. 37) notes that from LH IIIA2 onwards Mycenaean pottery from not just Miletus but the area she designates the Aegean-Anatolian interface is made in local forms and decoration, which is a mixture of Mycenaean, Anatolian and Minoan influence but which is not found in either of the respective cultures. Instead what we see is a break from imports and an increase in local production.

<sup>19</sup> Pottery from chamber tombs at Degirmentepe, just outside of Miletus date to LH IIIB-C which Mee (1998 p. 139) notes is curious given the presence of LH IIIA pottery at Miletus in addition to LH IIIB-C. No suggestions have been made as to why there is no LH IIIA2 wares in funerary contexts. In addition, Niemeier (cited by Mee 1998 p. 139) notes that 95% of the pottery at Miletus is Mycenaean, the remaining 5% is Anatolian.

<sup>20</sup> Kelder (2005) p. 74. Kelder points to a phi-figurine as evidence of this, and notes that, though the evidence is slim, it was most likely an import from the Argolid and perhaps attests to Mycenaean ritual activity at the site.

<sup>21</sup> The importance of ceramic production is also evident on the mainland, where a number of sites (Pylos, Tiryns, Asine, and Berbati) had kilns (cf. van Wijngaarden 2002).

<sup>22</sup> Mee (1978) p. 136. These fragments are local productions in Mycenaean style. Mee even notes that potters at Miletus could reproduce Mycenaean imports without difficulty (citing Kleiner 1969).

More discussion however should be given to settlements that were not under Mycenaean control for they are critical in understanding the overall impact of trade and what the Mycenaean gained from establishing trade relations. In the north the site of Troy was one of the longest occupied sites in Bronze Age Anatolia and was one of the few sites that maintained steady contact with the Greek mainland. Its location at the mouth of the Hellespont ensured that those travelling to the Black Sea passed through Troy and engaged in exchange, from which Troy would have benefited greatly.<sup>23</sup> Evidence for contact in the Late Helladic period comes from ceramics at the site which have been dated to LH IIA<sup>24</sup> and continue until the destruction of Troy VIIa sometime in the 12<sup>th</sup> century BC.<sup>25</sup>

The levels contemporary with the Late Bronze Age in the Aegean were Troy VI and Troy VIIa.<sup>26</sup> During this time foreign contact was more extensive than in previous periods at the site and has led to the suggestion that the settlement functioned as an intermediary between all kingdoms and states from north to south, east to west.<sup>27</sup> This idea of Troy serving as a commercial hub is heavily debated; did Troy act as a crossroads settlement for goods to enter markets from all directions? <sup>28</sup> Contact however with the Mycenaean does not immediately

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<sup>23</sup> The point has been raised that there is no evidence to suggest shipping vessels travelled beyond the Hellespont. It may simply be that no such evidence has survived, or it could be that Troy served as a “trans-shipment point” between the Aegean and the Black Sea (cf. Easton, et al 2002, p. 104). This could help explain the extent of foreign vessels found at the site.

<sup>24</sup> Mee (1998) p. 144.

<sup>25</sup> Hooker (1977) p. 115.

<sup>26</sup> Kolb (2004) p. 578. The earliest evidence for contact between the Trojans and the Greeks was first uncovered by H. Schliemann in the early years of his excavations and has been dated to the Early Bronze Age, which falls outside of the range covered in this examination.

<sup>27</sup> Kolb (2004) p. 578 (citing Korfmann 1997: 94; 1998: 382-385; 2001: 360). Materials (such as copper, gold, tin, iron, timber, textiles and lapis lazuli) from the Balkans, Crimea, Anatolia, the Troad, Colchis, Afghanistan and Egypt are all references by Korfmann.

<sup>28</sup> This idea was first presented by M. Korfmann (2001), and received support in Easton et al (2002) while counter-arguments have been presented by Hertel and Kolb (2003). The evidence that has been presented by Korfmann in his publications (as noted above) suggests that peoples from all over conducted business at Troy which the archaeological evidence might confirm. In a rather contradictory statement, F. Kolb notes that “a survey of the objects found in the excavation levels of Troy VI... fails to support the hypothesis that Troy maintained strong contacts with other regions” (2004: 589). However Kolb does not offer any alternative reason to explain this, even

appear in the archaeological record at this time, and it is not until the later part of the Level VI period that a significant increase in Mycenaean finds is attested.<sup>29</sup>

Attention turns to the Anatolian interior where the Hittites controlled the vast majority of territory and where the evidence of contact with the Mycenaean Greeks presents the greatest discrepancy in overseas trade relations. Several theories have been presented for this but one of the most striking hypotheses is the possibility that political intervention prevented trade from taking place.<sup>30</sup> Extensive archaeological activity in regions under Hittite control<sup>31</sup> has produced very little evidence of any contact with the Mycenaean: sherds and possible bronze objects have appeared at only four sites within Hittite borders.<sup>32</sup> The cause for this discrepancy is not easily identified and several theories have been proposed to explain the lack of objects, however no single theory has been widely accepted.<sup>33</sup>

Evidence for contact with the Mycenaean continues past Anatolia and extends far into the Asian interior where a small number of objects have been found in Mesopotamia. Exchange with the Mesopotamians is not substantial and within Greece a number of objects uncovered in

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with evidence that natural resources and luxury objects from around the Mediterranean and the Black Sea have been uncovered at Troy.

<sup>29</sup> Kolb (2004) citing Blegen et al (1953, Part 1: 20-33). Here Kolb notes that Blegen's excavations produced 914 objects over the course of Level VI, of which almost 750 date to the late Level VI. This total does not include ceramic objects. Hooker (1977) notes that ceramics from LH I-III have been found at Troy, and Mee (1978 citing Blegen 1953: 16) notes that "[about] 1000 sherds recovered [from Troy VI levels] represent some 700-800 pots". Mee also notes that the majority of these objects were dated to Level VI F-H, and corresponds to LH IIIA2 (~ 49%). This represents the "most prolific period" of Troy VI.

<sup>30</sup> See below for more regarding this subject.

<sup>31</sup> Based on the parameters established in Cline (1994) p. 68, Hittite territory is bordered to the north by the Kaska zone, to the east by the Halys, and to the south by the 'Lower Lands'. See Map of Anatolia in Appendix II.

<sup>32</sup> Cline (1994) p. 68. Fraktin (an LH IIIC stirrup jar and a possible knife), Uc Hoyuk , Godelesin Hoyuk and Boghazkoy (a bronze sword of probable Aegean origin) have produced objects of possible Mycenaean origin.

<sup>33</sup> Cline (1991b) offers the explanation that a trade embargo was enforced by the Hittites against the Mycenaean. Mellaart (1968) notes that the trade in perishable goods (food products, textiles, wooden objects etc.) was common in the Late Bronze Age (see also Bryce 1989, Beckman et al 2011). Hope Simpson (1981: 205) however argues that "direct contact was relatively limited, presumably due to geographic factors". For further discussion, see below (*Section 2: A Hittite trade embargo?*)

LBA contexts can trace their origins to Mesopotamia.<sup>34</sup> Most of the objects identified thus far are luxury items which suggests that exchange between the civilizations was based on the import and exchange of non-essential luxuries. Objects of lapis lazuli and blue glass consist of the majority of Mesopotamian goods in Greece, and were either cylinder seals or were used as jewelry.<sup>35</sup> Unfortunately it is not possible to determine whether or not these objects came to Greece as part of trade with Mesopotamians directly or whether they arrived through indirect means. This is one of the major problems in understanding the extent of trade not only with Mesopotamia but with most civilizations in the Eastern Mediterranean.

### *Syro-Palestine and the Levantine Coast*

The west coast of Asia was home to a number of smaller states in the Late Bronze Age, and each one appears to have been in contact with the Mycenaean Greeks once they came to be the dominant power in the Aegean. Objects of Greek origin have been found all across the region and vice versa. Pottery, though, is not the only source of evidence for trade, as trade does not relate solely to the goods transferred between two people. It is widely accepted that a number of technological advancements, particularly in processing metals, were first made in the Levantine region, and over the course of the Bronze Age made their way to the palaces of Mainland Greece.

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<sup>34</sup> Cline (1994), p. 24. Cline remarks that a number of Mesopotamian objects, mostly cylinder seals have been found at mainland Greece sites, but that the extent of contact between the two civilizations was not great. Cylinder seals were found at Thebes, while some objects of possible Mesopotamian origin have been found at the major central palace sites of Mycenae and Pylos. Reciprocal trade is thought to have occurred with objects of Mycenaean origin found in Bronze Age contexts within Mesopotamia. Textual evidence may exist that points to contact between the Mesopotamians and the Greeks, however two problems persist: 1) that the textual evidence points to the *Kap-ta-ra*, a possible reference not to the Mycenaean Greeks but the Minoans and Crete, and 2) that we do not yet know what name the Mycenaean or Minoans used to identify themselves. See **Table 5** for dates and findspots of Mesopotamian objects in Greece and the Aegean.

<sup>35</sup> Cline (2007), p. 191. Cline later notes that 41 objects originate from Mesopotamia and that the majority of them were found at Thebes in LH IIIB1-2 contexts (p. 192). It is important to stress the nature of these objects, as some of these objects would be considered luxury goods. Excavations at the New Kadmeion at Thebes would suggest imports were driven by the wealthy ruler of Thebes, though others have suggested that they were part of a gift of “one mina of lapis lazuli sent by King Tukulti-Ninurta I of Assyria” (p. 192 citing the theory presented by Porada).

Like most states along the Eastern Mediterranean coast trade seems to have originated with the Minoans on Crete at the end of the Middle Bronze Age and into the beginning of the Late Bronze Age.<sup>36</sup> The extent of contact the Minoans had can be found throughout the East Mediterranean, but “evidence... shows that in the MBA a few Minoan trading ventures were made, but no regular trade followed”.<sup>37</sup> With the increase in trade during LM I, routes were expanded and the Minoans flourished. After the expansion of the Mycenaeans those trade networks were incorporated into Mycenaean society.

What emerges from excavations along the Levantine coast is one of the largest collections of goods traded with the Greeks. Cline noted that about 259 objects found throughout Greece and the islands had originated in the Syro-Palestinian region, while Hankey and others note that goods that originated from the Aegean have been found at roughly 100 sites in the Levant.<sup>38</sup> This is most important because it shows the single largest distribution of sites that the peoples living in Greece and the islands at the time had contact with, though it remains to be seen if such contact was direct or indirect.

Pottery in the Levant is the best evidence for trade with as many as 1800 vessels being identified as Mycenaean or Minoan in origin.<sup>39</sup> Several authors have identified various stages of trade amongst the Aegean and the peoples of the Levant over the course of the Late Bronze Age which is similar to the trends observed with other states in the East. Much like the trends seen in Anatolia and Mesopotamia, imports into Greece show the dominance of the different cultures at

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<sup>36</sup> Pottery from the Middle Bronze Age, and more specifically originating from Crete has been found across mainland Greece, the Cyclades, Miletus, Knidos, Cyprus and Syro-Palestine (cf. Watrous in *Wace and Blegen*)

<sup>37</sup> Hankey (1993a) p. 103.

<sup>38</sup> Hankey writes that the distribution of vessels originating from the Aegean varies, with some sites containing more than 100 vessels, like at Ugarit or Tell Abu Hawam, or a small handful of objects, like at Karkhemish or Emar. As of 2002 110 sites have produced evidence in the Levant of contact with the Mycenaean Greeks (see *Appendix II* for list of sites in Syro-Palestine with Aegean objects, and **Table 7** for a breakdown of objects in the Aegean).

<sup>39</sup> Cline (1994) p. 49.

the time. Beginning in LH/LM I most of the evidence shows that contact was between the Minoans and the Syro-Palestinians and continued into LH/LM II but “this did not immediately stimulate regular trade”.<sup>40</sup> By the LH/LM IIIA-B period there appears to be a shift in the origins of pottery in the archaeological record of the Levant. Contact with the Minoans appears to have decreased by LM IIIB which is evident in the archaeological record in Greece where roughly 98% of Levantine objects can be found on the mainland.<sup>41</sup> With respect to the regions covered by the Syro-Palestine title, Canaan seems to have been the most popular source of imported wares, as Canaanite jars have been identified as the most abundant vessel during the Late Bronze Age.<sup>42</sup>

It is possible to identify potential ports of import for goods arriving into the Levant. The city of Ugarit is one of the most important sites because of its association as a major transit hub for the Near East.<sup>43</sup> Its location along the western coast of Syria placed the site strategically along the Mediterranean trade routes and acted as a distributor of goods to all regions of the Eastern Mediterranean. Its importance in the region was not meant just for the Mycenaeans to get their goods to market overseas, but it appears to have served all nationalities looking to move goods across the known world.<sup>44</sup> Scholars have referenced a number of media to support this claim, including textual evidence from Ugarit to the expansive collection of foreign objects found throughout the settlement.

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<sup>40</sup> Hankey (1993a) p. 103. Cline (1994, p. 49) also notices that contact with the Levant/Syro-Palestinian region was minimal during this period.

<sup>41</sup> Cline (1994) p. 49. The remaining objects were found in funerary contexts on Crete.

<sup>42</sup> The appearance of Canaanite vessels in Greece, Cyprus, Anatolia, and Egypt, as well as the impressive amount aboard the Ulu Burun shipwreck highlight its importance in the Eastern Mediterranean (cf. Cline 1994 but also Ben-Shlomo et al, 2011).

<sup>43</sup> Ugarit however is one of almost 100 sites that have produced archaeological information for the contact between the Mycenaeans and the Levant. G. van Wijngaarden gives careful attention to Hazor and Tell Deir ‘Alla as well in order to provide a balanced picture of the region.

<sup>44</sup> Excavations at Ras Shamra and Minet el-Beida have revealed countless objects of Egyptian, Mesopotamian, Canaanite, Cypriot and Anatolian origin.

While the archaeological record at Ugarit provides the greatest examples of foreign exchange, a crucial problem has been highlighted by van Wijngaarden. It has recently been seen that due to the excavation processes during the early years of excavation, and due to the questionable provenance of objects in museums, it is not possible to provide a near complete picture of the Mycenaean ceramic corpus in the Levant. Specifically at Ugarit it can be observed that some objects have had to be left out of consideration because at the time of excavation they were not considered relevant to the site's context.<sup>45</sup> In addition to this, van Wijngaarden notes that undecorated pottery of local manufacture prevented comparison with imports and so it is difficult to identify which objects were made locally in Mycenaean style versus imports from the mainland. This is significant to understanding the level of contact the Mycenaean may have had with Ugarit specifically because any such influence that came from direct contact has been eliminated.

The impact of Mycenaean goods to the city can be easily observed when looking at the distribution of pottery at Ugarit. Objects have been uncovered at almost every part of the site that has been excavated and in essentially every context (domestic, funerary, religious). The impact of this is that Mycenaean goods, and in particular oils, remained a constant export for the Mycenaean because of their use in all aspects of life.<sup>46</sup>

Despite these issues the consideration of Mycenaean pottery at the site is crucial when considering the complete archaeological record. van Wijngaarden notes that “the occurrence of

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<sup>45</sup> The amount of pottery is not extensive; however, the complication of publishing the result of finds has made studying Mycenaean pottery at Ugarit even more challenging. Still the number of objects that can be confirmed as either Mycenaean or made in ‘Mycenaean style’ far outweigh the objects excluded.

<sup>46</sup> The vast majority of objects seem to have been stirrup jars, which have been found mostly in funerary contexts. van Wijngaarden notes that this may indicate the role oil played in funerary customs, and notes that epigraphic evidence suggests oils were used in funeral practices, where “the deceased were treated with oil during their deposition in the funeral cellar” (p. 71 citing Kinet 1981 and Salles 1995).

objects from many different areas is a characteristic of the material culture in Ugarit and a sign of the cosmopolitan culture of the Levant in the LBA”.<sup>47</sup> The idea that Ugarit served as a major port for several cultures is seen in the extensive finds including objects of Egyptian, Cypriot, Anatolian and Syrian origin. Remarkably, van Wijngaarden citing Courtois (1979) notes that Hittite finds are less common at Ugarit which is interesting given the lack of Hittite objects in the Aegean.<sup>48</sup>

Overall the presence of Mycenaean objects in the Levant in such a wide range of contexts and sites demonstrates the importance of trade in the region. It can be further observed that ceramics are not the only objects that were exchanged, though they are the most easily understood. Cline has remarked that exchange with the Levant resulted in the exchange of ideas and possibly even laborers.<sup>49</sup> The idea is not unexpected since the artistic motifs throughout the Aegean (particularly at Akrotiri and Knossos) have been argued to contain elements of Egyptian influence. Could the transfer of techniques, such as in metalworking, have originated in the Levant and spread into Greece either through hired work or from immigration? The answer is not so easily ascertained. Examples from later history have been used in the past to show the extent of networks in the Mediterranean and there is no evidence to suggest that this couldn't be the case as well in the Late Bronze Age. Linear B in particular makes numerous references to smiths who were selected by the palace to receive bronze or other metals for working<sup>50</sup> and further suggests that metalworking was one of the major components of the local Greek economy. It

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<sup>47</sup> van Wijngaarden (2002) p. 71

<sup>48</sup> Kolb (2004) p. 587-588 notes that Hittite objects are not found at Troy, and that they are rare in the Levant and on Cyprus. Additionally he remarks that gift exchange between the Hittites and Near Eastern rulers was conducted with perishable goods and meltable material (such as copper) being offered.

<sup>49</sup> Cline 1994, p. 52

<sup>50</sup> The Linear B tablets from Pylos (more specifically the *Jn* series) list as many as 274 metalsmiths in the surrounding areas controlled by Pylos who had received varying quantities of bronze or copper from the palace. It is not known if their names are identified as Greek or a transliteration of an exotic name. D. Nakassis (2013) has examined this at great lengths to understand the role of individuals as well as the redistribution of metals and other goods within the Pylian kingdom.

would be plausible to believe that such workers came not just from the Greek mainland and the islands, but also from areas where metal production was dominant.<sup>51</sup>

### *The Egyptian New Kingdom (18<sup>th</sup> Dynasty – 19<sup>th</sup> Dynasty)*

Directly south of Crete lies the Kingdom of Egypt, entering the Eighteenth Dynasty as the Late Bronze Age came about. It comes as no surprise that Egypt, whose relationship with the Minoans developed and peaked in the Middle and early Late Bronze Age became one of the largest trade partners for the later Mycenaean Greeks. Based on the number of Egyptian goods found at both Minoan and Mycenaean sites, as well as the archaeological evidence within Egypt for both Minoan and Mycenaean influence, the relationship seems to have transitioned with the increased presence of the Mycenaean on Crete. Cline recorded roughly 236 objects within Greece with dates ranging from LH I to LH IIIC and a further 1800 objects found within Egypt that could trace their origin back to Minoan and Mycenaean territory.<sup>52</sup> These numbers indicate that Egypt was the second largest trading partner for the Mycenaean.

The nature of trade and exchange between LBA Greeks and Egyptians relies on a number of factors that are not as prominent in other cultures. At the same time some of the problems that have arisen with regard to other cultures are also prominent in understanding the contact between the Mycenaean and Egyptians. The evidence for contact and interaction between the mainland and the Egyptians falls into three separate categories; artefactual evidence, textual evidence and iconographic evidence. It is the latter two which present some of the biggest problems in Egypto-

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<sup>51</sup> Cline (1994) p. 52 notes that Egyptian and Near Eastern craftsmen were sent out on loan (citing Beckman 1983 and Zaccagnini 1983), while some merchants from outside of Greece may have settled temporarily or permanently in the regions (citing Morris 1989, 1990). A. Harding (1984) p. 49 has noted that Palestine may have been one of the key sources for copper in the Mediterranean and so it is plausible given the movement of peoples that immigrants were hired by the palaces for metalworking.

<sup>52</sup> The majority of these objects date to the later part of the Late Bronze Age, and as Cline (1994) notes, they have been found at 30 sites. See **Map 4** for a distribution of sites in Egypt, *Appendix II* for a list of sites, and **Table 8** for a breakdown of Egyptian objects in the Aegean, based on date and findspot.

Mycenaean study due to the unknown variables each presents. Nevertheless this evidence should not be overlooked. The artefactual evidence highlights the continuation of trade over the span of the Late Bronze Age, while both the textual and iconographic evidence provide additional support to the presence of Mycenaean exchange in Egypt. As with many states during this time the concept of gift exchange will also be examined to determine whether the relationship was based on obligation or the desire for commercial interaction.

As is the case with sites previously mentioned the presence of LH I pottery is not evident in Egypt.<sup>53</sup> Once more this is a result of the meagreness of Mycenaean trade which at the time was restricted to the Greek islands including Crete.<sup>54</sup> Nevertheless there is some evidence in Egypt of contact with the Aegean during the early part of the Late Bronze Age, where the evidence has been traced back to the Minoans on Crete.<sup>55</sup> The result is that early contact between the Egyptians and the peoples of Greece in the early LBA was incredibly restricted and very sporadic. The archaeological record remains this way until contact begins to increase during LH/LM IIIA2 with a few exceptions.<sup>56</sup>

In the LH III period contact increases as Late Helladic objects appear at more sites along the Nile River. The strongest evidence for a Mycenaean presence is the stirrup jar. These small containers have been found in great amounts at sites like Amarna, Tell el-Dab'a Memphis and

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<sup>53</sup> Cline 1994, Mountjoy 1993.

<sup>54</sup> During LH I-II most of the evidence for Mycenaean peoples abroad are contained to the Cyclades with sites like Akrotiri, Phylakopi, Serraglio and Ayia Irini being the most cited.

<sup>55</sup> Cline 1994 (p. 31). Though he states the appearance of LH/LM I-II pottery is scarce, sherds that date to the early LBA are present at nine sites.

<sup>56</sup> Hankey (1993b) p. 110. Hankey records that a few minor Aegean imports that date to LM IB/LH II have been found in Egypt at the tomb of Rekhmire, a vizier to the pharaohs Thutmose III and Amenophis II. The tomb is also the location of iconographic evidence for contact with the Minoans on Crete and one of the references to the *Keftiu*. Kelder (2009 p. 342) points out that “the quantities [of Mycenaean pottery in Egypt before the Amarna period] are very small” and that the beginning of the Amarna period “marks the advent of Mycenaean pottery” in Egypt.

Saqqara, and in virtually all contexts (i.e.: religious, domestic or official).<sup>57</sup> This raises the question of what importance these objects served to the Egyptian people; were they sought after for their decorative element or for the goods contained within? It is most likely that they were used for storing oils and in particular scented oils.

The city of Amarna, the capital of the pharaoh Akhenaten at the end of the Eighteenth Dynasty<sup>58</sup> has produced a great amount of Mycenaean pottery, most of which dates to the LH IIIA-B period during the height of Mycenaean overseas exchange.<sup>59</sup> It is here that the amount of artefactual and iconographic evidence shows the extent of exchange and contact the Mycenaean peoples had with the Egyptians. Regarding the artefactual evidence excavations at the site have produced a great number of ceramic fragments including the remains of stirrup jars,<sup>60</sup> alabastra and a variety of cup shapes including the kylix.<sup>61</sup> The corpus of Mycenaean pottery at Amarna thus presents a number of questions such as what purpose these objects served and how they came to Egypt.

A number of answers have been proposed for each of these questions and there is no definitive evidence to suggest one is better than another. The shapes of various vessels have underscored their function, mainly for the transportation and storage of valuable goods. Unfortunately there is no way to determine if any of the objects at Amarna were appreciated by the locals for their content or their decoration. It has been suggested that “as a container these

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<sup>57</sup> Hankey (1993b) p. 111. The expansive use of LH III pottery demonstrates the high demand for the goods these objects once contained.

<sup>58</sup> Akhenaten ruled over Egypt from ca. 1353-1336 BC.

<sup>59</sup> Hankey (1993b) p. 114. The note on el-Amarna (site #65 on page 102 of the same volume) indicates that less than 300 objects have been found at the site in almost every context (palace, temple, city, rubbish heaps, workmen's village)

<sup>60</sup> Hankey 1995 (p. 116). Hankey notes that the excavator Flinders Petrie uncovered 1341 fragments of Mycenaean pottery, with a portion of them forming stirrup jars.

<sup>61</sup> Hankey (1993b) p. 112. These objects are common Mycenaean wares found not only at Amarna but other sites including Saqqara and Qantir.

shapes were fashionable” given the number of imitations at Amarna and other sites throughout Egypt.<sup>62</sup> It has also been suggested that particular objects were the desire and envy of others at the time and that “the empties trickled down the social scale after the original contents had been used”<sup>63</sup> becoming decorative objects for others at Amarna.<sup>64</sup> Based on the variety of contexts in which these objects have been found, their widespread use at Amarna indicates the intrinsic value of both the objects and the contents within.

The artefactual evidence has been able to provide information such as the extent of contact the Mycenaeans had with the Egyptians and in some cases about what goods were being exchanged. And yet our understanding of a Mycenaean presence in Egypt in the Late Bronze Age extends beyond the artefactual evidence. Two particular examples highlight the iconographic and textual evidence and shows these two powers were in contact, although it is difficult to determine whether this contact was the result of economic activity in Egypt. The strongest piece of evidence comes from the tombs of Egyptian officials, like those found at Amarna and can be used in conjunction with the artefactual evidence both on the mainland and in Egypt to support economic contact. Wall paintings have fascinated both scholars and the general public for centuries and the information contained in a number of royal officials’ tombs can confirm that olives and olive oil from Greece were frequently imported into Egypt for a variety of reasons,<sup>65</sup> the least of which was to ensure the state met its demand for the commodity.

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<sup>62</sup> Hankey (1993b) p. 112 and 1995 (p. 117). Imitation stirrup jars and flasks were commonly made out of clay but also faience, calcite and metals, as has been found at Gurob.

<sup>63</sup> Hankey (1993b) p. 112. An early example of recycling?

<sup>64</sup> The value for these objects is seen as ‘one man’s trash, another man’s treasure’.

<sup>65</sup> Evidence of the olive in Egypt is extensive and indicates the importance of the fruit in Egyptian society. Kelder (2009) remarks that its appearance in wall paintings at the Temple of Aten and in the funerary bouquet of Tutankhamun, as well as the many uses from cooking agents to fuel for lamps to offerings to deities highlight the Egyptian demand for it.

The second piece of evidence comes not in the pictorial evidence but the textual evidence and is something that appears time and time again in Bronze Age scholarship; what exactly were the Mycenaeans and the lands of Greece called?<sup>66</sup> Egyptian hieroglyphs make reference a number of times between the reigns of Thutmose III and Rameses III to a group of peoples called the *Tanaja* or *Tanaju*, which scholars have concluded are the Greeks.<sup>67</sup> Many have come to accept this as fact, given that many other great civilizations have been correctly identified in recorded material. The evidence presented is minimal<sup>68</sup> but in the case of the statue base of Amenhotep III's mortuary temple, can be quite enlightening. This particular base has become known as the 'Aegean List' as it recorded 16 places within the Aegean Sea (figure 4 below). Although the last few names have been lost, the list records sites like Amnisos, Phaistos, Mycenae and Knossos. The statue base has been used to suggest the hegemony over the Aegean,<sup>69</sup> but has recently been corrected to showcase an Egyptian knowledge of the Aegean world and nothing more.<sup>70</sup>

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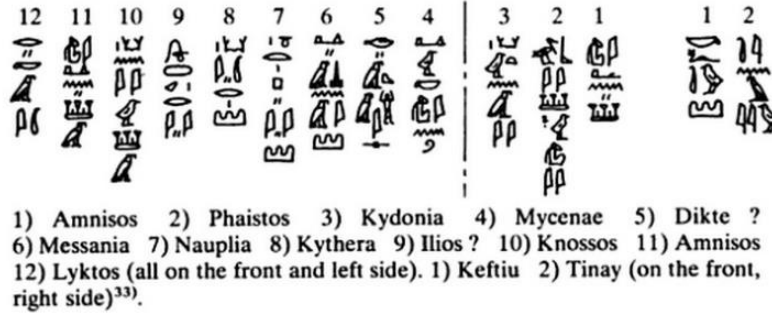
<sup>66</sup> The issue of the Ahhiyawa in the Hittite texts and the *Kap-ta-ra* in Mesopotamian texts raises the question of which land they are specifically referring to. A number of Mesopotamian texts that date to the Middle Bronze Age refer to objects of *Caphtorian* make which has been suggested to refer to Crete, while the Ahhiyawa are believed to be the Greeks, although this debate is still ongoing.

<sup>67</sup> The general theory is that the text should be read *Danaya* which scholars have interpreted as Egyptian transliteration of the *Danaoi*. For more see M. Bernal (1991). *Black Athena: The Afro-Asiatic Roots of Classical Civilization*, but also Cline (1994) p. 32, Drews (2000) p. 181.

<sup>68</sup> A table in Cline (1994) shows the number of times the Egyptians made reference to the *Tanaja* from the Middle Kingdom to the end of Rameses VI's reign. The word appears 6 times in the Egyptian record, with 3 occurrences during the reign of Amenhotep III, and no references before the reign of Thutmose III, who ruled over Egypt in the earlier part of the 15<sup>th</sup> Century BC. This period would fall in line with the LH IIA/LM IIB when trade was stronger with the Minoans than the Mycenaeans, but also falls in line with the accepted period when the Mycenaeans were beginning their expansion overseas.

<sup>69</sup> Originally suggested by Merrillees (1972), it was expanded on by Bernal to suggest "some sort of Egyptian hegemony" (Cline 1994, p. 38). Cline however points out Bernal's ignorance of arguments against the theory.

<sup>70</sup> Bachhuber (2006) p. 346. Cline (1994) p. 39, insists that the list is simply a geographic itinerary.



**Figure 4:** the ‘Aegean List’ from one of the statue bases of Amenhotep III.

The role of gift exchange has not gone unnoticed in the study of Mycenaean-Egyptian relations. The evidence for peoples outside Egypt bringing what appears to be tribute highlights this important part of political and economic relations and it has been suggested that the Egyptians and Mycenaeans engaged in such exchanges. While the extent of these exchanges is unknown, given the amount of Egyptian goods in Greece over the course of the Late Bronze Age it is questionable whether such an exchange was common.<sup>71</sup> In addition to this the reason for such exchange is unknown as there is no indication from either the archaeological record or the textual record that any political relations were gained from exchange.<sup>72</sup> The evidence that suggests gift exchange took place centers on a number of facts: the earlier depiction of the *Keftiu* people presenting what appears to be tribute to an Egyptian pharaoh,<sup>73</sup> the presence of Egyptian plaques at Mycenae<sup>74</sup> and the ‘Aegean List’ on the statue base of Amenhotep III at his mortuary temple at Kom el-Hetan. Separately these pieces of evidence suggest trade at the very least

<sup>71</sup> Egyptian records are better indications of contact because they provide information on an annual basis, whereas the Greek textual evidence refers to the final years of the Late Helladic period. Depending on whether or not the *Tanaju* people mentioned in Egyptian texts are the peoples occupying the mainland, they are mentioned only a handful of times between the reigns of Thutmose III and Amenhotep III (ca. 1479-1352 BC) (cf. Kelder 2009).

<sup>72</sup> Bachhuber (2006) p. 345, notes that the Linear B records “are notoriously elusive on issues related to trade and foreign contact” and that if any such gift exchange were conducted then the record of it would not be shown.

<sup>73</sup> It would not be unimaginable to assume that if the *Keftiu* were tribute paying peoples, and were then conquered by the mainland Greeks, then the new rulers of Crete would enter into a relationship with the Egyptians in order to profit from such contact.

<sup>74</sup> Hankey (1981 cited by Kelder 2009) presented a scenario where Amenhotep III, in order to acquire oil from Greece, sent an embassy to Mycenae with faience plaques as a gift in order to procure a shipment. Kelder (2009) however claims that the faience plaques that have been found at Mycenae and carry the pharaoh’s cartouche are not found in contexts contemporary with Amenhotep III.

between the Egyptians and Mycenaeans; however they have been suggested together to present a clear argument that such interaction was the result of gift exchange.<sup>75</sup>

The evidence presented is merely a fraction of the theories and arguments that support Mycenaean and Egyptian interactions in the Late Bronze Age. Complications arise when trying to understand the extent of interaction and the level of economic activity between the two states. In a study such as this, one must also address the issue surrounding the model of the ancient economy, mostly that modern economic theories cannot always be applied to ancient economies. M.I. Finley is a strong voice for the primitive economic model, which does not rely on modern economic theories and principles in order to compile a clear image of the ancient economy, one that is not driven by market indicators (such as labour, currency or stock markets). His work demonstrates that a number of key economic indicators, such as interest rates, debt holdings, insurance and most importantly trade and exchange, were common throughout the ancient world without these modern indicators of economic prowess. It would not be for almost two thousand years after the writings of the Greeks and Romans that Adam Smith presented his economic model on the invisible hand where market conditions are pulled by a number of factors, and so Finley's work is intended to analyse the ancient economy without the use of these modern concepts (i.e.: supply and demand or the various market indicators mentioned above) simply because they were non-existent at the time. Finley argues that "the 'principles' [i.e.: these concepts]... tend to draw us into a false account... [and that] no modern investment model is

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<sup>75</sup> Gift exchange presents a unique argument, as it falls into a 'grey' area with regards to trade (for more on gift exchange and diplomatic relations between Egypt and the Mycenaeans, see Kelder 2009, 2010). While one would consider the act of gift exchange as part of diplomatic relations between two states, "the evidence for it certainly cannot be used... to argue for high-level ceremonial exchanges of the kind that would indicate diplomatic contacts between rulers in the Aegean and the Near East [including Egypt]" (Dickinson 2006: 35). It has also been argued that the pharaoh Amenhotep III asserted control over the Eastern Mediterranean through the means of 'gift exchange' (for more see Bernal 1991). In doing so he created vassal kingdoms and alliances in order to strengthen his dominance over the Mediterranean and halt the expansion of the Hittite empire (cf. Cline 1994: 41).

applicable” to understanding the ancient economy.<sup>76</sup> The work Finley presented is in favour of the Classical Greek and Roman periods, and so one must also ask whether this might also be applied to the Mycenaean palaces in the Late Bronze Age and their role in the overall economy of the Aegean during this time period.

It is also clear that the evidence not only suggests economic relations but also diplomatic relations in the form of gift exchange. The sporadic evidence surrounding this idea cannot in itself indicate that the Mycenaean and the Egyptians were in continuous contact, and the controversial context in which the main evidence is found cannot support the theory that ties were established through gift exchange alone. It is however certain that once contact between the Mycenaean and Egyptians was established in the early Late Bronze Age (ca. LH I), exchange remained continuous particularly through LH IIIA to LH IIIB and that there was a high demand for certain Mycenaean objects.

### *Cyprus*

Across the sea from Ugarit and the Levantine states, Cyprus has been considered one of the key trade partners of the Mycenaean and economic activity is evident from the time of the Minoans and into later Greek history. Its location between the Greek islands and the coast of the Levant makes Cyprus a significant intermediary between the two regions in facilitating trade.<sup>77</sup> Due to this proximity a great number of objects of Mycenaean origin have been uncovered at a number of sites, with no discrimination between larger settlements and smaller towns. Cline

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<sup>76</sup> Finley 1973, p. 23.

<sup>77</sup> See **Map 2** for a distribution of sites on Cyprus, and *Appendix II* for a list of sites where Mycenaean objects have been found.

notes that about 176 objects of Cypriot origin have been found in Greece<sup>78</sup> which indicates reciprocal trade, though the question of direct or indirect trade remains unknown. Unlike many of the regions that have been discussed up to this point, Cyprus' role in Bronze Age trade may not center on the trade of ceramics or processed goods but on commodities like copper.

The range of Mycenaean wares on Cyprus follows a pattern similar to the one that has been discussed in the Near East, the Levant and in Egypt. As early as the 1950's it had been observed that examples of LH I and II wares on the island were incredibly rare.<sup>79</sup> This detail has not changed as LH I or II vessels have so far not been found on Cyprus except in a few instances.<sup>80</sup> The earliest objects that have been found on Cyprus have been dated to LM I and correspond with the pattern observed across the Eastern Mediterranean where contact was first established by the Minoans.<sup>81</sup> In regards to the Greek mainland Cline notes that of the 176 Cypriot objects uncovered in Greece, more than half of the imported objects are ceramic wares.<sup>82</sup> The first observation that can be made is that in the early parts of the Late Bronze Age "the Mycenaean and Minoans were importing Cypriot ceramics as a fine, luxury, tableware"<sup>83</sup> based on the shapes of these objects.

Mycenaean pottery reaches its peak output in the LH IIIA1-2 period, and reciprocal trade was being conducted by the Cypriots, whose ceramic wares were being brought into Greece in

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<sup>78</sup> Cline (1994) p. 60. In breaking down the location of all 176 objects, Cline specifies that 52 objects are part of the Ulu Burun and Cape Gelidonya shipwrecks and only fall into the classification of Late Bronze Age, not necessarily Late Helladic. See **Table 9** for a breakdown of Cypriot objects in the Aegean.

<sup>79</sup> Stubbings (1951), p. 26. These wares appear to be confined to the Greek islands and mainland, while transitional items from LH II to III have been found in rare quantities. Steel (1998) also confirms this almost 50 years later.

<sup>80</sup> Objects of LH I and II have been found at Enkomi, Ayia Irini-*Paleokastro*, Toumba tou Skourou, Maroni Vournes, and Kouklia Palaepaphos.

<sup>81</sup> van Wijngaarden (2002) p. 129.

<sup>82</sup> Cline (1994) p. 60. Cline offers two different numbers based on whether Cypriot objects on the Ulu Burun and Cape Gelidonya wrecks should be included. The 176 objects includes the evidence from both wrecks.

<sup>83</sup> Cline (1994), p. 60. Cline bases his evidence on the abundance of Cypriot 'milkbowls' which were one of the more common vessels imported into the Aegean in this period.

greater quantities (Cline remarks that most of the incoming objects were found at either Tiryns or Boeotian Thebes). The later Late Bronze Age (LH IIIC) however sees a downturn in economic activity between the two regions, and of the imports into Greece most are metal objects (of gold or bronze). These objects consist mostly of luxury goods such as jewelry but also includes bronze tripods and bronze tools.<sup>84</sup> Thus it is evident that by the end of the Late Bronze Age, objects that are being imported into Greece are valuable goods, although the reason for trade in these goods is yet to be determined. As well there is no substantial evidence for imports in ceramic and utilitarian wares. Cline, citing Cadogan, remarks that for perhaps the first time objects are arriving in Attica during the LH IIIC period.<sup>85</sup>

In Cyprus, Mycenaean pottery has been found since excavations began in the late 19<sup>th</sup> century, and has not been centered at a single site but is distributed throughout the island.<sup>86</sup> The town of Enkomi, located roughly 3km from the eastern coast, produced the greatest amount of evidence for trade with the Aegean. Continuous excavation at Enkomi has indicated that trade was carried out at most stages of the Late Bronze Age.<sup>87</sup> Social structure and administrative functions were present at the site, for “[t]he unequal distribution... of gold and of exotic and symbolic grave goods indicate that in the early stages of LC [Late Cypriot] II there was a stratified elite in the city”.<sup>88</sup> Furthermore the Cypro-Minoan script, though undeciphered, seems to draw parallels to the established administrative system found in other major cultures of the region. Such comparisons can be drawn from the Mycenaean states, where the presence of lavish

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<sup>84</sup> Cline (1994) p. 61.

<sup>85</sup> Cline (1994) p. 61 citing Cadogan (1972 p. 11-12).

<sup>86</sup> van Wijngaarden (2002), p. 125 notes that Furtwängler and Loschke mentioned in 1886 that three sites had produced 37 objects of Mycenaean origin and that by the mid-1920's “the number of Aegean finds in Cyprus was well over a thousand” and that about twenty sites had produced large amounts of pottery.

<sup>87</sup> van Wijngaarden (2002) p. 131 notes that the first evidence of pottery at Enkomi dates to LH I and carries through to the end of LH IIIC. In total 1472 finds have been identified as Mycenaean in origin.

<sup>88</sup> van Wijngaarden (2002), p. 130-131. Late Cypriot II corresponds roughly with the date 1450-1200 BC, or LH IIIA1-III B

grave goods and administrative documents show a strong social structure and hierarchy in the civilization.<sup>89</sup> The trend that is visible at Enkomi is also noted at several other sites throughout Cyprus, such as Toumba tou Skourou, Kition, Kalavassos-*Ayios Dhimitrios*, and Maroni-*Vournes*.<sup>90</sup> Though the quantity of pottery does not compare with that at Enkomi, its importance cannot be ignored.

The distribution of pottery within the city points to the different uses the people of Enkomi had for the Mycenaean imports. Most of the evidence survives in funerary contexts; however, domestic contexts are also notable. At Enkomi, archaeologists were able to identify a number of buildings, with the most striking referred to as the ‘fortress’ because of its grand appearance compared with surrounding structures. It appears to have been multifunctional, serving as part-residence, part-commercial building. It was in the residential part of the building that Mycenaean wares were concentrated.<sup>91</sup> Dating the finds within the residential wing of the fortress indicate that the building was used over several generations and that perhaps the owner of the building (the local ruling family?) was heavily involved in the trade networks of the Aegean.<sup>92</sup>

The finds from the commercial area of the building, however, provide possible insight into how the residents came to acquire Aegean made vessels. The commercial sector of the ‘fortress’ showed some evidence of metal production, and a tablet inscribed with Cypro-Minoan

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<sup>89</sup> I should however clarify that the lavish goods, like those found at the Grave circles at Mycenae and the presence of Linear B documents at these sites do not date to the same time period. It does however stress the idea of social hierarchy at both sites, indicating that a similar structure was in use and that trade was a very important aspect of the socio-economic structure.

<sup>90</sup> Steel (1998) notes that the distribution of Mycenaean vessels is concentrated in these major urban centres along the south and the east coast of the island. No doubt this relates to the ties these settlements had with the Levantine coast.

<sup>91</sup> van Wijngaarden (2002), p. 144. He also notes that other imports were found alongside the Mycenaean wares but that “other finds may not have been in use simultaneously”.

<sup>92</sup> van Wijngaarden (2002) p. 144. The earliest evidence of Mycenaean contact comes from a fragment of LH I alabastron among other objects that have been confirmed as LH I.

script was found in this sector of the house. This coupled with the imported wares in the domestic quarter has led to the belief that the house served as the workshop for metal goods “aimed at overseas exchange”.<sup>93</sup>

In order to fully comprehend the importance of Mycenaean wares on Cyprus, one must consider the shapes of the vessels found in both funerary and domestic contexts in order to see if their use was functional or decorative. This will also determine if the importance of their import was based on the vessel or the contents of each vessel. In the early Late Bronze Age, there appears to be a restrictive nature of the vessels imported into Cyprus where two types, the open mouthed and closed mouth vessel, are found throughout the island. Most of these vessels have been identified in funerary contexts and perhaps find the best parallels in later Attic black- and red-figure pottery.<sup>94</sup> Open mouthed vessels, such as kylix cups and kraters indicate the expansive functions objects of import had on the local communities,<sup>95</sup> whereas closed vessels, such as stirrup jars and flasks “were imported for their contents”.<sup>96</sup>

Part of the overall problem surrounding Cyprus and its role in the Eastern Mediterranean trade network is the means in which the information has come to us. Stubbings notes that “so much Mycenaean pottery from Cyprus now in museum collections was acquired by tomb-robbing or unscientific excavation”.<sup>97</sup> This has greatly impeded our understanding of what these

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<sup>93</sup> van Wijngaarden (2002) p. 144 citing Keswani (1996 p. 222).

<sup>94</sup> This particular parallel was drawn by Steel (1998), p. 293, but the logic behind it is sound; “it’s very different appearance and in particular its use of an exclusive form of decoration” made such objects the desire of the elites in their respective communities.

<sup>95</sup> van Wijngaarden (2002), p. The distribution of Mycenaean vessels throughout Enkomi, in numerous contexts and not solely contained to one particular sector of the settlement suggests that Mycenaean wares were widely available to the community, and not just restricted to one particular use.

<sup>96</sup> Steel (1998) p. 286.

<sup>97</sup> Stubbings (1951), p. 25. Cadogan (1993), p. 91 emphasizes this by going further to say that “[sites] had been dug badly by excavators who gave little thought to Cypriot wares”. It would appear that the majority of early archaeologists focused on the well preserved Mycenaean wares and cared little for the local wares.

objects represented for the people who used them; their context is now lost and their origin brought into question.

The amount of pottery found at Enkomi alone is a staggering revelation about the amount of contact between the Greek mainland and the island from LH I-LH IIIC. Roughly 4000 objects have been identified as imports from the Greek mainland which represents perhaps the largest collection of objects outside Greece.<sup>98</sup> There may however be a discrepancy between the two regions as the number of objects found in each state does not indicate that trade was balanced. This may be a result of the trade of commodities like copper or other metals which are much more difficult to trace once they have been worked and processed into other goods. It has been shown already that the palaces on the mainland were involved in the redistribution of metals and other precious goods and so it is most likely that the relationship between Cyprus and the Mycenaean Greeks was based on the trade of high value goods like unworked copper and scented oils.

Unlike the study of pottery, which uses a variety of tools to provide details on origins and dates, metal analysis is purely scientific and requires a greater amount of study with a limited number of tools. Unlike clay analysis for pottery, which has a large sample size from all corners of the Mediterranean on which to conduct analyses, metals are fewer in number and thus the sample sizes are not as great. This however has not hindered analysis as “[a]ttempts are still being made to show that the copper in a certain object must have come from a particular

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<sup>98</sup> Cline (1994) p. 61

source”.<sup>99</sup> The information that has been gathered thus far from the sample size provides an interesting picture of Bronze Age metals trade.

Copper production on the island is believed to have begun towards the end of the MC III and into the beginning of the LC I period. This transitional period corresponds roughly with the end of MH III/beginning of LH I (ca. 1600 BC) and has produced some evidence for the growth of the exploitation of copper on the island. Enkomi appears as one of the first sites on Cyprus where “copper refining installations” developed, and continued to spread across the island to a number of other sites.<sup>100</sup> Evidence from the ‘fortress’ house has already demonstrated that metal production of some sort took place at the site, and so one of the questions that arises is whether metals arrived at the site from the copper-rich Troodos mountains. Scholars conducting scientific research on Cyprus have noticed a number of patterns mainly that “post c.1400 BC oxhide ingots were smelted from copper ores from the Apliki ore deposit”<sup>101</sup> and from a number of deposits around the mountains, based on Lead Isotope Analysis (LIA). This research has concluded that Apliki was one of the largest sources of copper on the island, and perhaps one of the most exploited sites for the commodity.

LIA analysis of copper ingots does not however produce conclusive results. Gale has demonstrated that most of the copper ingots have trace element profiles similar to copper at

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<sup>99</sup> Muhly, J.D. (1977), p. 78. Since the publication of Muhly’s article, comprehensive studies have been conducted on copper ingots and various copper objects from around the Mediterranean to determine place of origin. These analyses rely heavily on the composition of the metal and any trace elements that can be detected in samples. The number of ingots found on the Cape Gelidonya and Ulu Burun shipwrecks have increased sample sizes and further analysis may produce better results to determine place of origin.

<sup>100</sup> Knapp, A.B. (2012), p. 17 in *Kassianidou and Pappasavvas*. Knapp lists the majority of coastal sites that have been widely studied and have been mentioned in several places in this paper.

<sup>101</sup> Gale and Stos-Gale (2012) in *Kassianidou and Pappasavvas*, p. 71. The findings of this research relied on several studies conducted by Gale and Stos-Gale after 1995 but with research conducted much earlier. The increase in research came from the greater number of core samples available to the researchers. Based on the chemical composition of copper ingots from places like Sardinia, Kommos, Mycenae, Egypt and the Cape Gelidonya shipwreck to list a few of their sample sources, they were able to trace the origins of these copper ingots to the Apliki mine. Gale and Stos-Gale also note that a number of core samples were also traced to other mines besides the Apliki mine but all located around the Troodos mountains on Cyprus.

Apliki,<sup>102</sup> however, Knapp points out that none of the bronze artefacts share the same element pattern, and therefore are not sourced from the Apliki mine. Knapp also points out that the location of Apliki is not well situated for overseas trade since the difficulties in extracting and then transporting so much ore for processing to the coastal towns made for undesirable conditions.<sup>103</sup>

How then does this information relate to the trade of bronze from Cyprus to the Greek mainland? So far the connection stems from an increase in copper extraction around the same time that influence from the Greek mainland was expanding. It has been observed that copper mining and production at a number of sites is dated to between 1650 and 1200 BC with more production being dated to after 1400 BC.<sup>104</sup> When one considers the “flood of Mycenaean imports to the East Mediterranean”<sup>105</sup> as has been discussed above, it appears that such an increase in production on Cyprus is driven in part by the high demand by the Greeks.<sup>106</sup> As well, given the location of the deposit in relation to the major production centres, it is possible that the increase in extraction after 1400 BC was done to meet the demand for copper in the surrounding regions (not just for the Mycenaeans but also the Near East, Egypt and the Syro-Palestine region) and that coastal sites were pivotal in the working of copper to meet the overseas demand.<sup>107</sup>

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<sup>102</sup> Gale and Stos-Gale (2012) in *Kassianidou and Papasavvas*. Gale, as stated already, draws the conclusion that most of the copper ingots found within Late Bronze Age contexts contain trace elements from the Apliki region. His research though focuses solely on his own previous work and does not include much study from other scholars. This Knapp believes to be part of the problem with the evidence he has presented.

<sup>103</sup> Knapp (2012), p. 23.

<sup>104</sup> Apliki, Enkomi, Athienou, and Kition all showed an increase in smelting and producing ingots in Late Cypriot. Gale and Stos-Gale (1982), p. 17.

<sup>105</sup> Steel (1998), p. 286.

<sup>106</sup> Knapp (2012), p. 21 notes that Apliki has been suggested by Taylor (1952: 164) to have been established around the time of the Mycenaean expansion and perhaps this was due to some Mycenaean presence at the site. Knapp dismisses this claim and says that while there is no doubt the site was a mining town, there is no evidence of Mycenaean presence at the site at least from an administrative point of view.

<sup>107</sup> Early study into the demand of copper by the mainland Greeks has led to several different conclusions. Though technological advancements have led to confirmation of several deposits, it has been noted that the Greek mainland is often overlooked for their contribution to local sources of copper in the Bronze Age and that mainland deposits

### *The Cape Gelidonya and Ulu Burun Shipwrecks*

Our understanding of the manner in which objects moved around the Eastern Mediterranean received a boost with the discovery of the ‘Flotilla Fresco’ from Akrotiri (figure 5) as the scene depicts the possible shape of Late Bronze Age transport vessels.<sup>108</sup> Scholars have always known that the Greeks were seafarers but it was not until the discovery of the Cape Gelidonya shipwreck in 1954 and the subsequent discovery of the Ulu Burun shipwreck in 1982 that scholars began to understand trade routes of the Bronze Age, which in turn furthered our understanding of international trade routes.<sup>109</sup> Today these wrecks remain a popular topic in Bronze Age study because of the controversial elements found in their remains – what was their port of origin, what was the direction they were travelling and which state was profiting from such trade? Though the answers may not be completely ascertained several details have since emerged.

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were a more important source of copper than external sources (Gale and Stos-Gale 1982, p. 17). While there is no evidence from the mainland that identifies the source of metals like copper (possibly because any evidence of such records have since disappeared) it is highly likely that local sources were not able to meet the demand of the palaces and that importing was the only possibility to meet the demands (as later evidence provided by Gale, 2012 has indicated).

<sup>108</sup> The shapes of the vessels may not however indicate whether their main function was for transporting goods. However there is no evidence to suggest some of these vessels were not multi-purpose vessels.

<sup>109</sup> A third shipwreck, the Point Iria shipwreck, was discovered in 1962 off the coast of the Argolid. Though a significant discovery for understanding trade routes in the Late Helladic IIIC period, it has been excluded from this examination because of the nature of its cargo, which suggests perhaps it was a local merchant’s vessel. For more see Dickinson (2006: 34).



**Figure 5:** Section of the 'Flotilla' Fresco, Akrotiri

The wreck was discovered almost 30 meters below the surface off the promontory of Cape Gelidonya by sponge divers. The excavations that followed and helmed by George Bass uncovered a great number of objects which had “[fallen] into two principal masses on the sea bed”.<sup>110</sup> The deterioration of the ship no doubt led to this and over the course of the millennia the objects began to suffer from concretion making it difficult to identify what the objects were let alone provide a date for the time of sinking. It was possible however to distinguish between some objects as their shape and material were still recognizable. Ingots were perhaps the most recognizable objects because of the number of previously discovered ingots across the Mediterranean. Other objects including bronze tools and various ceramic vessels were also found. The shape and make of a number of objects helped date the Cape Gelidonya wreck to LH IIIB-C (ca. 1300-1100 BC).

The origins of these objects is what concerns a number of Bronze Age scholars because of the implications that can be gathered. Much like the metallurgical studies that have been conducted at copper producing sites like those on Cyprus, scientific analysis has been conducted on a number of Cape Gelidonya ingots to try and establish an origin. This however has proven to

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<sup>110</sup> Taylor in Bass (1967) p. 40.

be more complicated than anticipated since “[t]ypological study of the objects only confused the issue by revealing a mixed lot of material assignable to several different origins”.<sup>111</sup>

Concerning the origins of the Cape Gelidonya copper supply it has been confirmed by the analysis of copper ingots that a number of sources of copper were known and exploited in the Late Bronze Age, as some of the ingots on the Gelidonya wreck traced their origins back to Cyprus while others have indicated that an Anatolian provenance is more likely.<sup>112</sup> While a specific place of origin may not be completely traceable (i.e.: Apliki) it stands to reason that merchants sailing the Eastern Mediterranean acquired goods of all varieties for resale elsewhere.

Ingots may have occupied much of the vessel’s space but they were not the only objects of importance. Although ceramic vessels of numerous origins were also found on the sea floor it is still not possible to determine the port of origin of the ships. Unlike copper ingots ceramic wares pose a problem in addition to the ones already identified. It has yet to be determined if ceramic objects were disposed of once the goods they carried were used up or whether they were recycled for shipping other goods. It has been suggested that in Egypt something like this may have been the case but the presence of Mycenaean wares on the Cape Gelidonya wreck does not provide such details.<sup>113</sup> So far all that can be gathered from the fragments is what type of object they once belonged to. Stirrup jars are one of the common Mycenaean styles found on the Gelidonya wreck, which is not unexpected given that “[they] have wide distribution in the Aegean world and the Levant”.<sup>114</sup> Researchers have also noted that other fragments come from coarse ware which itself is interesting as these may reflect the desire for sturdy containers for

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<sup>111</sup> Muhly, J, T. Wheeler, R. Maddin (1977) p. 353.

<sup>112</sup> Muhly et al (1977). Muhly has indicated that four ox-hide ingots from the wreck are similar in composition to the ‘Mathiati Hoard’ from Cyprus, while other shapes have led to the speculation of different production techniques or different areas of origin.

<sup>113</sup> cf Hankey (1993b) (n. 62 above)

<sup>114</sup> Hennessy and Taylor in *Bass* (1967) p. 125.

shipping purposes and would possibly have had no intrinsic value as opposed to fine wares which may have been desired for their appearance as well as their contents.<sup>115</sup>

The coast of Turkey gained widespread attention again in the early 1980's with the discovery of a second Bronze Age shipwreck off the coast of Ulu Burun. The finds of this wreck have been described as some of the most spectacular<sup>116</sup> and have produced a vast number of objects that span the entire Eastern Mediterranean.<sup>117</sup> Once again establishing a port of origin proves challenging because of the diversity of objects on the ship and a number of sites have been proposed but not one site has leading support. The goods that were found on the ship are in stark contrast to those found on the Cape Gelidonya wreck. Objects of bronze, glass, ivory, and wood were found alongside a great deal more of luxury objects. It is surprising given the diversity of objects on board that there are very few Mycenaean objects. Cline offers two explanations as to why this is: 1) that the ship was on route to the Aegean when it sank or 2) the ship conducted trade and exchange along the Eastern Mediterranean shores and did not travel to the Aegean.<sup>118</sup>

A possible third theory has been suggested where the Ulu Burun ship was conducting diplomatic operations in the Aegean on behalf of the Egyptian royal court when it sank.<sup>119</sup> This theory draws evidence from the mortuary temple of Amenhotep III where the 'Aegean List' statue base was thought to have inscribed the destinations of "an Egyptian voyage to the

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<sup>115</sup> Given the dangers that come with shipping across the Mediterranean coarse wares are much more acceptable for transporting large quantities of goods which could then be transferred into fine wares after arriving at each destination. Given the merchants lived on the ship it is also possible that a number of ceramics belonged to them for storage of foodstuffs, oil and wine.

<sup>116</sup> Pulak (1998), Bachhuber (2006)

<sup>117</sup> Cline (1994) notes that the cargo on the Ulu Burun wreck could trace origins back to Syro-Palestine, Cyprus, Egypt, Mesopotamia and Italy.

<sup>118</sup> Cline (1994) p. 100. Cline cites the lack of 'saleable' Mycenaean goods as to why the ship may have been on route to the Aegean. Cline is inclined to disregard the second option given the amount of Near Eastern and Egyptian goods in the Late Bronze Age Aegean.

<sup>119</sup> Bachhuber (2006) p. 345 citing Hankey (1981)

Aegean” as well as the number of Egyptian objects found at Mycenae that can be dated to Amenhotep III’s reign.<sup>120</sup> Unfortunately it is difficult to connect this evidence with the route with the Ulu Burun shipwreck given that the sites listed on the base focus mainly on the Aegean islands and the Peloponnese and do not make any reference to the coast of the Levant or Anatolia, where it eventually sank.

Regarding the evidence on the Ulu Burun shipwreck only a small number of objects on board have been identified as Aegean. These objects are minimal compared with the large haul of Near Eastern *pithoi* and at least 149 Canaanite jars<sup>121</sup> among the hundreds of copper, tin and glass ingots from other civilizations. Of these Aegean objects, the stirrup jar appears to be the most represented object from the wreck but one flask has also been identified. These objects however must be placed in a separate category since their use on the ship was probably for storage.<sup>122</sup> Another class of objects have been identified which are often described as utilitarian, perhaps the personal belongings of the crew, and the majority of which are thought to be Aegean in origin.<sup>123</sup> This evidence has led to the belief that part of the cargo contained in the ship was bound for the Aegean for the purpose of gift exchange. Some of the men on the ship “may have acted as Mycenaean emissaries, or messengers, accompanying a cargo... back to the Aegean”, and may thus provide an explanation for ‘Aegean’ objects aboard the ship.<sup>124</sup> It is thought that

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<sup>120</sup> Bachhuber (2006) p. 345 cf. Hankey (1981: 45). Bachhuber notes that there are 14 Egyptian objects in the Aegean that have been dated to the reign of Amenhotep III, which includes two scarabs with his wife’s cartouche inscribed on them.

<sup>121</sup> Bachhuber (2006) p. 347. Eighteen ceramic objects that can be dated to the LH/LM IIIA2 period were found among the objects.

<sup>122</sup> See Ben-Shlomo et al (2011) for more regarding transport stirrup jars.

<sup>123</sup> Bachhuber (2006). Bachhuber notes that a number of Aegean objects were found as pairs which he argues indicates that they were not merely randomly picked or bric-a-brak but likely personal objects of two Mycenaean men. It should however be expressed that objects in pairs are not uncommon in Mycenaean finds as the site of Akrotiri yielded a number of objects that have been found as a ‘pair’ (C. Doumas personal communication).

<sup>124</sup> Pulak (1997) p. 252-253 (cited by Bachhuber 2006, p. 353). Caution must be given to this idea as Bachhuber suggests since there is no way to completely prove this idea.

some of the men on board served as the administrative representatives of the Greek port for which the cargo was destined and were on board to ensure the cargo arrived safely at the port.

It has been observed in Egyptian politics that gift exchange was one of the most suitable ways to cement diplomatic ties and the textual evidence from the Amarna letters (among a number of Hittite or Mesopotamian texts) substantiates this claim.<sup>125</sup> Pictorial evidence from the tombs of Egyptian officials and pharaohs also indicates exchange and a number of items similar to those found in both the Cape Gelidonya and Ulu Burun shipwrecks can be identified in these images.<sup>126</sup> Was the cargo of the Ulu Burun in particular destined for a Mycenaean palace (the destination remains unknown) as part of a royal embassy solidifying contact between the two states? Given that a majority of objects on board the ships were of Levantine origin it is highly unlikely that the cargo was destined for the Greek mainland as part of a diplomatic embassy from Egypt.<sup>127</sup>

The greatest benefit the Cape Gelidonya and Ulu Burun shipwrecks have provided to the advancement of Late Bronze Age economics is the understanding of exchange between the various Eastern Mediterranean civilizations. While the ports of origin cannot be established, scholars are able to identify potential routes the ships may have been travelling as well as the potential destinations. Their cargo has also led to the advancement in understanding what goods were in greater demand at the time, as Canaanite jars and copper and tin ingots (among the diverse group of objects between the two wrecks) suggest the Levant and Cyprus were some of

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<sup>125</sup> Gift Exchange has been suggested as an explanation for valuable Egyptian objects found at Mycenae. The evidence from those objects is plausible given that they appear as unique items as one would expect to receive as gifts as opposed to great quantities of metals and other goods

<sup>126</sup> A point of clarification is needed here: the objects depicted in the wall paintings in Egypt are not the same objects as those in the Ulu Burun or the Cape Gelidonya wrecks. They are simply comparable in shape and identification of material. In some cases it may be possible to identify the goods carried in certain objects (i.e.: oils in stirrup jars).

<sup>127</sup> Egyptian objects are not as well attested on either wreck.

the most important partners in LBA trade networks. The integration of the Mycenaean Greeks is not as clearly understood in regards to the Gelidonya and Ulu Burun wrecks. The suggestion that a Mycenaean presence on the Ulu Burun ship was partly because of diplomatic ties with the Eastern Mediterranean is not impossible given the textual evidence from Egypt, but the reliance on various commodities in the Aegean, such as oils, textiles and processed bronze tools or weapons, as is evident in the Linear B tablets shows that trade routes along the Eastern Mediterranean coast impacted the mainland economy significantly. While the archaeological evidence from the two wrecks cannot confirm the ships' port of origin was the Aegean, the evidence provided by a number of scholars suggests that the Aegean may have been the port of final call.

***What conclusions can be drawn?***

The evidence that supports the notion that the Mycenaean Greeks during the Late Bronze Age were actively trading with the major powers in the Eastern Mediterranean is substantial. Objects of foreign manufacture in Greece total nearly 1000 while the number of objects found in the various boundaries of Egypt, Anatolia, the Levant and Cyprus number several thousands. Thus the archaeological record clearly supports 'international' trade. One of the resounding features of the evidence presented in the preceding pages is that there is no clear understanding of this 'international' trade in the Late Bronze Age. The number of scholars who have dedicated time to understanding economics of the Late Bronze Age are unable to provide any clear information as to the causes and effects of trade, other than simply implying that trade was occurring and that it was a significant component of socio-political life at the palaces. This remains one of the many problems left unanswered; what was the nature of trade amongst the Mycenaean Greeks and the states bordering the Eastern Mediterranean? Unfortunately this

question may remain unanswered due to the relatively thin evidence that has survived in the archaeological record (compared with what must have been exchanged).

While the archaeological evidence, such as pottery and other material objects, may indicate some of the goods that were exchanged (i.e.: oils and wine in stirrup jars and pithoi), archaeologists are lucky to have written records from a number of civilizations which have been able to shed new light on the Late Bronze Age. Though these documents are crucial to understanding socio-economic activities, such as the manufacturing processes at a Mycenaean palace or the role gift exchange played between two rulers, they reflect a small percentage of the archaeological evidence. The Linear B tablets provide information on the last year (or years) of the Late Bronze Age and do not provide any information about the early and middle Late Bronze Age, and diplomatic texts from Egypt, Mesopotamia and Central Anatolia are either fragmentary or their context is lost to today's reader. These are some of the challenges facing Late Bronze Age study, and though they have not been answered here, bringing attention to them may lead to further research.<sup>128</sup>

### **Chapter 3: A Hittite Trade Embargo?**

In 1991 Eric Cline published an interesting article claiming that the Hittite kingdom in Central Anatolia placed a trade embargo on the Mycenaean Greeks in the later part of the Late Bronze Age (ca. 1450-1100 BC).<sup>129</sup> The argument relies on artefactual and textual evidence not only in Central Anatolia and Greece but in neighbouring regions in the broader Eastern Mediterranean. The theory that an economic embargo was placed on the Mycenaean Greeks has

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<sup>128</sup> As noted by Parkinson et al (2013), the redistribution model first proposed by C. Renfrew (1975) is seen as dated and has led to a re-examination of the Late Bronze Age economic model in recent scholarship (following the 'primitivist' models established by Polanyi and Finley among others). See as well Nakassis et al (2011) for more on the re-examination of economic models of the Late Bronze Age.

<sup>129</sup> The dating for this relies heavily on Hittite texts and the earliest mentions of the Ahhiyawa from the reigns of the early rulers to the end of the reign of Suppiluliuma II sometime in the 12<sup>th</sup> century BC.

very little support with Cline being the only promoter of such an idea, although his theory has been cited by other scholars. It is important therefore to discuss the idea of an embargo for it draws attention to the total lack of goods in Central Anatolia in the Late Bronze Age. The subject of an embargo draws its evidence from a handful of Hittite texts. This textual evidence complicates Cline's theory because in order for it to be successful the Ahhiyawa problem must be considered and proved to be the Greeks. What follows will be a summary of Cline's arguments for an embargo as well as a reassessment of the evidence in order to understand whether Cline's conclusions are accurate and how his theory fits with the archaeology of the period.

This particular subject relies heavily on Cline's work where he presents the total amount of archaeological evidence between the Hittites and the Mycenaeans and attempts to disprove a number of arguments that might serve as reasonable causes for a lack of trade, including the exchange in perishable goods or a disregard for Anatolian or Mycenaean goods. By breaking down the evidence Cline uses it may be possible to propose a new theory to explain the discrepancy, if such a theory can be established. What follows will be a discussion of Cline's arguments based on the archaeological evidence that he has found as well as any archaeological evidence that has come to light since his theory was published.

Cline's first argument suggests that "the Hittites... are the only major Near East/Eastern Mediterranean power not well-represented by objects in the Late Bronze Age Aegean".<sup>130</sup> The evidence that shows this is substantial when the total number of foreign objects in Late Helladic contexts is considered. Cline notes that "only six [out of 21 possible objects] may be Central

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<sup>130</sup> Cline (1991) p. 1.

Anatolian Hittite”<sup>131</sup> and their dates within the stratigraphy range from MM III – LH IIIC. Given the number of foreign objects found within LBA contexts in Greece the miniscule number of Hittite artefacts over the timespan of the Late Bronze Age raises questions.<sup>132</sup>

In connection with his first argument, Cline notes that “the Mycenaeans are the only major Aegean/Eastern Mediterranean Late Bronze Age power not well-represented by objects in Central Anatolia”.<sup>133</sup> This too draws comparisons from the archaeological evidence of other major trading states in Central Anatolian territory and includes evidence from sites such as Masat, Alisar, Fraktin, and Boghazkoy.<sup>134</sup> Given the extent of excavations across the Central Anatolian region and the variety of objects from sites in the Levant, Cyprus and Egypt it is surprising to see so little that can trace its origins back to Mycenaean centres.<sup>135</sup>

The next argument Cline presents relies on the textual evidence of the Hittites. In the Hittite documents Cline has observed that “the Mycenaeans are the only major Late Bronze Age Aegean/Eastern Mediterranean power not well attested with regard to trade”.<sup>136</sup> Like most powers in the Eastern Mediterranean textual evidence is a valuable resource in understanding the various connections these states had with one another. The lack of reference to the Mycenaeans in any trade related texts would therefore indicate, in Cline’s model, that trade was virtually nonexistent with no identifiable cause. This in itself is a major problem in Hittite studies as will

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<sup>131</sup> Cline (1991b) p. 1. In a later publication though Cline (1994) remarks that 12 objects of Anatolian provenance can be identified. The question of where these objects originated is still up for debate especially given the difficulty in defining the territories within Anatolia. Do all of these objects come from the central region controlled by the Hittites or from the Western or Northern territories which were controlled by different peoples? The answer remains unknown.

<sup>132</sup> This is in comparison to the number of Egyptian objects (236), Cypriot (176) and Levantine objects (259) that have been found in Greece.

<sup>133</sup> Cline (1991b) p. 2.

<sup>134</sup> Cline (1991b) p. 2-3. These sites specifically include a number of finds from various sites, particularly Cyprus, North Syria, Egypt and Babylon.

<sup>135</sup> Much like the number of Anatolian objects in Greece, the number of Mycenaean objects in Central Anatolia total roughly twelve objects, but these objects are fragmentary and in some cases only a sherd can be possibly Mycenaean in origin (Cline 1991b p. 3).

<sup>136</sup> Cline (1991b) p. 4.

be discussed below. He also argues based on textual information that “the Hittites... are not mentioned in the Mycenaean Linear B texts”<sup>137</sup> and therefore the Mycenaeans are not in contact with the Hittites in Central Anatolia.

The final piece of evidence at Cline’s disposal relies on other Hittite documents and shows that “the Hittites... established trade embargoes during the Late Bronze Age”.<sup>138</sup> This evidence is miniscule, with only one presumed reference to an embargo: Cline admits this may not reflect an embargo placed on the Mycenaeans but instead was used to highlight “that economic embargoes existed in the Late Bronze Age... on at least one occasion”.<sup>139</sup>

The five points that Cline has made demonstrate that the Mycenaean Greeks and the Hittites living in Central Anatolia appear to have had very little contact with one another during the Late Bronze Age with no clear explanation, especially when one considers the extent of trade and contact each civilization had with bordering nations. But is the idea of an embargo accurate given the evidence Cline has presented? Cline’s conclusions may be plausible, but a number of questions arise out of the five points and each one is significant in understanding if an embargo is the only reason for such a lack of contact. What were some of the leading causes for an embargo? If such an embargo was put in place then how are there objects of Mycenaean origin in central Anatolia and vice versa? As well what is the time frame for this embargo (i.e.: did an embargo continue for over 200 years)? These questions must all be addressed and Cline does not offer a reasonable answer for any of them. In addition to these one must also ask whether there was another reason for the relative paucity of Mycenaean objects or Hittite objects in respective territories.

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<sup>137</sup> Cline (1991b) p. 5.

<sup>138</sup> Cline (1991b) p. 6.

<sup>139</sup> Cline (1991b) p. 6.

The first two arguments Cline presents shows the level of contact between the Mycenaeans and the Hittites as both states do not have many archaeological remains to indicate trade occurred between them on a large scale. The idea of an embargo however should not be the only outcome for such lack of evidence in Central Anatolia. Others have pointed to goods that leave no trace in the archaeological record, such as agricultural products, wooden and other organic products and raw materials as possible traded goods.<sup>140</sup> Cline dismisses this as unlikely given “there should be textual evidence”<sup>141</sup> of trade in perishable goods, however it has been noted that “the Linear B tablets from Pylos do mention women, presumably captives, who may have come from Anatolia”.<sup>142</sup> Speculation that the women were captive aside, the particular series referenced by Ventris and Chadwick may indicate that the exchange of humans was part of the exchange pattern between the two states and that undetectable goods might have changed hands.<sup>143</sup> It is also known that perishable goods were manufactured in vast amounts based on the Linear B documents but these documents do not reveal whether perishable and organic objects were exported from the palaces either as royal gifts or foreign exchange or whether they were used for local consumption.<sup>144</sup> While Cline’s model may be plausible he presents it as the only acceptable explanation for such a discrepancy in the archaeological record between the Mycenaeans and Hittites. Since the nature of contact between the two states cannot confirm

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<sup>140</sup> Mellaart (1968) p. 192. Wine, wheat, horses, chariots and raw metals like gold, copper and electrum are some of the materials that Mellaart suggests were traded by the Mycenaeans.

<sup>141</sup> Cline (1991b) p. 8.

<sup>142</sup> Mee (1998) p. 141. Mee cites Ventris and Chadwick (1973) but also J.C. Billigmeier and J.A. Turner in H. Foley (1981).

<sup>143</sup> As has been noted above (n. 51), it was customary for Egyptian and Near Eastern courts to send craftspeople to other kingdoms. It may be possible that these people listed in the Linear B documents were brought into Greece as part of an exchange of skilled workers (similar to Temporary Foreign Worker programs in Canada), slaves or landed immigrants.

<sup>144</sup> Several series of tablets from both Pylos and Knossos show that textile production and agriculture were some of the largest industries at the palaces and so the exchange of these goods may be assumed. The biggest problem with the Linear B tablets is that there is no indication of where goods came from or where goods were going.

strong trade relations based solely on the archaeological record, conclusions cannot immediately be drawn from his evidence.

The textual evidence Cline presents is just as problematic because the information found in both Hittite and Mycenaean documents regarding the extent of contact with one another does not address the issue of trade. While the Linear B tablets have information relating to the inner workings of the palace economy they do not provide information to indicate the provenance of materials and other goods.<sup>145</sup> As such there is no record to indicate where goods came from and where certain goods were being sent. Though Hittite documents have revealed diplomatic gifts were sent to foreign kingdoms such as Egypt and Mesopotamia there is no indication that the Hittites recorded transactions on a daily basis.

The most widely debated aspect of Hittite documents however remains the Ahhiyawa question. This question is significant to understanding Cline's theory because it relies heavily on identifying which civilization the Ahhiyawa were in the Mediterranean, if they were even a Mediterranean civilization. Without knowing who the Ahhiyawa were much of the textual evidence that Cline has used would have to be ruled out and the case of an embargo against the Mycenaean state diminished. It is therefore important to expand on the problems commonly associated with identifying the Ahhiyawa in order to understand whether the embargo placed on them is indeed an embargo on the Mycenaeans.

In order to correctly identify the Ahhiyawa it is important to note that we do not know what the Greeks called themselves and therefore we cannot be sure that foreign texts are

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<sup>145</sup> Ventris and Chadwick (1956) p. 135. Note also that the Linear B tablets reflect the final period of economic activity at the central palaces and were not meant to be permanent documents. There is always the possibility that records were made to indicate gifts and other forms of exchange long before the palaces were destroyed.

referring to them or to another state altogether.<sup>146</sup> What draws attention to the problem is the name Homer associated with the Greeks fighting at Troy: the *Achaeans*. The theory that the Ahhiyawa referred to the Mycenaeans was first presented by Emil Forrer in the early 1920's and his idea in which he "tentatively linked the Ahhiyawa to the Mycenaeans"<sup>147</sup> based on the textual evidence from Hittite texts found at Hattusa. His theory associated the Mycenaeans with the Achaeans, and so Ahhiyawa =  $\alpha\chi\alpha\iota\omicron\iota$  = Achaeans = Mycenaeans. In other words, the Mycenaeans must be the Ahhiyawa. Forrer's idea was widely criticised in academic circles<sup>148</sup> and has been a constant subject of debate in both Greek and Anatolian studies, but the archaeological evidence does favour the possibility that the Ahhiyawa refers to the Mycenaeans.<sup>149</sup>

Part of the problem draws on what has already been stated: that the Mycenaeans are the only power in the Mediterranean not mentioned in the textual record. If the Ahhiyawa connection is proven incorrect then the archaeological record has yet to provide a site that would correspond with the Ahhiyawa and produce objects that as of yet have not been associated with another developed state. Based on the textual evidence it is presumed that the Ahhiyawa and the Hittites did have regular contact throughout the Late Bronze Age, since the earliest reference to the Ahhiyawa dates to the late 15<sup>th</sup>/early 14<sup>th</sup> century BC, and continues to the end of the 13<sup>th</sup>

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<sup>146</sup> Bryce (1989) p. 5 notes that "foreigners sometimes refer to a country by a name quite different from that used by the indigenous population" (i.e.: Greece for Hellas, Germany for Deutschland). This same problem has been observed in Egypt where the *Tanaju/Danaioi* problem persists.

<sup>147</sup> Beckman, Bryce and Cline (2011), p. 1. Forrer presented his argument at a lecture in Berlin and published his idea in two articles in *MDOG* and *OLZ*, two German periodicals.

<sup>148</sup> The most vocal opponent of Forrer's theory was F. Sommer who published a translation of the entire corpus of Hittite texts in 1932 and concluded that the Ahhiyawa were merely a previously unknown Anatolian state (Beckman et al p. 2). The debate is still ongoing, but the majority of evidence currently available suggests that the Ahhiyawa refer to the Greeks, but the distinction of whether the title refers to an entire civilization or merely a geographic region within the Greek territory is still undecided (see Bryce 1989, Kelder 2005).

<sup>149</sup> Bryce (1989) p. 3 states that a Mycenaean kingdom is the strongest candidate for the kingdom of Ahhiyawa.

century BC.<sup>150</sup> This is a significant point to address because the archaeological evidence in support of the Mycenaeans being the Ahhiyawa is greater than the evidence against it.<sup>151</sup>

In summing up his arguments Cline notes that several theories which had been presented in the past are not suitable given the evidence that he has found. His reasoning that perishable goods were not exchanged because any trace of those goods has not been found in the textual record should be dismissed purely on the reasoning that the surviving textual records are far from complete. In addition to this, as recently as 2011 the idea that ‘invisible’ goods, mostly agricultural goods (wheat, grains, wool etc) and base metals (silver, copper), were exchanged in both processed and unprocessed forms was suggested and is probably one of the strongest arguments for the lack of physical objects in Anatolia and Greece respectively.<sup>152</sup> Though the epigraphic evidence from Knossos, Pylos or any other mainland site cannot confirm where metals or other goods came from, there is the suggestion that architectural influences, such as the defensive walls at Mycenae and Tiryns came from contact with the Anatolians.<sup>153</sup>

Supposing the question of Ahhiyawa has been answered and they can correctly be identified as the Mycenaean Greeks, and supposing the Hittites did in fact impose a trade embargo against them, the next question that must be considered is why such action would be

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<sup>150</sup> Beckman et al (2011) p. 7. The number of Hittite documents that make reference to the Ahhiyawa indicate that contact remained steady for the entire Late Bronze Age, even if the extent of contact is not known. A number of documents have been given generic dates because they are so fragmentary and cannot be dated more precisely than a century. One inscription that dates to the 8<sup>th</sup> century BC refers to the king of (Ah)Hiyawa who lived in southwestern Anatolia. In their commentary (p. 265f) Beckman et al draw parallels between the king Warika, the descendent of Mukasa and the classical link to Mopsus. The authors suggest that if these links are correct then the Hiyawa kingdom in southwestern Anatolia in the 8<sup>th</sup> century BC was founded by a Greek colonizing group, presumably the Ahhiyawa from which this new kingdom derives its name.

<sup>151</sup> Bryce (1989) p. 3 n. 14, notes that there are still those who do not accept the Ahhiyawa/Mycenaean connection such as S. Kosak, D. Easton, J. Mellaart, R.F. Hoddinott and J. Macqueen. Bryce later reports (p. 6) that the period in which the Ahhiyawa become a factor in the Hittite texts corresponds roughly with the time that Mycenaean objects begin to appear in the archaeological record in Anatolia giving further evidence that the Ahhiyawa and the Mycenaeans refer to the same civilization.

<sup>152</sup> Beckman et al, p. 268-269. The subject was first alluded to in Mellaart (1968) and subsequently supported by Bryce (1989), Mee (1998) and Kelder (2005).

<sup>153</sup> Bryce (1989) p. 14

taken. In order to answer this Hittite documents must be considered for they offer the most likely evidence as to why such action was necessary. The archaeological record has proved that the civilizations of Crete and Greece were active in Western Anatolia since the beginning of the Late Bronze Age, as can be seen at Miletus, Ephesus, Troy and Clazomenae to name a few sites. Contact with Central Anatolia would presumably be expected given the Mycenaean presence along the western Anatolian coast. It is here that one can clearly observe the reasons behind an embargo being enforced.

Presumably the leading cause of enforcing any trade embargo is the protection of one state against another either from economic, political or military threat. This has been seen in the last century with the United States and Cuba after the Cuban Missile Crisis, global sanctions against Iran and North Korea for their desire to develop nuclear weapons and more recently Russia for the annexation of Crimea. It is believed that part of the reason for such economic and political sanctions against the Mycenaean Greeks was due partly to their involvement in Western Anatolia. It seems that their presence may have posed a threat to the Hittites, who often held control of the territory through a system of vassal states.

The evidence to support the idea of Mycenaean involvement in western Anatolia is greatly attested to in several Hittite texts (assuming the Ahhiyawa identification is correct).<sup>154</sup> The site of Miletus, as has been discussed, became one of the major settlements for Mycenaean interactions in the East and perhaps operated as a central hub for Mycenaean involvement in western Anatolia. This is seen not only in the number of Mycenaean graves which date from LH

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<sup>154</sup> 31 texts have been found that mention the Ahhiyawa.

IIIB-C<sup>155</sup> that have been excavated in the region but also from the ‘Mycenaeanisation’ and local imitation of Mycenaean wares found throughout the East.<sup>156</sup> If this is the case is it possible that an embargo or sanctions against the Mycenaeans by the Hittites was driven by protectionist agendas?<sup>157</sup>

Interactions between the Hittites and the Ahhiyawa/Mycenaeans appear to have been continuous throughout the Late Bronze Age, as is evident from the number of mentions in Hittite texts. The underlying question however is to what extent these two civilizations had contact. A number of letters from the Hittite corpus suggest that the nature of contact between the two peoples was hostile. The first letter, the Indictment of Madduwatta, which was written sometime in the late 15<sup>th</sup>/early 14<sup>th</sup> century BC is a clear indication of hostility between the two.<sup>158</sup> The text was written as a warning to a man named Madduwatta who was acting against the Hittite king (believed to be Arnuwanda I). The document records that the vassal ruler was given his land after being rescued by the Hittites from an attack by the people of Ahhiyawa.<sup>159</sup> The document records not only this instance but another instance where a second attack was made by the Ahhiyawa people and that Hittite intervention was required. Though the accuracy of this document is unknown (and likely indeterminable) it shows the hostility of the Ahhiyawan people in Anatolia as early as the late 1400’s BC.<sup>160</sup> It is also remarkable to note that during the time

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<sup>155</sup> Mee (1998) p. 139. This has been confirmed from the dates of Mycenaean pottery found within the chamber tombs at Degirmentepe. Citing Niemeier (1998), Mee reports that 95% of the pottery from the site is Mycenaean while the remaining 5% is identified as Anatolian.

<sup>156</sup> It is argued particularly around Enkomi on Cyprus that a decline in Mycenaean imported wares came from an increase in locally produced wares in Mycenaean style. Mee (citing Godecken) notes that analysis of the pottery from Miletus is locally produced in Mycenaean style.

<sup>157</sup> Mee (1998) p. 142. The Hittites sacked Miletus (Millawanda) in the third year of Mursili II’s reign after the settlement broke from the Hittites and allied itself with the Ahhiyawa. The archaeological record shows that Miletus was destroyed by fire ca. LH IIIA2 around the same time as this document is believed to have been written.

<sup>158</sup> Beckman et al (2011) p. 7.

<sup>159</sup> The text uses the earlier form Ahhiya for Ahhiyawa, and is one of two texts to use this form, the other being an oracular text which may date to the late 15<sup>th</sup> century/early 14<sup>th</sup> century BC (Beckman et al 2011, p. 97).

<sup>160</sup> Based on the reign of the king of Hatti.

that the Ahhiyawa begin to make appearances in Hittite documents, the first evidence of Mycenaean trade with western Anatolia is observed in the archaeological record.<sup>161</sup>

The indictment text is important to understanding the relations between the Central Anatolian Hittites and the people of Ahhiyawa because it is one of the first references to the kingdom and its activities in western Anatolia. Two other letters are also critical in understanding the hostile relations between the Ahhiyawa and the Hittites, known as the Tawagalawa letter and the Milawatta letter, and help to demonstrate that hostilities between the two states continued into the late-13<sup>th</sup> century BC. From these documents one has a better understanding of the relations between the two states, and the causes of an embargo may be inferred. Mee (citing Cline) has noted that the Hittites made use of economic sanctions against their enemies but he does not believe that “the embargo could have been in force for the whole of the period covered by the Ahhiyawa texts”<sup>162</sup> and does believe that an embargo is plausible in this instance. Mee also offers an alternate suggestion: instead of an embargo he suggests that the trade routes between western Anatolia and the central Hittite kingdom were too dangerous to travel due to bandits and politically driven rebellions which could explain why so much trade was lost between the two states.<sup>163</sup> Kelder too supports the notion that trade throughout western Anatolia was unsafe because of unsettled and rebellious states under Hittite control, a notion supported by the above mentioned letters.<sup>164</sup>

One final question that must be asked regarding an embargo is whether or not any economic sanctions had a devastating impact on the palace economy leading to the collapse of

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<sup>161</sup> Bryce (1989) p. 6.

<sup>162</sup> Mee (1998) p. 143.

<sup>163</sup> Mee (1998) p. 143.

<sup>164</sup> Kelder (2005) p. 52, also Hope Simpson (1981) p. 205.

the Mycenaean Greeks. It is one theory.<sup>165</sup> However in light of the information Cline has argued, the impact of an embargo does not seem to have hindered the Greek mainland as much as one would expect (considering the examples from modern history that show the effectiveness of embargoes). Trade continued without the participation of the Anatolian Hittites, and the palaces continued to grow and show prosperity throughout the Late Bronze Age. Dumas notes that the collapse of the mainland palaces came not from external forces (such as climate change or political motives such as an embargo) but was most likely internal (infighting between royals and elites, as exemplified in the *Iliad*).<sup>166</sup> While his arguments seem plausible, it is Cline who best sums up the complexity for the collapse of the Bronze Age, where “many possible variables may have had a contributing role in the collapse”.<sup>167</sup>

The idea that a trade embargo is the only reasonable suggestion for a lack of trade between the Mycenaeans and the Hittites remains open for discussion. The evidence that Cline has presented with regard to a trade embargo against the Mycenaeans has not changed since he first published his theory back in 1991 and no new evidence has been found in Central Anatolia or Greece to suggest anything else. Was an embargo the reason for such a lack of evidence between the two states or is there another reason for such a discrepancy? While the answer may never be known, it seems that more should be considered given the length of contact the two states had with one another and the appearance of both Mycenaean and Hittite objects in their respective lands. The arguments Cline had presented are plausible; however, they do leave a number of questions left to answer, and Cline has not attempted to answer any of them. The

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<sup>165</sup> Cline has compiled a number of theories as to what led to the collapse of the Late Bronze Age civilizations. See *1177 BC: The year civilization collapsed* (chapter 5) for an explanation of each theory and its possible implications on the collapse.

<sup>166</sup> Dumas (1998) p. 129-130.

<sup>167</sup> Cline (2014) p. 170. Interestingly, Cline notes that the variables and theories that have been argued may not be all and that it is possible that tens or even hundreds of unknown variables may exist and we cannot know them because the evidence for them is missing.

artefactual evidence in any context is never 100% reflective of the total amount of goods that would have been exported around the Mediterranean. The idea that perishable goods were exchanged should not be overlooked; doing so ignores evidence of Mycenaean activity not just in the Eastern Mediterranean, but the whole Mediterranean. As well the idea that if trade in perishable goods was conducted then there should be a 'paper trail' is unconvincing since records are but a fraction of what they probably were, and were often not concerned with foreign trade.

While I agree that the total lack of Anatolian and Mycenaean goods in each respective territory is unusual given the extent of trade each state had around the Eastern Mediterranean, the likelihood of long term economic sanctions does not resonate especially given the length of time the two states were at their most powerful. It would be more plausible to suggest that a combination of factors led to the total lack of visible contact between the Mycenaean and the Hittites, which could include an embargo, as the evidence that some type of blockade is known on one occasion. The exchange of perishable goods is also plausible given the Mycenaean manufactured a variety of textiles, agricultural goods and scented oils and its dismissal that this is unlikely given the lack of textual evidence is unacceptable. The idea that Mycenaean wares were not suitable for long distance trade however is less plausible given wares show up at the farthest reaches of Egypt and into the interior of Mesopotamia, although geographic conditions have been suggested. Though a new theory will not be presented here it is my purpose to bring attention to this particular claim and suggest that an embargo is not the most suitable explanation for a discrepancy in Hittite and Mycenaean objects in each respective state.

One final observation has been made by M. Finley with regards to overall economic history. He states that in "a society as complex as the Greek or Roman, it is hard to conceive of

any action taken by a state which lacked an economic component” and so it would appear that economics played a vastly important role in all aspects of society.<sup>168</sup> While his evidence relies on the textual and archaeological evidence from the Classical Greek and Imperial Roman world, could this idea of ‘primitive economics’ be applied to the local palace economies in the Late Bronze Age Aegean as well? One could make the argument that Ahhiyawa’s involvement in Anatolia during the Late Bronze Age was a result of political involvement but that part of the reason for engaging in conflict was to gain further access to crucial supplies (i.e.: metals and foodstuffs from Anatolia and beyond). Though the evidence may be weak, the idea of an underlying economic component is plausible. This primitive stance is further supported most recently by a number of scholars (Parkinson, Nakassis, and Galaty) who believe that the previous redistribution models have distracted scholars from hypothesising alternative economic models of the Late Bronze Age.<sup>169</sup>

#### **Chapter 4: Conclusion**

It has so far been seen that trade was a regular part of Late Bronze Age civilization. The established connections that had been made in the centuries before ca. 1400 BC allowed for the Mycenaean Greeks to easily assimilate their culture into the routes and allow for greater access to key markets and to compete on an international level. The archaeological evidence has shown that Mycenaean goods were in demand for roughly two centuries and the impact that trade had on the Greek mainland over the course of the Late Bronze Age is easily observed. The expansion of the Mycenaean citadels indicates that wealth was being accumulated in larger quantities on the

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<sup>168</sup> Finley (1973) p. 156. Finley stresses that many aspects of society (such as war and conflict, participation in the arts and festivals) were driven in part by economics. He cites the desire for empire (both in Greek and Roman contexts), raiding and pillaging by locals for economic gain, and public expenditure by private citizens who would be rewarded with glory and fame.

<sup>169</sup> Parkinson et al (2013).

mainland, as there appears to be a correlation between the number of imported goods found at some of the palace sites (Mycenae, Tiryns, Thebes, Pylos) and the times when the fortification walls were being expanded around the citadels. Did this increase in overseas activity lead to the expansion of the citadels at Mycenae and Tiryns? Certainly during the last two centuries the amount of pottery around the Eastern Mediterranean would suggest that local economies were on the rise and production of goods for export was a major part of the mainland Greek economy, furthering the need for sturdy protection. While there is no confirmation that this is true, it is plausible that there is some link between the expansion of Mycenaean citadels and the expansion of the Mycenaean economy. In addition to this, it has been argued that economic conditions in the Late Bronze Age led to the collapse of the palaces on the mainland, but could this disruption of economic activity abroad be the result of the palace collapse and domestic disturbances? The archaeological evidence seems to indicate that the Mycenaeans were still actively involved in overseas exchange around the time the palaces are believed to have been destroyed, and so the linear model where one event after the other triggered the collapse of the palace civilization may need to be scrutinised further.

A number of questions though still remain unanswered. The beginning of this paper demonstrated that the Mycenaean Greeks were heavily involved in foreign trade throughout the Late Bronze Age. This paper has collected and interpreted the archaeological, textual and iconographic evidence to indicate that trade was occurring between the Greeks and the various civilizations of the Eastern Mediterranean. The reality of the situation however is that very little is known about the relations between the Late Bronze Age civilizations. There does not appear to be any indication of the types of goods that were traded and conclusions cannot be drawn from most of the scholarly work on such a subject. The economic activities on the mainland suggest

that perishable goods were the most likely candidate given the extensive documentary evidence from the Linear B tablets, but the extent of these trade relations cannot be ascertained from the archaeological record. Nor can we rely on the textual evidence solely to understand the role of trade in the Late Bronze Age, as these records were meant to be temporary and only reflect the economic conditions for the final year of the Late Helladic period.

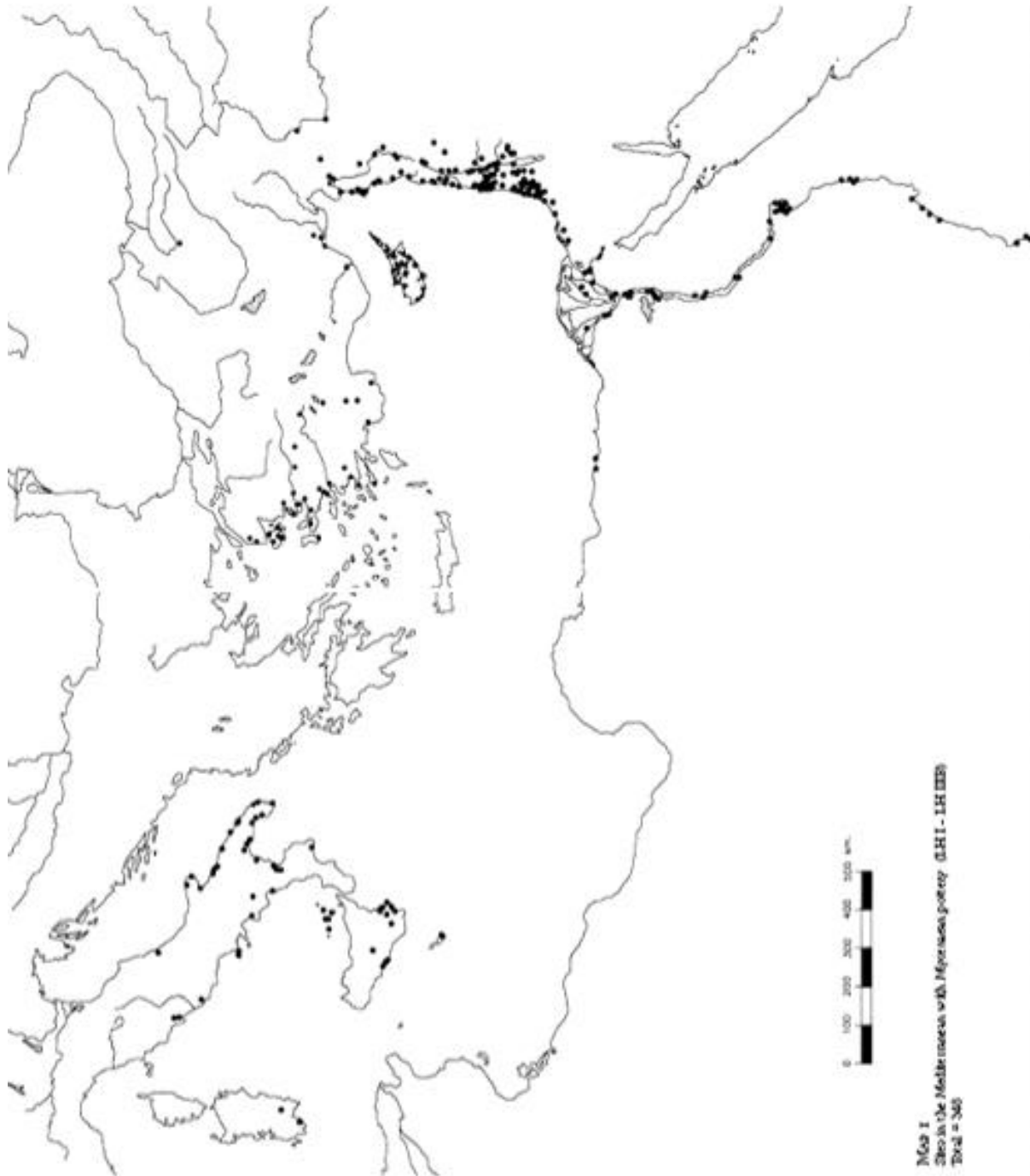
The most significant conclusion that can be drawn from the information gathered here is that there is a deep break in our understanding of the Late Bronze Age, not only in terms of economic history but the socio-political history as well. The conclusions generated by Cline have led to the discussion that economic sanctions based on political divisions were occurring in the Late Bronze Age but the evidence used to support these conclusions is unsubstantial. Though it is not impossible that such action was taken (for reasons unknown), the conclusion ignores a number of exemplary ideas that trade was occurring in goods that have left no trace in the archaeological record. Therefore caution must be given in any examination of the Late Bronze Age, as there are a number of unknown variables.

One final thought to bear in mind with regard to Late Bronze Age study is that archaeologists try to “[produce] a form of narrative history”,<sup>170</sup> associating evidence with the Homeric epics or connecting objects with events depicted in Egyptian wall paintings. Often it appears that where the Mycenaeans were trading and what they were trading has been overshadowed by the idea that objects of contemporary manufacture can confirm historical events such as the Trojan War. The treatment of the Late Bronze Age as the period of Greek mythology results in parallels being drawn to myth, and less focus has been given to archaeological evidence to generate an understanding of the reality of the time period.

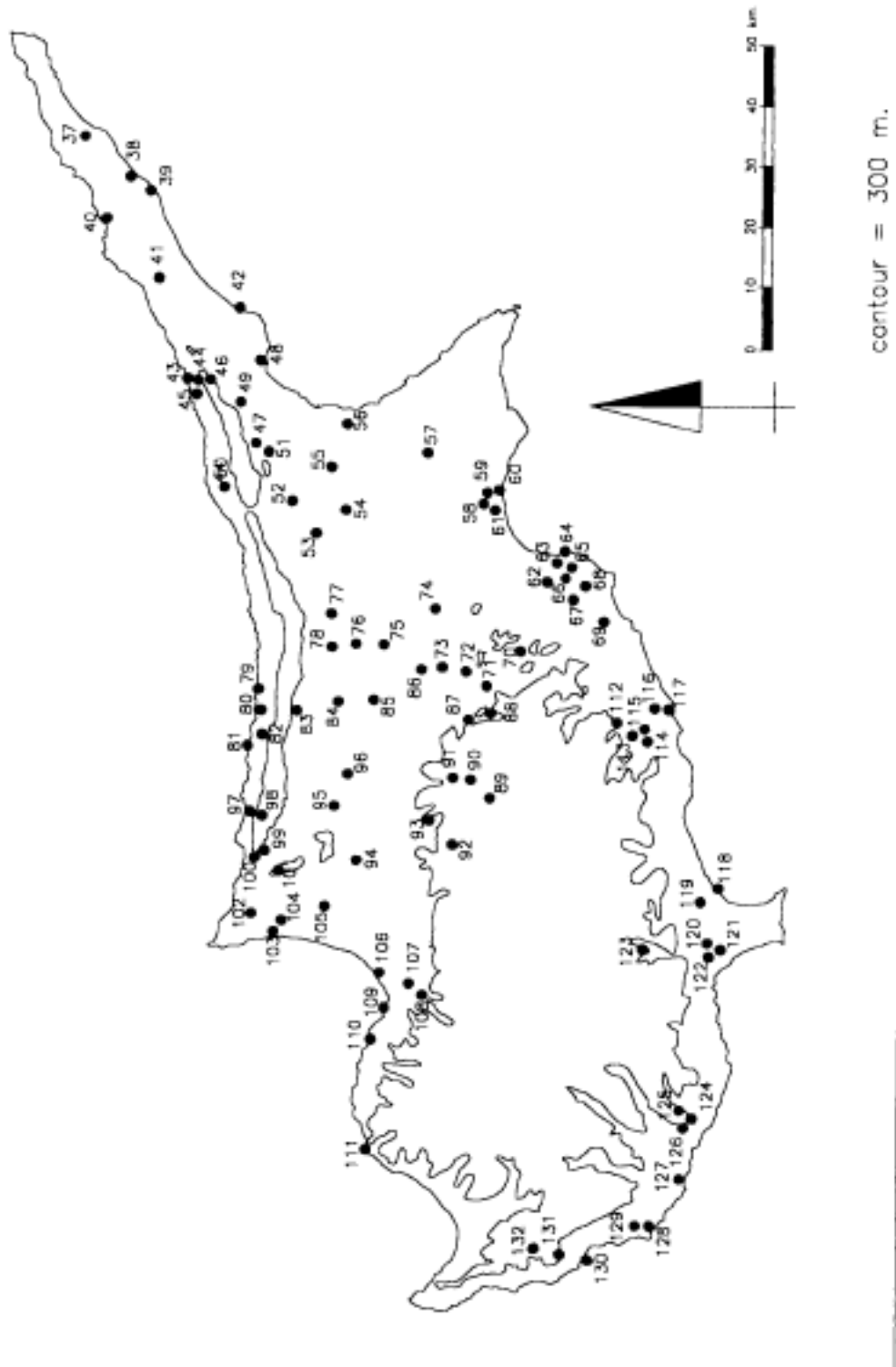
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<sup>170</sup> Sherratt (1998), p. 292.

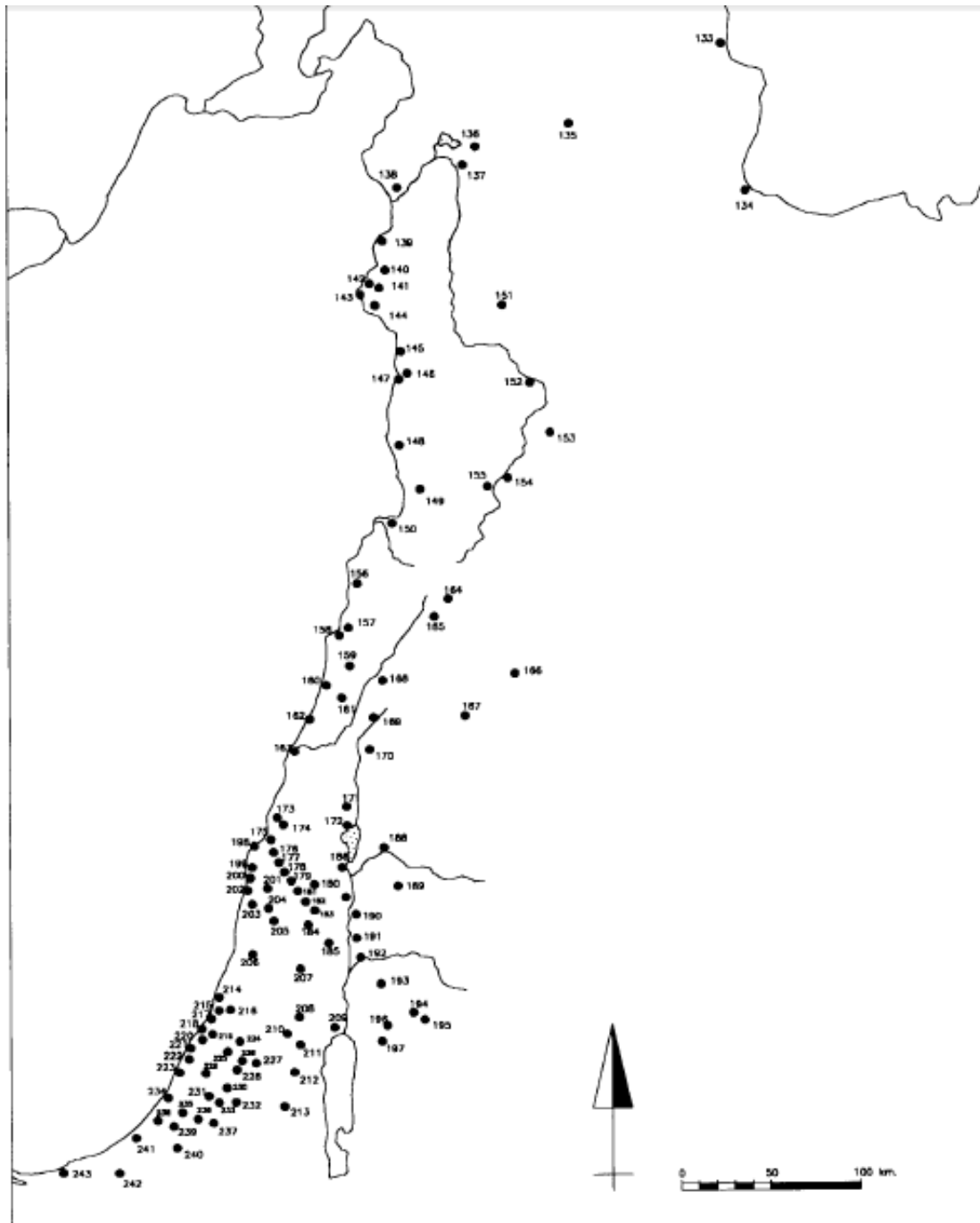
## Appendix I – Maps



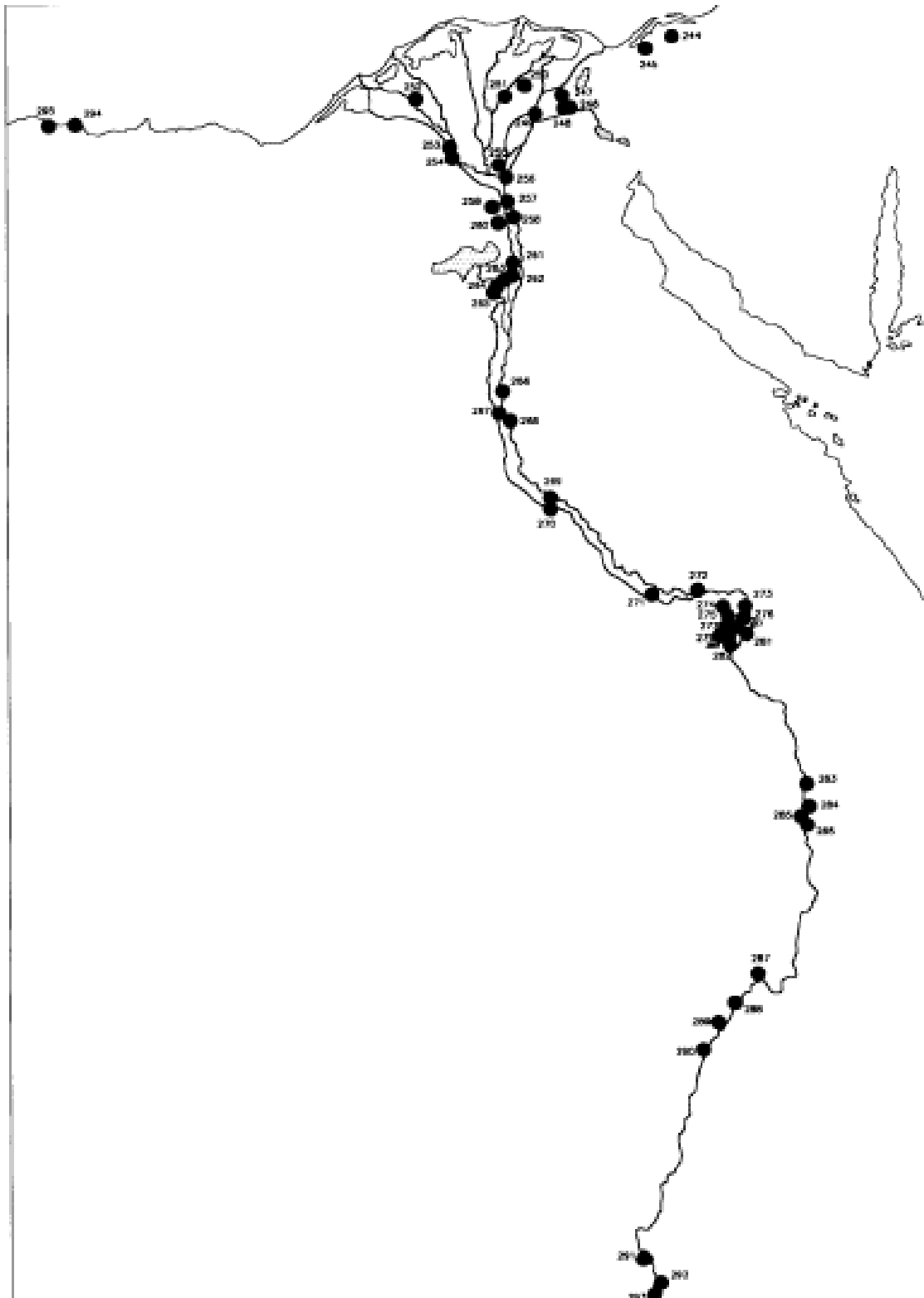
**Map 1:** Distribution of Mycenaean Pottery in the Mediterranean Sea. (van Wijngaarden 2002).



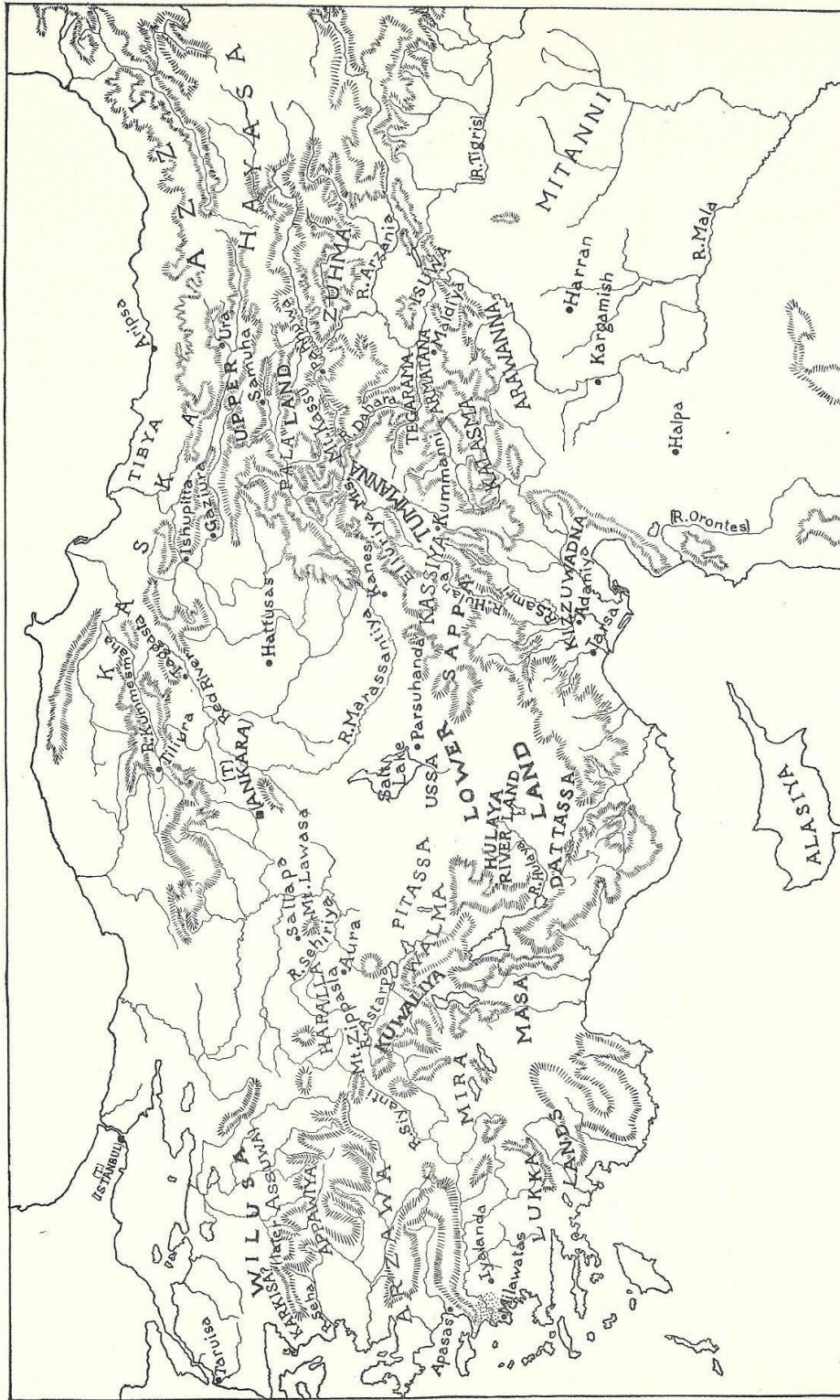
**Map 2:** Distribution of Mycenaean Pottery from Cyprus. (van Wijngaarden 2002).



**Map 3:** Distribution of Mycenaean Pottery in the Syro-Palestine/Levantine Coast. (van Wijngaarden 2002).



**Map 4:** Distribution of Mycenaean Pottery in Egypt. (van Wijngaarden. 2002).



Map 1. Hittite Asia Minor

Map 5: Anatolia (Garstang and Gourney, 1959).

## Appendix II – Catalogue of Mycenaean objects in the Eastern Mediterranean<sup>171</sup>

Site name	I-IIA	IIB-III A1	III A2	IIIB	IIIC	AMOUNT*
<b>Anatolia</b>						
1 Troy-Hissarlik	X	X	X	X	X	5
2 Besik-tepe				X	X	2
3 Methymna						1
4 Antissa			X	X		1
5 Thermi		X	X			1
6 Pyrrha			X	X		1
7 Kourtir						1
8 Elaia						1
9 Phocaia (Eski Foca)						1
10 Panaztepe						1
11 Cerkes Sultaniyou		X				1
12 Bayrakli (Old Smyrna)			X	X		1
13 Clazomenae (Liman tepe)	X	X	X	X	X	2
14 Reisdere (Erythrae)						1
15 Emporio			X	X	X	1
16 Halkapinar			X	X		1
17 Ephesus (Selcuk)		X	X	X	X	2
18 Kusadasi			X			1
19 Miletus	X	X	X	X	X	5
20 Mylasa (Milas)			X			1
21 Iasos (Kuren)	X	X	X	X	X	3
22 Musgebi		X	X	X	X	4
23 Knidos (Kinidos)						1
24 Sardis				X	X	1
25 Gavurtepe			X			1
26 Beycesultan			X	X		1
27 Duver			X	X		1
28 Derekoy			X	X		1
29 Beylerbey			X			1
30 Telmessos (Fethiye)			X	X		1
31 Lymira				X	X	1
32 Kilise Tepe			X	X		1
33 Mersin (Yuemuektepe)			X		X	1
34 Kazanlı Hoeyuek	X		X	X	X	1
35 Tarsus				X	X	1
36 Masat Hoeyuek			X	X		1
<b>Cyprus</b>						
37 Rizokarpasso			X	X		1
38 Galinoporni			X	X		1
39 Korovia Nitovikla				X		1
40 Ayios Thyrsos Vikla						1
41 Leonarissio						1
42 Ayios Theodoros						1
43 Dhavlos Pyrgos						1
44 Anochora						1
45 Phlamoudhi Sapilou			X	X		1
46 Kantara			X	X		1

\* Amount of Mycenaean finds: 1 = 1-10; 2 = 10-50; 3 = 50-100; 4 = 100-500; 5 = 500 and more.

<sup>171</sup> Based on 'Catalogue 1: Sites in the Mediterranean with Mycenaean pottery' (van Wijngaarden 2002: 323-328)

	Site name	I-IIA	IIB-III A1	III A2	IIIB	IIIC	AMOUNT
47	Ayios Iakovos Dhima			X	X		1
48	Gastria Ayios Ioannis						1
49	Ovgoros			X	X		1
50	Akanthou Moulos			X	X		2
51	Ayios Iakovos Melia			X	X		2
52	Psilatos Moutti			X	X		1
53	Marathovouni						1
54	Sinda			X	X	X	2
55	Milia		X	X	X		1
56	Enkomi	X	X	X	X	X	5
57	Kalopsidha			X	X	X	1
58	Pyla Kokkinokremos				X		2
59	Dhekelia Steno			X	X		2
60	Dhekelia Koukoupoudhkia			X	X		2
61	Pyla Verghi			X	X		2
62	Aradhippou			X	X		1
63	Kition			X	X	X	5
64	Laxia tou Riou			X	X		1
65	Hala Sultan Tekke		X	X	X	X	5
66	Dromolaxia trypes			X	X		2
67	Klavdhia			X	X		2
68	Arpera Chiflik		X	X	X		2
69	Kivisil Gyppos						1
70	Lythrodhonda Moutti						1
71	Alambra			X	X		1
72	Idalion		X	X	X	X	2
73	Ayios Sozomenos			X	X	X	1
74	Athienou Bamboulari			X	X		2
75	Nicosia Ayia Paraskevi		X	X	X		1
76	Kaimakli Evretadhes			X	X		2
77	Angastina			X	X		2
78	Palekythro				X		1
79	Ayios Epiktetos			X	X		1
80	Kazaphani Ayios Andronikos			X	X		1
81	Mylopetres				X		1
82	Karmi						1
83	Dhikomo Onisia		X	X	X		1
84	Nicosia Bairaktar				X	X	1
85	Strovolos Dromero						1
86	Yeri Phoenikias			X			1
87	Analionda Palioklichia				X		1
88	Mathiatis			X			1
89	Politiko-Lambertis			X	X		1
90	Pera				X		1
91	Tamassos Litharkes						1
92	Akhera			X	X		2
93	Meniko Kyra tou Dhiakou			X	X		1
94	Akaki			X	X		2
95	Dhenia			X	X		1
96	Kokkini Trimithia						1
97	Lapithos Ayia Anastasia			X	X	X	2
98	Larnaca tis Lapithou				X		1

Site name	I-IIA	II B-III A1	III A2	II B	III C	AMOUNT
99 Myrtou Pigadhes			X	X	X	2
100 Myrtou Stephania			X	X		2
101 Dhiorios Kupous				X		1
102 Kormakiti Ayious			X	X		1
103 Ayia Irini Palaeokastro	X	X				1
104 Ayia Irini Temple Site				X	X	1
105 Toumba tou Skourou	X	X	X	X		2
106 Pendayia						1
107 Katydhata		X	X	X		2
108 Apliki			X	X	X	2
109 Soloi				X		1
110 Loutros Adhkia						1
111 Pomos						1
112 Kirokitia Skasmata						1
113 Kalavassos Mavrovouni				X		1
114 Kalavassos Ayios Dimitrios		X	X	X		4
115 Kalavassos Mangi			X	X		1
116 Maroni Vournes	X	X	X	X		4
117 Maroni Tsaroukkas		X	X	X		3
118 Limassol Kapsalos						1
119 Polemidhia Oufkia						1
120 Erimi Kafkalla			X	X		1
121 Kourion Episkopi			X	X		1
122 Kourion Bamboula			X	X	X	3
123 Alassa				X		1
124 Kouklia Skales			X	X		1
125 Kouklia Hadji			X	X	X	1
126 Kouklia Palaepaphos	X	X	X	X	X	4
127 Yeroskipou			X	X		1
128 Paphos						1
129 Peyia Koutsourous				X		1
130 Maa Palaeokastro				X	X	2
131 Arodhes			X	X		1
132 Drousha Appiourka			X	X		1
<b>Levant</b>						
133 Charchemish (Jerablus)			X	X		1
134 Meskene Emar				X		1
135 Oumm el-Mara						1
136 Catal Hueyuek				X		1
137 Alalakh (Tell Atchana)	X	X	X	X		2
138 Sabouni						1
139 Ras el-Bassit		X	X	X	X	1
140 Tell Nahr al-'Arab						1
141 Ugarit (Ras Shamra)	X	X	X	X		4
142 Minet el-Beida	X	X	X	X		4
143 Ras Ibn Hani			X	X	X	2
144 Lattakia (Remitha)			X	X		1
145 Tell Sukas			X	X	X	3
146 Arab al Mulk			X	X		1
147 Tell Daruk						1
148 Tell Kazel			X	X		2

Site name	I-IIA	IIB-III A1	III A2	IIIB	IIIC	AMOUNT
149 Tell Hayat						1
150 Tell 'Arqa						1
151 Khan Sheikoun			X	X		1
152 Hama			X	X		1
153 Qatna (Mishrife)			X			1
154 Tell Ouaouieh						1
155 Qadesh (Tell Nebi Mend)			X	X		2
156 Byblos (Jbail)	X	X	X	X	X	3
157 Beirut Dog river				X		1
158 Beirut (centre)			X	X		2
159 Garife						1
160 Sidon (Saida)		X	X	X		2
161 Qraye				X		1
162 Sarepta (Sarafand)		X	X	X	X	4
163 Tyre			X	X	X	2
164 Tell el Ghassil						1
165 Tell 'Ain Sherif				X		1
166 Tell es Salihyeh		X				1
167 Deir Khabie			X	X		1
168 Kamid el-Loz	X	X	X	X		3
169 Khan Selim						1
170 Tell Dan (Tell el-Qadi)			X	X		2
171 Hazor		X	X	X		3
172 Kinneret (Kh. al-Urema)			X	X		1
173 Akko			X		X	2
174 Tell Bir el-Gharbi						1
175 Tell Abu Hawam			X	X		5
176 Tell Oasis				X		1
177 Tell Qiri			X	X		1
178 Tell Yoqne'am			X	X		1
179 Abu Shushe			X			1
180 Afula			X	X		1
181 Megiddo (Tell el-Mutesseim)		X	X	X		4
182 Tell Kadesh			X	X		1
183 Tell Ta'annek	X	X	X	X		1
184 Dothan						3
185 Tell el Far'ah (North)			X			1
186 Tell Yin'am			X	X		1
187 Beth Shean			X	X		3
188 Tell Ashari			X	X		1
189 Tell Irbid						1
190 Pella (Tabaqat Fahil)			X	X		2
191 Tell es Saidiyeh			X	X		2
192 Deir Alla			X	X		1
193 Umm ad Dananir			X	X		1
194 Amman Airport	X	X	X	X		4
195 Sahab			X	X		1
196 Hesban			X	X		1
197 Madeba				X		1
198 Tell es Samak						1
199 Atlit						1
200 Tell Nami			X	X		1

Site name	I-IIA	IIIB-III A1	III A2	IIIB	IIIC	AMOUNT
201	Tell Eran					1
202	Dor (Tell el Burj)		X	X		2
203	Tell Mevorakh		X			1
204	Tell Aron					1
205	Jatt		X	X		1
206	Tell Burgatha					1
207	Shechem (Tell Balata)		X	X	X	2
208	Bethel (Beitin)		X	X		1
209	Jericho					1
210	Gibeon (el Jib)		X			1
211	Jerusalem		X	X		1
212	Khirbet Judur		X			1
213	Khirbet Rabud (Debir)		X			1
214	Tell Michal	X				1
215	Aphek (Antipatris)		X	X		1
216	Izbet Sartah			X		1
217	Tell Jerishe		X	X		1
218	Yavneh Yam					1
219	Dahrat al Humrayah		X	X		1
220	Tell Mor					1
221	Ashdod-Yam					1
222	Ashdod		X	X	X	3
223	Ashkelon		X	X		2
224	Gezer	X	X	X		2
225	Tell Miqne			X	X	1
226	Tell Batash		X	X		1
227	Ain Shems (Beth Shemesh)		X	X		2
228	Tell es Safiyeh		X	X		1
229	Tell Sippor		X	X		1
230	Lachish (Tell ed Duweir)	X	X	X		4
231	Tell el Hesi		X	X		1
232	Tell Beit Mirsim		X	X		2
233	Tell Nagila					1
234	Tell 'Ajjul (Gaza)	X	X	X		2
235	Qudur el Walaida					1
236	Tell Haror		X	X		1
237	Tell Sera'		X	X		2
238	Deir el Balah		X	X		1
239	Gerar (Tell Jemmeh)		X	X		1
240	Tell el Far'ah (south)		X	X		1
241	Tell er Ridan					1
242	El-Harruba		X	X	X	2
243	El 'Arish (Tell esh-Shari'a)					1
<b>Egypt</b>						
244	Bir el Abd					2
245	C 86		X			1
246	Ali Mara					1
247	Tell el Dab'a-Qantir	X	X	X		3
248	Tell el-Rataba		X	X		1
249	Az-Zaqaziz					1
250	Tell ar-Rubai					1

Site name	I-IIA	II B-III A1	III A2	III B	III C	AMOUNT
251	Tell el-Muqdam		X			1
252	Kom Firin					1
253	Mostai (Tell Om Harb)			X		1
254	Kom Abu Billa		X	X		1
255	Tell el-Yahudiyeh			X		1
256	Heliopolis		X			1
257	Abusir el-Meleq	X				1
258	Memphis (Kom Rabi'a)	X	X			1
259	Saqqara - Teti area	X	X			1
260	Saqqara-N.K. necropole		X	X		2
261	Riqqeh		X	X		1
262	Meydum					1
263	Kahun (al-Lahun)		X	X	X	1
264	Gurob	X	X	X	X	2
265	Sedment	X	X	X	X	1
266	Zawyet el-Amwat		X			1
267	Tuneh el-Gebel (E Ash.)		X	X		1
268	Tell el Amarna		X	X		5
269	Assyut			X		1
270	Rifeh		X	X		1
271	Abydos	X	X	X		1
272	Balabisch			X		1
273	Deir el-Ballas					1
274	Kom el-Abd					1
275	Deir el-Medina	X	X	X	X	4
276	Naqada			X		1
277	Qasr al-Aguz					1
278	Gurna (Abd el-Qurna)		X	X	X	1
279	Dira Abu n Naga	X	X	X	X	1
280	Malkata			X		1
281	Karnak		X	X		1
282	Armant	X				1
283	Elephantine (Assuan)					1
284	Arabi Hilla		X			1
285	Daqqa		X	X		1
286	Qubban		X	X		1
287	Aniba	X				1
288	Arminna					1
289	Debeira					1
290	Buhen		X	X		1
291	Sesebi		X			2
292	Kerma	X				1
293	Tabo - Argo Island		X	X		1
294	Marsa Matruh (Bates' Island)		X			2
295	Zawiyet Umm el-Rakham					1

### Appendix III – Catalogue of Late Bronze Age objects in Greece

Context	Syro-Pal	Egypt	Cyprus	Mesop	Anat	Italy	Total
LM I	4	13	5	3	1	-	26
LM IA/LH I	12	6	3	15	2	-	38
LM IB/LH IIA	3	35	8	5	1	-	47
LM II/LH IIB	1	22	3	-	-	-	26
LH/LM I-II	-	8	-	-	-	-	8
LH II	1	3	-	-	-	-	4
Total	21	82	19	23	4	-	149

**Table 1:** Orientalia and Occidentalia in LM/LH I-II Greece, by country of origin. (Cline 1994: 13)

Context	Mainland	Crete	Rhodes	Islands	Total
LM I	-	20	3	3	26
LM IA/LH I	20	7	-	11	38
LM IB/LH IIA	10	36	1	-	47
LM II/LH IIB	1	25	-	-	26
LH/LM I-II	2	6	-	-	8
LH II	4	-	-	-	4
Total	37	94	4	16	149

**Table 2:** Orientalia and Occidentalia in LM/LH I-II Greece, by findspot (Cline 1994: 13)

Context	Syro-Pal	Egypt	Cyprus	Mesop	Anat	Italy	Total
LH/LM III (generic)	16	30	7	-	2	1	56
LH/LM IIIA	53	46	40	-	2	10	151
LH/M IIIA-B	20	3	8	-	2	24	57
LH/LM IIIB	55	22	28	21	-	32	158
LH/LM IIIC	21	32	22	-	2	17	94
Total	165	133	105	21	8	84	516

**Table 3:** Orientalia and Occidentalia in LH/LM III Greece, by country of origin (Cline 1994: 15)

Context	Mainland	Crete	Rhodes	Islands	Total
LH/LM III (generic)	22	25	5	4	56
LH/LM IIIA	18	117	13	3	151
LH/LM IIIA-B	15	42	-	-	57
LH/LM IIIB	118	35	1	4	158
LH/LM IIIC	55	12	14	13	94
Total	228	231	33	24	516

**Table 4:** Orientalia and Occidentalia in LH/LM III Greece, by findspot (Cline 1994: 14)

Context	Mainland	Crete	Rhodes	Islands	Wrecks	Total
LM I	-	1	-	-	-	1
LM IA/LH I	2	-	-	-	-	2
LM IB/LH IIA	-	1	-	-	-	1
LM II/LH IIB	-	-	-	-	-	-
LM I-II	-	-	-	-	-	-
LH II	-	-	-	-	-	-
LH/LM III	1	-	1	-	-	2
LH/LM IIIA	-	-	-	1	-	1
LH/LM IIIA1	-	-	-	-	-	-
LH/LM IIIA2	1	-	-	-	-	1
LH/LM IIIA-B	-	2	-	-	-	2
LH/LM IIIB	-	-	-	-	-	-
LH/LM IIIC	-	-	2	-	-	2
Total	4	4	3	1	-	12

**Table 5:** Anatolian objects in the LBA Aegean (Cline 1994: 75)

Context	Mainland	Crete	Rhodes	Islands	Wrecks	Total
LM I	-	2	-	1	-	3
LM IA/LH I	15	-	-	-	-	15
LM IB/LH IIA	5	-	-	-	-	5
LM II/LH IIB	-	-	-	-	-	-
LM I-II	-	-	-	-	-	-
LH II	-	-	-	-	-	-
LH/LM III	-	-	-	-	-	-
LH/LM IIIA	-	-	-	-	-	-
LH/LM IIIA1	-	-	-	-	-	-
LH/LM IIIA2	-	-	-	-	-	-
LH/LM IIIA-B	-	-	-	-	3	3
LH/LM IIIB	21	-	-	-	-	21
LH/LM IIIC	-	-	-	-	-	-
Total	41	2	-	1	3	47

**Table 6:** Mesopotamian objects in LBA Aegean (Cline 1994: 28)

Context	Mainland	Crete	Rhodes	Islands	Wrecks	Total
LM I	-	4	-	-	-	4
LM IA/LH I	-	3	-	9	-	12
LM IB/LH IIA	-	3	-	-	-	3
LM II/LH IIB	1	-	-	-	-	1
LM I-II	-	-	-	-	-	-
LH II	1	-	-	-	-	1
LH/LM III	5	10	-	1	-	16
LH/LM IIIA	4	11	-	-	-	15
LH/LM IIIA1	4	19	-	-	-	23
LH/LM IIIA2	1	13	1	-	-	15
LH/LM IIIA-B	13	7	-	-	72	92
LH/LM IIIB	54	1	-	-	-	55
LH/LM IIIC	16	-	1	4	1	22
Total	99	71	2	14	73	259

**Table 7:** Syro-Palestinian objects in LBA Aegean, including objects from shipwrecks (Cline 1994: 56)

Context	Mainland	Crete	Rhodes	Islands	Wrecks	Total
LM I	-	12	-	1	-	13
LM IA/LH I	3	2	-	1	-	6
LM IB/LH IIA	5	25	-	-	-	30
LM II/LH IIB	-	21	-	-	-	21
LH/LM I-II	2	7	-	-	-	9
LH II	3	-	-	-	-	3
LH/LM III	11	12	4	3	-	30
LH/LM IIIA	4	12	-	-	-	16
LH/LM IIIA1	-	15	-	-	-	15
LH/LM IIIA2	2	10	3	-	-	15
LH/LM IIIA-B	2	1	-	-	16	19
LH/LM IIIB	18	3	-	1	-	22
LH/LM IIIC	25	-	4	3	5	37
Total	75	120	11	9	21	236

**Table 8:** Egyptian objects in LBA Aegean (Cline 1994: 43)

Context	Mainland	Crete	Rhodes	Islands	Wrecks	Total
LM I	-	1	3	1	-	5
LM IA/LH I	-	2	-	1	-	3
LM IB/LH IIA	-	7	1	-	-	8
LM II/LH IIB	-	3	-	-	-	3
LM I-II	-	-	-	-	-	-
LH II	-	-	-	-	-	-
LH/LM III	4	3	-	-	-	7
LH/LM IIIA	-	8	1	2	-	11
LH/LM IIIA1	2	11	4	-	-	17
LH/LM IIIA2	-	8	4	-	-	12
LH/LM IIIA-B	-	8	-	-	45	53
LH/LM IIIB	23	3	1	1	-	28
LH/LM IIIC	11	-	6	5	7	29
Total	40	54	20	10	52	176

**Table 9:** Cypriot objects in the LBA Aegean (Cline 1994: 64)

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