



University of Birmingham

A Barrier to be Broken

**Change and continuity in the transition between the Bronze and Iron Age Aegean
from the observation of burial contexts and grave goods.**

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ABSTRACT:

This work discusses changes and continuities taking place in the transition from the Late Bronze to the Early Iron Ages in Greece.

The geographical range will cover the eastern mainland (including Euboea), Naxos and Knossos, in a period starting from the final palatial culture of LH IIIB/13th century and ending with the Proto-Geometric/10th century burial evidence.

In order to collect and observe the archaeological evidence several tomb assemblages have been researched from both original reports and visits to relevant Greek museums. Finds have been tabulated, and continuities, innovations and losses have been identified. The major categories of material evidence analysed included pottery and metalwork; but also the form of the tombs and the manner of the burials were considered. The final analysis of these categories of evidence refutes theories of major and or abrupt change, whether caused by invasion or natural phenomena. It rather indicates social modifications following the loss of the palatial centres and their administration and culminating in their gradual replacement by new forms of social structure.

Although not directly demonstrable from the existing evidence, a possible scenario is proposed to explain the frequent indications of influence from SE and Central Europe during this transition.

Dedication:

To my **Great Aunts, Paolina and Delfina**, and my **Grandfather Pasqualino**, who at the venerable ages of 90, 85 and 97 have never stopped providing me with constant encouragement and economic support during these past years, firm in their conviction that at the end of the day, no matter what, knowledge and education are the only things worth fighting for.

“Doctum, ex omnibus solum, neque in alienis locis peregrinum neque amissis familiaribus et necessariis inopem amicorum, sed in omni civitate essem civem difficilisque fortunae sine timore posse despiciere casus.” (Vitruvius, VI.2.).

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Chapter I

Introduction: history of scholarship and aims of the present study

1. Research Background.

Over a century has now passed since the first evidence of the Bronze Age civilisations of the Aegean and their assumed collapse in the 12th century BC. There are still many areas of uncertainty about these complex societies archaeologically known as the Mycenaeans, but very likely to be the Kingdom(s) of *Ahhiyawa* mentioned by the Hittites,¹ connecting probably with the Achaeans of the Homeric epic,² which dominated the Bronze Age Aegean from ca. 1600 to 1200 BC. All we know for certain is that they were Indo-Europeans characterised by a warrior ideology,³ who had reached the Greek mainland by the Middle Helladic period and seized it possibly by force, judging by the extensive destruction levels found in the EH III period.⁴ From an initial series of independent settlements (possibly integrated in a sort of embryonic ‘symmarchy’, as shown by later epic),⁵ this human group was influenced by the wealthy Minoan palatial system to develop its own monumental centres.⁶

Applying the same administrative machine which had its focus in the monumental palaces, their system was based upon collection and redistribution of agricultural products and on exploitation of surplus via international trade, which expanded all over the former Minoan routes. These features allowed them to increase wealth and political organisation to the point of negotiating on equal terms with the Hittites and the other Near-Eastern kingdoms, until the end of LH IIIB2 when this hypothetical “coalition” of Mycenaean states collapsed.⁷ This was followed by an obscure Iron Age which apparently was recorded neither by the remaining population nor by neighbouring countries. Past scholars wanted to see in this and in the long, mute recovery that followed, a phase of disruption and darkness;⁸ this was separated from its predecessor by a conceptual barrier before which was an unknown disaster, and after, the period conventionally called the Greek Dark Ages.⁹

¹ Forrer 1924: 138-141.

² Bryce 1998: 61; a good summary in Middleton 2010: 10-12 .

³ Wright 2008: 244.

⁴ Caskey 1960: 249-56; Coleman 2000: 101–53; Pullen 2008: 38-40.

⁵ Homer, II, 494-759; Desborough 1964: 217.

⁶ Wright 2008: 243.

⁷ Deger-Jalkotzy 2008: 387-416.

⁸ Among many: Murray 1907; Blegen 1962; Carpenter 1966; Desborough 1972.

⁹ Snodgrass 1971

2. Pessimism in the past: inventing the ‘Dark Ages’.

The theory of a foreign invasion as mentioned by the ancient sources was still regarded as reasonable until recently. No matter how many studies are currently conducted on this subject, a veil of darkness seems to remain, and so does the conceptual barrier between the Mycenaean Age and that which followed. The four missing centuries of Aegean history, roughly 1200-800 BC, constitute a great loss for world history in general, since the dynamics apparent in the Greek area also affected contemporary European and Near Eastern events, so that understanding the actual processes involved could shed light on a crucial moment of the whole human record. This urgency for a definitive answer was the main motivator of my research, and my intention is to review the available information critically and finally shed some light on this problematic period.

If research is now detaching itself from the earlier theories of a violent demise of the Mycenaean society, it took almost eighty years to reject the myth of the Dorians and other ‘catastrophe’ theories which tried to explain the limited evidence available. Skeat, for instance, was so focussed on the literary accounts of the invasion that he devoted a good part of his studies to reconstructing a whole series of migrations which eventually brought the Dorians to Greece. In his theory it all started from the European Lausitz invasion which generated a chain reaction of migrations along the Danube area and finally opened the way for the Dorians (who he insisted on locating historically in the Pindos mountains, and more specifically in North-Western Thessaly) to descend into Dryopis (an undefined region which he identifies with the upper Spercheios). According to Strabo at that point they were supported by Herakles and triumphed over the locals,¹⁰ moving soon after to the Peloponnese.¹¹ Yet, though evocative, his theory relied on the accounts of the Classical period¹² and could not represent a reliable explanation.

In 1948 Milošević traced the “dark age” decorative PG (10th to 9th century BC)¹³ and geometric patterns back to LH IIIC, identifying their arrival with the period in which the foreign invasion was believed to have occurred. For the first time he sought to demonstrate that these stylistic traits could have been the material evidence for an actual Dorian

¹⁰ Strabo, VII 7.1.

¹¹ Skeat 1934: 42-60.

¹² E.g. Thucydides, I, 12.

¹³ This term was created by Schweitzer in 1917. New studies (e.g. Wardle, Higham, Kromer 2014) have moved the beginning of the period to 1050 BC, making it overlap with Sub-Mycenaean. While waiting for this new theory to be fully accepted, I have decided to keep for this work the former chronology: 1000-900 BC.

invasion.¹⁴ Around fifteen years later Blegen still accepted the classical account, admitting the possibility of an intrusive and warring population devastating the Mycenaean world at the end of LH IIIB and ultimately at the end of that period. His evidence lay in the imposing fortifications erected by some palaces after the first destructions in the mid-13th century.¹⁵

The myth of the Heracleidae reclaiming their lands seized by Eurystheus,¹⁶ founder of the House of the Atreides, suggested to Buck that some degree of truth was hidden also within this account.¹⁷ This theory was widely accepted in the decades to come and even Desborough in 1971, perplexed about the 12th century BC adoption of clothing accessories of probable northern origin, tried to imagine possible routes of penetration by the invaders: he preferred the north-western areas of Greece as the most likely channels of infiltration, although, as he admitted, the districts of Achaea and Delphi should have represented a solid military barrier.¹⁸ To overcome this obstacle, Desborough pointed out that mainland Greece was rather underpopulated in the country areas surrounding the palatial districts and especially the north-western zone was likely to permit passage with minimal opposition. Therefore he identified two possible routes:

- Invaders could have descended the Spercheios valley, turning south-east afterwards and reaching Boeotia and Attica.
- Invaders could have crossed the Gulf of Patras, turning south-east, traversing the wild landscape and reaching the Argolid.

A proof for the second route would be then the destruction of the citadel at *Teichos Dymaion*, but, as Desborough himself concluded, no certain date was available for that destruction.¹⁹

Other questions made quickly room for new interpretations. Chadwick's studies of the Linear B scripts (which he had helped to decipher) concluded that both the Mycenaean dialect and the Doric dialect of historical Greece were expressing the same language. For this reason he proposed that rather than foreign invaders, the Dorians of the tradition could have existed already within Mycenaean society, though representing its lower class, therefore incapable of writing.²⁰ An interpretation which, if hard to prove as such, introduced the idea of an internal collapse led by a struggle of the social classes. Also Papadopoulos, in the conclusion of his study on ancient Achaea stated that the society of north-western Greece, that should have

¹⁴ Milošević 1948 - 1949: 12-36.

¹⁵ Blegen 1962: 30.

¹⁶ Pseudo-Apollodorus, 3.8.1; Diodorus Siculus, 4.57; Pausanias, 1.44.10; Strabo, 7.6.19.

¹⁷ Buck 1969: 276-298; Stubbings 1973.

¹⁸ Desborough 1972: 110.

¹⁹ Desborough 1972: 110.

²⁰ Chadwick 1976: 103 -117.

offered major signs of the passage of a foreign invasion, remained indisputably Mycenaean. Its first signs of depopulation came instead at the end of the 11th century.²¹ So there were no traces of an invasion in the northern regions of Greece.

But the presence of a hand-made and undecorated Burnished Ware, called “Barbarian”, in sites like Tiryns, Mycenae, Asine and Athens, told a different story, accounting again for foreign intrusions. French had related this pottery to Central European areas through the Danube-Carpathian passage.²² Moreover, the theory of pirates from the sea, the “Sea Peoples” of the Egyptian sources, who, interfering violently in the Aegean, had broken down the international trade system beyond repair, was restrained by the absence of archaeological evidence, and even though the tablets of Pylos do mention a possible threat from the sea, nothing specific could be deduced about it.²³

Theories concerning external causes were soon accompanied by suggestions of internal distress. Hooker, in his study of the Linear B texts saw the signs of a double pressure on the palatial system, on the one hand the competition between palaces, on the other the distress provoked by social disparities and resulting turmoil.²⁴ Especially the second type of conflicting interests would have caused a progressive class struggle, weakening the political system and interrupting the economic redistribution which was the core of the palatial system. Some have interpreted the construction of new storerooms within the walls of the palaces in LH IIIB2 as a sign of internal crisis and as a concomitant awareness by the aristocracies that the provision of food by the lower classes was soon to be interrupted.²⁵ Among the internal causes an intriguing fact was found in Tiryns by Kroll, who when analysing the paleobotanical remains in the storerooms concluded that the most recent crops were low in quality and damaged by parasitic infections, suggesting the decline of agriculture due to prolonged monoculture with no innovations was among the factors of the collapse.²⁶

Another cluster of theories oriented initial research towards the unstable geophysical situation of the Aegean, proposing the possibility of natural causes at the origin of the collapse. Starting from archaeo-geological analyses of the soils, Carpenter’s view most endorsed by other scholars had suggested that the last phase of the Bronze Age Greece could have been marked by alluvial phenomena as a consequence of soil erosion after the

²¹ Papadopoulos 1979: 176.

²² French 1969: 133-136.

²³ Sacconi 1986: 117-134.

²⁴ Hooker 1979: 100-111.

²⁵ De Fidio 1977: 34.

²⁶ Kroll 1982: 467-485.

abandonment of the terraces, the latter linked to a possible climatic change that resulted in overwhelming aridity.²⁷ This was at the time an initial step into using scientific methods to understand the events of the past. In 1962 Mylonas had found several human remains under a number of collapsed LH IIIB buildings on the Panagia ridge at Mycenae, covered by stones as if the buildings had fallen upon them. This evidence was repeated at Plakes, not too far from Mycenae, in 1975. The same evidence was found at Tiryns and Kilian ascribed that destruction level to the same earthquake as had hit Mycenae.²⁸ The destruction levels including the collapsed buildings and the human remains in them were soon named “the earthquake horizon”, and used as a proof of a seismic event at the end of the Bronze Age. But already at the time, earthquakes were unconvincing as the definitive cause of the palatial collapse. In the same year Williams published his theory where he disregarded the geo-physical theories suggesting that the introduction of cremations was instead a possible evidence for a serious attempt to contain an epidemic of plague, which being very infectious, had spread out quickly and killed large parts of the population, bringing the local economies to their knees and pushing them towards their end.²⁹ This again remained just a mere speculation.

Though well constructed, all of these pictures presented by the past scholars had weaknesses and lacked the necessary evidence to put an end to the question. Current research, although far from a definitive answer, is mostly following the same clues, trying at least to cut off all those theories which can no longer be confidently sustained by archaeological evidence, as described in the following paragraph.

3. Collapses and continuities: the current state of the research.

To start with, in the last thirty years new studies on this subject widely questioned the idea of a dark age. Above all, the Classical account of a foreign invasion as the ultimate cause of downfall for the Mycenaean civilisation has lost favour. In the alleged changes which occurred after the disappearance of palatial society scholars started to look for signs of continuity. If some recent studies still connect the evidence of destructions to LH IIIB2 (at the end of the 13th century BC),³⁰ other theories would seem to move it at the beginning of LH IIIC (12th century BC), basing this on data derived from pottery classifications.³¹

²⁷ Carpenter 1966; Bryson, Lamb, Donley 1974: 46-50.

²⁸ Kilian 1986: 73-95.

²⁹ Williams 1962: 109-125.

³⁰ Rutter 2003: 255. Demarkopoulou 2003: 91.

³¹ Mountjoy 1993: 4; 1999: 16-18; Shelmerdine 2001: tab. 1.

Yet this process has been treated cautiously because of the potential fallacy behind pottery-constructed chronologies. More accurate dating, based on by stratigraphic analyses, could discredit such a theoretical approach, since there is no apparent transitional period in the stratigraphies which can suggest an intermediate non-palatial phase at the beginning of LH IIIC, pinning the collapse at the commonly accepted date of the end of LH IIIB2.³² LH IIIB2 fire-destructions are so well attested at Mycenae, Tiryns and Midea, that Rutter has suggested to use them as the boundary between LH IIIB and IIIC, considering all LH IIIB pottery found after that horizon as just earlier survivals.³³ Jung has also warned against oversimplification in relation to these destructions, since it is unlikely that these palaces and their territories met their final demise all at the same time or one shortly after another, therefore a single precise date for the end of the palatial age should not be sought.³⁴

Dating the end of each single palatial site has proved a hard task nonetheless, since most of the stratigraphies are unclear and, again, dating through pottery produced several inconsistent dates.³⁵ In the last decade some agreement has been reached between the defenders of a transition occurring at the end of the 13th century and those suggesting the beginning of the 12th century. Mountjoy, Rutter and Jung agreed upon placing Pylos destructions (in a transitional phase between LH IIIB2 and IIIC Early) after those of Mycenae and Tiryns (in LH IIIB2),³⁶ while the end of the building on the Athenian acropolis has been classified as contemporary to Pylos' demise, and after Midea (LH IIIB2).³⁷ At the same time the Menelaion (Laconia) and the palaces at Dimini (Thessaly), Thebes and Orchomenos (Boeotia) all collapsed somewhere between the demise of Mycenae, Tiryns and Midea and those of Pylos and Athens.³⁸ It might be tempting to agree with Popham when he set a time span of twenty five years for the collapse of all the palaces.³⁹

The fact that these destructions bear witness to the disastrous demise of the palatial society and the beginning of the 'Dark Age' has remained a common belief in archaeology until a few decades ago.⁴⁰ Dickinson has labelled it as the "Collapse", since the concept of a Dark Age was unable to express the complexity of the period and was stained by derivative

³² Demarkopoulou 2003: 91.

³³ Rutter 2003: 255; Gauss 2003: 253.

³⁴ Jung 2003: 254.

³⁵ Middleton 2010: 13.

³⁶ Mountjoy 1999: 36; Rutter, Jung 2003: 255-256.

³⁷ Rutter 2003: 255.

³⁸ Adrimi-Sismani 2006: 474.

³⁹ Popham 1994: 281.

⁴⁰ Drews 1993: 3; Eder 1998.

connotations.⁴¹ In my opinion it is a clever way to deny the “aura” of complete negativity involved in the concept of a Dark Age, and to admit nonetheless that a former system had failed to progress and reached a downfall. This idea of a collapse should always be ascribed to the palatial institutions only, without equating their collapse with a breakdown of the whole Aegean world. The evidence collected in this study contributes to show that apart from the palaces and their surroundings most of the Greek regions immediately overcame their absence. They re-organised themselves with new aristocracies, kept their armies functional and provided their economies with all the necessary means of subsistence (crops and animal farming, trade). Many regions flourished instead of suffering soon after the end of the palatial control.⁴²

It is true that some activities ceased and can be interpreted as cultural losses. That literacy actually disappeared is still a fact.⁴³ It is also acknowledged that the typical architecture of the palaces and their intrinsic art of making frescoes was no longer reproduced in the post-palatial period.⁴⁴ Jewellery when not inherited from the previous periods, also appears simpler and betrays the loss of the necessary expertise in metalworking.⁴⁵ Nevertheless these losses were not enough to define the transition from the Late Bronze to the Early Iron as a total descent into darkness. Several scholars rightfully agreed on the fact that the change was not so immediate and that for a long period after the collapse the culture remained fundamentally Mycenaean.⁴⁶ On the other hand it obviously presented signs of gradual differentiation in its developmental complexity⁴⁷ and material culture,⁴⁸ especially as time passed. But it is also a common feeling in present research that there is no comparison between the 12th century social dynamics and the previous Mycenaean organisation, structure, ability to mobilize and command resources for large and impressive architectural works and to influence wide regions and the resulting post-palatial polities.⁴⁹ All in all the negative impression created by the label ‘Dark Age’ has disappeared to highlight the positive features of the collapse, especially in terms of freedom for the Aegean non palatial sites to exploit economic opportunities (trade contacts, local artisanship) formerly limited by the palatial

⁴¹ Dickinson 2006: 24.

⁴² Broodbank 2010: 460.

⁴³ Dickinson 1996: 1014.

⁴⁴ Sherratt 2001: 214, 215.

⁴⁵ Deger-Jalkotzy 1998: 122.

⁴⁶ Rutter 1992: 70; Morris 1997; Dickinson 2006: 116; Thomatos 2006: 257.

⁴⁷ Wright 2008; Shelmerdine and Bennet 2008.

⁴⁸ Rutter 1992, Dickinson 2006: 115.

⁴⁹ Middleton 2010: 35.

control.⁵⁰ As Rutter has stated, despite a substantial decline in population, the Aegean recovered quite well from the absence of the palaces.⁵¹

The cause of the collapse is therefore far from being the annihilating force that ancient texts reported as the Dorian ‘invasion’. Even though Eder implied that some kernel of truth lay behind the myth,⁵² this “truth” should be limited to a series of minor population movements. As Hall implies, we are almost forced to admit these movements since we still have the need to explain how historic Greece emerged with its ‘tribal’ organisation, and speaking different dialects.⁵³ The recourse to dialects to demonstrate invasion was already refuted by Drew, who did not find any foreign linguistic root in the Dorian dialect,⁵⁴ and recently by Hall, who finally states that Dorian, Laconian and Argolic dialects are in fact all related to the same Mycenaean Greek found in the Linear B tablets. So they are likely to be natural evolutions, developed through contacts between nearby regions. Moreover, and I entirely agree, the history of a language does not necessarily mirror the history of those who speak it.⁵⁵

It can be also admitted, as both Hall and Middleton do, that the myths describing population movements had a strong social function, they expressed identity and ethnicity to justify the existence of a specific population.⁵⁶ Since they necessarily kept reinventing their past, their recollection of historical events should not be taken as an accurate record.

Although Winter already in 1977 warned against the limitations of archaeological research and that invaders may be almost invisible at a cultural level, and so only known historically and not archaeologically, archaeological evidence for newcomers has been adduced nonetheless. Deger-Jalkotzy had said that all the new elements of the post-palatial material culture, hand-made burnished ware, Naue II swords, violin-bow fibulae, cremations and single graves were to be included in the same intrusive culture which allegedly affected Greece in the transition between the LBA and EIA.⁵⁷

As regards hand-made burnished ware, Rutter identified a possible arrival of newcomers from south-eastern Romania, since there were similarities between their hand-

⁵⁰ Muhly 1992, 70; Deger-Jalkotzy 1996: 728.

⁵¹ Rutter 1992: 70.

⁵² Eder 1998.

⁵³ Hall 2007: 45-48.

⁵⁴ Drew 1993: 63.

⁵⁵ Hall 2007: 45.

⁵⁶ Hall 1997: 41; Middleton 2010: 42.

⁵⁷ Deger-Jakotzy:

made burnished ware and the few examples found in Greece.⁵⁸ He has also recently suggested that some Sardinian and Southern-Italian hand-made carinated vessels might have influenced some carinated shapes of the Aegean repertoire in both Crete (Kommos) and the mainland (especially the Peloponnese). But these hand-made shapes did not affect the local tradition significantly, and the rare specimens found in Greece in LH IIIB were probably imports used to transport the products they contained.⁵⁹ Similarities with the Italian pottery had also been suggested by Belardelli and Bettelli in their study on Southern Italian pottery.⁶⁰ Even though all these stylistic links with Italy, Romania and the Balkans are possible, linking them to a complex population movement is hard to believe. Moreover Dickinson argued that hand-made burnished ware and the so-called intrusive bronze work found in Greek tombs from LH IIIC onwards had a distribution which did not fit in the areas of the Argolid and Peloponnese allegedly invaded by the Dorians, but had a different distribution.⁶¹ Recent revisions of the stratigraphic analyses of the sites in which this pottery appeared showed that it was both very limited in quantity and introduced before the destructions of LH IIIB1.⁶² Even though Mountjoy recently pointed out that in the sites where it was found it was produced locally,⁶³ Dickinson suggests that it was made by small groups of immigrants.⁶⁴ All the data suggest that the presence of hand-made burnished ware was not linked to hostile human groups.

As listed by Deger-Jalkotzy in her set of “intrusive” items representing the archaeological evidence of population movements, Naue II sword types and violin-bow fibulae appear as non-local objects adopted all over Greece and posing questions about the date of their arrival and adoption. Both were attested at Mycenae before the destructions at the end of LH IIIB. The origin of Naue II swords has been located in an area ranging from Central Europe and Northern Italy.⁶⁵ This is an assumption later reiterated for fibulae.⁶⁶ I agree with Dickinson when he suggests that all these foreign metal objects reached Greece not by mass migrations, but through complex trade contacts.⁶⁷ In this respect, a possible and rather convincing explanation was expressed by Sherratt, who defined personal ornaments of metal (among which weapons could also sometimes be included, especially in tombs) as

⁵⁸ Rutter 2000:

⁵⁹ Rutter 2000; Rutter 2012: 73-88.

⁶⁰ Belardelli, Bettelli 2007.

⁶¹ Dickinson 2006: 205.

⁶² In order of publication: Lemos 2002: 84; Cultraro 2004: 58; Romanos 2011: 15-17.

⁶³ Mountjoy 2001: 92.

⁶⁴ Dickinson 2006: 206.

⁶⁵ Drews 1993: 194.

⁶⁶ Kilian-Dirlmeier 1984: 66 ff; Dickinson 2006: 161.

⁶⁷ Dickinson 2006: 205.

increasing in the Aegean after LH IIIB because they were produced in quantity and exported by the European Urnfield culture, at the time expanding its influence through maritime agents. As she continues, all the bronze jewellery, weapons and even the use of single burials appeared in small numbers, as rarities, before the collapse, their final popularity must be rather be caused by some economic and social changes which took place at the end of LH IIIB2 and went on in the subsequent periods.⁶⁸

The present conclusions about the material changes which occurred in Greece during the post-palatial period and in the Early Iron Age are all part of a series of complex dynamics through which human groups created their own identity.⁶⁹ I endorse the vision of human societies as always flexible and in a continuous adaptation to the events in which they are enveloped, and, by all means, I respect Middleton's conclusion that material culture does not always mirror political situations and languages and social practices do not always fit conveniently together. Nevertheless Middleton himself uses schematic pottery drawings to imply social features,⁷⁰ which in itself it is a strong use of material culture in order to mirror a political situation. In my opinion also theories like Burmeister's, who states that where the tight connection between societies and their material culture is obvious,⁷¹ it should not be disregarded too readily.

Today the most accepted theories on the Mycenaean collapse concern economic factors. Again Middleton summarises them as evolving in two directions: the external trade and the internal organisation of the palace-systems, and warns that both these views result from different interpretations of the palatial societies and how they worked, so that the respective conclusions are inevitably biased.⁷² Starting with external trade factors, in the '60s great importance had been sensibly placed on the sea routes sailed by the Mycenaeans and the international trade these routes favoured; together with the enormous economic damage that disruption would have brought.⁷³ When we think of sea raiders the label of the Egyptian "Sea Peoples" is immediately attached to them. But, as suggested, these raids should have shown some effects on the coasts and in the most vulnerable areas of the Mycenaean world, primarily the islands, but no evidence seems to support this hypothesis.⁷⁴ Even if such a threat

⁶⁸ Sherratt 2003: 41-44.

⁶⁹ Hall 2007; Middleton 2010: 47.

⁷⁰ Middleton 2010: 72.

⁷¹ Burmeister 2000: 540.

⁷² Middleton 2010: 32.

⁷³ See Vermeule 1960.

⁷⁴ Vlachopoulos 1998: 237, 238; Middleton 2010: 33.

occurred, the palaces would have supposedly fought back.⁷⁵ If we imagine the Mycenaean states as the powerful kingdom which shared with the Near-East the same degree of importance, it is really hard to believe they would have lost their land to a few raiders. As Middleton suggested, even if the sea routes became too dangerous for trade during these assumed raids, the Palaces could have stopped their commercial traffic for a while, maintaining their capital secure until the end of the crisis, and at the same time organizing their counteroffensive.⁷⁶ It is implied then that for crucial effect, the “Sea People’s” raids must have been overwhelming and long lasting, as if the Mycenaean forces were staying still just to watch. This view would be possible if we endorsed Popham’s idea that these raiders were militarily capable and well equipped.⁷⁷ That is that the “Sea Peoples” were superior in battle. But Popham assumes too much, since, as Dickinson argues, there is no evidence for it.⁷⁸ The extensive invasion assumed to have occurred in the LBA by hand of the Sea Peoples is not shown in the victory proclamations by the Pharaohs of the 13th and 12th dynasties,⁷⁹ especially in the 12th century inscriptions of Medinet Habu,⁸⁰ nor there is any indication in the textual sources about their widespread presence in the Aegean or their coordination in attacking all together, and, as stated by Knapp and Manning, it is highly improbable that a band of pirates could have overthrown the political asset of entire civilisations.⁸¹

To disrupt and cause the downfall of the whole Aegean and the Near East, the numbers of the “Sea Peoples’s” fleet should have been so massive that the necessary resources to put them together can hardly be imagined and localized in any region of the Mediterranean. Among the most interesting theories regarding their origins, Deger-Jakotzy originally proposed that small groups of foreigners had reached the Aegean via the Danube, initially settled in Greece, Romania and Southern Italy, and later began to make their income from piracy, slowly creating the first nucleus of the “Sea Peoples.”⁸² A few years later Popham discussed the linguistic assonances between some Sea Peoples’ ethnic names recorded in the Egyptian texts, specifically the *Sherden* and *Shekelesh*, and ancient Sardinians and Sicilians, concluding that these raids could have moved towards the Aegean from a Southern Italian

⁷⁵ Middleton 2010: 33.

⁷⁶ Middleton 2010: 33.

⁷⁷ Popham 1994: 228.

⁷⁸ Dickinson 2006: 47.

⁷⁹ Broodbank 2013: 461.

⁸⁰ Roberts 2014: 259, 260.

⁸¹ Knapp, Manning 2016: 122.

⁸² Deger-Jakotzy 1989: 11-14.

basin.⁸³ But apart from Sherden and Shekelesh, there are many other names in the Egyptian texts,⁸⁴ like the Peleshet, Eqwesh and Denyen, which seem to recall Mediterranean locations like Palestine, Achaea and Danaia, evidencing if not a devastating force, a Mediterranean seaborne multiethnic mobilisation reaching extents of which we have no earlier record.⁸⁵ Whether coming from Southern Italy or not, the assonance of the name is still a weak evidence since it is based on our perception of modern names in ancient languages, which not only are local adaptations of foreign names, but are also words pertaining to idioms forever lost.

Broodbank's suggestion is that this ethnic seaborne circulation represents the real revolution matured at the end of the BA. It generated a distribution of goods and ideas which escaped the control of the land-based centres, eventually isolating them.⁸⁶ Moreover the fact that the palaces did not ally against a common enemy is indicative of the limited scope these centres had, engaging only with their circumscribed areas and ignoring whatever exceeded them.⁸⁷ Broodbank's conclusion acknowledges the Sea Peoples' theory the fact it brings forth many features representative of the 13th century Mediterranean: mobility of violence, dislocation, demographic and economic recession, a diminished elite power, cultural impoverishment. In such an environment a more epidemic warfare could prosper and particular attention could be placed to new sets of weapons and to ships able to reach far lands like Sardinia and Cyprus.⁸⁸

In my opinion although sea raiders of all ethnicities must have existed in the Mediterranean in every period and could have been a potential menace to trade and an issue (if marginal) for the Mediterranean kingdoms, the lack of evidence discourages the hypothesis of a massive invasion that destroyed the Bronze Age equilibrium of most of the political superpowers of the time. Their presence in Egypt could be better understood in the context of mercenaries enrolled by the Pharaohs and introduced to a rich world that later they decided to plunder. This involvement could have been all Egyptian and nothing like this need have occurred for the Aegean as well. Nevertheless an increase of raiders in the Eastern Mediterranean could have happened both during and in the immediate aftermath of the collapse, when not only the Mycenaean States, but also most of the great kingdoms were

⁸³ Popham 1994: 229 ff.

⁸⁴ A complete list is provided by Cline, O'Connor 2003; Adam, Cohen 2013.

⁸⁵ Yasur-Landau 2010: 34 ff; Broodbank 2013: 462.

⁸⁶ Broodbank 2013: 464.

⁸⁷ Knapp, Manning 2016: 138.

⁸⁸ Broodbank 2013: 465.

facing a crisis independent of the Sea Peoples, but made more difficult by them. If raiders from both land and sea might have taken advantage of internal struggles to bring turmoil, the Sea Peoples' threat cannot be seen *per se* as the reason of the palatial downfall.

As regards the conflicts between the elusive kingdom of Ahhijawa and the Hittites, the situation seems more complex and important than previously thought. Even if the debatable banishment of Ahhijawa from the Anatolian coast involved probably only part of the Mycenaean kingdom and not the whole Aegean,⁸⁹ the consequences would have resounded on the entirety of it and allowed new trade links to start, especially with Cyprus.⁹⁰ This would have been quite hard to do in the political system governed by the Mycenaean palaces.

A third big economic reason has been connected again to Cyprus and its commercial expansion westwards. In Sherratt's view, given the vital dependence of the palaces on international trade, the opening of a new trade route by Cyprus could have cut off the Greek mainland from the central routes, transforming it into a peripheral area.⁹¹ She also adds that the regions which once had welcomed Mycenaean products, started the production of local imitations during LH IIIB, reducing the original imports. This theory is quite realistic, if not as the ultimate cause, since the opening of new trade routes would have contributed to limit the economic profits of the palaces, weakening their economies. These could have triggered internal struggles which occurred when the middle class, of private merchants, found itself competing with traders from the new marketplaces, remaining limited by the palatial control, which, as Sherratt once again points out, did not fully understand the essential nature of the Minoan palatial system and simply adapted to it an Indo-European client-based warrior society, which lacked the necessary flexibility to work at its maximum potential.⁹²

As already mentioned, present research has also discussed possible internal causes for the fall of the palatial system. Deger-Jalkotzy pointed out that the Mycenaean states were too small to be able to sustain the monumental enterprises and the high expenditures they demanded. Covering such expenses would have meant a heavy taxation and/or a work overload, both likely to fail in the long run.⁹³ Such imposed labour would recall a fictional idea of a Pharaoh-like figure, forcing people to build his monuments in a short time. Small's study stressed the fact that textual evidence from Pylos would not support the idea of a tyrant-like Wanax. Pylos at least was not a totalitarian state, it seems to have involved many wealthy

⁸⁹ Middleton 2010: 33.

⁹⁰ Sherratt 2001: 222-224.

⁹¹ Sherratt 2001: 226.

⁹² Sherratt 2003: 53.

⁹³ Deger-Jalkotzy 1996: 717, 718.

families in continual competition to acquire a dominant role in the community. In this competition, mastering trade was apparently the main focus.⁹⁴ Internal revolts could also have been generated by agricultural failure and the simultaneous incapability of the palaces to cope with the resulting famine.⁹⁵ But there are no signs of a breakdown in the agricultural systems, nor there is any other evidence of drought and famine in the Linear B records.⁹⁶ I personally agree with Middleton in defining the drought hypothesis as unconvincing as the sole cause of collapse, unless in combination with other factors.⁹⁷ Among the internal causes another of Middleton's suggestions is more interesting. He suggests that together with the material culture traded during the Mycenaean Age, also new ideologies (especially an incipient militarism) may have reached Greece from abroad and the palatial authorities could have underestimated the necessity of reasserting their own authority, losing credibility and respect.⁹⁸

The theories concerning climate have continued in modern works. Drake juxtaposed to Carpenter's earlier studies his solid chemical analysis of the soils, demonstrating the fact that the EIA was in fact more arid if compared to the LBA. His conclusions revealed that an increase in temperatures took place right before the collapse of the Palatial centres, followed by a fast decrease soon after their abandonment. Drake explained that Mediterranean Sea surface temperatures cooled rapidly during the LBA, limiting freshwater flux into the atmosphere and thus reducing precipitation over land.⁹⁹ These climatic changes could have produced a decline in agricultural production and made the basic subsistence of the populations on which the Palatial centres relied, unsustainable. So far the latest climatic analyses agree in supporting the hypothesis of a hot dry climate and a resulting drought during the LBA.¹⁰⁰ One of the most recent studies on climate, led by Kaniewski, used a multi-disciplinary methodology (including geo-morphology, sedimentology, pollen analyses, radiocarbon dating) to integrate archaeological and paleoclimatic proxies and produce unequivocal evidence of a more arid climate at the end of the LBA.¹⁰¹ Knapp and Manning, though admitting an augmented aridity, lamented the limited number of radiocarbon analyses used and showed criticism on the evident discrepancy between the low chronological

⁹⁴ Small 1999: 43-47.

⁹⁵ Betancourt 2000: 301.

⁹⁶ Dickinson 2006: 37-55.

⁹⁷ Middleton 2010: 37, 38.

⁹⁸ Middleton 2010: 35.

⁹⁹ Drake 2012: 1862-1870.

¹⁰⁰ Kaniewski *et al.* 2013.

¹⁰¹ Kaniewski *et al.* 2013: 14.

resolution proposed and the overstated claim that drought and famine were driving the Mediterranean towards the collapse.¹⁰²

Current research is still dealing with natural cataclysms, even though archaeological studies of the coastline rejected the possibility of coastal modifications connected to a major tsunami at the end of the 13th century.¹⁰³ Stiros points out that earthquakes have become for archaeologists a ready excuse to explain destructions and abandonments.¹⁰⁴ His method, elaborated to find evidence of such events, analysed peculiar structural damages to the buildings,¹⁰⁵ can be actually applied to a few sites, among which Mycenae, Tiryns, Pylos, Midea, Thebes, the Menelaion and Kynos.¹⁰⁶ The evident signs of destructions due to earthquakes have been confirmed as occurring at Mycenae during the beginning of LH III B2.¹⁰⁷ In the area where the skeletons were found by Mylonas covered by collapsed stones evidence shows that a series of architectural improvements occurred soon after to strengthen the buildings and prevent them from collapsing again. This would indicate that there was a preoccupation with new seismic events and attempts to prevent major damage to people and property were made. But the immediate reoccupation and repair also prove that the damage was limited and that the earthquake was not strong enough to cause abandonment of the site. Moreover, as for Mycenae, these events are immediately followed by architectural improvements such as stronger foundations, in order to strengthen the structure of the buildings and resist future earthquakes. So the damages were once again minor and not decisive. Similar evidence can be found at Tiryns in the same chronological setting involving the destructions at Mycenae.¹⁰⁸ There, at least two catastrophic events occurred at the end of LH III B1 and in LH III B2. The evidence of seismic activity is shown both by wall deformation in several houses of the acropolis and by skeletons found below the stones of collapsed buildings. The tilting of the walls was opposite to the slope on which the houses were built, which makes the deformation or the total collapse of the walls hardly attributable to land-slides.¹⁰⁹

¹⁰² Knapp, Manning 2016: 103.

¹⁰³ Cultraro 2004: 61.

¹⁰⁴ Stiros 1996: 129.

¹⁰⁵ Stiros 1996: 152.

¹⁰⁶ Mylonas 1977: 61; Iakovidis 1977: 134; Nur, Cline 2000: 50; French 2002: 93; Kilian 1996: 65 – 67; Åström, Demakopoulou 1996: 36 – 39; Sampson 1996: 114; Dakoronia 1996: 41.

¹⁰⁷ French 1996: 51, 52.

¹⁰⁸ Kilian 1996: 67, 68.

¹⁰⁹ Kilian 1996: 63.

During recent excavations at Livanates in Locris, the ruins of several LH IIIC storerooms were found with signs of destructions.¹¹⁰ There appear to have been two different phases of destructions, both ascribable to tectonic movements. In the first event (LH IIIC Middle), the mudbrick walls were offset, an event which archaeoseismologists associate to the action of earthquakes. But if it was an earthquake, then its scale must have been modest, since the damage was minor and soon repaired. The second destructions (LH IIIC Late) appear associated to pebbles and marine fossils unrelated to the site, signs which indicate a tsunami following another wave of seismic events. Yet not all these events occurred in LH IIIB2 when they should have in order to justify a collapse. Shelmerdine points out that if we ascribed the fall of the palaces to seismic events we would need some explanations on why the megara at Mycenae and Tiryns were abandoned in LH IIIB2 and not soon after the earthquakes taking place in LH IIIB1.¹¹¹ Dickinson remarks that during LH IIIB2, after the destruction levels, the palaces initiated a series of large-scale constructions, emphasising a relative prosperity.¹¹² But Middleton rightly rejects this view, adding that new constructions are not necessarily evidence of prosperity, especially if, soon after, the systems collapse.¹¹³ These examples show that earthquakes and similar events were happening and were expected in Greece at all times. Our present knowledge of geology cannot disprove this possibility, Greece lies in a complex and unsettled tectonic area. But we have evidence of these seismic activities happening before (LH IIIB2) and after (LH IIIC) the collapse of the Mycenaean palaces, and in no instance were they crucial for the continuation of human activity in these areas.

As Middleton argues, there is clear evidence for continuity of habitation in sites damaged by earthquakes, and in itself it proves that they were not the ultimate cause of the palatial collapse.¹¹⁴ But then again it is right to agree with French's idea that if not the ultimate cause, earthquakes added their amount of stress to an economic decline that the Mycenaean states were already incapable of repairing.¹¹⁵ All in all we can agree with Bloedow that it is questionable to ascribe the end of the palaces to environmental issues.¹¹⁶ If the cause were interpreted instead as an overexploitation of agricultural resources and a resulting famine, this may well explain abandonment of those sites entirely dependent on

¹¹⁰ Dakoronia 1996: 42, 43.

¹¹¹ Shelmerdine 2001: 375.

¹¹² Dickinson 2006: 42.

¹¹³ Middleton 2010: 40.

¹¹⁴ Middleton 2010: 41.

¹¹⁵ French 2002: 135.

¹¹⁶ Bloedow 1995.

agricultural resources, but not the fall of a whole society.¹¹⁷ Yet the arrival of new weapons which betrayed a different style of battle points towards a new type of warfare against which the Mycenaean (as much as the Anatolian and Near-Eastern) kingdoms could have found themselves incapable of defence and consequently in dire straits. Drews underlined how in the BA all the great kingdoms focused on chariot warfare and archery, so that invaders wanting to win them over could have devised new tactics, based on swarming infantries with javelins and cut-and-thrust swords.¹¹⁸

Though possible, this would imply again an invasion of barbarians that all the data so far seem to reject. The presence of new weapons cannot be *per se* the evidence of military events, especially because, as I will show, the number of these was small and did not fit the image of large Naue-II-armed infantry forces. Middleton rightfully reminds us that the nature of LBA warfare cannot be easily summarised as “chariots and archery warfare” because we do not have much evidence of it. The material evidence for chariots is very limited and also arrow-heads are not abundant. The LBA kingdoms’ warfare could have well included weapons and tactics for which we lack accurate representations at every level, either material, literary or iconographic.¹¹⁹

Walløe, instead, returned to William’s theory about the possible link between cremations and infective illnesses.¹²⁰ He tried to ascribe the event to more evident contemporary cases, such as Cyprus¹²¹ and Hattusha,¹²² where cases of plague were recorded. If it is true that in both Cyprus and Khatti, plague provoked serious disruption to the local administration, the same cannot be imagined for the Aegean also, especially without any mention in texts nor from the analysis of the human remains.¹²³ The link between cremations and illnesses is too weak, a speculation far too wide to be accepted.

In conclusion the old suggestion that any individual cause was strong enough to lead to such epochal events continues today. The combination of different factors at work in the disintegration of the palatial systems is still seen as highly probable.¹²⁴ In this respect, Middleton concludes that the collapse is best explained as a complex set of interlinked processes that occurred over a period of around three decades. The collapse involved both the

¹¹⁷ Middleton 2010: 41.

¹¹⁸ Drews 1993: 104.

¹¹⁹ Middleton 2010: 48.

¹²⁰ Walløe 1999: 123-125.

¹²¹ Moran 1992: 107.

¹²² Bryce 1998: 223-225.

¹²³ Middleton 2010: 50.

¹²⁴ Dickinson 2006: 43-56; Bennet 2006: 209; Hall 2007: 51– 55; Deger-Jalkotzy 2008; Middleton 2010: 31-52; Cline 2014: 166, 167.

internal structure of the palaces and their relationships with hinterlands as well as non palatial parts of Greece, the central Mediterranean and the Near East.¹²⁵ Cline just added up his approach to the issue within the recently elaborated complexity theory, which studies complex systems in order to explain the phenomena emerging by the interaction of objects or agents.¹²⁶ In the case of the LBA collapse, the agents implied by this theory would be the various Aegean and Eastern Mediterranean civilisations. These, as “agents” have a complex behaviour, affected by their experience of the past and the ability to elaborate strategies suiting their present. This agency is alive and open; it evolves in complicated ways and can be influenced by external events.¹²⁷

As the Mediterranean statal entities became more complex and the interdependence of their constituents grew, the overall system required more effort to stabilize.¹²⁸ This leads to the phenomenon of hyper-coherence occurring when interdependencies become so complex that stability becomes too hard to maintain. If this was the case also for the LBA civilisations then the political change to any one of the relevant kingdoms would have affected and destabilised the whole Eastern-Mediterranean balance. Therefore the theory would envision the end of the LBA as the disintegration of major and connected areas which found themselves gradually transformed into diminished and isolated entities.¹²⁹ Though an interesting approach, Cline himself finds this theory excellent in a case where all the information is readily available, but extremely difficult to apply to a subject where too much information is still hidden as in the case of Bronze Age civilisations at the end of the LBA and the final conclusion brings us back to the point in which several causes occurred at the same time and the sparkle igniting the collapse remains conjectural.¹³⁰

The Palaces were probably competitive both internally and between themselves and must have often been engaged in warfare. But non palatial areas were also involved, as separate political groups, allies, enemies or providers of fighters.¹³¹ As palace-based societies are today seen more and more as dependent on overseas links, it is likely that whatever event was responsible for their disruption unbalanced the capability of the local politics to maintain the old *status quo*, resulting in the abandonment of old systems and the subsequent creation of new ones. But what of this is visible in the transition to the post-palatial periods?

¹²⁵ Middleton 2010: 52.

¹²⁶ Johnson 2009: 13

¹²⁷ Johnson 2009: 13, Cline 2014: 167, 168.

¹²⁸ Bell 2006: 2, 17; Dark 1998.

¹²⁹ Cline 2014: 167, 168.

¹³⁰ Cline 2014: 169.

¹³¹ Middleton 2010: 52.

Rutter felt that there were cultural continuities between palatial and post-palatial societies. These were visible in several spheres of the material culture, and suggested that the same was happening in the human relations and social customs.¹³² Eder stated that the elite lifestyle between 1200 and 700 BC did not have any setback, as visible in the themes painted on pottery.¹³³ In this respect Middleton has shown that pictorial pottery flourished in LH IIIC, postulating a market that could make use of it, a market fostered by people who shared similar tastes with the society which had produced them in the previous periods.¹³⁴ It is true that the most evident change occurred soon after the palatial systems seems to be the absence of the old rulers, the Wanaktes, and the appearance of the Homeric Basileis. The roles of both these figures are unclear, from the texts it appears that the Wanax was a military chief and a religious authority. His royalty seems undisputable, but the mechanics behind it are anything but clear to us. The same can be said of the Basileis who replaced them somewhere in the transitional periods. What should be rejected about the post-palatial period is not the absence of the palaces, the absence of state organisation.¹³⁵ A level of authority must indeed have been preserved.

For instance it can be read in Homer the word ἄναξ referred to basileis.¹³⁶ That ἄναξ is the linguistic evolution of a more archaic “Ἰάναξ” is shown by what linguists call the smooth breathing, a diacritical mark indicating the crasis of a voiceless glottal fricative from the beginning of a word.¹³⁷ So what was earlier written as Ἰάναξ sounded exactly like Wanax, and it can be easily concluded that this Homeric epithet for the Basileus had direct links with the palatial rulers to whom the new term was close in its practical function. Yet Yamagata’s warns that the Homeric “Anax” should be intended as a relationship rather than a social function, *i.e.* a sort of patriarch of a given population, a master of the house, almost a tutelary divinity.¹³⁸ Also the term “Quasireu”, often linked to the Homeric Basileus, has also been analysed by Palaima who states that it has no Indo-European origin,¹³⁹ and in fact it might have been adopted by the Achaean-Greeks from the pre-existent language of the land they seized.¹⁴⁰

¹³² Rutter 1992: 29-49.

¹³³ Eder 2006: 570-572.

¹³⁴ Middleton 2010: 92.

¹³⁵ Muhly 2003: 24.

¹³⁶ See Homer, *Iliad* I. 506, II. 77.

¹³⁷ See Sidney-Allen 1974; Sodano, Vanacore 1995: 46; Pieraccioni 1995.

¹³⁸ Yamagata 1997: 3-14.

¹³⁹ Palaima 1995: 125.

¹⁴⁰ Palaima 2006: 54.

Middleton admits that Homer had probably no familiarity with the Bronze Age kingship, and could not portray it; but he could well describe situations in which a group of powerful individual, who based their wealth and power on their lands and households, ruled through gift-giving and hospitality,¹⁴¹ alliances, diplomatic activities and a shared elite culture.¹⁴² Sherratt seems convinced that the world of the *Iliad* is describing the social dynamics of the EIA society in Greece.¹⁴³ This is a theory which has been recently endorsed by Eder.¹⁴⁴ He discussed the function of the Basileis, showing that they did not rule as kings, but were more preeminent personalities fundamental to preserve the normal activity of their *oikos*.¹⁴⁵ If the land and its activity were the core of the Homeric society it is useful to notice that it could be earned as a prize, therefore the more a given *Oikos* showed its valour at war, perhaps outdoing another household, the more chances it had to increase its land and therefore its wealth.¹⁴⁶ But it is also true that Telemachus is supposed to inherit the kingship of Ithaca from his father, so a right of birth on the land did exist.¹⁴⁷

That the *oikos*, as the fundamental social unit in historical times, could count as well as the fundamental unit of the post-palatial kingdoms is very likely, but Rystedt also transports their social value to the Bronze Age,¹⁴⁸ to which I have some reservations. It is quite hazardous to link Linear B evidence that Wanaktes had high-class subordinates for instance, and that chamber tombs were elite family burials, with the idea that there were Homeric-like *oikoi* in the palatial period. The post-palatial households had to operate without massive central powers and this must necessarily have implied a modification in the way they organised social life and developed throughout the period.

I tend to agree more with Maran when he describes the new layout of Tiryns during LH IIIC as a new asset, where courtyard houses represented family units on the verge of creating a household-based economies.¹⁴⁹ These units were clear economic evolutions, deriving from a system which had clearly failed and attempt to regain a subsistence for the local communities. In this tentative to grasp continuities and changes in the transition evidence may be given by the appearance of warrior tombs in the post-palatial periods. Several scholars have pointed out

¹⁴¹ Homer, *Odyssey* VII. 389.

¹⁴² Middleton 2010: 95.

¹⁴³ Sherratt 1990: 807-824.

¹⁴⁴ Eder 2006: 570-572.

¹⁴⁵ Middleton 2010: 95.

¹⁴⁶ Homer, *Odyssey* XXIV. 205-214.

¹⁴⁷ Homer, *Odyssey* I. 386.

¹⁴⁸ Rystedt 1999: 94.

¹⁴⁹ Maran 2006: 125.

that they increase more and more from the EIA onwards.¹⁵⁰ Mee has even attempted to build a bridge between post-palatial warrior graves and the Bronze Age idea of militarism.¹⁵¹ Middleton rightfully objects that most of these so-called warrior tombs appear during the Protogeometric and they are distributed in areas that were distant from the palatial influence.¹⁵² The three warrior burials identified at Perati have been interpreted as important clans in which at least one member had reached the warrior status.¹⁵³

The present conclusions about the complex state of affairs operating in post-palatial Greece from LH IIIC onwards can be well summarised by stating that it was a period in which a ruling class still existed, even though it is not clear how it earned its power, probably through a variety of different actions involving military value, personal charisma, diplomacy or in some cases (though not necessarily) heredity. If these mutated political and economic conditions took place, then some material changes must have followed.¹⁵⁴

Middleton also dealt with change and continuity during the transition in art after the end of palatial control. He did not focus on the funerary contexts but observed especially those elements of daily life which could be inferred from the observation of the settlements and in the iconography of the few LH IIIC vases with depictions. What the LH IIIC settlements showed was a well organised plan, though in a smaller size. This implies some social structure ruled by a class which if not grand in scale and prestige, preserved a ruling position and was likely to grant also protection to the other social classes. The same organisation is shown in the pictorial style pottery, displaying what Middleton considers as possible activities of the post-palatial societies: scenes of war, hunting, chariots and ships. None of these could have functioned without proper organisation, whether political or military.

If on the one hand there was continuity in the presence of a ruling elite, on the other hand there are also signs of change. The fact that settlements shrank in size and the absence of monumental architecture would point towards reduced complexity in social stratification, also resulting in less economic and occupational specialisation. Without evident signs of social differentiation he also implies that a single central authority was lacking. At the same time the absence of the artistic grandeur of the Mycenaean civilisation would also betray a lack of investment by the elite in artistic and literary achievements. Perhaps in consequence there were also reduced opportunities for trade and therefore a sharing of ideas and trends.

¹⁵⁰ Cavanagh, Mee 1998: 95; Dickinson 2006: 73; Deger-Jalkotzy 2006: 151-179.

¹⁵¹ Mee 2008: 335.

¹⁵² Middleton 2010: 102.

¹⁵³ Deger-Jalkotzy 2006: 156.

¹⁵⁴ Middleton 2010: 112.

Middleton finally concluded that after the failure of the palatial system there is an evident change in society, expressed by a lower level of complexity, but on the other hand he also accepted a significant level of continuity in preserving the military hierarchy and a well organised social structure. So he acknowledges the collapse of the palatial institutions, but not the collapse of the entire society, which continued to exist with no signs of abrupt or violent changes due to foreign intrusions.¹⁵⁵

If Middleton's is one of the most significant studies of the collapse in the last decade, and I can agree on his interpretation of settlements, texts, architectures and objects, with the social dynamics they express, I would not, however, share the same level of optimism as regards iconography, which remains obscure and unreliable. How do we know for instance that the ships and chariots painted on pottery represent contemporary society and not an idealized past? How do we know whether the soldiers in the warrior vase of Mycenae are local elites or armed foreigners? Can we interpret them as a visual rendering of their own period or just as an artistic vision independent from the reality of time? Many features depicted on the vases are unique, or similar but not identical to other instances.

As a result inferring too much about the society represented by these sketchy scenes can be misleading or make us overspeculate. That is why, keeping in mind Middleton's work as a useful and valuable basis, I will be attempting to leave what he explored and move towards a field on which he has not focused in so much detail. I will focus only on those data found in the closed contexts of tombs, detecting as far as possible what they convey about the social dynamics of the post-palatial and EIA periods in attempting to fill the gaps left open by current research.

4. Secret cocoons, choosing tombs as the main source of information.

If current research is analyzing the changes occurred in the post-palatial society to admit and show signs of continuity, my personal contribution intends to reverse the picture. In fact I studied the material culture of the transitional period looking at first for elements of continuity and then started to admit some gradual elements of change. As aforementioned I want immediately put forward that my research focused essentially on burials and not on other sources, though available. This is because in the unclear setting under review my attention wanted to linger on close contexts, with minor or no intrusions at all from the external environment. A sort of snapshot of the time, where fashion, habits and beliefs of the LB and

¹⁵⁵ Middleton 2010: 112-115.

EIA Greeks could be observed in a protected cocoon. The same could not be done with other contexts such as settlements or cultic centres.

Settlements are in fact open contexts, exposed to casual changes and dynamics not always easy to detect. They could be inhabited by locals, visitors, travellers, foreigners who lived there for a short period and then left, foreigners who interbred with the locals and then stayed, and so on. Each one of these possibilities could have left traces which complicate the main picture, since it is unlikely for archaeology to identify their ultimate origin and the confusion that may result may provide misleading information if taken into account for a fluid transition as the one I wanted to research. Cultic centres and their activities, either continuous or discontinuous, can be easily expected to be another source of information as regards the transitional phase in question, but they also bring forth the same general issues presented for the settlements. Very often a cultic space goes on from prehistory to historical periods because by nature it is tied to characteristics of the natural environment which create a link between the physical and the metaphysical. As a general assumption, hypogean spaces are connected with the spirits of the underworld and high peaks with the gods of heaven.

With time these places can maintain their original conjunction with the sacred, but then again they are open contexts: elements, ideas, rites and beliefs of a later stage may end up being totally unrelated with those of earlier ones and at the same time objects there dedicated can mean different things in different periods. Deities themselves can syncretise with others and acquire new connotations, and so different dedications, as time goes by. More importantly, as ancient civilisations were mostly polytheistic, each god in their systems ruled over physical and metaphysical elements of life. These gods could be recognised, if with different names, by all sort of travellers in the Mediterranean basin and even further. This implies that within a cultic centre we may be looking at offerings totally unrelated with the local situation, left there by travellers, mercenaries or even fugitives who wanted to propitiate a god in whom they saw their own, eventually leaving and ending their journey somewhere else.

If the danger in interpreting the data of a continuative centre is undeniable, whenever the original sacred meaning is artificially recreated with the construction of a building made on purpose the situation is even worse. Cultic centres like these can easily be destroyed and remade, but also reused with no substantial restorations if nothing better is available, or even abandoned. Without necessarily signifying that there was a shift in belief, since their sacred value was not related to a spatial place, but to a set of symbols placed in their interior. These symbols could be moved to somewhere else easily, regenerating a cultic place detached from

the previous location. So cultic centres, in a society such as the transitional Greek one can again be problematic.

My aim is to intercept “Zeno’s arrow” in its course, by looking at the still instants that compose its proceeding forward. This is something that only the protected (when not looted) contexts of the burials can do. Of course human society is a complex phenomenon, there will be instances in which the funerary and the living spaces will mingle together and therefore some aspects of the research will necessarily call for corollary observations of elements present even in settlements and cultic centres (Mycenae will be a good instance, given the complexity of its state after the cessation of the palatial power). Yet this will not change the fact that my focus will be on funerary context and there should be no expectations of a full study on other circumstances.

By stating now that the funerary context will be our main reference, another source will have to be left aside: evidence of literacy. If the Mycenaean writing system, conventionally known as Linear B, and its disappearance in that form may certainly represent an interesting investigation in terms of continuity and change, it never appears in any form within the burials, and therefore it will be exceeding the limits of my research.

5. Archaeological theories and the search for a compromise.

Several archaeological theories have been proposed to interpret the past. Anthropology, palethnology and sociology often flanked the archaeological analysis of the material evidence. These range from processualist and post-processualist theories, in which the archaeological data could respectively be either scientifically objective¹⁵⁶ or idealistically subjective,¹⁵⁷ studies have become somehow more flexible. From structuralist theories where human societies were seen as living in accordance with invisible societal structures unconsciously created,¹⁵⁸ to human agency theories which saw human beings as free to explicate their existences in accordance with their own interests.¹⁵⁹

Admitting a major individual autonomy and fortuity of actions forced anthropology and archaeology to avoid generalisation and to develop systems more focused on particular situations. According to Mediterranean studies, concepts as Connectivity and World Systems seemed adequate. The first saw the Mediterranean as responsible of ideological contacts and

¹⁵⁶ Willey, Phillips 1958: 2.

¹⁵⁷ Johnson 1999: 98-99.

¹⁵⁸ Lévi-Strauss 1958.

¹⁵⁹ Mayr 2011.

exchange, creating a network difficult to interpret otherwise.¹⁶⁰ The second acknowledges core centres (a concept which can be expanded from cities to nations) inevitably creating expanding cultural ripples eventually reflecting on far areas which become their peripheries.¹⁶¹

In a study like mine, which intends to observe changes and continuities in burial contexts I had to find a compromise. It is true that the processualist method cannot be used here, burial rites appear already consumed and are hard to reconstruct; we can observe their result, the burial practice in its ultimate form, but the stages through which it has passed are invisible and what experimental archaeology can re-enact is poor and involves too limited knowledge to be accurate. Very little of the period under my review can (if ever possible) be considered absolutely objective. But then again, to a certain degree I need to consider the grave goods if not as a reflection of the dead, at least as the reflection of the living who interred them. This can be intended as more post-processualist since it involves the ideological side of the actions producing the grave goods, and necessarily leaves room for subjectivity and speculation. But in the transitional Greek societies also mind structures can be identified, intrinsic of both rituals and objects meant to construct rather than just express their identity.

Nevertheless, also the world system theory would perfectly apply to my investigation, since it is very likely that the collapse was caused exactly by shifts of core areas and the relative modification of the peripheries intended as spheres of influence. In my opinion we should not be seeking a theory which perfectly fits complex societies, for every society is in itself analogous and yet different from the others, providing objective data and subjectively interpretable elements. It will have examples of structural mind and also of individual freedom. Especially Greece in the transitional aftermath of the collapsed system finds itself fragmented, unstable and in pressing necessity to reorganise its resources. The fluctuation of mindsets, habits, fashion and rituals involved must have been all but fixed. Therefore, what we should do at present is not crystallise ourselves on theories but pay more attention to observation and collection of solid data which, once tabulated, will provide more evidence to theorise upon.

¹⁶⁰ Horden, Purcell 2000.

¹⁶¹ Wallerstein 2004.

6. Simple but not easy: a different approach.

As aforementioned, the collected data will have a considerable degree of objectivity, but also subjective interpretations will be unavoidably exposed. Whenever unable to describe complex rituals and specific elements of daily life, we shall try to reverse the approach used in the past and therefore focus especially on the general features. By 'general' I mean that we should not transform the material culture in a typological jungle from which it is too hard to disentangle when cohesive conclusions are needed. An essential typology will still be used, of course, but not exasperatingly. First of all we are looking for continuity between LBA and EIA, and only then for change. To do so I will initially remain tied to the material classes, the way they appear, their functions, that is their 'macro-features', which ultimately can be observed in conjunction with earlier and later examples. It is already clear that by observing them chronologically I will not pay particular attention to what we could call 'micro-features'.

For instance I would not judge as different such swords that present the same general features, but are rendered with different details. In fact we can observe in the Naue II sword-type a series of different regional features which can all be yet reconnected to the same general and foreign idea, i.e. their being cut-and-thrust blades and having an hilt-flanged aspect. Their function and aspect represent to me their macro-features and will be the only characteristics considered. Using these macro-features (namely general shapes and basic functions) to identify the popularity of objects throughout the transitional period will enable me to trace an uninterrupted thread line from the end of the palaces to the end of final PG, after which the same objects continue their evolution far over the boundaries of this study. In my tabulation, therefore, stirrup jars in LH IIIC Early will be considered as culturally related to stirrup jars in SM and, if applicable, to even later. Similarly, bronze Naue II swords appearing in LH IIIC Late will be considered as culturally related to bronze Naue II found in PG, and even to their iron versions.

With this approach I do not mean to ignore the innumerable social dynamics playing their role in creating micro-features and their subsequent evolutions. What I want to imply is that a research of micro-features can happen only when macro-features have been solidly identified and tabulated and this has not properly done before. Once the chronological continuity from which gradual changes may stem is solidly set, future archaeological research will be able to assess also the micro-features. This does not mean that once the archaeological data will be organised and tabulated, there will not be space for speculations and some pressing micro-features, especially concerning decorations and their symbolic meaning.

Simply the main focus of this work will be on macro-features of similar objects which, once clustered together, express specific popularity and use within a single culture, revealing a certain degree of continuity.

7. Geographical boundaries and case studies.

It will soon be noticed that the geographic scope of my study does not include the totality of the Aegean as the title seems to imply. The fact that the post-palatial Aegean in its wholeness was all but an heterogeneous place is not a new concept. Its actual composition of regional contexts, all of which similar but different at the same time, would have required a study exceeding the proposition of this one. My plan, instead, is meant to be thorough without losing the overview of the transitional period by means of few selected locations, chosen because of special features that make them of outstanding interest for a work like this. The locations here used as case studies will be Mycenae, Perati, Salamis, Athens, Lefkandi, Naxos and Knossos.

Mycenae is almost mandatory to observe, since it was the principal venue of the Greek palatial system. Its condition after the collapse, the way the population reacted to the absence of authority, its continuation into the later periods and how it relates itself to the neighbouring areas are all aspects which demand scrutiny. Perati is another location which presents interesting features, since it thrived while the former palatial centres shrank and allegedly faced economical distress. While preserving Mycenaean traditions in its grave goods, the variety and sophistication of the offerings knew no impoverishment. There is also evidence of active trade with Egypt and the Near East in a moment when seaborne exchanges of goods were supposed to be disrupted.

Salamis is important because it was in its cemetery, rich in tombs but poor in content, that a pottery style different from the Mycenaean one and closer to the PG was identified and named "Sub-Mycenaean". Salamis deserved therefore my full attention since Sub-Mycenaean (as it will happen with the PG) will be regarded as a full chronological period. Athens and its cemeteries represent a privileged place to observe the clear attempt of a former Mycenaean centre to innovate several aspects of its material culture during the Early Iron Age. The apparent economical reprise and the inspiration of new artistic trends throughout the Aegean clearly give to Athens an outstanding importance and the necessity of a detailed study.

Lefkandi is well known for its Iron Age Heroon and the enigmatic features this building presents in terms of both social organisation and prosperity. Its main cemeteries are also a

good comparison with Athens, from which they seem to adopt several elements of fashion; a study of this site was therefore relevant.

Naxos and its main funerary contexts have been chosen as well to observe the situation in the Cyclades at the time of the transition to the EIA. As one of the main islands and location of some of the richest chamber tombs of the LH IIIC, Naxos offers important insights on the social dynamics ongoing in the Cyclades at the end of the Bronze Age.

Knossos was a hard choice in the wide and abundant presence of PG contexts which could have been chosen. Yet Knossos was the only centre on Crete to host a monopalatial institution in LM II under a very strong Mycenaean influence and therefore the last of the Cretan centres to have abandoned the palatial system. This fact motivated my choice of it as a case study, since the situation occurring in the mainland was likely to have occurred more evidently also in areas where the Mycenaean influence lasted longer in palatial form.

These case studies, covering most of the main areas of Greece can present a concise, and yet representative view of the Aegean conditions. Whenever comparisons and relevant instances oblige me to refer to further regional contexts, I have preferred to do so by including only the relevant features rather than presenting again the whole regional picture. My research will start therefore with a discussion on continuity and change of burials, initially taking into account their architecture and customs (Chapter III) and moving later to the material classes offered within. Working with burials obviously implies that the material classes under scrutiny were invested by local societies with connotative social values. Through them a sketch of daily life can possibly be drawn. The material evidence found in the cemeteries can be summarized into two main classes: Pottery (Chapter IV) and Metalwork (Chapter V).

8. Chronological boundaries of the research.

The chronological boundaries of this research will go from the post-palatial period, conventionally named LH IIIC, to the end of the PG. In order to make it easier for the reader to follow the chronology, the table below provides the main phases and relative dates:

Conventional Periods	Approximate Dates
LH IIIC (Early)	1200–1130 BC
LH IIIC (Middle)	1130–1090 BC
LHIIIC (Late)	1090–1050 BC
Sub-Mycenaean (SM)	1050 – 1000 BC
Sub-Minoan (SMin)	1050 – 950 BC
Proto-Geometric (PG)	1000 – 900 BC

This timeframe will occasionally need to be moved to earlier dates, at least to LH IIIB2 (1230 – 1200 BC) and later, to the Early Geometric period (900 – 850 BC). However, any observation on the material exceeding the chronological setting presented above will not be included in my final analysis, nor tabulated.

My methodology is based essentially on artefactual observation, both from published catalogues and from autoptic analysis undertaken in the most relevant Greek museums. These data have been then tabulated and analysed quantitatively in graphic form, also providing for the first time a clear visual presentation of both synchronic and diachronic modifications. The quantitative and visual analyses have been also flanked by tables and pictures showing a comparative study of styles and symbols.

9. What the dead have to say - the outcome of the research.

The outcome of my study produced solid evidence showing once and for all that the continuity of the Mycenaean culture in the subsequent periods is stronger than change. The material culture remained the same soon after the fall of the palace and only a few aspects gradually changed together with fashion and social values. Only a few metal objects were introduced from a northern link probably originating in central Europe and connected to the Balkans via the Danube.

Nevertheless, the European objects (Naue II swords, fibulae) are not obviously following any catastrophic event, nor were they brought by foreign invaders, but they rather reached Greece through new routes of trade. Through such an exchange also new social ideas might have arrived and should not be underestimated. A new eschatology might have peacefully rooted into the Greek civilisation, mixing with the local one. This is expressed by the return to single tombs, a major adoption of cremation rites and new bell-shaped clay figurines so far unique in the Greek Iron Age. All these elements together account for a continuation of Mycenaean culture and a natural evolution into a Proto-Greek world which did not suffer neither invasions nor total obliteration.

Chapter II

The kingdom of Ahhijawa in the Late Bronze Age

1. The ‘Mycenaean’ expansion and the Hittites.

Before developing any discourse on the artefacts in the grave contexts, it is opportune to present my point of view about the textual evidence mentioning the kingdom of Ahhijawa and its relationship with the Anatolian coast and the Hittites. In fact, if graves can give an idea about the social modifications in action in the funerary architecture, rites and grave goods, they are still unable to record any exact moment or particular reason which caused the palatial system to fall. If we had to discuss whether or not “the Dorians” or, broadly speaking, an external intrusion from the North truly brought about the end of the palatial civilisation we can now answer that in a way it did, but not in the form of the armed invasion described in the past studies.¹⁶² Skeat’s reconstruction is obviously out of date. Yet he conveyed some valid ideas of how different peoples and cultures could move around and resettle in different areas, reshaping local cultures in a relatively limited time.

It could be admitted that, despite the various Mediterranean climatic regimes and the resultant microclimatic niches, the overall agricultural production was never sufficient there to enable any population to thrive, *i.e.* without the benefits of a well-established trade network which supplied unavailable goods and exploited its own surplus.¹⁶³ It is clear that in these conditions the ideal locations to exploit in the ancient Mediterranean were those geographically at the centre of advantageous trade routes. Moreover, the grandeur shown in many of these trading sites implied a military strength to defend their activity. It seems that thriving civilisations had also to become military powers, especially in the age of the metals when raw materials were seldom available in large quantity everywhere and the need for trade became pressing.

The advantage of well established trade routes became soon a necessity for the Indo-European populations who, occupying the Greek peninsula, were inspired by the power and wealth of the Minoan civilisation, the secret of which lay in a widespread net of seaborne commerce. The subsequent fusion of the Mycenaean warrior culture with the Minoan trading skills enabled the Mycenaean states to grow into the palatial society of the LBA. From what we know and have seen in the luxuries and exotica present in the Mycenaean family tombs of LH IIIA and IIIB, we can imagine how the ancient Near East represented an essential source for a wide range of products. Merchants crossed the Eastern Mediterranean regularly to trade

¹⁶² Skeat *et al.*, see the introductory chapter.

¹⁶³ Sherratt 2001: 226, 227.

the products of the Greek mainland and Minoan Crete to the Levantine ports and *vice versa*, communicating ideas and exchanging goods with lands as far away as Mesopotamia and Egypt.¹⁶⁴ Anatolia was an important bridge between the Aegean and the Near East and this had already been spotted by the Minoans, with the foundation of a colony which the Hittites named Milawata/Millawanda, identified with classical Miletus.¹⁶⁵ Mee pointed out how a century later the Mycenaeans had followed the Minoan lead and extended their influence onto the Anatolian coast, founding a series of colonies later known as Halicarnassos, Iasos, Ephesos, Klazomenai, Smyrna and Larissa.¹⁶⁶

This move towards Anatolia could have not been ignored by local powers. In this period the Hittite empire was already controlling eastern Anatolia and part of Syria, expanding more and more westwards and aiming to control the western coast to gain control over the Aegean trading routes.¹⁶⁷ The Ionian coast of Anatolia had already been claimed at the end of the 15th century as part of the Hittite empire, and yet we know that from 1400 BC onward Milawata is under Mycenaean control.¹⁶⁸ This desire for the same land, fostered by the same basic reasons, to control routes into and out of the Near East and improve self-sufficiency in trade cannot have happened without military clashes. Hittites and Mycenaeans must have fought each other several times and some important documents do exist, if of course we take for granted that the Hittite *Ahhijawa* and the Homeric *Achaioi* were one and the same.¹⁶⁹

There is still a certain degree of skepticism about the equivalence between the kingdom of *Ahhijawa* and the kingdoms of the Homeric Achaeans and therefore the Mycenaean palatial states. Sherratt has recently argued that the linguistic analogy between the names cannot be taken as evidence, and the two realities might not represent the same entity.¹⁷⁰ This is especially because no *Ahhijawan* leaders comparable with Homeric characters are ever mentioned. Moreover Linear B lists betray a serious lack of specialised scribes, capable of writing in foreign languages and redact a correspondence with international realities. Last but not least, the commercial routes evidenced by the Mycenaean texts seem to mention recurrently Crete and Rhodes as the furthest places reached by their products, acting as mediators between the palaces and the Eastern markets and the Anatolian coast.¹⁷¹

¹⁶⁴ Bryce 2003: 190.

¹⁶⁵ Niemeier 1998: 27-29.

¹⁶⁶ Mee 1978: 121-156; Mountjoy 1999(A): 253 -295.

¹⁶⁷ Bryce 1998: 392-407.

¹⁶⁸ Niemeier 1998: 34-40.

¹⁶⁹ Forrer 1924: 1-22. Hawkins 1998: 7-14.

¹⁷⁰ Sherratt 2001: 224, 225.

¹⁷¹ Sherratt 2001: 225.

Though apparently good points, it must be said that basing one's evidence on Homeric names, on the probability (never demonstrable) that two regional names are not referring to the same state, the limited information provided by Linear B (which is all but narrative) can hardly represent strong arguments in comparison with the numerous 'coincidences' found in the close analysis of the Near-Eastern texts, especially Hittites. According to Kelder these texts are particularly important since they are exclusively meant to convey diplomatic messages from a ruler to another and did not involve propaganda or epic narrative, exposing then a series of reliable accounts of those events.¹⁷²

The period of time covered by the Hittite correspondence mentioning the kingdom of Ahhijawa (reaching at present about twenty-six texts)¹⁷³ covers a time span of roughly two hundred years, from 1400 to 1220 BC, a perfectly fitting period for the assumed Mycenaean palaces activity in the Mediterranean.¹⁷⁴ Before 1400 BC the Hittites seem to be engaging in diplomatic operations with the independent kingdom of Aššuwa which appeared to be leading a league of cities and was the most prominent site in the Anatolian coast,¹⁷⁵ comparable to what in the Egyptian sources appears as Isy,¹⁷⁶ and in the Aegean ones with the Minoan Asuja and the Mycenaean Asiwija.¹⁷⁷ Cline recalled that when around 1400 BC Aššuwa was neutralised by Khatti, the victory celebrations had included the dedication of a Mycenising sword to the sanctuary of the God of Storm at Hattuša, wondering whether among the warriors fighting within the Aššuwian league could be assumed also an Ahhijawan participation.¹⁷⁸

Kelder's reconstruction explains that after settling the western Area with the eventual submission of Aššuwa, a new threat from Mitanni forced Khatti to move its troops to the East, where they engaged in military operations for about fifty years.¹⁷⁹ During this period a new kingdom is mentioned by the Hittites in the area previously occupied by Aššuwa: the kingdom of Arzawa, with which Khatti was in constant contact,¹⁸⁰ suggesting the vassalage of this new kingdom towards them. This name occurred in the Amarna letters in a direct

¹⁷² Kelder 2012: 43.

¹⁷³ Heinhold-Krahmer 2003: 204.

¹⁷⁴ Kelder 2010: 21.

¹⁷⁵ KUB XXIII.11; KUB XXVI.91; KUB XL.62; KUB XIII.9; KUB XXXIV.43.

¹⁷⁶ Kelder 2010: 21.

¹⁷⁷ Chadwick 1986: 80; Cline 1997: 191.

¹⁷⁸ Cline 1998: 137-151.

¹⁷⁹ Kelder 2010: 21.

¹⁸⁰ As read in the "Annals of Muršili II", Heinhold-Krahmer 1977: 84-88.

communication with the Pharaoh, as if its importance in the Anatolian coast was already as great as the past kingdom.¹⁸¹

More importantly, during the same Amarna kingdom, Egypt seems to be reached by messengers from across the “Great Green”¹⁸² who gifted the Pharaoh with metal vases of copper and silver described as “Keftiu” style, (the Egyptian name for Crete).¹⁸³ These messengers came from the kingdom of *Tnj* (Tanaju), the name of which appears incised on the statue of Amenhotep III, and known as the Kom-el-Hetan text. The latter exposes a list of regions and sites of the known world touched by the activity of the mighty Pharaoh. Apart from the known kingdoms of the Near-East, presented from south to north with acceptable precision, is mentioned also a previously unknown area beyond Keftiu (Crete), named indeed Tanaju, presumably Greece, or, as the name suggests, the Homeric Danaia, in which two sites are spelled as *Mkin* and *Npry* (Mycenae and Nauplion?).¹⁸⁴ This textual evidence is also supported by Mycenaean materials in Egypt during the 18th and 19th dynasties. According to Hankey this might justify the Egyptian artefacts found in Mycenae as the result of gift exchanges during the Amarna period, and Nauplion was mentioned because it was the harbour that the Egyptian ambassadors would have used to enter the kingdom.¹⁸⁵ Apparently during the 19th dynasty the Mycenaean artefacts entered Egypt regularly and the bulk of it has been chemically analysed and associated with the Argolid.¹⁸⁶ Also papyri showing Mycenaean-like helmets on foreign warriors support this evidence.¹⁸⁷ Hepper identified the reason why Egypt imported Greek pottery with the fact they contained olive oil. The most popular shapes imported are indeed stirrup jars.¹⁸⁸ If Tanaju was Mycenaean Greece it can be implied that it was interested in approaching the Egyptian court during the 18th dynasty. Was it mere diplomacy or there was more behind it?

It is around 1400 BC that a Hittite letter mentions for the first time the name of Ahhijawa,¹⁸⁹ a far-off kingdom beyond the sea which since 1450 BC had set foot on

¹⁸¹ EA 31, EA 32; Moran 1987: 192-195.

¹⁸² Nicholson, Shaw 1995; Kelder 2010: 37 among others think that the ‘Great Green’ can be interpreted as the Mediterranean Sea, but Duhoux 2003 expressed skepticism about it.

¹⁸³ Haider 1988: 10. Latacz 2001: 164.

¹⁸⁴ Apart from Edel 1975: 63 who placed Tanaju in Syria/Cilicia, the mainstream view recognises it as Mycenaean Greece, especially after the mention in the Kom el-Hetan text (PWN I-V). See Kelder 2010: 36-39, Cline 2011: 7.

¹⁸⁵ Hankey 1981: 38-49.

¹⁸⁶ Podzuweit 1994: 157; Kelder 2010: 78.

¹⁸⁷ Schofield, Parkinson 1994: 157-170, 1995: 125.

¹⁸⁸ Hepper 1990: 16

¹⁸⁹ KUB XIV.1. named “The Mischief of Madduwatta”.

Anatolia.¹⁹⁰ This particular letter narrates that Madduwatta, an Arzawan authority, perhaps a prince, was chased by a man from ‘Ahhija’, one Attariššija, who after being offended by him forced the Arzawan to flee for his life seeking the protection of Khatti. We do not know what Madduwatta did to Attariššija to deserve such a violent response, but it seems to be a personal matter, not involving further reprimands towards the kingdom of Arzawa, which on the contrary is suggested by Hawkins to be in this period the only medium between the kingdom of Ahhijawa across the sea (as mentioned in another coeval text) and the Anatolian inland,¹⁹¹ while the Aegean colony of Milawata seems still independent. Kelder reminds that a pot sherd from Hattuša shows a warrior wearing a Mycenaean helmet.¹⁹²

The close relationship with Arzawa is also witnessed by the Hittite texts written in ca. 1315 BC, when they secured their eastern boundaries by pushing back the Mitanni expansion and returning to project themselves towards the Anatolian coast. Here they found Arzawa rebelling against their subordinates with the support of Ahhijawa, of which thing king Muršili complains in his letters.¹⁹³ On a coeval papyrus found in Amarna, warriors with boar’s tusk helmets seem to be rescuing fallen Egyptians in some contemporary fight. Cline proposed that Egyptian iconography might be showing that Ahhijawans and Egyptians were indeed allies, and this would explain the interest of Tanaju/Ahhijawa to establish diplomatic ties with Egypt earlier on in order to weaken and possibly defeat the Hittites.¹⁹⁴ Around 1300 BC the Hittites are alarmed by Ahhijawa military operations in the Eastern Aegean, where they seized most of the islands.¹⁹⁵ Moreover their expansion continued on Anatolian soil, with the occupation of the coastal site of Milawata, which the Hittites attacked under king Muwatalli in response to the Ahhijawan support to Arzawa.¹⁹⁶

Further developments are described in another letter usually called the “Tawagalawa Letter”.¹⁹⁷ This informs us about king Hatthushili III’s (1267 – 1237 BC) request to an unknown king of *Ahhijawa*, addressing him as if he were his equal, and complaining about Milawata’s connivance in protecting a rebellious Hittite vassal named Piyamaradu. This character was the brother in law of one Atpa, the appointed governor of Milawata and appears to work for the Ahhijawan lord. He was a recruiter (slave merchant?) of Anatolian labour

¹⁹⁰ Niemeier 2002: 295.

¹⁹¹ KBo III.4; Hawkins 1998: 30

¹⁹² Kelder 2010: 40.

¹⁹³ Kelder 2010: 33.

¹⁹⁴ Cline 1998: 250.

¹⁹⁵ KUB XXVI. 91.

¹⁹⁶ KUB XIV. 15.

¹⁹⁷ Tawagalawa Letter: C.H.T. no. 181. Translated and published by Bryce 2003: 195.

force necessary to the Ahhijawans for some big enterprise they had started, which Bryce reasonably suggests could have been the new fortifications of Mycenae.¹⁹⁸ Initially the king of *Ahhijawa* orders Atpa to yield up Piyamaradu to the Hittites, but when Hattušili sent his own son to Milawata to collect him, he was no longer there, but had escaped by sea to somewhere unknown (under Mycenaean control?).¹⁹⁹

This can only underline how the relationship between the Mycenaeans and the Hittites was never smooth and that each of the two kingdoms worked according to its own agenda. As read in this text, during the kingdom of Hattušili III, Milawata was back in Ahhijawan hands after Muwatalli's latest offensive previously occurred. Therefore, between 1300 and 1250 BC the Hittites lost Milawata and the surrounding area because of some event of which we do not have any clear record. Kelder proposes the succession between Muwatalli and Hattušili, so the decade between ca. 1275 and 1265 BC in which the kingship of Khatti was held by Urkhi-Teshub.²⁰⁰

However plausible, Kelder's argument does not give importance to the fact that in 1275 something significant had drawn the Hittite energies to the south, the battle of Qadesh. This conflict between the Egyptians, led by Ramses II, and the Hittites of Muwatalli over the control of Syrian land, employed such a great number of men and chariots that was remembered as one of the greatest military events of the period.²⁰¹ The total commitment of the Hittites in this war seems to disregard Ahhijawa as if it were not a kingdom worthy of preoccupation, not equaling the contemporary Eastern superpowers. Moreover the Hittite king, Muwatalli, died soon after the battle, leaving a dangerous vacancy which brought to a succession fight and contributed to weaken the kingdom.

Ahhijawa had already given proof of its diplomatic abilities in the past, perhaps even playing a role in the Aššuwa league, supporting Arzawa and exchanging gifts with the pharaohs, all moves that suggest a clear intention to weaken Khatti and guarantee themselves an expansion towards the East. As aforementioned, both textual and archaeological evidence show that contacts between Egypt and Tanaju had rapidly escalated during the 14th and 13th century and that Mycenaean-like warriors appeared fighting in the Egyptian armies. I do acknowledge Cline's idea and I would like to push it further. The Ahhijawan caused the rebellion in the West so that the Hittites could fight over that front and employ there their resources. Once the Hittites thought to be victorious, the Egyptians, with which the

¹⁹⁸ Bryce 2003: 194.

¹⁹⁹ Bryce 2003: 195.

²⁰⁰ Kelder 2010: 27.

²⁰¹ Kuentz 1928-1934; Bresciani 1969: 274-285.

Tanajans/Ahhijawans were in contact, felt they could restart their expansion towards Syria bringing a far greater war on that front, with the probable aid of Ahhijawan troops as well, perhaps not only mercenaries, but proper allies. From this period some bone plaques like those found in the Greek tombs and referring to boar's tusk helmets were found in the ruins of Pi-Ramses,²⁰² and were roughly coeval to the Battle of Qadesh. Moreover the portrait of the Queen Nefertari, Ramses II's wife, is depicted in her tomb as wearing Mycenaean earrings.²⁰³ When the Hittites were weakened on both fronts, the Ahhijawans had the opportunity to take Milawata back and probably expand on the Anatolian coast, given that after Muwatalli the Hittites seem to recognise its presence among the great kingdoms of their time.

From the same letter, we are informed about a matter of outstanding importance for the two factions. Hattušili suggests to the king of Ahhijawa what to say to Piyamaradu in order to have a ready excuse to break the relationship with him; this important reason reads as follows: “[...] About that matter of Wilusa, over which we went to war, he [the Hittite king] has converted me and we have made friends; [...] another war would not be right for us.”²⁰⁴ Now, if Wilusa actually were the Homeric *Iliion*,²⁰⁵ as both the geographic position (facing the strait of the Dardanelles) and the assonance of the names indicated by ancient texts and modern studies together would suggest,²⁰⁶ this would foster the inference that Troy, of which the pottery of stratum VI contemporary to the date agreed upon for the Homeric war, was chronologically set around 1270 BC,²⁰⁷ short before the event of Piyamaradu described in the letter, and that its history was actually part of the Mycenaean one. The letter would suggest that the kingdom of Wilusa was controlled by the Hittites, to whom it was in vassalage. Its strategic importance for the traffic towards the Black Sea was probably the cause of its continuous aggressions, and the reason for which Hattušili reminded the Ahhijawans that it was time to end the conflict over the city in a peaceful way.

The fact that Atpa, an Ahhijawan governor of Milawata was related to Piyamaradu implies that family bonds were established by the Ahhijawans to reinforce the local support. Moreover, thanks to the “Manapa-Tarhunda” letter, we find out that Piyamaradu was more than just a rebellious vassal under the protection of Ahhijawa. He was at their service, seizing for them the island of Lazpa (Lesbos) and once again Wilusa, defeating both the city armies

²⁰² Pusch 1985: 254ff.

²⁰³ Kohel 1999: 424.

²⁰⁴ C.H.T. 181, Bryce 2003: 195.

²⁰⁵ Güterbock 1984: 94.

²⁰⁶ The “Manapa-Tarhunda” letter *KUB XIX 5*, and the “Augmented Letter” *KBO XIX 79*, translated in Houwink Ten Cate 1983: 64.

²⁰⁷ Mee 1978: 146; Mee 1984: 114-22; Mellink 1984: 94. Bryce 1998: 392-407, Mountjoy 1999(A): 253 -295.

and the backup offered by nearby vassal Manapa-Tarhunda, governor of the Seha River region.²⁰⁸ As reported by Latacz, a later text informs that another Hittite vassal, Kupanta-Kurunta, king of Mira, won back the lands of the Seha and Wilusa, in which another Hittite vassal was appointed, one Alaksandu.²⁰⁹

The account of the Trojan war recorded by epic is still matter of debate. In the past the extensive ethnographic information provided by Homer was seen as hardly dismissible.²¹⁰ Even Sherratt, despite her recent skepticism about the association Ahhijawa/Achaeans, had recognised in the Epic poems a very old narrative, started in the palatial period and integrated with new material until the Geometric period, being used especially during the post-palatial centuries as a way to reassert the glory of the Mycenaean ancestors.²¹¹ Dickinson has lately suggested that the Homeric tradition about the Trojan war in relation with the facts concerning Wilusa should instead be rejected, since the Hittite texts make clear that Ahhijawa was fighting a cold war against the Hittites, made of diplomatic missions and fostering rebellions, while nothing about open conflicts is implied. The texts would not mention any long war, nor sieges or characters with names quoted in the Homeric poems. Moreover, Dickinson points out that there is no later memory in Greece about Miletus being Mycenaean, or about the Hittites and what they narrate in their correspondence.²¹² However, this view did not remain unquestioned. Monroe believes indeed that the setting of the Homeric poems is plausibly that of the LBA and, regardless of their several inconsistencies, their core refers to institutions and archaeologically attested events.²¹³

I think Monroe's inference is reasonably constructed. However, we should not fall like Dickinson into the trap of tautology by stating that Homer does not reflect Mycenaean Greece "to any real extent", yet refusing the association Ahhijawa/Mycenae on the base of Homeric inconsistencies.²¹⁴ I do agree that the rhapsodies composing and transmitting the epic poems cannot be a hundred-per-cent reliable. They certainly created and re-adapted themes and events of a distant past, imbue of mythological and fictional nuances to entertain a specific audience. Nevertheless, I also believe that these oral accounts should be respected as genuine attempts to celebrate the glory of the past, and even with understandable confusions and inconsistencies, their main view of Mycenaean Greece should be taken into account. We

²⁰⁸ KUB XIX. 5.

²⁰⁹ KUB XIX. 55. Latacz 2001: 170.

²¹⁰ E.g. Finley 1951: 10.

²¹¹ Sherratt 1990: 815.

²¹² Dickinson 2009: 283, 284.

²¹³ Monroe 2009: 30.

²¹⁴ Dickinson 2009: 276, 284.

cannot demand that the kings of Troy in Homer had the same names of the governors mentioned by the Hittites, since almost four centuries had passed. And yet, the last king appointed to Wilusa by Tudkhaliya IV was named Alaksandu, of which the linguistic resemblance with Alexandros (another name for Paris in the *Iliad*) is striking, despite Dickinson's pretext that such an association should not be made because in the *Iliad* Paris is not the king of Troy.²¹⁵ Herodotus even reminds us that Miletus considered itself as having the purest and oldest blood of all Greece,²¹⁶ a sign that something of the distant past was remembered after all. Last but not least, the Tawagalawa letter says that over Wilusa Hittites and Ahhijawans had already fought, so open conflicts were also happening.

If Wilusa was Troy, the Tawagalawa letter clearly shows that the Mycenaeans (or, as Homer reminds us, a federation of different Mycenaean centres) and the Hittite kingdoms were rivals in controlling western Anatolia and that more than once the *casus belli* had been the strategic outpost of Wilusa. They had had at least one big recent conflict over it and the Hittites were not willing to fight again, probably exhausted by the effort and the losses. On the other hand, the behaviour of the kingdom of Ahhijawa (that we will associate with Mycenae as a leading centre) casts light on a series of points:

- a) The Mycenaean alliance with Piyamaradu implies their determination not to renounce Wilusa.
- b) Mycenae was now building its new cyclopean fortification, implying that it felt insecure and it expected either threats or new attacks.

We do not know for certain what happened next. We have to wait until the successive reign of Thudaliya IV (1237 – 1209 BC) to see the Hittite reaction. In this period another Hittite document, the Milawata Letter, shows that Wilusa had been attacked again, almost certainly by Ahhijawa. The king of Wilusa, one Walmu, a protégé of the Hittite lord, was forced to flee for his life.²¹⁷ Whether the inhabitants and the resources of Wilusa were plundered to Ahhijawan benefit can only be speculated. The Milawata Letter expresses Thudaliya's reaction, recalling a Hittite attack to Milawata and a final redefinition of the Hittite boundaries in that region. Moreover, the letter tells, in the words of Thudaliya to his son: "Send Walmu to me, and I will install him as king again in Wilusa. And just as previously he was the king of Wilusa, now let him be so again!"²¹⁸

²¹⁵ Dickinson 2009: 284.

²¹⁶ Herodotus I. 146; IX. 97.

²¹⁷ Bryce 2005: 306, 307.

²¹⁸ Milawata Letter: KUB XIX 55 and KUB XLVIII 90, see Beckman 1999: 144-146.

The account of the events occurring after Wilusa is completed by a third document, the Šaušga-Muwa treaty (fig. 1),²¹⁹ where the same king Tudhaliya, sealing a treaty with one of his Syrian vassals at Amurru, gives notice of the finally settled upheavals on the Anatolian coast where Milawata was situated, now enumerated among the Hittite possessions.²²⁰ He proceeds to list the names of the kingdoms he considers as equals at that moment: Babylon, Assyria, Egypt. But Ahhijawa, who at first was included in the list, had been now erased. At this point Bryce might have some good points when he infers that after the Mycenaean interference in Anatolia new battles had occurred, so that at last the Hittites were able to cut the Mycenaeans off from their Anatolian colonies and, in fact, from the Levantine coast.²²¹

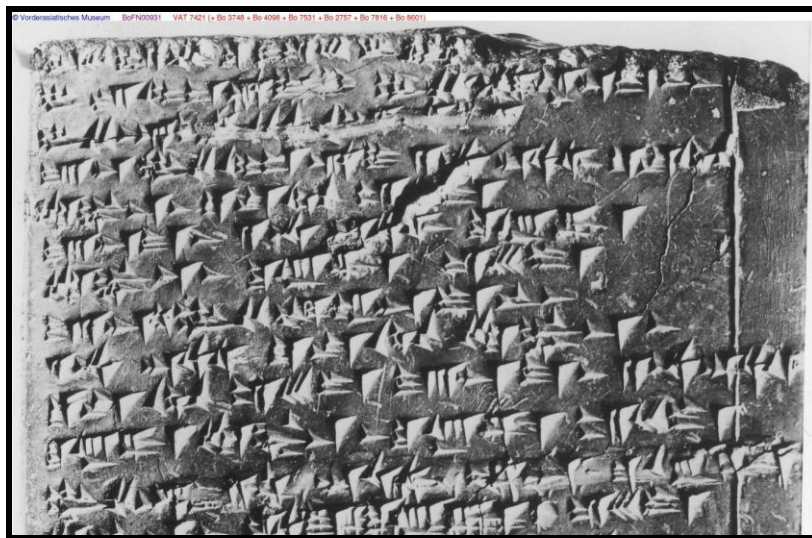


Figure 1: The Šaušga-Muwa Treaty (Vorderasiatisches Museum, Mainz, BoFN00931, Gerfrid G.W. Müller 2002-2014)

In the same Šaušga-Muwa letter, Ahhijawan ships are said to be still trading with Assyria through Levantine harbours, provoking an immediate interdiction from the Hittites. As Kelder implies, the fact that Ahhijawa was still important enough to be mentioned in official texts means that they were not yet annihilated.²²² It is not clear what they were providing to the Assyrians, but it is important to remember that Assyria, like Egypt, was pushing towards the Mediterranean Sea and sought to eliminate the Hittite power.²²³ What Ahhijawa could have been exchanging with them were perhaps information and strategies to apply against the Hittites.

However, the fact that the core of the Ahhijawan forces was not in Anatolia contributes to suggest that Ahhijawa and mainland Greece were the same. Even though the Hittites

²¹⁹ Shausga-Muwa Treaty, CHT 105, A IV 1-7

²²⁰ Bryce 2003: 201.

²²¹ Bryce 2003: 202.

²²² Kelder 2010: 32.

²²³ Monroe 2009: 36.

eradicated the Mycenaean colonies and political alliances from their land, the headquarter beyond the “great green”, was still operative around 1220 BC. The last text mentioning Ahhijawa is in fact another offensive reprimand of the Hittites towards the Seha River region, which under the lead of Tarhunderadu rebelled against the Hittite domination causing great turmoil under the support of Ahhijawa, yet eventually succumbing to the Hittites.²²⁴

From the archaeological records we know that from 1250 onwards the Mycenaean palaces had started suffering the setback which eventually will turn into a collapse in the 12th century. Should we admit that the crisis was brought by the excessive resources employed to support Arzawa, Egypt, Milawata and the rebellious vassals against the Hittites? Can all this be connected with the Mycenaean situation? Kelder points out that Ahhijawa is described in the Hittite texts as a powerful state, and also the Egyptian list at Kom el-Hetan equates it to state entities. So both its size and coherent characteristics were perceived by the Hittites as one single territory, which can only be admitted if thought of as a confederation of states.²²⁵

For Kelder none of the texts clarifies how the palatial systems worked in political terms, nor their interrelations or the presence of a king ruling over them, so that the only way to admit a federal state would be equating territorial borders with political ones, which is methodologically hazardous.²²⁶ Moreover, he explains the presence of two Mycenaean ruling models, the Wanax and the Lawagetas, as a possible evidence of the fact that a “Great King”, as defined by the Hittites,²²⁷ was a political authority (the Wanax) who governed a single state organisation divided into several territorial entities, each governed by local rulers (the Lawagetas).²²⁸ If this were true, the core territory could reasonably be identified as the Argolid, in which Mycenae would have been the chief palatial centre, easily recognisable in its superior monumentality of both the urban and the cimiterial spaces.²²⁹

In this centuries of Ahhijawan presence in Anatolia, also large amount of Mycenaean pottery was found in the Levant, Cyprus and Anatolia itself, while in Egypt it was circumscribed to the 18th and 19th dynasties. When the number of Mycenaean artefacts is limited, it can only be implied a commercial contact. But when it is extensive, as it is in the Ephesus region of Anatolia, an actual Mycenaean presence can be proposed with lesser doubt.²³⁰ To Kelder, the Mycenaean artefacts found on the Anatolian coast seem to

²²⁴ KUB XXIII. 13; Güterbock 1983: 138.

²²⁵ Beckman, Bryce, Cline 2011: 6.

²²⁶ Kelder 2012: 44

²²⁷ Bryce 1998: 17.

²²⁸ Kelder 2012: 45.

²²⁹ Kelder 2012: 47.

²³⁰ Bammer 1986/1987: 21; Kelder 2010: 47.

corroborate the textual evidence. Mycenaeans were involved during the LH IIIA and IIIB periods in the Arzawa politics, but, as hinted by the Hittite letters, their influence was strong only in the area of Milawata, while the rest of the coast was in artefactual terms a mixture of Mediterranean influences.²³¹

My opinion is that even without the absolute certainty that Ahhijawa and Mycenaean Greece were one and the same, we could not possibly have such an amount of “lucky coincidences”. Twenty-six texts mentioning Ahhijawa are not a limited quantity. They are interspersed in the two centuries marking the acme and the decline of the Mycenaean palaces in Greece, and give a coherent account on what happened during this period on the Anatolian Coast. Ahhijawa is a kingdom across the sea which also the Egyptian had placed in the area where Greece was supposed to be. The Ahhijawan state is mentioned as a powerful entity and, if not the Mycenaeans, who else so invasive could be present in the Eastern Aegean without leaving any distinctive material culture behind? Or, on the contrary, how can such an amount of Mycenaean pottery be present in Egypt, Cyprus and Anatolia, especially at Milawata/Miletus without leaving a clue of its origins in the local chronicles? Also the dates coincide with the facts concerning the Amarna and Ramesside periods in Egypt and do not contrast with the Hittite operations in Anatolia. The archaeological material (both iconographic and artefactual) offers clear parallels with space and time in which the Ahhijawan/Mycenaean activity took place.

Sherratt’s view must be here considered, since it holds very good points. She reasonably points out that the Mycenaean palaces, if analysed with a critical eye, are small entities with a monumental megaron reproducing a tribal chief hut with still visible wooden posts and hearth. The artistic implements to this tribal core, which transform it into a palatial structure, are just a repetitive package of features (grand architecture, frescoes with repetitive scenes, a limited and underestimated use of writing) taken from the Minoan examples and adopted as elite symbols to differentiate the aristocracy from common people. Doing so, they exercised psychological power in addition to armed one. This society was not the international power represented by Ahhijawa in the Hittite letters, and hardly gives evidence of either autonomous agrarian-based redistribution units or a thalassocratic trade-based one. Sherratt’s conclusion is that they were small hillforts adorned like palaces. They were based on a warrior society made of social bonds, communal drinks and libations and clientele. They were not enough organised to undergo international politics on their own. They had to use Crete or Rhodes as

²³¹ Kelder 2010: 50-61.

funnels for their products to reach Anatolia and the East, so that when new trade routes were opened, with Cyprus as a driving force, the Mycenaean control slowly faded away and the administration suffered economically from this isolation. Forced to drop the formal mask of power the palaces exposed themselves as the shallower warrior society they were.²³² Her theories are all plausible, the hillfort-fashioned palaces of which she finds an influence on later Hallstatt examples rise probably from a common Indo-European necessity for well defended head-quarters, nothing surprising in a warrior-based society. What according to me, as it is clearly shown by both textual and archaeological evidence, Sherratt underestimates, is the ability of the Mycenaean to have had direct relationship with Anatolia and the Near-East, which involves rejecting the equation between Achaeans and Ahhijawa.

Hittite and Egyptian textual, iconographic and artefactual records reconstruct a clear picture where it is very hard to deny that Mycenaean traders and warriors did not reach Egypt, Cyprus and Anatolia. There is no evidence that they all came from Crete, unless Crete was used by mainland travellers as an overland bridge or a cabotage route to reach eastern islands and coasts. The great quantity of Mycenaean pottery in Egypt and Miletus in the periods under review shows more than trade, it allows to imply a permanence of some sort. If such a permanence existed, then the local authorities could not help but noticing and describing it. The only evident foreign presence from overseas expressed by Anatolia and Egypt is Ahhijawa/Tanaju and until the Sea Peoples mentioned in the late 13th century (among which were other Eqwesh and Deneyen components)²³³ no one else came from across the sea to settle and bring turmoil. The fact that architectural, artistic and technological aspects of the Mycenaean palaces were only a façade to a more practical and rougher existence in Greece does not contrast in any way with the thirst of seaborne and overland routes sought by the ‘Wanaktes’, nor with the theory of federalism. Such a hillfort organisation does not exclude territorial entities united under a single authority. The fact that Linear B mentions especially Crete and Rhodes with regards to trade might just imply that the palaces had storage points in those areas from which they proceeded (also directly) to trade in the East.

Therefore, if we were tempted to judge the political and military power of a state by its capability of displaying them, this would recall Thucydides’ lesson.²³⁴ If we could not count on historiography, how could we know that a city like Sparta, with its poor material culture, rivaled with Athens and actually won the Peloponnesian war? How reliable is material culture

²³² Sherratt 2001: 226-237.

²³³ Broodbank 2013: 462.

²³⁴ Thucydides I. 2-19

to deny military power and the ability to undertake great enterprises? And Mycenaean states were certainly not like Sparta. We have still enough manifestation of grandeur to suggest they might well have attempted to engage in military expeditions abroad. Recent works also dealt with the pressing question about the diplomatic language used by the Ahhijawans to reply to the Hittites. Unfortunately no Mycenaean diplomatic texts and royal decrees are found at the palatial archives so that the possible modalities by which Ahhiyawan-Hittite correspondence operated remains obscure. Melchert has recently attempted an interesting interpretation,²³⁵ by observing that a letter, now generally accepted as Ahhijawan,²³⁶ and directed to the king of Khatti is written in Neo-Hittite and not in Mycenaean language. In the letter is clearly said that the message was written (as the verb ḫatrā(i)- “to send a written message” indicates), which implies that the Mycenaeans could use professional scribes for their correspondence. About the language used, which is still a mystery, KUB XXVI would prove that Neo-Hittite could be used to communicate with the Hittites, but Bryce and Kelder propose that Akkadian, the *lingua franca* of the time in the Near-East must have been the most appropriate for formal communications, although the evidence of that remains absent for Ahhijawa and Khatti.²³⁷

My opinion is that there were different people from different ethnic groups circulating in the Mediterranean and some of them could have been polyglots. It would not be surprising if polyglot scribes at work within specialised palatial offices took care of writing the diplomatic correspondence directly in the language needed by the foreign courts they were addressing the message to. But this is so far just another speculation and we will have to wait for ulterior researches to be able to further examine the matter. So far, let us admit that Ahhijawa is actually the kingdom of Mycenae, what would this change in our perspective about collapse? As recent works imply,²³⁸ there was a concomitance of factors operating in the LBA Mediterranean, sometimes seen in itself as a cause of melting pot between different and distant peoples, resources and goods often turning politics against one another. The LBA people movements and the availability of new trade routes created new marketplaces which certainly cut off the Mycenaean palaces from the Southern Aegean, now the core of a new economy,²³⁹ and forced the political entities of the Eastern Mediterranean to adapt in one way or another. The factors bringing Mycenaean Greece to a change in its formal authority were already into being in the LBA and the presence of Greek warriors among the Sea Peoples may

²³⁵ Melchert, forthcoming. Cited in Kelder 2012: 37.

²³⁶ KUB XXVI. 91

²³⁷ Bryce 1999: 258; Kelder 2012: 47, 48.

²³⁸ Sherratt 2001, 2003; Broodbank 2003; Middleton 2010.

²³⁹ Broodbank 2013.

even acknowledge their direct participation. In all this, saying that Ahhijawa, as I think, was the Homeric Achaea implies a heavy participation of the Greeks in the complex Anatolian chessboard, with all the economical effort it required and the probable human losses and waste of resources it entailed. The facts narrated in the Hittite correspondence, rather than finding an ultimate cause for the collapse, would only suggest that when resources should have been saved and used wisely, they were instead employed in distant warfare, pushing the palaces to a point of no return.

It must also be stressed out that the struggle for seizing Wilusa and the mentioned reactions of nearby vassals and Hittite authorities is to me the most plausible historical chronicle of what was later known as the war of Troy. Nevertheless, individuating it as part of the foreign relations between Ahhijawa and Khatti does not imply that Troy can be intended as a scapegoat for the collapse of entire civilisations. Wilusa was certainly an important strategic point which appealed both Hittites and Ahhijawans, so their fighting for its possession is no surprise. Nonetheless it probably needs to be deprived of all the epic atmosphere described in the Homeric poems, since it was not decisive, unique or excessively demanding. We must also admit that the Homeric poems we know were probably not the only ones circulating at the time of their composition. There could have been a poem for every Greek military exploit, as far as we know. But ‘the matter over Wilusa’ is a good example of how foreign politics were operating in Anatolia in the LBA and how the Mycenaeans were tirelessly involved into them. To this the archaeological record adds its own degree of ambiguity, given that it is always difficult to discern cause and effect in the introduction of new objects in a region. We can surely admit Kelder’s view of Greek military presence and trade activity as both operating at the same time without necessary being the result of each other.²⁴⁰ Yet it is hard to deny that one of the two, whatever came first, would not open the way for the other.

If all these were correct assumptions, they would give rise to more speculations: the total control of the Hittites in Anatolia, if for just a few decades before their own collapse, would have cut the Achaeans not only off from Anatolia, but also from the Syrian trading centres, at the other end of the Hittite empire. To this we might apply the Sea Peoples’ theory, suggesting that they were now raiding the eastern Mediterranean and disrupting seaborne trade; in addition, the sea routes from Canaan to Egypt were suffering from the same issue. These regions could not continue to furnish the Mycenaeans with the products they needed to

²⁴⁰ Kelder 2010: 51.

maintain their grandeur. Though we do not have any letter telling what had happened to the Mycenaean palaces, we can use the documented history of the Hittites as a possible comparison. We have seen that the Hittites, of Indo-European origins like the Achaeans, had had a very similar *acme* in Eastern Anatolia and their economic success was due to both an efficient military organization and a convenient convergence of trading links, just like the Mycenaeans. The Hittites aimed to colonize and conquer the routes which brought them to their main sources of goods, the Fertile Crescent and Egypt, and perhaps to include them eventually into their kingdom. The wars against Ahhijawa over the western coast and the Dardanelles happened probably more than once and, as we can understand from the words of Hattušili, they were intense and ended at a dire cost, considering that the Hittites were warring on many fronts, especially Egypt over the Syrian possessions. If the Hittites were exhausted by fighting on the Anatolian coast, so must have been the Mycenaeans. Although initially they broke through the defenses of the Hittite vassals at Wilusa (as at other Hittite outposts), in the end they always withdrew (even if we should imagine with rich booty), leaving these areas always in Hittite hands. After the success of Thudaliya IV in confronting the Mycenaean menace in the west he had to attempt the same in Syria, not only against his historical enemy, Egypt, but against a newly resurrected power: Assyria. Without going into details, the Hittites were now too weak to overcome such powerful enemies and slowly had to yield their lands to the Assyrians, while the Sea Peoples managed to destroy and control their outposts along the coastline, interrupting the arrival of supplies and leaving the capital undefended not only against Assyria, but also against those raiding tribes from further North-East. These tribes, the identification of which is hard,²⁴¹ but recall those Phrygians described by the Greek tradition,²⁴² eventually attacked, operating within a critical combination of different factors, which saw in a relatively short time the end of the Hittites and their kingdom.²⁴³

So the end of the Hittites resulted from a simple fact. Unlike the Near-Eastern kingdoms, they were unable to rely on land products only.²⁴⁴ As Sherratt implies, with no control over trade, the Hittites could barely guarantee the subsistence of the reduced population of a chiefdom, let alone a kingdom and, for sure, no empire. Wealth had necessarily to come from trade and contacts with all those countries which produced those resources that the Hittites lacked. This must be valid for all of those civilisations who did not

²⁴¹ Speiser 1932: 350-367. Matthews 2004: 200-211.

²⁴² Gurney 1952: 39.

²⁴³ Collins 2007: 72-80.

²⁴⁴ Bryce 1998: 322, 331.

have the luck to be crossed by fertile rivers, like Egypt and Mesopotamia. It was certainly true for Khatti and it is very likely to have been the same for the Mycenaean kingdoms. So the war in the Aegean repeatedly occurred with the aim of increasing the power and wealth of the nations involved, which competed with each other to equal the oriental kingdoms. As long as they shared the trade routes and were content with their present situation, they thrived. But as soon as they started to fight each other to impose their exclusive control of the traffic and the production of the resources, they found themselves at war, exhausted and unable to defend themselves against the threat of fresh enemies and raiders. Whatever their individual histories, it is beyond question that the end of Khatti was dictated by their being cut off their trading posts.²⁴⁵ Another matter of interest is given by the fact that although Hattuša was invaded, it was not occupied by the newcomers. The raiders acted according to their nature, they killed people, took everything valuable and left behind only fire and destruction. Had the same thing happened to Mycenae?

2. Mycenaeans and Hittites compared.

Let us imagine that the same situation applies to mainland Greece. The LBA has been seen by several theoretical approaches as a patchwork of different connections, ethnic mobility and technological advances, therefore as a moment in which life sophistication increased to unprecedented levels.²⁴⁶ In this complex environment the states which had thrived until that moment had found themselves enclosed within a delicate ‘balance of powers’, which, if disturbed could readily collapse.²⁴⁷ The states involved in this international relations expressed their power through a ‘political polycentrism,’²⁴⁸ that is, in order to guarantee a far reaching control over large territories, they had to dilute their authority into several minor polities which in a crisis could be easily disconnected from the centre. Nevertheless the Aegean (and the Eastern Mediterranean) can be easily ascribed to the model of a ‘multicentered world system’,²⁴⁹ an interconnected network of state entities, the disruption of which could result in a disastrous outcome for the whole system. What kept the states interconnected in this network was above it all trade. As Monroe reasonably points out, the LBA states practiced a ‘capitalising’ form of accumulation, based especially on long distance trade. Although it has been suggested that the words “merchant”, and “trade” are not

²⁴⁵ Bryce 1998: 341.

²⁴⁶ Munroe 2009: 37.

²⁴⁷ Liverani 1990: 66-68.

²⁴⁸ Klengel 1992: 120.

²⁴⁹ Chase-Dunn and Hall 1997: 42, 43.

present in the Linear B texts,²⁵⁰ the textual evidence from Khatti, Egypt and Ugarit seems to endorse the theory seeing merchants working for the kings.²⁵¹ According to Monroe, the whole European World-System relationships were driven more by luxury goods than regular commodities. This search for luxuries generated a form of contagious anxiety and a resulting agency focused on acquiring them. Arzy has recently found evidence for 13th century activities committed in linking the Levantine coast to Meghiddo and the desert through the Carmel ridge. Meghiddo was a hinterland market where the products from the Mediterranean encountered the products from the Arabian regions, implying the constant effort of the merchants to venture Eastwards using clandestine routes to acquire luxuries from far lands.²⁵² Through peer-polity interaction, and therefore competitive emulation, the neighbouring elites of the Mediterranean had become culturally similar. In all this the role of the merchants was central, becoming in fact the dynamic force who reshaped the material culture of the LBA.²⁵³

In this scenario, the Hittite ban might have left the Mycenaean centres with none of the luxury goods they needed to remain part of this system.²⁵⁴ They lost their status of great kingdom and became too weak to maintain their administrative system, therefore forcing themselves to return to an economy based on subsistence agriculture. It is striking to see that at the end of the 13th century they start evaluating the possibility of inserting themselves into southern Italian and Sardinian trade networks.²⁵⁵ However, these lands were far off and, in any case, inaccessible during the long periods of *mare clausum* of the autumn and winter months to be a stable solution for the Mycenaeans. Probably their “state” started to dissolve when the need for expansion had lost urgency and each palace started to face its own security. About this we need to mention Broodbank’s recent model, where he proposes that it was not a proper disruption of trade, but its inclusion into a wider and more complex interconnection of ethnic movements, ideas and technologies (above it all navigational) that brought the Mycenaean Palaces to the end. This generated a broader circulation and influenced the social systems of the Mediterranean civilisations up to a point when land-based polities became unable to control this new flux of maritime economy.²⁵⁶ I think this is a plausible but only parallel part of the picture, which contributed to destabilise a Mycenaean trade network. The documents mentioning Ahhijawa suggest that their trade network was always proactive and

²⁵⁰ Petruso 1992: 60.

²⁵¹ Monroe 2009: 203.

²⁵² Arzy 1998: 439-445.

²⁵³ Monroe 1999: 94.

²⁵⁴ Sherratt 1991; Sherratt 2003: 126.

²⁵⁵ Bartoloni, Moscati 1997: 7; Broodbank 2013: 444.

²⁵⁶ Broodbank 2013: 464.

able to interweave new ways to mingle with foreign politics and events. It is very weird to me that they were not able to control maritime trade and that they allowed other protagonists to take over. I think that the extenuating military efforts against the Hittites impoverished their economies, while internal expenditure was pushed too far for the construction of monumental architectures. The Hittite triumph forced the Mycenaeans to retaliate and find their space in the new maritime marketplace, already interested by new routes and products, in concurrence with Cyprus, whose navigational superiority allowed the Cypriots faster and more secure movements.²⁵⁷

If I agree with Sherratt that the palaces depended on international trade to survive, I am not convinced about the inference that the Cypriot trade alone transformed the Aegean into a peripheral zone and damaged its economy beyond repair, the signs of this can be found in several goods with precise Cypriot marks along coherent trade routes going from Palestine to Southern Italy.²⁵⁸ It is hard to deny that this Cypriot activity, as a link between the Levant and the Aegean in the 12th century, had an impact on the economic system of the time.²⁵⁹ Cyprus is in fact a protagonist of the 12th century trade and filled the gap left by a collapse which had already occurred. The disruption in the international (Near-Eastern) trade lacking to Mycenaean Greece at the time it collapsed must have been caused by a more serious event, and, again, my theory identifies it in the disastrous outcome of the Hittitian wars over the control of the Dardanelles. As regards foreign intrusions, we can no longer just blame the Dorians (see chapter I), even though Balkan raiders similar to those who attacked Khatti could have been moving here and there on the margins of the Aegean, sporadically attacking the weakened Mycenaean cities just to pillage them of their values, but never settling there. The crisis which must have begun from that point on needs no other explanation, however slippery our evidence, we have enough signs of an emergency unrelated to intrusive human groups. This does not exclude some movements of proto-Greek-speaking tribes around the Mycenaean periphery. Economy changed, new value and importance must have been bestowed on land allotments and their production, while trading became already a dangerous venture of private entrepreneurs as still remembered at the time of Hesiod.²⁶⁰ Wealth obtained by land production must have been in the Mediterranean quite less luxurious than the one gained through trading during the Bronze Age; well-being could have been intended as just

²⁵⁷ Sherratt 2003: 42, 43.

²⁵⁸ Sherratt 2003: 53.

²⁵⁹ Broodbank 2013: 468.

²⁶⁰ Hesiod, *Works and Days*, ll. 646-662.

the survival of the various layers of the society and the possibility for it to sustain itself rather than accumulating surplus to be exchanged for exotica.

This critical moment, specialised craftsmen could no longer be afforded: only forty out of a hundred and fifty-five specialist Mycenaean occupations survived in classical Greek terminology.²⁶¹ It is very likely that after the end of the palatial institutions, the possible “federal” links between them had vanished, and that regional groups had developed lives of their own, with individual characteristics, even if still with a Mycenaean foundation. As Small pointed out, in this scenario the most important households, perhaps united by some kind of formal institutions, preserved the prestige of their lineage, kept the social framework intact, minimising distress and managing to guarantee the survival of some of the former social structures.²⁶² Crielaard summarised the main evidence for the fact that such social configuration did not change at all, illustrating the following points:²⁶³

- Several settlements (such as Midea and Tiryns) appear clearly reorganized in conformity with the former citadel plans, and immediately after the collapse they appear committed in a self-sufficient production of staples.²⁶⁴
- The few examples of warriors depicted on LH IIIC pottery give the impression that warfare never stopped and foot soldiers, charioteers and marines not only continued to exist but also implied that hierarchic political and military organizations continued in the post-palatial period.²⁶⁵ There is an obvious conclusion: such a system implies that some people were in command.²⁶⁶

This would agree with our evidence that both before and after the end of the palatial institutions (which did not end simultaneously, as Middleton suggests²⁶⁷) around the 12th century BC, Greek societies had been unaffected by neither invasions nor important cultural changes, but rather struggled for the reconstruction of a political system and the search for new trading areas to exploit in order to restart the local economies. This was not achieved completely until the 10th century, when we see indeed the introduction of fashionable and more functional items from European marketplaces. These objects have no archaeological link with violent actions, but, as proposed by Sherratt, they seem products of peaceful

²⁶¹ Morpurgo-Davies 1979: 99-102.

²⁶² Small 1995: 283-291. Crielaard 2011: 88.

²⁶³ Crielaard 2006: 279; Crielaard 2011: 91-93.

²⁶⁴ Shelmerdine 2006: 73-76.

²⁶⁵ Vermeule 1982: figs. XI.15, XI.28, XI.42.; Mountjoy 1999: 357-358; Raaflaub 1999: 198-202; Güntner 2000; Mountjoy 2005(A): 121-12; Mountjoy 2005(B): 423-427, pl. XCVI.

²⁶⁶ Middleton 2010: 115.

²⁶⁷ Middleton 2010: 115.

economic changes of the final 13th century and the resulting Urnfield Culture's production of new, functional and exotic bronze objects, soon adopted as status definers.²⁶⁸

A possible marketplace for these metal objects, recurrently implied by the distribution of the material evidence, could have been the Danube area. In fact the wide area serviced by the Danubian trade was a comfortable cultural basin from which the recovering Greek societies could find available commodities at a lesser cost. Of course my view is not envisaging Greek merchants waiting on the banks of the Danube for the products to arrive. I am convinced that from specific docks the products were passed from settlement to settlement, finally reaching Greece or its peripheries. To possible objections about the smoother and more secure Adriatic route to fulfill the same task, I can answer that if Northern Italians sailed the Adriatic to reach those southern regions of Italy apparently in contact with Greece, also Greek products might have then been traded in exchange for metalwork. There is no evidence instead of Greek artefacts in Northern Italy. Archaeologically it is like the two populations never met, either directly or indirectly.²⁶⁹ The Danube River, instead, connected the Balkans with central Europe and the latter with Northern Italy and Eastern Europe. It was navigable and relatively secure. Greece has evidence of European artefacts, but also the Danube kept its Greek connections. Manufactured goods could have smoothly reached several docks along its journey towards the Black Sea region. Greece, beyond its northern boundaries could have "purchased" these goods either from a wide network of contacts which, once mobilised, encompassed also the regional variations of the lands it crossed before reaching Greece or approached them in some Balkan trade markets, through mountain ridges. It was not inducted by necessity, but happened naturally because of the practicality of the Danube and the inevitable contacts between populations and the diffusion of sharable ideologies.

To support this contacts with the Danube, the material analyses of the offerings found in the grave contexts of the 12th – 9th centuries BC will therefore be used. I will continue from where the recent studies on the subject have stopped and underline especially the peaceful exchange of goods in the Mediterranean, the strong continuity of the Mycenaean tradition into the LH IIIC and the corollary ideological changes in the EIA, crossing the divide between the LBA and the EIA and proposing a more gradual and homogeneous evolution.

²⁶⁸ Sherratt 2003: 41-44.

²⁶⁹ Jung, Mehofer 2013: 178, 179.

Chapter III

Burial Customs

1. Introduction to burial practices.

When dealing with a period like this, characterised by absence of literary accounts and limited monumentality, tombs become the primary source of evidence for understanding the society under review. Since burial customs are interconnected with social beliefs and status symbols, they can also provide indications of ethnicity. Therefore, in our case, all the possible indicators for major social changes that may have occurred after the destruction of the Mycenaean palaces can be sought in tombs. The long period from the 12th to the 9th century presents a number of features which need to be analysed in detail, with an emphasis on the evidence for social change or for continuity in the transition between the Bronze and the Iron Ages. If funerary data certainly offer several advantages to this research, such as undisturbed contexts, a clear view of the fashion, prestige and daily activities of the time, and so a privileged picture in which continuity and change can appear, it also presents some disadvantages if taken superficially. For instance one could easily fall into the trap of the processualist theory and envisage in tombs and their offerings a clear reflection of the society. This is not true in a number of ways. What can be shown in tombs is a set of objects, perhaps preconceived. They could be useful for the family members of the deceased to strengthen their common ideology. But they might also represent the objects necessary for the dead to face his perilous trip throughout the underworld. Finally they might have reinforced the personal identity of the departed, according to what he accomplished in life. But then again, they may also be just its personal effects with no cultic or social meaning attached. Not to mention that all the rites and socially representative actions are usually invisible for us. My personal opinion is that we should look at the objects in tombs initially just as part of the material culture of the time. Whatever social meaning they had, they were bound in their timeframe (unless the tombs were reused, and in that case they would help mark the diachronic changes) and as such they can still estimate the popularity of their shapes and decorations. This popularity will also reflect the fashion of the time allowing us to record continuity and change. Once these two factors have been detected, a speculation about their meaning in the broader picture can be attempted, but accessory and not invalidating my analysis.

1.1. The evidence of LH IIIC.

If we observe the Greek situation after the fall of the palatial system, we are immediately struck by the fact that there is no evidence for any of the shifts in the main burial practices, and therefore inclusions of new ethnic groups are not visible. There is “no trace of racial change”, as Karo had stated already in the '30s.²⁷⁰ Today we may say that there is no trace of change in ethnicity. There is a clear continuity in the use of some Mycenaean cemeteries and many of those abandoned soon after the collapse seem to have been reused in LH IIIC.²⁷¹ In his recent analysis of the transition, Dickinson states that none of the burial types identified in LH IIIC, SM and PG present substantial changes in their structural characteristics; on the contrary they keep the same features seen in the Bronze Age.²⁷² Of the two monumental types in use during LH IIIA and IIIB, *i.e.* tholos and chamber tombs,²⁷³ the latter continues in LH IIIC and SM in those places where a certain degree of wealth still exists, such as Perati or Knossos, mainly due to the use of advantageous coastal locations. Continuity of chamber tombs seems to reflect also an endurance of human groups still retaining a sense of Mycenaean identity, as underlined by the same types of offerings.²⁷⁴ This apparent similarity with the Mycenaean built tombs does not only reveal a total convergence of ideas, it also shows evident differences.²⁷⁵ First of all they appear reduced in size and inferior in quality, a clear sign of a change in the prosperity of the family groups.²⁷⁶ It can be noted that the practice of reusing earlier tombs became rarer and rarer at the end of the LH IIIC period.²⁷⁷ On the contrary, both in mainland Greece and in the islands, these post-palatial societies began to prefer single burials rather than collective tombs. This was not an abrupt change. Sites like Argos show that although at the end of the 12th century chamber tombs were being reused, the new burials contained no more than one or two people, as if the general idea of being buried collectively were slowly changing towards a desire for isolation.

Still in LH IIIC family tombs started to coexist with newly made single burials, usually pits.²⁷⁸ This could suggest a gradual abandonment of the monumental aspects of the old family tombs in favour of less complex (and less expensive) types. These single graves might

²⁷⁰ Karo 1943: 7.

²⁷¹ Deger-Jalkotzy 2008: 399.

²⁷² Dickinson 2006: 74.

²⁷³ Cavanagh, Mee 1998: 77.

²⁷⁴ Cavanagh, Mee 1998: 125, 95.

²⁷⁵ Cavanagh, Mee 1998: 97.

²⁷⁶ Desborough 1964: 32-40; Lemos, Deger-Jalkotzy, 2006: 184.

²⁷⁷ Dickinson 2006: 181.

²⁷⁸ Dickinson 1983: 78, 66.

have expressed the social status of the deceased by means of the goods in their interior, instead. The graduality of this phenomenon is also underlined by the fact that single tombs were not a predominant type anywhere in the Aegean at this stage. They are still a minor feature, but it is important to state that within the apparent continuity represented by the use of chamber tombs there is an incipient change. Desborough had already spotted in the '70s a fragmentation of choices concerning depositions and rites in the post-palatial period.²⁷⁹ This could have been the result of political changes that must have occurred after the collapse of the administrative centres, perhaps including new religious ideologies. As mentioned above, single tombs can be either included in cemeteries with prevalence of multiple burials or created anew in clusters that occupied unused areas. In the first instance the single graves associated with chamber tombs appear to be pits (see Perati). In the second, cists are the most popular type, even if with a small presence of pits among them.²⁸⁰

The contexts in which pit graves are found are again ambiguous, they can be intramural or extramural depending on the circumstances, but since intramural graves appear containing a more limited amount of objects than those extramural, it is reasonable to think that they might have belonged to people with a lower status. But then again, ignoring the value of these objects in the ritual does not allow to speculate further.²⁸¹ A notable feature is the appearance of cremation for the first time after the rare evidence in the tumuli of Bronze Age Epirus.²⁸² This phenomenon remains in LH IIIC and SM still limited to small sections of post-palatial society. It is a remarkable fact that this custom was also used in contemporary Anatolia (Müskebi)²⁸³ and Italy (Tropea, Milazzo),²⁸⁴ making the origin of its introduction to mainland Greece hard to identify. A good inference about a Northern Italian origin was made after the observation of the LH IIIC tumulus discovered at Chania, near Mycenae. The mound presented a rare example of nine inurned cremations, with no trace of inhumations. They were already collected in Mycenaean biconical amphorae covered by deep bowls or amphoriskoi placed upside down.²⁸⁵ Although the ritual seems to be influenced by Northern Italian beliefs,²⁸⁶ the objects in the tumulus are completely Mycenaean and so is the decoration on the vases. Chania seems to point out the acquisition of a foreign idea of the funerary ritual

²⁷⁹ Desborough 1972: 273.

²⁸⁰ Lewartowski 2000: 16.

²⁸¹ Lewartowski 2000: 52.

²⁸² Snodgrass 1971: 187.

²⁸³ Boysal 1967: 79. But also Mellink 1967: 163.

²⁸⁴ Eder, Jung 2005: 485-495.

²⁸⁵ Palaiologou 2013: 254-267.

²⁸⁶ Eder, Jung 2005.

perfectly integrated in a Mycenaean-fashioned context. This practice appears in use all over the Aegean: Argolid (Argos, Prosymna)²⁸⁷ Achaea (Kallithea, Koukoura)²⁸⁸, Attica (Perati,²⁸⁹ Salamis)²⁹⁰, Naxos (Aplomata)²⁹¹, Elis (Agrapidochori),²⁹² Dodecanese (Langada, Ialysos),²⁹³ Crete (Knossos).²⁹⁴

As regards grave goods, the 'ideology' which had already started in the MBA, centred on male-gendered individuals and a display of prestige items, apparently remained the central feature of the late Bronze Age also and continued in the EIA.²⁹⁵ It can be at times identified in the funerary displays of the post-palatial period a clear reevaluation of older objects, deposited in tombs to legitimise the social position of elite families and their relation with prestigious ancestors. A good example is provided by some LH IIIB shapes (a jug, piriform jar and stirrup jar) found in LH IIIC funerary contexts at Tiryns.²⁹⁶ It has been argued whether a change in the ideologies behind the funerary practices had taken place at the end of the Bronze Age.²⁹⁷ Unlike earlier ceremonies where the tombs remained accessible to the living for further rituals, in the Late Bronze Age the community expected the body to be buried, after a relatively brief ceremony, in tombs which were sealed once and for all. This new ritual secluded forever the corpse from the view of the community and, because of that, the time available to give the onlookers a clear and solid memory of the deceased and his identity was limited. This could have placed a serious concern on the preparation of the corpse both in a visible straight position and with all his status symbols well on display.²⁹⁸ The resulting ideology seems to ascribe to the Late Bronze Age a glorification of the body as the key of a "signification system composed of mutually referential personal items."²⁹⁹

Yet the grave goods offered during LH IIIC are notably reduced in number and variety.³⁰⁰ It has to be kept into account that the persisting family tombs still present richer goods than contemporary single tombs, but a few rich objects were also found in cist graves. The difference in quantity might result from the limited space of the single burials. Among

²⁸⁷ Piteros 2001: 99-120.

²⁸⁸ Papadopoulos 1979.

²⁸⁹ Iakovidis 1970b: 423.

²⁹⁰ Wide 1967: 17.

²⁹¹ Deger-Jalkotzy 2006: 151-181.

²⁹² Cavanagh Mee 1998: 93.

²⁹³ Cavanagh, Mee 1998: 93.

²⁹⁴ Coldstream, Catling 1996: 681-682.

²⁹⁵ Treherne 1995: 111.

²⁹⁶ Stockhammer 2009: 165.

²⁹⁷ Sherratt 1991; Thomas 1991a; 1991b; Shennan 1993.

²⁹⁸ Thomas 1991b: 40.

²⁹⁹ Treherne 1995: 121.

³⁰⁰ Lewartowski 2000: 51.

the objects recovered, LH IIIC weapons, identifying warrior tombs, appeared in very limited specimens. Usually the cemeteries of this period held only one or two weapons and their presence was not to be necessarily imagined as belonging to the post-palatial elites. Very often, in fact, even in tombs preserving prestigious objects like scepter-heads or signet rings (perhaps Mycenaean heirlooms), weapons could be not present among the funerary goods.³⁰¹ If Mycenaean elites used to place weapons within the burials of their adult males, probably as symbols of power, as their being associated with other luxury goods would suggest, in LH IIIC they appear instead associated with both rich and poor funerary goods.³⁰² If hastily taken into account, this would suggest that after the collapse an armed class no longer existed, implying also the loss of ideological value that was once placed on weapons as status symbols. But, as Deger-Jalkotzy pointed out, it is hardly possible that the limited number of weapon finds reflects the actual state of LH IIIC warfare. More likely, only selected people had the privilege to keep their weapons with them after their death.³⁰³

Of course it is hard to define a man a warrior just because a weapon is among his funerary objects and it is even harder if weapons do not appear. The fact that we do not have any full knowledge of the society under review makes a definitive answer impossible. To discuss this issue we should at first decide what the terminology implies, that is whether the term 'warrior' is a (hereditary?) status to which actual fighting skills were attached or just a symbolic label for people belonging to a specific social class, eventually devoided of practical value. I find easy to believe that the latter eventuality can be true for periods of long lasting opulence and peace, while it is hard to believe for periods of turmoil. Whitley points out that at times the biographic value attached to the objects in tombs, derives rather from a superficial interpretation than from a careful analysis.³⁰⁴ What would the osteological analyses show if they were compared to the objects surrounding them? Though presently impossible to use the scanty osteological data from the Greek tombs to answer such a question, similar analyses have been made on the LBA English burials.³⁰⁵ Whitley uses them as an initial example to show how, unlike common interpretation, almost all the so-called warrior burials analysed contained, despite the weapons inside, adolescent bodies, hardly able to wield them effectively. On the contrary, the bones found damaged by battle wounds, belonging to real warriors, were buried with no weapons. Whitley envisages in this fact a clear ideology which

³⁰¹ Deger-Jalkotzy 2008: 405.

³⁰² Dickinson 2006: 74.

³⁰³ Deger-Jalkotzy 2006: 152.

³⁰⁴ Whitley 2002: 217-232 .

³⁰⁵ Härke 1990; 1992.

gave to weapons more than a social role, but rather a complete narrative which functioned as a symbolic autobiography for the person buried.

The objects in the graves, and in this case weapons, have therefore autobiographical reference.³⁰⁶ They describe an ideology emerging at the end of the Bronze Age, in which an accomplished person had to be a personality of power and show prowess in battle. This idealised status involved heroic enterprises and a glorious death, preferably on the battlefield. The objects had to speak for the deceased, and weapons had to convey the image of a hero. This can be certainly acknowledged for the Greek Bronze Age, where the palatial elites, engaged in international conquests, wanted to affirm their military power. They were certainly warriors when they subjugated the Aegeans at the beginning of the MH period. Yet, as very often shown in human history, an initially warrior society evolves to a prosperous civilisation, whose ruling class was probably forgetful about actual battles (entrusted to professionals) but still preserved those warrior values of their ancestors and the idea of supremacy that their weapons symbolised. For instance, some Mycenaean sword types such as C and D from the grave circles of Mycenae show very impractical sizes and make their actual use in battle doubtful. This does not automatically exclude that there was no organised army able to fight with real weapons; if the Hittite tablets actually refer to the Mycenaeans, we have to imagine that their commitment in warfare had been continuous during the whole Bronze Age. Perhaps in a rigidly structured society, even the army had gradually become part of the palatial machine and its lower ranks (who actually fought) had lost that symbolic importance retained by the upper ranks (who seldom took physically part into war actions). In this case it could be certainly possible that the 'aristocrat' who owned the weapons of his household, could be buried with them without being an actual warrior, while a professional soldier could have been buried with no weapons.

But was this the same picture of the postpalatial period? As soon as a social crisis occurs and the structures which sustained a former civilisation collapse, we must imagine the aristocracies (if not all of them and not at the same time) unable to contain the subordinated classes, probably realising that their being warriors by status could not win against those that were warriors by profession, finally being overthrown in the turmoil. This scenario, likely to be the one occurring in Greece, implies that in the ongoing political and economical fragmentation safety must have been the priority. This was in the hands of people actually able to win in battle and to guarantee their own survival and that of their followers. Therefore,

³⁰⁶ Whitley 2002: 221.

whenever in the post-palatial and EIA graves there are weapons, especially Naue II swords actually made for fighting, it is very likely that they define their possessors as actual warriors. I find it hard to believe that a society in time of distress, abandoning a collapsing political and ideological systems, would keep esteeming warriors for their ideological values rather than their real skills. In the light of the ideology permeating the Greek after-life as it appears in Homer, death was simply the annihilation of the self, the end of one's identity in a world of shadows. On these premises Vernant had envisaged an evident ideology behind warrior tombs, in which death was fought through the inscription of the individual subject into the collective memory of the group.³⁰⁷

This immortality entrusted to the memory of the living implied of course a life worth remembering, that is a life in which one's glory had been alimented by valuable warrior exploits. Such a life was attached to the collective memories through the way the body of the departed was treated. On the one hand there was the physical inclusion into a monumental tomb, which in itself reminded the community of the worthy individual there buried.³⁰⁸ On the other hand there was the body itself, the way it was presented, adorned, and the weapons he wore in life. The presence of weapons was important since they were seen almost as an extension of the body and the self of an individual.³⁰⁹ Weapons conferred on the dead an image almost heraldic, in which the community could see the example of a beautiful death, honouring the individual and the whole community at the same time.³¹⁰ It is true, though, that there is paucity of weapons and this generates problems in identifying both gender and social rules in mortuary practices.³¹¹ As Dickinson states, all the data related to age and sex are far from being complete and reliable at present.³¹² From what we have it is true that non-adult burials appear to be too rare to represent real infant mortality. Child-burials are present in both settlements and cemeteries during LH IIIC phase, showing that the elite children were not at all excluded from the ritual.³¹³ When child-burials are found, the quality and quantity of the goods offered within them show a certain prosperity.

Among the most evident grave goods found in child burials before and after the palatial collapse are beads. They do not seem to be embodying any religious meaning and could have

³⁰⁷ Vernant 1991a: 57.

³⁰⁸ Barret 1993; Rowlands 1993.

³⁰⁹ Vernant 1991b: 37.

³¹⁰ Foucault 1977.

³¹¹ Dickinson 2006: 74.

³¹² Dickinson 2006: 175.

³¹³ Dickinson 1983: 222.

been just offerings made by sad adults to their prematurely deceased children.³¹⁴ By observing that already in Middle Helladic cists were richer if compared with other contemporary single burials, Lewartowski suggested that cist graves could be depositions for the new elite during the post-palatial period. An hypothesis reinforced by the fact that cists had disappeared soon after the increase in popularity of the chamber tombs in the Mycenaean Age, coming back in use during LH IIIC only in those cemeteries where chamber tombs were absent, as if they were both tomb types chosen by the aristocracies of the respective periods. Some pits appear covered by stone slabs as if imitating cists, suggesting evidence for lower classes trying to equal the upper ones.³¹⁵ Cist graves could have belonged then to the post-palatial aristocracy, who simply decided to abandon the Mycenaean multiple burials and go back to Middle Helladic types.³¹⁶ Gender differentiation is often impractical in tombs. It is known that the preservation of bones depends on specific factors. Inhumations may preserve skeletal remains only when the physical characteristics of the burial spot do not affect the necessary conditions for their conservation. In the case of cremations this differentiation is even harder since ashes are not clearly readable unless they preserved some portions of bones.

In both cases skeletal analyses, which would unveil the nature of the skeletons almost unmistakably, are seldom applied to ancient cemeteries in a complete and systematic way.³¹⁷ Usually the only other way to differentiate genders in tombs is through their association with the grave goods found with them, whenever such association is present and well evident. Often a clear differentiation comes from the presence of weapons or accessories identifiable with a particular sex only.

For male depositions, as we have seen, weapons are a reasonably evident marker. Other male objects are identifiable in wine-drinking sets of pottery that we should imagine were part of a male-centered communal banquet. Men used usually fewer clothing accessories to adorn themselves, if compared with women, but such quantitative assumptions are often too dependent on singular contexts rather than defined patterns and are never completely reliable. It must be said that weapons were normally placed in the grave at the side of the body, where they would have stayed, sheathed, in life. Female depositions are instead marked by a greater quantity of dressing accessories (like buttons, diadems or beads composing elaborate necklaces) probably worn by women during the funerary ritual,³¹⁸ allegedly in the attempt

³¹⁴ Lewartowski 2000: 50.

³¹⁵ Lewartowski 2000: 18.

³¹⁶ Morris 1997: 542.

³¹⁷ Harrell 2014: 100.

³¹⁸ Lewartowski 2000 : 51.

mentioned above to adorn the body of excellent personalities in order to fix them in the mind of the community. Female burials could also include specific pottery shapes, such as jugs and piriform jars,³¹⁹ still made for drinking, but not necessarily connected with a wine-based banquet. All these objects seem to be common items, not crafted upon commission for funerary purposes.³²⁰

What causes a greater difficulty are again tombs where none of these objects are found and the grave goods are minimal and not in relation with any of the sexes. These cases will have to cope with different aspects of the cemetery, leaving gender differentiation to skeletal analyses. A few horizons of change (reduced size of chamber tombs; increasing preference for single graves; adoption of cremation) do appear during Late Helladic IIIC, but they are not very marked and seem to supplant the old traditions in a quite gradual manner, also affected by regionalism and different reactions to political change. We may also notice an essential continuity in the adoption and use of the same social phenomena (use of chamber tombs, offering of heirlooms, classes of grave goods) encountered earlier in time.³²¹ Even the funerary spaces used for depositions remained the same, a sign that the communities still recognised themselves as belonging to the same society as their ancestors.

1.2. Sub-Mycenaean burial practices.

Sub Mycenaean has been a controversial phase since its initial definition in 1934.³²² Its funerary customs were not less puzzling. But what was once considered an important break with the Late Helladic IIIC period, the introduction of cist and pit graves as main burial types,³²³ has been lately dismissed in the light of the absence of uniformity of this phenomenon, lacking in regional contexts such as Messenia and Crete.³²⁴

Regions	LH IIIC	Sub-Mycenaean
Cists		
Argolid	V	X
Attica	V	V

³¹⁹ Lewartowski 2000 : 51.

³²⁰ Lewartowski 2000: 51.

³²¹ Dickinson 2006: 183.

³²² Skeat 1934: 28; Mountjoy P.A., Hankey 1988: 1-33; Ruppenstein, 2001: 183-192.

³²³ Desborough 1972: 32-40. Lemos 2002: 185.

³²⁴ Snodgrass, 1971: 177.

N.W. Greece	✓	✗
Cyclades	✓	✓
Dodecanese	✓	✓
Locris	✓	✓
Thessaly	✓	✓
Corinthia	✓	✗
Elis	✓	✓
Achaia	✗	✓
Boeotia	✗	✓
Euboea	✗	✓
Pits		
Argolid	✓	✗
Attica	✓	✓
Dodecanese	✓	✗
Thessaly	✗	✓
Elis	✓	✓
Boeotia	✗	✓
Euboea	✓	✗
Phocis	✗	✓

Table 1: Continuity of simple tombs from LH IIIC to Sub-Mycenaean, after Lewartowski, 2000.

What can be admitted at this point of the research is that a rejection of the traditional Mycenaean customs in the former Mycenaean centres (Argolid, Boeotia, Dodecanese, Skyros, Attica) seems to be fairly detectable during SM.³²⁵ Desborough saw in this change the proof of the intermission of a new ethnic group,³²⁶ a hypothesis not completely dismissed by Lemos, who highlighted the actual importance of the SM disregard towards the funerary areas of the past.³²⁷ Snodgrass opposed this vision, stating that single burials were not new, but rather a reappearance of types already in use during the Middle Helladic period,³²⁸ implying that the EIA Greeks had kept in their memory rites and forms of burial used five centuries

³²⁵ Desborough 1972: 269; see paragraphs 2.4, 2.5.

³²⁶ Desborough 1972: 106-111.

³²⁷ Lemos 2002: 185.

³²⁸ Snodgrass 1971: 177-184.

earlier.³²⁹ Snodgrass' final implication would be that after the demise of the palaces, pre-Mycenaean rites had come back after a period in which they had been interrupted by the new official practices of the ruling class. Rejecting Snodgrass' approach, Dickinson compared the apparently similar burial practices, and his results acknowledged that:

- Middle Helladic burials were both extramural and intramural, while in SM and PG they became almost exclusively extramural, thus clearly separating the sphere of the living from that of the dead. A deep change that must have had also important ritual implications, although not fully known at present.

- Grave goods appeared sporadically in the Middle Bronze Age, while in the SM they appear to be an important feature of the burials. Again there is a change in the vision of dead, probably involving a cult of personality which was not so marked during the Middle Helladic period.³³⁰

From these differences it is clear that it was hardly the case of single tombs being revivals of Middle Helladic practices. The form may be similar, but the practices include different ideologies which are borrowed from the Mycenaean beliefs and are applied to funerary traditions that wanted to break with the past. The reintroduction of single tombs in this new fashion can be interpreted therefore as a gradual change from the Mycenaean tradition and not as a real break. As said, the most popular tomb types used for single burials were cists and pits. Their lengths and widths, rather variable during the LH IIIC, increased in the SM phase.³³¹ Usually they are invisible to the onlookers unless clear signals were placed to mark their spot. If not made of durable materials (e.g. stone stelai), these *semata* perished with time.³³² While in some areas, during this period, single burial cemeteries are newly prepared (see Athens), in other areas they utilize spaces previously used for habitation (see Mycenae), betraying either a disrespect for what once was a living space or simple unawareness of it (also indirectly proving that settlements had shrank during LH IIIC), strengthening the theory of newcomers,³³³ even though not necessarily non-Greeks.

Cist and pit graves seem to be the predominant tomb types in central mainland Greece: Attica, Argolis, Boeotia, Corinthia and Elis.³³⁴ According to Desborough the use of simple tombs in those areas, which will become preeminent in the later development of the Greek

³²⁹ Middle Helladic dates cover ca. 2000 – 1550 BC

³³⁰ Dickinson 2006: 183. See also Mee, Cavanagh 1984: 58; Lewartowski, 2000: 7-12.

³³¹ Lewartowski 2000: 12.

³³² Lewartowski 2000: 12.

³³³ Lemos 2002: 185.

³³⁴ Desborough 1972: 269; Lewartowski 2000: 13-18.

poleis, might be thought as a rejection of Mycenaean practices possibly previously imposed by the ruling classes and a return to pre-palatial interments, better representing the majority of the local inhabitants.³³⁵ We can observe that when single tomb cemeteries are the prevailing type in use the orientation of their burials does not follow any planned pattern but it rather depends on the space available and the intrinsic characteristics of the terrain in which they are placed.³³⁶ Inhumation still appears the most common funerary practice, a direct heritage of the last Mycenaean phase. Cremations are still used sporadically. In this general scene, however, there are exceptions of outstanding importance, like the cist tomb found at Kouvaràs.³³⁷ The site, in the Aetolian-Akarnanian region, gave back a cist grave unusually rich in content. The grave is a rare example of a SM warrior tomb in which a well represented equipment is shown together with objects of unique manufacture. The goods included a golden kylix and, more importantly, a hybrid dagger on which an iron blade was fused to a bronze handle, covered by ivory plates. There was a bronze Naue II sword accompanying a Mycenaean type F, plus another rare find in SM: bronze greaves of local manufacture, though recalling a model largely attested all over the Mediterranean, from Southern Italy to Cyprus.³³⁸

What appears of great significance in this tomb is that such rich offerings and outstanding personality were not buried in a monumental tomb, but in a cist grave. The new elite did not disregard simple tombs. Once again the stress was not put on the architecture of the tombs, but on the value of the offerings. The connections with the international trade in a moment where foreign contacts were allegedly limited are *per se* enlightening. The results of the metallographic analyses showed indeed that the Naue II sword and the bi-metallic dagger were Italian imports, but also that all the copper used in the production of the bronze objects was Cypriot.³³⁹ The two imports are linked with Italian manufactures: the Naue II sword parallels samples found in Northern Italy (Pila del Brancòn),³⁴⁰ while the bi-metallic dagger, though found in several locations of the Middle-East, has an ivory-work retraceable in the Matrei workshops of East-Tyrol,³⁴¹ but the only close parallel to this dagger was found in Sicily (Mulino della Badia).³⁴² So this deposition was precociously showing all the symbols of a warrior ideology which, though having Mycenaean roots as expressed by the pottery and

³³⁵ Desborough 1972: 109.

³³⁶ Dickinson 2006: 184.

³³⁷ Exposed in detail by Gatsi, Jung, Mehofer 2012: 247-265.

³³⁸ Clausen 2002: 163–167; Eder, Jung 2005: 489; Jung, Moschos, Mehofer 2008: 90; Moschos 2009: 356.

³³⁹ Begemann *et al.* 2001; Lo Schiavo 2005: 404-407.

³⁴⁰ Salzani 1994: 83.

³⁴¹ Zanini 2005: 86.

³⁴² Albanese Procelli 2003: 100.

the presence of the Mycenaean type F sword, was inspired by innovative ideas coming from Europe, through Italy. These ideas, the relation between a wine-drinking set of vessels and weaponry, enclosed in a single burial, as more commonly (if not yet largely) found in the subsequent period, appear here already linked together in a model that PG will only confirm.

1.3. Proto-Geometric burial practices.

After the SM period, the Athenian style of decoration marks the phase conventionally known as Proto-Geometric. Now the features developed during the SM period become the standard. Simple tombs continue to be used in the areas where they were previously adopted, often prepared to receive pots with the function of cinerary urns. Their use is now more monumental, the slabs are well cut and disposed in orderly fashion; no longer cheaper variants of built tombs, but rather much more expensive options.³⁴³

Yet in this period, some areas such as Crete, did not adopt single graves and kept using chamber tombs during the whole Iron Age.³⁴⁴ Also in Phocis-Locris the tradition of the chamber tombs continued in form of newly made rooms recalling the old shapes, if in a rather diminished size and care in execution, keeping a *dromos* as a monumental entrance.³⁴⁵ At the same time in Messenia (Nichoria)³⁴⁶ and Thessaly (Marmariani, Nea Ionia, Iolkos),³⁴⁷ multiple burials also persist in the form of small *tholoi*.³⁴⁸ But this aspect involves chiefly the peripheries of the Mycenaean territory and does not represent the broader picture. Cremation reaches now its peak of popularity and appears more commonly than inhumation in a number of sites (Athens, Lefkandi, Knossos, Argos, Elateia, Grotta and even Assarlik) throughout the Aegean, not affecting the typology of the graves already in use; all in all, this preference would seem nothing but a personal choice.³⁴⁹ Dickinson points out that cremations seem to be more popular where contacts with the Middle East (where cremation was in use in the Syro-Palestinian area) persist,³⁵⁰ even though Chania would point more towards Northern Italy as a possible link. Whatever the origin, the introduction of cremation as a burial practice must have been influenced peacefully by foreign beliefs, of which the ultimate meaning remains uncertain. We should imagine that cremations might have had more than a purpose. The first

³⁴³ Lemos 2002: 186.

³⁴⁴ Cavanagh, Mee 1998: 95.

³⁴⁵ Dickinson 2006: 182.

³⁴⁶ Wilkie 1992: 231-344.

³⁴⁷ Georganas 2000: 47-54.

³⁴⁸ Dickinson 2006: 182.

³⁴⁹ Dickinson 2006: 185.

³⁵⁰ Dickinson 2006: 186.

advantage of cremating a corpse is hygiene; it immediately stops its decomposition and the unpleasant effects of it on the community.

With time, to this initial cleaning act, a whole set of rituals connected with eschatology and religious beliefs must have been added. The main characteristic of cremation is that bodily remains are incinerated and so destroyed. In the vision of the rite, these might be seen as a disadvantageous limitation to the soul and its continuation into the next form of existence. The elimination of the body transferred the self from this dimension to the other. This vision, of course, would be discarding the body as a representation of the deceased's identity, transferring this role to the cremating act itself, which as a rite must have involved a pyre, energy and fuel expenditure and some collective rites now lost. Even without the visual fixation of the body in the mind of the community, the ritual fixed the event in the collective memory and was able to convey the same surrogate of immortality.

Of course, being able to invest in the construction of a pyre and fuelling the fire until the body was completely consumed was costly for the family. If speaking of actual wealth may be inappropriate since we cannot quantify such an expense and how sustainable it was at the time, it is hard to believe that families undertaking a cremation were indigent. Cremation remains are deposited in several ways even at the same site, underlining the fact that social customs are manifold and unrestricted. These variations in depositing the ashes include:

- The use of a cinerary pot, usually in the form of an amphora laid at the bottom of a pit dug on purpose in the floor of the grave. It is sealed by an open vessel, and all the goods are placed around it.
- The laying of the ashes in a hole without the aid of recipients;
- The deposition of the ashes on the floor with neither pots nor receiving dumps.³⁵¹

Even though less popular, inhumation continued regularly. The ratio between the two practices does not suggest radical social change related to the dead. The single tombs and the cremation practice now in use are both markers of a possible increase in wealth of these communities, given their cost in both human energy and fuel.³⁵² Areas where chamber tombs had been the standard during LH IIIC and initial SM are now either abandoned (Perati) or retained with the same characteristics (Knossos). As regards burials, we can notice a prevalence of females and children, if we judge them by the goods they contain. It has been suggested by Dickinson that in this period males might have expressed their prestige by

³⁵¹ Dickinson 2006: 184-186.

³⁵² Wells 1960: 35.

showing the wealth in the status of their consorts and children, seldom giving the same prominence to their own weapon-burials, a practice already seen in Middle Helladic graves, which could be taken as a possible sign of resurgence of pre-Mycenaean patterns.³⁵³ The analysis of single burials shows a variety of objects being offered in the graves, again with no apparent consistency.³⁵⁴

The significance of the objects offered is obscure, especially for those items that are not exclusively connected with the funerary sphere.³⁵⁵ If we tried to see the grave goods in a post-processualist way, we should intend them as social expressions of a collective identity. This vision would include within the burials only socially recognised items, appropriate to the social status of the departed.³⁵⁶ This view would be also connected with the fact that, by switching to single burials, prestige depended on the contents of the tomb rather than on its external monumentality. A residue of the Mycenaean expression of social prestige can be seen in the creation of larger single burials, apt to include more goods, generally richer, although rich items have been found also in small graves.³⁵⁷ As pointed out by Lewartowski, the variety and inconsistency of objects in tombs apparently suggests a detachment from the sphere of the sacred, as if they did not mean to assist the deceased during his or her journey in the underworld.³⁵⁸ Only a few items in tombs can be thought of as being pertinent to the religious sphere: principally figurines and animal bones,³⁵⁹ but then again, there are signs of religious beliefs within pottery (see chapter IV.5.2.ff.). Goods were still offered in the same way, inserted in the available space of the tombs and in quantities proportional to the wealth degree of the dead. Again the differences between male and female depositions are unclear.³⁶⁰ Lekythoi, used to contain ritual (?) oil, replace from now on the piriform and perhaps the stirrup jars previously used during LH IIIC and SM, especially in female burials (see chapter II.1).³⁶¹

PG Athens gave evidence of graves where, according to skeletal analysis, young women were buried,³⁶² in that these were all marked by recurrent items such as bell-shaped dolls,

³⁵³ Dickinson 2006: 190.

³⁵⁴ Lewartowski 2000: 49.

³⁵⁵ Dickinson 2006: 177.

³⁵⁶ Dickinson 2006: 178.

³⁵⁷ Dickinson 2006: 181.

³⁵⁸ Lewartowski 2000: 50.

³⁵⁹ Lewartowski 2000: 51.

³⁶⁰ Desborough 1972: 67.

³⁶¹ Lewartowski 2000: 51.

³⁶² Parker Pearson 1999; MacKinnon 2007: 473-504.

terracotta models of boots, *kalathoi*, *pyxides* and above all metal hair spirals.³⁶³ The same combination of objects can be found at Lefkandi, where the Athenian influence was in fact quite strong. But particular presence of metal hair spirals in maiden graves links not only Attica and Euboea, but also central Greece, Peloponnese and the islands.³⁶⁴ Lekythoi together with *pyxides* and *kalathoi* are three vases never found in domestic contexts, allowing us to infer that their production in the PG period was exclusively funerary.³⁶⁵ Beads and buttons are no longer in use, while weapons reappear in this period and are deposited once again in their natural position in relation with the bodies. It must be underlined that during this period special categories of objects previously thought to be associated with infant burials, such as feeders, miniature vases, terracotta figurines, beads and shells, seem to disappear almost completely.³⁶⁶

Probably to overcome the difficulty of the reduced space provided by cist graves (or even smaller single burials) for offerings, a large amount of pottery was avoided: in a standard situation, Iron Age single burials had from one to four vessels accompanying the dead.³⁶⁷ In the case of rich burials, the amount of pottery was greater and the cists were bigger and included an extra space for storing the offerings, which in this case could include not only a larger amount of pottery, but also weapons, dress fasteners and other jewellery such as rings or heirlooms.

	Mycenae³⁶⁸	Salamis³⁶⁹	Athens³⁷⁰	Lefkandi³⁷¹	Naxos³⁷²
1 to 2 pottery samples	10	23	72	55	8
3 to 4 pottery samples	0	0	10	31	1
5 pottery samples or more	1	0	6	44	0

Table 2: Examples of quantitative analysis of Pots in single Sub-Mycenaean and Proto-Geometric graves.

The other classes of goods remain basically the same: the scarcity of jewellery, the lack of weapons seen during the SM period give way during the PG to wealthier goods. Weapons return to being part of the grave goods and offer us a clearer gender differentiation; the same evidence is given by the increase in the use of dress fasteners (arched fibulae and long iron

³⁶³ Langdon 2008: 130.

³⁶⁴ Marinatos 1967: 28; Bielefeld 1968: 47, 48; Higgins 1980: 74-89, 97-104.

³⁶⁵ Lemos 2002: 189.

³⁶⁶ Lewartowski 2000: 50.

³⁶⁷ Dickinson 2006: 185.

³⁶⁸ Packenham-Walsh 1955; Mountjoy 1999(1).

³⁶⁹ Wide 1910; Mountjoy 1999.

³⁷⁰ Kübler, Kraiker 1939-1954; Ruppenstein 2007.

³⁷¹ Popham, Sackett, Themelis 1979.

³⁷² Kardara 1977; Lambrinouidakis 1980; Mountjoy 1999; Vlachopoulos 2006.

pins), which appear to be in greater quantities on women's bodies, probably because they were required by the type of dress they wore.³⁷³ Together with a certain increase in offerings of metal objects and fasteners, iron is now commonly used as a metal. Exotic and imported items, as well as gold and other precious stones occur quite rarely, as part of exceptionally wealthy sites still able to trade, such as coastal Attica, Euboea and Crete, probably not typical of the broader situation.³⁷⁴

1.4. Concerning religious patterns in graves.

Without textual sources, finding evidence of religious patterns of the post-palatial world is a task beyond solution. If during LH IIIA and IIIB we have mention in the texts of ritual offerings to the gods (almost all of them recognisable in the archaic pantheon),³⁷⁵ in LH IIIC we have no textual evidence of any ritual connected with the same figures and even the ritual areas are indistinct and fragmentary.³⁷⁶ The only thing visible in both the post-palatial and EIA graves, which can be also mirroring the Cretan *ex voto* in caves and high peaks,³⁷⁷ are the terracotta figurines of obscure function, commonly ascribed to some kind of religious activity.³⁷⁸ There is no comparison with Crete observable in the grave goods of the LH IIIC, SM and PG mainland, no specific possible cultic objects such as snake tubes, plaques or bull protomes.³⁷⁹ What could be identified in the "Dark Age" mainland as signs of cult are traces of practices in the treatment of the deceased. Unfortunately, even during the Mycenaean period these patterns appear various and not bound to any particular rule: in the same cemetery, different age and gender types could be buried with the same practices or be differentiated according to personal choices. Skeletal positions also suggest a private choice in the way the bodies were laid in the burial. We do not know whether tombs were made to fit the size of the bodies or *vice versa*. I agree with Lewartowski when he admits that the second hypothesis is likely to be the most plausible one for simple tombs, since there are no practical differences in construction, small size was limited only by personal resources, and sometimes, even when they are bigger than necessary, some skeletons appear crouched,³⁸⁰ as to convey a sleeping or foetal image.

³⁷³ Lewartowski 2000: 50.

³⁷⁴ Dickinson 2006: 185.

³⁷⁵ Marinatos, N. 1988: 9-20.

³⁷⁶ Dickinson 1994: 286-293.

³⁷⁷ Nilsson 1950: 74.

³⁷⁸ French 1971: 102-187.

³⁷⁹ Dickinson 1994: 225.

³⁸⁰ Lewartowski 2000: 26.

If we had to rely on grave goods and skeletal positions we would still be groping in the dark, since signs of religious patterns are not directly identifiable. Of course burnt bones of animals, sometimes found around tombs, can suggest ritual banquets with some religious meaning,³⁸¹ but our knowledge of them remains limited. As Marakas points out, an interesting change in religious practices occurred in the choice of locating EIA cult centres in remote areas, detached from the settlements.³⁸² These were isolated and open-air locations, usually detectable where flat stones (used as altars) or natural springs were in connection with remains of burnt bones and pottery sherds (implying possible ritual meals). The presence of banquets would suggest that rich families must have invested in ritual events just to express their power and to strengthen their social relations.³⁸³

2. Regional Contexts.

2.1. Mycenae.

The eponymous city of the Mycenaean civilisation appears after LH IIIB2 in a notable state of decline, but at the same time it presents signs of coexistence of old and new customs. As the centre of an imposing palace, probably the Wanax's main residence, Mycenae's Citadel was apparently badly affected by the absence of the former ruling class. During LH IIIC Early it is interesting to note how only the residential area within the citadel was rebuilt and put to use by at least another generation of Mycenaean. The urban areas abandoned after the collapse were often used as burial grounds.³⁸⁴ Here several structures contained poorly furnished intramural depositions: the remains in the cyclopean terrace structure (Γ1 1959) was a postpalatial inhumation in a pithos,³⁸⁵ the unfinished tower in area XLVIII³⁸⁶ nearby also had on its floor a skeleton with a stirrup jar in between its legs.³⁸⁷ The grand storehouse known erroneously as the Granary, that French demonstrated to have been built in LH IIIC,³⁸⁸ might have contained a badly preserved deposition under its floor, and at the east side of the same structure there was also the so-called bath grave, an isolated grave within a terracotta larnax.³⁸⁹ Another LH IIIC source of information comes from the east, south and west slopes

³⁸¹ Deger-Jalkotzy 2008: 405.

³⁸² Marakas 2010: 136.

³⁸³ Marakas 2010: 136.

³⁸⁴ French 2011: 11- 32; Rutter 2013.

³⁸⁵ French, 2011: 24.

³⁸⁶ French, 2011: 21.

³⁸⁷ Mountjoy 1999: 139.

³⁸⁸ See French 2011: 28.

³⁸⁹ Mountjoy 1999: 139.

of the Panaghia Ridge, in the ‘Third Kilometre Cemetery’ in which the main burial practice had been inhumation in twenty chamber tombs.³⁹⁰

At the same time not so far from Mycenae, the great tumulus of Chania preserved a different picture. It contained only incinerated bodies placed within Mycenaean-fashioned vases.³⁹¹ The use of different burial rites would imply an absence of ties with the local traditions, but then again the material culture inside the tumulus seems to indicate that the people buried there were still Mycenaean in culture.³⁹² Lantzas’ recent study on Mycenae has indicated a few features that are worth mentioning. Her work admits what I have been implying so far, that a strong material continuity between the LBA and the EIA is clearly attested at Mycenae, but at the same time it can be noted a clear detachment from the old ideology also evident elsewhere in EIA Greece.³⁹³ In the cemeteries, at least five chamber tombs (G-III from Gortsoulia, P-I in the cemetery on the Panaghia ridge, tomb 502 in the Third Kilometer cemetery, Grave B from Alepotrypa, 532 from the Kalkani cemetery), have been assigned to LH IIIC.³⁹⁴ The one in Gortsoulia was built in LH IIIA1 and continuously reused until LH IIIC Middle,³⁹⁵ the one in the Panaghia ridge was built in LH IIIA2 and again reused until LH IIIC Early.³⁹⁶ The other three tombs were certainly in use during LH IIIC and it is not clear from their architecture whether they were built earlier, apart from the one in Alepotrypa, securely assigned to and built in LH IIIC Late.³⁹⁷ There is evidence, therefore, of both reuse and new constructions of chamber tombs during LH IIIC, if neither as common nor widespread as in the palatial age. Yet these new chamber tombs are so limited in number that it was inferred by Thomatos that a drop in the population may have actually occurred.³⁹⁸ The table below (based on Lantzas’ work) confirms that LH IIIC Mycenae is still widely represented by collective burials, even though only five, while at the very end it started to associate them with the first examples of pithos burials.

Chronology	Chamber Tomb	Cist	Pit	Pithos
LH IIIC Early	✓	✗	✗	✗
LH IIIC Middle	✓	✗	✗	✗
LH IIIC Late	✗	✗	✗	✓
LH IIIC	✓	✗	✗	✓

³⁹⁰ Wace 1932; Mountjoy 1999: 139.

³⁹¹ Palaiologou 2013: 249.

³⁹² Thomatos 2006: 253.

³⁹³ Lantzas 2012: 42.

³⁹⁴ Lantzas 2012: 54.

³⁹⁵ Shelton 2000: 36-38.

³⁹⁶ Shelton 2000: 51.

³⁹⁷ Shelton 2003: 36.

³⁹⁸ Thomatos 2006:253.

Sub-Mycenaean / Early PG	X	V	X	X
Middle PG	X	X	X	X
Late PG	X	X	V	X
Proto-Geometric	X	V	V	X

Table 3: Diachronic presence of tomb types, after Lantzas 2012.

Wright had already pointed out that Chamber tombs were late introductions in the Bronze Age, not appearing earlier than LH IIIA. Since their appearance they were mostly used by the palatial elites and this fact strongly suggests their exclusive association with the ruling class. Through them, the Mycenaean elites wanted to stress the importance of their own family groups rather than that of individuals members of the society.³⁹⁹ The LH IIIC Late pithos burial found at Mycenae may be therefore the earliest witness of what Lantzas rightfully sees as an ideological revolution, the expression of individuality over corporation.⁴⁰⁰ The fact that some families continued to inhumate their dead in some chamber tombs at Mycenae until the end of LH IIIC Late could imply that the Mycenaean successors were still living in the same areas⁴⁰¹ and, at the same time, that they acknowledged their ancestors as those LH IIIB Mycenaean once living there.⁴⁰²

It should also be stressed out that no tholos tombs were built after the collapse.⁴⁰³ Perhaps tholos tombs had already lost their grip on the late Mycenaean ideology, since they represented, like the tumuli (of which they were perhaps an evolution), an Early Mycenaean aristocracy, probably influenced by Minoan status symbols far from the fully developed Late Mycenaean palatial institutions and practices.⁴⁰⁴ On the other hand, the very few chamber tombs constructed during the LH IIIC period and their complete disappearance after its conclusion confirm their link with the declined palatial elites and their last successors. After LH IIIC, it is evident that the communities at Mycenae no longer associated their dead with chamber tombs and there was instead a clear and complete acceptance of single burials. The first single burial that can be noticed at Mycenae is a pithos burial from the citadel, a reemergence of an *enchytrismòs* practice already in use during MH, therefore still a local trait rather than a foreign introduction.⁴⁰⁵ Soon after LH IIIC, pithos burials, cists and pits signed the passage to SM and PG, and the preference of both single burials and cremation practices. If it is true that neither cist nor pit burials were a novelty in Greece since the Neolithic, their

³⁹⁹ Wright 2008: 238.

⁴⁰⁰ Lantzas 2012: 66.

⁴⁰¹ Lantzas 2012: 66.

⁴⁰² Thomatos 2006: 253.

⁴⁰³ Thomatos 2006: 253.

⁴⁰⁴ Cultraro 2004: 150.

⁴⁰⁵ Boyd 2002: 69.

use and complex association to rites and status symbols during the EIA certainly categorises them as original phenomena. What Lantzas concludes about their introduction at Mycenae may well be true also for the other sites in central Greece, *i.e.* that the main purpose of both single burials and cremation at the end of LH IIIC, and their popularity in the subsequent periods, was to promote individuality. This new individuality was apparently defined by a new ideology, which wanted to dissociate the dead from their community to celebrate their personal achievements in life and their ultimate journey into the after-life.⁴⁰⁶ The crematory process, with its high cost and its strong impact on the senses of the onlookers was an unforgettable experience which would have remained steady in the collective memory.⁴⁰⁷

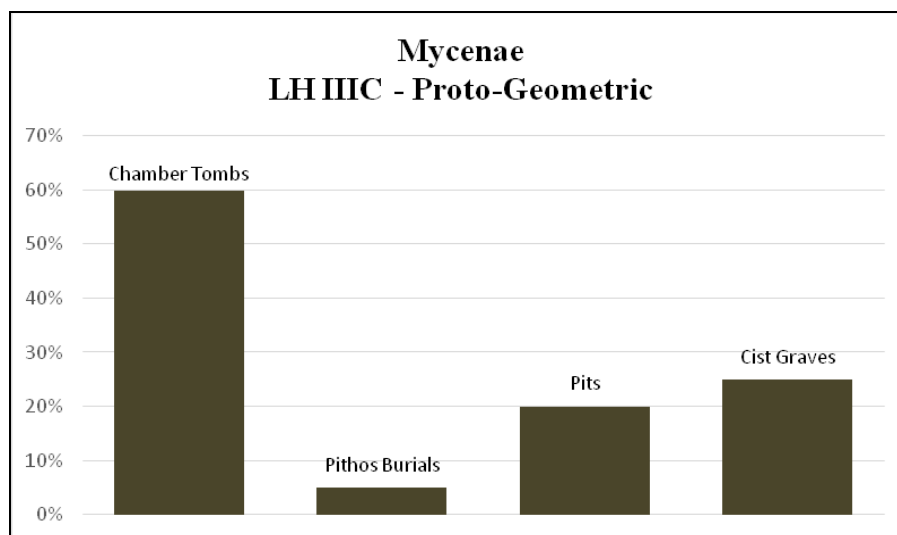


Table 4: Popularity of tomb types at Mycenae from LH IIIC to Proto-Geometric.

The skeletal remains found within these burials included both adult sexes, infants and children. The places in which burials were placed include important areas of the former administrative centre: the citadel house area, the temple context, the area near the Lion Gate, the North quarter of the palace. As Lantzas suggests: mortuary activities in the former citadel show that these communities wanted to change what it represented by transforming its primary function from the venue of central authority to a cemetery which had nothing to do with the living.⁴⁰⁸ In conclusion the situation at Mycenae is of great heterogeneity. It is true that Mycenae seems suffering evident signs of abandonment as shown by the burial evidence.⁴⁰⁹ What appears throughout the period is a reduced and poorer population, which rebuilds and finds shelter in the old ruins of the palace, using the former citadel houses as single burials. A few isolated tombs mix different burial modalities with no apparent relation

⁴⁰⁶ Lantzas 2012: 71

⁴⁰⁷ Williams 2004: 417.

⁴⁰⁸ Lantzas 2012: 55.

⁴⁰⁹ Megaw 1965: 11; Taylour 1969: 260.

to each other or to a common practice. We have *enchytrismoi*, pits and cists under the floors of abandoned fortifications or walls, and even clusters of chamber tombs mostly reused, while a couple are newly made. The overall impression is that the community at Mycenae kept inhabiting the same area and reusing the same family tombs for a while, until new elites started to reaffirm themselves and to look for a better way to express themselves in both life and death.

2.2. Perati.

Perati, on the eastern coast of Attica, shows one of the richest cemeteries of the post-palatial period. The necropolis covers a timespan roughly from 1200 to 1050 BC, embracing therefore the complete LH IIIC period and the early part of the SM one, after which it was abandoned.⁴¹⁰ It provides therefore an interesting case-study to investigate the funerary patterns that the post-palatial Mycenaean society was adopting soon after the fall of the palaces. Perati contained 192 newly made chamber tombs and 27 pit-graves. The chamber tombs are small (tomb 10 appears to have the biggest chamber, 3.40 x 3 m. while tomb Σ54 the smallest, 0.80 x 0.95 m.)⁴¹¹ and roughly constructed, with level floors and roofs; enclosing only a few interments, at times including children, 61 of them with only one deposition each; pits are included in the same cemetery inserted in the spaces surrounding the built tombs.⁴¹² Niches appear to have been added also inside a few chambers to provide storage to preserve the earlier depositions and make space for the new ones, a characteristic at times presented in form of pits excavated in the floors of the chambers.⁴¹³

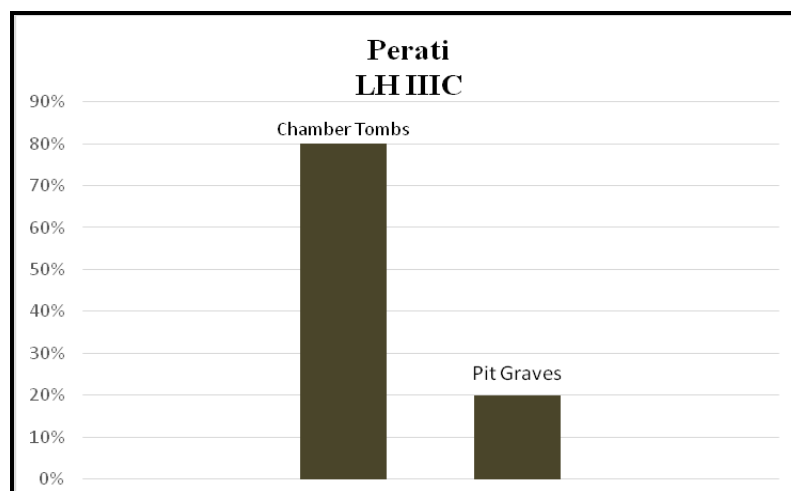


Table 5: Popularity of tomb types at Perati during LH IIIC.

⁴¹⁰ Iakovidis 1980: 3.

⁴¹¹ Iakovidis 1980: 4.

⁴¹² Dickinson 2006: 180.

⁴¹³ Iakovidis 1980: 4.

The excavator brought to light ca. 600 inhumations, but 18 cremations have been identified within ten of the chambers.⁴¹⁴ The inhumed bodies were usually placed on the floor or on a “bed” of pebbles, with no fixed orientation.⁴¹⁵ The majority of them were placed in a supine position, while a fifth were laid on their sides. The arms could be by their sides, on their lap, or on the chest; legs could be contracted or extended. All these variations occurred often in the same cluster (as in tombs 5, 56, 70, 90, 111, 145) excluding therefore ritual reasons behind it.⁴¹⁶ As regards cremations, the preference in the disposal of the ashes leaned towards the use of funerary urns, but depositions directly laid on the floor of the tomb also occurred.⁴¹⁷ From the analysis of the cremated remains, Iakovidis reported that they must have burnt on pyres rapidly lit and put out in a relatively short period of time, since the remains are only partially reduced to ashes with evidence of bones later intentionally splintered.⁴¹⁸ The spectrum of ages and sexes emerging from the analysis of these eighteen cremations shows a majority of adults, twelve in number. Also one child of ca. five-years-old was found, plus two adolescents, one woman and three old men,⁴¹⁹ including then all sexes and ages, leading no support to the idea of infectious disease in the bone remains, excluding a use of cremation for prophylactic or purificatory purposes.

It would appear that, as Dickinson rightfully states, the adoption of both inhumations and cremations within the same sepulchral architecture and enclosure evidences that their choice was probably unrelated to changes in belief or ethnicity.⁴²⁰ It is more evident that the bigger chamber tombs, which therefore present a larger expenditure in their construction, often include the richest goods and contain the cremations, suggesting a social meaning in the adoption of cremation, perhaps an exotic and prestigious custom that only the richest families could afford. As regards the pit-graves, they present no novelties in the structural features; they are rectangular shafts, 26 slab-covered, six simply filled and left uncovered, which all contained the human remains (mostly holding single depositions) with no other content. There is also lack of coherence in their orientation and markers were not found.⁴²¹ The inhumed bodies do not present any particular rule as regards their deposition: most of them lay on their backs, with raised knees and hands placed on their lap, side, or crossed on their chest. Five

⁴¹⁴ Galanakis 2013.

⁴¹⁵ Iakovidis, 1970B: 422.

⁴¹⁶ Iakovidis, 1970B: 422.

⁴¹⁷ Dickinson 2006: 181.

⁴¹⁸ Iakovidis, 1980: 7.

⁴¹⁹ Iakovidis, 1980: 7.

⁴²⁰ Dickinson 2006: 181.

⁴²¹ Iakovidis 1980: 7.

inhumed lay on their side, two were found in contracted positions. Even in the arrangement of the bodies inside the graves was therefore variable.⁴²²

Finally, Perati presents continuity in Mycenaean patterns and grave goods but includes some signs of change not related to intrusive foreign intrusions, but rather with a personal search for cultural prestige through deployment of wealth and exotic practices. As regards the clustering of the tombs it is clear that there was an attempt to maintain an orderly pattern with all the *dromoi* aligned along paths suitable for processions and open towards the south or south-west, therefore developing the chambers towards the north or north-east. Whenever the natural landscape was unsuitable the chambers had been cut accordingly pointing towards north-west north-east, seldom west. Nine *dromoi* have niches along their walls, identified by Iakovidis as child-burials.⁴²³

This position of the tombs seems to underline a precise social organisation still linked to funerary rites involving *ekphora* like those depicted on the Geometric pottery. Moreover, visits and perhaps rites continued to be performed outside the tombs, as the easily accessible pathways running through the cemetery would seem to suggest. All in all, the overall situation presents no signs of disruption, on the contrary it evidences a relative wellbeing and stability. It is interesting to note that the Perati cemeteries flourished and kept being extended three times (around 1160, 1100 and 1050 BC) but were inexplicably abandoned during the initial phase of the SM. The site had maintained a Mycenaean identity throughout its existence. The desertion of such a settlement, which had showed clear signs of prosperity due to trade contacts, might imply a change in the trade routes at the end of the 12th century BC.

⁴²² Iakovidis 1980: 5.

⁴²³ Iakovidis 1980: 4.

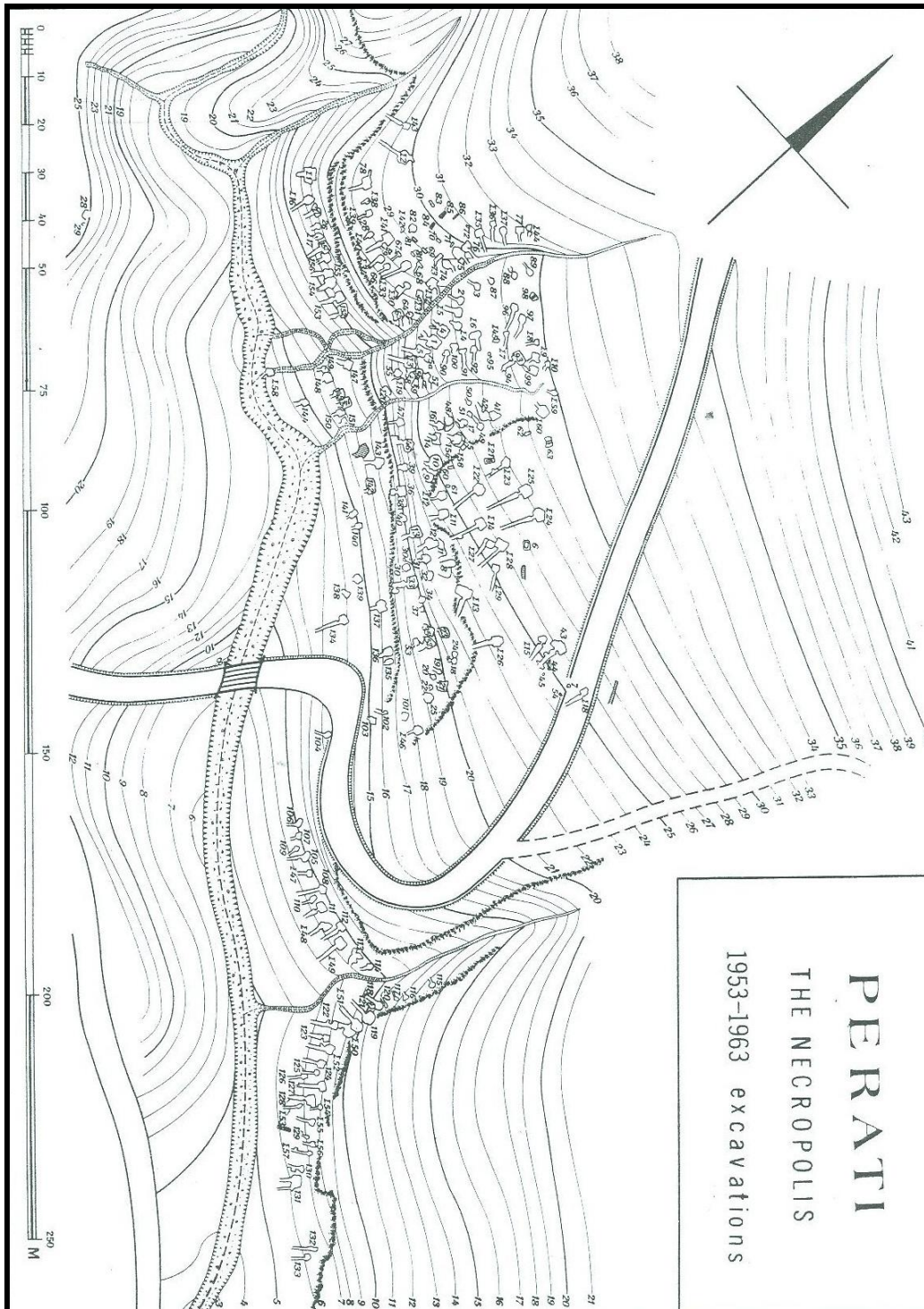


Figure 2: Map of the Perati cemetery. Iakovidis: 1980.

2.3. Salamis.

Salamis would certainly disprove Lewartowski's theory of cist tombs as possible elite burials.⁴²⁴ In fact, of the ninety-eight burials dating to LH IIIC late and SM (with few addition in the LPG), all are single burials in form of stone-covered cists, but their content was poor, mostly with a new style of minimally decorated pottery (see chapter IV.2.3),⁴²⁵ rarely accompanied by jewellery.⁴²⁶ Each cist contained a single inhumation in a contracted position, maybe to fit the small size of the graves, only 0.90 x 1.20 m.⁴²⁷

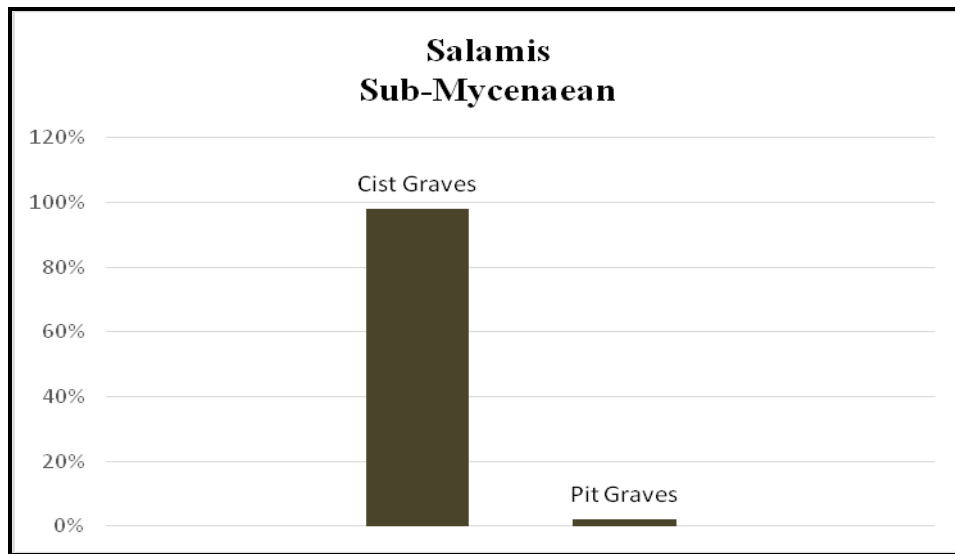


Table 6: Popularity of tomb types at Salamis during Sub-Mycenaean.

The cists were roughly made and do not seem to follow any particular orientation in the arrangement of the graves, nor is there any evident trace of cultic performances.⁴²⁸ Only two graves would seem to indicate cremation activity, the jars contained respectively ashes and bone remains,⁴²⁹ but they were found empty of other offerings and therefore hard to date.⁴³⁰ The evidence of Salamis shows that although the preference for single tombs was here fully expressed, such choice was not related to self-determination as high status elements of the society, but it rather showed the use of cist tombs as modest substitutes of the more expensive chamber tombs.

⁴²⁴ Lewartowski 2000: 18.

⁴²⁵ Styrenius 1962: 103-122.

⁴²⁶ Wide 1930: 17-36.

⁴²⁷ Kavvadias 1886: 1-20.

⁴²⁸ Snodgrass 1971: 147.

⁴²⁹ Kavvadias 1886: 1-20.

⁴³⁰ Styrenius 1962: 37.

2.4. Athens.

The Kerameikos cemetery at Athens represents our best witness for the evolution of tomb types in the Early Iron Age and will be used here as the main source.⁴³¹ That Athens was the seat of a Mycenaean palace during LH III was until recently suggested by the presence of tholos tombs in its vicinities (Menidhi, Thorikos and Marathon).⁴³² When the palace was supposedly no longer in use, there was evidence of only one chamber tomb in the Agora,⁴³³ evidencing signs of an initial crisis rapidly overcome in the following period. Nevertheless, Privitera has argued that at least two out of the five LBA terraces (IV and V) in the acropolis of Athens should be dated to LH IIIC early⁴³⁴ rather than to the early 13th century B.C.⁴³⁵ Though based on a single sherd from a deep bowl dated to the latest phase of the BA, between LH IIIB2 and LH IIIC early, this bold theory might change our point of view about Mycenaean Attica.⁴³⁶ Since the existence of a “Mycenaean palace” on the Acropolis was based on Iakovidis’ dating, if Privitera’s theory were true it would mean that an extensive and expensive terracing took place in LH IIIC Attica in a period supposed to be critical. Such an effort was only possible if the local government were already decentralized in LH IIIB2.⁴³⁷ During the same period, indeed, most of the Attic sites were abandoned. The activity in Athens would mean that the site was rising to a capital status in Attica already at the end of the palatial society, as witnessed by LH IIIB2 Attic pottery, exclusively produced in Athens.⁴³⁸

In this view, Homer’s verse referring to a “solid house of Erechtheus”,⁴³⁹ so far the unequivocal postulate of a Mycenaean palace, should be intended as something else, perhaps as the post-palatial residence of a political and military leader, like those who allegedly took over in the LBA and EIA, defined by Homer simply as kings. The active entrepreneurship of Athens as a primary centre in Attica during LH IIIC would be attested also archaeologically by the nearby cemetery of Perati and the exchange network operating there (especially pottery). During the SM period Athens kept this lively activity, such a continuity is at present hard to find below the stratified levels of the classical and modern cities. The SM Kerameikos

⁴³¹ The tombs in the Sacred Road, Erechteion Street in the Kerameikos series have not been included in this analysis, for reference see Lemos 2002: 9.

⁴³² Cavanagh 1986: 161-169.

⁴³³ Papadopoulos 2003: 292

⁴³⁴ Privitera 2013: 60-65.

⁴³⁵ Iakovidis 1962.

⁴³⁶ Privitera 2013: 63, 174.

⁴³⁷ Privitera 2013: 52, 174.

⁴³⁸ Privitera 2013: 68, 69.

⁴³⁹ Homer, *Odyssey* VII. 81.

cemetery began its life in the 11th century and already showed a clear choice, whether determined by necessity or change in fashion, to adopt single burials as the main practice.⁴⁴⁰ Among all the grave types constructed after the SM period, cist tombs are the majority, together with pits and shafts covered by field-stones. Inside these simply executed tombs, with poor contents almost restricted to pottery alone, we start finding a few jars with cremated remains. The inhumed bodies were laid on their back, with bent legs. The grave goods were disposed around the deceased, a pattern already seen in the LH IIIC Perati and largely maintained even later in single tombs, whenever inhumations occurred.⁴⁴¹ The position of the SM graves does not show any regular pattern or orientation, they look randomly adapted to the natural environment.

The recent publication by Ruppenstein about the latest finds at the Kerameikos implies that the Athenian SM can be defined as a chronological period and not only as a pottery style. The SM of Athens presents features that detach it from the previous periods and open the way to the subsequent periods (a major example can be the introduction of the concentric circles). It should be seen therefore as a transitional period. Concerning SM burial practices, Ruppenstein reiterates that the main innovation is given by the introduction of single graves in new established cemeteries. The evidence shows that the most popular SM tomb type was represented in Athens by the stone cist.⁴⁴²

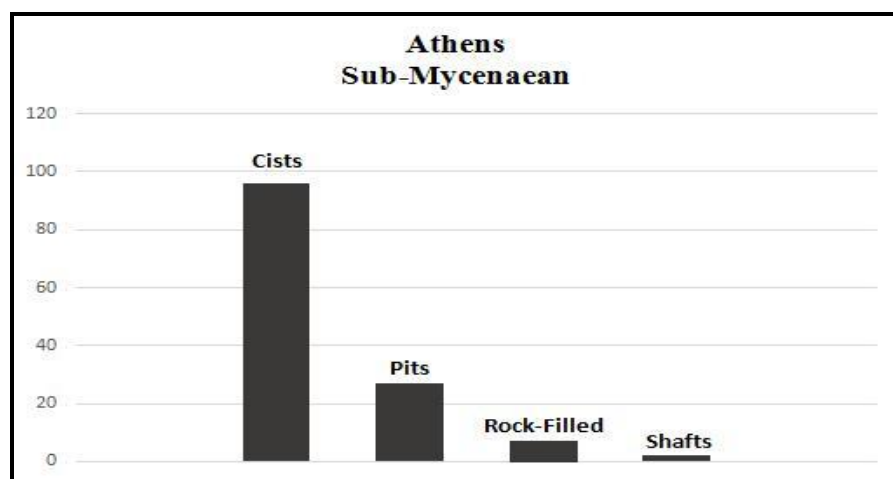


Table 7: Popularity of tomb types at Athens during Sub-Mycenaean.

Ruppenstein rejects Snodgrass' theory about a revival of MH customs⁴⁴³ and links these types to foreign traditions, instead. The evidence would come from the Late Bronze parallels of Epirus and the northern regions neighbouring the Greek mainland, especially the present

⁴⁴⁰ Whitley 2003: 88.

⁴⁴¹ Iakovidis 1980: 5.

⁴⁴² Ruppenstein 2007: 241.

⁴⁴³ Snodgrass 1972: 186.

areas of Albania and F.Y.R.O.M. which also have in common the adoption of tumuli like those seen in LH IIIC Argolid.⁴⁴⁴ To Ruppenstein it is clear that there were contacts between Greece and these northern regions and that the local populations chose to break up with the former Mycenaean customs and adopt these exotic practices.⁴⁴⁵ The tomb types remained basically the same in the PG period. Only the rock-filled shaft (a minor example even earlier) disappears with the addition of only one type of single burial, the ‘Trench-and-hole’, an excavated rectangle with a hole dug at one end or in the centre of it, made to host the cinerary urn. The latter is usually an amphora closed at the top by another vessel. This adjustment underlines one of the main novelties of the period: the predominant, though not exclusive, adoption of cremation. This implies an increase in prosperity not only shown by the expensive practice itself, but also by the grave goods offered with it. These goods increase now in both number and quality, at the same time presenting technological improvements and original styles.⁴⁴⁶ In these new grave types, offerings are placed in the space around the urn-hole, while the remaining trench is filled in with the earth coming from the pyre or with gravel and pebbles, as found in regular cist tombs.⁴⁴⁷

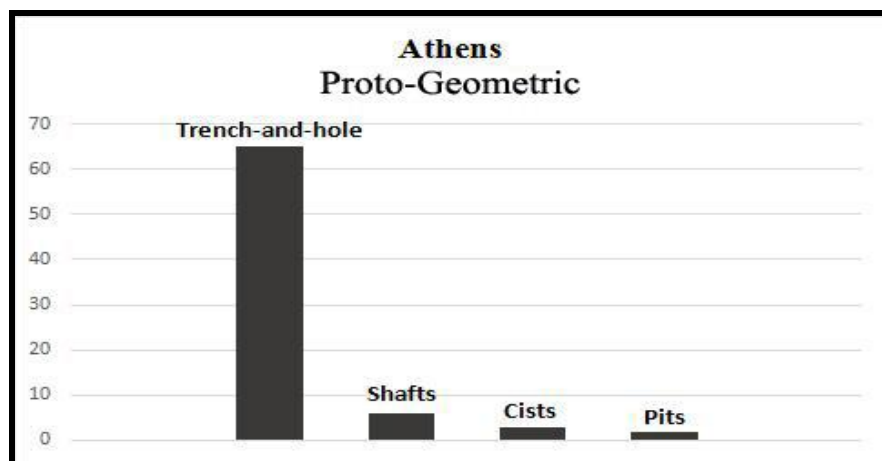


Table 8: Popularity of tomb types at Athens during Proto-Geometric.

It must be stressed that there is a big difference between SM and PG tomb types at Athens. There is a drastic drop of stone cists during the PG period (3% against the SM 96%). Even though slightly different, idea of strong individual expression valid for the cist graves is still operating behind the choice of the trench-and-hole shafts. What makes all the difference is the increased popularity of the crematory rite. I suggest here to see PG tombs as still strongly related to SM ones. There is standardised use of cremation for both genders. Men

⁴⁴⁴ Ruppenstein 2007: 241-254.

⁴⁴⁵ Ruppenstein 2007: 248 ff.

⁴⁴⁶ Whitley 2003: 102.

⁴⁴⁷ Whitley 2003: 102.

and women are both inurned in amphorae which, according to Whitley, might be defining genders by their shapes: neck-handled-amphorae for male cremations and belly-handled (or shoulder-handled) amphorae for female ones, although by his own admission, there are cases in which the vessel types are the same for both sexes. In fact, this association between genders and amphorae is not yet supported by any extensive analysis of the cremated remains, and Whitley's theory remains speculative. It is interesting to find child-burials in simple trenches, either cremated or inhumed, deposited without metal offerings.⁴⁴⁸ If a vessel was chosen to accompany (or contain) the bodily remains of children, this was usually a hand-made jug, but their ashes were often laid on the floor.⁴⁴⁹ The graves are again disposed randomly.⁴⁵⁰

Slight modifications occur in the EPG and MPG phases: the trench-and-holes have much deeper pits to receive the urns.⁴⁵¹ The lids of the cinerary amphorae can now be made of bronze.⁴⁵² The paired neck-handled and belly-handled amphorae become more popular, while child-burials are archaeologically invisible in this period. This part of the cemetery also appears reduced in size and was composed of isolated clusters with no particular orientation.⁴⁵³ The overall situation at Athens seems to be showing that as soon as the 'Wanax' control in Attica, of which we can only imagine the actual extent, came to an end, the Athenian settlement remained active, if initially in a state of economic recession. The resources once collected from the coastal centres like Perati must have suddenly ceased for the benefit of those sites, now independent. The SM period marks the beginning of Athenian resurgence.

Yet I exclude the importance of maritime trade in this period. The Attic coastal sites are now abandoned, it is evident that new sea routes for trade were being sailed and that the Greek mainland was not part of them. Suffering from the isolation of its harbours, the Attic economy had initially entered a difficult economic phase. Nevertheless Athens seems to revive its material culture in concomitance with the appearance of a new ideology reaching Greece after the palaces. This is suggested by the immediate and full adoption of single burials, with minimal architectural elaboration and limited assemblages of offerings. During this period there is still a very limited trace of weapons among the grave goods, too few to make us speak of a warrior society. Most of the objects seem still related to a local

⁴⁴⁸ Lemos 2002: 152.

⁴⁴⁹ Whitley 2003: 110.

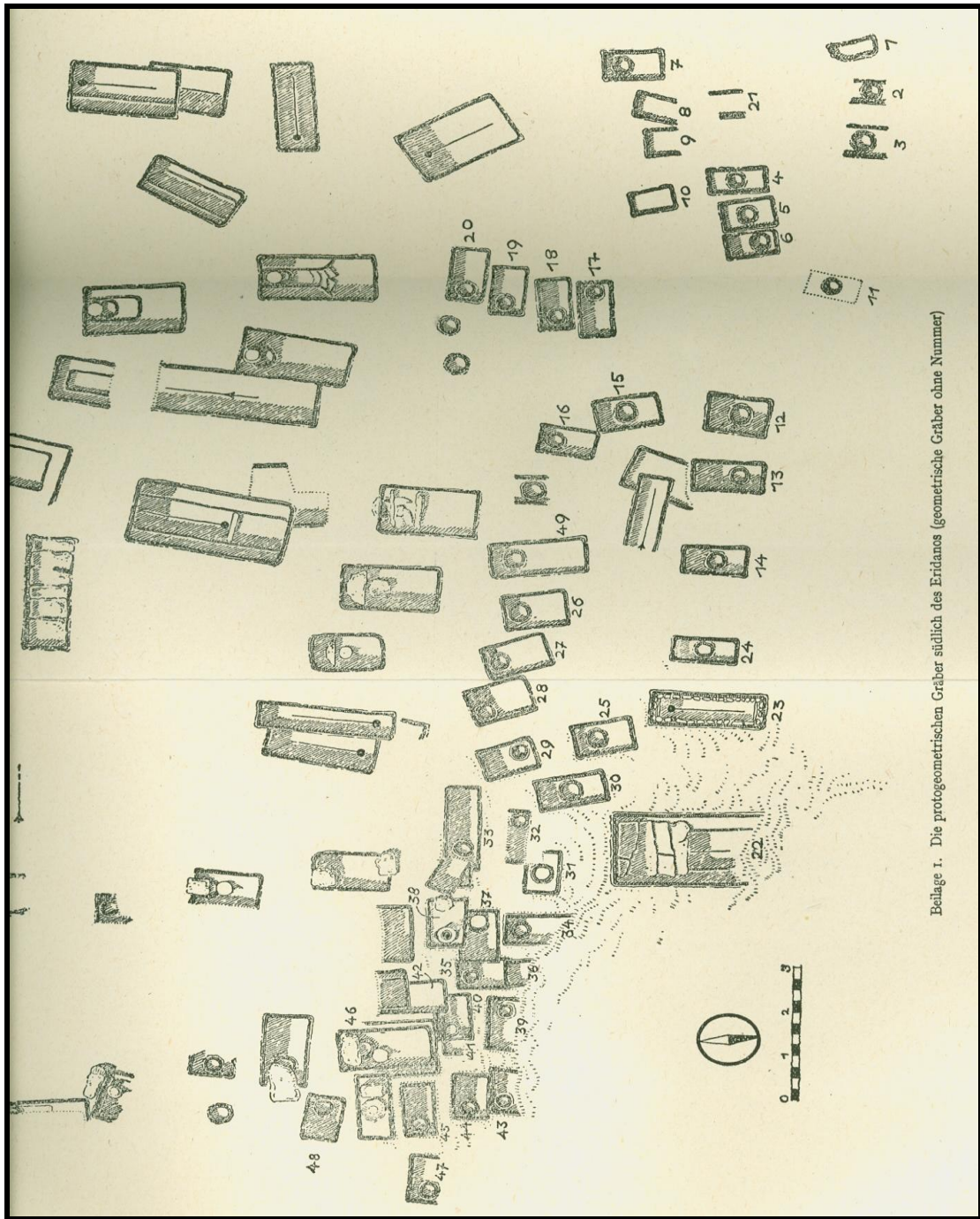
⁴⁵⁰ Kübler, Kraiker 1939-1954.

⁴⁵¹ Whitley 2003: 110.

⁴⁵² Whitley 2003: 110.

⁴⁵³ Whitley 2003: 118.

Mycenaean population with no trace of foreign intrusions. The PG period presents instead a full recovery, new sources of wealth and expensive cremations become normal during this period. These single burials initially presented adaptations to host cinerary urns and increased their deployment of grave goods of higher quality, including iron weapons which would seem to indicate the return of some kind of an important warrior class in the everyday life of the period, but at the same time the reprise of a trade involving Anatolia and Cyprus. That the warrior aristocracy governing Athens was responsible for the rise of the economy by means of mercenary services, military participation or simply the fruit of piracy is a tempting possibility.



Beilage I. Die protogeometrischen Gräber südlich des Eridanos (geometrische Gräber ohne Nummer)

Figure 3: Map of the Kerameikos Proto-Geometric Cemetery, after Kübler, Kraiker: 1939.

2.5. Lefkandi.

Euboea's proximity to Attica makes it a good region for comparison with the situation of the south-eastern mainland. Lefkandi is the most important site in a study like this, since it was inhabited uninterruptedly from LH IIIC to the Geometric period.⁴⁵⁴ The area chosen for the settlement is a coastal one and this may again be the main reason for a prosperity connected with independent trading soon after the fall of the Mycenaean kingdoms. Yet it should be noted that no trace of Mycenaean palaces have been found in Euboea,⁴⁵⁵ making us speculate about its actual dependence from one of the surrounding areas during the Mycenaean period.⁴⁵⁶ There were only two chamber tombs, apparently dated to Early Mycenaean periods.⁴⁵⁷ There is no visible trace of the LH IIIC cemetery, which must have existed, but has not yet been located. The Skoubris cemetery started in SM and it is our earliest source of information for Lefkandi during both the SM and EPG periods.⁴⁵⁸ The cemetery contained 63 inhumations (56 cists, 3 shafts, 4 pits), but there is evidence of an early adoption of cremation, visible in the remains of 1 cinerary amphora and 21 pyres, of which the ashes have been subsequently enclosed in the adjacent pits.⁴⁵⁹ As Lemos points out, it is evident that in this early period inhumations in cists are the most used practices, a feature which will change during the MPG in the cemetery of Palia Perivolia.⁴⁶⁰

Skoubris is a unique case among the SM cemeteries of the Aegean. Cist tombs are built in the same way observed everywhere else in the Aegean, with rectangular trenches lined and covered with stone slabs, often the floors are paved. The few shafts found in SM and EPG are essentially cists with no lining of stones, only covered by slabs.⁴⁶¹ Variation in size is evident,⁴⁶² supposedly in the more spacious ones could be stored a larger amount of offerings. Not far away, about a hundred meters from Skoubris, the cemetery of Palia Perivolia has given back so far forty single graves (33 shafts and 6 pits) and forty-seven pyres.⁴⁶³ The main burial practice is still inhumation, but cists are now replaced by shaft graves, which become

⁴⁵⁴ Sackett, Popham 1972: 8-19.

⁴⁵⁵ Rutter 2013.

⁴⁵⁶ For instance, Lemos 2002: 218 suggested that in the 13th century Euboea was under the control of Thebes.

⁴⁵⁷ Sapouna-Sakellarakis 1995: 41-46.

⁴⁵⁸ Lemos 2002: 164.

⁴⁵⁹ See Popham, Sackett 1968; Popham, Sackett 1979: 103.

⁴⁶⁰ Lemos 2002: 164.

⁴⁶¹ Bridgewater 1991: 36, 37.

⁴⁶² Bridgewater 1991: 36, 37.

⁴⁶³ Popham, Sackett 1979: 105.

the most used burial practice from this period onwards.⁴⁶⁴ This cemetery represents the MPG phase of Lefkandi and appears to have continued to be in use until SPG III (coinciding with EG at Athens), when Skoubris went back in use. In Palia Perivolia the same increase of cremations pointed out for Athens is also evident at Lefkandi, even though less marked. The initial interpretation was that they represented about half of the population, although Lemos has recently pointed out the possibility that several cremations were actually inhumations extensively corrupted by decomposition, lowering the use of cremations to only 10% of the population.⁴⁶⁵

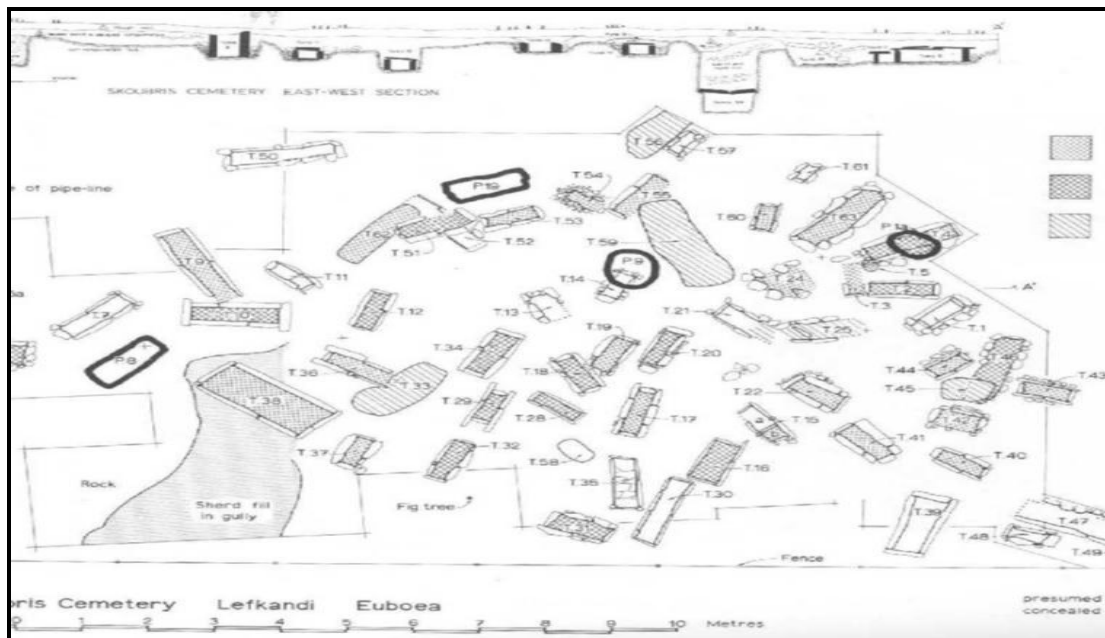


Figure 4: Map of the Skoubris cemetery (Lefkandi), after Popham, Sackett: 1968.

Contemporary to Palia Perivolia was the artificial mound which, once excavated, revealed the remains of a monumental building conventionally known as the ‘Heroon’.⁴⁶⁶ The building was built on a stone foundation, on which stood a structure made of rectangular wooden posts and mud brick walls internally plastered, reposing therefore the same constitutive principles seen in the Bronze Age palaces in a novel vest. Outside a columned portico surrounded the building and was probably connected to the internal posts by wooden beams. The interior of the building was divided in different sectors: a porch welcomed the visitor and was followed by a large rectangular room with no finds *in situ*. The central area which might have originally contained a hearth was occupied by a rock-cut shaft divided in two sides: one contained the remains of four horses; the other, built inside with mud-brick-

⁴⁶⁴ Lemos 2002: 164.

⁴⁶⁵ Lemos 1998: 45-58.

⁴⁶⁶ Popham, Calligas, Sackett 1993: 43.

plastered walls included a double burial. One was that of a woman, fully clothed and with rich jewellery still on the skeleton, including golden accoutrements; her feet were crossed and so were her hands on the stomach. Beside of it there was a bronze amphora with the cremated remains of a man, together with his linen garments, iron weapons and tools.⁴⁶⁷

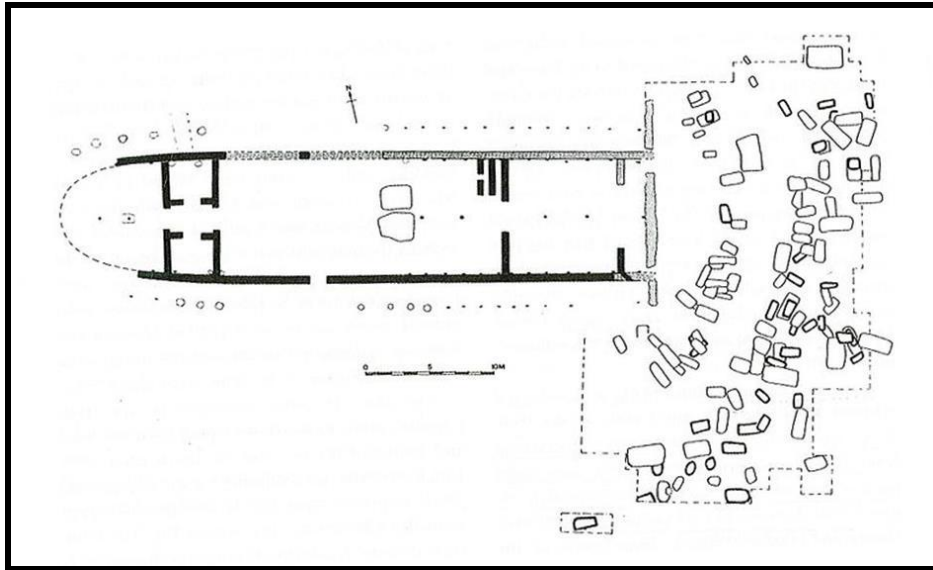


Figure 5: Map of the Toumba building and its cemetery. Popham, Sackett: 1982.

Underneath the clay floor nearby were found post-holes and traces of fire, likely to show the remains of the pyre. The plan of the Heroon continued with a corridor on which two other empty rooms opened, terminating into the apsidal end, apparently used for storage, given the ceramic containers for food and liquid there deposited.⁴⁶⁸ Though still far to be fully unveiled, the building at Toumba has been recently studied by Herdt, who, by means of modern statical calculations, attempted to redefine this unique tomb.⁴⁶⁹ The clear presence of post-holes had led the previous investigations to a *proto-peristasis*, the colonnade which centuries later will become the hallmark of the Greek temples.⁴⁷⁰ But as Herdt objects, Toumba post-holes were wooden and rectangular, not too similar to the columns that Greek temples will show from the 7th century onward.⁴⁷¹ A series of wood-posts at the front of the building, designing an external perimeter, had been interpreted as sustaining a “veranda”, contributing at the same time to hold the roof in place.⁴⁷² This interpretation was also based on the fact that the internal post-holes show no structural function for the posts, since the walls sustaining the roof were clearly built before them. Their function could have been

⁴⁶⁷ Popham 1982: 170.

⁴⁶⁸ Bridgewater 1991: 44.

⁴⁶⁹ Herdt 2015: 203-210

⁴⁷⁰ Coulton 1988: 59

⁴⁷¹ Herdt 2015: 203

⁴⁷² Coulton 1993: 45.

suggested by their actual size, but there is nothing standing at present to suggest this conclusion. What can be deduced and is still accepted, given the presence of a straight line of post-holes in the centre of the building, is a probable ridge beam, holding what was perhaps a pitched roof made of tattered rafters.⁴⁷³

The height of this pitched roof was long debated. The structure had until recently been envisaged as very tall and over-imposing. Coulton had proposed a length of about 9.80 m (of which 8.50 m, visible above the ground) for the spinal posts, and about 4 m for the perimetral ones and the walls.⁴⁷⁴ This height could well include a ‘veranda’ structure at the front. Modern engineering has a lot to object to this interpretation: such a height would in fact be possible only if the posts were made of imported trees, because such a size for tree-trunks cannot be found in Euboea. Moreover that height would have hardly made stable a pitched roof covered with rafters, especially in presence of wind. Herdt’s calculations provided a new, more probable, size: 1.50 m for the walls and the perimetral posts, and no more than 7.50 m for the spinal ones (of which 6 m. above the ground).⁴⁷⁵ This revised size, apart from being too low for a ‘veranda’, would lower also the roof, stabilizing the whole structure. Moreover, a more stable construction would have been required by the weight of the wooden rafters pitching down.⁴⁷⁶ In conclusion, Herdt’s reconstruction of the Toumba building makes it more similar to a European Longhouse *ante litteram*. Though not defining it as such, he still proposes that longhouses, intended as a sort of chief’s venues, would be a better comparison with the Toumba building than archaic templar architectures. Nevertheless what can be related to an archaic temples is also its internal tripartition. In my opinion it is not too bold to say that both later longhouses and temples could have resulted from ideas already present in this ancient monument. A chief who is divinised after his death obtains a god-like status so his house becomes a temple. While the idea of the chief’s headquarter prevailed perhaps in the European longhouses, that of sacredness might have contributed to the formation of the archaic Greek religious monuments. However, it is important to see that the European culture was linked with Euboea during this period.

⁴⁷³ Coulton 1993: 41, 62.

⁴⁷⁴ Coulton 1993: 46.

⁴⁷⁵ Herdt 2015: 208.

⁴⁷⁶ Herdt 2015: 208.

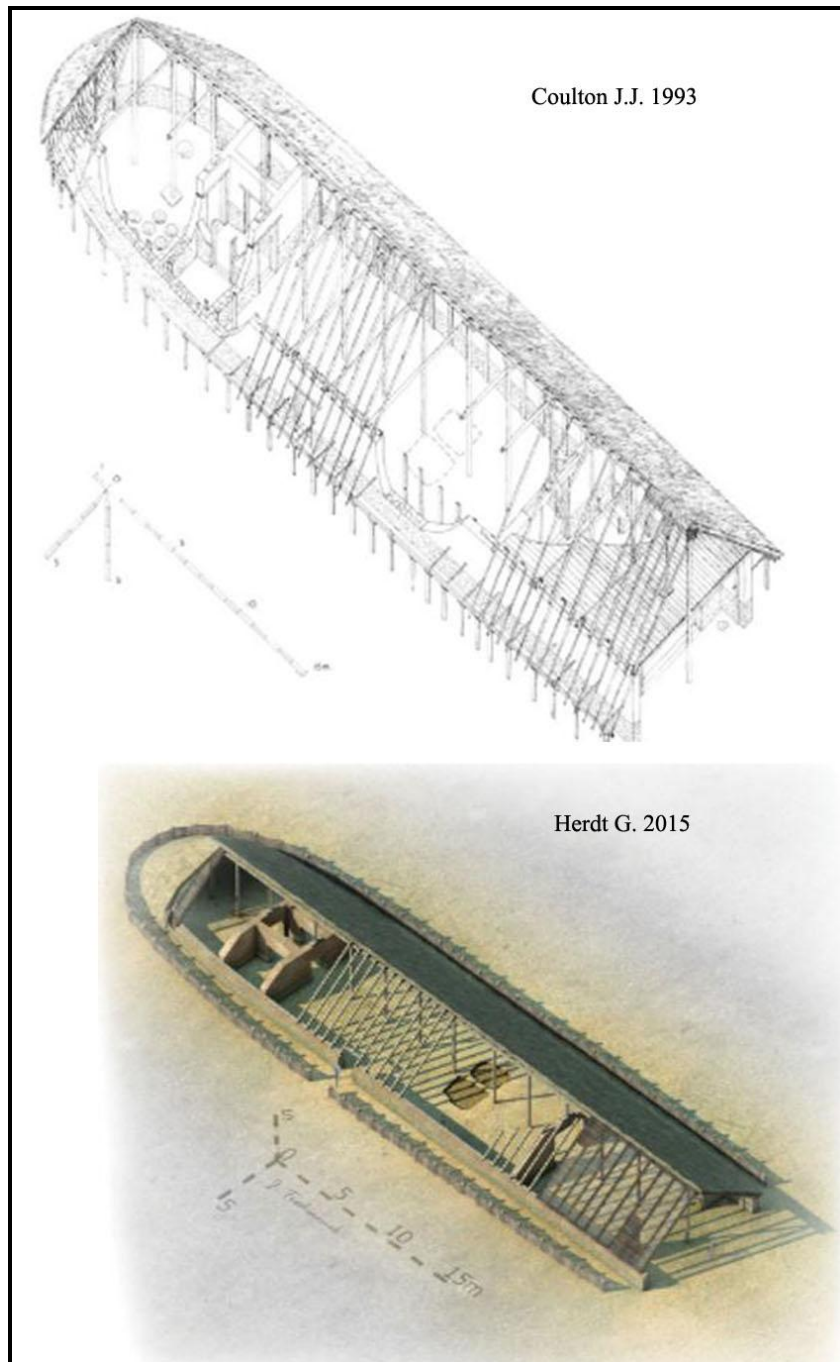


Figure 6: Comparison between Coulton and Herdt's reconstructions of the 'Heron.'

The relative chronology provided by the PG pottery shows that the building, whether a former king-hall later transformed into a tomb or conceived as such from the beginning, was abandoned after ca. 950 BC, partially dismantled and covered by a mound. Soon after the creation of the mound, the area in front of it gave start to the new Toumba cemetery, in use until the 9th century.⁴⁷⁷ This latest area contained 37 tombs and 9 pyres, the main tomb types

⁴⁷⁷ Lemos 2009.

are again shafts (33) containing inhumed bodies and 4 pits (within mudbrick walls⁴⁷⁸ later found to be incidental structures of the Heroon, unrelated to the pits).⁴⁷⁹ The grave goods were exceptionally wealthy. Several golden artefacts and imports from the Near East and Egypt⁴⁸⁰ allow us to think of this particular group and the couple inside the Heroon as the upper class of Lefkandi, possibly interrelated by blood links.⁴⁸¹ This is also shown by the regular orientation of the single tombs at Toumba, disposed with their ends pointing towards the mound, perhaps in a sort of reverential action. Lefkandi presents some features clearly in common to contemporary SM Athens, in particular the adoption of single burials in form of cist graves, with few vessels, no weapons and a limited cremations.

A striking difference lies in the way cremations are carried out in this area: in comparison with Athens where the place of the crematory rites is not clearly identifiable and was likely not to be within the cemetery, at Lefkandi cremation was carried out *in situ*, within the same cemetery. The ashes were immediately transferred in adjacent single graves (mostly pits),⁴⁸² presenting therefore peculiar circumstances which may underline a ritual link between the act of burning the dead and its resting place instead of excluding the physical act of cremation from the ritual one (*i.e.* the burying or the ashes). Another contrast with Athens is the use of bronze amphorae to receive the ashes before they were deposited into the graves.⁴⁸³ So, the PG phase does not seem to represent a major change, it is rather the steady continuation of the previous period as regards the single burial cemeteries. The trench-and-hole type appearing in Athens is never adopted at Lefkandi. Some of the cists can be identified as warrior burials with iron weapons. The skeletal analyses on the few human remains available evidenced that both genders and children were buried in these cemeteries,⁴⁸⁴ there are no special treatments for different genders or ages. The real break with the burial customs found throughout the Aegean in the same period is represented by the 10th century Heroon, since both architecture and manner of deposition appear peculiar. The couple buried inside presents unique features, the gold jewellery, ornaments of the dress and skeletal position of the woman are matchless in Greece.

⁴⁷⁸ Popham, Sackett 1979: 105.

⁴⁷⁹ Popham, Touloupa, Sackett 1982: 230.

⁴⁸⁰ Popham, Sackett, Themelis 1979: 235, a-e.

⁴⁸¹ Lemos 2009.

⁴⁸² Themelis 1979: 212

⁴⁸³ Lemos 2002: 164

⁴⁸⁴ Lemos 2002: 165-168.

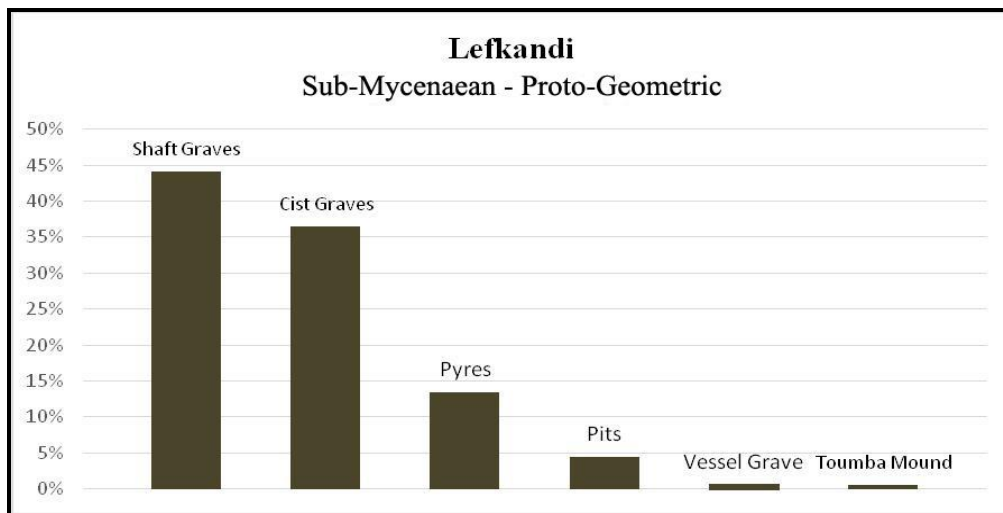


Table 9: Popularity of tomb types at Lefkandi from Sub-Mycenaean to Proto-Geometric.

The couple, more than any other EIA example, seems to express the new social order envisaged by Whitley, in which objects, especially if ancient, speak for the deceased and almost reinvent their ideal biography. In this process, vases apparently play a important role, the more ancient and peculiar, the better.⁴⁸⁵ For instance the amphora containing the man's cremation was an import from Cyprus and was at least 150 years old when it was offered. The weapons were 'killed' before deposition, following a common pattern of the EIA and according to Whitley a demarcation line between the final BA, when weapons were only displayed, and the EIA, when they were ritually killed to 'die' together with their owner.⁴⁸⁶ Also the richly-furnished inhumation of the woman had among her grave goods astounding antiques, like the Babylonian pendant with beads of gold, probably manufactured around 2000 BC,⁴⁸⁷ so around a millennium older than the burial it was offered to. The cremation of the man in a bronze vase is not unprecedented. An EPG cremation in a bronze krater was found indeed in a small tholos tomb at Pantanassa, Crete. The krater contained both the ashes and bone remains of the deceased.⁴⁸⁸ Yet, the clear hierarchic position of the couple and their undeniable wealth, at least in comparison with the average burials of Lefkandi, especially those in the adjoining Toumba cemetery, is again something of which we do not have the equal in PG Greece.

2.6. Knossos.

⁴⁸⁵ Whitley 2013: 223 ff.

⁴⁸⁶ Whitley 2013: 224; Lloyd 2013.

⁴⁸⁷ Popham 1994: 15.

⁴⁸⁸ Tegou 2001: 125.

In the transition between the LBA and EIA Crete shows several significant features concerning both its settlements and cemeteries.⁴⁸⁹ Of great interest for this research are the features concerning the burial practices. In fact, after the collapse of the palaces, both single and multiple burials hosting either inhumation or cremation practices appear in use on Crete. Snodgrass had mentioned twelve distinct tomb types in use in the postpalatial period: apart from chamber and tholos tombs, which represented the most numerous types, there is also evidence of pseudotholos tombs, burials in natural caves and rock shelters, pit graves, shaft graves, cist graves, burial enclosures, pit caves, pithos burials, tumuli, cremations under a cairn of stones, and intramural burials.⁴⁹⁰ Yet, of all these types, as Eaby argues, many were very limited in use, appearing at only one or two sites.⁴⁹¹ Coldstream and Catling had ascribed shaft graves and pit-caves only to SMin Knossos.⁴⁹² Warren and Hall respectively found evidence of intramural burials of children or infants only at LM IIIC–SMin Knossos⁴⁹³ and Vrokastro.⁴⁹⁴ Also those burials not particularly related to cremations under a small cairn of stones, pseudotholoi, and cist graves are relatively infrequent.⁴⁹⁵

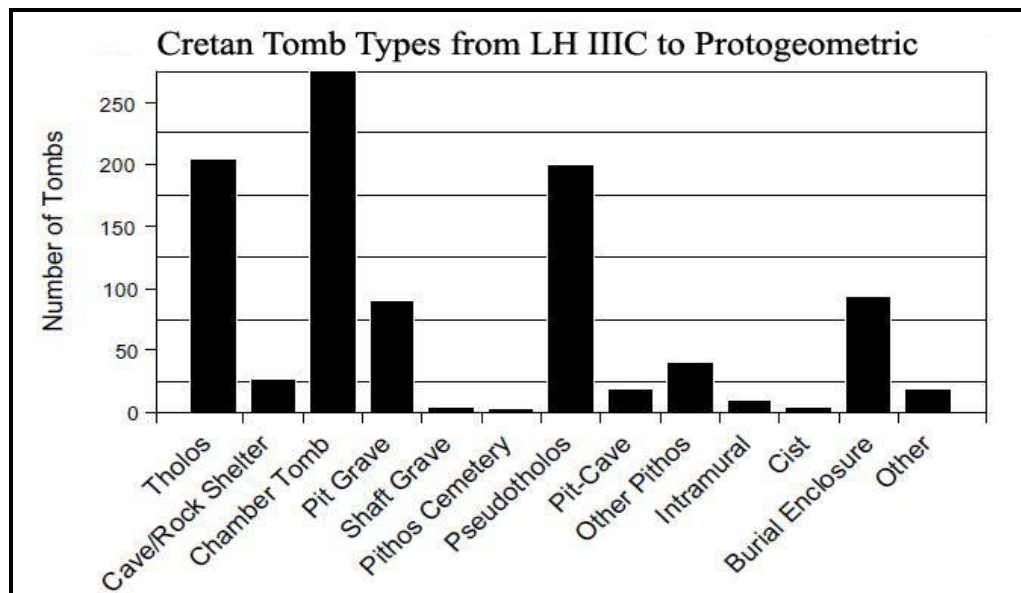


Figure 7: Popularity of tomb types on Crete, from Eaby 2011.

To map the popularity of different burial types, Eaby has recently defined six distinct funerary regions (Lasithi, Far Eastern, Mirabello/West Siteia Mountains, Central, Far

⁴⁸⁹ Settlements are not included in this research, to deepen their evolution see Nowicki 2000; Borgna 2003; Prent 2005; Wallace 2003.

⁴⁹⁰ Snodgrass 1971: 142-143, cfr. Eaby 2009: 98,99.

⁴⁹¹ Eaby 2011: 166.

⁴⁹² Coldstream, Catling 1996.

⁴⁹³ Warren 1983: 73-80.

⁴⁹⁴ Hall 1914: 106-112.

⁴⁹⁵ Eaby 2007: 32-332.

Western, and West-Central) in which different factors (including geography, previous traditions, a well established cultural identity, settlement type, and sociopolitical organisation) had influenced the development of a mortuary regionalism.⁴⁹⁶ It is important to underline that in general the primary tomb type used in a region seems to reflect a continuation of the LM IIIB funerary tradition in the same area.⁴⁹⁷ Following this inference two main tomb types stand out in this evident regionalism: tholos tombs in the east, and chamber tombs in the central-west. Although our attention will be placed especially on central-western Crete and Knossos, it is opportune to have a quick view of the eastern side of the island and see whether tholos tombs offer interesting insights.

Most of the *tholoi* built in the transitional period are small, with diameters of 1.5-2.0 m, and a large number of them went out of use during PG.⁴⁹⁸ As regards the burial practices found in these small tholos tombs, we find that inhumation in larnakes, pithoi or on the tomb floor, was the primary one, though cremation, in urns, amphorae, kraters, pyxides, and pithoi sporadically occur.⁴⁹⁹ Typically the quantity of burials contained within the EIA *tholoi* was low, between one and five as an average, possibly indicating that they all belonged to a single family, including no more than two generations per tomb.⁵⁰⁰ EIA tholoi were usually scattered over large distances around a settlement, although they frequently occur in clusters. When this happens it may signify a clan connection is being represented. Although minor distinctions in the manners of the burials and the goods offered do occur, it is striking how their architecture follows always the same rules.⁵⁰¹ If we had to summarise the funerary aspects of Eastern Crete we would see a prominence of tholoi, which are similar to the LM III types, but smaller and containing a limited number of burials, used for no more than fifty years. These types are still continuing older traditions and representing family groups often gathered into clans, with no signs of major cultural breaks.

If this is the situation in the eastern regions of Crete, the central-western area presents a number of 47 sites with presence of EIA burials, especially located in the north.⁵⁰² From PG onwards, the city-state system was probably starting to develop, and this had been faster in Central Crete than in the east.⁵⁰³ The sites in this area present as a common tomb type the

⁴⁹⁶ Eaby 2011: 194.

⁴⁹⁷ Eaby 2011: 194.

⁴⁹⁸ Eaby 2009: 99.

⁴⁹⁹ Eaby 2009: 99.

⁵⁰⁰ Nowicki 2000: 98.

⁵⁰¹ Eaby 2009: 100.

⁵⁰² Eaby 2007: 95-170.

⁵⁰³ Nowicki 2000: 246, 247.

rock-cut chamber tomb, even though a minority of pit or pithos burials does occur. The tholos tombs so popular in Eastern Crete are very rare in the west-central area, in any phase of the EIA.⁵⁰⁴ Nevertheless the chamber tombs popular in these regions share with the tholoi a small size and a limited amount of burials. The most popular burial practice associated with chamber tombs was certainly cremation.⁵⁰⁵ The cemeteries, although often in scattered locations, are usually clustered in well defined areas. The dates of their construction and use span the whole EIA. As Wallace suggests, the central sites were re-developing complex societies during this period, probably because of a rapid demographic growth and the rise of new elites. The creation of new sociopolitical structures implies some attempts by individuals or families to maintain the old authority or gain a new one.⁵⁰⁶ Of the ca. 300 chamber tombs identified from across the island, 68% were found in the area of Knossos alone.⁵⁰⁷ In fact, by this time Knossos was already considered as an urban nucleus.⁵⁰⁸ Knossos has been therefore chosen as a case study since it presents several interesting features in the content of its cemeteries.

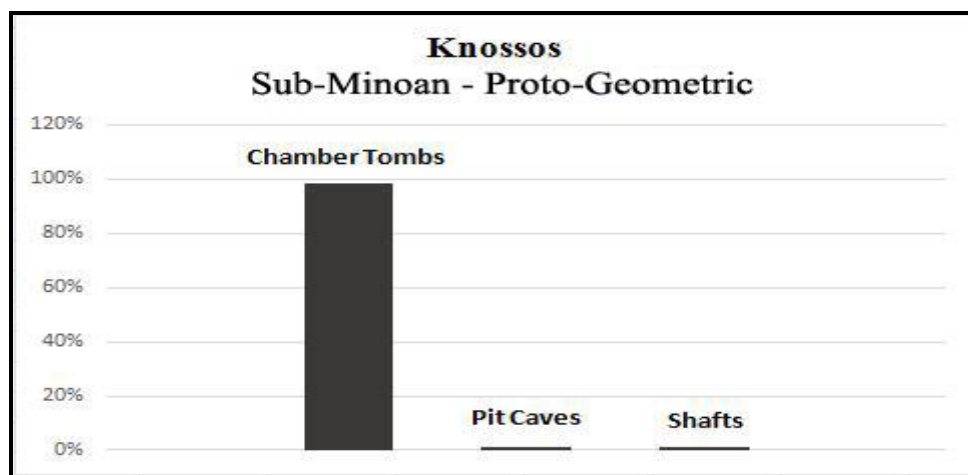


Table 10: Popularity of tomb types at Knossos from Sub-Mycenaean to Proto-Geometric.

The abandonment of the cemeteries used by the ruling class which had controlled the area during the Monopalatial period (LM II – LM IIIA) represents already a visible break between the local ruling class and the population.⁵⁰⁹ During the “Creto-Mycenaean” control probably occurred during LM IIIA and IIIB, new cemeteries were already established and presented a combination of rich chamber tombs with a minority of poorer pit and shaft graves. As if the Knossian elites were following the same gradual change in practices which

⁵⁰⁴ Eaby 2009: 99.

⁵⁰⁵ Eaby 2011: 188.

⁵⁰⁶ Wallace 2003: 268-271.

⁵⁰⁷ Eaby 2011: 185.

⁵⁰⁸ Coldstream 1991.

⁵⁰⁹ Miller 2011: 112

eventually led to a preference of single burials in the mainland during the EIA. After the fall of the palaces in the mainland, a new area is again used to establish a cemetery for the population of Knossos: the North Cemetery. Continuously in use from LM IIIC until the Geometric period the North Cemetery can provide a clear picture of how continuity and change went on in the area during the LBA and EIA. Since its beginning the preferred tomb type was the collective chamber tomb and its use does not stop in the subsequent periods.⁵¹⁰ The most striking evidence coming from Knossos is that the local economy does not seem to be in recession as in the post-palatial sites of the mainland, neither in terms of architectural expenditure nor of the grave goods being offered. The tomb types present a large majority of chamber tombs, ca. two-hundred during the three centuries under review; these were built during LM IIIC – SMin, augmented in number by newly built ones in PG and mostly reused during the Geometric period by those we have to imagine as the relatives of the same families who had built them. Cremation is adopted; not predominantly during SMin, but at least a third of the society seems to practice it in the Cretan PG (950 – 900 BC), deposited in pots or on the floors inside the chambers.⁵¹¹

As regards early SMin cremations, Catling drew attention to two Knossian pit caves showing, already in 1050 BC, practices attested elsewhere fifty years later.⁵¹² These, are so far the earliest example known. Tombs 186 and 201 of the New Hospital site show two cremations accompanied by iron weapons, among which, Naue II sword-types. These early and undisturbed cremations and their offerings are strongly connected with Cyprus, making Catling suggest that around 1100 BC some aristocratic Cretan families moved to Cyprus, where we have some similar features,⁵¹³ and mingled with the local population. These two pit caves might be therefore the burial places of two descendants of those early migrants, who went back to Crete to be buried as heroes from the past.⁵¹⁴ In tomb 201 were found some ivory fragments likely to have pertained to a boar's tusk helmet of MH origin, attested in the Aegean until the 12th century.⁵¹⁵ To Catling this object conferred to the deceased a recognisable lineage and therefore classified the person as a heroic progeny of the Minoan (Mycenaean?) travellers who ventured to Cyprus after the palatial collapse.⁵¹⁶ If this were true, Cyprus could be one of the responsible for the arrival of the cremation and iron

⁵¹⁰ Coldstream 1996: 659; Warren 1982: 63-87.

⁵¹¹ Coldstream, Catling 1996: 659.

⁵¹² Catling 1995: 123-136.

⁵¹³ In the Late Cypriot IIIB tomb 40 at Episkopi, see McFadden 1954: 131-142.

⁵¹⁴ Catling 1995: 128.

⁵¹⁵ The last example was found at Kallithea, see Yalouris 1960: 44, 54-56.

⁵¹⁶ Catling 1995: 127.

weaponry trends which will start in Greece at around 1000 BC. But the presence of Cypriot customs mixed with local aspects of the funerary cult might also be part of a more complex situation. It has been recently underlined by Sherratt and Broodbank that Cyprus was a leading commercial entrepreneur during the whole LBA,⁵¹⁷ and its influence could have been felt on Crete (which unlike the mainland had remained in a central position for maritime trade) even without migrations to Cyprus.

It can certainly be noted that the proportion of cremations during both SMin and PG sees a neat prevalence of cremations over inhumations. Only 37 tombs in the North Cemetery had skeletal remains, meaning that about 80% of the internments were cremations. Of the remaining 20%, inhumations, only 6 belong to SMin and 9 to PG. The other 22 are post-PG.⁵¹⁸ The success of the cremation practice, concomitant with the opening of new cemeteries, should not be detached from the idea of a social reorganization of the EIA society at Knossos and possibly in the whole island of Crete.⁵¹⁹ This ideological switch from inhumation to cremation is too wide to have occurred without the general consensus of the Knossian society. The presence of a small percentage of inhumations points out towards the presence of small groups still tied to the precedent practice, at the same time implying the freedom to choose and the absence of a domineering ideology about burial practices. Moreover, the fact that it is not unusual to find both cremations and inhumations within the same chamber tomb also concurs to provide the idea of individualistic choices behind these practices, but also that different practices were not necessarily implying different ideas about the after-life.⁵²⁰

⁵¹⁷ Sherratt 2001; Broodbank 2013.

⁵¹⁸ Coldstream, Catling 1996.

⁵¹⁹ Dickinson 2006: 146.

⁵²⁰ Musgrave 1990: 273 ff.



Figure 8: Knossos North Cemetery. Coldstream, Catling: 1996.

The majority of tombs were richly furnished with a large amount of drinking vessels, with several weapons and a remarkable presence of jewellery and exotica, all pointing towards an extended wealth of the Knossian society during the PG phase and above it all underlining the significance of such wealth in relation with the burial customs and social

expressions. A minority of tombs were also simple and similar to those seen in the mainland: mostly poorly furnished shaft graves and pits. Dickinson points out that the remains contained in the cemetery are too exiguous to represent almost four centuries of occupation, meaning that only a selected part of the population could afford visible burial rites.⁵²¹ Knossos shows therefore a continuity of the same funerary architecture related to the Mycenaean chamber tombs. These persisted from LM IIIC to SMin and Cretan PG, with signs of reuse. The presence a few simple tombs, given the scarcity of burial goods, would seem to represent the middle-/low-class, not wealthy enough to be included within the chamber tombs. There is no sign of violent foreign intrusions. The exotic features from the Mainland, the East and Egypt, arrived through trade. From the features presented by the Cretan funerary contexts, exemplified by Knossos, it can be implied that in the EIA existed a sociopolitical organisation based on extended families or households with some differentiation of wealth.⁵²² These sociopolitical developments did not occur everywhere at the same time and with the same dynamics. Some modifications appear slower in some areas, while new influences were not always accepted, depending upon how rooted previous traditions were in a specific region.⁵²³

2.7. Naxos.

On Naxos, our major source of evidence for the Cycladic situation, we can notice a striking difference between LH IIIC, SM and PG periods.⁵²⁴ During LH IIIC we have evidence of eight chamber tombs (4 in the Aplomata cemetery and 4 in the Kamini one) cut into two earth mounds.⁵²⁵ The two mounds are 500 meters away from each other. Aplomata dates back to LH IIIC Middle, while Kamini belongs to LH IIIC Late. As Vlachopoulos suggests: they can be showing grave clusters used by family clans of the local elites.⁵²⁶ While Tomb Γ contained also a niche in its dromos wall, where it was perhaps interred a child, tomb Δ was associated with a contemporary open-air pyre.⁵²⁷ The situation shown by the first cluster at Aplomata was initially of 3 chamber tombs,⁵²⁸ but another one was believed to exist further away, cut into the same mound.⁵²⁹ Aplomata Chamber Tomb A was largely damaged

⁵²¹ Dickinson 2006: 186.

⁵²² Prent 2005: 103-126.

⁵²³ Eaby 2011: 195.

⁵²⁴ Kontoleon 1971: 155; Kardara 1977; Dickinson 2000: 178; Lemos 2002: 22; Vlachopoulos 2006: 42-54; Earle 2008: 206-207.

⁵²⁵ Vlachopoulos 1999: 79-86.

⁵²⁶ Vlachopoulos 2008: 479.

⁵²⁷ Vlachopoulos 2006: 388-403.

⁵²⁸ Earle 2008: 206-207.

⁵²⁹ See Hadjianastasiou 1996: 1433-1441.

by erosion, at the interior were found pottery sherds and at least two skulls, with no signs of ulterior burial practices. Chamber Tomb B contained another deposition, but two older skeletons had been swept away. Also signs of burning were individuated, suggesting either fumigations or cremations.⁵³⁰ Tomb Γ was again extremely eroded, yet the remains of 3 burials have been found.⁵³¹ The fourth, Tomb Δ, is still under study. As regards the 4 chamber tombs found in the later cluster at Kamini,⁵³² tomb A presented an undisturbed warrior grave and its paraphernalia. Tomb B had inside 6 skeletons all amassed near a wall and a single deposition in a pit below a stone slab. Tomb Γ yielded back 1 adult female and 1 child-burial, another one was in the niche dug into the wall of the dromos. The presence of two mourner-type figurines in association with the two child-burials will be considered in the relevant chapter of this work.⁵³³ Tomb Δ was again damaged by later activities, but human remains have been found in form of bones close to a pyre (the bones are unburnt, discouraging the theory of a cremation).⁵³⁴

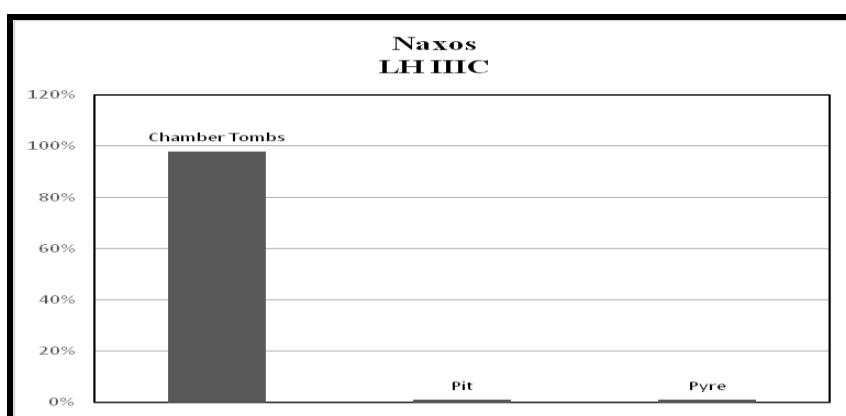


Table 11: Popularity of tomb types at Naxos from Sub-Mycenaean to Proto-Geometric.

As exposed by Vlachopoulos,⁵³⁵ the pyre outside chamber tomb Δ presents unique features for LH IIC. This way of honouring the dead was not Mycenaean and it is dissimilar also from the exotic practices occurred in the tumuli of Chania and Argos. Its peculiarity lies in the fact that the pyre was not used for a cremation, since the skeletal remains of the deceased were unburnt. It was perhaps used to sacrifice animals to honour the dead. After the ‘pyre’ had consumed itself, the ground on which it was prepared was levelled. The works of the levelling apparently disturbed the context of the tomb Δ nearby.⁵³⁶ The deceased was

⁵³⁰ Earle 2008: 206.

⁵³¹ Thomatos 2006: 160.

⁵³² Vlachopoulos 2008: 483; 2012: 351-431;

⁵³³ Vlachopoulos 2006: 388-403.

⁵³⁴ Earle 2008: 207.

⁵³⁵ Vlachopoulos 2006: 404-421.

⁵³⁶ Vlachopoulos 2012: 422- 431.

buried in the burnt layer of the pyre ground, together with a spear-head, a javelin, a chain and a seal-stone. Around the burial, other artefacts were scattered perhaps as part of the same offerings, in this case presenting another spear-head among them. Interesting among these offerings are also the metal sheets representing bulls' heads, a symbol of Cretan memory used here in conjunction with weapons, perhaps underlining the warrior vigour of the deceased. On top of the funerary mound a pit grave (named grave E), contained a rich child-burial in which no skeletal remains were found, but a unique set of four golden sheets on which the image of a child was created by repoussé.⁵³⁷

All the graves appear well furnished and there are no burials which are not accompanied by offerings including pottery shapes and jewels.⁵³⁸ It must be noted that the mentioned three warrior burials in the Naxian cemeteries (Aplomata Tomb A, Kamini Tomb A and the pseudo-cremation on the Pyre) if compared with contemporary proportions, are an outstanding quantity. This implies, as rightfully suggested by Vlachopoulos, that on Naxos a strong and wealthy Mycenaean elite was still active in the 12th century. It was involved in trade and warfare, in which the insignia of power (old and new) are clearly visible.⁵³⁹ Concerning funerary rites, the Naxian pictorial style depicts several scenes which endorse the common belief that Mycenaeans used to mourn the deceased initially in the place where it was prepared (prothesis), transportation to the burial place (ekphora) with lamentation formulae (threnos) and its final deposition.⁵⁴⁰ Other parts of the ritual suggested by the analysis of these tombs could be seen in the offering of terracotta figurines for religious purposes, of banquets to honour the dead (nekrodeipna) and in the final smashing of the libation pottery on the entrance of the sealed tomb in order to break forever the link with the person there buried.⁵⁴¹ If honouring the dead is at times visible in the chamber tomb clusters of Naxos, there is no clear cult of the ancestors or heroic celebration during LH IIIC. There are no SM graves, evidencing a possible overlapping of LH IIIC until middle PG. This strengthens the inference that the continuity of the Mycenaean culture on Naxos was stronger and longer than in the mainland, presenting uninterrupted features (in pottery, human representations and pictorial descriptions of activities).⁵⁴²

⁵³⁷ Thomatos 2006: 160. Vlachopoulos 2012: 432-436.

⁵³⁸ Vlachopoulos 2008: 479-491.

⁵³⁹ Vlachopoulos 2012: 416.

⁵⁴⁰ Vlachopoulos 2012: figs 17, 18.

⁵⁴¹ Vlachopoulos 2012: 416.

⁵⁴² Vlachopoulos 2012: 458.

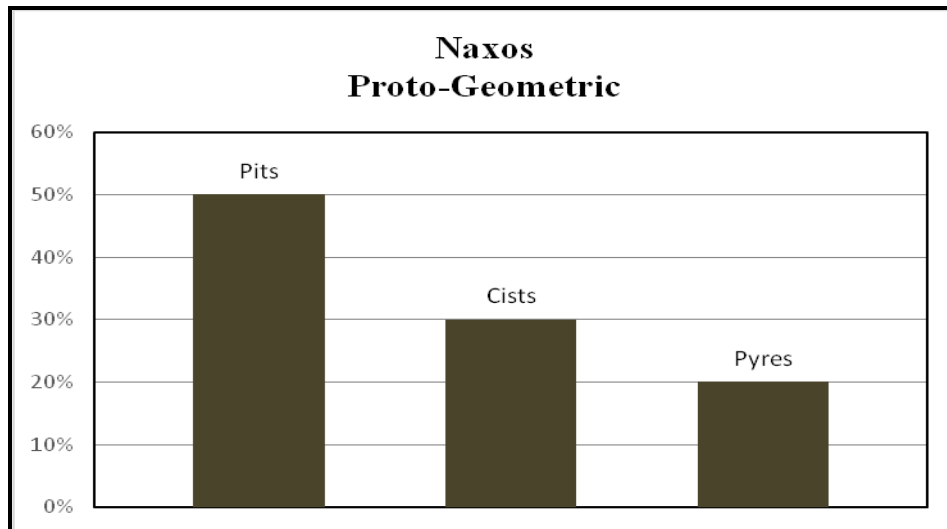


Table 12: Popularity of tomb types at Naxos during Proto-Geometric.

Lambrinoudakis described inhumations and cremations occurring together during PG with a late, and yet total adoption of single graves. The tombs are found near Aplomata and in what was the earlier location of Grotta.⁵⁴³ Burying the dead in areas once inhabited by the living presents analogies with Mycenae but differs in the fact that objects and modes of the burials seem to celebrate earlier times, as if a worship of the ancestors was taking place.⁵⁴⁴ PG cists showed skeletal remains in a crouched position, with the hands embracing the knees and the head resting on one of the cheeks, surrounded by the offerings.⁵⁴⁵ The cremation process was achieved through slow burning on pyres (the cremated ashes were collected in pots or, without containers, deposited in pits).⁵⁴⁶ Naxos maintains this equal combination of cist and pit tombs for the whole PG.

3. Preliminary Conclusions.

Our initial assumption that graves were an invaluable witness of the transitional society in question paid off in a number of ways. With regard to funerary architecture and burial customs in LH IIIC, while some regions decided to reuse or keep building less ambitious versions of the same types of chamber tombs and *tholoi* in use during the LH IIIB period, other communities adopted simple tombs and single burials, very commonly cist and pit graves. Their degree of complexity and content fluctuated in the transition between LH IIIC and the EIA and their religious practices are not entirely understood at present. Cist graves

⁵⁴³ Lemos 2002: 179.

⁵⁴⁴ Lambrinoudakis 1980: 260

⁵⁴⁵ Lambrinoudakis 1980: 259-262; Bridgewater 1991: 44.

⁵⁴⁶ Lemos 2002: 179.

appear more elaborate and relatively wealthy in comparison with pits, and are likely to be the new burial types of the post-palatial elites, as emphasized by their being never associated with chamber tombs. Cremation, which seems to increase more and more in the period going from the final LH IIIC to PG, became predominant, but not exclusive, in the latter. Similarity of grave goods and their inclusion in the same cemeteries where inhumations were practiced make cremations and inhumations only two facets of the same culture and show no evidence for foreign groups within the post-Mycenaean society.

What the heterogeneity of tomb types and funerary practices implies is not a world on its knees because of the pressuring presence of a military invasion. It is rather the opposite: there is an absence of order which can only happen if the strictness of an organized regime is lacking. The society appears to be both regionally and locally fragmented and each fragment of it dealt with the new *status quo* in its own way, keeping a Mycenaean cultural foundation but developing (or adopting) new ideas to detach itself from the past. Grandeur was sought in life rather than in monumental death. When LH IIIB2 reached an end and the traditional households still existing in LH IIIC eventually died off leaving space in the subsequent periods for new traditions. Popham rightfully implies that in LH IIIC the communication between regions and farther areas was more open and allowed a circulation of ideas that could move from a region to another, despite distance, if still characterized by the prevalence of a strong regionalism.⁵⁴⁷ Sherratt adds that, even though initially in turmoil because of the end of the palatial administration, those areas in which local resources were still exploitable, above it all access to sea-routes and trade, kept prospering.⁵⁴⁸ In Thomatos' reconstruction, not disproven by my study, if Early LH IIIC shows a society still in a state of uncertainty, Middle LH IIIC already witnesses the reprise of trade contacts and pictorial arts, stabilizing the economy and paving the way to the next developments. In fact the sites that appear to be thriving during the period are Perati in Attica, Kamini and Aplomata on Naxos, Lefkandi in Euboea and Knossos on Crete. Our best example is certainly Perati, which presents most of its visible burials as receiving the same funerary treatment. Most of the population was therefore in condition of relative wealth. Several imports from the East (Egypt, Cyprus, Syria) show that the possible source of this prosperity was trade and the coastal position which favoured it.⁵⁴⁹

⁵⁴⁷ Popham 1994: 295.

⁵⁴⁸ Sherratt, Sherratt 1991: 374.

⁵⁴⁹ Thomatos 2006: 258, 259.

The tumulus at Chania is an important example, its mixed traditions (Mycenaean pottery and European-fashioned pyre cremations) may imply that possible foreign European settlers integrated themselves into the Mycenaean lifestyle, at the same time maintaining their own funerary rites, but this is just a possibility. It is more likely to me that after the collapse of the palaces a broader circulation of ideas and beliefs started to cross the Aegean, in a central position between Eastern and Western Mediterranean shores. The union of Mycenaean pottery and European rites can be seen as a starting point for a LH IIIC Greek adoption of European features as fillers for religious gaps left uncovered by the end of the palatial institutions. This is particularly evident in the increasing popularity of these burial customs in the EIA when even the single burials (also found in the European tradition) are adopted as a dominant type by most of the Greek regions. A confirmation of this trend is the SM cist grave recently found at Kouvaras where again Aegean (F type) and European/Italian (Allerona type) weapons coexist, together with a Mycenaean kylix made of gold instead of clay, again fusing two worlds together in the same funerary context. In this mixture a Cypriot intermission is also evidenced by the provenance of the bronze ores used to make some Aegean artefacts. In my opinion this is not necessarily implying that Cyprus dominated maritime trade in the 11th century, but it was certainly part of that wide circulation of goods characterising the LBA Aegean. In comparison with the LH IIIC tumulus of Chania, the element of warfare is now far more evident. Two swords and metal greaves are very rich and unusual goods in SM. Prowess in battle was certainly already part of the Mycenaean tradition, but what is acquired from the European warriors is its connection with the dimension of death. Apparently valour at war was highly esteemed in a man, especially after his death, and this might suggest implications also at a metaphysical level, though speculatively. In Homer there are little expectations for the after-life, it is rather implied that a warrior deeds were his only possibility to immortalise himself in the memory of the living. Perhaps this philosophy was not originally Greek, it came from European ideologies reaching Greece in the 12th century BC and becoming more and more popular during the subsequent phases until their major adoption during PG.

As a result of these intercultural prodromes, the popularity of PG cremations and cist graves might have truly defined the new elite burial customs. Still architecturally demanding if well built, cists were more contained and more in line with a newly established concept of death. If invisible underground the expensive ritual of cremation was certainly more visual in the eyes of community and the honour and deeds of the deceased must have been entrusted to memory and oral lore, opposite to with the monumentality which contributed to the economic crisis of the palaces. Of course this process might have gone on at a different pace in each

regional context according to individual economies and ideals, but in the end single tombs appear to be a secret space in which the individual dealt alone with his ultimate journey. The similarity between the European Hallstatt burial customs and the SM and PG Greek ones shows the same way to cremate the deceased on pyre and bury their inurned ashes in pits or shafts with weapons and jewels.⁵⁵⁰ As already proposed for the Chania cultural intrusions, the full adoption of these funerary features and rites can be also symptomatic of an influence from novel trade routes which I believe coming from Central-Europe and moving from Eastern Hallstatt cultures until Greece. Post-palatial Greece in turn, had probably lost its institutional religion and just a popular version of the former palatial cults had survived. If we compared the chthonian environment created in the cult centre of Mycenae and the hypogeic condition of cist and pits we can relate the two things by saying that the European burial customs gave to Greece a novel use of the chthonian aspect but also rites that allowed the new society to constitute a new form of religiosity. In this the individual and the way he was prepared, adorned and cremated was in the memory of the community more important than the burial space adopted.

I think the case studies selected in this work, though not covering the diversity of instances present in the Aegean and its islands, do give an idea of the same processes seen at Chania and Kouvaras in terms of continuity, interculturalism and finally adoption of some features common to the Hallstatt culture. Naxos (Kamini) offers another example of a LH IIC pyre cremation related to a chamber tomb in which European swords and Aegean spears coexist. Athens and Lefkandi are the best candidates to express the new features involving death and burial customs in the PG period. They both present a large adoption of foreign features like single tombs, cremation rites and warrior items like Naue II swords and even horse burials, if only in the unique context of the Lefkandi Heroon. Finally, they show a clear preference for the widespread warrior ideology of the time and probably also embraced its significance in daily life. Crete re-expresses the features seen in the mainland, highlighting the peaceful acquirement of novel customs like cremations, though not abandoning the Minoan multiple burials (mostly chamber tombs in the central-western area and tholos tombs in the eastern one).

All these case studies, though expressed within regional preference, show that during the post-palatial period there was a clear ideological shift involving death and funerary rituals. This shift, if not exactly a change (the Mycenaean gods found in Linear B almost totally

⁵⁵⁰ A capital publication on these remains Reinecke 1900: 44 ff.

match the Homeric ones) shows evidence for a separation between the worlds of the living and that of the dead, including their respective deities. If the Mycenaean gods ruled the natural world of the living, the world of the dead could have necessitated different and more private rites. Though their nature is entirely lost to us, we can however consider the most popular objects present in tombs as possible indicators of the religious sphere. From what I have observed, the change in the burial practices could have involved a new eschatology and a different relationship with the dead. It has been argued that there is a passage from monumental family tombs, yearly reopened to celebrate the deceased, to simpler tombs, closed forever after an initial celebration. In this view, the disposition of the body, adorned with all its paraphernalia, had to leave an impressive last image of itself in the memory of the onlookers. Nonetheless it is not clear if and how common it was to reopen family tombs only to honour the old burials. The evidence at Perati and Knossos shows that re-openings were made just to place new burials in the tomb, and when that happened, the prior human remains and goods were swept away as if both the body and the objects accompanying it had exhausted their reason to be there.

	LH IIIC Early	LH IIIC Middle	LH IIIC Late	Sub-Mycenaean/Sub-Minoan	Proto-Geometric
Chamber Tombs	██████████				
Tholos Tombs				██████████	██████████
Cist Graves			██████████	██████████	██████████
Pit Graves	██████████			██████████	██████████
Trench-and-holes					██████████
Shaft Graves			██████████	██████████	██████████
Pithos Burials					██████████
Intramural			██████████		
Tumuli					██████████
Pyres					██████████

Table 13: Diachronic popularity of tomb types from LH IIIC to Proto-Geometric.

	Mycenae	Perati	Salamis	Naxos	Athens	Lefkandi	Knossos
Chamber Tombs	██████████	██████████		██████████			██████████
Tholos Tombs	██████████						
Cists	██████████		██████████	██████████	██████████	██████████	
Pits	██████████	██████████	██████████	██████████	██████████		
Trench-and-holes				██████████	██████████		
Shaft Graves						██████████	
Pithos Burials	██████████						
Intramural	██████████						
Tumuli	██████████					██████████	
Pyres				██████████		██████████	

Table 14: Synchronic popularity of tomb types.

	LH IIIC Early	LH IIIC Middle	LH IIIC Late	Sub-Mycenaean/Minoan	Protogeometric
Inhumations	■	■	■	■	■
Cremations		■	■	■	■

Table 15: Diachronic popularity of burial practices from LH IIIC to Proto-Geometric.

Perhaps it is a change in the emotive consideration of the old skeletal remains that brought the preference for simple tombs. In fact they provided a place entirely dedicated to a single person, which was honoured only once after his death and remained undisturbed by secondary burials. This is a serious eschatological change which must have happened because of a different understanding of the mortuary sphere, perhaps due to new religious thoughts.

Chapter IV

Changes and Continuity in Pottery

1. Introduction to pottery.

As Desborough had promptly pointed out, pottery works as a privileged spectrum of analysis in archaeology, simply because it is found everywhere, it undergoes regular stylistic modifications connected to site chronology and ultimately it is one of the most resistant materials available.⁵⁵¹ The role of pottery in this chapter will not be to emphasise the main and well attested function of ceramic remains as chronological indicators, since chronology of LH IIIC, SM and PG in relation to them has already been defined.⁵⁵² Our attempt here will be to summarise the continuities and/or the changes in the popularity of vessel shapes and motifs offered in burials. This will allow us to understand whether pottery demonstrates significant social changes during the transitional phase and to identify the ritual significance attached to the ceramic sets deposited in the graves.

1.1. The post-palatial pottery of LH IIIC and Sub-Mycenaean.

After the collapse of the Mycenaean palatial power, the areas which had hosted a palatial centre confirm that the pottery production was suffering a clear setback. In the former citadel of Mycenae it is notable that a smaller range of examples was produced, with coarser clay and a hasty process. Some of it comes from improvised depositions like intramural tombs like the one in the ‘granary’ of Mycenae, or the abandoned habitations scattered around what was once the palatial centre. Nevertheless, Mycenaean locations around the former palatial centres do not present signs of a decreased production. There is an undeniable fragmentation and lack of uniformity in both pottery shapes and decoration,⁵⁵³ appearing to maintain old shapes and at the same time developing new artistic trends, often tied to a particular area of Greece and soon exported all over the mainland as well recognizable schools.⁵⁵⁴ Stockhammer proposed that the continuity of pottery shapes was due to the desire of the elites to seek a connection with their ancestry. With this regard, he envisages a different relationship between the craftsman and the consumers during the post-palatial period. In fact, if during the palatial period the influence on the production of at least the fine ware painted pottery was imposed by the palace and was more uniform, during the post-palatial period the craftsmen might have experienced the ruins of their workshops and a drastic reduction of their clientele.

⁵⁵¹ Desborough 1972: 290.

⁵⁵² Mountjoy 1985, 1993, 1999; Betancourt 1985.

⁵⁵³ Desborough, 1972: 32.

⁵⁵⁴ Mountjoy 1993: 109-114.

As a result they had to adapt their art in accordance with the elite tastes, often demanding old traditional shapes with contemporary decorations, creating hybrids which are immediately identifiable during LH IIC Middle.⁵⁵⁵ The decorative motifs changed gradually during LH IIC, while their schematisation increased.⁵⁵⁶

During LH IIC Early (1190-1130 BC), new versions of existing shapes were developed while others were introduced for the first time,⁵⁵⁷ though obtaining scarce popularity: deep semi-globular cups (new); carinated cups (new); amphoriskoi (developed from earlier types); collar necked jars (developed from earlier types); spouted basins (developed from earlier types).



Figure 9: Comparison between a LM IIIB octopus stirrup jar (British Museum no. 1896, 0201.265) and a LH IIC octopus stirrup jar (Metropolitan Museum of Art no. 53.11.6).

Most of the shapes were made for containing, serving or drinking wine; apart from the lekythoi, which appear instead to be containing perfumed oils or unguents, like the later aryballoi and alabastra. Among these shapes, the Mycenaean globular stirrup jars remained unchanged during LH IIC and still have to us an unclear function. Playing the debate on its functional interpretation, the presence of a large number of samples in a rather big size must be taken into account. Perfume holders had a size not exceeding six or nine inches, because

⁵⁵⁵ Stockhammer 2009: 169.

⁵⁵⁶ Desborough 1972: 32.

⁵⁵⁷ See Mountjoy 1993: 109-114; French 2011: 51-57.

their precious content could not be wasted too quickly and its bottle had to be manageable. Presumably the small bottle was held with one hand and a few drops were dropped on the other in order to be rubbed on the body. The medium (around 30 cm) and big sizes (up to 40 cm) of many stirrup jars would make this simple operation impossible, especially if full of liquid. By stating this I do not exclude the use of the miniature stirrup jars (not unlike other miniature shapes) as perfume holders. But miniature accessories used as perfume holders should not be mistaken with their regular-sized counterparts, which could hardly be used for the same reason. I endorse therefore the idea of stirrup jars as liquid storages for wine or oil.⁵⁵⁸ The decoration of the vases becomes at this point schematic; figured scenes are simpler and linear patterns become commoner, applied mostly to create a zonal separation on the surface of close vases, or panellings on open vases. Central triglyphs are still common, now flanked by antithetic spirals; on large shapes are diagnostic of the period the two motifs of the tassel and the scroll.⁵⁵⁹

LH IIC Middle (ca. 1130 – 1190 BC) saw the introduction of globular amphorae and a minimal use of lekythoi, pyxides and oinochoai. The localised pottery styles of the early phase kept during this subsequent period a high standard, fine and well fired ceramics with elaborate decorations reach now their apex, starting local schools of wide impact in the rest of the Aegean.⁵⁶⁰ The tendency was now to cover wide areas of the vase with paint, limiting an elaborate set of motifs to specially reserved spaces. There were three main schools following the trend of the period, conventionally referred to as:⁵⁶¹

1. Close Style;
2. Octopus Style;
3. Pictorial Style.

To these can be added also the Granary Style, initially a minor tendency, very soon gaining more and more popularity.

The Close Style consisted of a series of horizontal bands and lines close to each other, all containing a different chain of decorative motifs: birds, quadrupeds, fish, triangles, lozenges, zigzags. It was used mainly on stirrup jars (of which the disc was often decorated by a central rosette) and has as its geographical area of development the Argolid. It can seldom be found on trefoil-mouthed jugs, kylikes and on some bowl types. The octopus style evolved

⁵⁵⁸ Haskel 1985; See Dickinson 1994; Williams 1999; Jones, Killen, Haskell, Day 2011 and for a chemical analysis of the ceramic samples Tzedakis, Martlew 1999: 32; 153; 196.

⁵⁵⁹ Mountjoy 1993: 91.

⁵⁶⁰ Dickinson 2006: 122.

⁵⁶¹ Mountjoy 1993: 109.

from a decorative motif common also during the Mycenaean age, coming from a Minoan concept,⁵⁶² now standardised and acquiring typical trait, and the octopus is central with its tentacles straight towards the side of the body; this style is redeveloped in this period in the islands, both in the Cyclades (especially Naxos) and the Dodecanese.⁵⁶³ The pictorial style was developed in the Peloponnese and Central Greece, including an ensemble of cities including Mycenae, Tiryns, Lefkandi, Volos and Athens. Specimens have been found also in some of the major islands like Naxos and Kos. The main feature of the style is the employment of figurative scenes. The vessels usually decorated by this school are kraters, collar-necked jars, straight-sided alabastra and the interior of kalathoi. The most popular pictorial scenes included charioteers, hunting, battles, human figures, horses, goats, lions, stags, mythical creatures of oriental origin like sphinxes and griffins. A technique often employed proposed repetitions of the same figure along the whole circumference of the vase.⁵⁶⁴ The Granary style, found in the ruins of what was once the new grain storage point of the newly fortified citadel of Mycenae, is less elaborate in term of quantity of the decorative motifs applied. A permanence of the scroll and tassel combination from the previous sub-phase can appear in some shapes, but most of the small vases are monochrome and the hallmark of the style is actually a composition of simple lines.⁵⁶⁵

Among these schools, a composition of shapes including octopus style-fashioned stirrup jars, strainer jugs, large flasks and kalathoi with internal pictorial decoration constituted rapidly a set linking the artistic trend of East Attica and Perati, Naxos, Kalymnos, Rhodes and Kos, and creating what has been defined as an Aegean Koiné.⁵⁶⁶ This renewed flourishing of artistic trends and regional styles started to diminish during the LH IIIC Late (1090-1060 BC). Alabastra and Hydriai are now introduced into the previous LH IIIC set. Even though a more schematised version of pictorial and octopus styles had initially persisted, they soon disappeared. Examples of panelled decoration are still found, but the triglyphs are wider and the motifs are drawn in a casual manner.⁵⁶⁷ Of the fashion previously developed, only the Granary style prevailed in its linear decoration, now applied only to limited areas, separating large spaces of monochrome paint; the scroll and tassel motif is still present, while necklace patterns and antithetic loops are common features of this period.⁵⁶⁸

⁵⁶² Desborough 1972: 113.

⁵⁶³ Mountjoy 1993: 110.

⁵⁶⁴ Mountjoy 1993: 111.

⁵⁶⁵ Mountjoy 1993: 109.

⁵⁶⁶ See Deger-Jalkotzy, Zavadil 2007.

⁵⁶⁷ Mountjoy 1993: 114

⁵⁶⁸ Mountjoy 1993: 114.



Figure 10: Attic LH IIC Granary Style jug (National Archaeological Museum, Athens: NM 3762), picture by Dan Diffendale.

Moreover the vase shapes now tend to acquire a biconical outline rather than globular.⁵⁶⁹ Shapes like the piriform jar, the shallow bowl and the carinated cup are no longer produced. The amphorae with single handle from rim to shoulder in use during LH IIC Middle are now replaced with variants very important in the development of the subsequent periods: the neck-handled types.⁵⁷⁰ The mainland close style finds continuity in the Cretan production.⁵⁷¹ This style reaches its own originality by reorganising the compositions in vertical bands, giving to the vase a fringed aspect and giving birth to the so-called Fringed Style, also typical of this period and largely exported to the mainland.⁵⁷² Characteristic of this period on Crete is the miniaturist technique in the design of complex decorative motifs, often realised with the use of needles.⁵⁷³ Among the Cretan shapes in fashion during the Mycenaean-Minoan period, the tankard is no longer used, while stirrup jars become now

⁵⁶⁹ Mountjoy 1993: 113.

⁵⁷⁰ Mountjoy 1993: 114.

⁵⁷¹ Betancourt 1985: 182.

⁵⁷² Dickinson 2006: 122.

⁵⁷³ Betancourt 1985: 182.

popular, especially decorated with the octopus style.⁵⁷⁴ The SM period (1050 to 1000 BC) shows a considerable simplification of both shapes and decoration, both deriving from the previous period.⁵⁷⁵ In fact, the term *Sub-Mycenaean* is controversial and matter of constant debate. When in 1910 Wide assigned the peculiar pottery style of Salamis to PG,⁵⁷⁶ he was later disproven by Skeat.⁵⁷⁷ The latter proposed in 1934 that Salamis' pottery was to be detached from both LH IIIC and PG, since its features were distinctive. He created the label 'Sub-Mycenaean' to define the style and very soon it started being ascribed to the whole time-span in which it remained in use, roughly fifty years, from 1050 to 1000 BC.

This term was successful enough to remain in use until today, but the debate on its validity still plays out. The main issue was raised by the fact that SM is geographically limited and does not involve the whole Aegean. Desborough had initially circumscribed it to West Attica,⁵⁷⁸ though later correcting his view with a wider range (which included Argolis, Euboea, Ancient Elis).⁵⁷⁹ Rutter agreed on separating SM from both LH IIIC and PG, but according to him it was not to be seen as a novel style, but rather as an ulterior and final stage of the Mycenaean pottery before it died out in PG.⁵⁸⁰ To this theory Papadimitriou objected that, as seen from her excavations in Argolid, the levels containing SM pottery were clearly distinct from the LH IIIC ones below. SM was therefore attached to a distinct period of time, and was not just a stylistic occurrence on a pre-existing Mycenaean pottery.⁵⁸¹ In the light of those data, the SM period had continued to be largely interpreted as such even in recent publications. Lemos, after her own observations, does not hesitate to define it an intermediate stage between Late Mycenaean and PG, but she also detected a short transitional phase between SM and EPG in which pottery style, burial customs and metalwork all converge into a stronger evidence of social changes and the proper beginning of PG.⁵⁸² To this view Ruppenstein, in his recent contribution to the catalogue of the Athenian Kerameikos, reiterates the fact that SM should be always interpreted as a proper chronological period.⁵⁸³ He even individuates four distinct waves of innovation in the ceramic sequence, the latest

⁵⁷⁴ Betancourt 1985: 183.

⁵⁷⁵ Snodgrass 1971: 34.

⁵⁷⁶ Wide 1910: 17-36.

⁵⁷⁷ Skeat 1935: 28.

⁵⁷⁸ Desborough 1964: 17-20.

⁵⁷⁹ Desborough 1972: 64-105.

⁵⁸⁰ Rutter 1978: 58-65.

⁵⁸¹ Papadimitriou 1988: 234-242.

⁵⁸² Lemos 2002: 9, 10.

⁵⁸³ Ruppenstein 2007: 248 ff.

being an introductory phase to PG.⁵⁸⁴ The SM adoption of single graves and cremation would show in his view a clear sign of cultural contacts between Greece and undefined northern regions, after which the local populations chose to break up with the former Mycenaean customs and adopt these exotic practices.

As implied by Wenninger and Jung, the SM period shows evidence to have been a very short period if compared with the previous and subsequent ones. Its short duration and the limited diagnostic pottery shapes contribute to make it as almost untraceable to archaeology.⁵⁸⁵ But then again, as recently underlined by Lis in her detailed comparisons of Central and Southern Greece,⁵⁸⁶ though it is true that a coherent SM pottery sequence can hardly be found, this should not weaken the legitimacy of SM as a chronological phase. As she reminds us, SM cannot be searched only in pottery sequences; since it involves many other factors. The introduction of simple tombs; the increase in the adoption of cremation; the rare appearance of iron weapons and jewellery; the abandonment of old settlements and the establishment of new ones are all factors occurring together around 1050 BC. They can perfectly stand for a claim of a new chronological period. In her conclusion present research should quit all the extremes. If a plea for the abandonment of the term SM is not acceptable due to the undeniable characteristics proper of a new phase, also a stubborn search for SM pottery sequences in a transition which does not have in pottery its major horizon of change would be rather futile.⁵⁸⁷ In my opinion, we should endorse Lis' conclusion and treat SM less as a pottery style and more as chronological period. It may not have had the same extent of evidence in every single region of the Aegean, but the fact it appears in most of central Greece and also heavily influenced the culture on Crete accounts for its prominence in the 11th century Aegean. Even when this period is not well represented, as in Naxos, it can still be used as a matter of comparison to define the areas of its absence as far from the new propulsive centre in Attica and whether its fortune in central Greece actually involves deeper social implications. I think that the most diagnostic aspects of SM, which link it to the subsequent PG, are not in the shapes of the vases, but in the adoption of wavy bands and hand-made concentric semicircles used to express something symbolic, which on the one hand abandoned the Mycenaean spirals and on the other paved the way to the compass-drawn semicircles and circles of the PG style. A possible meaning of these newly expressed symbols will be discussed more precisely in chapter VII.

⁵⁸⁴ Ruppenstein 2007: 196.

⁵⁸⁵ Wenninger, Jung 2009: 385-388.

⁵⁸⁶ Lis 2009: 213.

⁵⁸⁷ Lis 2009: 212, 213.

Here we may premise that a change in the expression of the semicircles found on funerary pottery could also imply some changes in the ritual practices committed to guarantee a safe after-life. If changes like these occurred, they did so after LH IIIC, when the Mycenaean rituals were presumably lost after the fall of the palaces and their cult officers. The need of the SM society was to regain a relationship with the divine and especially with the underworld, in which they would spend eternity. In absence of official cults, external influences and popular beliefs must have played together with the memory of the Mycenaean pantheon and created a more personal and affordable religion, of which these hand-drawn semicircles sign the beginning. SM is therefore more than a pottery style, it is the starting point of a cultural innovation, if relating itself to a Mycenaean identity. Rutter's definition would not fit it, because we cannot really see it as a sort of 'LH IIID', since it does present new concepts which move on from the previous periods. I accept the term Sub-Mycenaean and, like Lemos and Ruppenstein, I will treat it as an intermediate period. Though pottery is still Mycenaean in tradition,⁵⁸⁸ new shapes such as neck-handled and belly-handled amphorae start now to be introduced. The vases are mostly small, perhaps to fit in the limited space offered by single burials, and monochrome-painted. Their decoration summarises and exploits three previously known motifs: lines, wavy lines, hand-made concentric semicircles, all employed on the narrow zones of the vases, often on unpainted surfaces.⁵⁸⁹ In this period the cemetery areas of Attica, especially Athens, Salamis and Perati, flourish with newly established complexes of single graves. Athens *in primis* starts now to produce a pottery style soon destined to dominate the Iron Age Aegean.⁵⁹⁰

⁵⁸⁸ Desborough 1972: 30.

⁵⁸⁹ Mountjoy 1993: 114.

⁵⁹⁰ Mountjoy 1988: 1-37.



Figure 11: Sub-Mycenaean vases (Agora Museum, Athens). Mureddu 2014.

The Cretan counterpart of this period, known as SMin, lasts unlike the mainland roughly fifty years longer and shows more continuity with the previous LM IIIC typologies of shapes and decoration, a clear sign that Crete does not suffer from any serious crisis during this phase, continuing a solid artistic production.⁵⁹¹ The major SM centres on Crete can be identified in the quantity of pottery shapes found at Karphi, Dreros, Phaistos, Knossos and Vrokastro.⁵⁹² Cretan contacts within the Aegean are not the only ones in this period, Cyprus offers an interesting range of common shapes, including duck vases, small jugs and stirrup jars.⁵⁹³ Though production does not seem to decrease, that complex decorative expertise present in the LM IIIC shows a lower standard: the patterns are more schematic and the fringed style disappears. Common motifs are the rectilinear and curvilinear designs, together with hatched triangles. The fabric is weaker and the paint is easy to fall off. Small open shapes like cups are clearly influenced by the mainland in their body shapes, which are now conical.⁵⁹⁴ Bowls occur in several varieties. The most popular shape has a minute base and horizontal handles. Kraters have the same outline of the cups, obviously produced in a larger size. Also kalathoi and dippers become now popular. Ultimately, all the closed shapes of LM IIIC are kept with minor modifications (e.g. the stirrup jars have a knob atop their false

⁵⁹¹ Snodgrass 1971: 30.

⁵⁹² Betancourt 1985: 184.

⁵⁹³ Coldstream, Catling 1996 (IV).

⁵⁹⁴ Mountjoy 1985: 184.

mouths and the pyxides are high-handled). Amphorae, jars, flasks and small pithoi do not change in shape.⁵⁹⁵

1.2. The Athenian trend: Proto-Geometric.

After the end of the Helladic period and the development of its final SM style, a revolution of vase decoration takes place in Athens.⁵⁹⁶ Initially shapes and designs recall LH IIC models, but they soon evolve in the 10th century into a first phase of geometric decoration reaching its full elaboration in the 9th century with the Early Geometric period (900 – 850 BC).⁵⁹⁷ These periods are characterised by a new creative trend enhanced by means of new technical implements able to refine the decorative work, such as compasses and multiple brushes. Many scholars have debated so far with no solution on whether this technology was used on Greek pottery from the PG onward only.⁵⁹⁸ Petrie had described accurate hand-written concentric patterns as occurring already in Bronze Age Egypt.⁵⁹⁹ Also Boardman had traced and widened the geographical scope of this decorative trend, linking Greece to the LBA Near East, Cyprus, Syria and Mesopotamia.⁶⁰⁰ Though Boardman implied that multiple patterns could also have been obtained by accurate handwriting or individual compasses used one at a time, warning therefore against the hasty interpretation of the Greek decoration as compass-drawn, the punctures found at the centre of the concentric circles evidenced the use of an actual compass.⁶⁰¹ While Eiteljorg had expressed his concern about the practical use of a multiple brushes round surfaces, arguing for their sole possible use on flat ones,⁶⁰² experimental archaeology has recently shown that similar items would work quite easily also on the surface of some pottery shapes.⁶⁰³

⁵⁹⁵ Mountjoy 1985: 186.

⁵⁹⁶ Desborough 1972: 41.

⁵⁹⁷ Karo 1943: 9.

⁵⁹⁸ To name a few: Conze, 1870: 519; Skeat: 1934: 8; Desborough, 1952: 298, 299; Coldstream 1968: 335, 336; Eiteljorg 1980: 445-452; Papadopoulos, Vedder, Schreiber 1998: 507-529.

⁵⁹⁹ Petrie 1920: 18.

⁶⁰⁰ Boardman 1960: 85-89.

⁶⁰¹ Jacob-Felsch 1988: 193-199.

⁶⁰² Eiteljorg 1980: 445-452.

⁶⁰³ Papadopoulos 1998: 507-529.



Figure 12: Proto-Geometric vases from the Agora Museum, Athens. Murreddu 2014.

Whatever the ultimate origin of multiple brushes, I remain convinced that since the oldest samples of this decoration are those in the Kerameikos of Athens,⁶⁰⁴ it is pointless to argue on different origins and chronologies without ulterior evidence. This decoration must still be held as originally Athenian. The shapes used in the SM period at Athens, mostly found in the Kerameikos, continued into the early phase of the PG and increased their popularity, these including neck-handled amphorae, belly-handled amphorae and pyxides. New shapes, popular during the PG period only are, instead: shoulder-handled amphorae, straight-sided jars, kantharoi and aryballoi. Other minor new shapes (Cypriot imports?) were identified by Desborough:⁶⁰⁵ small jars; tripod vases; duck vases; pilgrim flasks; bottle jugs. If SM shapes were once again made essentially for drinking, apart from a reduced presence of oil-containers, the same is true for a large number of PG vases, if accompanied by storage shapes like pyxides.⁶⁰⁶ The decoration keeps now preferring linear motifs, but the new technical instruments allow the painters to draw perfectly symmetrical concentric circles and semicircles, which become now the main and most diagnostic pattern on the vases, together with languets and wavy lines.⁶⁰⁷ The concentric semicircles are usually set on the shoulders of the vases, while the concentric circles are found mainly on the belly for obvious spatial reasons. Other new motifs are chequers and diamond patterns and solidly pointed triangles.⁶⁰⁸ This new pottery style was immediately exported, reaching popularity in several Aegean regions.

⁶⁰⁴ Desborough 1952: 298, 299; Coldstream 1968: 335, 336; Finley 1970: 81; Snodgrass 1971: 74; Cook 1997: 6.

⁶⁰⁵ Coldstream 2006: 49-55; Desborough, 1972, 43,44.

⁶⁰⁶ Whitley 2003: 98.

⁶⁰⁷ Whitley 2003: 98.

⁶⁰⁸ Desborough 1972: 43.

Even Crete abandons at some point the SMin style to adopt and later reproduce PG-fashioned pottery. It is immediately noticeable that the most recurrent shape of the LH IIIC period, the stirrup jar, starts declining in quantity during SM and becomes unusual during the PG period. Amphoriskoi, flasks and lekythoi also lose popularity, while *aryballoi* and *alabastra* start taking hold. As Coldstream summarises in his handbook, during PG the Attic fashion reached Crete.⁶⁰⁹ It seems that imports from Attica represented the main part of the foreign trade in this period. These imports, occurred especially from the Cretan EPG onwards (which relates to Attic LPG⁶¹⁰, as clearly showed by Coldstream's table below), saw the Attic amphorae decorated with compass-drawn concentric circles as their favourite shapes. This introduction of Attic shapes was not abrupt. Coldstream underlines that it was so gradual that it is even possible to detect a transitional category between SM/EPG, during which SM decorations were still applied on EPG shapes.⁶¹¹ Considering the Athenian imports, it is also striking the confinement of the concentric circles to the atticising amphorae only, while they are not found anywhere on local amphorae of SM tradition. Such concentric circles were added also on deep bell-kraters, where some SM motifs (like antithetic spirals) continued anyway into EPG. This Attic pattern was also found on some kalathoi and necked pithoi, but these conclude the EPG repertoire of shapes bearing such motifs.⁶¹²

MPG is as well characterized by the great popularity of the concentric circles, now applied to a wider range of shapes: amphorae, bell-kraters, necked pithoi, deep bowls and a new types of atticising kraters. Both types of kraters show a central panel filled with several combinations of lozenges, hourglasses and checkers. Within the decorative circles Maltese crosses, hourglasses or St. George crosses can often be found. In this phase the triangles on the stirrup-jars are rendered with straighter outlines and rectilinear fillings. To conclude, LPG (which goes out of our scope, since it overlaps the mainland EG period) begins to reduce the Attic imports, while local developments show a new repertoire, especially oinochoai and new open-necked stirrup-jars, which are the last of their kind, giving soon way to unguent bottles like lekythoi and aryballoi, until now new to Crete.

⁶⁰⁹ Desborough 1977: 115; Coldstream 2001: 21-65.

⁶¹⁰ Snodgrass 1971: 82.

⁶¹¹ Coldstream 2001: 65.

⁶¹² Coldstream 2001: 65.

Comparative chronology, Knossian and Attic.			
<i>Approx. dates</i>	<i>Knossian phase</i>	<i>Attic phase</i>	<i>Approx. dates</i>
1050	SM	EPG	1050
		MPG	
1000		LPG	1000
970	EPG		
920	MPG		
900			EG I
875	LPG	EG II	875
850			850

Figure 13: Comparative chronology between Knossos and Athens after Coldstream 2001.

New motifs presented gridded zigzags, gridded battlements, columns of lozenges, rows of gridded triangles and of pendent concentric circles, possibly derived from imported Euboean SubPG deep bowls. Full concentric circles continued on necked pithoi and bell-kraters, semicircles on the shoulders of some pouring vessels. Neck-handled amphorae with spaced bands are peculiar to this phase.

2. Regional Contexts.

2.1. Mycenae.

Mycenae was the venue of one of the most important palatial complexes of Late Helladic. The heavy destructions evidenced by her material remains points towards a violent end of its power. Deposits of post-palatial pottery can be found in reoccupied contexts of the city, testifying poorer standards and mostly monochrome fine ware. Ceramic specimens ranging from LH IIIB to IIIC have been found at various locations of the Mycenaean citadel: continuous strata of debris have been found especially between the Lion Gate and the internal façade of the citadel wall, near the so-called Granary building, preserving material of LH IIIC Late.⁶¹³ In the same location more specimens were found between the strata X and XI in an isolated mortuary deposition in a terracotta larnax, known as the Bath Grave, which took

⁶¹³ Mountjoy 1999: 63; French 2011: 28

place when the site had already been abandoned for habitation.⁶¹⁴ Another source of pottery, accumulated in form of debris, was in the ‘Granary’ by the Lion Gate, initially thought to have been built in LH IIIB1,⁶¹⁵ but recently identified as likely to be LH IIIC;⁶¹⁶ eventually destroyed by fire at the end of LH IIIC Middle. Some intramural depositions within isolated buildings were uncovered on the hills surrounding the citadel, possibly groups of houses each preserving some pottery, while another earlier LH IIIC Middle single burial was placed inside a ruined edifice close to the western wall, with only a stirrup jar between the legs of the skeleton,⁶¹⁷ and a pithos burial was inserted into one of the destroyed cyclopean buildings in LH IIIC Late.

Traces of houses have been uncovered in the southern extremity of the Panaghia Ridge; the cemeteries belonging to these houses, such as the Third Kilometer Cemetery, are situated on the eastern, southern and western lower slopes, including twenty chamber tombs.⁶¹⁸ The last source available for pottery remains of Mycenae is from the area of the so-called prehistoric cemetery, located across the south-western slope of the citadel, which has late internments including cist graves and pithos burials.⁶¹⁹ The data collected indicate that in comparison with other contemporary cemeteries Mycenae yields much less material evidence, and shows in fact undeniably all the signs of a decayed site and poverty; dwellings are sporadically reused with nothing similar to the previous grandeur. Nevertheless, the paucity of evidence allows us to focus on such remains with more attention, since Mycenae is the heart of the events taking place during and after the destruction of the palaces. As a result of this complexity, Mycenae necessitates of a different analysis of its chronological development of pottery. It must be said that, in order to compensate the paucity of its whole pottery shapes coming from the few funerary contexts found so far, a large quantities of pottery sherds from the LH IIIC settlement have been used as additional information. The tables reporting settlement sherds have been separated from the whole pottery shapes coming from the graves. The figures extrapolated from the sherds of the settlement are those provided by Sherratt and French:⁶²⁰

⁶¹⁴ Mountjoy 1999: 61.

⁶¹⁵ Mountjoy 1999: 61.

⁶¹⁶ French 2011: 28.

⁶¹⁷ Mountjoy 1999: 63.

⁶¹⁸ Mountjoy 1999: 63.

⁶¹⁹ Mountjoy 1999: 63.

⁶²⁰ The data in the original publication presented some discrepancies between the totals given and the numbers being summed up. In my tabs those data have been recalculated in order to give the right totals and percentages.

LH III B2 – IIC Early (Settlement Sherds) ⁶²¹		
Unpainted (buff-ware):	5,898	51%
Painted:	2,284	20%
Patterned:	730	7%
Coarse ware:	1,572	13%
Patterned from earlier periods:	599	5%
Pre-Mycenaean:	547	4%
Total Sherds:	11,630	100%
Belonging to: deep bowls; amphorae; jugs; hydriae; cooking pots; tripod vessels; kraters; basins; stemmed bowls; stirrup jars; collar-necked jars; amphoriskoi; piriform jars; narrow-necked jugs; pithoi.		

Table 16: Integration of LH IIC Early pottery shapes by settlement sherds.

If we were to judge the changes in shapes and decoration occurring in the transition between LH IIIB2 and IIC by using these sherds, we would see the disappearance by IIC Early of the deep bowls, tripod vessels, stemmed bowls, piriform jars, narrow-necked jars in fashion during the earlier period and a gradual introduction of new shapes: cups (simple or crenated), bowls (small, rounded with horizontal strap handles, semiglobular with a single horizontal loop handle), kylikes, mugs, kalathoi and sporadic finds of handmade burnished ware. By IIC Early the majority of these sherds appears decorated with a clear buff ware, though from the transition from LH IIIB2 to IIC Early and IIC Early proper the quantity slightly decreases (from 51% to 44%), while those fully painted slightly increase in number (from 20% to 29%). Patterned vases are still a minority (6%).

LH IIC Early (Settlement Sherds)		
Unpainted (buff ware):	3,687	44%
Painted:	2,394	29%
Patterned:	551	6%
Coarse:	1,146	13%
Patterned (pre-LH IIC):	374	4%
Pre-Mycenaean:	380	4%
Total Sherds:	8,532	100%

⁶²¹ See French, Sherratt 2011: 59-81.

Belonging to: cups; small bowls; rounded bowls with horizontal strap handles; kylikes; carinated cups; amphorae, jugs, hydriae; kraters; mugs; semiglobular bowl with a single horizontal loop handle; kalathoi; amphoriskoi; collar-necked jars; stirrup jars; handmade burnished ware; cooking wares; pithoi.

Table 17: Integration of LH IIIC Early pottery shapes by settlement sherds.

In comparison with the LH IIIB2 pottery, Sherratt admits that in LH IIIC Early both the shapes previously in use and those newly made do not show any technical change.⁶²² It is also evident that the majority of these shards remain buff ware or are fully painted.

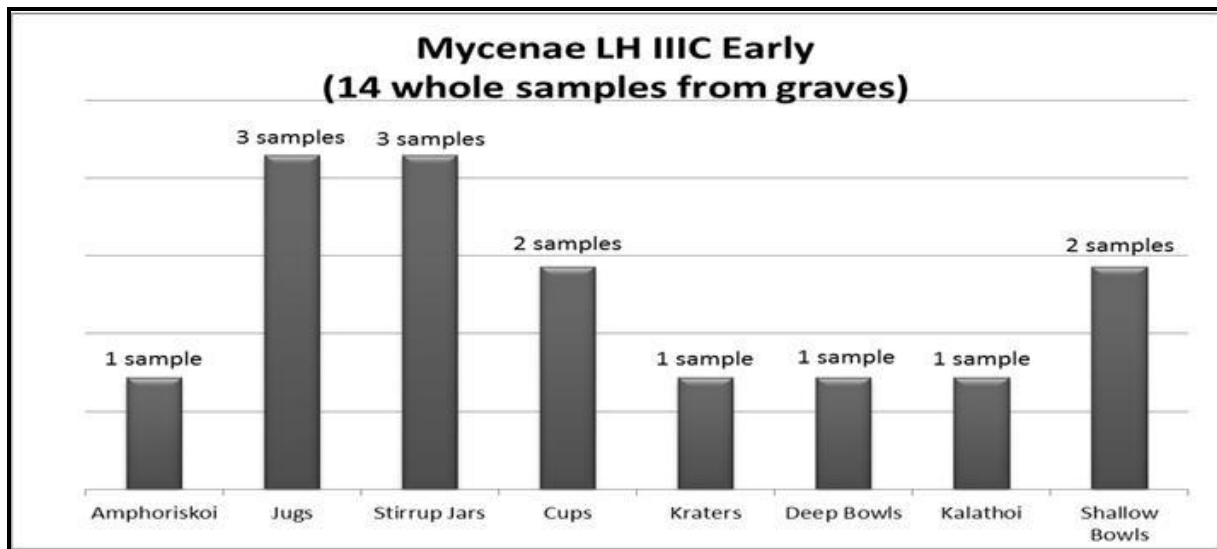


Table 18: Popularity of funerary pottery shapes at Mycenae during LH IIIC Early.

Sherrat and French show a notably reduced quantity of pottery material during LH IIIC Middle on the basis of the sherds found in the settlement. The introduction of monochrome painted deep bowls with single reserved line inside the rim (characteristic decoration remain instead the medium band and the antithetic spirals), while shallow angular bowls occur for the first time with the developed form which will be characteristic in the subsequent phase and seem now to be gradually replacing the rounded bowl with horizontal strap handle.⁶²³ Of the shapes in fashion during LH IIIC Early, only the bowls with horizontal strap handle, cups (simple or carinated), kylikes, amphorae, jugs, hydriae, amphoriskoi and collar necked jars survive. Bowls are developed into a shallow angular version and kraters become now carinated. The deep bowls are now reintroduced since their apparent disappearance in LH IIIC Early and new additions appear in the settlements as testified by their sherds: shallow trefoil-mouthed jugs, neck-handled amphorae and alabastra. Decoration remains for the majority of

⁶²² Sherratt, French 2011: 68-70.

⁶²³ Sherratt, French 2011: 72.

the shapes unpainted buff ware or full monochrome, the percentages of which tend to reverse at the end of the period in favour of painted monochrome decorations (in the initial IIC Middle they are 36% and 33%, while at the end 32% and 42%). The advanced phase of LH IIC shows as its main innovation the introduction of the deep bowl with multiple reserved lines in both internal and external rims and round the belly and lower body.⁶²⁴

LH IIC Middle 1 (Settlement Sherds)		
Unpainted (buff-ware):	1,057	36%
Painted:	940	33%
Patterned:	177	8%
Coarse ware:	401	15%
Patterned, pre-LH IIC:	88	5%
Pre-Mycenaean:	78	4%
Total Sherds:	2,988	100%
Belonging to: shallow regular bowls; rounded bowl with horizontal strap handle ⁶²⁵ ; cups; kylikes; carinated cups; amphorae; jugs; hydriae; carinated kraters.		

Table 19: Integration of LH IIC Middle1 pottery shapes by settlement sherds.

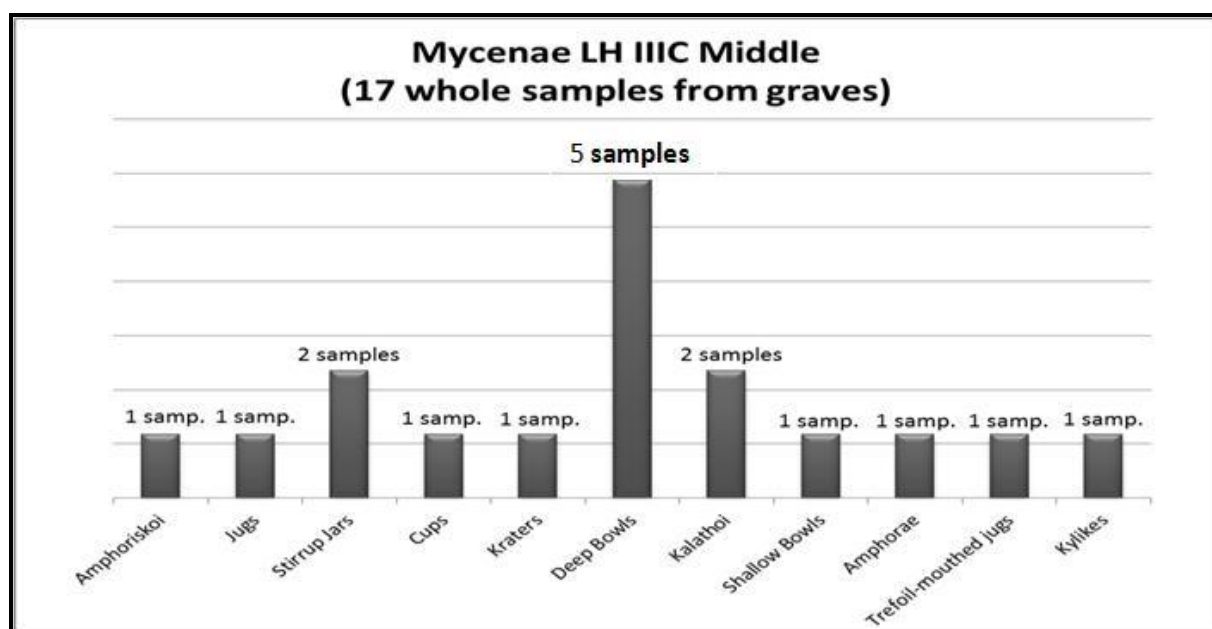


Table 20: Popularity of LH IIC Middle funerary pottery shapes at Mycenae.

The remaining shapes persist in the same outline, receiving nonetheless the new style of decoration, reaching in this period its peak of popularity. During LH IIC Late newly introduced types of deep bowl totally covered in monochrome paint with a narrow reserved

⁶²⁴ Sherratt, French 2011: 73, 74.

⁶²⁵ See French 2007.

panel (blank or with wavy line) between the handles appear.⁶²⁶ Patterns are few and represent sole or several intersecting wavy lines.⁶²⁷

LH IIIC Middle 2 (Settlement Sherds)		
Unpainted (buff ware):	2,629	32%
Painted:	3,446	42%
Patterned:	550	7%
Coarse ware:	1,182	19%
Patterned, pre-LH IIIC:	184	3%
Pre-Mycenaean:	66	1%
Total Sherds:	8,057	100%
Belonging to: deep bowls; trefoil-mouthed jugs; stirrup jars; shallow angular bowls; carinated cups; mugs; kylikes; kalathoi; cups; amphorae, jugs; hydriae; neck-handled amphorae; alabastra; amphoriskoi; collar-necked jars.		

Table 21: Integration of LH IIIC Middle2 pottery shapes by settlement sherds.

Ultimately, there is an ulterior reduction of shapes: carinated cups; mugs; kylikes; kalathoi; cups, neck-handled amphorae and alabastra instead, seem not to be present in the settlement from what can be reconstructed by the sherds. As concerns decoration, the momentary majority of monochrome painted shapes appearing at the end of LH IIIC Middle seems to decrease again (38%) in favour of buff ware (40%).⁶²⁸ These sherds already produce an initial bulk of information which sees pottery following a gradual decline from LH IIIB2 to LH IIIC Late, with its most creative peak during the second phase of LH IIIC Middle and a clear decline of both shapes and decorative patterns in LH IIIC Late.

LH IIIC Late (Settlement Sherds)		
Unpainted (buff ware):	1,855	40%
Painted:	1,746	38%
Patterned:	275	6%
Coarse ware:	518	11%
Patterned, pre-LH IIIC:	117	4%
Pre-Mycenaean:	48	1%

⁶²⁶ Sherratt, French 2011: 79.

⁶²⁷ Sherratt, French 2011: 80.

⁶²⁸ Sherratt, French 2011: 80.

Total Sherds:	4,559	100%
Belonging to: deep bowls; trefoil-mouthed jugs; amphoriskoi; collar-necked jars; stirrup jars; amphorae; jugs and hydriae; shallow angular bowls.		

Table 22: Integration of LH IIIC Late pottery shapes by settlement sherds.

From the data collected by the vessels found intact or in parts easily restorable in the closed contexts of tombs and domestic contexts reused as burial places, we can notice that most of the shapes recall again a drinking set, while stirrup jars, yet possibly for wine, are often interpreted as perfume-containers. This situation continued with few additions and an evident reduction of shapes in the following SM period, when even decoration appears more schematized and most of the vases are in fact undecorated and monochrome, lacking any sort of decorative geometry. The SM repertoire, as shown in the graph, indicates that lekythoi, small bottles likely to be ointment jars for the deceased, are the most popular shapes and the only new addition of the period. While Mountjoy had included 2 samples in LH IIIC Middle and Late,⁶²⁹ recent studies by French have not found these shapes in the same period,⁶³⁰ leaving them to the SM transition instead. The introduction of lekythoi would show that even in the poor material culture shown by this period at Mycenae, oils and ointments (with which the dead were anointed?) had to be an essential component during funerary rituals, providing perhaps both hygienic and religious meanings. The rest are all drinking vessels.

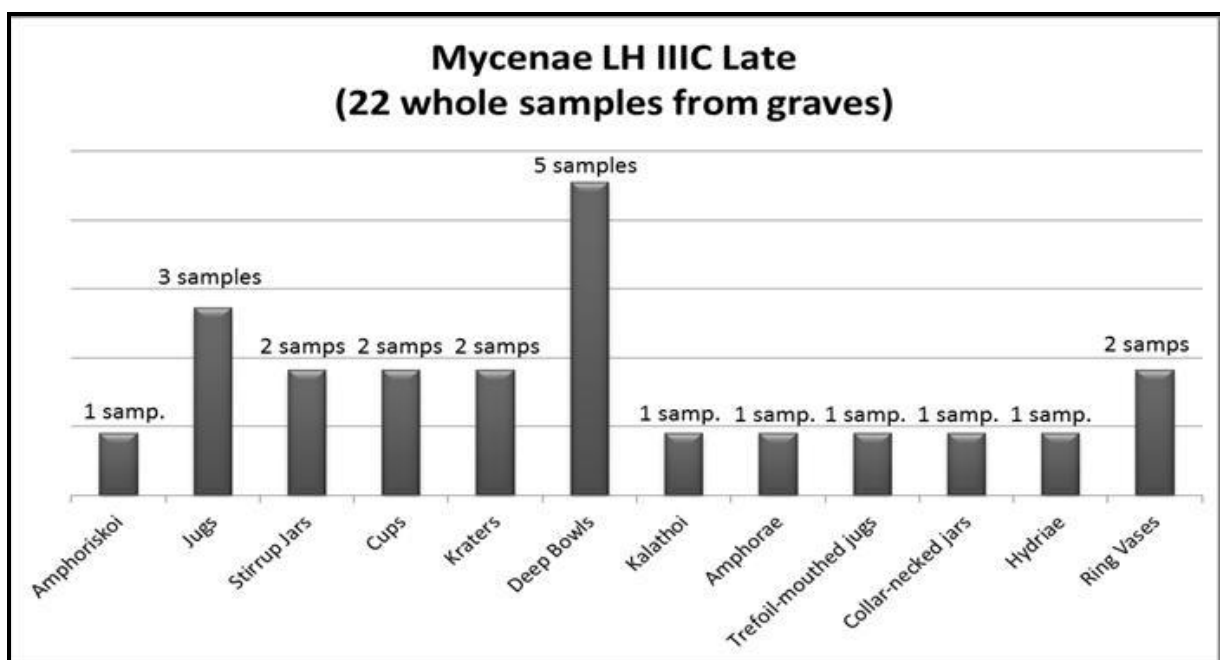


Table 23: Popularity of LH IIIC Late funerary pottery shapes at Mycenae.

⁶²⁹ Mountjoy 1999: 155-196.

⁶³⁰ Sherratt, French 2011.

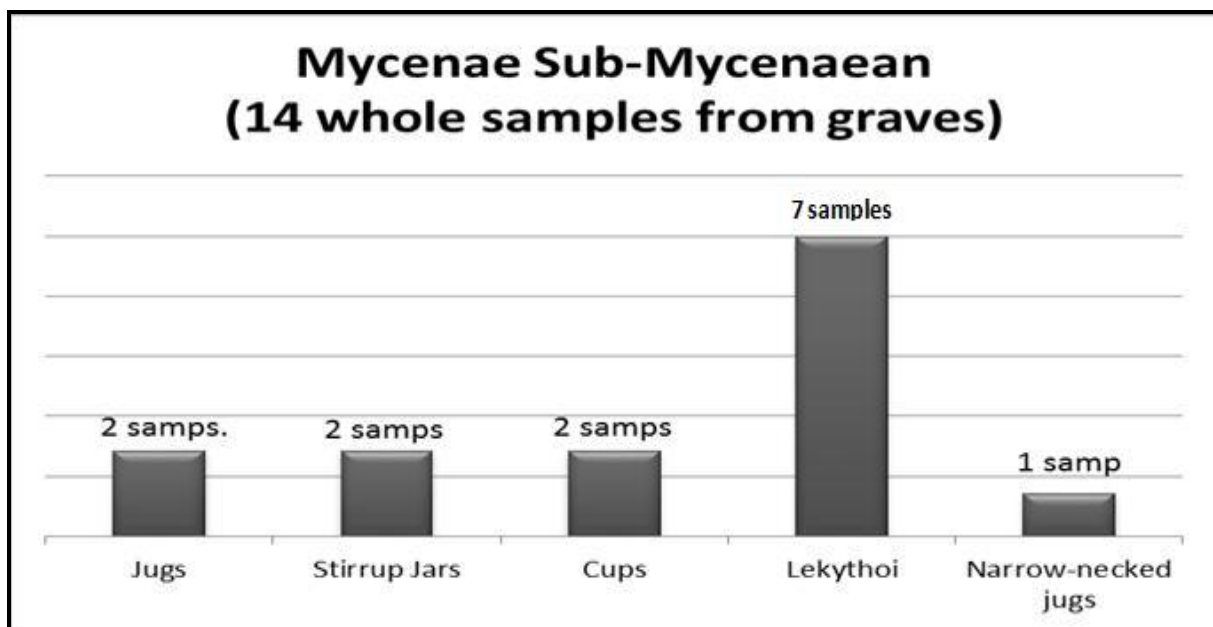


Table 24: Popularity of Sub-Mycenaeen funerary pottery shapes at Mycenae.

The PG period and the practice of cremation show scarce evidence at Mycenae, where there are only three different pottery shapes in this period, coming from two graves. Neck-handled and belly-handled amphora types, usually paired, are here separately offered. One of the two, the neck-handled type, laid in a house tomb of the citadel area.⁶³¹ The belly-handled type was found instead within a grave in the prehistoric cemetery, accompanied by an askos.⁶³² This separation of the two types might indicate that at Mycenae they were not ash containers as they were used in Athens. It is unclear whether the amphorae found in these few tombs of the citadel were used as urns, but the symbolic meaning connected with the funerary context is still there (and detached from decoration, since these examples are undecorated).

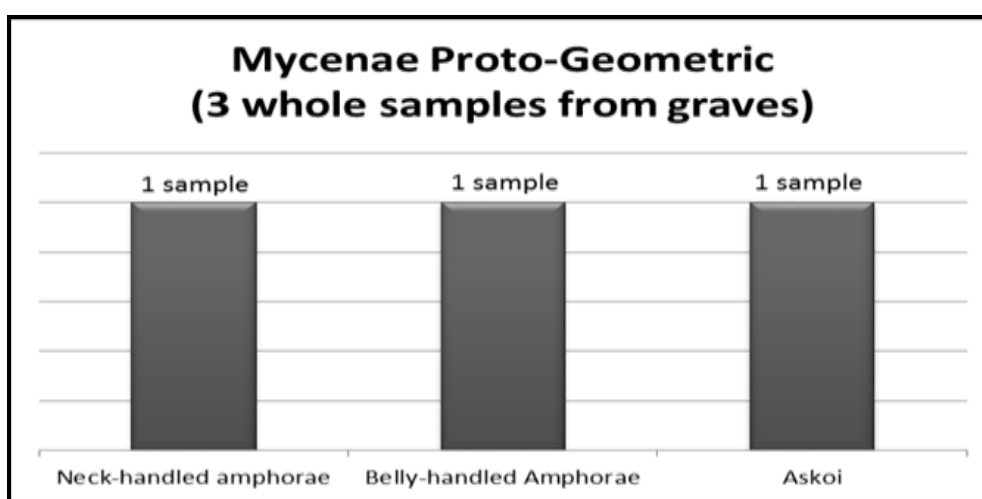


Table 25: Popularity of Proto-Geometric funerary pottery shapes at Mycenae.

⁶³¹ Mountjoy 1999: 155-196.

⁶³² Pakenham Walsh 1955: 190-193.

In summary we see a majority of closed shapes connected with storing liquids (for drinking and seldom to contain perfumes) and a minor range of open shapes made to receive liquids for drinking, mixing or transporting them. In the table below it is clearly shown that amphoriskoi are not very popular during the whole timespan and there is no evidence of them during both the SM and the PG periods.⁶³³ The overall impression at Mycenae is that the whole LH IIIC kept using roughly the same vessels from the early to the late periods and that only the SM introduces a dramatic reduction of shapes and the introduction of lekythoi as popular perfume bottles.

	LH IIIC Early	LH IIIC Middle	LH IIIC Late	Sub-Mycenaean/Sub-Minoan	Protogeometric
Closed Vases					
Amphoriskoi	X	X	X		
Jugs	XXX	X	XX	X	
Stirrup Jars	XXX	XX	XX	X	
Amphorae		X	X		
Kalathoi	X	XX	X		
Trefoil-mouthed Jugs		X	X		
Collar-necked Jars		X	X		
Hydriai	X	X	X		
Alabastra		X			
Lekythoi				XXX	
Neck-handled Amphorae		X			X
Belly-handled Amphorae					X
Askoi					X
Open Vases					
Bowls	X	XXX	XXX		
Cups	XX	X	X	X	
Kraters	X	X	XX		
Kylikes		X			
Mugs	X				
Pithoi	X				

Table 26: Diachronic ratio of pottery shapes.

⁶³³ Whereas 'XXX' indicates a great popularity (5 or more shapes per context), XX indicates a fair popularity (from 2 to 4 shapes per context), X indicates low popularity (1 to 2 shapes per context) and the empty boxes indicate total absence of the shape.



Figure 14: LH IIC pottery (Archaeological Museum of Mycenae), Mureddu 2014.

2.2. Perati.

Perati, in perfect consistency with the other classes of finds, presents a rich deposition of pottery shapes among its grave goods. All the shapes, ranging from LH IIIC to SM are not new to the previous Mycenaean assemblages, apart from a strainer in the chamber tomb 75⁶³⁴, which might be connected with exotic practices of flavouring wine with spices. In most cases we cannot be sure of the content they held at the moment of their deposition in the graves. Most of them are designed to pour wine, but the *lekanides* were made supposedly for measured dispensing of unknown liquids or perhaps made exclusively as funerary offerings. Analyses on Perati pottery produced traces of milk and honey inside one of the jugs,⁶³⁵ which is not paralleled so far to any known funerary context, nor to any ritual practice mentioned in later texts. Here reproduced is at last a briefing table presenting a list of ceramic contents in the necropolis of Perati:⁶³⁶

Perati LH IIIC (whole samples from the cemetery)		
Unpainted	35	3,7%
Fully Painted (Monochrome red, brown, yellow):	127	11%
Pictorial Style (Fringed)	4	0,3%
Patterned:	1004	86%
Total samples:	1170 ⁶³⁷	100%

Table 27: Percentage of popular LH IIIC pottery shapes at Perati.

As Iakovidis stated in his report⁶³⁸, vessels with an ample belly and an open mouth such as jugs, hydriai, oinochoai, collar-necked jars, kraters, juglets and all the spouted shapes must have been liquid containers, while *lekanides*, conical bowls, deep bowls, cups, tankards, kylikes were clearly drinking vessels. Small-sized vases with long necks and tight mouths can be instead oil or perfume containers. The most numerous shapes are stirrup jars: 31% of the total; soon after, in decreasing order, come the stamniskoi 18%, jugs 13%, cups 8%.⁶³⁹

⁶³⁴ Catalogued as object 639, in Iakovidis 1980: 25.

⁶³⁵ Catalogued as object 795 in Iakovidis 1980: 25.

⁶³⁶ All from Iakovidis 1970 A.

⁶³⁷ The totals expressed in these tabs, including the whole quantity of samples, whether fragmentary or uncommon, may vary in comparison with the total expressed in the diagrams, including instead the most relevant samples only.

⁶³⁸ Iakovidis 1980: 25.

⁶³⁹ Iakovidis 1980: 25.

Vessels containing liquid (either to pour or to drink) are the 70% of the whole range, while perfume-holders are a good 20% and storage vessels only a minor 10%. The analysis showed that most of the vases were produced with local clay, all are wheel made, carefully shaped and fired; 511 vases were worked on yellow-white clay, 388 on buff, 151 on red clay and 189 on local green clay, the least plastic one and with a tendency to flake. Almost all the vases are coated with a slip that varies in colour and consistency. Preference leans towards the whitish or yellowish colour, most of the finest specimens (786 examples) have this slip.⁶⁴⁰ The technique used involved the application of a glaze, mostly lustrous, often matt red-brown. The colours depended also on the thickness of the clay and can therefore vary from vase to vase. This glaze was obtained by suspending fine red clay in water together with alkali (potash?), which during the firing process under oxidising conditions assumed a red colour, while under reducing conditions a black or dark-brown colour. The vases fall into four main classes, according to their clays, glazes, and decoration:

- Fine, well-fired, white slip, well drawn decoration, uniform glaze.
- Fine slip, well-fired slip, but clear imitations of the previous class.
- Domestic, coarse clay, coated with a medium-quality whitish slip.
- Local greenish clay, coarse and deficient in plasticity and cohesion.

As expressed in the chart, Iakovidis separated the chronology of Perati in three phases, hard to parallel with the common chronology of other LH IIIC sites, but roughly including the transition between LH IIIB2 and LH IIIC Early, LH IIIC Early and part of the Middle, LH IIIC Middle and part of the Late.⁶⁴¹ Phase I includes a wide range of shapes, a standard also in the subsequent phases: amphoriskoi, jugs, stirrup jars, lekythoi, hydriae, stamniskoi, alabastra, feeders, lekanai, lekanides, pithamphorae, cups, kraters, kylikes and deep bowls. Decorations representing this phase at best are octopuses, v patterns, metopes, flowers, whorl shells and zigzags.

⁶⁴⁰ Iakovidis 1980: 25.

⁶⁴¹ Iakovidis 1980: 106.

	LH IIIC 1	LH IIIC 2	LH IIIC 3
Closed Shapes			
Amphoriskoi	XX	X	X
Jugs (globular and oval)	XX	XX	XX
Stirrup Jars (Globular and Squat)	XXX	XXX	XX
Amphorae			XX
Lekythoi	X	X	XX
Hydriae	X	X	X
Stamniskoi	XXX	XXX	XX
Alabastra	XX	XX	X
Feeders	XX	XX	X
Lekanai	X	X	X
Lekanides	X	X	X
Oinochoai		X	X
Pithamphorae	X	X	X
Pyxides			X
Flasks		X	
Belly-handled Amphorae			X
Open Shapes			
Cups	XX	XX	XX
Craters	X	X	X
Kylikes	X	X	X
Deep Bowls (one-handled)		XX	XX

Table 28: Ratio of LH IIIC pottery shapes at Perati after Iakovidis 1980.

Phase II includes the same shapes and decorations of Phase I, yet presenting two new additions among the previous shapes: oinochoai and one-handled deep bowls. Nevertheless, minor changes occur in stirrup jars and lekythoi, whose outline becomes less globular and more conical; also jugs acquire now a grooved lip.⁶⁴² Phase III sees instead the peak of popularity for lekythoi and oinochoai. Moreover, two additions appear at Perati: collar necked stamniskoi and belly-handled amphorae. The change of shape from globular into conical is now complete. The discs closing the false-neck of the stirrup jars appear to develop a point and the handles of the deep bowls become more horizontal.

⁶⁴² Iakovidis 1980: 105.

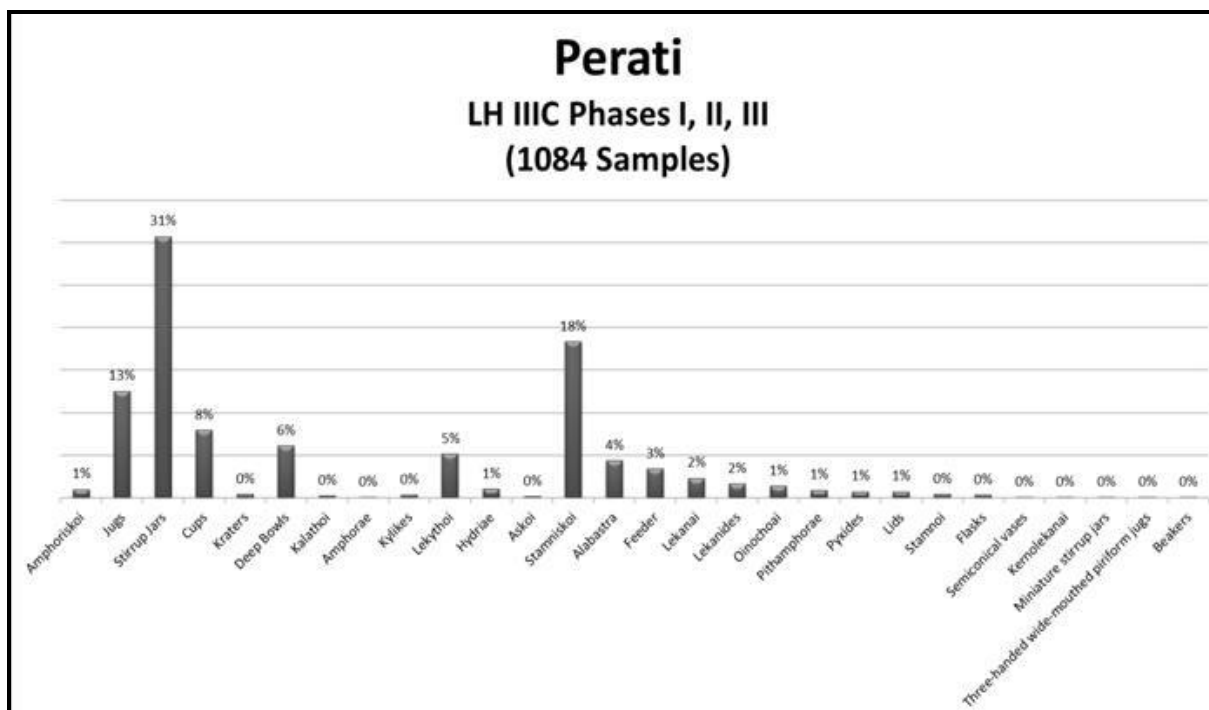


Table 29: Popularity of Proto-Geometric funerary pottery shapes at Perati.

In Phase III there are almost no pictorial scenes, only 4 vessels are decorated with a pictorial style (the fringed one) while the majority of them (86%) is patterned with wavy lines, drop-shaped fringes, half ovals.⁶⁴³ We may add that in this site a transition between the pictorial trend of the latest phase of the Bronze Age and the beginning of the schematism which characterized the subsequent periods elsewhere is still visible. In brief, the change in the decoration trend may have had its occurrence around 1100 BC and does not seem to go along with any significant change in the local lifestyle.⁶⁴⁴

⁶⁴³ Iakovidis 1980: 105-107.

⁶⁴⁴ Only 49 pots, of fifteen different shapes, were not local, they were probably Cypriot, see Iakovidis 1980: 28.



Figure 15: LH IIC stirrup jar from Perati (Archaeological Museum of Brauron). Mureddu 2014.



Figure 16: Trefoil-mouthed jug from Perati (Archaeological Museum of Brauron), Mureddu 2014.

2.3. Salamis.

In the 11th century, a cemetery consisting of one-hundred newly set up single graves was established on the island of Salamis; the deployment of grave goods did not express the same degree of wealth seen at Perati. On the contrary, the number of objects found is not at all impressive. The catalogue of ceramic shapes put together does not represent an exception:

Salamis from LH IIIC to Proto-Geometric⁶⁴⁵ (whole samples from the cemetery)		
Undecorated:	9	13%
Painted	0	0%
Pictorial Style	0	0%
Patterned:	60	87%
Total samples:	69	100%

Table 30: Percentage of popular pottery shapes and decoration at Salamis.

As we can see, during LH IIIC late and SM there were only four classes of shapes found in a relatively large cemetery of 100 graves. These four classes show 61 samples in total. The shapes are all related to drinking, imitating forms already seen in the Mycenaean age.⁶⁴⁶ After the well represented SM style around 1050 BC, there are only imported Attic forms during the LPG period, reproducing *in toto* the whole Athenian range, with the pair neck-handled/belly-handled amphorae, kraters, jugs, oinochoai and a majority of small pyxides, each one with its own lid.⁶⁴⁷ The most popular shapes in the cemetery are amphorae and stirrup jars. All the decorations conform to the canons of the late LH IIIC and SM periods: simple, linear or wavy patterns and triangles (87% of the total) but the quality of both fabric and composition is low.⁶⁴⁸

⁶⁴⁵ Wide 1967: 17.

⁶⁴⁶ Kavvadias 1886.

⁶⁴⁷ These are out of context and not part of the Sub-Mycenaean cemetery.

⁶⁴⁸ Kavvadias 1886.

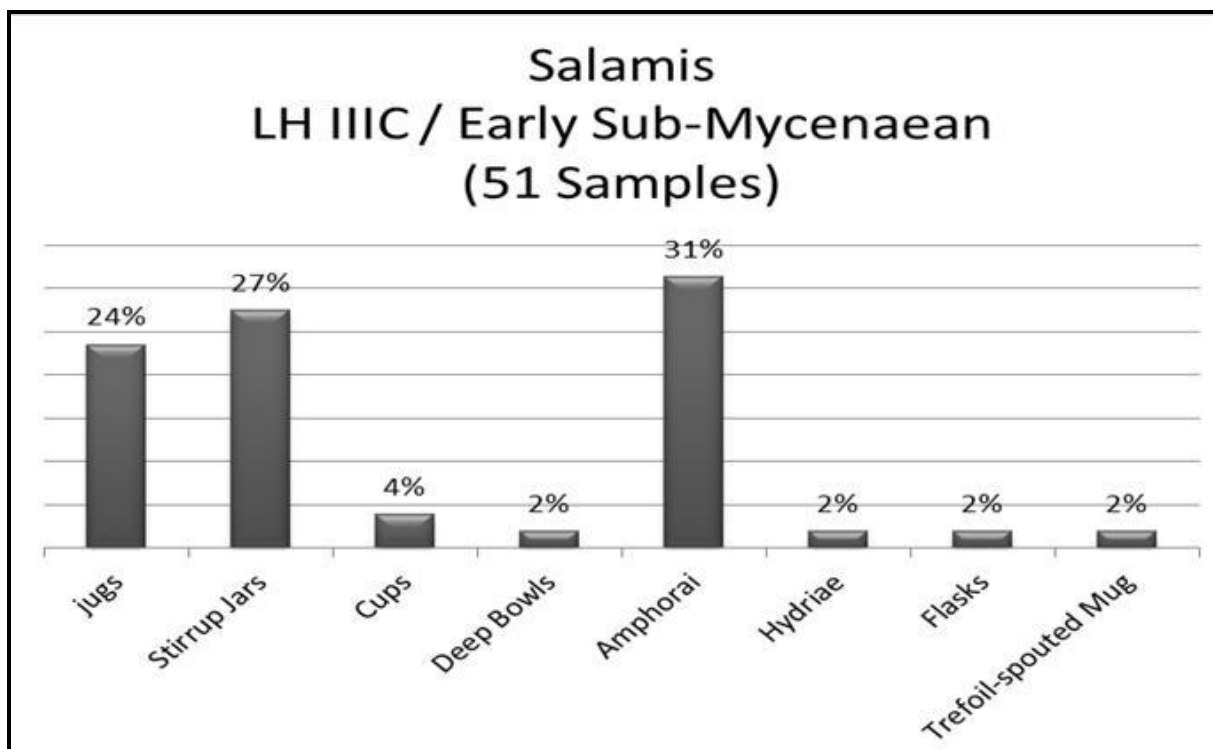


Table 31: Popularity of LH IIIC/Sub-Mycenaean funerary pottery shapes at Salamis.

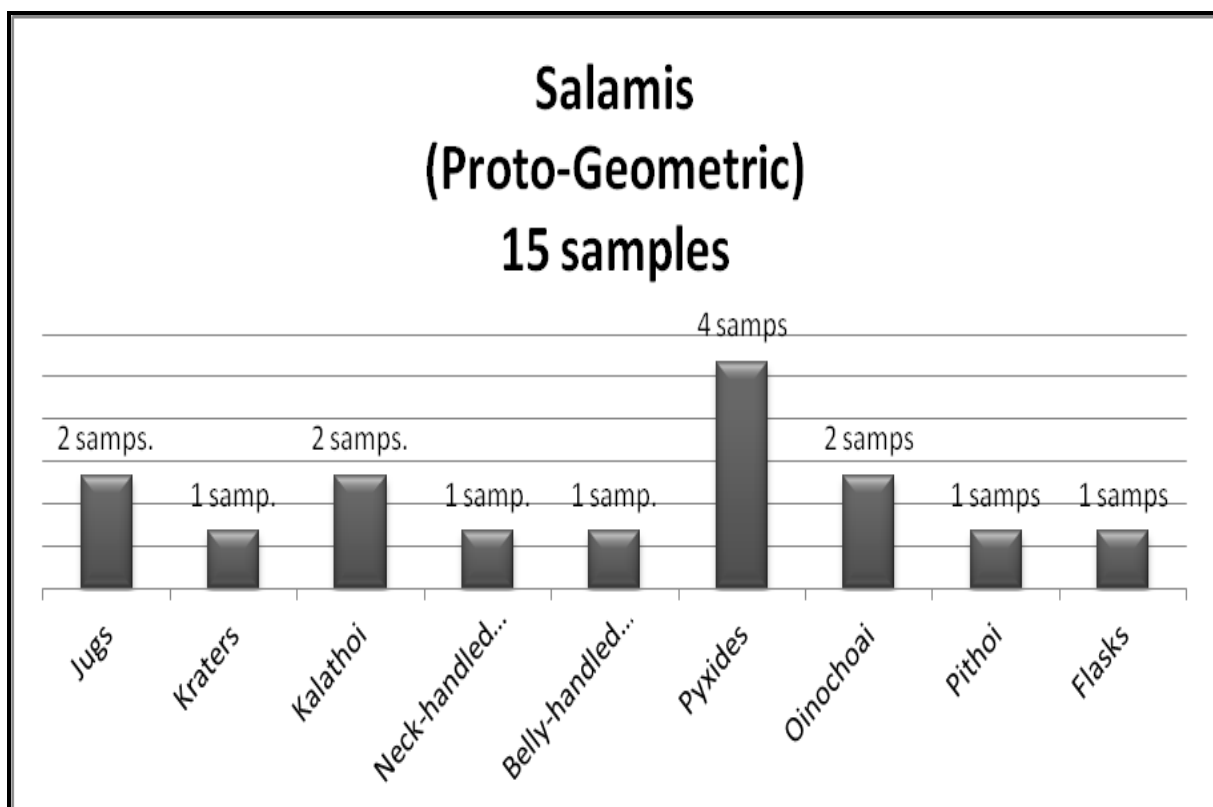


Table 32: Popularity of Proto-Geometric funerary pottery shapes at Salamis.



Figure 17: Pottery and metal finds from Salamis (Archaeological Museum of Piraeus), Mureddu 2014.

2.4. Athens.

The Athenian Kerameikos cemetery offers new inputs to the discussion about post-palatial transformations during the controversial SM period and its transition to PG. As previously pointed out, Athenian pottery starts to distinguish itself from the earlier periods of the Aegean LH IIIC during the so-called SM period. As aforementioned, in Ruppenstein's view the SM period contained novelties which gradually evolved throughout the second half of the 11th century, divided into three stages, plus a fourth which recalls Lemos' transitional phase, though not endorsing the boundaries she provided in overlapping what she calls EPG.⁶⁴⁹ The table below summarises Ruppenstein's setting for the Athenian SM and the four stages of the transition to the PG:

From Ruppenstein 2007: 196⁶⁵⁰	Stage 1	Stage 2	Stage 3	Stage 4
Lekythos 1	X			
Stirrup Jar 1	X			
Stirrup Jar 2A	X			
Jar 1	X			
S.H. Amphora	X			
Amphoriskos 1	X	x		
Lekythos 2	x	X	x	
Amphoriskos 2		X		
Stirrup Jar 3		X		
Stirrup Jar 3-4		X		
Amphoriskos 3		X		
Stirrup Jar 4		X	x	
Jar 2			X	
Stirrup Jar 2B			X	
Amphoriskos 4			X	x
Lekythos 3			X	X
Flask			X	X

⁶⁴⁹ Lemos 2002: 9; Ruppenstein 2007: 199, 200; Ruppenstein 2009: 327.

⁶⁵⁰ Capital X is used by Ruppenstein to represent characteristic shapes, while lowercase x represents sporadic shapes.

Cylindr. Lekythos			X	X
B.H. Amphora 1				X
B.H. Amphora 2				X
Straight Amphora				X
S.H. Amphora				X
Ring Flask				X
Bird Askos				X
Krater				X
Cylindr. Pyxis				X
Jar 3				X
Rectangular Box				X
Deep Bowl 2				X
N.H. Amphora				X
Deep Bowl 1	X	X	X	x
Cup	X	X	X	x

Table 33: Ruppenstein's Kerameikos Sub-Mycenaean Chronology.

As he states, the differences between the first three stages and the fourth are clear. The fourth style expresses a series of characteristics (namely continuity with previous stages, innovation, peculiarities of this section only and sudden appearances of new shapes) which links it with the previous SM and yet detaches it from it. For instance, we have continuity of shapes like the lekythos, which bridges SM and PG, but also the appearance of new shapes like Belly-handled Amphorae, Deep Bowls and Kraters. In the fourth stage he places also the first appearance of the compass-drawn semicircles, which probably made Lemos ascribe them to EPG rather than to SM. Ruppenstein says this should be interpreted as a diagnostic feature for understanding the precise moment in which SM and PG overlapped. All amphoriskoi, shoulder-handled amphorae, ring vases, bird askoi and square boxes disappear already in the third SM stage. It is perhaps the end of Cyprus' influence in trade and the beginning of a new commercial impulse coming from Athens.

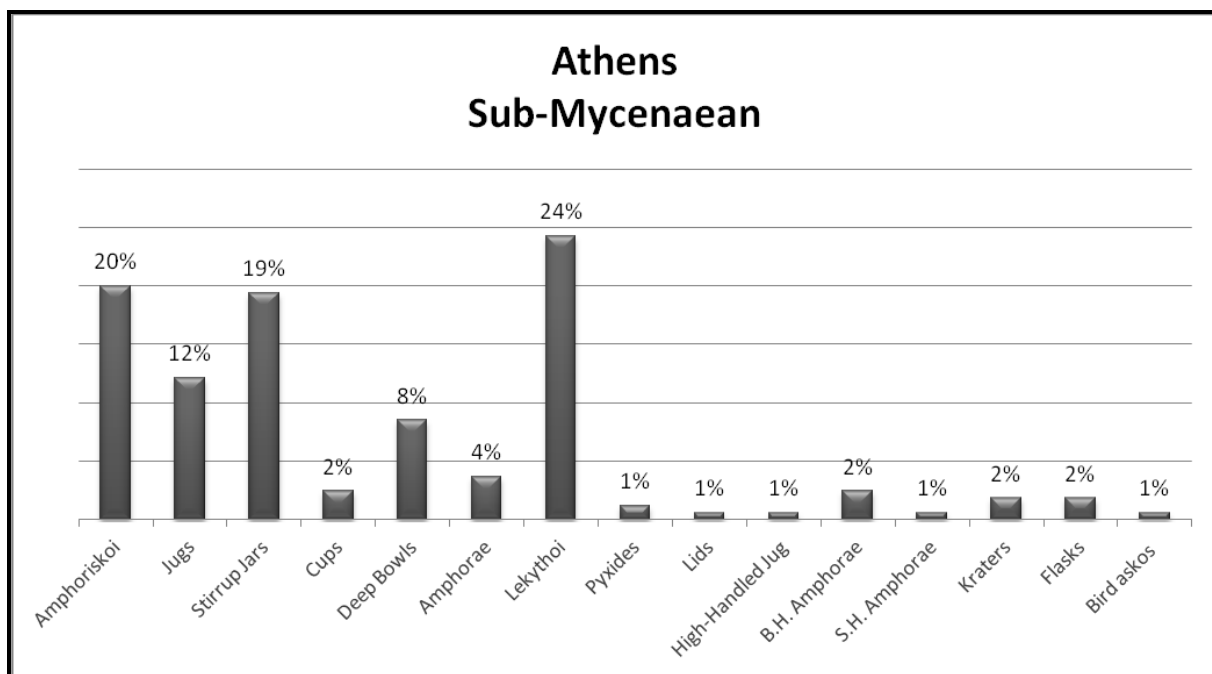


Table 34: Popularity of Proto-Geometric Sub-Mycenaean funerary pottery shapes at Athens.

The decoration of the vases remained quite minimal both in SM and PG, its quantity on the surface of the vases cannot be used as a diagnostic feature, yet the number and variety of shapes offered in tombs pertaining to the fourth stage increased massively, which thing will continue in the subsequent EPG.

Athens Sub-Mycenaean and Proto-Geometric ⁶⁵¹ (whole samples from the cemeteries)		
Undecorated:	14	6%
Painted (Monochrome black):	8	2,9 %
Pictorial Style (Octopus)	1	0,1%
Patterned:	235	91%
Total samples:	258	100%

Table 35: Percentage of popular pottery shapes and decoration at Athens.

In the 10th century the innovative patterns appeared in Ruppenstein's transitional phase and the introduction of new shapes mark the clear beginning of the PG⁶⁵² and witness a renewed flourishing Athenian creativity.⁶⁵³

⁶⁵¹ After Kübler, Kraiker: 1939-1952; Lemos 2002; Ruppenstein 2007.

⁶⁵² Whitley 2003: 88.

⁶⁵³ Desborough: 1972.

EPG is defined by Lemos as still a mixture of SM and PG features. She lists three categories of vases: 1) remnants of SM which do not continue to MPG (stirrup jars, shoulder-handled amphoriskoi); 2) SM shapes which do continue into MPG, though with minor changes in both shape and decoration (lekythoi, amphorae, deep bowls, cups); 3) new shapes, also including rarities and imports from Cyprus and Crete (ring vases, tripods, high-handled pyxides). Ceramic is made with light-ground.⁶⁵⁴ In MPG the SM vases disappear or become very sporadic and the range of ceramic shapes becomes more limited than in the previous phase. Popular shapes become the b.h. and n.h. amphorae (from now on classified as urn vases), deep bowls, oinochoai, handmade kitchen ware. A diagnostic features of this phase can be recognised in the painted monochrome necks of belly-handled amphorae.⁶⁵⁵ In this period the compass-drawn concentric circles are no longer used to decorate the amphorae, especially the ones used as urns. They are replaced instead by compass-drawn concentric semicircles. Interestingly, oinochoai continue to use also concentric circles, as if semicircles had more to do with vessels used as urns. Another popular decoration is now the vertical wavy line, which will continue in the next phase. Triple concentric circles on the surface of deep bowl become in this phase so popular to become the standard.⁶⁵⁶ Ceramic is still light-ground. As stated by Lemos, the first immediate change in pottery at the end of PG is the different ground used. All the vases are now made of dark-ground ceramic.⁶⁵⁷ This ceramic marks the beginning of the LPG period in Athens.

New LPG shapes are kantharoi, kalathoi, globular pyxides, flat-based cups. A shoulder-handled amphora returns and replaces the belly-handled type. The bodies are now finely made and their shape is more ovoid than globular. A few imports continue to reach Athens, especially ring vases and flasks. The decoration now seems to emphasise the divisions between the different parts of the vase bodies, so there is a visual detachment of the foot from the belly, of the shoulder from the body and of the neck from the shoulders. Oinochoai become fully painted, apart from reserved bands (at times including zigzags) on their bellies, and lose their previous decoration on the neck. Lekythoi becomes more ovoid and keep the concentric semicircles on their shoulders. The deep bowls with triple circles have now these divided within panels. All in all, the variety of vases increases and its quality is certainly superior.⁶⁵⁸ Yet graves contained a modest number of vases, often presenting more than one

⁶⁵⁴ Lemos 2002: 9.

⁶⁵⁵ Lemos 2002:16.

⁶⁵⁶ Lemos 2002: 16.

⁶⁵⁷ Lemos 2002: 19.

⁶⁵⁸ Lemos 2002: 19.

example of the same shape. The presence is not uniform, some of the graves have only one vase and nothing can be said about the choice of these single items in relation to the burial context, since they are all different types. The regular appearance of the pair neck-handled/belly-handled amphorae during PG is a striking novelty.

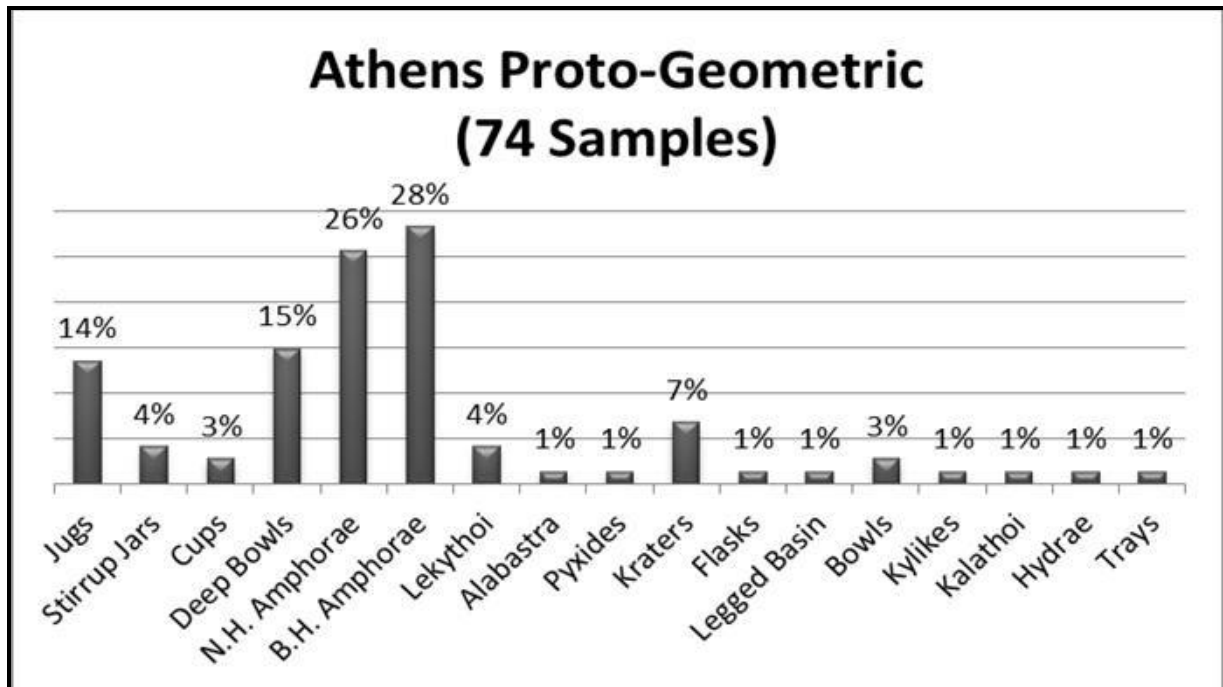


Table 36: Popularity of Proto-Geometric funerary pottery shapes at Athens.

The main form of decoration (87% of the total) is represented by patterns. These patterned amphorae appear to be the real hallmark of the PG. Possible cultic meanings will be described in the following paragraphs. It is remarkable that at Athens very few shapes are either unpainted (6%) or painted with a monochrome slip (2,9%). A common denominator so far can be seen, not unusually, in the function that all these pottery shapes had to the drinking set: a relationship with wine. The difference in the quantity can be related to the personal wealth of the deceased.



Figure 18: Sub-Mycenaean shapes from Athens (Kerameikos Museum), Mureddu 2014.



Figure 19: Middle Proto-Geometric jug from the Agora (Agora Museum), Mureddu 2014.



Figure 20: Late Proto-Geometric belly-handled amphora from Athens (Kerameikos Museum), Mureddu 2014.

2.5. Lefkandi.

Only one tomb found in the area of Chalkis has been ascribed so far to the LH IIIC settlement of Xeropolis.⁶⁵⁹ Therefore, very limited grave goods can be listed and pottery could not be clearly individuated nor state a chronological setting. The best witnesses of post-palatial Euboean pottery remain the cemeteries of Lefkandi. If initially Xeropolis-Lefkandi was a small settlement with intramural depositions filled with a limited set of goods, it very soon flourished and reached a new prosperity during SM and EPG, establishing new burial spaces.⁶⁶⁰ The display of goods and prestige markers, together with the royal-like appearance of the couple buried in the so-called 'Heroon' building (and the building itself), are unprecedented in the second half of the 10th century.⁶⁶¹ Because of this discovery, Whitley proposed the 'Big Men' theory, exposed by Sahlins in 1963,⁶⁶² to express the kind of social organisation in existence at Lefkandi after the palatial collapse.⁶⁶³

Large amounts of pottery was deposited in these cemeteries, allowing better chronology settings. The earlier cemetery, Skoubris, was established during SM and was in use until the MPG period. The later cemeteries of Palia Perivolia and Toumba both appear to belong to MPG, but only Toumba develops mostly during LPG.⁶⁶⁴ As for Athens, the EPG pottery was identified by Lemos as a mixture of SM and PG features, implying a direct continuity of the two periods.⁶⁶⁵ There is a fair presence of local shapes during SM, especially multiple vases and b.h. amphoriskoi, deep bowls, jugs, oinochoai. New EPG shapes are flasks, tripods, straight-sided pyxides.⁶⁶⁶ Judging by the pottery found in the excavation of the Toumba building and the earlier tombs of its cemetery, MPG is the date in which the Attic style reached Lefkandi,⁶⁶⁷ unlike the later date proposed by Desborough.⁶⁶⁸ As stated by Boardman, the quality of the fabric, some shapes and decorative techniques (compass-drawn concentric circles) totally mirror the Attic styles or are direct imports.⁶⁶⁹

⁶⁵⁹ Thomatos 2006: 254.

⁶⁶⁰ Popham, Sackett, Themelis 1979.

⁶⁶¹ See Popham, Calligas 1993.

⁶⁶² Sahlins 1963: 285-303.

⁶⁶³ Whitley 1991: 341-365.

⁶⁶⁴ Lemos 2002: 164.

⁶⁶⁵ Lemos 2002: 11.

⁶⁶⁶ Lemos 2002: 11.

⁶⁶⁷ Lemos 2002: 16.

⁶⁶⁸ Desborough 1991: 418.

⁶⁶⁹ Boardman 1998: 215.

Lefkandi		
Sub-Mycenaean and Proto-Geometric⁶⁷⁰		
(whole samples from the cemeteries)		
Undecorated:	254	39%
Painted (Monochrome black):	0	0%
Figures (Archers, Bovines)	2	0,3%
Patterned:	392	60,7%
Total samples:	648	100%

Table 37: Percentage of popular pottery shapes and decoration at Lefkandi.

Patterned shapes represent the 61% of the total, while it must be pointed out that in comparison with Athens there is a good 40% of unpainted and undecorated vases. The SM fashion remains wine-related in terms of shapes, while major decorations are pendent circles and semicircles executed with multiple brushes in the Athenian fashion. The number of shapes per tomb varies from grave to grave according to personal wealth. The different types of graves, whether inhumations or pyre cremations, present common shapes. As well as the containers for liquids there are several storage containers, like large pithoi, kalathoi and pyxides. These are likely to be the most suitable receptacles (being large and wide-mouthed) for personal objects pertaining to the cremated depositions. There is evidence of broken vessels buried soon after the breakage. According to the excavator, all the material comes from domestic use and was not made on purpose.⁶⁷¹ The chronology of the shapes and decorations parallels the Athenian Kerameikos. Contacts between Attica and Euboea were therefore clearly continuous. Some shapes suggest foreign connections such as Boeotia, Phocis and Skyros.⁶⁷² Examples of semi-fine handmade wares have been recognised as both Thessalian and Macedonian, while black slip coated vessels indicate imports from Asia Minor.⁶⁷³

⁶⁷⁰ After Popham, Sackett, Themelis 1979.

⁶⁷¹ Catling, Lemos 1991: 93-95.

⁶⁷² Catling, Lemos 1991: 93-95.

⁶⁷³ Catling, Lemos 1991: 93-95.

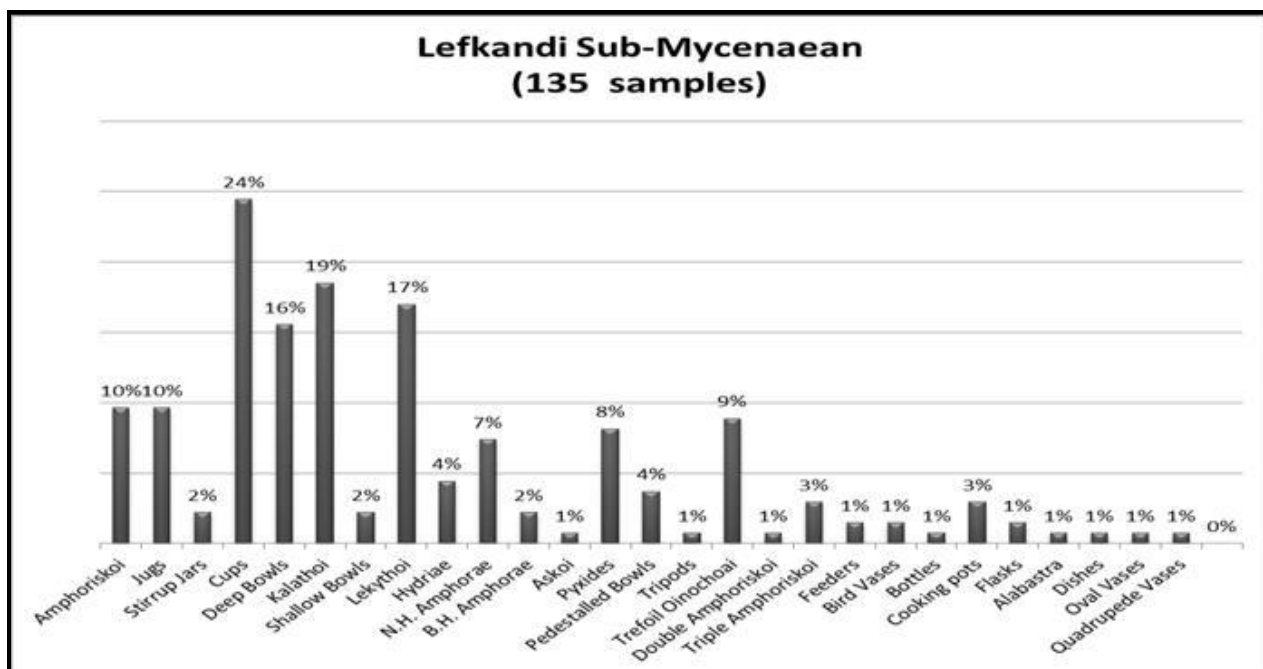


Table 38: Popularity of Sub-Mycenaean funerary pottery shapes at Lefkandi.

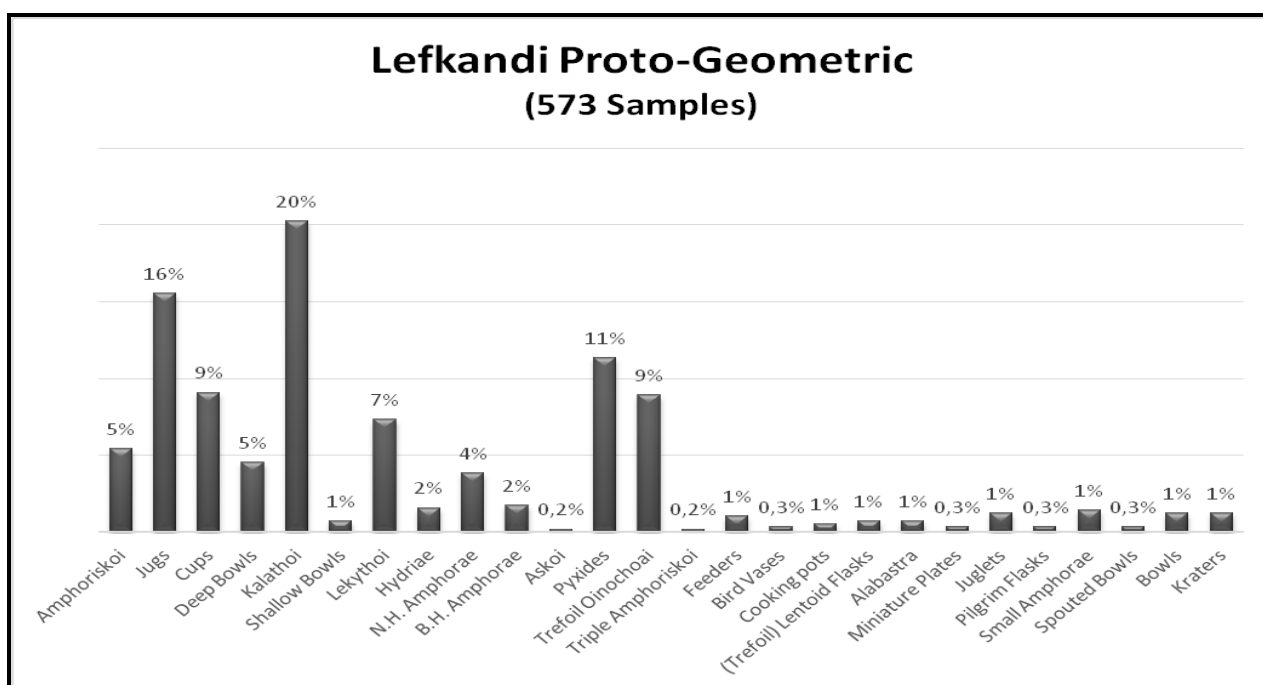


Table 39: Popularity of Proto-Geometric funerary pottery shapes at Lefkandi.



Figure 21: Sub-Mycenaean pottery from Lefkandi (Archaeological Museum of Eretria), Mureddu 2014.

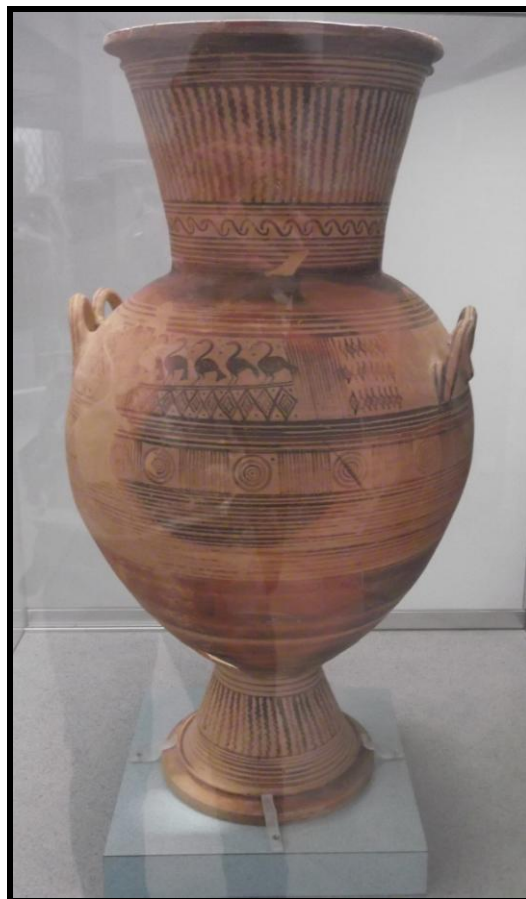


Figure 22: Proto-Geometric high-necked belly-handled amphora from Lefkandi (Arcaheological Museum of Eretria), Mureddu 2014.

2.6. Knossos.

As seen in chapter II, Knossian chamber tombs show good continuity during the post-palatial periods. Among their offerings many local pottery shapes can still be found, but some types of vessels and decorations, as previously introduced, appear as Attic imports.⁶⁷⁴ The period known as SMin seems initially to chronologically match the mainland SM, but it lasted longer, ending around 970/950 BC and overlapping the EPG and MPG periods in the mainland.⁶⁷⁵ Even though some LM IIIC characteristics remain in the early SM period and some scholars speculate about two different stages of Cretan SMin,⁶⁷⁶ in order to avoid confusion, I will not follow this ulterior complication. Snodgrass, Coldstream and Willet's time settings, none of which exceeds 950 BC, will be used in this study. After 950 BC, the style of shapes and decoration at Knossos perfectly matches the mainland PG and will be considered as such in my tabulation.⁶⁷⁷ Since the mainland PG had begun fifty years earlier, it must be said that some SM imports during the first half of the 10th century BC belong to the mainland EPG and MPG even though appearing in SMin Cretan contexts. This is the reason why Coldstream and Catling associated the Cretan imports to the same chronological phases of the mainland,⁶⁷⁸ and this way of proceeding will be accepted and reposed here. An interesting characteristic of Knossos is the continuous use of the same chamber tombs over the centuries, holding in the same context pottery ranging from the MPG to the Orientalising (although our catalogue only reaches LPG).

Knossos		
Sub-Minoan and Proto-Geometric (whole samples from the cemeteries).⁶⁷⁹		
Undecorated:	611	44%
Painted (Monochrome black and <i>Bucchero</i>):	23	1,6%
Figures (Warriors, Animals)	6	0,4%
Patterned:	758	54%
Total samples:	1398	100%

Table 40: Percentage of popular pottery shapes and decoration at Knossos.

The shapes related to this view of the SMin period of Knossos are as much reduced in number as those in the SM cemeteries of Athens, with the only difference that neck- and belly-handled amphorae seem to be already present on Crete, even constituting a good

⁶⁷⁴ Coldstream 2001: 21-65.

⁶⁷⁵ Snodgrass 1971: 128; Willets 1992: 162; Coldstream 2001: 22.

⁶⁷⁶ D'Agata 2011: 51-64.

⁶⁷⁷ Desborough 1972: 115.

⁶⁷⁸ Coldstream, Catling 1996.

⁶⁷⁹ After Coldstream, Catling 1996.

percentage (neck-handled amphorae are 23% of the total SMin range, while belly-handled amphorae are 7%). Stirrup jars, are in this period the most popular shapes in tombs,⁶⁸⁰ a characteristic not uncommon to the rest of the SM Aegean. An interesting remark is made by Coldstream in his description of Stirrup Jars as being the first stage of a fashion which later will change in favour of lekythoi and aryballoi, confirming that all these shapes had the same function of unguentaries (or slow-pouring vessels).⁶⁸¹

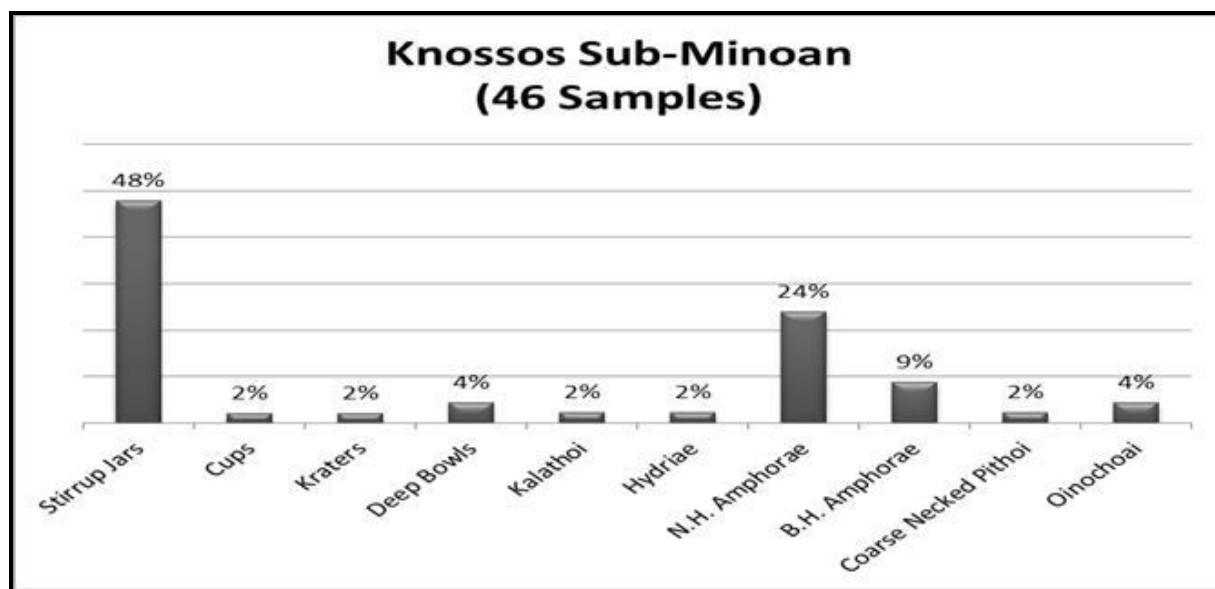


Table 41: Popularity of Sub-Minoan funerary pottery shapes at Knossos.

The PG imports from Attica appear in the tombs as an addition to the previous local shapes. New shapes in line with the Attic style are represented by Atticising n-h. and b.h. amphorae with concentric circles, straight-sided pithoi; lekythoi; aryballoi. Especially the high percentage of conical, small and domed vase lids appearing in the Knossian PG indicates the presence of a large amount of funerary urns and therefore an increment of cremations.⁶⁸² The shapes continuing from the Minoan and SMin periods to the PG period, which are also in use at the same time in the mainland, are necked pithoi; necked-handled amphorae; stirrup-jars; hydriai; oinochoai; flasks. The division between patterned vases and unpainted ones is less marked in Crete than in Athens. Here they are almost equal in number (54% patterned and 44% unpainted and unpatterned), more similar to the situation at Lefkandi.

⁶⁸⁰ Coldstream 2001: 40.

⁶⁸¹ Coldstream 2001: 42.

⁶⁸² Coldstream 2001: 31-35.

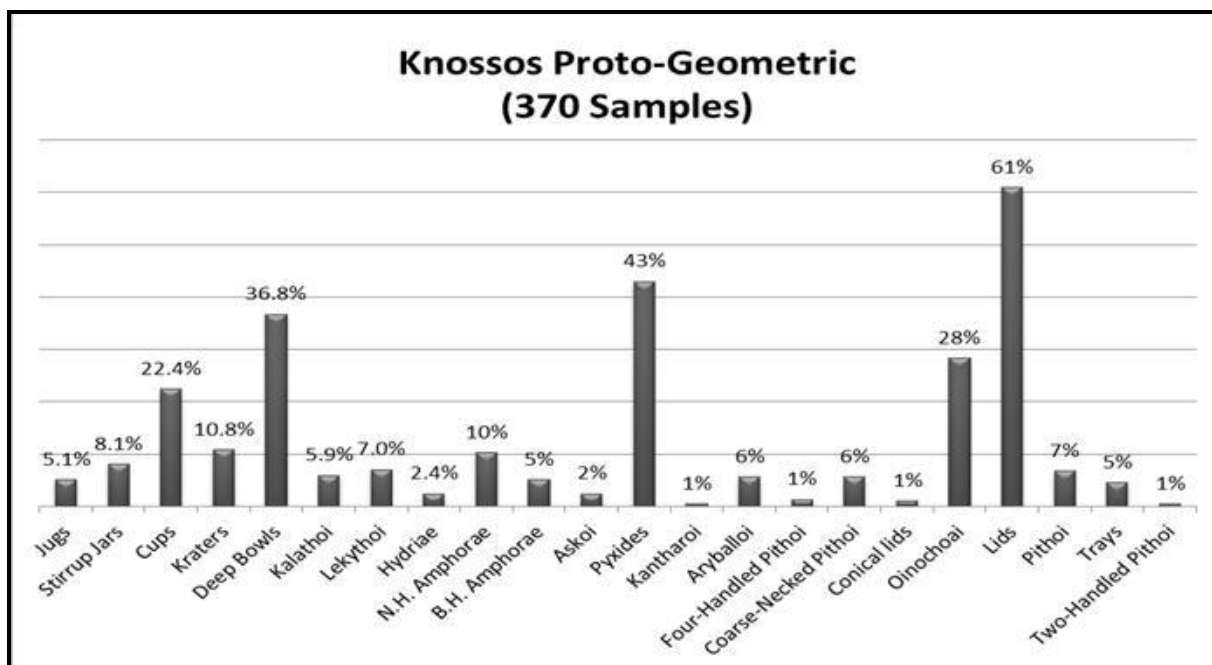


Table 42: Popularity of Proto-Geometric funerary pottery shapes at Knossos.

An interesting feature is also the presence in all the Iron Age funerary contexts of MM larnakes, often painted with scenes of animals and possible deities, and betraying a link with the earlier cultic tradition. These surviving ceramic boxes must be thought of as carrying a social value reflecting the domestic environment and those aspects of the household which were to be represented in the funerary context. When describing them inside chamber tombs exclusively containing EIA pottery, Cavanagh implied that they could have been Minoanising larnakes, but still belonging to the EIA. Whether this were true or not, resorting to larnakes in the EIA could still have had the function of re-enacting the BA tradition. This link with the past was sought several times during the EIA, not only on Crete. Another instance can be seen in the offering of a LH IIIA piriform jar in a PG burial of the Serraglio cemetery on Kos. A LH IIIC glass seal was found in a MPG grave at Lefkandi. All these attempts to confer objects from the distant past to the deceased would highlight a continuing reverence towards the Mycenaean/Minoan past. Whatever the real meaning assigned to these items, it is likely that the EIA Greeks deposited them in tombs to reiterate their descent from the same lineage or to express their proximity to glorious events and characters of the past, stating once again that no erasure of the Mycenaean/Minoan culture had occurred by means of foreign invasions or cataclysmic events.



Figure 23: Sub-Minoan pottery from Knossos (Archaeological Museum of Heraklion), Mureddu 2014.



Figure 24: Proto-Geometric pottery from Knossos (Archaeological Museum of Heraklion), Mureddu 2014.



Figure 25: Proto-Geometric jug from Knossos (Archaeological Museum of Heraklion), Mureddu 2014

2.7. Naxos.

On Naxos the quality of the LH IIIC pottery equals the coeval examples in the mainland and on Crete. The cemeteries producing post-palatial pottery, Aplomata and Kamini, show a wide range of different shapes.⁶⁸³ The majority of the pottery (330 samples so far)⁶⁸⁴ comes from the two chamber tomb clusters.⁶⁸⁵ The shapes in use mostly conform to those in the mainland: Amphoriskoi, stirrup jars, deep bowls, jugs and cups are the most popular shapes during LH IIIC.

Naxos ⁶⁸⁶		
Undecorated:	14	30%
Painted (Monochrome black):	6	13%
Pictorial Styles (Octopus)	10	22%
Patterned:	16	35%
Total samples:	76	100%

Table 43: Percentage of popular pottery shapes and decoration at Naxos.

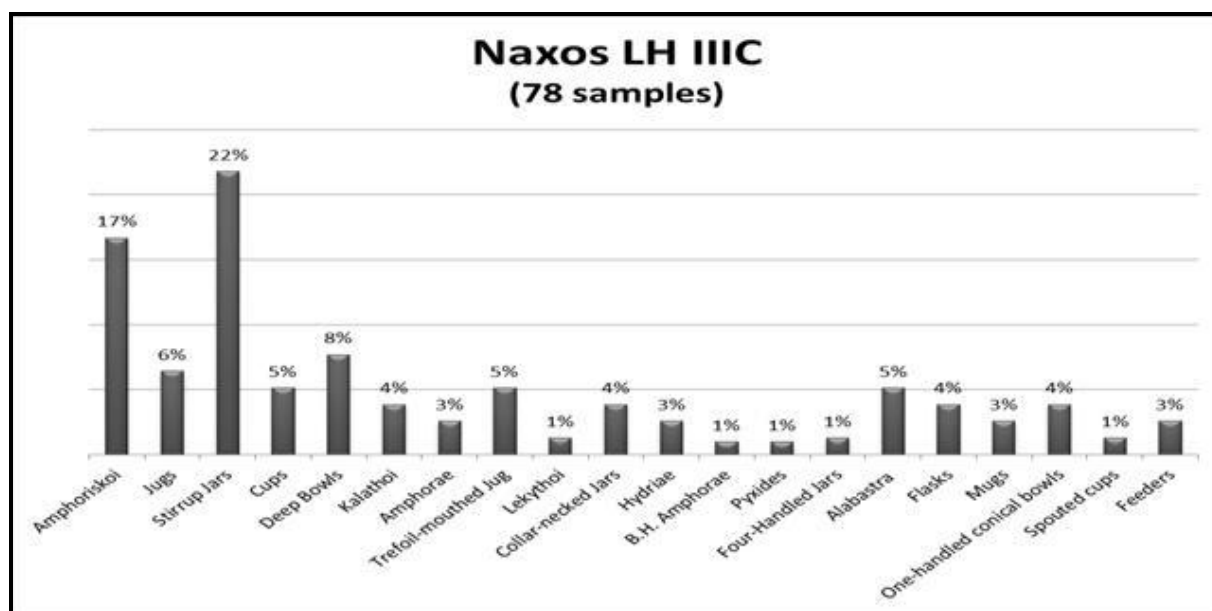


Table 44: Popularity of LH IIIC funerary pottery shapes at Naxos.

During the LH IIIC period, decoration on vases is rarely absent. The majority of vessels are decorated (57%) yet many others are completely undecorated and unpainted (30%). The

⁶⁸³ Deger-Jalkotzy 2006: 151-181.

⁶⁸⁴ However, of these 330 only 76 vessels could be accessed in detail for this research and are here used.

⁶⁸⁵ Vlachopoulos 2006: 485.

⁶⁸⁶ The total here presented refers to the ones published and visible in detail, a quantitative diagram of the whole range follows. See Kontoleon 1971; Lambrinouidakis 1980: 259-262; Mountjoy 1999: 942-964.

local style is still strong, though there is a clear presence of imported vases from Athens and Eastern Crete.⁶⁸⁷ It is interesting to notice that one third of the whole decorated pottery presents a schematic form of octopus style, usually depicted on stirrup jars (60% of the samples). The rest of the decorated pots shows with elaborate and well-drawn patterns the fashion of each period: wavy lines, spirals, triangles and those hand-drawn concentric semicircles which will become popular in mainland Greece and Crete during the SM/SMin phase, but not on Naxos, where SM is almost invisible, perhaps due to the lack of funerary evidence.⁶⁸⁸ The passage from LH IIIC Late to PG is more abrupt. When that happens we can notice that the Athenian style is only represented by a few imported vessels and it is not fully adopted on the island. The Aplomata cemetery gives back a scarce quantity of this PG pottery, only thirteen items in total. Shapes are all drinking vessels except for one lekythos, decoration is poor or absent and so are popular neck- and belly-handled amphorae of the mainland.

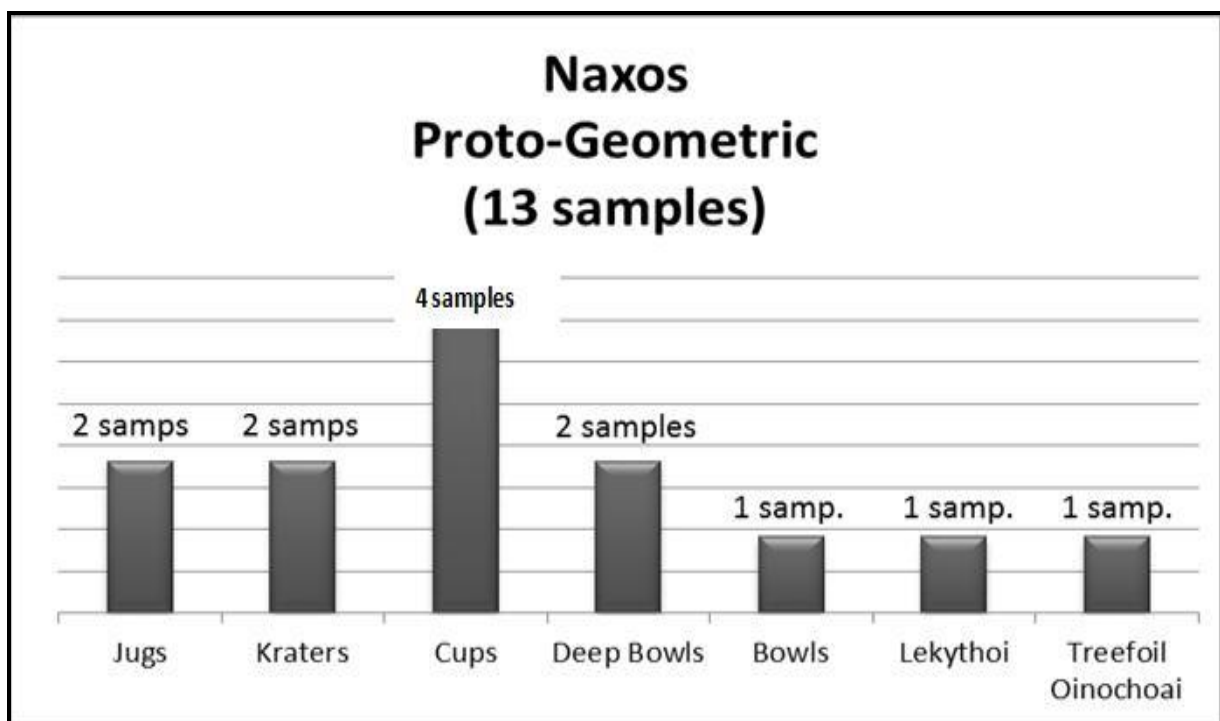


Table 45: Popularity of Proto-Geometric funerary pottery shapes at Naxos.

⁶⁸⁷ Vlachopoulos 2006: 485.

⁶⁸⁸ Lemos 2007: 170.

3. Remarks on the ratio of the number of pottery vessels per tombs.

In order to observe the proportions of the vessels found in the funerary contexts, their ratio was calculated and expressed in a table. As it appears, it is immediately striking that apart from Mycenae (which, as the centre of a former palace, seems to have suffered a major setback at the end of LH IIIB2) the other locations under review seem to thrive more during LH IIIC than they are in the subsequent periods.

Multiple Burials (LH IIIC - PG)	Total of Burials	Total of Vessels	Ratio
Mycenae	5	7	2
Perati	222	1084	5
Knossos	72	416	6
Naxos	8	330	37
Single Burials (LH IIIC - PG)			
Mycenae	16	49	3
Athens	127	202	2
Salamis	100	61	1
Lefkandi	167	446	3
Naxos	9	13	2

Table 46: Ratio of the quantity of vessels per burial in the case studies treated.

It must be said that such a ratio should not be taken as an absolute resolution, since it is obviously a sum up of data often coming from diverse situations. Yet, they can give a relative indication on the circulation of goods in those contexts in which respectively multiple or single burials were chosen. A ratio compels some reasoning about the real implications of the number of pots in the post-palatial and EIA societies. Of course, if we just took into consideration the ratio of pots and used it to imply wealth based on quantity, I would fall in the processualist trap. I prefer to say that the number of pots in a tomb can be determined by several factors: actual possessions, stolen goods, mere chance, the fact that the deceased was himself a potter and could provide his grave with several pots with minimal expenses, etc. There is no secure answer to that in absolute terms. My personal speculation is that there is some meaning behind the deposit of pottery in tombs and in their quantity. They could have been dedications to the dead or to the gods of the underworld. But they could also represent the number of people participating to the funeral, each leaving his/her own vessel there, after symbolically drinking with the deceased. If the latter hypothesis were true, the pots deposited would have belonged to somebody else, making speculations on personal wealth pointless.

Considering all these variables, the study of our ratio only shows a merely indicative prosperity of the locations active in the aftermath of the palatial collapse and those suffering some kind of setback; however, it indicates at the same time which of them started to thrive two centuries later, involved in the new trade relationships characterizing the 10th century.

4. A diachronic summary of pottery shapes and patterns.

The data collected so far show that the pottery sets in use from LH IIIC to PG period were neither abruptly replaced by completely new ones nor betrayed shapes and functions alien to the previous Mycenaean and Minoan civilisations. Although during the centuries under review modifications of shapes and decoration do occur, not unusually given the long timespan embraced by the production, there is no doubt that all these changes are superficial, gradual and linked to roots always attested in the previous phases, disproving any hypothesis of foreign intrusion, not only violent, but not even cultural. When decorative or plastic innovations are totally new, they still appear in conjunction with patterns and styles begun in earlier phases. It is opportune to clarify now that in this study the stress will be put on general shapes and functions, while stylistic modifications on shapes that remained basically the same, or shapes added later on, or again shapes introduced only once and soon dismissed, will not be taken into account since irrelevant to this purpose. Having examined the ceramic class shown by the cemetery evidence of the Aegean areas here selected, let us try to identify all the links between one period and the subsequent one. In order to ease this task, two different diagrams will follow, the first will be showing the continuity of the main pottery shapes from LH IIIC Early to PG. The second diagram will show those shapes attesting themselves in each selected areas to highlight cultural influence.

	LH IIIC Early	LH IIIC Middle	LH IIIC Late	Sub-Mycenaean/Sub-Minoan	Proto-Geometric
Amphoriskoi	█				
Jugs	█				
Stirrup Jars	█				
Cups	█				
Kraters	█				
Deep Bowls	█				
Kalathoi	█				
Shallow Bowls	█				
Amphorae		█			
Oinochoai	█				
Kylikes		█			
Lekanai			█		
Alabastra			█		
Hydriai			█		
Lekythoi			█		
N.H. Amphorae				█	
B.H. Amphorae				█	
Pyxides				█	
Kantharoi				█	
Aryballoi				█	
Mugs				█	
Pithoi				█	

Table 47: Diachronic development of pottery shapes from LH IIIC to Proto-Geometric.

	Mycenae	Perati	Salamis	Naxos	Athens	Lefkandi	Knossos
Amphoriskoi							
Jugs							
Stirrup Jars							
Cups							
Kraters							
Deep Bowls							
Kalathoi							
Shallow Bowls							
Amphorae							
Oinochoai							
Kylikes							
Lekanoi							
Alabastra							
Hydriai							
Lekythoi							
N.H. Amphorae							
B.H. Amphorae							
Pyxides							
Kantharoi							
Aryballoi							
Mugs							
Pithoi							

Table 48: Synchronic development of pottery shapes in the case studies proposed.

5. Preliminary conclusions: continuities, changes and social meanings.

Pottery is one of the most obvious offerings in tombs, at all times. What resulted from our analysis was the presence of a variable number of pottery shapes in both the Mycenaean and the LH IIIC burial contexts. The diagrams proposed are the proof that continuity was the norm rather than the exception. If during LH IIIC Early the production of pottery is limited to a smaller range of shapes, poor in quality and less elaborate in decoration, already from LH IIIC Middle there is a clear sign of a renewed artistic expression with more refined pots and a new repertoire of pictorial scenes and motifs. The locations which continued to be inhabited do not present signs of a decrease in production, yet there appear to be an increasing differentiation in the popularity of the shapes and patterns, and a subsequent development of new styles linked to different regions, influencing, once exported, distant areas of Greece. Both this productive activity and differentiation started to be exhausted already during the latest phase of LH IIIC.

SM brings the simplification of shapes and decoration even further. Pottery is still in the Mycenaean tradition but vases are smaller and mostly with minimal decoration, and the most common ones are amphoriskoi, stirrup jars and lekythoi. It is certainly the PG adoption of cremation that highlights the use of vases as funerary urns, placed in the centre of the single burials together with the other grave goods. As regards cremations and funerary urns, those Euboean seem to mirror the Attic trends, while attention must be drawn to peculiar cases, such as SMin Knossos,⁶⁸⁹ where cremation burials within a chamber tomb presented the ceramic items placed around a central burial spot, with the remains of the ashes simply laid on the floor with no pots;⁶⁹⁰ a practice that, although to be kept in mind, cannot be included in any precise funerary pattern, both because ashes laid on floors are seldom detectable and because they are a rare feature in the majority of inhumations during SM Crete, in accordance with mainland practices. But concerning the increasing phenomenon of cremations in neck-handled and belly-handled amphorae during the Attic PG, the cremations on Crete prefer instead inurnment within Pyxides, Kraters and Lebetes.⁶⁹¹

However, if the use of pots as ash-containers was perhaps a logical consequence in the 10th century cremations, it must have developed within the independent tradition of depositing pottery in burials. Cremations then emphasised the presence of ceramic containers for offerings in the graves even more. It can be pointed out that, even when the economic

⁶⁸⁹ In Crete the SM period overlaps with the mainland EPG period.

⁶⁹⁰ As in Chamber Tomb 186, thesis chapter I, 2.6.

⁶⁹¹ As in Chamber Tomb 186, thesis chapter I, 2.6.

conditions became difficult, pottery remained strictly connected with the realm of the dead. Indeed in both inhumation and cremation contexts pottery accompanies the deceased.

The popularity of each shape is affected by regional variations. However, we see that some shapes are widely popular in the whole Aegean and recur in several sites and are common to all my case studies. Stirrup jars, jugs, kraters and deep bowls are unquestionably popular during LH IIIC. In the subsequent EIA the same shapes persist, if not all with the same popularity (stirrup jars become rarer), but novel shapes are added to the funerary sets (neck-handled and belly-handled amphorae, lekythoi, pyxides, kantharoi, aryballoi). The shapes associated with graves are mostly liquid containers, either for pouring or drinking. The adoption of cremation and the resulting use of some shapes, like neck-handled and belly-handled amphorae, as funerary urns made them very popular at Athens during the PG period. Though adopting many characteristics of the Athenian fashion, the most popular shapes at Lefkandi are cups during the SM period and kalathoi in the PG one, showing after all a sign of divergence in the choice of pottery shapes to insert within the graves. Also Mycenae presents a picture similar to Athens, but instead of stirrup jars, the most popular shape during the SM period is the lekythos, while during PG we have again the neck- and belly-handled amphorae of Athenian influence. Salamis shows instead clear preference for pyxides, while Naxos for cups. Knossos presents during its long SMin period a clear preference for neck-handled amphorae of Athenian influence, while during the Cretan PG pyxides become the most popular shape. If we take a look at the table below we can notice a few interesting features regarding the diachronic process of the patterns:

Decorative Patterns Diachronic Presence	LH IIIC	Sub-Mycenaean	Sub-Minoan	Proto-Geometric	Cretan Proto-Geometric	Early Geometric	Cretan Early Geometric
Lines	V	V	V	V	V	V	V
Foliolate Bands	V	X	X	X	X	X	X
Lozenges	V	X	V	X	V	X	V
Dots	V	V	V	V	V	X	V
Panels	V	X	X	X	X	V	X
Arcs	V	V	X	V	V	X	V

Concentric arcs	V	X	V	X	X	X	X
Spirals	V	X	V	X	V	X	V
Chevrons	V	V	X	V	V	X	V
Dogtooth	V	X	X	V	V	X	V
Semicircles	V	V	V	X	V	X	V
Figures of animals and men	V	X	X	X	V	X	X
Triangles	V	V	V	V	V	V	V
Wavy Lines	V	V	V	V	V	X	V
Scroll and Tassel	V	X	X	X	X	X	X
Anthitetic loops	V	X	X	X	X	X	X
Zigzags	V	V	X	V	V	X	V
Octopus Style	V	V	X	X	X	X	X
Reserved central zone	V	X	X	X	X	X	X
(Reserved) bands	V	V	V	V	V	X	V
Fringed Style	V	X	X	X	X	X	X
Granary Style	V	X	X	X	X	X	X
Hand-Made Concentric semicircles	V	V	X	X	X	X	X
Hand-made concentric circles	V	V	X	X	X	X	X
Compass-drawn concentric circles	X	X	X	V	V	X	V
Compass-drawn concentric semicircles	X	X	X	V	V	X	X
Bars	V	V	X	V	V	X	V
Rhombi	V	X	X	V	X	X	X
Painted Monochromes	V	V	X	X	V	X	V
Rosettes	V	X	X	X	X	X	X
Leaves	V	X	X	X	X	X	X
Loops	V	X	X	X	V	X	X
Trefoils	V	X	X	X	X	X	X
Circles	V	X	X	X	X	V	X
Necklace	V	X	X	X	X	X	X
Brush Strokes	X	V	V	V	X	X	X
Net Pattern	X	V	X	V	X	X	X
Checkers	X	V	X	V	V	X	X

Meanders	X	X	X	V	X	X	V
Battlements	X	V	X	V	X	X	V
Swastikas	X	X	X	X	X	V	V

Table 49: Diachronic development of decorative patterns on vases.

Although I have listed here the whole range of recognizable patterns as seen on the pottery shapes in question, most of them can hardly be identified with any known religious symbolism. Wavy lines, popular throughout the post-palatial and EIA centuries, suggest in my opinion the wavy surface of water. The connection between death and liquids will be reprise below. Some interest can be raised by the silhouettes of human beings and animals appearing only during LH IIIC and PG. These images, though still schematic, do not properly continue and are in fact different. The scenes in the LH IIIC pots are usually concerned with scenes of battle (also naval), hunting and dancing, they are an artistic projection of what the ‘painter’ saw in the main activities of the time. The favourite LH IIIC animals were instead marine and avian species.

The PG representations of human beings are instead rare. However, when they are successively depicted on EG vases, their style is still schematic, but certainly different from the LH IIIC examples. The depicted hourglass-shaped women (or men?) on the Geometric vases appear involved mainly in funerary rituals. The figures are rendered with limited details as in LH IIIC, but the style varies significantly. The fact that the rare PG depictions of animals show bovines or horses also highlight a shift in the perspective of the reality and perhaps an indirect evidence of a new mentality which considered farming and fighting/competing on horses as representative of its culture. But the shift occurred between the LH IIIC and PG/EG representations is clear, and even though not as part of violent intrusions, it betrays a new ideology. The patterns representing to me the most important continuity through space and time and perhaps a deeper meaning are instead the sets of spirals, hand-drawn concentric circles, compass-drawn concentric circles and swastikas (my table has them in red). From the observation on how they appear on vases, we notice that these motifs share a central position and a visual similarity, probably pointing towards the same meaning, a meaning preserved along the centuries.

These motifs have therefore called for more attention. Spirals were popular throughout the Bronze Age and remained in use on Crete also during the Iron Age. In the vessels from Salamis there are stirrup jars having already finely hand-drawn concentric circles in place of spirals on their false necks, but in the SM and PG periods they are slowly supplanted by

concentric circles, ending up in Geometric times as swastikas. They seem all related to some kind of symbolic value and we have so far two possible directions to take, if we want to reason about them:

- 1) All the most popular pottery shapes in this periods can be connected with their archaic and classical counterparts. Like those, these shapes were used especially for drinking (or serving and storing) liquids, possibly wine.⁶⁹² If true, why drinking, why wine?
- 2) Judging by the central focus they were given, the evolution of the spiral motif into concentric circles and finally into swastikas from the Bronze to the Iron Age might imply a communal meaning. What did it represent?

5.1. 'Drinking vessels': addressing the issue of an effective interpretative model.

It is clear that pottery had a privileged function within the burial context, a function not immediately recognisable. The variability of quantity and shapes could depend on status symbolism and expression of wealth, but linking a general meaning to a material class is always an arbitrary process which tries to treat single cases according to universal assumptions,⁶⁹³ yet remaining most of the time speculative. Can we really define or describe social changes in the Iron Age Greek funerary context only through the quantity of material goods in the graves? In the past, Goody, according to his personal experience as an anthropologist, pointed out that death represents a shift in status which is mostly mediated and distorted by the interests and ideology of the society, therefore it can be in any case neither a universal nor an automatic coefficient.⁶⁹⁴ Nevertheless, Tainter's theory on energy expenditure tried to find a complexity coefficient which enabled to measure social change through the quantification of wealth deployment in graves. This reasoning implies that social changes can be measured quantitatively and that a structural differentiation within societies is entirely established by distinct expenditure of energy on the deceased, making energy expenditure a reliable indicator for social status.⁶⁹⁵ But that model was in recent years rejected by scholars like Whitley, who returned to Goody's one. Whitley argues that the expenditure of wealth in graves can be, and very often is, archaeologically invisible (for instance in the

⁶⁹² See Wecowski 2011: 355.

⁶⁹³ Binford 1972: 223.

⁶⁹⁴ Goody 1959: 134-138.

⁶⁹⁵ Tainter 1978: 105-141.

case of funeral feasts), so that the idea of measuring expenditure in the burial practices as universal social markers ought to be deemed as absurd.⁶⁹⁶

Nevertheless, if the quantity of the vases cannot be used to identify social status, we still need to assign pottery a meaning which can be applied to tombs. Pots are a preeminent presence in graves, (in both family and single graves, with inhumations or cremations). The analysis of shapes and decoration already showed that rather than a sudden ethnic change, pottery betrays a gradual transformation of style. Stress has been put on the fact that most of these pottery shapes are drinking vessels, of which the function can be transferred easily to their archaic and classical counterparts, which composed the necessary set for communal banquets,⁶⁹⁷ though not allowing us to imply the same social rules for it. Nonetheless, the feasts described by Homer seem to have had closer similarities to those social dynamics occurring in the Geometric society.⁶⁹⁸ It might be questioned that there is also a high percentage of containers (kalathoi, pyxides) and perfume or oil bottles in tombs (small stirrup jars, lekythoi), which are not connected with drinking. It should be remembered here that most of these non-drinking vessels are perfume/oil holders and are found in great number only from the SM period onwards. They were probably connected to practical funerary uses, perhaps the deceased was treated with unguents or perfumed oils before inhumation (and when these are found within cremation burials, before his preparation for the pyre), as part of the sensorial (not only visual) impact expressed towards the participants to the rites. The fact that these vases augment and diversify during the PG period suggests an increased complexity of the burial rites, which in LH IIIC were still in the making and in the subsequent periods found their full expression. I would imagine that some non-drinking shapes like kalathoi could still be for liquids and perhaps used by the attendants of the funeral to wash their hands after the treatment, or to wet a cloth to wash the body of the dead. Others, like pyxides, could have contained small oil bottles or jewels (even if empty they might have had a symbolic significance).

What is important about drinking/pouring/liquid-storing vessels is that they remained popular from the LH IIIC period (more likely from the palatial periods) to the PG one, and even if some shapes decreased in popularity they never disappeared completely. Moreover, even though the unguentaries used for the funeral are understandably left in graves, a drinking set is still something to which the mortuary sphere seems not related. So the questions

⁶⁹⁶ Whitley, 2003: 28, 29.

⁶⁹⁷ See Hobden 2013.

⁶⁹⁸ Homer, *Odyssey*, IV, 77-81.

regarding their presence in tombs are always more pressing. Talking about the social importance of a drinking ceramic set in expressing an opulent society would bring us back to the faults of Tainter's theoretical approach; a different kind of issue arises when even in poorly supplied graves the ceramic shapes are preferred to other items within the burials, as clearly shown by some single graves in the PG Kerameikos, where poorly furnished depositions are accompanied only by deep bowls. Most of the decorative motifs do not appear to be functional to any intelligible cultic meaning; they are used indiscriminately according to personal taste and common fashion (apart for the symbols described later in this paragraph). Although traces of ritual libations are detectable through the presence of pottery in the vicinities of the tombs in several cemeteries of LH IIIB, it had been suggested that they were not a major feature of the Mycenaean funerary landscape;⁶⁹⁹ recent studies have pointed out instead, that such a practice could have been more significant than previously thought, and manifested themselves in a variety of ways.⁷⁰⁰ Frescoes interpreted as showing ritual drinking have been identified in Thebes, Tiryns and Knossos.⁷⁰¹ In LH IIIC there was probably some continuity of these practices but the evidence becomes weaker, and yet ritual use of drinking vessels in the funerary context has been suggested for some Achaian sites, such as Voudeni and Patras.⁷⁰²

It is important to underline that neither LH IIIB nor LH IIIC family tombs appear to have been regularly reopened to make use of the same pots for ritual libations. If opened to be reused for new depositions, the contents, including pottery, was swept away to make room. The vessels deposited in single graves after LH IIIC are even more restricted. There is no clear evidence for ritual libations, pots were probably included in the graves to accompany the dead. The practical act of drinking appears to be witnessed especially by two LH IIIC depictions on kraters, in use in daily life scenes. A depiction comes from a krater from Agia Triada (Elis) and shows a sketchy gathering of figures (two women, a child, a dog and a horse rider) around a supine man. Another man on the right, bearded, has been described as drinking from a kylix. The scholars' impression is that the scene is showing an elite funeral,⁷⁰³ the status being emphasized by the horse and the dog.⁷⁰⁴ To me the interpretation offered so far is very optimistic. We can only see human (?) figures close to a man resting on

⁶⁹⁹ Mylonas 1948: 73.

⁷⁰⁰ Hägg 1990: 183. Gallou 2005: 65, 82-103.

⁷⁰¹ Mantzourani 1995: 123-141.

⁷⁰² See Kolonas 2009.

⁷⁰³ Stoinas 1999: f.1; Eder 2006: 555; Yasur-Landau 2010: f. 3.41.

⁷⁰⁴ Yasur-Landau 2010: 1992.

a bed. Is it a funeral? Hard to tell, especially when the deceased in question has his eyes wide open. Is the bearded figure actually drinking? Can the object in his hands be defined as a vessel? To me nothing of this is particularly evident and I have expressed many times my skepticism about the use of depictions (especially the sketchy LH IIC ones) as claims of evidence. The man assumed to be drinking is giving his back to the deceased, a weird way to honour him. He also leads the funerary procession and what is in his hand could also be interpreted as a very badly rendered axe, or another ritual object used to guide the procession to the tomb. Nevertheless, if the scene were depicting a funeral and the man was really drinking from a kilix, then we would have an example of pottery used for funerary contexts, still not objecting that the same shape could be used in daily life.

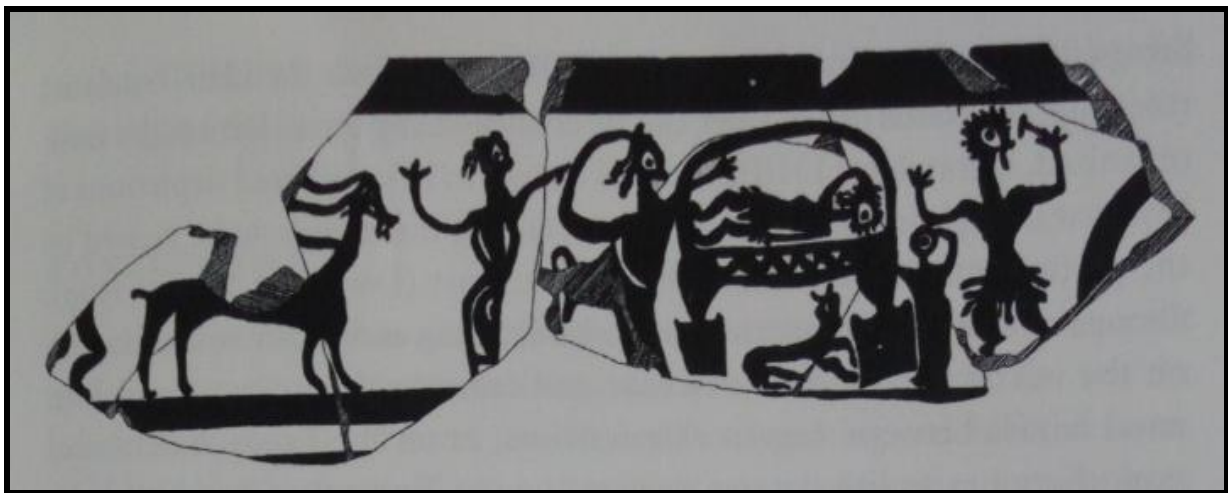


Figure 26: Funeral (?) scene from pottery sherds at Agia Triada, after Yasur-Landau 2010.

The other scene comes from another krater from Tiryns and has been explained as a seated man drinking during a chariot race, perhaps again during a funeral.⁷⁰⁵ Again this interpretation is to me hard to believe. The man, who this time is more evidently holding a high-footed bowl, could actually be in the act of drinking, but the krater is too damaged to imply a chariot race and a funeral, especially with only part of a chariot moving towards what I interpret as a central building of which the entrance is covered by a curtain of fleece. The seated man is instead in another building, judging by the black band rising like a wall behind him. In this building, he sits with no regard to the chariot. It is once again hard to give a definitive interpretation, but I would rather see this depiction as a military encampment, or an aristocratic household, nothing which can be applied to pottery and burial practices.

⁷⁰⁵ Vermeule and Karageorghis 1982: 127; Rehak 1995: f. 39a; Yasur-Landau 2010: f. 3.32.



Figure 27: Chariot race (?) from pottery sherds found at Tiryns, Yasur-Landau 2010.

If LH IIIC iconography, in all its obscurity, gives us little help about proper evidence about pottery and funerary rituals, we must envisage another reason to explain why there is such a great emphasis on drinking and pouring pots within graves.

5.2. Death and Wine in Greek Society.

It is important to recall here that in Linear B tablets a clear link between liquids (mostly wine) and religious offerings had already been clearly expressed.⁷⁰⁶ In order to shed some light on this complex matter, our theoretical approach will focus on several aspects linking death and wine in Greek society: if we check the list of the deities mentioned in the Mycenaean Linear B documents, we find that the presence of the classical god of wine, Dionysos, is among them, while Hades, the god of the dead does not appear.⁷⁰⁷ In the later Greek religion there was a variant of this god, known as Chthonian Dionysos, who mirrored both the Mesopotamian Dumuzi and the Egyptian Osiris, and shared with them a ritual death and a secondary rebirth as a god of the underworld.⁷⁰⁸ The possibility that the Mycenaean Dionysos was in fact the chthonian one and represented the ancestral Hades is strong.⁷⁰⁹ Unsurprisingly, the chthonic implications of the Dionysian festival of the Anthesteria, which took place in the polis-based Greece emerging from the ‘Dark Ages’, consisted of three days, each bearing the name of a ceramic vessel: *Pithoigia*, “The jar opening”, *Choai*, “The jugs”, and *Khytroi* (the water jugs). It is supposed to be a celebration for the opening of the jars

⁷⁰⁶ Murray 1979: 78; Bendall 2007.

⁷⁰⁷ Ventris, Chadwick 1959: no. 316.

⁷⁰⁸ Johnston 2007: 80.

⁷⁰⁹ The relationship between Hades and Dionysos and the Anthesteria had already been touched by my MA dissertation for the Birkbeck College in 2011.

containing new wine, and wine is indeed one of the essentials of the festival.⁷¹⁰ But in this case, it was not intended as a beverage for human enjoyment only: on *Pithoigia*, the god Dionysus was said to have reached Athens on a black (pitched) ship, coming from a wine-black sea⁷¹¹

Harrison connected indeed the *pithoi* which named the first day with the archaic practice of *enchytrismos*, that implied the dead or their cremated remains be buried inside *pithoi* (due to their big size and large mouth).⁷¹² Thus, if we think of the Dionysian myth, we could intend wine as a divine underworld liquid that came out from burial places and brought pollution to the living, unless purified by the appropriate rites. On the second day, *Choai*, the souls of the dead were deemed to be free to roam along the city streets and, to avoid their pollution, the temples remained closed and people chewed blackthorn as a protection against ghosts, anointing their house doors with pitch for the same reason. On the third day the ghosts were guided back to their realm by another chthonian figure, Hermes Psychopompos, to whom a soup (in deep bowls?) of all the pulses available (*panspermia*), was prepared for feeding the dead before their re-descent into Hades.⁷¹³ There is no religious festival known to us in the transition between the LBA and the EIA which can relate to Anthesteria. But it is also true that we do not have enough data about the rituals connected to the dead occurring in those periods, apart from the mourning and the procession to the grave rarely shown by vases. If not as the very same festival, at least as a ritual holding the same nucleus of beliefs, Anthesteria could have well occurred before. The Dionysos proposed by the festival is after all an ancestral and unusual one, quite anachronistic in classical times. He must have been recalled by older traditions.

It is also incorrect to state that there are no burial practices during the transition to the EIA which can relate to this tradition. In fact, the cultic value of wine as a liquid linked to the realm of the dead and to the ancestral Dionysos, appears even more evident if we recall the fact that in the Greek afterlife the souls are said to be thirsty,⁷¹⁴ and as soon as they drink from the river Lethe, they lose also their memory. In fact, Odysseus had to sacrifice a goat to be able to talk to them, because only by drinking blood dead souls could apparently reacquire their strength and wits.⁷¹⁵ Moreover, wine and blood can share the same colour, and the power

⁷¹⁰ Parker 2005: 296.

⁷¹¹ Hermippus, *The basket-bearers*, fr. 63.

⁷¹² Harrison 1991: 47.

⁷¹³ Parker 2005: 294, 295.

⁷¹⁴ This connection between thirsty souls and vessels in tombs had already been introduced by Immerwahr 1971: 105; Vermeule 1979: 57 and recently discussed in detail by Gallou 2005: 276-286.

⁷¹⁵ Homer, *Odyssey*, X, v. 135 ff.

of the beverage to affect one's wits was not a mystery; its place of honour among the ritual and chthonian substances was soon to be established. Therefore, if we had to theorise a conclusion explaining a function of the drinking vessels and all the ancillary shapes included in the drinking set offered in tombs, it might be acceptable to think of pottery as a ritual provision of wine as a mock-blood, either to supply the perennial thirst of the dead in the underworld or to keep them with enough 'wits' to avoid the dangers of their mysterious journey in the underworld. Of course, in this case the more wine containers available (especially within reused tombs) in a burial place, the longer the beneficial effects on the dead. And what if other roaming spirits had found the vases? An intriguing explanation would point out that stirrup jars had a false neck that spirits might have found closed in case of thirst, and not knowing about the false one would have left the precious liquid untouched. This initial belief proper of the Mycenaean and LH IIIC periods, might have faded during the PG, when cremation included a different and more direct way to reach the final destination. Did cremation represent a faster way to reach a god-like state? And then, what can we get from the patterns used to decorate these vessels? Did they have connections with fire and crematory rites?

5.3. Solar Symbols.

All the patterns pertaining to spirals and circles can be readily detected among the solar symbols of the Indo-European tradition, and appear as such also within the Urnfield culture of central Europe.⁷¹⁶ Goodison's work has shown that since the EBA there are recurrent circular

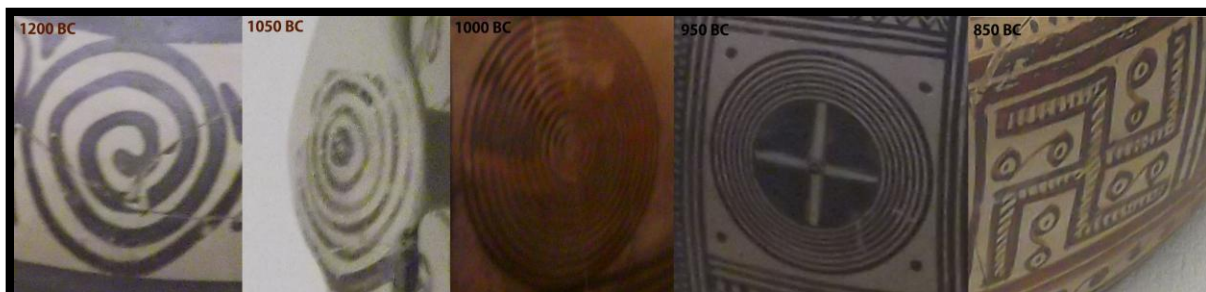


Figure 28: Diachronic evolution of the solar symbols on pottery.

and radiant symbols on pottery and depictions, usually found in concomitance with religious manifestations or sacred epiphanies. These symbols are identified in her conclusions with solar symbols, while the recurrent female characters officiating or appearing in the depictions with sun-goddesses and/or their priestesses.⁷¹⁷ Also the recurrent orientation of the tholos tombs towards the rising sun (together with their circular shape), as if the sun cycle had to do with a belief on death and rebirth (for analogy with the activity of the sun to vegetation) common to several coeval Mediterranean cultures (especially Egypt and Mesopotamia).⁷¹⁸ Though the solar cult in itself should not be exclusively related to the funerary sphere, it appears particularly relevant when associated with death. This cult of the sun remained steady during the palatial period, when initially its Aegean tradition is totally preserved and the sun probably remained a goddess, due to the feminine 'power' to give birth.⁷¹⁹ The orientation of the Mycenaean tholos tombs and tumuli to the rising sun continues in fewer instances.⁷²⁰ However, during the Mycenaean institutions, the very same symbols appear in presence of male characters with raised arms, as if a shift in the sex of the solar deities had occurred.⁷²¹ This transformation of the sun into a male god is what appears in Homer, and I think it must have continued during the LH IIIC, SM and PG periods. What remained visible in the transition, with no texts available and limited religious depictions on pots, is the large quantity

⁷¹⁶ Kossak 1954. Briard 1987. Bouzek 2011: 985.

⁷¹⁷ Goodison 1989: 15-20.

⁷¹⁸ Mellaart 1964: 103; Branigan 1970: 137, 185 ff; Goodison 1989: 30 ff.

⁷¹⁹ Thimme 1964: 84; Goodison 1987.

⁷²⁰ Cfr. Van Leuven 1975; Goodison 1989: 1985.

⁷²¹ Goodison 1989: 108, 109, ff. 249A -C.

of spirals, concentric circles and semicircles found on central areas of the vases. As implied by Renfrew, when the quantitative analysis shows a high recurrence of objects or, in this case, patterns, it can be used as an indicator to identify social meanings exceeding the expressivity of a restricted group or of an individual, pointing towards widely accepted beliefs.⁷²² Symbols like the ones described are the major decorations on pots, especially during the EIA, cannot be disregarded as simple ornamental designs.

One can also wonder whether cremation could have been involved in the ancient relationship between burial, sun and rebirth once entrusted to the symbolic action of the sun, and now directly to fire. The sun has a clear connection with fire and therefore also with the crematory rites. The sun is the maximum natural manifestation of a celestial body, repeatedly descending below the earthly horizon to rise again, thus a metaphor of rebirth and immortality after a journey into darkness. Several cultures saw this phenomenon as a expression of divinity and worshipped whichever god was associated to it. The Egyptian Osiris is perhaps the best known example.⁷²³ But within the same wave of European influences reaching Greece during the EIA, the sun might have been seen as an source of fiery energy which consumed the last bodily constraints and allowed a quicker entrance into the realm of the blessed ones. If we believe the Homeric hymns, gods were fed by the smoke of the sacrifices.⁷²⁴ Moreover, if we pay attention to Aristophanes, it is implied in its play ‘The Birds’, that the gods received human offerings in form of smoke.⁷²⁵ Once burnt, the offerings’ vapours floated up to the heavens where the deities resided. By following the same reasoning, a similar journey could have happened for the burnt bodies of the cremated men, sent up that way towards the realm of the gods. It is striking that the only solar deity recognizable in the Mycenaean pantheon is an unclear *pa-ja-wo-ne*,⁷²⁶ identified with Paeon, an archaic epithet of Apollo. But in Hesiod’s ‘Theogony’, Apollo, though listed among the gods, seems more connected to poetry than to solar cults, though he was already coupled with Artemis.⁷²⁷ In Hesiod the sun seems represented by Helios, son of the titan Hyperion (‘the high one’), in charge of shining over earth.⁷²⁸ A scene of the *Iliad* where Helios is invoked by Agamemnon

⁷²² Renfrew 1985: 21.

⁷²³ Rundle-Clark 1959: 255, 256; Goodison 1989: 100, 101.

⁷²⁴ *Homeric Hymns, To Demeter*, 310 ff.

⁷²⁵ Aristophanes, *Birds*, 190 ff. This is why in the comedy the construction of Cloudcuckooland blocked the smoke from the offerings to reach the heaven, starving the gods and forcing them to negotiate.

⁷²⁶ KN V 52. Chadwick 1976: 89.

⁷²⁷ Hesiod, *Theogony* ll. 918-920.

⁷²⁸ Hesiod, *Theogony* ll. 371-374.

introduces him as a god who sees and hears everything.⁷²⁹ It is unclear when Apollo and Helios became both solar deities and whether the Mycenaean Paeon was already a solar god, a tutelary deity of poetry or rather none of them. But if Helios was the sun in the 8th century, it is also probable that the not-so-much earlier PG iconography displaying solar symbols reflected a Helios-like god deriving from more ancient predecessors. With this regard, Webster had proposed that the character with a bow shooting rays, incised on a gold ring kept in the Ashmolean Museum, represented a sun god.⁷³⁰ He suggested that this initial archer god was merged in the EIA with other bow-equipped gods, above all to a God of Healing which shot diseases, syncretising them all in the same god, which in Homer was Apollo.

I have reported the theories according to which in the Mediterranean BA the cycle of the sun was likely to be linked with a cycle of vegetation. It was therefore connected with a perpetual cycle of life propitiated also for human beings. If the male Sun God of the LBA, whichever his name, had to be invoked to perform on the deceased his reviving power and guarantee them a rebirth in some after-life, it is not surprising that the pots, especially those with large surfaces, displayed solar symbols which, like the sun, expressed solar vivification, rebirth. The spiral in the Mycenaean culture, as a symbol of eternity, can also be noticed in the tridimensional representations found among the objects in the Cult Centre at Mycenae, where they assume the shape of coiled snakes, animals who represented in antiquity the infinity of time due to their characteristic of renewing their skin and to arrange their bodies into circles.⁷³¹ It is not a coincidence if snakes were in Egypt sacred to the sun and some of them protected Osiris during his journey in the underworld.⁷³² If in the Mycenaean period this association of the snakes with the sun and its eternal rebirth seems very similar to the Egyptian one. During the post-palatial period a shift to a less Mediterranean idea of the sun and a more Indo-European concept occur. From a spiral, the symbols on the funerary vases become concentric circles (and later Swastikas). The concentric circles are ascribable to solar symbols (apart from their mere central appearance on the pots) because they acquire the shape of 'eyes', embodying the power of warding evil off, still present in the blue glass-paste eyes on sale everywhere in modern Greece, Turkey and the Levant as charms. This 'watch' against the evil spirits (perfectly consistent with these funerary rites) allows me to speculate about the

⁷²⁹ *Iliad* III. 277.

⁷³⁰ Webster 1958: 45; Goodison 1989: f. 249A.

⁷³¹ In Egypt the serpent Mehen guarded Osiris in his journey in the realm of the dead (*Coffin Texts*, 758-760), and was said to swallow its own tail (*Pyramid Texts*, 393), being linked later in Greece with the concept of the Ouroboros (Plato, *Timaeus*, 33). In the Egyptian *Book of Gates*, V, this serpent is assisted by the 12 goddesses of the hours.

⁷³² Tyldesley 2011: 88 ff.

connection between solar symbols and the model of the Indo-European ‘eye in the sky’ shared by Irish,⁷³³ Iranians,⁷³⁴ Indo-Aryans⁷³⁵ and, if we believe Homer,⁷³⁶ also by the Achaeans.⁷³⁷ This wide-spread association of the sun with the eye would also connect its presence in tombs with its apotropaic function still visible in the later depictions on the sterns of the ships (again to cross a wine-dark sea) as well as on amulets. This stronger Indo-European vision of the sun, though continuing the Aegean metaphor of death and rebirth,⁷³⁸ added new concepts and symbols. It is striking to notice that, from LH IIIC onwards, horses and chariots appear more and more depicted on vases. As Goodison implied, horses were fundamental transporters and might have been associated to the journey of the sun and its transportation throughout the underworld, a journey which appears in the Geometric period associated with recurrent swastikas.⁷³⁹ She evidenced with this regard how in the Homeric Hymns Helios rode on a chariot pulled by horses,⁷⁴⁰ but in the Homeric poems this action is performed by Hades.⁷⁴¹

This connection (or confusion) between a multiplicity of ancestral deities syncretised or redefined in the EIA is probably responsible for the unclear attributes they often have. What we have to keep in mind here, is that the Sun was connected with the underworld and depicting such symbols like spirals, concentric circles and swastikas (inclusive of light, rebirth and protection) would have conferred the deceased a possibility to survive death into another dimension. Especially single burials which did not have entrances to be oriented toward the sun, needed solar power for the deceased, and the symbols on pots could have been an acceptable compromise. The revivification operated by the sun is by no means contradicting the use of pots as liquid containers described above. In fact if the sun was necessary to allow the rebirth of the deceased in the other dimension, the liquid was necessary to sustain him/her during his after-life journey. Once realized this shift towards a more Indo-European ideology, it is possible to speculate about the common funerary meaning of the evident solar symbols (crossed circles or swastikas) found in the graves of the roughly contemporary Iron Age Hallstatt culture.⁷⁴² Similarities like these do not imply any violent invasion of Greece by Central-European people, either during LH IIIC, in which such

⁷³³ O’Kelly 1978: 249-252.

⁷³⁴ Avesta, Yasna I.11.

⁷³⁵ Rigveda I.115.1, Rigveda VI.51.1, Rigveda VII.63.1, Yajurveda IV.35, Yajurveda VII.42, Yajurveda XIII.46, Atharvaveda VIII.2.35

⁷³⁶ Homer, *Odyssey*, VIII, 300 ff.

⁷³⁷ *Iliad* III. 277; Mallory, Adams 1997: 556.

⁷³⁸ Goodison 1989: 26 – 29.

⁷³⁹ Goodison 1989: 154.

⁷⁴⁰ *Hymn to Hermes* 69; *Hymn to Demeter* 63, 88.

⁷⁴¹ *Iliad* V, 654; XI, 445; Goodison 1989: 155, 156.

⁷⁴² Gimbutas 1965: 342.

characteristics were absent in Greece, or in the PG phase, when no deep change is shown in the ethnic traits of the society to justify such an event. It would rather appear that a strong influence in terms of social symbolism and personal relationship with life and after-life was arriving to Greece, gradually and very slowly, throughout clear Central-European channels.

Chapter V

Changes and Continuity in Metalwork

Section A: Weaponry

1. Introduction: the Post-Palatial Situation.⁷⁴³

After the collapse of the Mycenaean Palaces, an intriguing social change takes place in the Aegean and produced a new set of both offensive and defensive weapons.⁷⁴⁴ Snodgrass' interpretation of new weapon types as peaceful imports coming from trade contacts,⁷⁴⁵ has recently met with objections from Deger-Jalkotzy. She implies that a possible human attack could have occurred at the end of LH IIIB, causing the demise of the Mycenaean palaces, and bringing the invaders' weapon types to Greece.⁷⁴⁶ Recently, Lloyd, even if not supporting the hypothesis of a human attack, stated that there are some obscure points in the collapse events, for instance the fact that the recovery occurred after the destructions of LH IIIB1 does not repeat itself after the destructions of LH IIIB2, or the extensive signs of fires which cannot have been caused by natural events.⁷⁴⁷ Nevertheless, only two weapons have been found in the Argolid, both in the same hoard from Tiryns, in a pit dated to LH IIIC Late.⁷⁴⁸ They were two swords of Naue II type, not connected with actual warfare, but apparently treasured together with many precious *keimelia*, possibly due to the metal they were made of. These swords were still bronze types, one had a broken handle, the other was unfinished, so they could not be used.⁷⁴⁹ Lloyd stresses the importance of this hoard, since all the metal objects found belonged to LH IIIB and IIIC Early, implying that, if this was a standard practice, old metal objects (and weapons) were rather stored and reused than deposited in tombs, explaining why they are so rarely found.⁷⁵⁰

And yet, post-palatial and EIA warrior burials do exist, as debated in chapter III, and contained assemblages usually including one or two sword types, spear-heads, a dagger, some vessels and rarely metal greaves and some metal bosses or bone plates, suggesting a previous presence of shields and headgears.⁷⁵¹ While Deger-Jalkotzy's study would make such tombs the standard, ascribing their reduced evidence to archaeological fallacy or depopulation of

⁷⁴³ The sections of this chapter concerning swords and spear-heads have been published in Mureddu 2013: 22-32.

⁷⁴⁴ Deger-Jalkotzy 2008: 401.

⁷⁴⁵ Snodgrass 1971: 305-310.

⁷⁴⁶ Deger-Jalkotzy 2008: 389.

⁷⁴⁷ Lloyd 2013: 110.

⁷⁴⁸ Karo 1930: 135, pl. XXXVII; Maran 2006: 129, 130.

⁷⁴⁹ Maran 2006: 130; Lloyd 2013: 111.

⁷⁵⁰ Lloyd 2013: 111.

⁷⁵¹ Above all Deger-Jalkotzy 2006.

many areas,⁷⁵² Cavanagh and Mee had clearly showed that several Greek regions (and the Argolid is no exception) were not depopulated and still there is no sign of warrior burials in their cemeteries.⁷⁵³ But then again, Achaea presents a large number of ‘warriors’ in graves, starting with the detailed report of Papadopoulos’ excavations and reaching the recent finds at Voudeni still being prepared for publication.⁷⁵⁴ And this is interpreted by Lloyd as a possibility that LH IIIC Achaea might have been through constant warfare.⁷⁵⁵ But apart from some evidence of arsons, which in my opinion could also have been accidental, there is no direct proof of damages attributable to warfare.⁷⁵⁶ If, as Lloyds implies, warrior burials contained actual warriors and not only warrior-status symbols, these battles occurred between different elites and remain at present archaeologically invisible.⁷⁵⁷

With regard to this, is it possible to reconstruct warfare from pictorial images? I have already expressed my pessimism towards whichever attempt to compare the images on frescoes, pottery and reliefs with real events, since, especially when there are no extensive texts accompanying them (as in the Egyptian sculpted chronicles), they can be telling many different stories, at times contradictory. Middleton dedicated to painted figures on pottery a section of his study and recognised in those schematic human figures traces of social organisation, hierarchy and warfare.⁷⁵⁸ To me this is a very weak evidence. What, Vermeule, Karagheorghis, Hattler, Vonhoff and others have tried to show in their studies on iconographies was the regular presence of warrior scenes in the pictorial repertoire of the palatial and post-palatial periods.⁷⁵⁹ Especially in the post-palatial period, in fact, when a clear social setting cannot be grasped, pottery seems to show a majority of scenes related to some kind of military activities. Iconic in this sense is the warrior vase from Mycenae,⁷⁶⁰ mainly because it is one of the few cases in which the figures have clear details and are unequivocally warriors. Whether Mycenaean, foreign, imaginary or commemorative warriors it is not evident.

Both iconographic and archaeological evidences (especially from the exchange of *keimelia*) portray to us a post-palatial society in which a strong reverence of the past was

⁷⁵² Deger-Jalkotzy 2006: 154, 155; 167, 168.

⁷⁵³ Cavanagh, Mee 1998: 236

⁷⁵⁴ Papadopoulos 1979; Kolonas 2009.

⁷⁵⁵ Lloyd 2013: 112.

⁷⁵⁶ See the case of Aigeira, in Deger-Jalkotzy 2003(c); Alram-Stern 2003; 2007.

⁷⁵⁷ Lloyd 2013: 112.

⁷⁵⁸ Middleton 2010: 72.

⁷⁵⁹ Vermeule, Karagheorghis 1982; Hattler 2008; Vonhoff 2011.

⁷⁶⁰ Vermeule, Karagheorghis 1982: XI.42.

normal.⁷⁶¹ In my opinion, Lloyd's view of heirlooms in LH IIIc as a connection of the two periods should be endorsed, especially in the light of the data coming from continuities in burial customs and pottery shapes (chapters III, IV). But as regards depictions, they need to be very realistic, detailed and above all consistent in what they represent to be credited as archaeological evidence. This is not the case of post-palatial iconography, when the reduced scenes on pottery are schematic, sketchy and hardly detailed or consistent with each other. We should make clear, if we are going to use pictorial scenes, that iconography can be of two types: movable (pots and gems) and unmovable (frescoes and stelai). If the Mycenaean frescoes and stelai found in palaces and tombs were meant to stay where they were, placed to express the ideology of the ruler/deceased and therefore hardly detachable from the local culture, pottery, on the contrary, could be easily moved, transported and traded. In a word, it can be attached and detached to and from a context. This mobility makes the issue of iconography on pottery controversial, in fact pots could have been prepared to be exchanged, and therefore to please the possible receivers rather than to reassert local realities. If imported, they could have been chosen because of what the viewer recognised in those images, opening the door to a myriad of indecisive speculations. In practical terms, it does not take much to notice that the warriors on the post-palatial images, when seldom represented in more details than just black silhouettes, do not seem to wear the same armours of those in the Mycenaean frescoes.

It cannot be stated that such representations were portraying the local situation only because the pottery was found in local contexts. Who painted it? Was he/she a local? Was he a foreigner? Was the local vessel sent somewhere else to be painted? Was it commissioned to somebody who had never seen a soldier or a ship and painted according to oral accounts? How did the painter identify himself or the people he was going to paint, whether portraying them or just as a work of fantasy? At present these answers remain unanswered so we cannot prove our inference that hierarchically organised military corps were active. We can instead imply that, in times of social transformations when the palatial redistribution was absent but resources needed nonetheless to be exploited and invested, some sort of social organisation had to exist. There is no human group in history that ever survived without social regulations, whether set by kings, tribal chiefs or aristocratic councils. This does not need evidence, since it is already postulated by the success of these populations in surviving and defending themselves until historically documented periods. Given that protection from threats or even

⁷⁶¹ Lloyd 2013: 13.

the possibility to aggress to plunder unavailable goods was also part of survival, it is obvious that a warrior class must have existed and that its values were highly praised.

2. The last Aegean Swords.

If Mycenaean swords had experienced until the 14th century both stable production and uniform distribution,⁷⁶² featuring two main Mycenaean types classified as types C (*Hörnerschwerter*) and D (*Kreuzschwerter*),⁷⁶³ the 13th century marked an epoch of innovations and ulterior subdivisions. Types G and D were no longer produced.⁷⁶⁴ From one of the 14th century daggers, known as Eii, with a flat profile and a broad blade, stemmed the sword classified by Sandars as type F.⁷⁶⁵ Its main characteristics were the square-shaped shoulder and the crescent-shaped pommel. This type had achieved superior practicality, maintaining both a sharp point and a broad blade. Already in the aftermath of the palatial collapse, sword types of this kind lost uniformity and developed several subtypes. This chaotic diversification saw also the arrival of two new bronze types. Type G had a sharp-pointed and usually narrow blade, which could be either mid-ribbed or grooved and showed two small hooks at each shoulder. its tang was embellished by a t-shaped pommel.⁷⁶⁶ Type H presented instead a rod handle and two small projections beside each shoulder, similar to the hooks in type G. It embodied both Mycenaean and Asian characteristics: the *quillons* were a continuation of an Aegean tradition, while the handle recalled Syrian and Anatolian features. Specimens of these type were found mostly in Asia Minor and Rhodes.⁷⁶⁷ Types G and H were the last flashes of innovation of the Mycenaean tradition, after which a revolution was started by the true protagonist of the Iron Age: the *Griffzungenschwerter*.

⁷⁶² Sandars 1963: 133.

⁷⁶³ Kilian-Dirlmeier 1993: pl. 64.

⁷⁶⁴ Sandars 1963: 133.

⁷⁶⁵ Sandars 1963: 133.

⁷⁶⁶ Sandars 1963: 133.

⁷⁶⁷ Sandars 1963: 142.

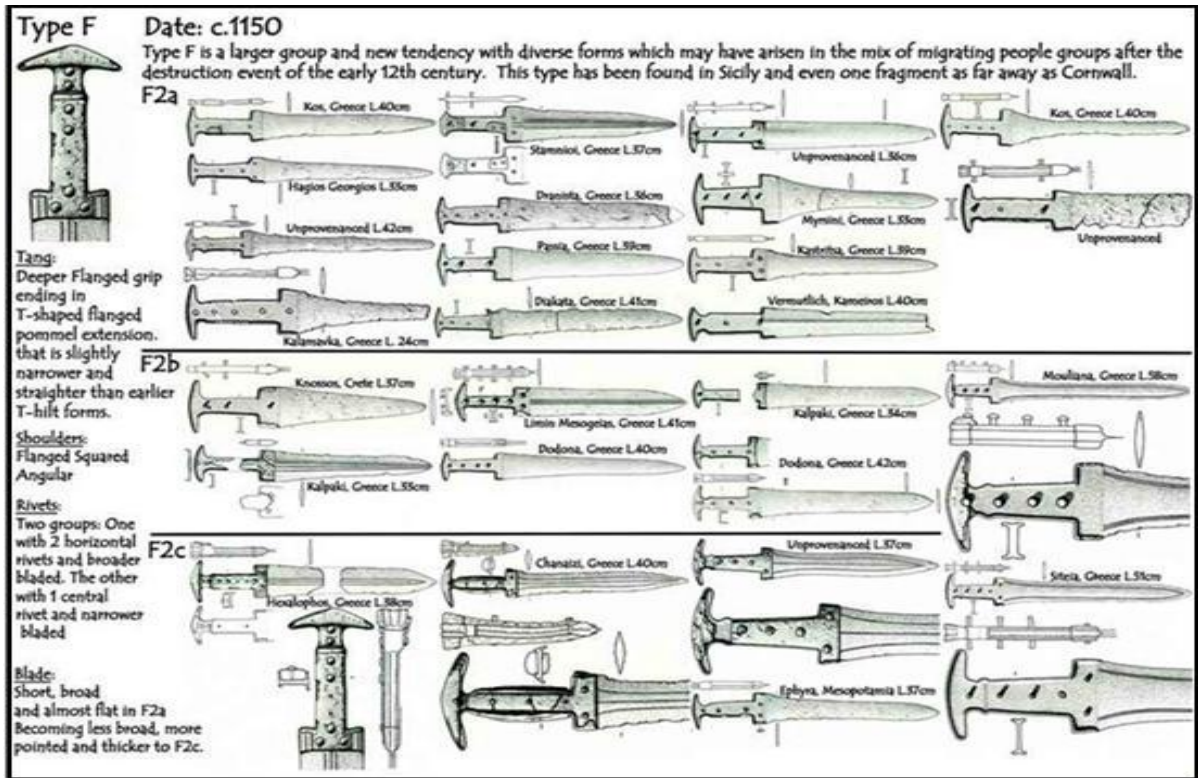


Figure 29: Chart of Sword Type F after Sandars, Kilian-Dirlmeier and illustrated by K. Spencer for Howard 2012

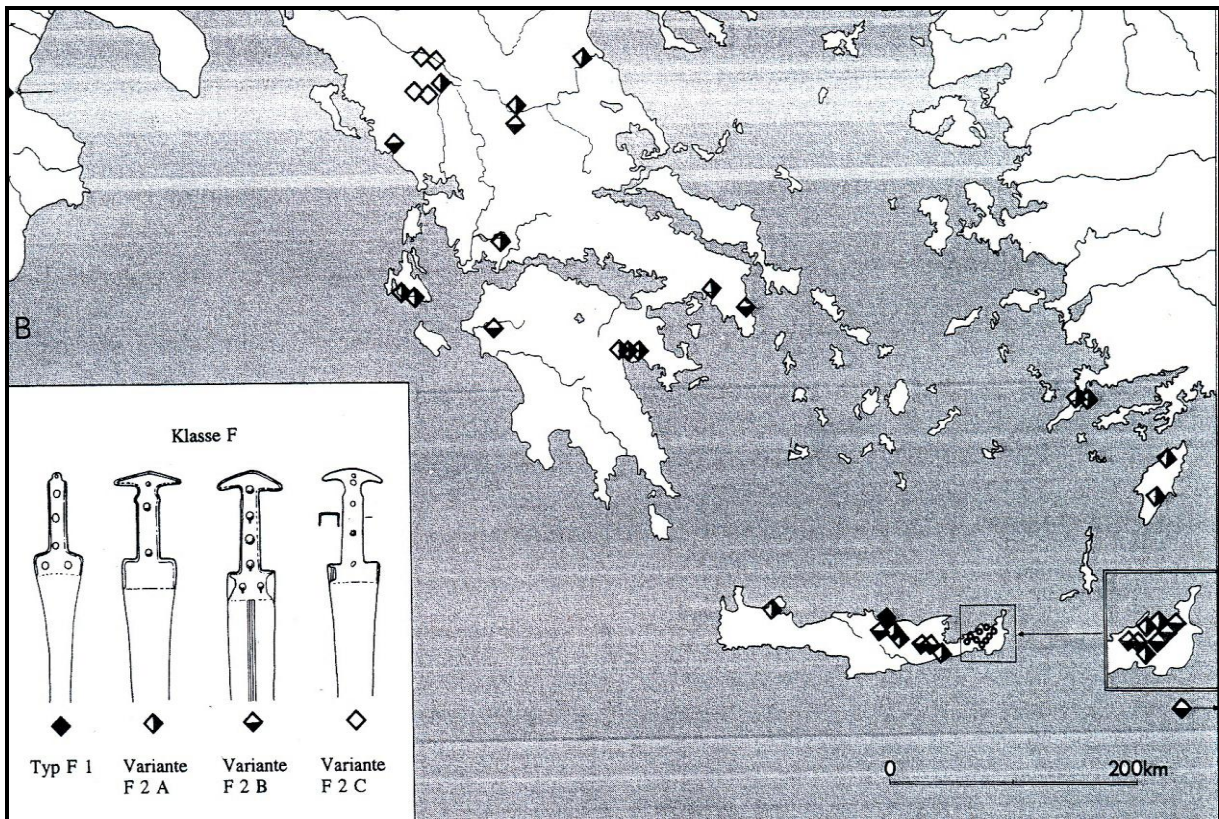


Figure 30: Distributional chart of F-type swords, after Kilian-Dirlmeier: 1993.

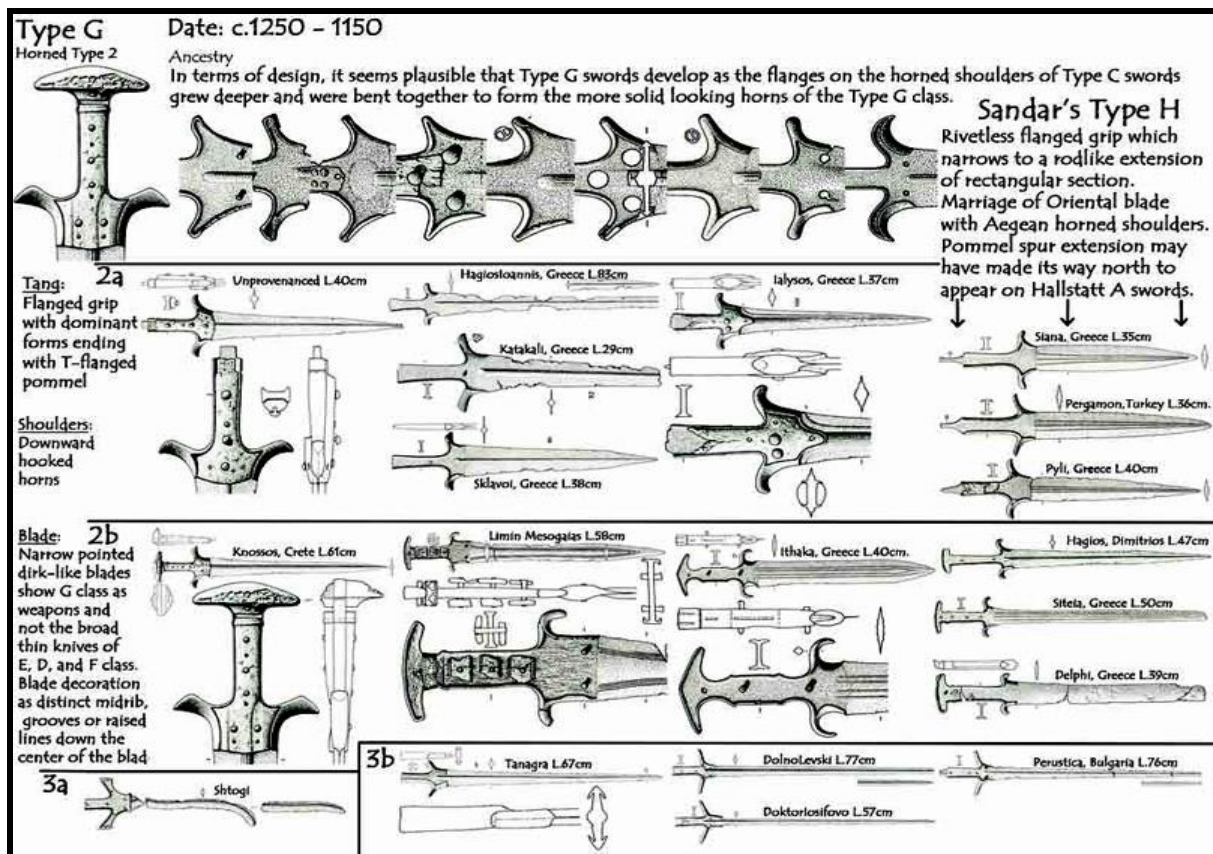


Figure 31: Chart of sword types G and H after Sandars, Kilian-Dirlmeier. Compiled by K. Spencer for Howard: 2012

3. The era of the Hilt-Flanged Swords.

The *Griffzungenschwerter*,⁷⁶⁸ commonly christened Naue II,⁷⁶⁹ became a hallmark of the post-Mycenaean weaponry, mostly because of its persistence as the main sword-type of the 'Dark Ages.'⁷⁷⁰ Not only does this sword type present a new shape, but also a new idea of swordsmanship: this sword was handy for both distant and close combat, given its blade able to slash and thrust at the same time.⁷⁷¹ Its cross section placed more weight onto the blade and increased its stability in battle, also preventing it to bend.⁷⁷² The Naue II was made for a fight in which the warrior not only tried to penetrate or by-pass the defenses of the opponent, but he could also slash from above and perform elliptical cuts. It was certainly excellent in close-quarters, where both erratic movements and a variable number opponents characterised the fight. Moreover, a thickened cross-section could absorb greater impacts and the solidity of the blade could cut through the armour.⁷⁷³ As Snodgrass, although admitting an extra-Aegean

⁷⁶⁸ Kilian-Dirlmeier 1993.

⁷⁶⁹ Naue 1903: 72-75.

⁷⁷⁰ Desborough 1972: 308.

⁷⁷¹ Deger-Jalkotzy 2008: 401.

⁷⁷² Jung, Mehofer 2005: 125.

⁷⁷³ Peatfield 1999: 137.

origin, points out that specimens of this sword type had already been found in Greece, as well as in Egypt (at Tell Firaun),⁷⁷⁴ as early as the 13th century BC, so before the LBA civilisations.⁷⁷⁵

As regards the Greek specimen, the earliest Naue II type was found in a hoard from the Mycenae Cult Centre during the LH IIIB period.⁷⁷⁶ The hoard contained also three Aegean swords (one type F and two type G),⁷⁷⁷ evidencing the contemporary use of different sword types in the same context during the transition from LH IIIB to IIIC. The Naue II reported by Schliemann among the offerings in the shaft graves at Mycenae could not be assigned to a any period and therefore must remain without a certain date.⁷⁷⁸ Another LH IIIB specimen was found at Langada on Kos.⁷⁷⁹ Also Enkomi, on Cyprus, produced a specimen contemporary with the Greek LH IIIC Early.⁷⁸⁰ The official date for the appearance of this blade as a regular weapon in grave contexts seems to be around 1230 BC, after which it seems to have been adopted all over the Mediterranean.⁷⁸¹ It remained uninterruptedly in use until the 7th century BC,⁷⁸² and during the 10th century it started being produced in iron.

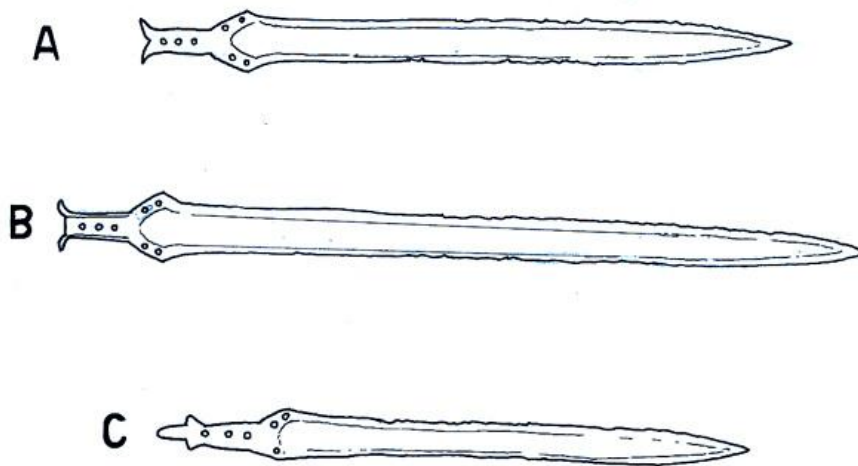


Figure 32: Naue II types after Catling 1961.

Characteristic of this sword is the flanged hilt and the long straight (to 85 cm) blade with parallel edges terminating with a sharp point.⁷⁸³ Catling, rejecting rarities and types of doubtful real use, divided the general model in three main variants all recognizable by the

⁷⁷⁴ Wace, Thompson 1911-1912: 282.

⁷⁷⁵ Snodgrass 1971: 307.

⁷⁷⁶ Tsountas 1891; Krzyszkowska 1997: 147.

⁷⁷⁷ Sandars 1963: 152; Kilian-Dirlmeier 1993: 82, 96.

⁷⁷⁸ Schliemann 1878: 167, fig. 121.

⁷⁷⁹ Morricone 1966: 137.

⁷⁸⁰ Schaeffer 1952: 337.

⁷⁸¹ Georganas 2010: 306.

⁷⁸² Kilian-Dirlmeier 1997: pl. 77.

⁷⁸³ Georganas 2010: 306.

shape of their tang.⁷⁸⁴ Jung and Mehofer recently repropoed the main differences between these three sub-types and their foreign connections.⁷⁸⁵

1. The version called Naue IIA in Greece⁷⁸⁶ is recognisable from its ‘fish-tail’ hilt, and appears also in Central Europe, known by the name of *Reutlingen*,⁷⁸⁷ and Italy, where it has been classified as *Cetona*.⁷⁸⁸
2. The Greek Naue IIB is instead characterised by pommel ears and a protuberance between them.⁷⁸⁹
3. The version known in Greece as Naue IIC has again pommel ears, but also a spur in the middle.⁷⁹⁰ This type appears again in Central Europe under the name of *Stätzling*,⁷⁹¹ and in Italy with the name of *Allerona*.⁷⁹²

The distribution of these bronze and iron types in the Aegean sees a pre-eminence in North-Eastern Peloponnese and eastern Crete, though Knossos has a few specimens and for the first time examples come also from the Messara plain.⁷⁹³ As mentioned, a LBA specimen comes from Kos and two from Mycenae. Boeotia, Ancient Elis and Naxos present a few examples and also, Boeotia and ancient Elis. Halos, in Thessaly yielded eleven specimens of both broad- and narrow-bladed types, all found in cremation burials.⁷⁹⁴ The resurgence of warrior graves in Lefkandi brought more specimens to light,⁷⁹⁵ made of iron with bronze rivets, a characteristic interpreted by Snodgrass as a practical necessity. In fact, bronze was softer and easier to mould than iron, so that it was better suited for small components of the weapon than for its blade, which required instead major hardness to endure a violent clash.⁷⁹⁶

⁷⁸⁴ Catling 1961: 115-122.

⁷⁸⁵ Jung, Mehofer 2005: 114.

⁷⁸⁶ Catling 1961: 119; Kilian-Dirlmeier 1993: 94 – 96, 100-105 .

⁷⁸⁷ Schauer 1971: 132-144.

⁷⁸⁸ Bianco Peroni 1979: 62-65.

⁷⁸⁹ “Group II Early” in Catling 1961: 119-120. See Kilian-Dirlmeier 1993: 94-105.

⁷⁹⁰ “Group II Developed” and “Group III” in Catling 1961: 119-120; Kilian-Dirlmeier 1993: 119-120.

⁷⁹¹ Schauer 1971: 144 -147.

⁷⁹² Bianco Peroni 1979: 66 -71.

⁷⁹³ Catling 1961: pl. 65.

⁷⁹⁴ Koerte 1897: 27, 28.

⁷⁹⁵ Bridgewater 1991: 43, 44.

⁷⁹⁶ Snodgrass 1971: 217-228.

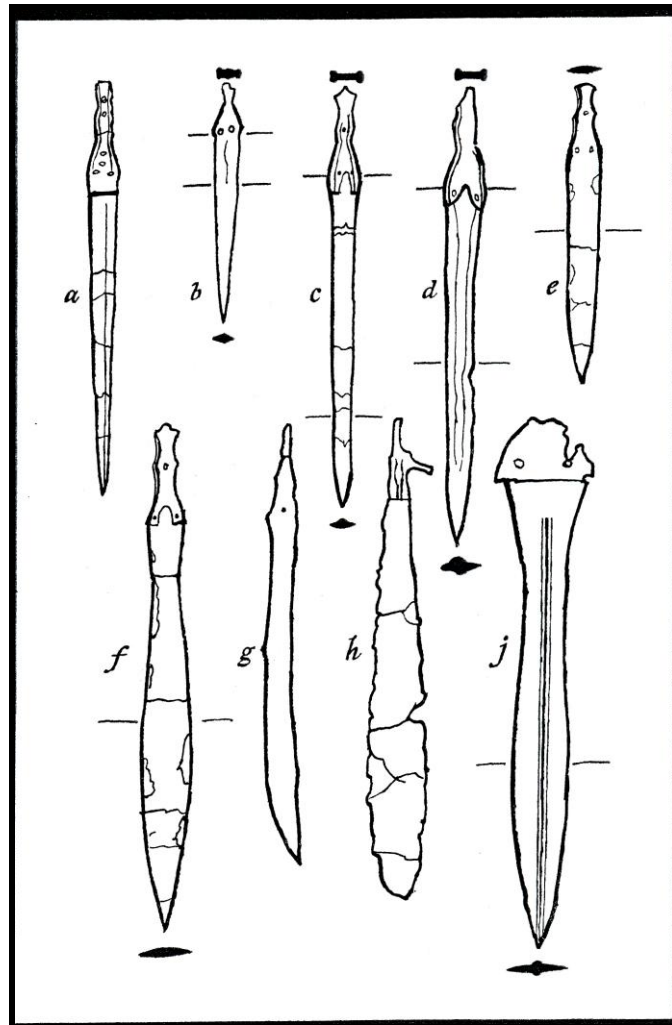


Figure 33: Hilt-Flanged sword rarities, after Naue 1903 and Snodgrass: 1962

Iron specimens were found also at Athens, especially from the Dipylon⁷⁹⁷ and the Kerameikos cemeteries⁷⁹⁸. It should not be ignored that a large amount of examples were found in Slav countries, covering the three modern nations of Albania, Former Yugoslavia and Bulgaria.⁷⁹⁹ The major intensity of finds in these countries could hint a possible European-related contact with the Balkan Regions and with the Eastern culture of Hallstatt which I imply to be behind the ideological revolution of the Greek EIA. Desborough had stated that the Naue II type might have reached both Greece and the Balkans crossing the Adriatic from Southern Italy and reaching the gulf of Corinth,⁸⁰⁰ a point of view already expressed by Catling,⁸⁰¹ and now reintroduced by Jung and Mehofer.⁸⁰² Nevertheless, the swords reaching Southern Italy and

⁷⁹⁷ Lolling 1893: 108.

⁷⁹⁸ Kübler, Kraiker: 1945.

⁷⁹⁹ This distributional chart of Naue II types is after Kilian-Dirlmeier 1993: pl. 65.

⁸⁰⁰ Desborough 1963: 69.

⁸⁰¹ Catling 1961: 121.

⁸⁰² Jung, Mehofer 2013: 175ff.

exported to Greece do not seem to receive any exotic artefact in exchange, as if the Northern Italian communities were not interested in any import from beyond the sea and limited their activity to export metalworks. I find this hard to believe. The weapons had probably reached the Balkans and Greece from a different route.

Lorimer had suggested, that the first appearance of the Naue II in the Aegean and Eastern-Mediterranean was probably due to the movements of the Sea Peoples, as proven by the Shardana mercenaries in the Medinet Habu relief. These mercenaries seem to have been using a short and tapering type of sword, in a slashing pose which suggests that their blades could already cut and thrust at the same time.⁸⁰³ This theory is now obsolete, since the swords in the relief are rendered with not enough details to provide a plain link with the Naue II, so that using Medinet Habu as evidence would be just naive. As Jung and Mehofer have shown, the recent find from Ugarit contributes to inform us about the movements of these sword types throughout the LBA Aegean.⁸⁰⁴ What makes the find important is its context. The hoard (unclearly associated to a grave) in which it was found contained objects, especially a Naue II sword and an iron knife of a type of which we have no evidence of use in the Syrian area at the time,⁸⁰⁵ and will be therefore classified as foreign intrusions from the west. If the Naue II were part of these intrusions, as I agree upon, this would point confirm that the naue II was introduced from the Aegean to the East, a theory certainly not disproven by its evident connections with the western world. Moreover, Jung and Mehofer have also rightfully demonstrated that the Naue II swords found in the hoard of Mycenae were produced in Europe and Northern Italy, where they had probably been originally developed.⁸⁰⁶ The recent metallographic analysis of its alloy shows indeed that the hoard Naue II came from Veneto, Northern Italy.⁸⁰⁷ Since the isotopic compositions of Greek and Italian objects are unquestionably distinct, those classified as Italian certainly came from Italy and cannot be interpreted as Greek recasts.⁸⁰⁸

To confirm this theory, a similar type found in Italy at Olmo di Nogara, contemporary with the whole Greek LH IIIB and Early IIIC periods, presented hybrid features, encompassing both initial (relationship between point/weight and length/weight) and newer

⁸⁰³ Lorimer 1950: 266.

⁸⁰⁴ Saliby 1970: 29, 30; Jung, Mehofer 2005-2006: 113ff.

⁸⁰⁵ Sandars 1955: 175.

⁸⁰⁶ Jung, Mehofer 2013: 176.

⁸⁰⁷ Jung, Moschos, Mehofer 2007.

⁸⁰⁸ Jung Mehofer 2013: 183.

characteristics (relationship between point and length). This may represent the intermediate and so far missing stage in the evolution of the Naue II.⁸⁰⁹

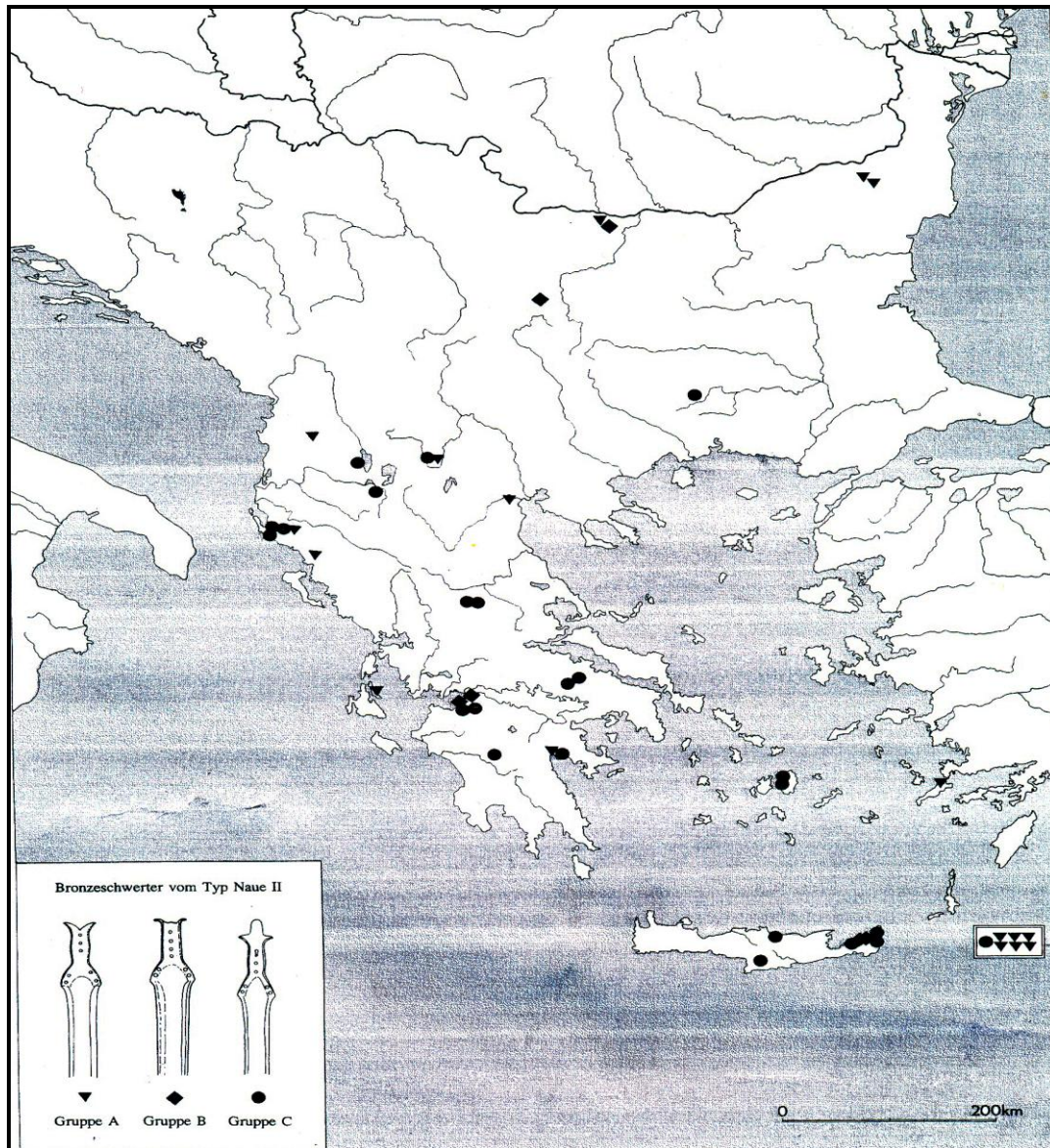


Figure 34: Distributional chart of Naue II types, after Kilian-Dirlmeier 1993.

It has been speculated that the fundamental socio-economic differences between the *Bronzo Recente* of Southern Italy and LH IIIB Greece should discourage the idea of a real arms trade between the two regions during the 13th century BC.⁸¹⁰ According to Mehofer, Catling's old theory about Naue II reaching Greece through foreign mercenary contingents,⁸¹¹ becomes in the light of these analyses the most plausible. It is not unlikely that in a period of threat during the Middle LH IIIB some Mycenaean palaces might have confronted some western warriors equipped with these new weapons, later integrating them in their contingents and acquired

⁸⁰⁹ Salzani 2005: 131.

⁸¹⁰ Jung Mehofer 2013: 185.

⁸¹¹ Catling 1961: 121.

knowledge of their weapons. Even though there was a gap in the evidence of Naue II during the second half of the 13th century,⁸¹² when the palaces finally fell, the contacts between Greece and Italy intensified instead of diminishing.⁸¹³ By LH IIIC Late the Italian *Cetona* and *Allerona* swords were common in the Mycenaean regions. From the analyses it is clear that in that phase some of them started to be locally produced as the result of a transfer of technological knowledge, but some continued to be imported, perhaps as gift exchanges or war booties.⁸¹⁴ Moreover, the recent discovery at Kouvaras (Aitolo-Acharnania) has brought to light another Naue II specimen.⁸¹⁵ Although Catling's Naue IIC type corresponds with the Italian *Allerona*, it bears some original features. Its handle is decorated, and functionally implemented by means of a golden wire twisted around several times in order to create an homogeneous and comfortable grip. Also the blade is uncommonly oblong and presents some plastic ribs flanking the central one. Its morphological resemblance with specimens from Northern Italy was striking, a resemblance also confirmed more metallographic analyses which identified the weapon as an Italian import.⁸¹⁶

As pointed out, most of the intrusive bronze weapons found in Greece seems to have been the result of Northern Italian technology, and yet there is almost no Mycenaean pottery in those regions, just Italo-Mycenaean imitations.⁸¹⁷ Jung and Mehofer suggest that from the northern regions of Italy bronze ores must have reached the southern regions of the peninsula, where they were used to produce local hilt-flanged types ('Pertosa') to be exchanged with the Greeks, since both Mycenaean swords and pottery were found there.⁸¹⁸ I am not sure whether evidence of a direct contact with a region must necessarily link indirectly to another region in which the same evidence is inexistent. Italy has regions far from each other and not always easy to cross. Veneto (where the alloy of the cult centre LH IIIB sword was made) was in the area of influence of the Urnfield culture and was more likely to exchange its products with neighbouring populations located on the other side of the Adriatic, as the territories of present Austria and Slovenia. From there the circulation could have well followed the Danube until present Bulgaria or Romania, eventually reaching Greece. As an ulterior issue, the Northern-Italian swords are mostly 'Cetona' or 'Allerona' types, much more similar to the Greek Naue II than the Apulian and Sicilian types.

⁸¹² Jung, Mehofer 2005-2006: 124.

⁸¹³ Eder, Jung 2005.

⁸¹⁴ Jung, Mehofer 2013: 185.

⁸¹⁵ Stavropoulou-Gatsi, Jung, Mehofer 2012: 254, 255.

⁸¹⁶ Salzani 1994: 83; Stavropoulou-Gatsi, Jung, Mehofer 2012: 259-261

⁸¹⁷ Jones *et. al.*, 2014; Salzani *et. al.* 2006.

⁸¹⁸ Jung, Mehofer 2013: 182.

With this I do not want to deny the evidence of contacts between Mycenaeans and Southern Italians at the end of the Bronze Age, yet as regards bronzes and metalworks, I would like to think of a wider and less circumscribed influence. The navigable course of the Danube could have been a means to connect all those regions sharing ideas and items proper of the Urnfields. It is also striking that in the Kouvaras assemblage, only the Naue II (and a bimetallic knife) were imports, the rest of the bronzes (a tripod and greaves) were locally made using bronze ingots which resulted as Cypriot.⁸¹⁹ This underlines the fact that weapon imports from Italy were not included in miscellaneous assemblages of metal goods. If metal objects were locally made and supplies, when needed, arrived from Cyprus (if we admitted it as a standard), the Central European/Italian weapons must have been imported exclusively for their technology. Snodgrass added that an interval of time could be noted as separating the disappearance of the latest bronze Naue II types (SMin Karphi) and the earlier appearance of their iron counterparts (PG Athens); an interval that was likely to have included peaceful movements of peoples and contacts. When the iron Naue II type appears, there are no typological differences with the bronze predecessors.⁸²⁰ Their shape evidently responded well to the new warfare, based on close-quarter battles, which no longer needed long thrusting swords, but was founded mainly on the ability to block slashes and accordingly respond with agility.

Back in the '50s Lorimer had attempted to individuate this particular type in Homer's description of warfare in the *Iliad*. There she found a three-fold way used to refer to a sword that was apparently a cut-and-thrust type: *ξίφος*, *ἄορ* and *φάσγανον*.⁸²¹ When Lorimer described *ξίφος* in the '50s she said that it was a word of non Greek origin, of which the ultimate source was lost.⁸²² Nevertheless recent post-decipherment studies connected the Homeric *xiphos* with Linear B *qi-si-pe-e*,⁸²³ interpreted as the dual form for the Homeric term, translating something like 'double sword'. It could well be interpreted as a double-edged sword, or rather dual because able to both cut and thrust? The relative ideogram is not very clear about this. It has been noticed that in Linear B ideogram *234 the sword figure associated with it rather reminds the one-edged knives (66 cm in length) found in the shaft graves at Mycenae, interpreted by Karo as *Schlachtmesser*, deriving them from chopping

⁸¹⁹ Begemann *et al.* 2001; Lo Schiavo 2005: 404-407..

⁸²⁰ Snodgrass 1963: 113.

⁸²¹ Lorimer 1950: 272.

⁸²² Lorimer 1950: 272.

⁸²³ PY 716.2. Lejeune 1971: 50; Chadwick, Ventris 1973: 346; Vandenabeele, Olivier 1979: 48.

tools to slaughter animals.⁸²⁴ These could be seen more as ancestors of the archaic κοπίς (or μάχαιρα) than of any cut-and-thrust type. There are two options here to interpret these discrepancies: on the one hand we should imagine the ideogram in Linear B as a general term for ‘sword’, meaning that once the Naue II was introduced, it was so unfashioned and limited in number that no Mycenaean scribe made the effort to create a new ideogram for it. On the other hand, though *Schlachtmesser* existed, one should also imagine that the ideogram for ‘sword’ in Linear B had to be schematic, not realistic. It is quite hard to see in a vertical semicircle a sword, not to mention the contradiction of a double-edged sword represented by a single-edged figure.

My personal opinion is that the ideogram might not be showing a sword silhouette. The line to which the semicircle is attached could be the sword, while the semicircle represents a string to tie the scabbard to one’s back. Naue II are thought to be used in close quarters, by running, agile warriors, their placement on one side of the belt could have been hindering the movements. Having them on their back was more practical. If the *qi-si-pe-e* were a cut-and-thrust type, this would imply that the Homeric *xiphos* might refer to a Naue II, indeed. But from linear B to Homer there are more than four centuries and the nuances of the language may well have changed. It must be taken into account that also classical *xiphoi* existed,⁸²⁵ and if still able to cut and thrust they did not resemble neither the hilt-flanged swords nor the ideogram in Linear B. Were they evolutions of the EIA swords, bearing the same name? Unfortunately this can be just the most logical inference. An interesting support to my theory about the ideogram for *xiphos* representing a sword with a string to be hung at the back comes also from the rarer term ἄορ, ascribed by Bekker to the Arcadian dialect,⁸²⁶ therefore more related with the ancient Achaian language spoken by the Mycenaean populations in the Bronze Age.⁸²⁷ As Buchholz reminds in his compendium, ἄορ is a substantivation of the verb ἀείρω “to hang”. He adds the fact that its only apparition in archaic literature is in epic, as if it were a poetical term.⁸²⁸ The word appears in Linear B, where the term *o-pa-wo-ta* seems the most likely ancestor.⁸²⁹ Buchholz goes on interpreting this verb as associated with the way of bearing this weapon, that is hanging from another piece of the armour.⁸³⁰ If this were the case, and ἄορ, ‘the hung one’, were just a poetic synecdoche for ‘sword,’ it would imply that also

⁸²⁴ Karo 1930-1935; also the Naue IIG in Naue 1903: 72-75, repropoed as a rarity in Snodgrass 1963: 102.

⁸²⁵ See the classical swords in Hanson, Victor Davis 2009.

⁸²⁶ Bekker 1814: 1095.

⁸²⁷ Lorimer, 1950: 272.

⁸²⁸ Buchholz 2010: 158.

⁸²⁹ Chadwick, Ventris 1973: 376.

⁸³⁰ Buchholz 2010: 376.

the *ξίφος* was hung, explaining its Mycenaean written ideogram. The last term, *φάσγανον*, has been instead connected with the Homeric verb *σφάζειν*, ‘to cut the throat’, implying sharpened edges, a literary testimony that seems to agree with the archaeological evidence. The ideogram associated with the Linear B term *pa-ka-na* represents indeed a bladed weapon. This has been associated more with daggers than with swords.⁸³¹ As I have implied many times, we should ask ourselves how a scribe would render a sword and a dagger as different on a tablet. Surely he could not render the difference of length too well, making it hard for us to tell them apart. Of course the action, also ritualised, of cutting the throat would be easier with a short-bladed tool. In fact, if not impossible, it would be rather unpractical to do the same with a long sword. Therefore, if we maintain that the term *pa-ka-na* is to be connected to the classic Greek *sfázein* as much as *phásganon*, it is acceptable to associate it with daggers, as previously implied. Whether the Linear B terms perfectly converge with the Homeric ones is as usual a matter of faith. The speculations made so far would certainly encourage such a connection.

4. Post-Palatial Spear-Heads.

Spears were the second main item of the elite weapon set in both the Bronze and Iron Ages.⁸³² Examples of them are found in different burial contexts, both in multiple and single tombs, within cremation and inhumation settings all around the Aegean world.⁸³³ Bronze Age spears consisted of a metal blade and a wooden shaft, of which obviously nothing remains visible in graves. What is left is their metal spear-head, our only source of knowledge for the typology of this weapon. For an exhaustive selection of the evidence, I will refer to Avila as concerns the Bronze Age.⁸³⁴ After the fall of the Palaces an immediate change in use is recorded in the graves. Unlike swords, spears are not advantaged by the introduction of iron.⁸³⁵ Bronze was indeed easier to cast if compared to iron. This would imply, as Snodgrass had suggested, that such care in avoiding the waste of iron on spears in an age when swords and daggers were made of iron may signify the beginning of a new use for spears as expendable throwing weapons, or javelins.⁸³⁶ Nevertheless iron spear-heads did appear in

⁸³¹ KN Ra 1540; Chadwick, Killen, Olivier 1971; Vandenabeele, Olivier 1979: 49.

⁸³² Georganas 2010: 306.

⁸³³ Avila, 1983: pl. 58, 59.

⁸³⁴ Avila, 1983: pl. 58, 59.

⁸³⁵ Snodgrass 1963: 116.

⁸³⁶ Snodgrass 1963: 116.

many PG graves⁸³⁷ especially on Crete.⁸³⁸ A pair of spears is not uncommon in the new EIA weaponry, a fact seen as a hint that at least one was to be thrown.⁸³⁹ This inference is quite rushed, given the reduced evidence available to sustain it. I will be following Snodgrass' cautious view that wherever in tombs the weapon set consisted of a double spear, one heavier than the other, the lighter one could have also been used as a javelin.⁸⁴⁰

The double set might be interpreted again as a re-expression of elite power: possessing more than a spear could represent valour in battle; show off a trophy or simply wealth.⁸⁴¹ Though beyond our scope, it is still to be pointed out that from the 9th century onward the use of a light throwing javelin is recorded by both javelin-heads and iconography. Geometric Attic vase paintings clearly represent soldiers carrying more than one spear in battle, and javelins are depicted as being thrown.⁸⁴² It can be perhaps suggested that these javelins, initially an exotic eastern implement during the EIA became more and more used in the subsequent period. Among the spear-head types reported by Avila for the Bronze Age, we find that almost all of them persisted in the Iron Age in bronze, used for both large and slender types.⁸⁴³ The types of spear-head found during the Late Mycenaean phase onward, until a proper javelin was developed by the hoplites of the Archaic period, are reported here:⁸⁴⁴

⁸³⁷ See the case of Olympia in Weber 1901: 154, pl. 61a.

⁸³⁸ Coldstream, Catling: 1996.

⁸³⁹ Snodgrass 1963: 137.

⁸⁴⁰ Snodgrass 1963: 137.

⁸⁴¹ Snodgrass 1963: 137.

⁸⁴² Lorimer 1950: 257.

⁸⁴³ Lorimer 1950: 134; Avila 1983.

⁸⁴⁴ After Snodgrass 1963: 116-131.

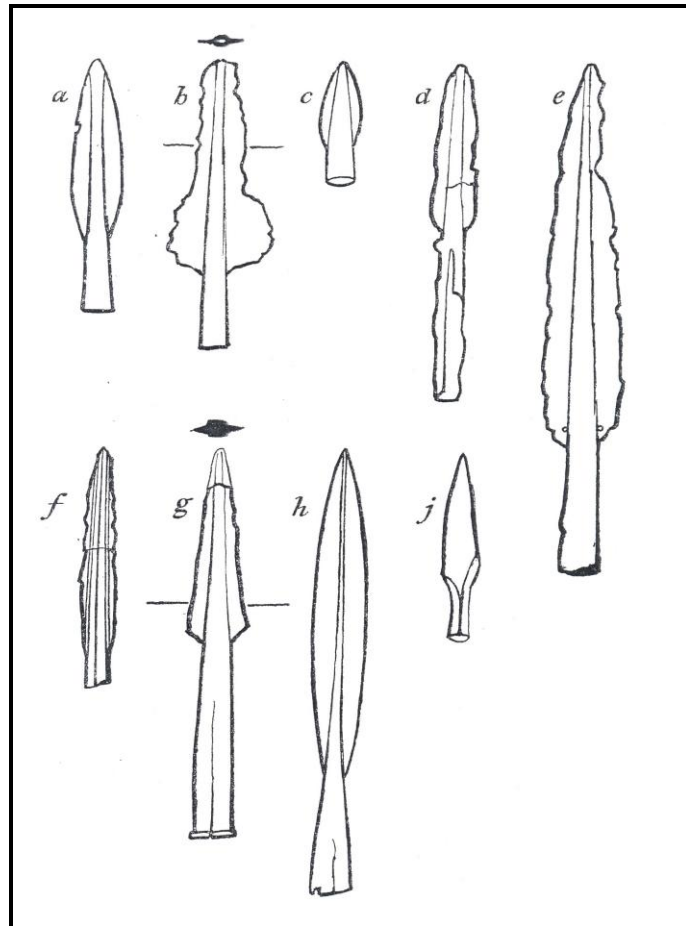


Figure 35: Iron Age Spear-types, after Snodgrass 1963.

- **Type A:**⁸⁴⁵ this early type has a medium-sized socket, a leaf-shaped blade and a wide and flat midrib, running uninterrupted from the socket to the tip, not very pointy. The shoulders are oblique. Specimens were found at Mouliana;⁸⁴⁶ Kallithea;⁸⁴⁷ Delphi;⁸⁴⁸ Perati;⁸⁴⁹ Tiryns;⁸⁵⁰ Athens;⁸⁵¹ Verghina.⁸⁵²
- **Type B:** with a shorter socket, a lanceolate blade; the midrib is again present along the middle section of the blade. The length of these spear-heads goes from 9 to 29.4 cm. This new spear-head makes its appearance during the LH IIC.⁸⁵³ In his recent review of the specimens found in Bulgaria, Leshtakov

⁸⁴⁵ Wherever details concerning location or date are missing, they are uncertain.

⁸⁴⁶ Xanthoudides, 1904: f. 7.

⁸⁴⁷ Yalouris, 1960.

⁸⁴⁸ Lerat 1937: 49, f. 2.

⁸⁴⁹ Daux 1962: 664, f. 23.

⁸⁵⁰ Daux 1958: 707.

⁸⁵¹ Kübler 1938: 104, pl. 32, 192, pl. 76.

⁸⁵² See Gavrilă 1952: 255, f. 30.

⁸⁵³ Snodgrass 1971: 307.

endorses its Middle-Eastern or Anatolian origins,⁸⁵⁴ while Snodgrass had seen a central European, Hungarian or Northern Italian provenance. Desborough saw in Epirus, if not the origin, the main channel of distribution, since the regions where it is found are mainly the North-Western areas. The incidence of this spear-head is far less visible in the Early Iron Age, for the simple reason that it is used in bronze form during the LH/LM IIIC, but it never reaches the Iron Age PG; it is then an intrusive weapon that appears in the turmoil of the post-palatial context, but disappears thereafter.⁸⁵⁵ What characterises it as a foreign weapon is, more than its shape, the complete casting of its socket: the tubular shape is now bereft of any longitudinal slit and therefore it likely reflects a different technology. As Snodgrass points out again, as a sign of their scarce importance in affecting the palatial collapse, their distribution sees them attested mainly in the Greek peripheral mainland.⁸⁵⁶ Whatever its real origin, as a matter of fact this spear-head appeared together with the Flange-Hilted Sword during and after the collapse of the palatial centres and this must be taken into account. It does not seem to last until the Iron Age, PG warriors used spears and javelins still recalling Bronze Age Mediterranean shapes even associating them with iron Naue II sword types.⁸⁵⁷ Specimens were found at Kalpaki,⁸⁵⁸ Mouliana,⁸⁵⁹ Metaxata,⁸⁶⁰ Gribiana,⁸⁶¹ Thebes.⁸⁶²

- **Type C:** Small, with a leaf-shaped blade that flanks the whole piece until the bottom of the socket.⁸⁶³ Specimens were found at Mouliana⁸⁶⁴ and Athens.⁸⁶⁵
- **Type D:** Early variant of type A; the socket has the same length of the blade, narrow and with a thick midrib. The shoulders are round.⁸⁶⁶ Specimens were found at Kaloriziki, Kourion,⁸⁶⁷ Athens⁸⁶⁸ Nauplion.⁸⁶⁹

⁸⁵⁴ Leshtakov 2011: 40.

⁸⁵⁵ Desborough 1972: 308.

⁸⁵⁶ Snodgrass 1971: 307.

⁸⁵⁷ Lemos 2002: 125, 126.

⁸⁵⁸ Daux 1956: 115, f.1.

⁸⁵⁹ Xanthoudides 1904: 48, f. 11.

⁸⁶⁰ See *Eph. Arch.*, 1933: 92, f. 41.

⁸⁶¹ Benton 1934: 35.

⁸⁶² Desborough 1962: 67, f. 22d.

⁸⁶³ Snodgrass 1963: 120.

⁸⁶⁴ Xanthoudides 1904: 48, f. 11.

⁸⁶⁵ Kübler 1938: 101, pl. 31, f. 7c.

⁸⁶⁶ Snodgrass 1963: 120.

⁸⁶⁷ McFadden 1954: 139, pl. 25, f. 32.

⁸⁶⁸ Kübler 1938: 101, pl. 31.

- **Type F:** Medium size, narrow blade and a very acute point. A midrib is again running from the socket to the tip. A prototype in bronze of this recurs in Bronze Age Italy⁸⁷⁰ and on its turn recalls a still earlier Central European shape.⁸⁷¹ Specimens were found at Athens⁸⁷² and Olympia.⁸⁷³
- **Type G:** Medium size, the blade is strongly angular, the midrib extends to the top and the socket is as long as the blade again.⁸⁷⁴ A specimen was found at Athens.⁸⁷⁵

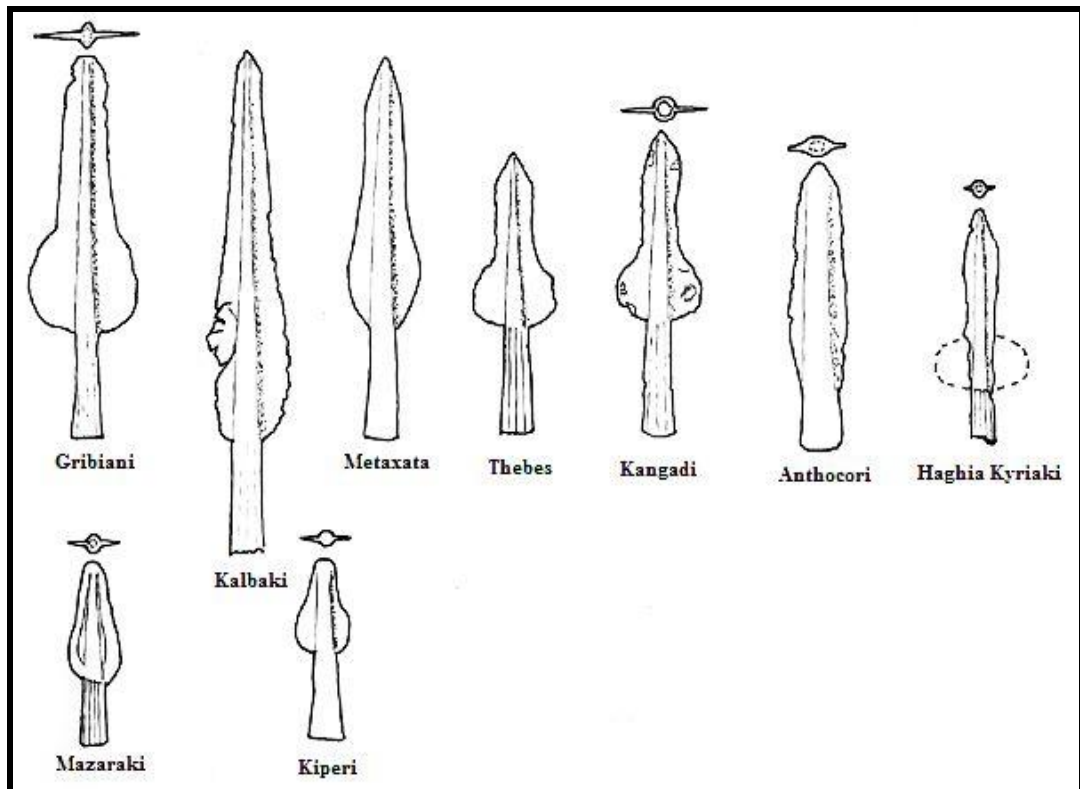


Figure 36: Examples of Flame-Shaped Spear-Heads, type B. Snodgrass 1963.

- **Type J:** very long spear-head, one of the few types having all its specimens made of iron; long socket, narrow blade, it could have easily been a throwing spear. Shoulders appear oblique.⁸⁷⁶ One specimen already known in the

⁸⁶⁹ Charitonidis 1955: 239, f. 19g.

⁸⁷⁰ Pigorini 1900: f. 2.

⁸⁷¹ Kersten 1936: 65, pl. 3.

⁸⁷² Unpublished.

⁸⁷³ 4 specimens, unpublished. Mentioned in Snodgrass 1963: 122.

⁸⁷⁴ Snodgrass 1963: 122.

⁸⁷⁵ Blegen 1952: 281, pl. 75c2, c3.

⁸⁷⁶ Snodgrass 1963: 123.

Bronze Age.⁸⁷⁷ As regards distribution: Verghina,⁸⁷⁸ Knossos,⁸⁷⁹ Athens;⁸⁸⁰ Olympia.⁸⁸¹

- **Type K:** small and roughly made form. The lower extremity of the blade is hammered to form a round socket.⁸⁸² A specimen was found at Amyklaion.⁸⁸³
- **Type L:** Cretan type, strongly squared shoulders, the socket is tapering and the blade elliptical in section.⁸⁸⁴ Specimens were found at Knossos⁸⁸⁵ and Kofina Panagia.⁸⁸⁶
- **Type M:** small type, flat-bladed. The socket is moulded into a proper tube.⁸⁸⁷ Specimens were found at Knossos;⁸⁸⁸ Vrokastro;⁸⁸⁹ Athens;⁸⁹⁰ Olympia;⁸⁹¹ Boubousti.⁸⁹²
- **Type R:** iron; the midrib stops halfway to the tip, the socket narrows into the actual point; the blade is flat.⁸⁹³ Specimens were found at Olympia⁸⁹⁴ and Patras.
- **Type S:** Italian origin, similar to type A, but with a shorter and though heavier socket; also the midrib is thicker.⁸⁹⁵ Specimens were found at Olympia⁸⁹⁶ and Delphi.⁸⁹⁷
- **Type T:** another rarity; it shows a short and wide socket, tapering to a thin midrib, the section of the blade is rectilinear.⁸⁹⁸ Specimens were found at Mouliana⁸⁹⁹ and Tyliossos.⁹⁰⁰

⁸⁷⁷ Marinatos 1956: 285, f. 9.

⁸⁷⁸ See *Πρακτικά* 1953: 147, f. 9.

⁸⁷⁹ Brock 1957: 97, pl. 75, nos. 1100, 1101.

⁸⁸⁰ Ashmolean Museum, Oxford, accession number G. 207.

⁸⁸¹ 13 specimens, Weber 1901: 148-153, pls. 58a, 60a, 60b, 61g, 62a, 62b, 62c, 62e, 62f, 62g; also *Olympia* 4, 173, 174, ff. 1032, 1042, 1046.

⁸⁸² Snodgrass 1963: 126.

⁸⁸³ Buschor, Massow 1927: 34, f. 17.

⁸⁸⁴ Snodgrass 1963: 126.

⁸⁸⁵ Brock 1957: 137, pl. 171, no. 1606; Coldstream, Catling 1996: 581.

⁸⁸⁶ Levi 1927-1929: 400, f. 589.

⁸⁸⁷ Snodgrass 1963: 127.

⁸⁸⁸ Coldstream, Catling 1996: 583.

⁸⁸⁹ Hall 1914: 156, pl. 21h.

⁸⁹⁰ Ashmolean Museum, Oxford, accession number G. 207.

⁸⁹¹ Weber 1901: 154, pl. 61d, 61f.

⁸⁹² Benton 1926/1927: 175, f. 29.

⁸⁹³ Snodgrass 1963: 130.

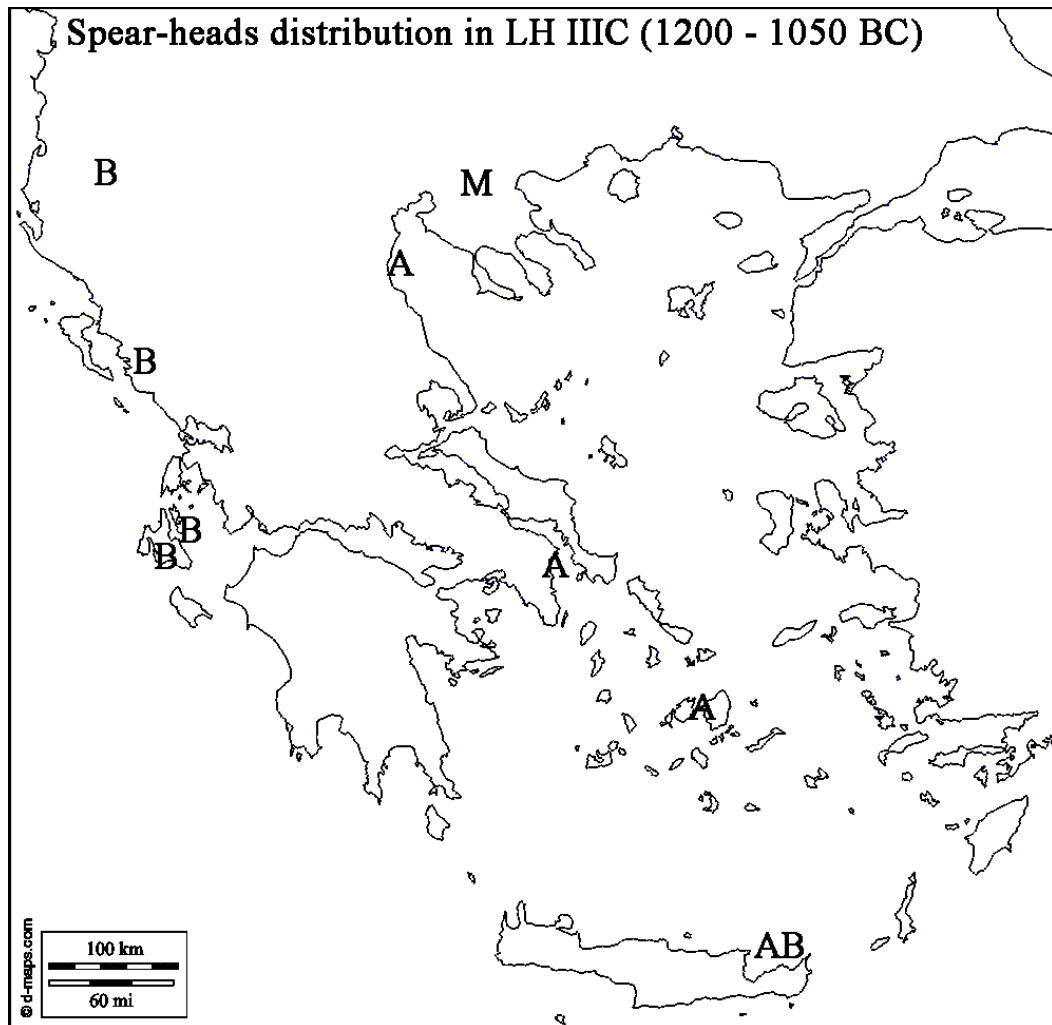
⁸⁹⁴ Weber 1901: 154, pl. 61a, 61b, 61c.

⁸⁹⁵ Snodgrass 1963: 130.

⁸⁹⁶ *Olympia* 4, 173, pl. 64, no. 1034.

⁸⁹⁷ Brock 1957: 95, ff. 326, 326a.

- **Type V:** long and narrow blade, the midrib runs until the tip. A middle-Eastern origin is seen by Snodgrass⁹⁰¹ in some specimens from Meghiddo.⁹⁰² Specimens in Greece were found at Lapithos⁹⁰³ and Knossos.⁹⁰⁴



• **Figure 37: Distributional chart of LH IIIC spear-heads (by the author).**

As Snodgrass reasonably suggests,⁹⁰⁵ we can notice that a bronze spear-type in use during LH IIIB (type A) continues without modifications during the subsequent LH IIIC. This type starts soon being associated with a new lanceolate shape coming from an unknown area ranging either from the Adriatic or the Anatolian region (type B), and others of unclear origin, (Type D and M). As soon as the SM starts, we see limited shapes circulating, (types A and B),

⁸⁹⁸ Snodgrass 1963: 131.

⁸⁹⁹ Unpublished.

⁹⁰⁰ Schietzschmann 1931: 113, f. 2.

⁹⁰¹ Snodgrass 1963: 131.

⁹⁰² See *Meghiddo* 2, pl. 173.

⁹⁰³ Lindos, Sjöquist 1927-1931: 272, pl. 59 no. 26.

⁹⁰⁴ Coldstream 1963: 38, f. 9.

⁹⁰⁵ Snodgrass 1963: 134, 135.

while PG witnesses the end of type B and the introduction of several new varieties (C, D, F, G, J, K, M, R, T, V in the mainland and L, M, T, V on Crete). A feature to be noticed every time a new type is introduced is the progressive lengthening of the blade. Snodgrass records an elongation of 10 cm during the long phase separating the 13th from the 10th century BC.⁹⁰⁶

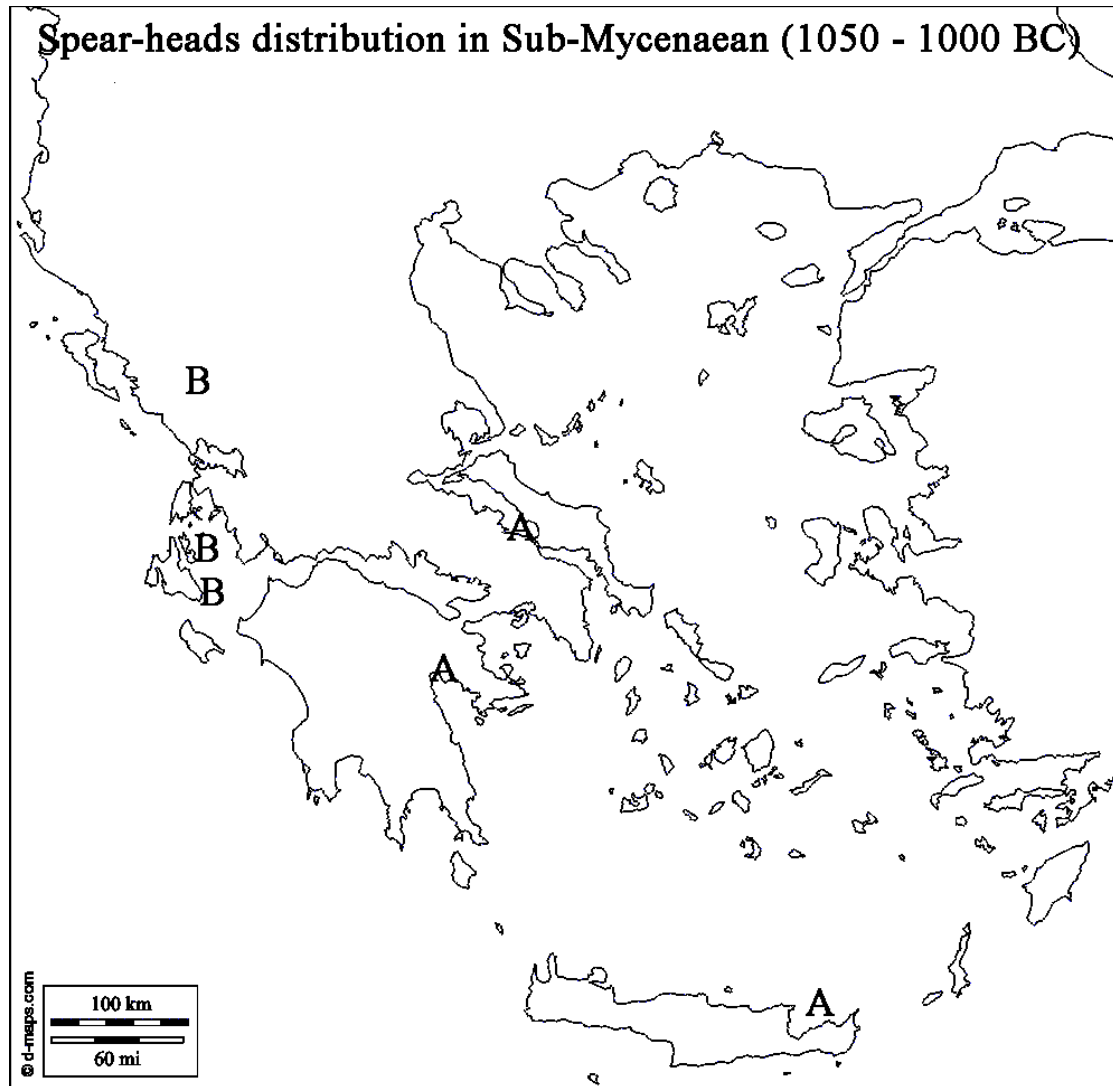


Figure 38: Distributional chart of Sub-Mycenaean spear-heads (by the author).

The Mycenaean type (A) and the main PG types of medium size (G) are replaced in the EG phase by larger types (J, E, L, P, Q, R). As regards foreign influences: type B is an infiltration from Europe (though Anatolia has been suggested),⁹⁰⁷ but types E and F can also be identified in similar shapes from Northern Italy.

⁹⁰⁶ Snodgrass 1963: 135.

⁹⁰⁷ Leshtakov 2011: 40.

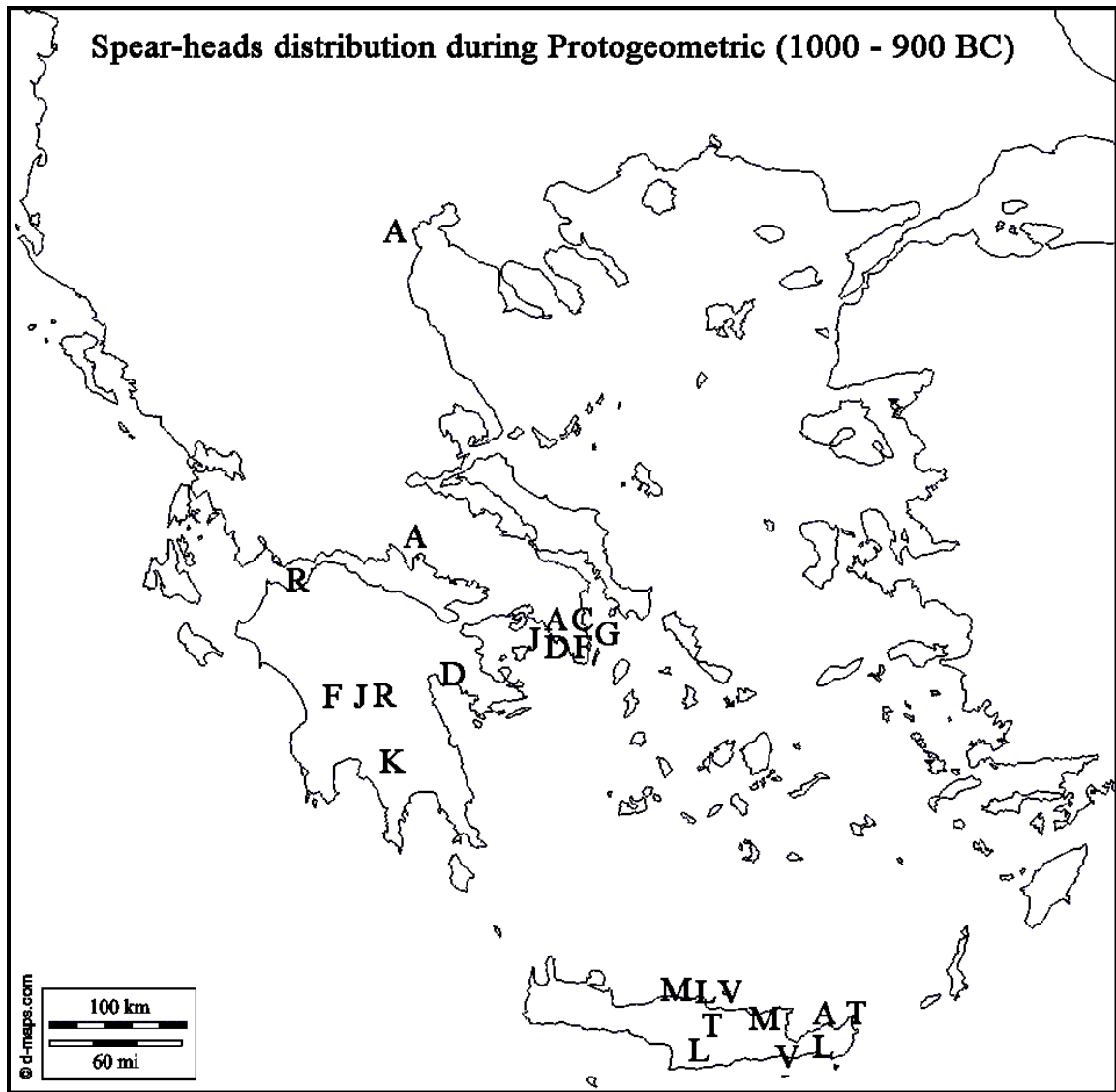


Figure 39: Distributional chart of Proto-Geometric spear-heads (by the author).

Type T appears in its turn to be a hybrid form incorporating both Aegean and European features. Among these various influences, apart from the possibility of Anatolian mediation Cypriot origin, there is a total absence of Asian influence in the SM and PG periods. Spears were of course used in the Near-East, but the only region making use of socketed spear-heads was Assyria and the shape there in use was unfamiliar to EIA Greece. Other contemporary Near-Eastern civilisations, Karchemish, Tarsus, Urartu, all have old-fashioned forms with tangs directly inserted into the shaft and no sockets.⁹⁰⁸

⁹⁰⁸ Snodgrass 1963: 135.

5. Post-palatial Daggers.

The third element of both Bronze and Iron Age offensive weapon sets was represented by daggers. After the collapse also dagger types appear to be a foreign model.⁹⁰⁹ There are two main types; the first of which is the so-called ‘Peschiera Dagger’.

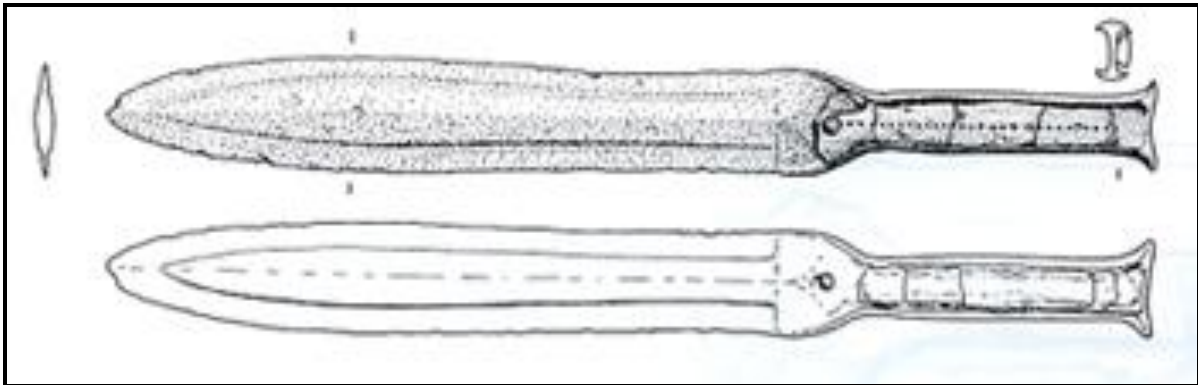


Figure 40: Examples of ‘Peschiera’ Daggers, after Howard 2012.

Though rarely found in the Aegean, specimens have been recuperated mainly from Crete and the Cyclades, but some come also from Achaia and Argolis (Mycenae). The main characteristic is a narrow, elongated oval blade, no longer than 25 cm, and a slightly sketched midrib. The grip is slim and flanged and usually ends with a fish-tail. The handle was fixed through rivets at the base of the blade. The origin of these blades is believed to be again Northern-Italian, from the homonymous terramare site of the *Bronzo Finale* context and they might also reflect central and northern European influences.⁹¹⁰ As stated by Papadopoulos, none of the Greek specimens can be dated through their contexts. The dating used, LH/LM III B2/C, comes exclusively from European parallels.⁹¹¹ As already seen about the flame-shaped spear-heads these daggers do not seem to survive into the EIA, they are again intrusive elements that tend to be peripheral to the Mycenaean culture, not adopted by the post-palatial elites. What seems to survive the post-palatial phase into the early Iron Age is instead another intrusive type: the flange-hilted dagger (fig. 41).



Figure 41: Example of Naue II Dagger, after Howard 2012.

⁹⁰⁹ Snodgrass 1971: 307.

⁹¹⁰ Papadopoulos 1998: 29.

⁹¹¹ Papadopoulos 1998: 58.

As the name suggests, it looks like a Naue II type sword, only produced in a smaller size and having a length not exceeding 28 cm. This type makes its appearance in bronze during the LH/LM IIIC and, together with swords, they are soon produced in iron and offered as grave goods.⁹¹² There is no certainty again about what role these daggers must have played at the end of the Mycenaean civilisation, it is though striking that the post-palatial elites chose them to be a regular element of their weapon set.

6. Offensive weapons with indirect or limited contextual evidence.

This section has been added here for a major comprehension of the general picture regarding weaponry. It contains all those accessory elements commonly included in ancient warfare, but of which we do not have any contextual evidence in the period under review and for which I will have to retrace the possible evolution in either textual or pictorial evidence. Most of these accessories were perishable and did not survive the passing of time. Some elements are rarely present in graves (unclear plates ascribable to cuirasses, metal parts possibly pertaining to harnessing of horses, arrow-heads), but they are often unique or so limited in quantity that any analysis about continuity and change would be insignificant. Nonetheless speculations can be deduced from their absence, in itself a change, and whenever possible they will be counted in the main discussion.

6.1. War Chariots.

Although Crouwel rightfully points out that land battle vehicles like chariots found scarce application in such an uneven and stony soil as the one in Greece,⁹¹³ we have some evidence, mostly indirect, that chariots were used in battle throughout Greek proto-history. The first evidence comes from a series of LH I/LH II stelai at Mycenae,⁹¹⁴ which respectively show engraved figures of charioteers, apparently chasing down running warriors, or, as reminded by Younger, in the ritual act of honouring the dead.⁹¹⁵ The vehicle appears to be a small calash on two wheels kept together by four spikes starting from a central stud.⁹¹⁶ This type was clearly manoeuvred by a single rider and the traction was provided by horses, the arrival of which must have been linked with the Indo-European invasion of the Aegean in the

⁹¹² Lemos, 2002: 120.

⁹¹³ Crouwel 1992: 19.

⁹¹⁴ For a detailed summary see Younger 1997: 235.

⁹¹⁵ Younger 1997: 232.

⁹¹⁶ Anthony 2007: 48.

MH period.⁹¹⁷ Also Central-European Bronze Age cultures used wooden chariots to ease their mobility, but the absence within European contexts of bridle bits and cheek-pieces discourage the use of horse chariots in the same way it was used in the Near-East,⁹¹⁸ but it does not imply that other ways were known by the Urnfield cultures to use such a device for war. However, if we had to trace back the earliest documented use of war chariots in the Bronze Age, that would remain the Kassite conquest of Babylon in 1900 BC.⁹¹⁹ Already in the '30s, Karo had individuated their appearance in Cappadocia and their use as an undeniable advantage in battle.⁹²⁰ Drews thought that the superiority of chariots was almost absolute during the whole Bronze Age, where the key to victory in battle was in the hands of chariot-riding archers. In his picture infantry was a support in case the chariots were somehow sieged or got hindered by unsuitable terrains. This alleged fact changed only when, in the final Bronze Age, new weapons allowed the opponent infantries to develop javelins able to be thrown at the charioteers as fast as the archers' arrows, eventually contrasting and abating the military forces of the palaces and overthrowing their power.⁹²¹

I will consider briefly the importance of the chariots in the palatial period, since it is clearly out of my chronological scope. The aforementioned shaft graves stelai were necessary to set a starting point of my discussion, highlighting the fact that chariots were already known to the Mycenaeans during the palatial periods, so that their arrival to Greece in later periods could be excluded at once. Though tempting, all the past ideas concerning this supposed preeminence of the war chariots in the BA have always gained little evidence from both the archaeological data and common sense. About this, I do not need to add anything new to Dickinson's discussion. He has already pointed out that there are only a few horse cheek pieces and arrow-heads in the shaft graves, a poor evidence to prove any outstanding importance in actual battles.⁹²² There are other scenes representing warfare in the shaft graves, consistently representing warriors on foot as well, as on the 'siege rhyton', the 'battle krater' and the 'battle in the glen seal-ring.'⁹²³ Moreover, if the sources show the preeminence of charioteers in battle both in the Egyptian reliefs and in the literary accounts of the Near-Eastern kingdoms, they may have failed at being realistic representation of actual warfare. Dickinson rightfully suggests that both the Egyptian and Middle-Eastern texts may have

⁹¹⁷ Clark 1941: 50.

⁹¹⁸ Hawkes 1940: 343.

⁹¹⁹ Meyer 1884: 579.

⁹²⁰ Karo 1930/1933: pl. XLVII.

⁹²¹ Drews 1993: 185 ff.

⁹²² Dickinson 1997: 48.

⁹²³ Dickinson 1999: 21.

wanted to represent especially the ruling elites by means of chariots, while infantry, considered less prestigious, was purposely ignored in the official propaganda.⁹²⁴ I can add the fact that the chariot idealised the divine status of kings. It separated them from the mass and allowed them to shoot lightning-like arrows to helpless opponents. It is not hard to believe that the chariot was more a metaphor than a practical weapon. Even if it was used in battle, I would assume that its maximum advantage was to keep the elites away from the real battle, coordinating it from afar. I also agree with Crouwel and Dickinson in taking into serious account the difficulty that such wheeled vehicles must have had on the mostly rocky terrains of Greece, preventing them *a priori* of being the core of the army. Even admitting that in the areas where the natural landscape could allow a wide employment of chariots, after an initial and effective impact operated by charioteers on the enemy formations, all the subsequent actions, like breaking through the enemy lines, chasing the survivors, sieging enemy garrisons and the final taking of them, necessitated of freer movements and a larger presence of infantrymen, which must have represented the central part of the BA armies.⁹²⁵

If charioteers were not the core of the army, chariots appears represented in many reliefs and engravings on seal-stones and signet rings. These examples belong to a period ranging from LH II to LH IIIA and appear also in form of symbols in the Linear B tablets. For these initial chariots of the Mycenaean elites, Cultraro proposed the use of message deliverer among the foot-soldier ranks.⁹²⁶ A different type of chariot is represented on LH IIIB-C (from the 13th century to the end of the 12th) pottery.⁹²⁷ These chariots were open-walled, with only a curved railing passing side to side to provide hold to the single rider.⁹²⁸ Lorimer believed that the various sections of this type of chariots were joined by means of bronze pegs.⁹²⁹

⁹²⁴ Dickinson 1999: 22.

⁹²⁵ Dickinson 1999: 23.

⁹²⁶ See Cultraro 2004.

⁹²⁷ Vohnoff 2008: ff. 173, 175, 178, 190.

⁹²⁸ Crouwel 1992: 30.

⁹²⁹ Lorimer 1950: 317.

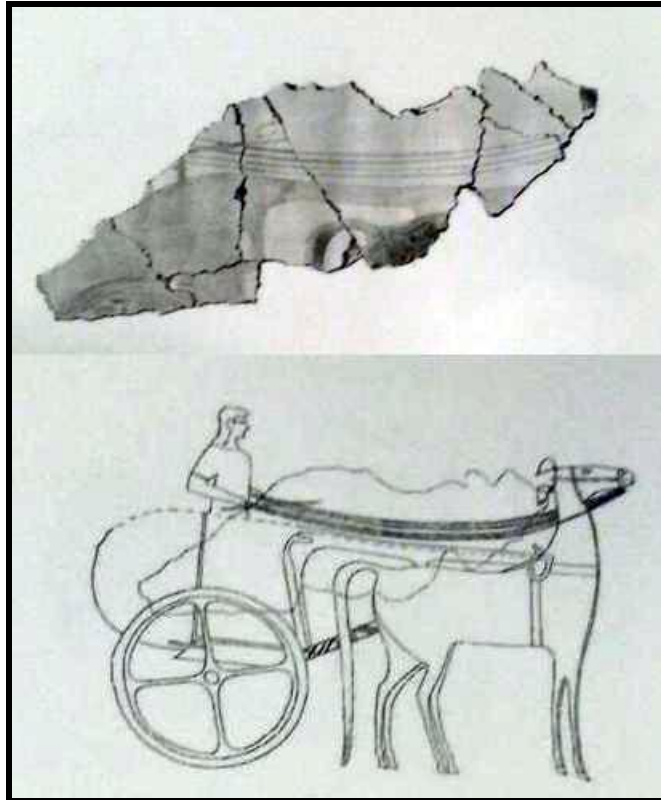


Figure 42: Fragment of the megaron frieze of Mycenae, reconstructed by Rodenwaldt 1921: 41, in Vonhoff 2008.

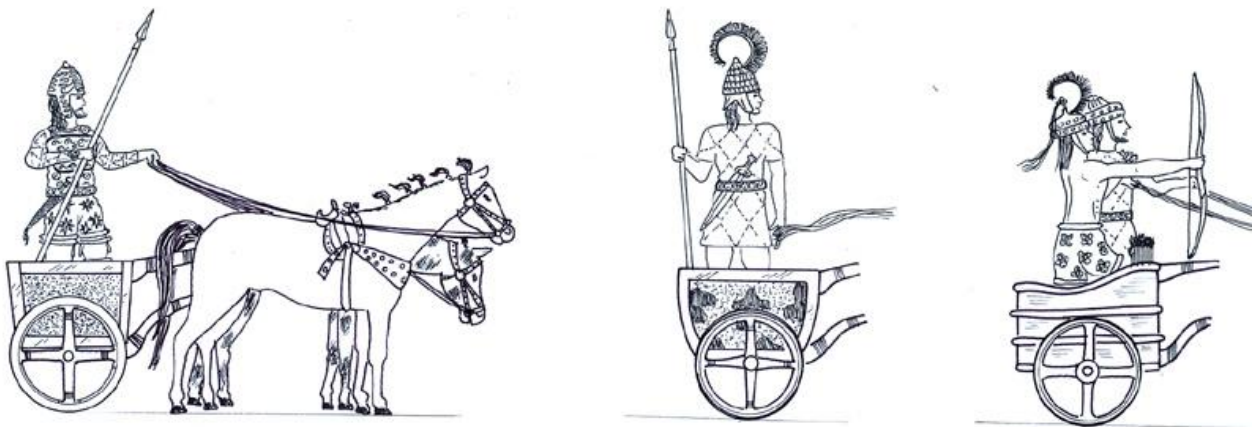


Figure 43: Interpretations of Mycenaean box type chariots, after Howard 2012.

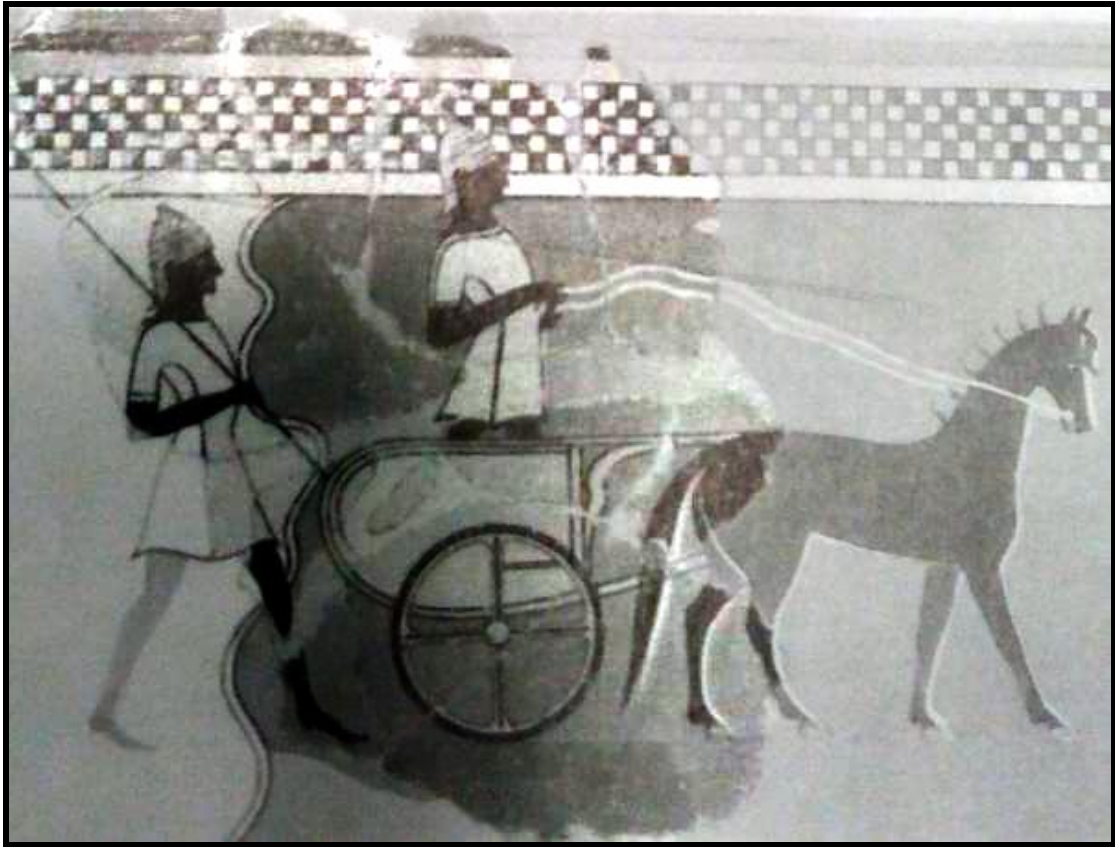


Figure 44: Box-chariot from a fresco from Pylos, reconstructed by Lang 1969, in Vonhoff 2008.

Tiryns presents one of the largest sources of depicted fragments representing chariots which might be considered the railed type. Unfortunately these LH IIIC depictions from kraters, even when presenting an articulate image, are very far from the detailed scenes of the palace frescoes. It would be once again hazardous to exchange these images as evidence. Yet the chariots appearing in the fragments have a feature in common, a consistency which could suggest their actual presence in LH IIIC: the legs of the standing charioteers can be entirely seen. This could be representing the open-walled structure of the railed type. A few sherds show the second person on the chariot, the one at the rear, as having two protruding objects on his back, similar to two arrows or a double spear.⁹³⁰ If the proportions of the figures were consistent, one may have interpreted them by simply judging their size, but the imprecise hand behind these depictions does not allow to speculate too much. My personal opinion is that they are a couple of javelins, since they seem to be regularly associated to chariots in Homer,⁹³¹ and they might have had the same association in the LH IIIC period, when the kraters of Tiryns were depicted.

⁹³⁰ Vonhoff 2008: tab. 40, f. 173, 42, f. 178.

⁹³¹ *Iliad* IV, 306-307, V, 230-238, XI, 745-749.

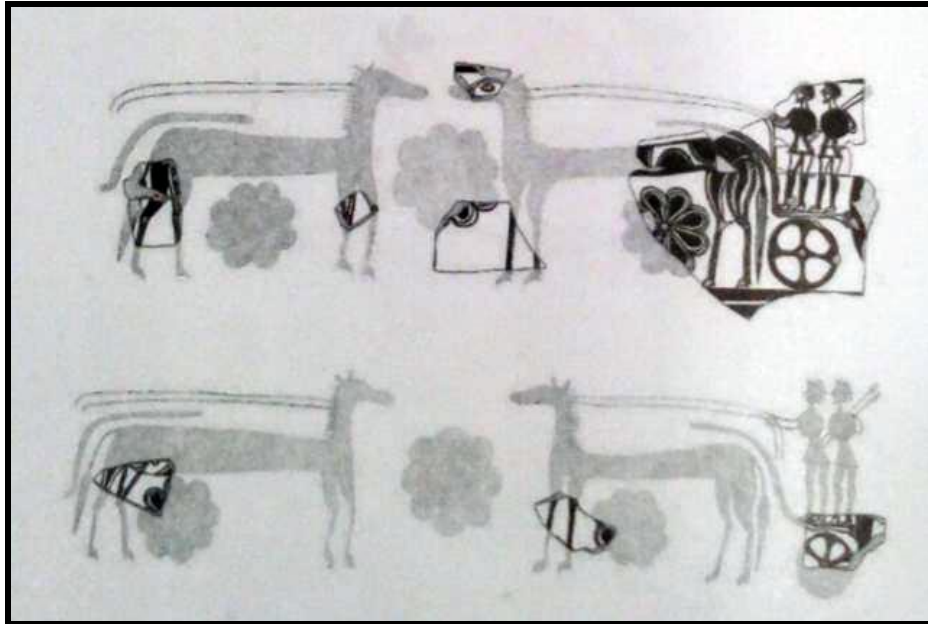


Figure 45: Fragments of a LH IIIC krater from Tiryns, Vonhoff 2008

Von Mercklin had proposed an Egyptian origin of this chariot comparing the representations of it produced in Thebes during the New Kingdom.⁹³² Snodgrass as well traced back its ultimate origin to Egypt.⁹³³ Nonetheless, as Crouwel points out, the New Kingdom type was much earlier than the Greek railed type, a descent from the Hellenic box type would make more sense.⁹³⁴ Since representations of this type are found in Geometric times, it is conceivable that their almost unvaried use continued uninterrupted during the whole EIA.⁹³⁵ The scarcity of physical remains makes it clear that battle-chariots were made entirely of wood, according to Crouwel mainly of elm, but also willow could have been an option.⁹³⁶ The back of the rail could have been filled in with wickerwork or leather to provide a softer support.⁹³⁷ Even if the physical weakness of wood were the main responsible for their lack of archaeological evidence, the metal harnessings of the horses and the arrow-heads shot, if really used imponently in battle, should have produced a greater amount of specimens than what they presently do.

⁹³² Von Mercklin 1909.

⁹³³ Snodgrass 1963: 161.

⁹³⁴ Crouwel 1992: 30.

⁹³⁵ Lorimer 1950: 307.

⁹³⁶ Crouwel, Brummel 1984.

⁹³⁷ Snodgrass 1963: 161.



Figure 46: Fragment of a LH III C krater from Tiryns, Vonhoff 2008.

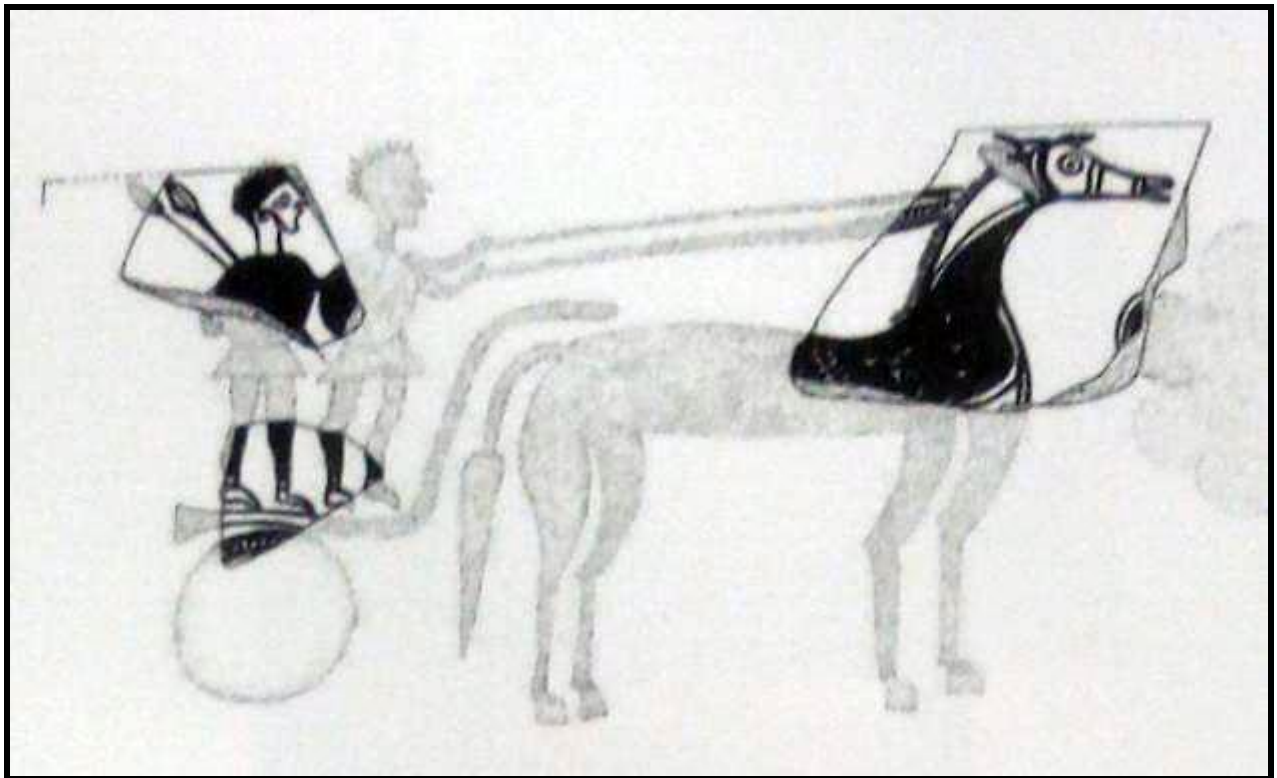


Figure 47: Fragment of a LH III C krater from Tiryns, Vonhoff 2008.

Drews assumed that barbarian raiders introduced javelins in order to counterattack the chariot-based armies supposedly in use in the Aegean and the Near-East, eventually winning them over.⁹³⁸ The fact that there are no great amounts of specimens even in LH IIIA and IIIB tombs discourages *per se* the theories involving the introduction of foreign javelin-throwers as crucial for the BA collapse, because defeating a few charioteers does not seem an important achievement against palatial armies composed essentially of infantrymen. Moreover, even admitting that javelin-armed infantrymen represented a real threat for the charioteers, Drews does not explain how these weapons and tactics might have won the fortified walls of the citadels and prostrated all the palaces and the areas under their control in such a small amount

⁹³⁸ Drews 1993: 185 ff.

of time. My conclusion about this endorses Dickinson's in thinking that chariot forces did not become obsolete in the post-palatial period even if confronted by better-equipped infantries, but their use might have simply become sporadic since no state organisations able to gather the necessary resources to create them had survived in Greece.⁹³⁹ The survival of chariots during the EIA is witnessed both by the PG 'heroon' at Lefkandi,⁹⁴⁰ where two harnessed horses were buried, and by rare examples of horse harnessings found among the goods deposited in a cremation burial at the Athenian Agora.⁹⁴¹

Both the examples at Lefkandi and Athens are connected with warrior burials. This may suggest that the presence of war chariots and horses in the rare instances mentioned should be considered as expensive symbols for the male deceased or his family to portray the heroic ideal in death, the same already expressed by weapons and probably by a specific apparel burnt in the pyre. The rarity of these finds and their association with cremations, already expensive in themselves, suggest that only a few people in the EIA community in Greece could afford such a treatment. Perhaps even the chariot and the horses were provided on purpose to reproduce a ritual cult of the ancestors and were no longer used in battle. Once again the literary account of Homer is a double-edged sword, since it describes very often the use of chariots in both battle and competitions to honour the dead. Was epic recounting contemporary features or recalling memories of a far distant past? This study cannot answer this question, but in the light of what so far discussed we can at least exclude the scanty remains of chariots from the changes in weaponry regarding the post-palatial periods and include them in a continuity discourse, even if only imitative.

6.2. Bows and Arrows.

Shooting weapons definable like ancient bows were certainly in use since the Bronze Age and so were their projectiles, though the limited evidence in both the Greek mainland and Crete. Since in Homer the Achaeans do not seem to use bows and arrows in battle, to the Mycenaeans was long denied the use of bows and arrows at war. This was hard to believe in regions where since MH and EH stone arrow-heads were not undocumented.⁹⁴² Representations were found in an incised image on a gold ring from Mycenae, shaft grave IV, and on the famous 'Lion-hunt Dagger' from the same grave.⁹⁴³ A breakthrough in the

⁹³⁹ Dickinson 1999: 25.

⁹⁴⁰ Popham, Lemos 1996: 22; Rutter, Sparkes 2000: 18.

⁹⁴¹ Blegen 1952: 287.

⁹⁴² Drews 1988: 168.

⁹⁴³ Lorimer 1950: 278.

archaeological evidence was given by the excavations of Knossos, where Evans found outstanding Minoan chests full of arrow-heads and even carbonized arrow shafts. He described them as able to contain about 10,000 arrows, rightfully stating that they were almost certainly military supplies.⁹⁴⁴ This large storage appears also confirmed in two Linear B documents from the same site,⁹⁴⁵ the first gives notice of a large number of arrows being stored, and the second shows that the palace administration was in charge to produce, store and distribute these projectiles.⁹⁴⁶ Bow manufacturers, *to-ko-so-wo-ko*, are also mentioned in a tablet from Pylos.⁹⁴⁷ In the light of this finds also the grooved stones found by Schliemann in shaft grave IV at Mycenae could be interpreted by Buchholz as arrow shafts polishers.⁹⁴⁸ If arrows were in use, also bows must have at least textual and figurative evidence. In fact Linear B contains also the terms *to-ko-so* (bow) and *to-ko-so-ta* (archer).⁹⁴⁹ Bronze Age bows circulated indeed in the Mediterranean regions in two types: self-bows, made from a single piece of wood, and composite-bows, made of two separate staves securely joined together at the centre of the handle. The second was more complex and needed a special expertise.

Even though Evans, quoted by Wachsmann, had mentioned that on a gold seal at Knossos two combatants were using composite bows,⁹⁵⁰ Lorimer remained convinced that Mycenaean Greeks knew only the simplest self-bow type of Egyptian derivation.⁹⁵¹ Bekroulaki *et al.* recently suggested that the bow appearing in the wall painting in the palace of Nestor at Pylos could be another evidence that the composite one was indeed in use, due to intriguing white layers of paint separating the staves in the depiction.⁹⁵² The presence of this bow type is also postulated by Homer's descriptions of at least two particular bows likely to have been composed.⁹⁵³ They are described as circular, emphasising a curvature too great to belong to the almost straight self-bows. Moreover, these are described by Homer as being made of wild goat's horns, elements which could create a curvature only if attached together. If all these inferences were true, this would be another case of continuity from the Mycenaean to the Iron Age. It is understood that the post-palatial ideology, focused on individual open and close combat, rejected the advantage offered by projectiles which could kill from afar and

⁹⁴⁴ Evans 1936: 836.

⁹⁴⁵ KN V 150, KN R 4482. See Ventris, Chadwick 1959.

⁹⁴⁶ Drews 1988: 168.

⁹⁴⁷ PY An 207, 360, 1163, fr. 279, 449, Ventris, Chadwick 1959.

⁹⁴⁸ Schliemann 1878; Buchholz 1980: 121.

⁹⁴⁹ KN V 150, 7624. Ventris, Chadwick 1959.

⁹⁵⁰ Wachsmann 1987: 89.

⁹⁵¹ Lorimer 1950: 275-305.

⁹⁵² Brecoulaki *et al.* 2008: 376.

⁹⁵³ *Iliad*, IV. 105; *Odyssey* XXI. 247.

so a large use of the bow. A compromise was perhaps represented by javelins, which had a shorter reach and required the warrior to be in the thick of the fight to be thrown. But bows like these appear only in epic and no specimens ever appear in tombs during the centuries encompassed by this study. If wood was a more common material for bows, this would explain why our only evidence for the Iron Age comes from Geometric depictions.⁹⁵⁴ Even in absence of physical remains, their depictions in Geometric and Orientalising pottery is in itself a postulate of continuity, although, as Snodgrass points out, the rarity of arrow heads, which are usually found before and after the Iron Age, could also admit a temporary disuse in the transitional period and a late reintroduction in the 7th century.⁹⁵⁵

Arrows produced with a metal head survived in small amount. It is indicative that, apart from Evan's discovery of the mentioned chests of Knossos, the LH III use of arrows had become more marginal in warfare. I personally think that before close combat became customary in LH IIIC, the Mycenaean palaces had their own archers, and manufactured arrows as testified by the Linear B texts. Nevertheless, being arrows projectiles, they were intended to be largely expendable and nothing was done to prevent them from being dispersed in the most disparate battlegrounds. Furthermore, the social value placed on these arrows was probably not the same placed on the bow. When in the *Iliad* Odysseus recovers his valuable bow, it is also said that it was kept in a special box.⁹⁵⁶ If between bows and arrows, the former were chosen to represent the status of a deceased in tombs, it is no surprise if we have no trace of them. In absence of clearer religious beliefs we cannot speculate about grave goods offered to serve the deceased in the other life, in which case arrows would have been placed together with the hypothetical bow. But if objects in tombs were placed at this stage because of their intrinsic value and symbol, no arrows were needed. In these terms, the absence of arrows in the LBA and EIA arsenals could reflect a poverty of archaeological finds rather than actual absence.

Of all the arrows found throughout the LBA and EIA Snodgrass had devised his own typology, including boss-barbed, barbed-tanged, cast-socketed, tang-headed and leaf-shaped types.⁹⁵⁷ On that typology, Avila has later proposed his more accurate prospect, dividing them into three main classes: leaf-shaped (*blattspitzen* types 1a – 1h), tanged (*stielspitzen* types 2a-

⁹⁵⁴ See *Corpus Vasorum Antiquorum: Louvre*, 11, fr. A527, pl. 3, A528, pl. 6 and A530, pl. 7; *Warsaw*, 1, fr. 142172, pl. 2-7.; Kunze 1953-1954: 162.

⁹⁵⁵ Snodgrass 1963: 142.

⁹⁵⁶ *Odyssey*, XXI.54.

⁹⁵⁷ Snodgrass 1963: 144-149.

2f) and socketed/barbed (*tüllenpfeilspitzen*), apart from the last, presenting several variants all interrupted after the fall of the palaces.⁹⁵⁸

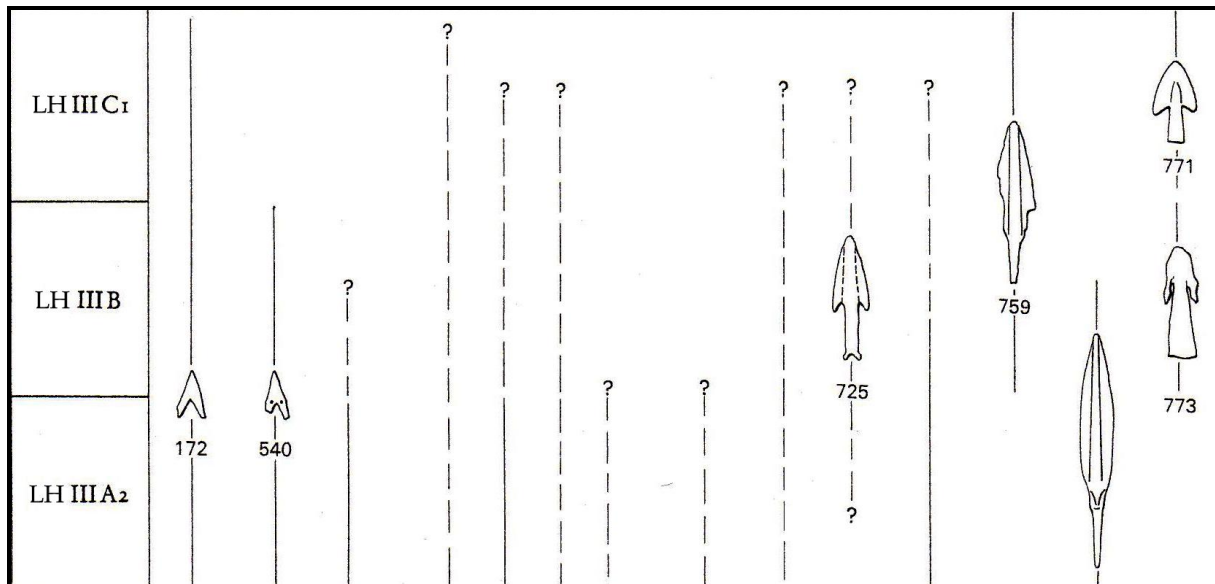


Figure 48: Arrow-heads from Mycenaean to Post-palatial periods, after Kilian-Dirlmeier 1984.

The typological evolution seems to stop in the middle LH IIIC, with the barbed type being the latest refinement of a LH IIIB prototype, rarely found so far only in Boeotia, Messenia and Eastern Crete. If we have a look at Avila's distributional maps,⁹⁵⁹ we soon notice that his tanged arrow-heads of the class 2b and 2e are the only two types in use during LH IIIB, together with the socketed barbed type which appeared during this period.

⁹⁵⁸ Avila 1983: 83-117.

⁹⁵⁹ Avila 1983: tabs 60-64.

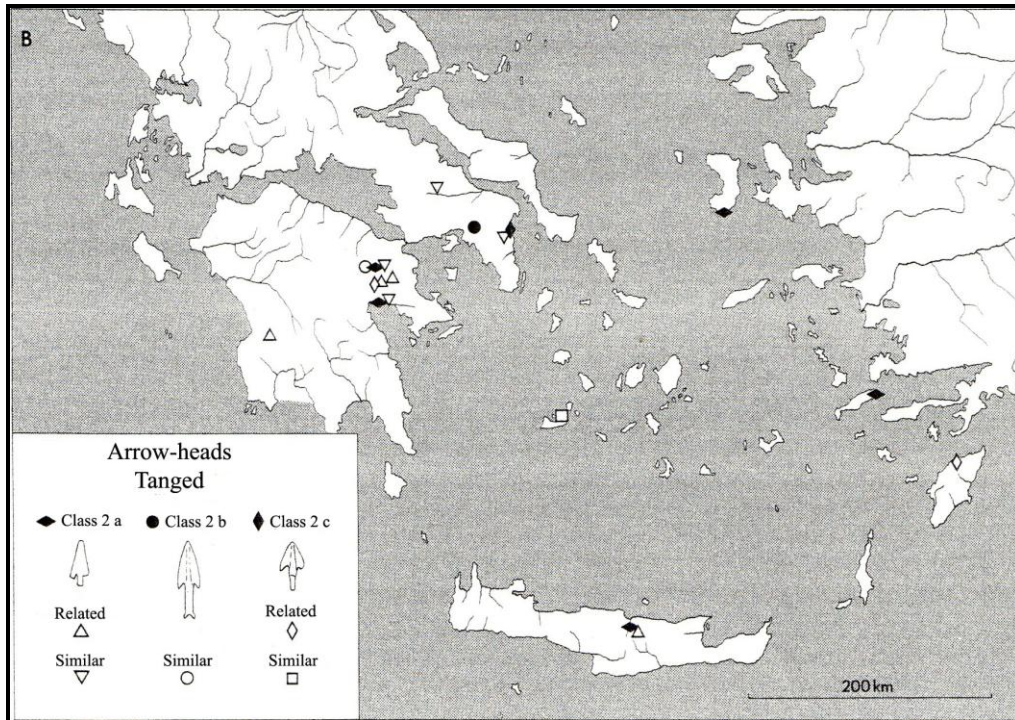


Figure 49: Distributional chart of tanged arrow-heads , after Kilian-Dirlmeier 1984.

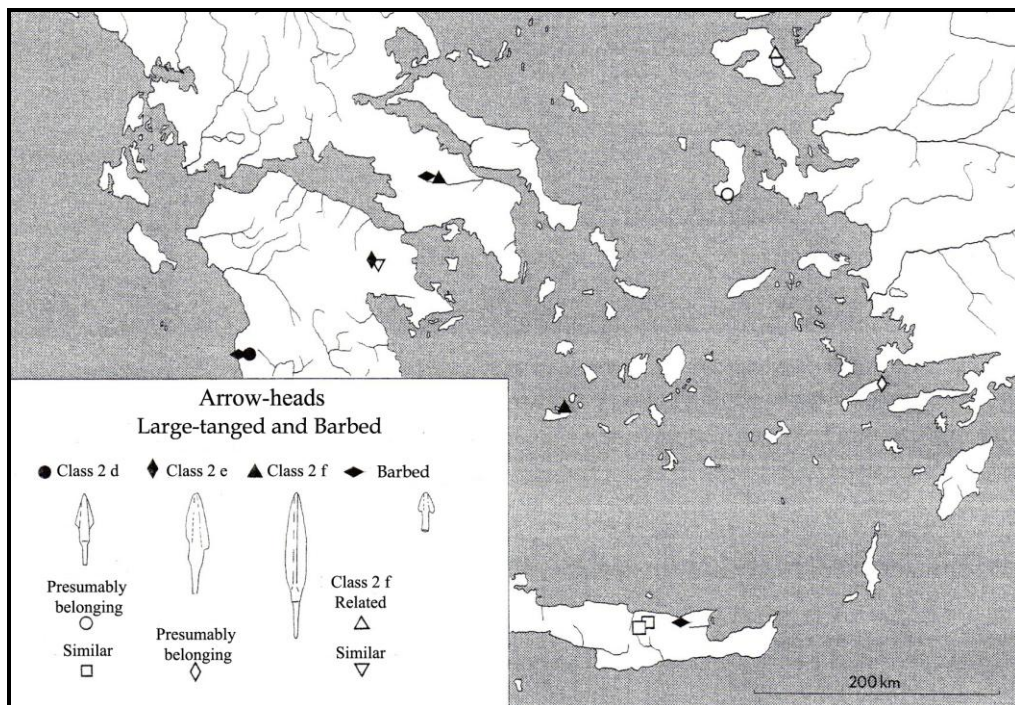


Figure 50: Distributional chart of large-tanged and barbed arrow-heads, after Kilian-Dirlmeier 1984.

As far as shown by the material evidence, the class 2b, found between Boeotia and Attica did not proceed to the subsequent periods. While 2e can be found until LH IIIC Early only in the Argolid. The barbed type with a tubular socket is the only one appearing during LH IIIB2 which survived to LH IIIC with no modifications and entering the EIA where we are no longer sure about their actual use in battle. Avila rightfully suggests that there are no

sufficient data about their role in both the palatial and the post-palatial horizons to express their actual role in warfare. When they reappear in large quantities, new technologies in archery had already taken place in Phrygia. If we had to consider the socketed and barbed types described by Avila, the only types sporadically found in the EIA, we could imply that they derive from LH IIIB prototypes and therefore represent a possible element of continuity. The evidence of arrow-heads before the late Geometric remain scarce and this seems to agree with the scenes described by Homer, where close range combats with javelins and swords used to take place. In such a thick fight, long range weapons like arrows were not appropriate and one might have run the risk of hitting the wrong person. It seems therefore reasonable to think of a marginal role of archery in those contexts .

6.3. Battle Axes.

This heavy-impacting weapon appears to be a protagonist of prehistory, as several specimens made of stone or copper clearly show in Neolithic contexts (*e.g.* at Franchti, Argolis).⁹⁶⁰ Nevertheless, mainland Greece lost this weapon after the EBA, perhaps recording a cultural change coinciding with the arrival of the Indo-European speaking Achaeans and their arsenal that did not include the axe. A possibility reinforced also by the striking diversity in the Minoan contexts, where the double-edged axe, or *labrys*, was an important feature of both the warrior and religious contexts and specimens of it are found until the Late Bronze (right before the Mycenaean influence on the island), as shown in LM II contexts at Vaphio, Lasithi and Knossos. On one side of the Knossian specimen, in a central position, there is a Linear B symbol indicating a boar's tusk helmet, a symbol present neither in the Linear A list, nor in the Cretan hieroglyphics so far known. Many are the possibilities implicated by such an association, though only speculative. A Mycenaean mark imposed by the mainland aristocracy can be a probable inference. The double axe also appears on a gold signet ring at a LH III context at Mycenae, representing a possible religious scene where the weapon is held by a *potnia* (already an Anatolian feature). This complicates the picture of a total absence and suggests either a Cretan religious influence in form of imported protective amulets or actual use of the item in Mycenaean priesthood, officed exclusively by women and therefore absent in warrior burials.⁹⁶¹

As already stated by Snodgrass, this weapon is almost invisible in the EIA. Argos and Vrokastro are the only sites where two iron specimens each have been found, though not from

⁹⁶⁰ Stroulia 2010: 44-46.

⁹⁶¹ Evans 1901: 108. Persson 1942: 25; Taylour 1970: 270-280.

a warrior burial, and not among other weapons.⁹⁶² This separation from weaponry could imply it had a religious value rather than a function in battle. A religious change can also be detected in later cultic features acquired by the double-axe. As already pointed out by Graves, the iconographic use of this item associates it to both Zeus and Poseidon's thunderbolts, indicating the end of a female association for this kind of power.⁹⁶³ Instances of the use of the axe during the Geometric period do appear in Homer,⁹⁶⁴ where it is nonetheless a foreign feature used by the Trojans and their allies, confirming the archaeological evidence shown by its use in form of *trunnion* in Anatolian contexts during the LBA,⁹⁶⁵ and the Neo-Hittite states in EPG coeval sites including Syria, Palestine and Egypt.⁹⁶⁶ The unclear use of battle axes in the EIA also recalls the well-known episode of the competition narrated in the *Odyssey*,⁹⁶⁷ where the participants had to shoot an arrow through the loops of several axes disposed in a line, recalling a type of looped bronze axe found at Vapheio in a LM II context, perhaps still used during circumstances unrelated to battle in the Geometric period.⁹⁶⁸

7. The elusive evidence of defensive weapons.

Defensive weapons are absent in my case studies, and only rare specimens of bronze helmets, greaves and probable shield bosses are found in the Aegean during the transition under review. It is not possible to collect enough data to create diagrams, nor to compose a consistent picture and speculate about it satisfactorily. Because of this challenging issues I have decided to summarise here the present state of affairs about defensive weapons, to help reconstructing and completing at least a general picture, and to see what continuities occurred from the post-palatial period onward and what changes in general; to do so, I will be often forced to observe palatial specimens and/or Geometric examples.

7.1. Helmets.

Among the several units constituting the defensive equipment of the last Mycenaean phase and the successive centuries, the helmet is one of the most elusive. The well-known

⁹⁶² Snodgrass 1963: 167.

⁹⁶³ Graves 1960.

⁹⁶⁴ *Iliad*, XIII, 611-612 and XIV, 711.

⁹⁶⁵ Maxwell-Hyslop 1953: 69-87.

⁹⁶⁶ Maxwell-Hyslop 1953: 81.

⁹⁶⁷ Homer, *Odyssey*, XXI, 120-123, 420-423.

⁹⁶⁸ Lorimer 1950: 305.

example yielded by tomb 12 at Dendra⁹⁶⁹ has by now set a definite typology. This helmet, also known as boar's tusk type, had a conical outline given by concentric rows of ivory plates sewn on a leather structure with a flat knob atop. The specimen at Dendra was the oldest, completed by a pair of bronze cheek-pieces, scalloped to provide a lateral view and access to vocal messages.⁹⁷⁰ This possibly postulates similar additions also on the specimens where such details did not survive.⁹⁷¹

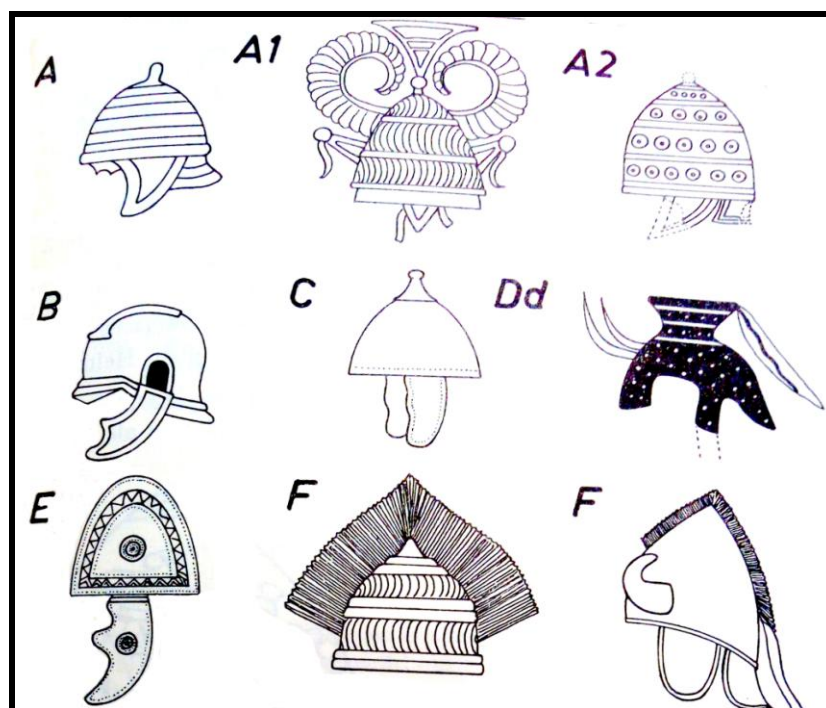


Figure 51: Mycenaean helmets from LH IIIA to LH IIIC after Borchhardt 1977.

The conical shape of an helmet is clearly visible in the Linear B ideogram *ko-ru* which seems to be showing a boar's tusk type.⁹⁷² Boar's tusk helmets certainly survived until LH IIIC,⁹⁷³ testified by some 11th century fragments at Knossos⁹⁷⁴ and Elateia, at present the latest specimen ever found.⁹⁷⁵ Very soon complete helmets of bronze were devised. Mödlinger has recently acknowledged that until the 13th century BC there is no evidence of metal helmets in Europe, but soon after this date metal helmets do appear in the archaeological data.⁹⁷⁶ The oldest type of metal helmet was individuated by Merhart and defined *glockenhelme* (bell-

⁹⁶⁹ Snodgrass 1963: 4.

⁹⁷⁰ Snodgrass 1963: 4.

⁹⁷¹ See Varvarigos 1981.

⁹⁷² Borchhardt 1977: 72.

⁹⁷³ Listed in detail by Borchhardt 1977: 61-66;

⁹⁷⁴ Tombs 200, 202, see Colstream, Catling 1996.

⁹⁷⁵ Dakoronia 2003: 46.

⁹⁷⁶ Mödlinger 2013: 391.

helmet),⁹⁷⁷ the same later defined by Hencken *kegelhelme* (conical helmet).⁹⁷⁸ This initial versions of full metal helmets were hammered into shape from a single tin-bronze disc with a knob attached on top as a socket for plumes. The caps of these helmets presented also evenly distributed rivet holes for applicable additions like cheek-pieces and neck-guards.⁹⁷⁹ These bronze helmets held a clear resemblance with the Boar's Tusk type, of which they seem to reproduce the conical shape in bronze instead of leather and ivory.

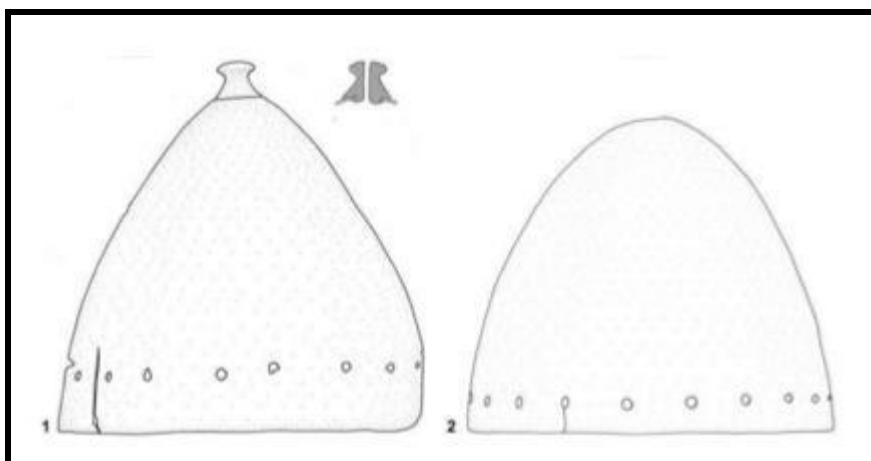


Figure 52: Conical helmets from Oranienburg after Mödlinger 2013.

Mödlinger made a distributional map for the LBA specimens, evidencing a geographical area connecting Greece (particularly Crete) to Germany. An evident concentration was marked in the zone comprised between the Carpathian basin and the regions of Moravia and Slovakia, where ten whole specimens have been found.⁹⁸⁰ At first sight one could be tempted to recognise a major production of helmets to Eastern Europe, which later extended it to the Aegean. Nevertheless such an inference would be absolutely disproved by the evidence.⁹⁸¹ First of all, the antiquity of the Dendra panoply (ca.1500 BC) and the clear resemblance of the boar's tusk helmet to these metal shapes proves an obvious derivation. Moreover another helmet, the one found at Knossos, is another metal conical type and dates to the same period of the Dendra specimen. This conical helmet has the same cheek pieces found attached to the boars' tusk type from Dendra.⁹⁸² This Knossian conical helmet, entirely of bronze, is the

⁹⁷⁷ Merhart 1941: 5.

⁹⁷⁸ Hencken 1971: 33, 34.

⁹⁷⁹ Mödlinger 2013: 392-394.

⁹⁸⁰ Hänsel 2003: 82; Mödlinger 2013: 402-408.

⁹⁸¹ Buchholz 1977: 72.

⁹⁸² Borchaardt 1972: 58.

oldest example known, dating to the 15th century.⁹⁸³ Its quality is deemed to be superior to that shown by most the Eastern-European specimens.⁹⁸⁴

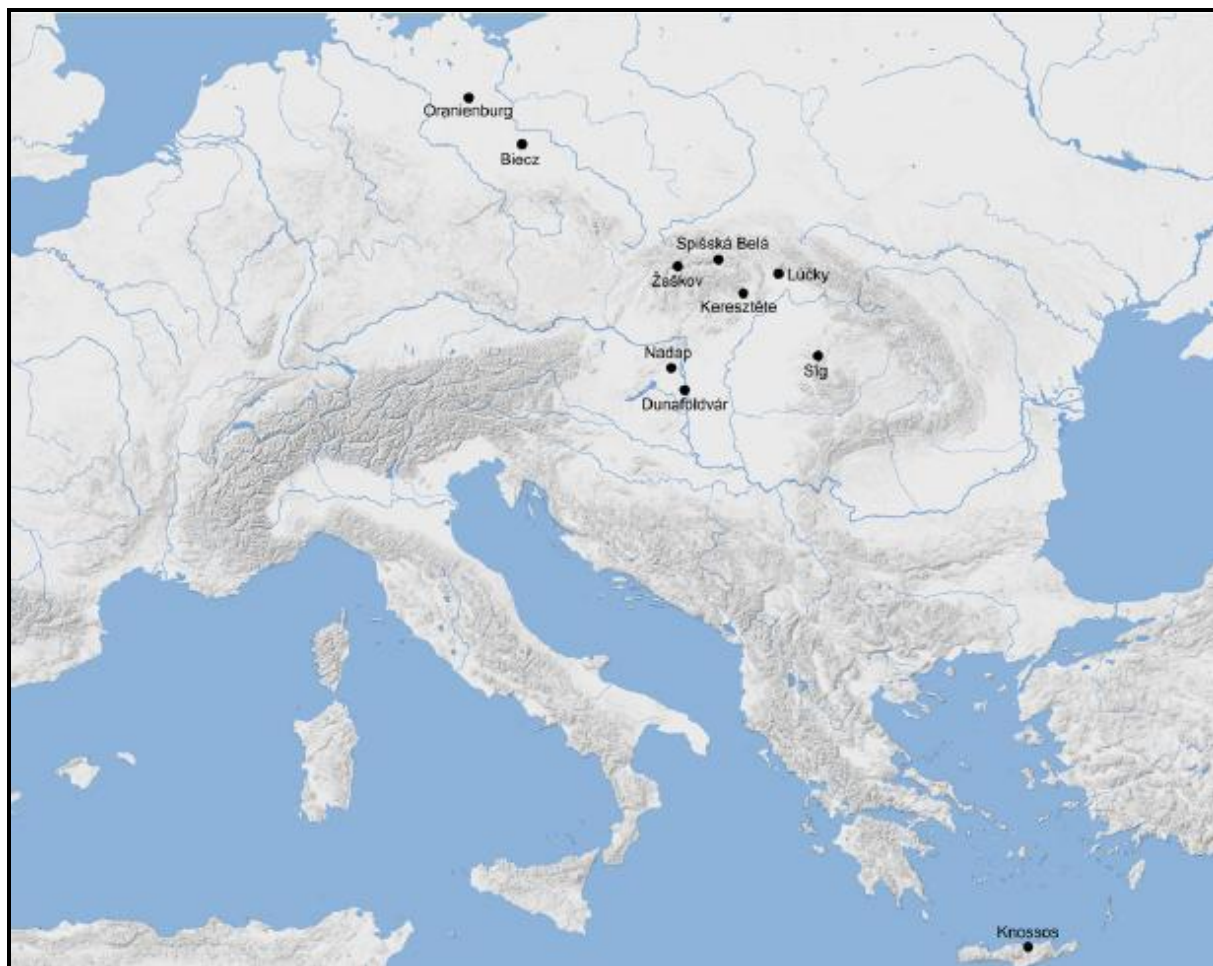


Figure 53: Distributional map of conical helmets, after Mödlinger 2013.

The reasonable reconstruction proposed by Mödlinger defines these helmets as originating in Greece after the initial boars' tusk versions,⁹⁸⁵ still still in use, and were exported to Europe until roughly the 13th century, after which the local populations of the Carpathian basin started their own manufacture.⁹⁸⁶ So far the evolution of the conical helmet seems to pass through three stages, as showed by three different finds. The first is the boar's tusk helmet of Dendra. The second is a conical helmet circulating in Boston, with no secure context or information, and yet presenting a bronze cap incised in order to resemble the boar's tusk ivory plates. The third is the oldest conical helmet with spool-shaped knob,⁹⁸⁷ from the

⁹⁸³ Borchaardt 1972: 58.

⁹⁸⁴ Hood, De Jong 1952: 59-60;

⁹⁸⁵ Buchholz 2010: 201.

⁹⁸⁶ Mödlinger 2013: 396.

⁹⁸⁷ Müller-Karpe 1962: 271; Verdélis 1967: 1 -53; Hencken 1971: 20.

chamber tomb 5 at Knossos.⁹⁸⁸ It is clear that the mysterious specimen of Boston, if properly contextualized, would represent the intermediate type which influenced the later metal types, but, once exported, gave origin to the East-European specimens.

Representations in contemporary art do exist, but once again the resulting information is unclear. The boar's tusk and the bronze conical helmet remained both in use during the whole Mycenaean period, as indicated by the 15th century fresco at Akrotiri,⁹⁸⁹ where white boar's tusk and yellow (bronze?) helmets appear together, and at Pylos,⁹⁹⁰ where the white boar's tusk and the yellow (bronze?) helmets with bosses and knobs appear together in the same scene.⁹⁹¹ But then again the battle representation in the hall 64 of the palace of Pylos shows warriors with helmets covering the back of the head and the neck, their colour is white, dotted with a dark-brownish pattern. In the same scene, other warriors show white helmets of similar shape, but plumed and with horizontal lines possibly representing the ivory boar's tusk plates.⁹⁹² In the LH IIIC warrior vase at Mycenae the type had again changed and showed a cap-like shape, with a chin-strap and a crest projecting a long plume. The pattern is again monochrome with dots, only this time reversed, white dots on dark surface. These helmets are also horned. The first row of soldiers seems to be facing a line of opponents with helmets showing hair-crested hemispherical types with no cheek-pieces.⁹⁹³ Other depictions on pottery shards coming from several Late Mycenaean sites like Tiryns show again the Boar's Tusk type.⁹⁹⁴ The totality of the depictions, together with the rare physical remains, present again a controversial portrait of the period, where the boar's tusk type appears to be well represented, but with many variants and floating in a background typology made of several different forms. Of those types having a dotted pattern, a perishable fabric with metal studs had been proposed by Lorimer, again with no material evidence.⁹⁹⁵ It is true that boar's tusk helmets are described in the *Iliad*⁹⁹⁶, as Reichel promptly recognized.⁹⁹⁷ The Linear B terms *ko-ru* and *pa-ra-wa-jo*, can be associated with in the Homeric terms *κόρυς* and *καλκοπαρήος* respectively 'helmet' and 'bronze cheek pieces.'⁹⁹⁸ But if the Homeric poems seem to keep memory of these kind of helmets, even investing them with heroic connotations, no

⁹⁸⁸ Clausen 2001: 218. Buchholz 2010: 202.

⁹⁸⁹ Akrivaki 2003: 527 ff.

⁹⁹⁰ Borchaardt 1972: pl. 11

⁹⁹¹ Mödinger 2013: 399.

⁹⁹² Immerwahr 1990: pls. 66, 67.

⁹⁹³ Immerwahr 1990: pl. 86, 87.

⁹⁹⁴ Immerwahr 1990: 91.

⁹⁹⁵ Lorimer 1950: 228.

⁹⁹⁶ Homer, *Iliad*, X, 260-271.

⁹⁹⁷ Reichel 1901.

⁹⁹⁸ Borchardt 1977: 72.

specimens are found after LH IIIC, neither in SM nor in PG contexts, leaving us with no material evidence for protective head-pieces during the EIA.⁹⁹⁹

Lorimer had assigned to the Late Mycenaean enterprise on Cyprus and the meeting of local expertise the creation of conical helmets similar to the Boar's Tusk type, but completely made of bronze.¹⁰⁰⁰ Whatever its origin, we have to face an extreme rarity of specimens, which does not fit well with the Homeric recurrence of the term *χαλκείος*. And the conviction of some scholars about the pre-eminent use of perishable materials for the pre-Hoplite helmets must be deemed as very likely.¹⁰⁰¹ So far, the only complete specimen of a bronze helmet ever found for the SM phase comes from Tiryns, tomb XXVIII: it was composed by two bronze shells linked by a section of perishable material. The lateral shells have a scalloped cheek-piece, each one with embossed rosettes.¹⁰⁰² Nevertheless this type is unique and not belonging to the Aegean types. Desborough thought of European origins for it,¹⁰⁰³ but Borchhardt later rightfully preferred to state that the information was too limited to allow any speculation.¹⁰⁰⁴ In the renowned representation of warriors in the so-called warrior vase from Mycenae, the helmets depicted on one side of the bowl seem to have two major implements (fig 54, type b). They both provided more flexibility to the neck (thanks to the absence of heavy neck protections), allowing a rapid mobility, and introduced horns on the forehead. Both developments enabled it to avoid quick sword slashes and to enhance the protection of the head after the LH IIIB-C introduction of the new cut-and-thrust swords.¹⁰⁰⁵ Nevertheless when we observe the depictions on several LH IIIC pots, another type is very often the protagonist, more similar to the one worn by the second row of warriors on the warrior vase (fig. 54, type a). It is a cap covered by spikes and there is no secure interpretation for it, nor material evidence (fig. 54, types c, d).

The cap seems of variable kinds, rendered with round or semicircular silhouettes. Whether the spikes were actual metal additions or schematic representations of crests/hair is hard to tell. They are very different from the boar's tusk helmets and presently impossible to retrace even among foreign helmets.

⁹⁹⁹ Lorimer 1950: 211. Borchhardt 1977: 72.

¹⁰⁰⁰ Lorimer 1950: 226.

¹⁰⁰¹ Desborough 1964: 62.

¹⁰⁰² Verdalis 1956: 4.

¹⁰⁰³ Desborough 1964: 65.

¹⁰⁰⁴ Borchhardt 1977: 74.

¹⁰⁰⁵ Desborough 1964: 65.

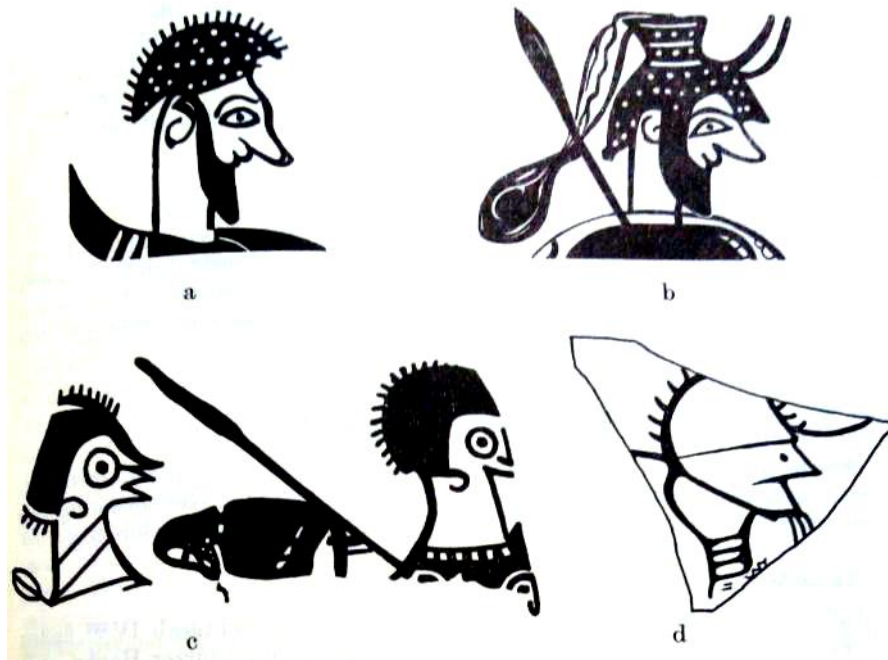


Figure 54: LH IIIC Helmets from vase depictions, after Borchhardt 1977.

7.2. Body Armours.

The presence of scaled corselets in the Eastern Mediterranean can be retraced to the EBA. Lorimer had suggested a possible transmission to the Aegean from the settlement of the Sumerian city of Nuzi, destroyed by the Assyrians in the 14th century. In the site it was found abundant evidence of bronze metal scales, representing so far our earliest provable dated context.¹⁰⁰⁶ Moving on, we find them depicted in the tomb of Ken-Amun, superintendent of the pharaoh Thutmose III, shown as yellow-striped shirts. These were interpreted by Davies as bronze-scaled corselets of the type already documented at Nuzi and that the pharaoh had possibly collected as a war booty from Megiddo in 1478 BC.¹⁰⁰⁷ In the tomb of Ramses III (1182 B.C.-1151 B.C.), in the Valley of the Kings, a pile of booty corselets is again represented, once again with an accurate rendering of the breast scales.¹⁰⁰⁸ The same model is worn in the Enkomi draught-box by a king driving a hunting excursion. In his study of the Mycenaean-Cypriot ivory set of which the draught-box is part, Barnett saw in the Khurrites the medium through which this corselet reached Cyprus and probably the Mycenaean settlers there located.¹⁰⁰⁹ On the base of the evidence found at Amathus, tomb 2, (iron rectangular splints still covered by traces of leather), Snodgrass admitted that scale-corselets might have been worn by Mycenaean warriors on Cyprus, not as predecessors of Aegean types, but as

¹⁰⁰⁶ Starr 1939: 475, pl. 126 a-k.

¹⁰⁰⁷ Davies 1904: 27.

¹⁰⁰⁸ Champollion 1835: 262, f. 17.

¹⁰⁰⁹ Barnett 1939: 4-19.

rarer alternatives.¹⁰¹⁰ Strangely enough, even though contacts between the Mycenaean settlers and the local scale-armoured people of Anatolia and Cyprus must have happened, such corselets have never been adopted in the Greek mainland, unless the warriors' vase is trying to show something similar with scarce success.¹⁰¹¹

In summary, even admitting an oriental inspiration for metal implemented corselets, it is still debated, due to the scarcity of archaeological remains, how the Aegean LBA and EIA warriors protected their chests from lethal blows in battle. So far our main and most complete source of knowledge for the Mycenaean soldiers is represented again by the Dendra panoply, tomb 12, LH IIB. There, a metal corselet composed by two plates (front and rear) joined together with ties of perishable material preserved itself unexpectedly well. Two metal shoulder guards made of three different bronze bands each were attached to the corselet, while the lower rim of the cuirass was completed by six separated bronze plates (three in the front and three at the back) covering the lower body until the knees.¹⁰¹² The result was a heavy armour that hindered agile movements and one to one fighting.

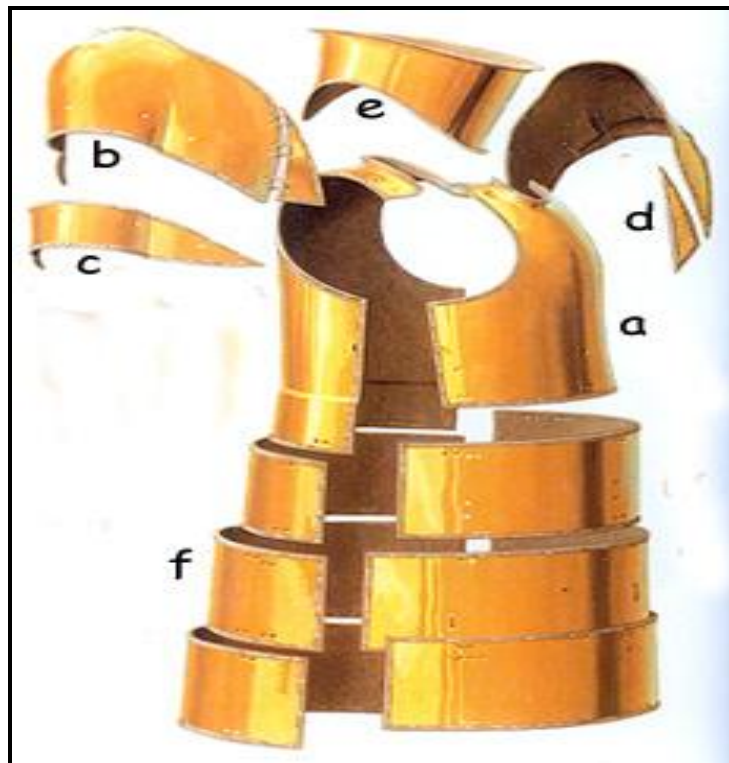



Figure 55: Composition of the Dendra armour, D'Amato, Salimbeti 2011.

Although complete, this armour type not only is a unique find, but it is also difficult to contextualise, since there are no other visual representations anywhere in Greece. It is

¹⁰¹⁰ Snodgrass 1963.

¹⁰¹¹ Lorimer 1950: 201.

¹⁰¹² Cultraro 2004.

therefore hazardous to state that such panoply was the regular equipment of the Mycenaean soldier. Nonetheless it is the only material evidence available for the Mycenaean cuirass and its composition is still useful if compared with subsequent models and technologies. In the Mycenaean linear B list of ideograms at Knossos there is a symbol that Chadwick interprets as a dress, nonetheless its resemblance with the Dendra equipment is tempting: .¹⁰¹³ Once again, among the schematism characterizing the post-palatial periods, the warrior vase offers one of the clearest examples about LH IIIC corselets, but none of the rows of its warriors wears anything close to the image of the Dendra panoply, probably already obsolete in the 12th century.¹⁰¹⁴ On the vase, the dark coverage the soldiers present on the chest, surrounded by apparent breast- and rear-plates, would seem to suggest a leather cuirass on which some metal reinforcements had been sewn. The kilts worn by these soldiers have fringes recalling oriental fashions, a fact that would raise the possibility of a Cypriot influence, after the Mycenaean colonisation of part of the island in the 14th century.

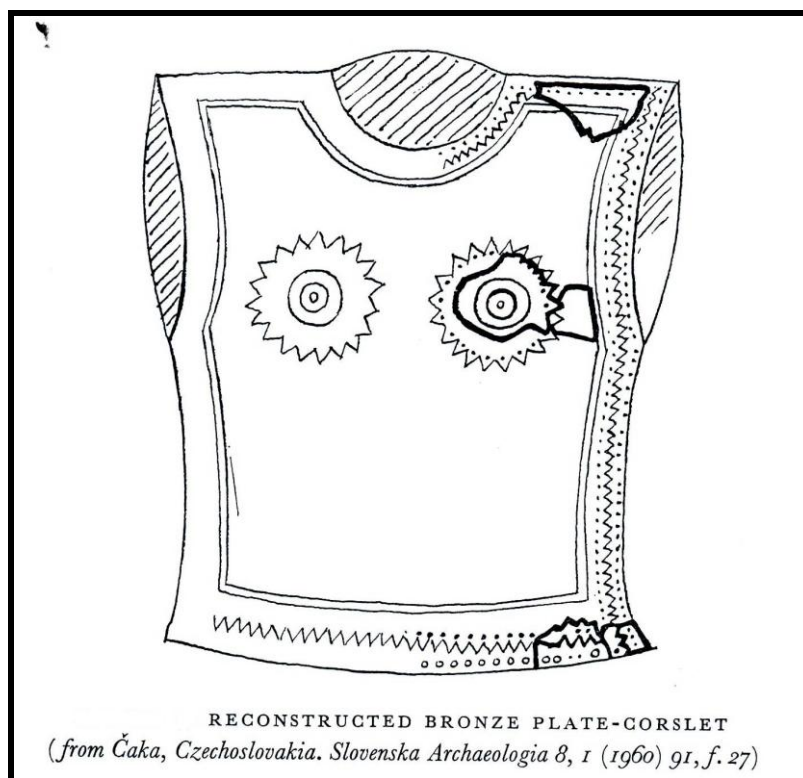


Figure 56: East-European Bronze Corselet, after Snodgrass 1961.

A fortunate find of iron plates in a tholos tomb at Karphi is our only source for the PG period and can hardly prove a regular adoption of it.¹⁰¹⁵ Moreover when fragments of metal are

¹⁰¹³ Chadwick, Killen, Olivier 1971.

¹⁰¹⁴ Immerwahr 1990: 86-88.

¹⁰¹⁵ Pendlebury 1939: 233, 234.

scantly found in tombs where weapons do appear, they can speculatively be associated to corselets.

7.3. Greaves.

Shin-protections, or greaves, were complementary to the body armour. The LH IIB panoply of Dendra produced two metal greaves made of bronze, short and not covering the knees.¹⁰¹⁶

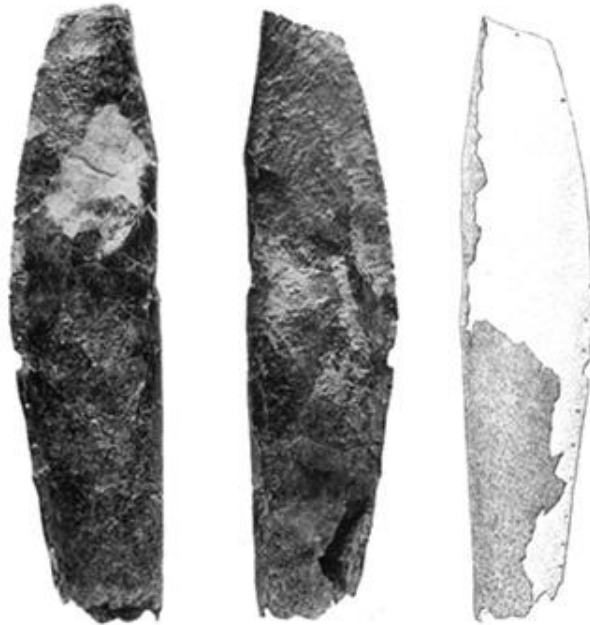


Figure 57: The greaves from Dendra, after Åström 1977.

With this regard, the representation of warriors on Mycenaean frescoes appears controversial. The detailed examples offered by the Megaron Frieze of both Mycenae and the Palace of Nestor at Pylos clearly show white greaves ending above the knee with a sort of knee-cup,¹⁰¹⁷ never found in any burial context, nor reproduced by any later European imitations. The white coloured ‘leggings’ have been interpreted by Lorimer as linen clothes, or linen upon leather and they could have been a cheaper alternative for protecting the shins during the Mycenaean period.¹⁰¹⁸ Nevertheless Catling underlines that more than once in Homer greaves are described as *αργύρεοι* which could have meant made of ‘silver’ or just ‘tin’, obtaining a silver colour after they were polished,¹⁰¹⁹ unless silver decorations were attached upon a bronze or a leather body. So the white greaves in the Mycenaean frescoes might also be representing

¹⁰¹⁶ See Åström 1977-1983.

¹⁰¹⁷ See Immerwahr 1990: 133-134, Vonhoff 2008: ff. 49-52, f. 93.

¹⁰¹⁸ Lorimer 1950: 254.

¹⁰¹⁹ *Iliad* XVI. 131 ff; XIX. 369.

metal.¹⁰²⁰ But Homer's lines are, as usual, a poetic imagery of the past, he cannot be taken as secure evidence.



Figure 58: Fresco scene from Pylos. Vonhoff 2008.

The greaves from Dendra are too oxydised to tell how they would have looked in their polished appearance. We know that polished tin has a silvery colour, but copper is rather brownish and bronze can vary depending on the percentages in the alloy, but can hardly look silver. The greaves at Dendra were made of bronze and so are all the specimens representing our material evidence. As mentioned, the frescoes show Mycenaean warriors wearing greaves, but the same warriors do not wear the rest of the Dendra armour, so why should we look for the Dendra greaves in these depictions? However, after almost three centuries without any other evidence other than on frescoes, LH IIIC offered more examples than expected. What the actual LH IIIC specimens are more and more affirming is that greaves made of bronze were in fact a reality. They still appear to have been produced with the same technique of the Dendra pair in several contexts of Europe, Greece and Cyprus soon after the collapse. If the pair found at Kallithea and Athens were for a long time the only examples for the LH IIIC mainland, two more recent finds from Achaia (Portes) and Aitolokarnania (Kouvaras) offered new perspectives. The known pair from Kallithea tomb A, showed crossed incised bands possibly reproducing the fastenings used in non-metal types to secure them to

¹⁰²⁰ Catling 1977: 143.

the shins.¹⁰²¹ As regards Athens, when Mountjoy reassigned the Geometric¹⁰²² pair from the Athenian Acropolis to LH IIIC on the base of the pottery features found in the same context, she could also establish some reasonable connections with many contemporary specimens.¹⁰²³

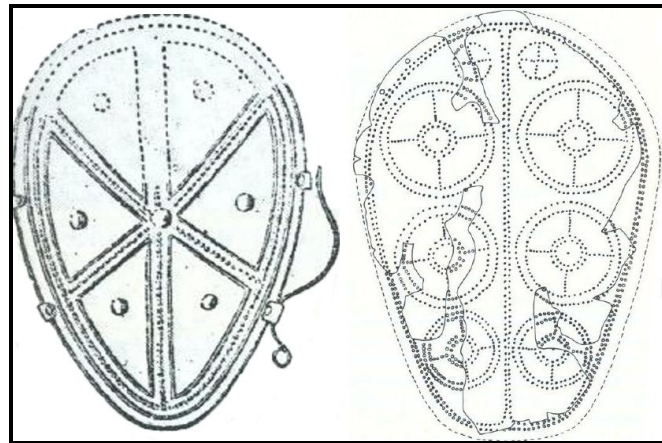


Figure 59: From left to right, Greave type from Kallithea and Athens. After Giannopoulos 2008 and Mountjoy 1984.

The Athenian bronze greaves were decorated by repoussé, double circles and bosses, resembling other specimens of the same period. The hammering technique from the initial bronze foil recall the pair from Kallithea,¹⁰²⁴ yet both shape and decoration did not perfectly match the Athenian pair. The Achaian ones were more elliptical, and apart from incised crossed bands, they do not present repoussé bosses. Nevertheless small bosses were noticed in the damaged Enkomi specimens,¹⁰²⁵ though at the time of this inference there were too many specimens and some of these conclusions were hasty. To me the Enkomi bosses are not decorative, they were needed to attach the loops necessary to the string fastenings. Some contemporary European specimens have been studied in the past by Merhart. These were from Northern Italy, Moravia, Hungary and Bosnia.¹⁰²⁶ Of all these examples, the pair from Moravia (Kurim) bears some resemblance with the decoration technique seen at Kallithea, but the one in Hungary (Rinyaszentkiraly) is more similar in shape and decoration to the pair found at Athens. A mix between the two seems to be shown by the pair in Italy (Pergine) with a shape similar to Kallithea and decorations similar to Athens. The type found in Bosnia (Ilicak) has instead a similar decoration with the Athenian pair.¹⁰²⁷

¹⁰²¹ See Papadopoulos 1979.

¹⁰²² According to Platon 1965: 32.

¹⁰²³ Mountjoy 1984: 135-145.

¹⁰²⁴ Tomb A, see Yalouris 1960: 42-52. Giannopoulos 2008: 213.

¹⁰²⁵ Catling 1955: 21-36.

¹⁰²⁶ Merhart 1956: 100-108.

¹⁰²⁷ Mountjoy 1984: 135-137

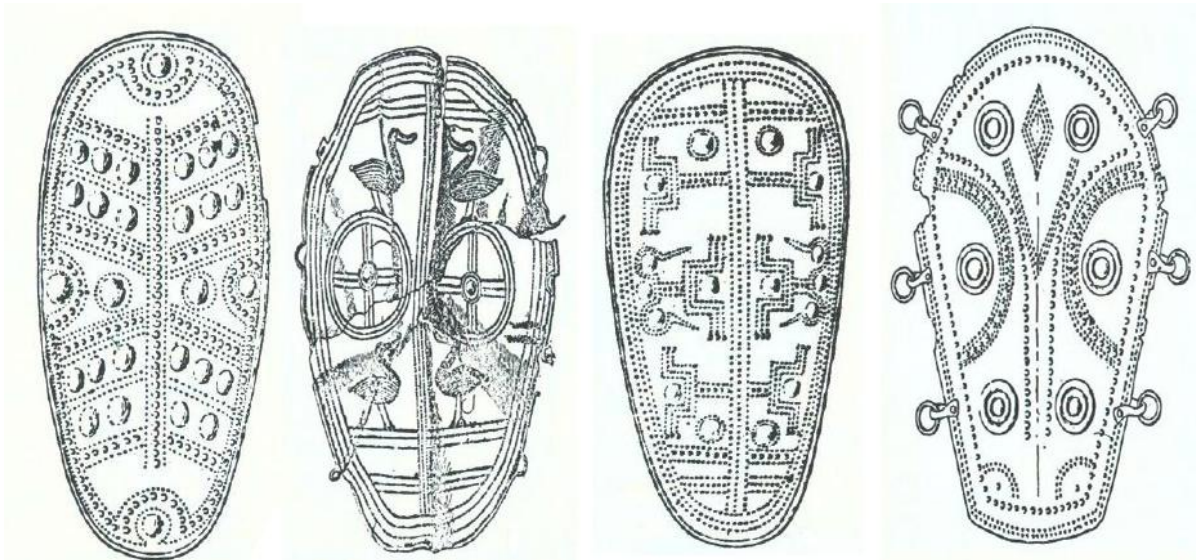


Figure 60: From left to right, greave specimens from Moravia, Hungary, Italy and Bosnia. Merhart 1956, Mountjoy 1984.

The new pair from Portes tomb 3, found in a warrior burial together with a complete weapon set (Naue II, Spear, Dagger), appeared instead more plain, similar to the old Dendra specimens, apart from their shorter length and the addition of large rosettes applied on the outer side.¹⁰²⁸ They look dissimilar from the greaves from Kallithea, Athens and even the Eastern European ones. It is interesting to notice that even being both in Achaia, the greaves from Kallithea and Portes do not share the same details. Kouvaras recently added one more contribution to our knowledge. It has already been mentioned that the weapons from its assemblage are Italian imports, while other bronzes are either locally made with Cypriot bronze or direct Cypriot imports.¹⁰²⁹ Kouvaras greaves are once again plain and undecorated, apart from incised lines bordering the edges. With the Cypriot greaves at Enkomi they also share the fastening system, made through bronze wire. Dickinson recently suggested that the owner of the objects in the assemblage might have not been Mycenaean, since in the cist nearby there was no trace of Mycenaean pottery. To him he must have been the important chief of a ‘semi-Mycenaean society,’ similar to those envisaged for Epirus and Macedonia.¹⁰³⁰

¹⁰²⁸ Giannopoulos 2008: 205.

¹⁰²⁹ Gatsi, Jung, Mehofer 2012: 247-265.

¹⁰³⁰ Dickinson 2014: 144.



Figure 61: Bronze greaves from Portes. Giannopoulos 2008.

Of course, in LH IIIC all Greece can be *per se* considered a semi-Mycenaean world, since the previous palatial customs started to compromise with foreign fashions and enclose advantageous additions to their metalwork. In the fragmented post-palatial Greek reality, where regional features influenced different classes of material culture it is not surprising that the aspect of coeval greaves differs in some respects with each other. If the Mycenaean bronze greaves of Dendra were first devised in Greece and exported or imitated during the course of the LBA, by LH IIIC they were being reproduced in both Europe and Cyprus, still with the same technique, if with different outlines and decorations. Analysing the 12th/11th century specimens from Europe, Cyprus and Greece we can notice that the plain or minimally decorated greaves are to be ascribed to the Cypriot production, while the ones richly incised with bosses, bands or combinations of both follow a European trend. Both types are present in Greece. Kallithea and Athens used European types, while Achaia and Aitoloakarnania seems more connected with Cyprus. Being both Achaia and Aitoloakarnania relatively peripheral regions, which, as said by Dickinson, were trying to imitate the centre, we could imply that Central Greece had instead stronger trade links with Italy and Eastern-Europe. It should therefore underlined the possible existence of a link connecting Greece with areas as far as Germany.

Of course bronze and finely decorated implements of the armour must have been a luxury for chiefs, kings or very important people of the time, so that their limited number in warrior burials should not be a surprise. What about the rest of the Greek army? Had they no

protection on their shins? The fact that there are obviously no finds attesting perishable materials does not imply the absence of such greaves from the average use. It only means we are presently incapable to establish it. The depictions on pottery, though obscure, seem to suggest that greaves were instead a customary part of the Greek armour and their absence in warrior burials can only suggest they were possible leather leggings. When distinguishable in the dark monochromy of the silhouettes or spared from breaks of the ceramic surfaces, warriors still appeared to be wearing greaves during the whole course of LH IIIC.



Figure 62: Fragment of a depicted LH IIIC pot with warrior greaves. Vonhoff 2008.



Figure 63: Fragment of a depicted LH IIIC pot with warrior. Vonhoff 2008.

The warriors' vase at Mycenae shows clearly that the colour of such greaves was dark brown, interpreted as leather in the past.¹⁰³¹ These greaves indicate also upper bandages above the knee, probably used to keep them in place.

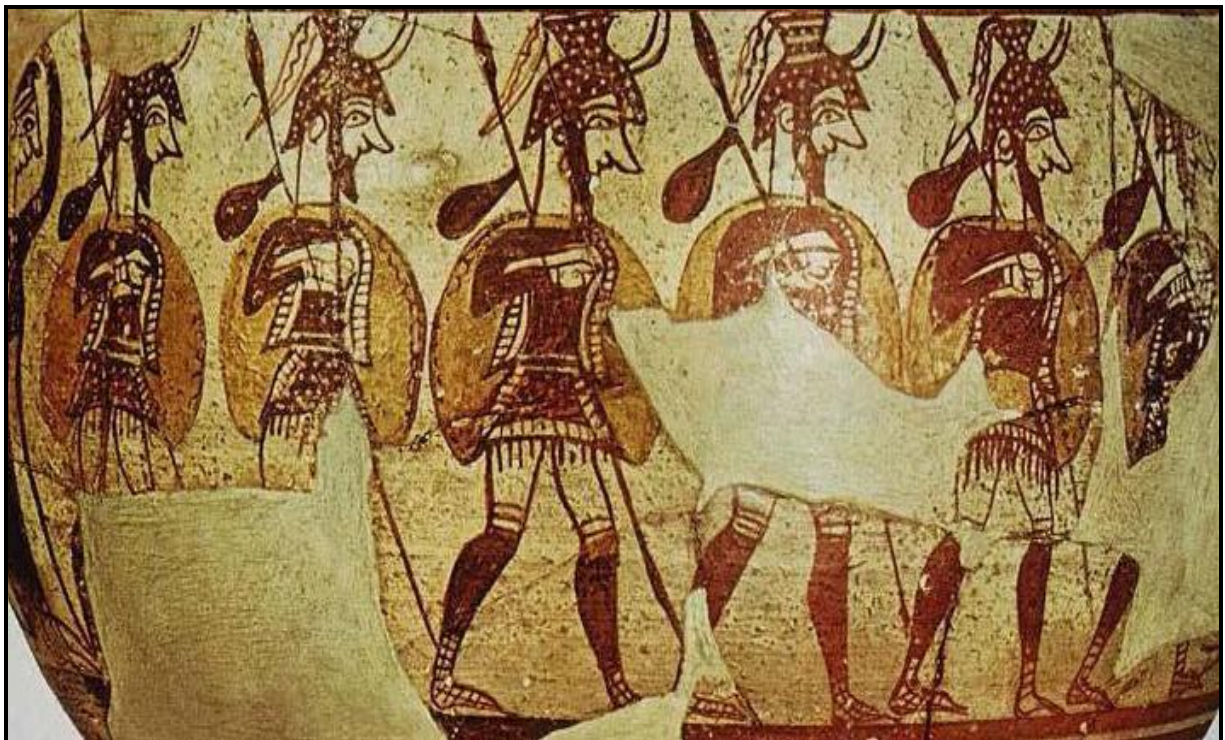


Figure 64: Particular of the Warriors' Vase from Mycenae, after Demargne 1964.

¹⁰³¹ Lorimer 1950: 255.

They were probably unused in (if not unknown to) the eastern kingdoms, there is no single monument in Egypt showing soldiers wearing them.¹⁰³² This accounts for a European introduction during the LBA, an ulterior cultural exchange between Greece and the populations interested by the Hallstatt cultures and their warrior ideal.

7.4. Shields.

As regards shields, the evidence becomes even more obscure. Unfortunately not a single specimen dating earlier than Late Geometric/Orientalising has been found so far. Two main shields of the Mycenaean Bronze Age, the ‘Tower’ and the ‘Figure-of-eight’, had no hand-grip and were in fact body shields. Apart from speculations, we know very little about these shields. All our information comes from pictorial and relief representations, especially from seals. On the dagger-blade in shaft-grave IV at Mycenae such shields appear hanging with their (leather?) strap, or *telamon*, between the neck and the shoulder.¹⁰³³ In both this representation and the one in relief on a silver *rython* from the same shaft grave, where another battle scene takes place, these shields appear at the same time, used apparently one against the other, although the scene on the dagger-blade is unclear about it. The *rython*, as analysed by Blakolmer appears to show two separated rows of warriors facing each other, each using a different body-shield, the row on the left uses the figure-of-eight, while the opposite one uses the tower.¹⁰³⁴

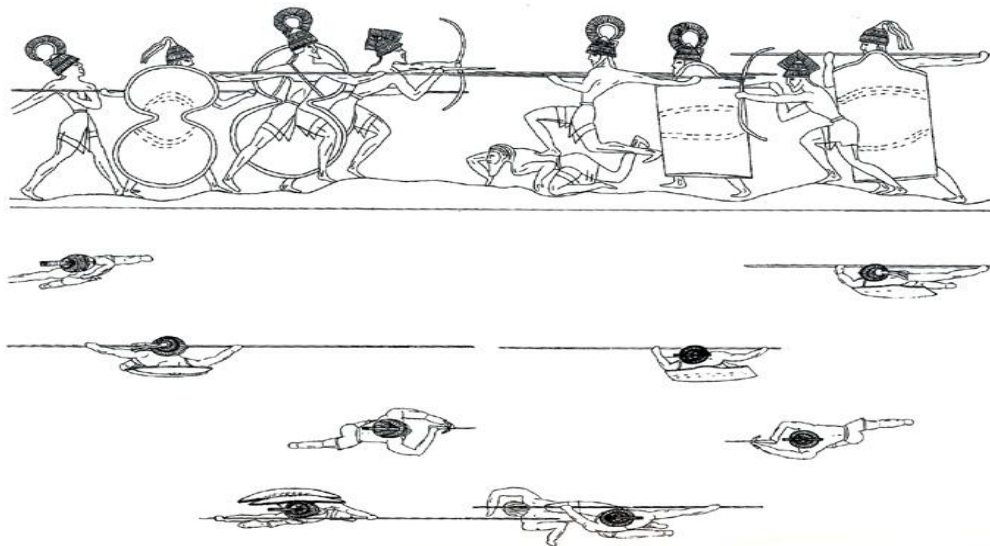


Figure 65: Visual interpretation of the scene in relief on the silver *rython* from Mycenae, after D’Amato, Salimbeti 2011.

¹⁰³² Lorimer 1950: 255.

¹⁰³³ Papadopoulos 1998.

¹⁰³⁴ Blakolmer 2007.

After the collapse the picture complicates even more. The LH IIIB2/IIIC depictions on the warriors' vase of Mycenae soldiers do not show any of the previous body types. On one side of the vase the soldiers appear equipped with a round shield of which the lower curve has been cut out to create a curvilinear observation point.



Figure 66: Detail of a shield depicted on one side of the warriors' vase, after Demargne 1964.

We do not have any other representation of this type; the opponents on the obverse hold their shields in a different position so it is not possible to say whether they are of the same type or completely round.

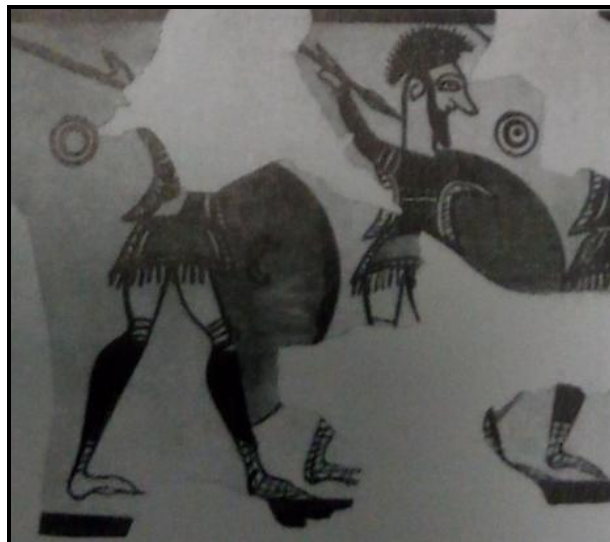


Figure 67: Detail of shields depicted on one side of the Warriors' Vase from Mycenae, after Vonhoff 2008.

Judging by the hand-grip they are not Mycenaean types, but they more likely represent an oriental arm-type of shield which by the end of the Bronze Age had spread out in the whole Near-East and Anatolia.¹⁰³⁵ It is probable that the modification occurred on the Mycenaean shields on the warriors' vase, starting probably from a 'figure-of-eight' prototype, has to be found in the military operations and successive exchange of ideas taking place in the eastern contacts on Cyprus, Syria and Egypt.¹⁰³⁶ The warrior's vase is one of the latest pictorial evidence we have about the late 13th century Mycenaean panoply. If at least one of the two

¹⁰³⁵ Lorimer 1950: 152.

¹⁰³⁶ Lorimer 1950: 153.

rows of soldiers (if not both) actually represented a local army we would have in this vase the latest panoply before (or soon after?) the collapse. During LH IIIC the depictions on the pots become more and more sketchy and it is often hard to even guess something more than the general shape of the shields. On some sherds from Mycenae are shown perfectly round shields. The same is shown by a seal from Enkomi and a bronze statuette from Nikosia (Cyprus) showing again round representations. More instances from pottery sherds found at Pyrgos Livanaton show schematic battle scenes with opponents using different shields. One is round and the other is rectangular with slightly concave edges resembling stretched ox hides.

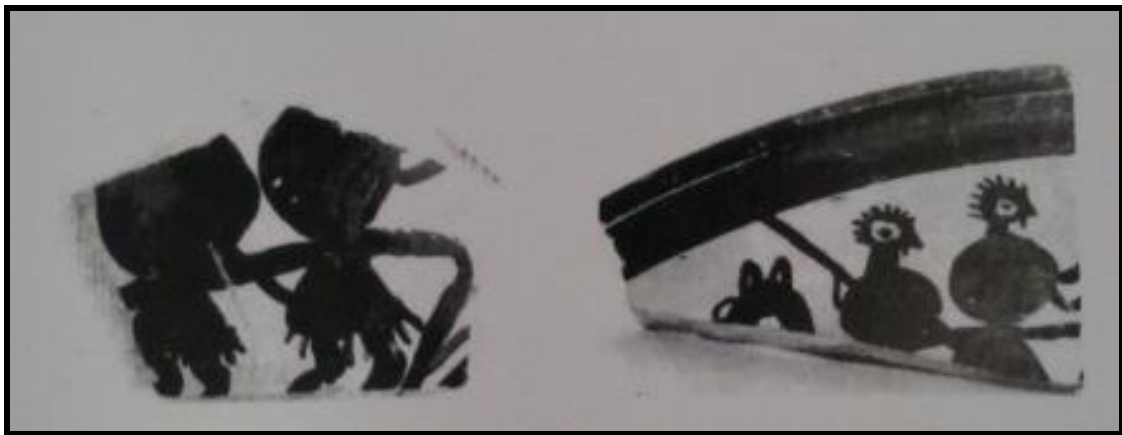


Figure 68: Sherds with armed warriors from LH IIIC Mycenae, after Vonhoff 2008.



Figure 69: Sherd with a naval battle from Pyrgos Livanaton, after Vonhoff 2008.



Figure 70: A sherd with a naval battle from Pyrgos Livanaton, after Vonhoff 2008.



Figure 71: A seal from Enkomi and a bronze statuette Nikosia, Cyprus, after Borchhardt 1977.

Nothing can be said about both origin and materials of these shields, whether they represent actual Greek shields. Our only source of information about their construction is again the descriptive vocabulary of Homer. Even if later and imprecise, his description of warfare include shields, named with two different words: *ἀσπίς* and *σάκος*. Yet it becomes problematic to assign them a shape, since Homer often seems to call different shields by the same name.¹⁰³⁷ According to Trümpy, the Homeric epic would use the word *σάκος* (described as rectangular) also when it meant the *ἀσπίς* (described as round) because in the rhapsodists'

¹⁰³⁷ Kirk 1985: 315.

vocabulary the former was a more ancient word used as a poetic archaism also for round shields. At the same time, being the shield of Achilles round, whenever a shield was mentioned in poetry, it was called *ἀσπίς* in order to acquire the quality of Achilles' shield.¹⁰³⁸

What Bershadsky recently observed, by analysing the Homeric use of the two terms in relation with the epic scenes in which they are used, is that they clearly show that the Greeks, apart very few cases, preferred to use the *σάκος* type, while the Trojans had only the *ἀσπίς*. Whenever two warriors are described as fighting each other, the one using the *σάκος* survives, while the other, protected by the *ἀσπίς*, usually dies or is defeated. The instances produced in her article suggest that the superiority of the Greek *σάκος* was in its being more solid, unbreakable, and to cover a wider portion of the body. By contrast the *ἀσπίς* was smaller, softer and able to cover a reduced part of the body, consequently causing a greater amount of casualties on the Trojan side. In the few instances where Greek warriors appear to use the *ἀσπίς* (being therefore available to them as well) they lose the fight because unable to avoid a lethal blow. Therefore, when the poems were composed the difference between the two shields was known.¹⁰³⁹ Borchhardt reminds us that the term *ἀσπίς* is not an Indo-European word and is believed to be Near-Eastern, implying that round shields arrived from the East.¹⁰⁴⁰ The fact that the Trojans are using it as part of their arsenal is not inconsistent with this idea. It is interesting to know that in the sherds from Pyrgos Livanaton the shields roughly matches these two types already in LH IIIC, one round and the other rectangular, even though not as big as a tower-shield (as far as the limited realism of the depiction can tell). Were they in use during the whole transition in the very same shapes? There is no answer to this. What remain in graves and suggest the presence of shields are the round bronze bosses thought to be the central part of round shields, which, we should imagine, held in place a wooden structure covered by layers of leather to which an internal hand strap was attached.

Shield bosses are enigmatic presences in the Aegean graves during a long period going from LH IIIC to the Geometric. It is still not clear whether these were the rigid centre of the Aegean shields, and many theories wanted to see in them different objects, such as a set of cymbals or dressing implements.¹⁰⁴¹ To this Snodgrass argues that they are too big to be clothing accessories and they should have been a pair to work as cymbals, a very rare occurrence indeed. He reached the conclusion that they were shield-bosses because they were

¹⁰³⁸ Trümpy 1950: 34 ff.

¹⁰³⁹ Bershadsky 2010: 1-24.

¹⁰⁴⁰ Borchhardt 1977: 44.

¹⁰⁴¹ Snodgrass 1963: 42, Lemos 2002: 124.

often found amid other weapons in warrior graves.¹⁰⁴² The possible shield-boss found at Athens was a very complex one, it had a plate rising in the centre to form a cone with a flat disc atop, from which a tip sprung up.

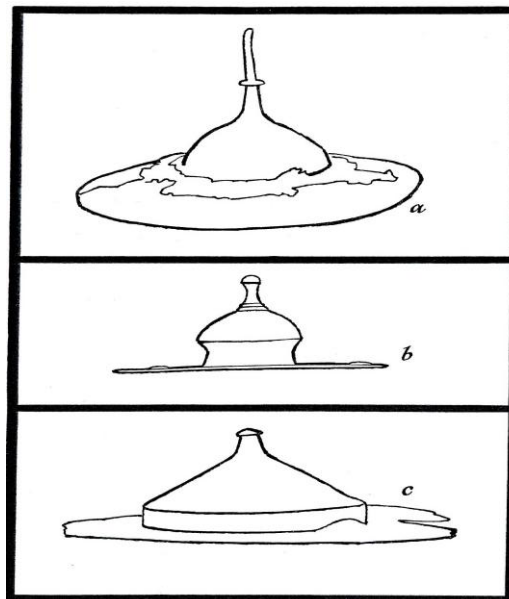


Figure 72: Examples of “shield bosses”, after Snodgrass 1963.

A pin was also found which verisimilarly had to pass through a hole in the first disc to join a second disc inside the boss. The means of connection to the actual structure of the shield was provided by a string, presumably of leather, passing through a boss ring. Fellmann nevertheless rejected the idea of the shield-boss, arguing that their presence in small pit graves and cremations, relatively small-spaced locations, would not allow the physical presence of big shields.¹⁰⁴³ Besides, some of them were decorated, and such work of art would have been lost with their insertion in the structure of the shield. So the only solution Fellmann found was their being implements of helmets.¹⁰⁴⁴ But the fact that these bronze discs are considerably different from one another and might have served different purposes is probable.

Site	Context	Notes	Chronology
Mouliana	Larnax	With bronze sword-type	LM III B
Kaloriziki	Tomb 40	With a bronze spear-head and a knife	LCyIII
Tiryns ¹⁰⁴⁵	Tomb XXVIII	With a bronze dagger and a helmet.	Sub-Mycenaean

¹⁰⁴² Snodgrass 1963: 44.

¹⁰⁴³ Fellmann 1984: 68-119.

¹⁰⁴⁴ Fellmann 1984: 68-119.

¹⁰⁴⁵ Verdelis 1963: 12-14, pl. 5.

Athens Kerameikos ¹⁰⁴⁶	Grave 24		Early Proto-Geometric
Skyros ¹⁰⁴⁷	X ¹⁰⁴⁸	With iron Spear-head	Proto-Geometric
Athens Kerameikos	Grave 40	With iron axe	Proto-Geometric
Athens Kerameikos	Grave 43		Proto-Geometric
Vergina	X	A pair with bow-fibulae.	Proto-Geometric
Vergina	Tomb N	Woman deposition	Proto-Geometric
Vergina	Tomb 12 VII	Woman deposition, positioned at waist height	Proto-Geometric
Vergina	Tomb AH II	X	Proto-Geometric
Amathus	Tomb 21	With bronze spear-head and a knife.	Proto-Geometric
Amathus	Tomb 18	With bronze knives	Geometric
Kavousi	X		Geometric
Athens Kynosarges	Unspecified Grave	Made of iron	Geometric
Idalion	X		Archaic II
Delphi	X		Archaic
Chauchitsa	Tomb 19		Iron Age
Chauchitsa	Tomb 20		Iron Age
Chauchitsa	Tomb 18		Iron Age
Isthmia	X		Archaic
Atalanti ¹⁰⁴⁹	Tomb II	With an iron sword and a knife	Proto-Geometric

Table 50: List of possible shield-bosses found in the Aegean, after Snodgrass 1964.

The circular boss shows evidence of a round shape of the shield in use in the PG, as a result of a stronger oriental influence and perhaps an innovation learned from the mercenaries militating with the Sea Peoples. It is though interesting the line of the *Odyssey* in which the shield of the ‘old Laertes’ is described as simply made of layers of leather.¹⁰⁵⁰ However a meager evidence, if we think of Laertes as belonging to a generation earlier than the time in which Odysseus undertakes his journey home, we may infer he also had old-fashioned

¹⁰⁴⁶ All the finds at Athens are in Kübler, Kraiker 1954: 33-42., pl. 37.

¹⁰⁴⁷ Papadimitriou 1936: 228-232.

¹⁰⁴⁸ Absent.

¹⁰⁴⁹ Dakoronia 1985: 165-167.

¹⁰⁵⁰ *Odyssey* XXII. 184.

belongings. His shield, lacking metal additions, would therefore suggest that before the time described in the Homeric poems, shields may have been entirely made of wood and leather.

8. Regional Contexts.

8.1. Mycenae.

Apart from the weapons found by Tsountas in the LH IIIB hoard, which were not therefore in a burial context, there are no weapons in the burial spaces of Mycenae ranging from LH IIIC to PG. The reason for this is once again speculative, and as suggested by Jung and Mehofer, it can be deduced from the fact that the Mycenaean hoard contained essentially metal objects and broken or unfinished swords probably kept there to be recast.¹⁰⁵¹ This treasuring of metals can on the one hand assert their value in the LBA and the resulting avoidance of the latest Mycenaeans in abandoning them within tombs, perhaps choosing other objects (particular pottery shapes?) to confer to the deceased the status of warrior. The little variety of objects found in the post-palatial graves at Mycenae cannot confirm this inference. Thanks to this hoard we can at least imply that by LH IIIB bronze Naue II were already circulating in this area.

8.2. Perati.

As regards weapons, there are three specimens available at perati, found in tombs 12, 38 and 123.¹⁰⁵²

Location	Swords	Spearheads	Chronology
Tomb 12 ¹⁰⁵³	1, bronze, type G	0	LH IIIC
Tomb 38 ¹⁰⁵⁴	1, bronze, type F	0	LH IIIC
Tomb 123 ¹⁰⁵⁵	0	1, bronze, type A	LH IIIC

Table 51: Offensive weapons from the cemetery of Perati, after Iakovidis 1980.

Tomb 12 contained a type G sword, belonging to the last phase of the Aegean bronze types, starting in LH IIIB. The blade is long, narrow and leaf-shaped, with convex and decorated midribs; decoration consisted of engraved lines. The hilt has a t-shaped pommel, a *quillon* at each shoulder; the plates on the handle were made of wood and covered with thin ivory plates, attached with bronze rivets.¹⁰⁵⁶

¹⁰⁵¹ Jung, Mehofer 2005: 114.

¹⁰⁵² Iakovidis 1980: 97.

¹⁰⁵³ Sandars 1963: 133.

¹⁰⁵⁴ Sandars 1963: 133.

¹⁰⁵⁵ Sandars 1963: 133.

¹⁰⁵⁶ Iakovidis 1980: 97.

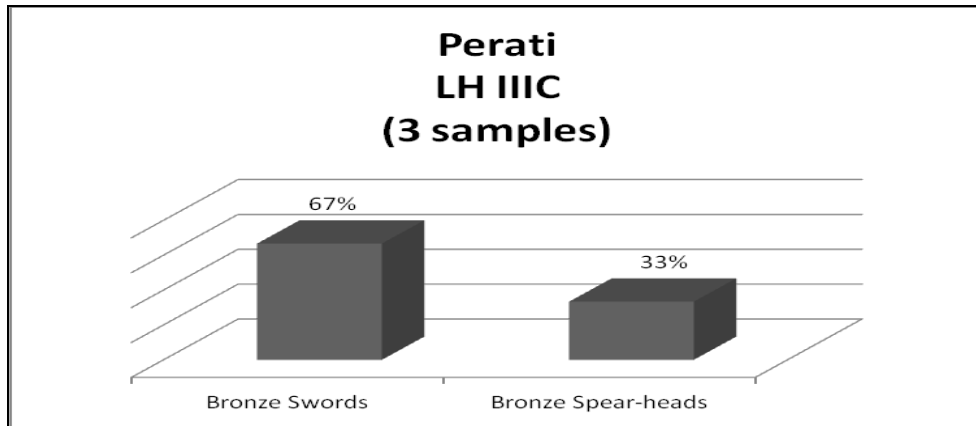


Table 52: Presence of swords and spear-heads at Perati.

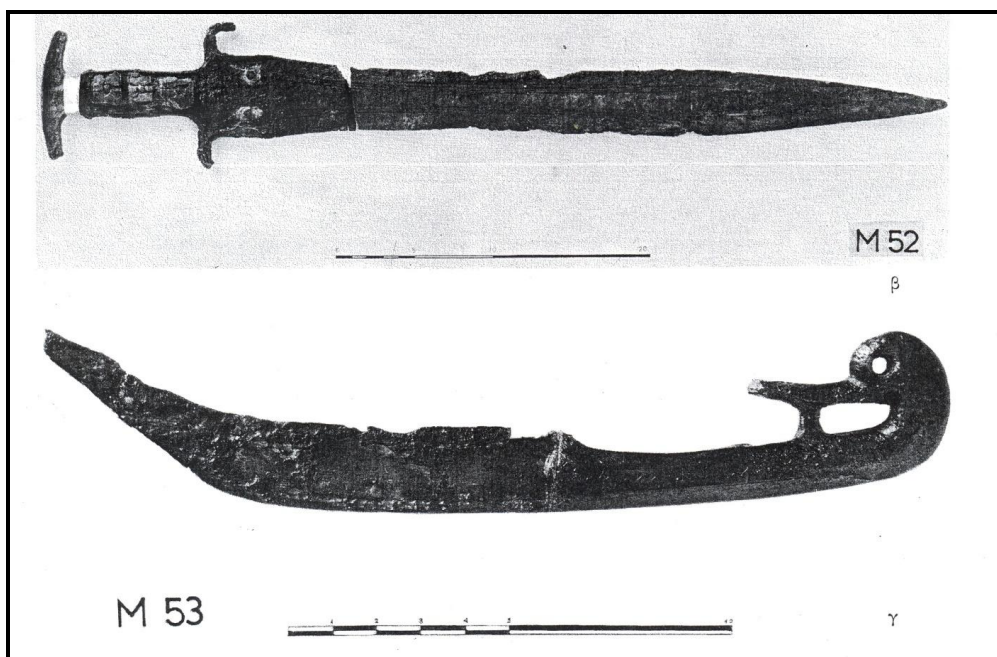


Figure 73: Aegean Type G sword and Syrian duck-head knife from tomb 12 at Perati, after Iakovidis 1970.

Tomb 38 contained a short bronze sword type F, again from LH IIIB-C. It has a straight blade with four engraved lines vertically decorating the centre of it. The hilt was t-shaped, with a slender and flat pommel and round shoulders. The handle was covered by wooden plates.¹⁰⁵⁷

¹⁰⁵⁷ Iakovidis 1980: 97.

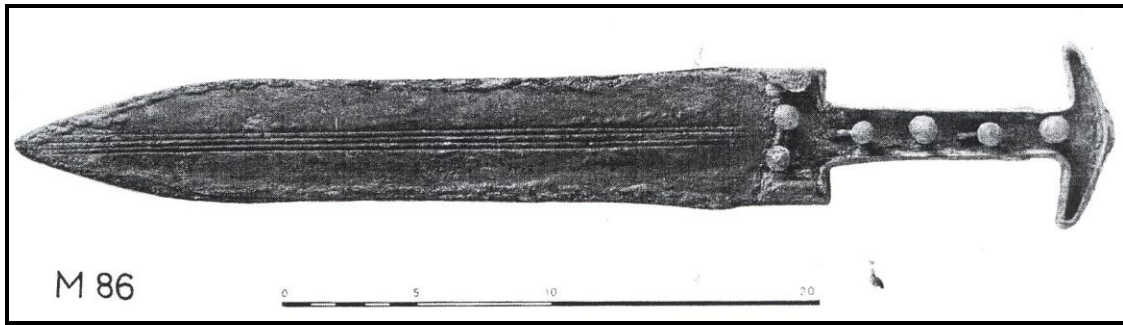


Figure 74: Aegean Type F dagger from tomb 38 at Perati, after Iakovidis 1970.

Tomb 123 had a bronze spear-head (Snodgrass' type A) in a very corroded state, the socket was long and tubular, the leaf-shaped blade was narrow with no midrib; with a rounded point. Perati is therefore a complex settlement, beginning in Mycenaean times and continuing to flourish during SM, thanks to its coastal and protected position that favoured trade, and its vicinity to both Athens and Euboea. Concerning weapons, Perati fully belongs to the Mycenaean tradition and no novelties of sort appear (apart from the imported Syrian duck-headed knife in tomb 53).¹⁰⁵⁸ It retains Aegean types even though experiencing flourishing commercial contacts with the Near-East.

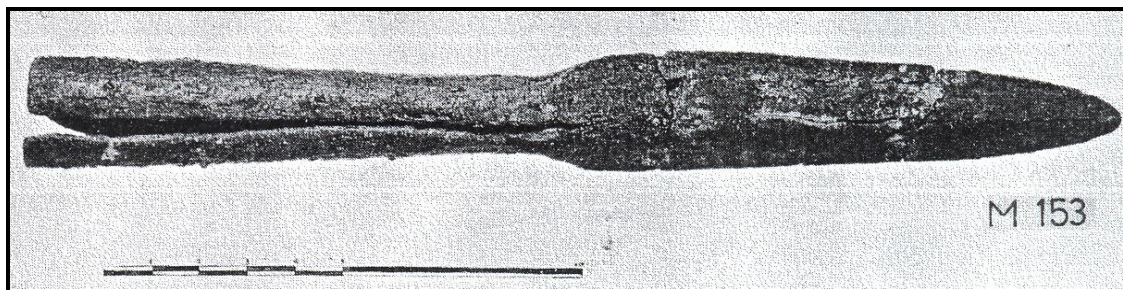


Figure 75: Bronze spear-head from tomb 123 at Perati. Iakovidis: 1970.

8.3. Salamis.

Although the remarkable number of single graves in its cemetery, Salamis only shows two samples of bronze Naue II sword types.¹⁰⁵⁹ These samples were found bent in a possible ritual act, but unfortunately no clear information is available about the context they were found in. A notable fact is that in a cemetery that testified the beginning of SM these foreign types had already been introduced still in bronze, contributing to witness that the gradual development of the iron forms had happened subsequently and should be placed in the PG period.

¹⁰⁵⁸ Iakovidis 1980: 97.

¹⁰⁵⁹ See the Archaeological Museum of Piraeus, first floor, room 2.

8.4. Athens.

Attica had large cemeteries and, in comparison with other areas of the Aegean, kept being inhabited uninterruptedly through the transition between the Bronze and the Iron Ages.¹⁰⁶⁰ As regards Athenian weapons, the graves presented both horned and cruciform sword types and their contemporary daggers during the palatial age;¹⁰⁶¹ so we could assume that these were the elite weapons and status symbols at the time.

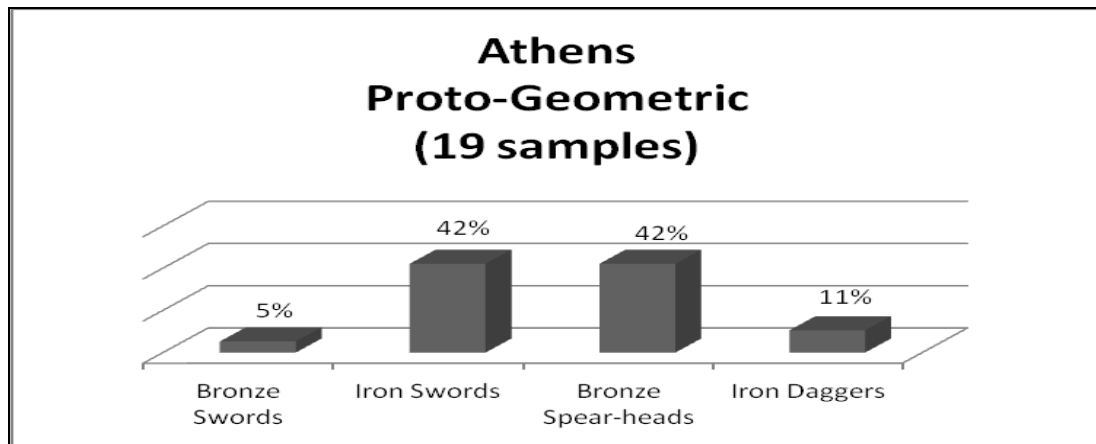


Table 53: Presence of offensive weapons at Athens, after Kübler, Kraiker 1939 – 1954; Ruppenstein 2007.

In the post-palatial periods Athens adopted the Naue II bronze sword types, even though the SM phase does not show weapons. From the LH IIIC to the PG periods the evidence shows Aegean swords being abandoned in favour of foreign sword and dagger types. The 10th century which starts the Athenian PG sees a resurrection of weapon offerings in the graves and the related ideological elevation of the warrior status, an attitude that proceeds into Geometric times.¹⁰⁶²

Location	Swords	Spearheads	Daggers	Chronology
Kerameikos Grave A ¹⁰⁶³	0	2 bronze, types C, D	1, iron, Naue II	EPG
Grave B ¹⁰⁶⁴	1, bronze, type Naue II	0	1, iron, Naue II	EPG
Grave 6 ¹⁰⁶⁵	1, iron, type Naue II	0	0	MPG
Grave 17 ¹⁰⁶⁶	0	1, bronze, type A	0	LPG
Grave 28 ¹⁰⁶⁷	1, iron, type Naue II	0	0	LPG

¹⁰⁶⁰ Snodgrass 1971: 196.

¹⁰⁶¹ Kilian-Dirlmeier 1997: pls. 14, 15, 24.

¹⁰⁶² Kilian-Dirlmeier 1997: pls. 14, 15, 24.

¹⁰⁶³ Kübler 1939: 101, pl. 31; Lemos 2002: 120.

¹⁰⁶⁴ Kübler 1939: 115; Lemos 2002: 120

¹⁰⁶⁵ Kübler 1939: 99.

¹⁰⁶⁶ Kübler 1939: 192, pl. 76.

¹⁰⁶⁷ Kübler, Kraiker 1954: 35.

Grave 32 ¹⁰⁶⁸	0	1, bronze, type F	0	LPG
Grave 34 ¹⁰⁶⁹	0	1, bronze, type A	0	LPG
Grave 128 ¹⁰⁷⁰	0	1, bronze, type A ¹⁰⁷¹	0	SM
Grave 129 ¹⁰⁷²	0	0	1, bronze, Naue	SM

Table 54: Offensive weapons from the Kerameikos cemetery at Athens, after Kübler, Kraiker 1939-1954; Ruppenstein 2007.

When iron swords are mentioned in the PG period, they always refer to the Naue II type. As I have showed, the same is not true for the bronze spear-heads of which the variety in the same period increases. The previously mentioned vulnerability of iron to oxidising soils does not allow us to go further into our investigation. The outstanding presence of weapons in the Kerameikos may be reconnecting to a desire of self-glorification and ritualised elevation of the warrior figure influencing more and more the EIA culture.

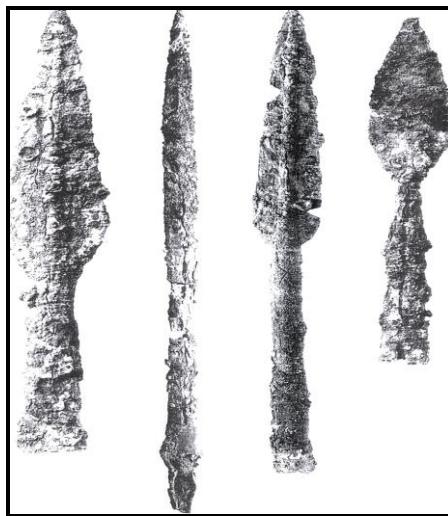


Figure 76: Three spear-heads and one sword from the Kerameikos, after Kübler 1939.

8.5. Lefkandi.

Euboea is a region of which the importance is second only to Attica as regards the presence of weapons.¹⁰⁷³ There are no Mycenaean tombs in Lefkandi, the cemeteries appear to start in the late SM and, at that stage, only an iron dagger was found among the burial

¹⁰⁶⁸ Kübler, Kraiker 1943: 36.

¹⁰⁶⁹ Kübler, Kraiker 1943: 37, pl. 38.

¹⁰⁷⁰ Ruppenstein 2007: 17.

¹⁰⁷¹ Avila type 9, see Avila 1983: 53, f. 114.

¹⁰⁷² Ruppenstein 2007: 18.

¹⁰⁷³ Lemos 2002: 125,126.

offerings.¹⁰⁷⁴ PG is instead represented by weapons found in both the Toumba cemetery and the ‘Heroon’.¹⁰⁷⁵ In the latter were found two burial pits hosting an inhumed woman and a cremated man. The male was associated with offerings imbued with warrior ideology, including an iron sword and a dagger of Naue II type, plus an iron spear-head of type A and remains of horse harnessing. Three other burials in the adjacent cemetery present an association of Naue II swords and type A spear-heads, while few of them only have a Naue II dagger.¹⁰⁷⁶ This will continue with no apparent break in the subsequent period, yet interestingly transferred to the preceding burial ground of Palia Perivolia.¹⁰⁷⁷ This may imply that after the warrior model expressed by the ‘Heroon couple’, weapons started to be displayed also in the single graves of the Toumba Cemetery during the LPG, later influencing the Palia Perivolia ground, which until then had not produced weapons.

Location	Swords	Spearheads	Daggers	Chronology
Skoubris Grave 46 ¹⁰⁷⁸	0	0	1, iron, Naue II	
Toumba ‘Heroon’ ¹⁰⁷⁹	1, iron, type Naue II	1, iron.	1, iron, Naue II	MPG
Toumba Grave 14 ¹⁰⁸⁰	1, iron, type Naue II	1, iron.	0	LPG
Grave 26 ¹⁰⁸¹	1, iron, type Naue II	0	0	LPG
Grave 39 ¹⁰⁸²	0	0	1, iron, Naue II	LPG
Grave 50 ¹⁰⁸³	1, iron, type Naue II	0	0	LPG
Grave 54 ¹⁰⁸⁴	0	0	1, iron, Naue II	LPG
Pyre 13	0	1, iron	SPG	SPG
Pyre 32	0	1, iron	SPG	SPG
Palia Perivolia Grave 46 ¹⁰⁸⁵	1, iron, type Naue II	0	SPG	SPG
Grave 47 ¹⁰⁸⁶	1, iron, type Naue II	1, iron, type A	SPG	SPG

¹⁰⁷⁴ Desborough 1972: 68.

¹⁰⁷⁵ Bridgewater 1991: 43, 67.

¹⁰⁷⁶ Lemos, 2002: 123.

¹⁰⁷⁷ See Popham 1979: pls. 106, 149, 152, 153.

¹⁰⁷⁸ Popham, Sackett, Themelis 1979: 252, 253.

¹⁰⁷⁹ Catling, Lemos 1991: 19.

¹⁰⁸⁰ Popham 1979: 176.

¹⁰⁸¹ Popham 1979: 183.

¹⁰⁸² Popham 1982: 219. Lemos 2002: 120.

¹⁰⁸³ Popham, Lemos 1996: 57.

¹⁰⁸⁴ Popham, Lemos 1996: 127; Lemos 2002: 120.

¹⁰⁸⁵ Palia Perivolia, see Popham 1979: pls. 106, 149, 152, 153.

¹⁰⁸⁶ Popham, Lemos 1996: 161.

Pyre 1	0	1, iron, type A	SPG	SPG
Pyre 13	0	1, iron, type A	SPG	SPG
Pyre 16	0	1, iron, type A	SPG	SPG
Pyre 32 ¹⁰⁸⁷	0	1, iron.	SPG	SPG

Table 55: Offensive weapons from the cemeteries of Lefkandi, after Popham, Sackett, Themelis 1979; Catling, Lemos 1991, Lemos 2002.

As we can see, the warrior status was expressed through grave offerings of weapons as in Athens, and swords and spear-heads were buried together. Spear-heads are always made of Iron and yet the type remains the Mycenaean type A in every instance,¹⁰⁸⁸ indicating that iron had not reached the area together with intrusive types, but merely as a technology applied also to traditional models.

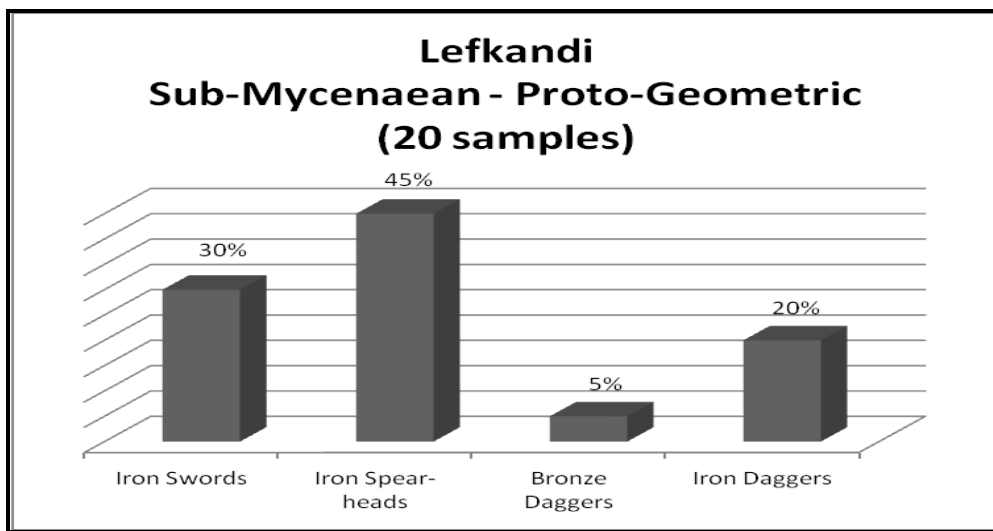


Table 56: Presence of offensive weapons at Lefkandi, after Popham, Sackett, Themelis 1979; Catling, Lemos 1991, Lemos 2002.

Whether the display of weapons (usually ritually bent or broken) started by the man in the Heroon had derived directly from Athenian influence or from abroad is hard to tell. The Attic influence on pottery already during MPG has already been exposed. It would be tempting to assume that the Heroon couple had tighter relationships with Athens, or maybe one of the two was Athenian and introduced this practice to Lefkandi. Yet the unique features of this burial make it hard to believe that there was any direct connection with Athens. Ideologies can travel by commercial relations and the difference between a superficial influence in fashion and a deeper social connotation is usually invisible.

¹⁰⁸⁷ Unpublished, mentioned by Lemos 2007.

¹⁰⁸⁸ Lemos 2002: 213, after Snodgrass 1963: 116, 117.

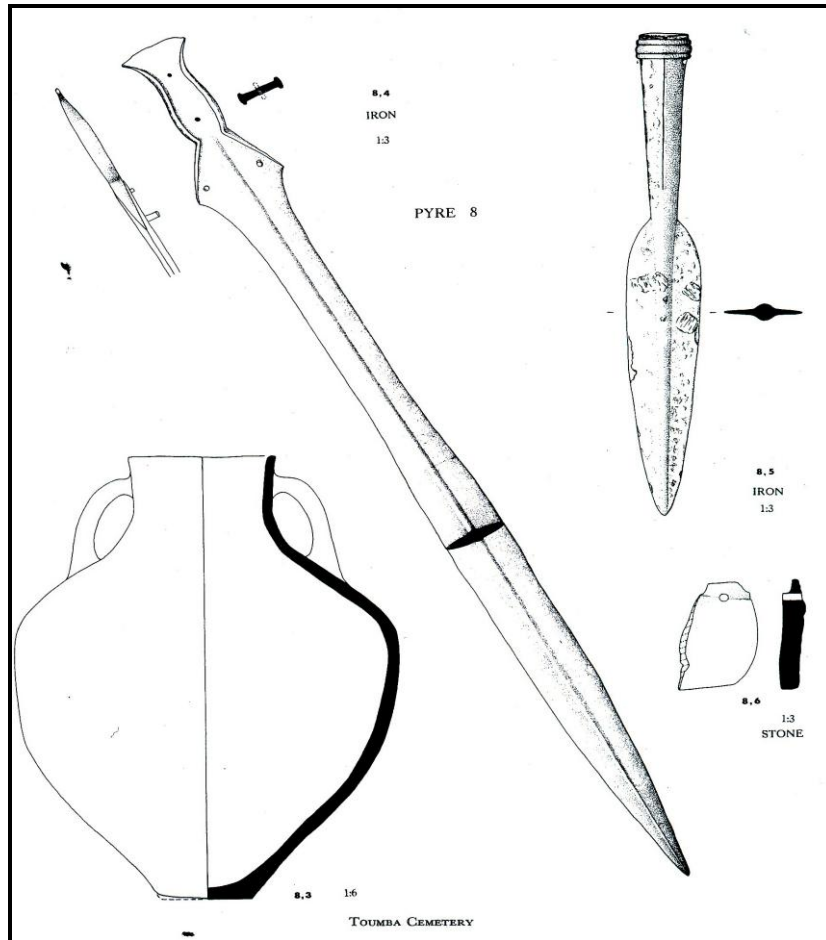


Figure 77: Some weapons among the finds from Lefkandi, Popham, Sackett, Themelis 1979.

8.6. Knossos.

The northern cemetery of Knossos offers several specimens of weapons.¹⁰⁸⁹ As Dickinson points out, some of these weapons are influenced by local fashion. Though still belonging to the Naue II typology, the Knossian swords have shorter blades and no ulterior decoration. They are therefore a simpler version, perhaps a fashionable imitation, of what we find in Athens and Lefkandi. Compared to the Athenian swords, of which specimens have been found in the North Cemetery, we can notice that the imports are immediately recognisable by longer blades, reaching about a meter in length. Their blades are decorated with plastic ribs and the handles have ivory or bone hilt plates attached by means of bronze rivets.¹⁰⁹⁰

¹⁰⁸⁹ Coldstream 1963: 43, f. 4.

¹⁰⁹⁰ Dickinson 2006.

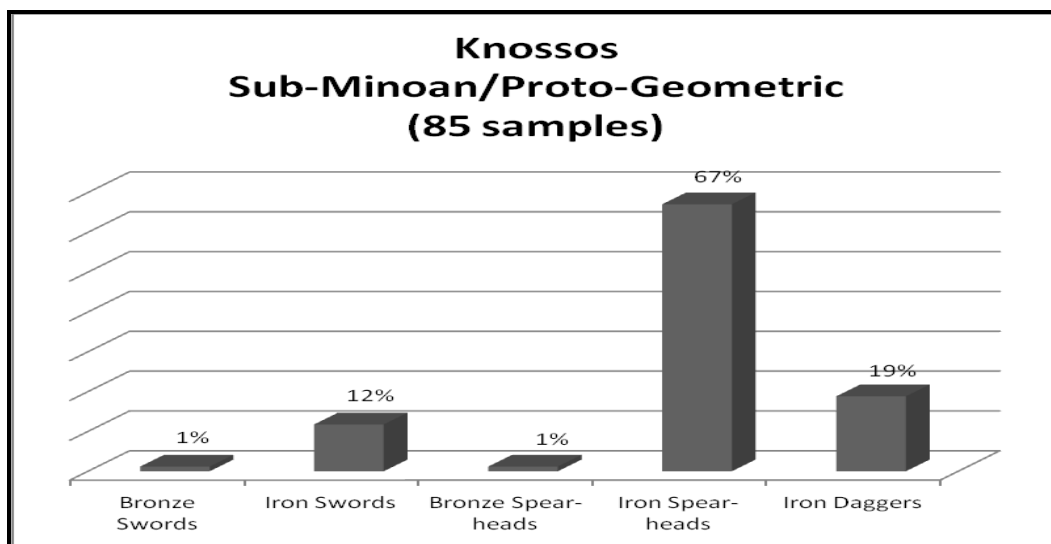


Table 57: Presence of offensive weapons at Knossos, after Coldstream, Catling 1996.

Iron spear-heads are also well represented in Crete. Tekke cemetery yielded up numerous fragmentary types, among which A, L, M and a V types from a PG chamber tomb.¹⁰⁹¹ The main regional characteristics reside in squared shoulders and straighter blades almost as long as their sockets, usually 30 cm long.¹⁰⁹² When their blades are too slender to be identified as spear-heads it could be inferred that they were used as javelins.¹⁰⁹³ Also Naue II daggers are found among the grave goods, all without any particular pattern in the combination, probably depending on personal preferences.¹⁰⁹⁴

Location	Swords	Spearheads	Daggers	Chronology
Tekke ¹⁰⁹⁵ Tomb D	0	1, iron, type unclear; socket only.	0	LPG
Tomb N	0	1, iron, type unclear; socket only.	0	LPG
Tomb O	0	1, iron, type unclear; socket only.	0	LPG
Tomb P	0	1, iron, type V	0	LPG
Medical School ¹⁰⁹⁶ Tomb 2	0	1, iron, type L	1, iron, Naue II	PG ¹⁰⁹⁷
Tomb 26	0	1, iron, type unclear; socket	0	PG

¹⁰⁹¹ Coldstream 1963: 38, f. 9.

¹⁰⁹² Dickinson 2006: 157.

¹⁰⁹³ Snodgrass 1963: 131.

¹⁰⁹⁴ Dickinson 2006: 157.

¹⁰⁹⁵ The Tekke Cemetery is from Coldstream, Catling 1996: 23-52.

¹⁰⁹⁶ The Medical School Cemetery is from Coldstream, Catling 1996: 59-282.

¹⁰⁹⁷ Proto-geometric.

		only.		
Tomb 28	0	2, iron, type L	1, iron, Naue II	PG
Tomb 45	0	3, iron, types A and L	0	PG
Tomb 60	2, iron, type Naue II	0	0	PG
Tomb 100	0	3, iron, types L, M.	0	PG
Tomb 107	0	3, iron, type L	2, iron, Naue II	PG
Tomb 123	0	0	3, iron, Naue II	PG
Tomb 175	2, iron, type Naue II.IA	6, iron, types A, L, M	1, iron, Naue II	PG
Tomb 186	0	1, iron, type L	0	PG
Tomb 201	1, bronze, type Naue II	1, bronze, unclear type.	0	SM
Tomb 208	0	0	1, iron, Naue II	PG
Tomb 218	1, iron, Naue II.IA	6, iron, unclear type.	1, iron, Naue II	PG
Tomb 283	2, iron, type Naue II	Corroded mass of unseparable spearheads, iron. 2 iron spearhead, corroded.	2, iron, Naue II	PG
Tomb 285	0	7, iron, javelin-heads, type L; corroded mass of 6 spears; corroded mass of 6 javelins.	3, iron, Naue II	PG
Tomb 292	0	2, iron, types L, M.	0	PG
Tomb 306	1, iron, type Naue II	1, iron, unclear.	1, iron, Naue II	PG
Fortetsa ¹⁰⁹⁸ Tomb 67.1	1, iron, type Naue II	0		Unclear.
Tomb 67.3	0	2, iron.		Unclear.

Table 58: Offensive weapons from the North Cemetery at Knossos, after Coldstream, Catling 1996.

The situation, as regards weapons, does not seem to represent a massive qualitative change if compared with the mainland, but the fashion of displaying weapons in tombs is visibly more frequent. Foreign artistic influences start to play a bigger role on Crete, especially those

¹⁰⁹⁸ Fortetsa, in Coldstream, Catling 1996: 284-288.

from Cyprus.¹⁰⁹⁹ Moreover, retention of bronze is limited. In fact iron is preferred for these weapons. The use of Naue II types for both swords and daggers seems to equal the rest of the EIA sites of the mainland.

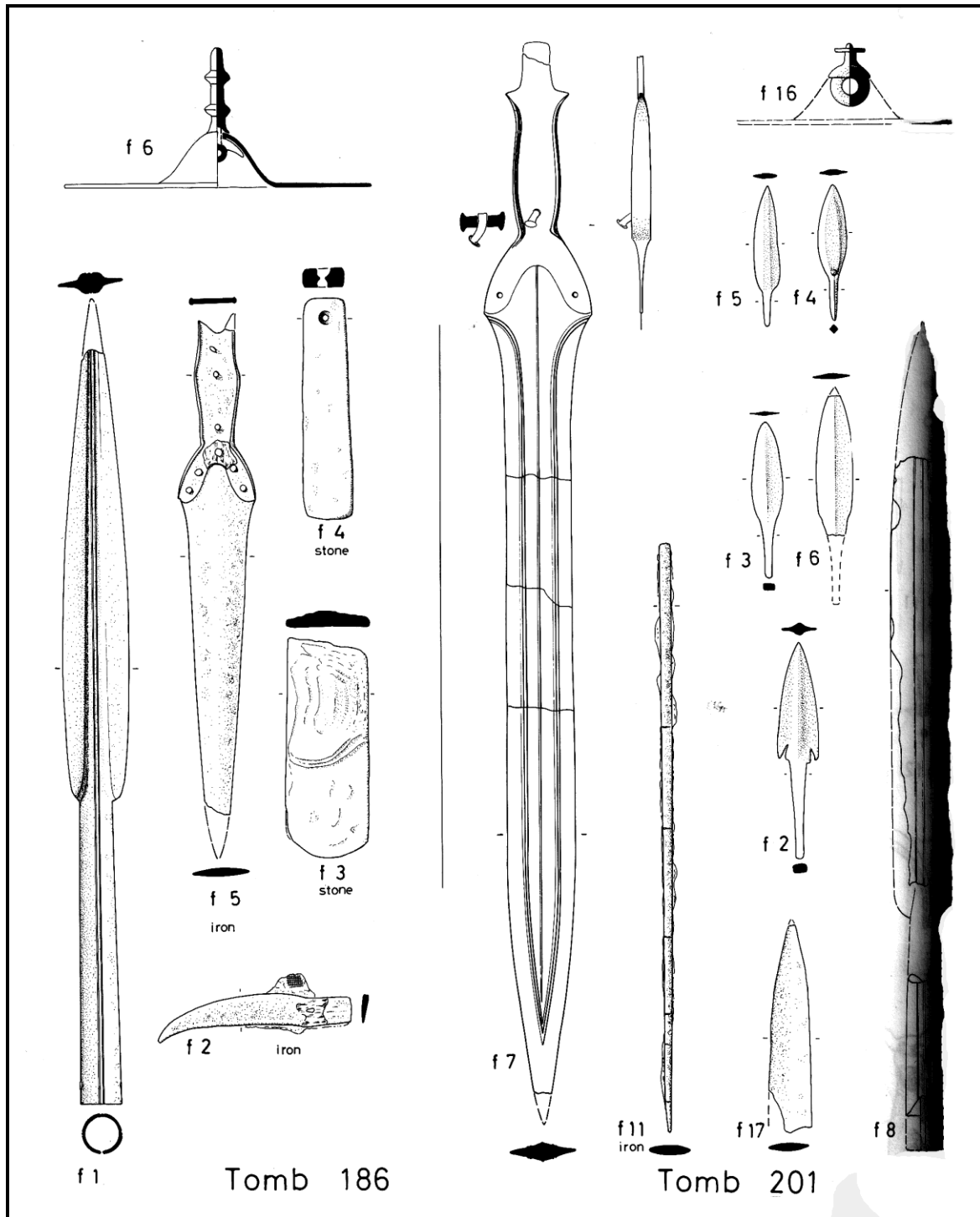


Figure 78: Specimens of weapons found in the North Cemetery at Knossos, after Coldstream, Catling 1996.

¹⁰⁹⁹ Gjerstad, Lindros, Sjöqvist, Westholm 1927: 131, f. 19.

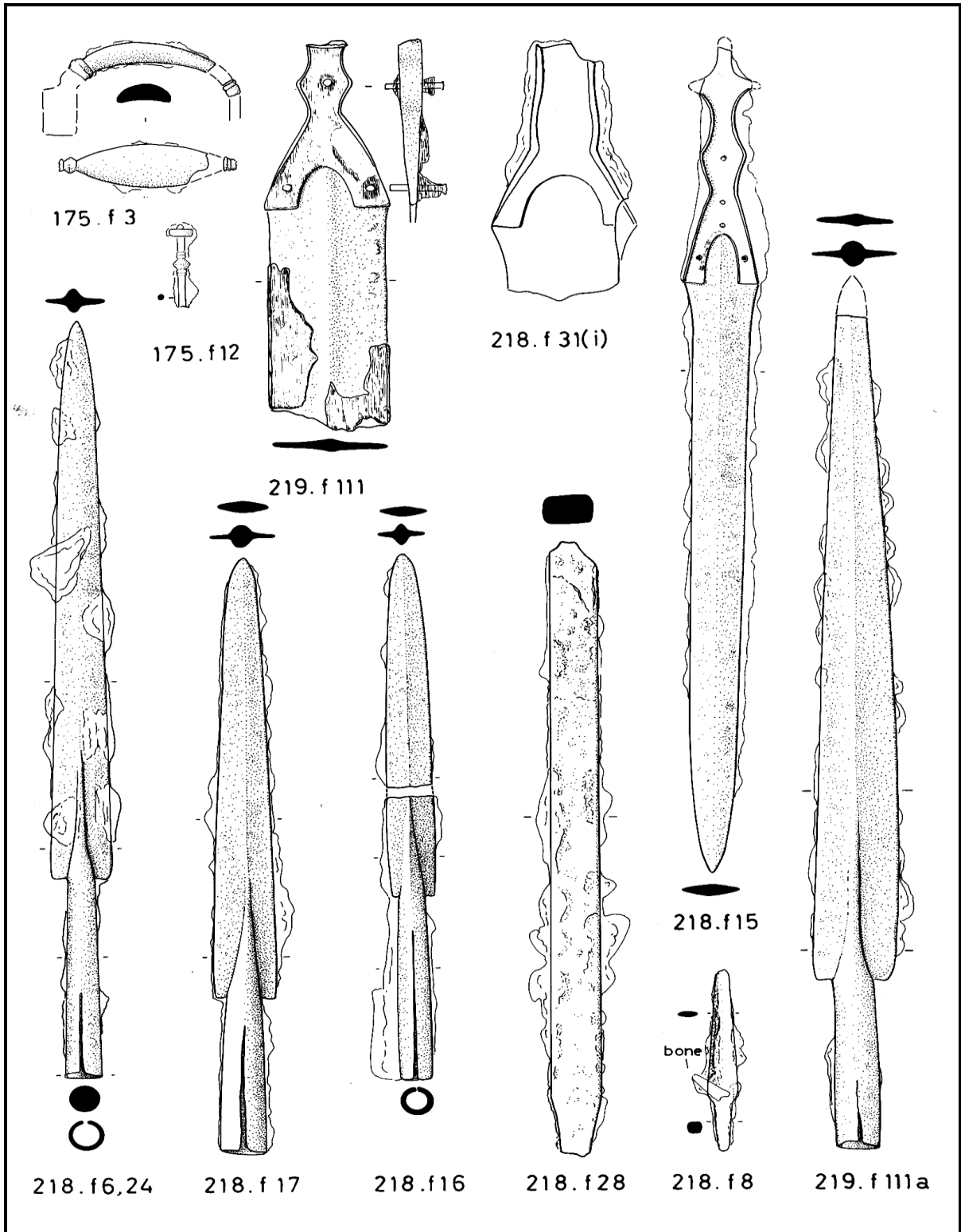


Figure 79: Specimens of weapons found in the North Cemetery at Knossos, after Coldstream, Catling 1996.

8.7. Naxos.

The site of Grotta, on Naxos,¹¹⁰⁰ had two different clusters of LH IIIC cemeteries: Aplomata and Kamini. Each one contained only one warrior grave. As aforementioned, in the tomb Δ of the Kamini cemetery a man was buried in the remains of a pyre, he was equipped with a bronze Naue II sword, a spear-head of unspecified type and a butt-spike from the same weapon. At Aplomata cemetery, tomb A, the situation is not as clear, but we can imagine the same modality.

Location	Swords	Spear-heads	Chronology
Aplomata Tomb A	1, bronze sword, type Naue II	0	LH IIIC Middle
Kamini Pyre Δ	1, bronze, type Naue II	1, bronze, type A? ¹¹⁰¹	LH IIIC Late

Table 59: Offensive weapons from the cemeteries of Naxos, after Vlachopoulos 2006, 2012.

Together with these weapons there was a wealthy display of objects that is explained by Deger-Jalkotzy as a stable prosperity of the island after the economic and political control exercised by the palaces.¹¹⁰²

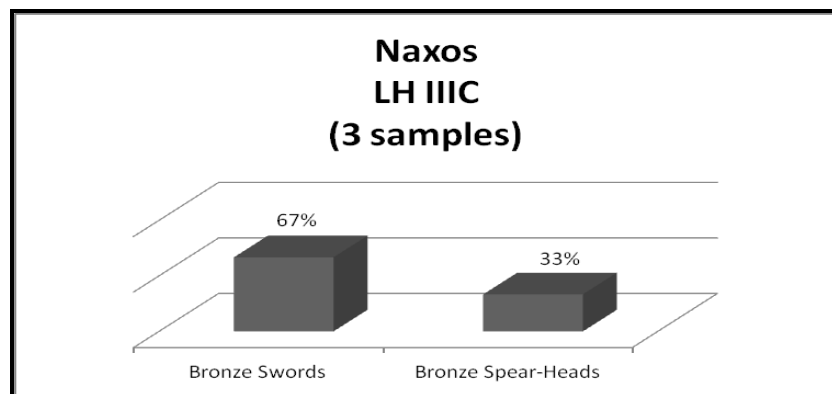


Figure 80: Presence of offensive weapons at Naxos, after Vlachopoulos 2006, 2012.

Vlachopoulos has recently pointed out that the Naue II swords found in Aplomata A and the Pyre burial at Kamini Δ are perfectly integrated in the material of the so-called ‘Aegean Koiné’. There is no evidence of newcomers on the island, whether violent or not. He rather agrees on a network of commercial and cultural contacts between the Aegean centres during LH IIIC, reaching its acme during LH IIIC Middle. A metallurgical koiné of objects produced by the same technology took place indeed not only in the Aegean, but also in the Eastern Mediterranean, the Adriatic and the Italian peninsula. Witnesses of this commercial contacts

¹¹⁰⁰ Kontoleon 1971; Lambrinouidakis 1980: 259-262; Kardara 1977.

¹¹⁰¹ Vlachopoulos 2006: 259-303.

¹¹⁰² Deger-Jalkotzy 2006: 162-163.

of Naxos with Europe and Italy are the Naue II swords of which we find ulterior specimens in its burial clusters.¹¹⁰³

¹¹⁰³ Vlachopoulos 2012: 434-435.

Section B: Jewellery.

1. Introduction to jewellery.

A second important class of metal objects found in graves which can inform us about continuity and change in the transition between the LBA and EIA is represented by jewellery. If it is true that not all metals can survive without deteriorating in presence of particular chemical reactions, there are some, like gold, that never change their composition in time, and others like bronze, which even in oxidizing contexts can last long enough for us to observe and reconstruct their initial condition. When metals are worked into different daily objects they are like imperishable marks of the civilisation which has produced or adopted them. Unless very rare cases of imitations of pottery vases made of bronze, most of the metalwork found in the burials under review, when not part of weaponry, are represented by jewellery.

Judging by grave assemblages, in comparison with the Mycenaean period, precious metals like gold and silver appear rarely utilised to create LH IIIC and EIA jewels. If the LH IIIB sources for gold were the Caucasian and Balkan regions,¹¹⁰⁴ silver mines were being exploited in Attica, Macedonia and Thrace.¹¹⁰⁵ There is no reason to believe that these metals could not continue to be imported from the same regions during the transition to the EIA. Yet the absence of specialised artisans could perhaps discourage the import of raw metal ores and encourage imports of finished products.¹¹⁰⁶ Yet it is not so clear whether artisans could still be hired for particular occasions, such as the funerary gold plaques covering a child deposition at Kamini, Naxos,¹¹⁰⁷ or the golden jewellery of the woman in the Toumba building,¹¹⁰⁸ too complex to be local improvisations. What did not change from the LBA is the use of tin and copper to make bronze objects. Greece was poor in tin and her main resources could be various: Caucasus, Western-Europe, Afghanistan.¹¹⁰⁹ But given that the technology necessary to make the bronze alloy might have come from the Balkans,¹¹¹⁰ it would be more logical to individuate somewhere in the Eastern-European area the source of tin, copper and later finished bronze objects, especially when the Balkans became the nearest source for the

¹¹⁰⁴ Konstantinidi 2001: 6.

¹¹⁰⁵ Higgins 1980: 10.

¹¹⁰⁶ For a complete description of extraction, preparation, manufacture and sources of Bronze Age metals and precious stones see Konstantinidi 2001: 5-18; Giardino 2002: 111-193.

¹¹⁰⁷ Vlachopoulos 2006: 49.

¹¹⁰⁸ Lemos 2002: 133.

¹¹⁰⁹ Konstantinidi 2001: 7.

¹¹¹⁰ McGehan-Liritzis 1983: 152-155.

circulation of European craftsmanship in the post-palatial periods. This attention on the Balkans will be often proposed from now on, since funerary customs and metalwork indicate a convergence of factors which leads towards the Balkans if not as the ultimate source, at least as a contact with further lands, already known by the Mycenaeans and now sought by their successors for still unclear reasons.

As regards the use of iron during the PG period, it is necessary to cite Haarer's research.¹¹¹¹ He explained that the exchange ratio between iron and the other metals as exposed in the Assyrian texts spanning from the Old Period to the New one (roughly from 2000 to 547 BC), can be studied to understand whether iron became popular because it was cheaper than bronze or not. According to his study, if up to 1600 BC iron was exchanged up to ten times the quantity of gold, in the 6th century BC its value becomes visibly lower than that of bronze. This phenomenon was probably not different in the Aegean. If this decrease was gradually reached and continued steadily through time, at some point the two values of Bronze and Iron must have been equal and that was probably later than the EIA period.¹¹¹² If from the 15th century BC iron had therefore begun its slow decrease in value, it is probable that in the period from the 12th and the 9th centuries BC it started to become, if not cheaper than bronze, more and more affordable to the PG elites. It was preferred to bronze in a number of instances, not only for its intrinsic qualities, but also because of the status symbols represented by the swords it had contributed to improve. In my scrutiny I have observed that graves including jewels in form of both sheer adornments and cloth fastenings were not many. Unlike pottery, constantly present among the grave offerings, jewels seem to appear only in those cemeteries where an elevated degree of prosperity is witnessed, also visible in the rest of the offerings. The adornment of wealthy individuals in both family and single burials is something rooted in the Aegean civilisation since the EBA,¹¹¹³ probably as an expression of power, wealth and elevated status. We do not have enough clues about a Prehistoric Greek religious system to understand whether these accoutrements granted a better outcome in the after-life or were simply placed in the grave to impress the participants to the funerary ceremony and honour the deceased family. However, when the palaces cease their activity, the tradition to display jewels does not stop, but the unclear political situation makes it hard to understand what the graves with jewels wanted to imply, whether descendents of Mycenaean lineages (as the presence of heirlooms would suggest) or looters who built their fortune at the

¹¹¹¹ Haarer 2001: 255-273.

¹¹¹² Haarer 2001: 265.

¹¹¹³ Cline, Laffineur 2012: 443-447.

expense of the former. There is evidence of LH IIIC burials with jewels in both collective tombs continuing the Mycenaean practices and simple tombs, during the SM and PG periods. Though there are seldom golden and silver jewels decorated with the specialised craftsmanship at the service of the Wanaktes in the Bronze Age.

Most of the jewels produced in the transition under study, unless heirlooms or imports, present a simple manufacture. A good examples is the bronze and iron rings found in the Kerameikos during SM. Ruppenstein gives a detailed account on their shape, making clear that the majority was made of reasonably thin hoops of metal wire.¹¹¹⁴ They could be completely closed or open, with no bezel, no precious stones embedded, nor decorations if not basic excisions or incisions. A minority of these rings was also spiral-shaped, and these basic models constituted also the general shape of the bracelets and earrings as well.¹¹¹⁵ If at first sight the jewels produced in the post-palatial periods, made either of bronze or iron (with very rare specimens of gold and silver), appear poor and without any intrinsic value, it should be pointed out that much more importance was assigned to other jewels, exotic and rare before the collapse, but normal a century later. These are those fibulae and long pins which again seems to be part of a bigger circulation of goods involving not only the Aegean, but also Central Europe and Italy, as a result of the wide spreading of the Hallstatt cultures and its status symbols.

¹¹¹⁴ Ruppenstein 2007: 206-217.

¹¹¹⁵ Lemos 2002: 133.

2. Ancient jewellery.

Jewellery found in the post-palatial period consisted of several items, a few of them represent a clear continuity of Mycenaean repertoires, others become popular especially in the EIA.

- **Amulets:** when an object embodied in the social mind-set an invisible power and conferred good luck or protection to his/her holder, it acquired the status of amulet. The qualities of an amulet came either from the material they were made of or by the image or religious symbol they represented. Foreign influences are particularly visible in the amulets found in Minoan and Mycenaean burial contexts: the cemetery of Perati (LH IIIC) had amulets Imported from Egypt, Near East and Cyprus.¹¹¹⁶ Among them there were two plaques carrying the name of Ramses II; the god Bes; the hippo goddess Thoueris or the crocodile deity Sobek.¹¹¹⁷ These amulets, found in Greek LH IIIC graves can certainly imply that the journey into the after-life was still deemed as perilous and that there was an absence of local apotropaic rites if foreign amulets were used to protect the deceased.
- **Earrings:** five main types: 1. Tapered hoops; 2. Rings with intersected heads; 3. Rings with a pyramidal shapes connected in the centre; 4. hoops or spirals with granulated pendants. Earrings could be either worn singly or in pairs and were perhaps used by both sexes.¹¹¹⁸
- **Pins:** an accessory used throughout the Bronze Age, made mostly of metal. Their function is still unclear but is very probable that they were used as a dress fasteners. It can be easily confused with hair-pins, the difference lies often in their position on the bodies in the graves. Evidence shows them in pairs most of the time and related to female burials. LH IIIC bronze specimens had a length varying between 18 and 38 cm.
The main types include:¹¹¹⁹ type a) wire pins with round sections and a head generally flat, also produced in many variants. Specimens of this type come from LH IIIC Cephalonia, with spiralling head. Type b): pins of heavy metal forms, perforated below to insert a thread. The first specimen ever found come from Cheliotomylos, Corinthia. Type c): pins of heavy metal shank with globes or swellings on the shank or just below the head. The type has a major concentration in LH IIIB-C Argolid. This

¹¹¹⁶ Cline 1994: 91-93.

¹¹¹⁷ Kostantinidi 2001: 23.

¹¹¹⁸ Hall 1915: 241.

¹¹¹⁹ See Tripathi 1988.

includes four different variants: conical or acorn-headed with a spherical projection below it; with small swellings above and below from LH IIIC and SM contexts, with a swelling instead of a globe also dated LH IIIC. Type d): metal pins with heads made of a material different from the one of their shafts, an example comes from Routsis, Attica (LH II-IIIB) made of silver with an amethyst head: to this group can be added those metal pins with gold-plated heads.

As Kostantinidi suggests, the incidence of pins throughout the whole Bronze Age may signify that these accoutrements were not required by the fashion of the time, because otherwise they would have been found very frequently in both settlements and tombs. Since pair of pins in men burials are rare, it might be inferred that single pins were used to fasten a male cloak instead.¹¹²⁰ Jacobsthal subdivided pins according to their profile characteristics and their occurrence together with ceramic styles. According to him pins can be organized as follows:¹¹²¹

- a) SM pins: made of bronze, with the shank and globe cast in a single piece; the shank above the globe proceeds on, showing engraved rings and ending with a projection which is at times plane, others semiglobular or nail-shaped.¹¹²²
- b) PG: bigger and longer, made either of bronze or iron with bronze globe, which is placed lower in comparison with the previous period. The bigger the distance of the globe from the head, the later their belonging into the PG timespan. The shank has a round section while the head was disc-shaped.¹¹²³



Figure 81: Globular pin from Athens (Kerameikos Museum), Mureddu 2014.

In the light of new evidence at the time, an ultimate classification was made by Snodgrass:

Type 1 is the common type during the LH IIIC and SM, presenting a disc-like head and a bronze globe down the shaft. This will become predominantly of iron during

¹¹²⁰ Kostantinidi 2001: 26, 27.

¹¹²¹ Jacobsthal 1956: 2.

¹¹²² Jacobsthal 1956: 2.

¹¹²³ Jacobsthal 1956: 2.

PG. This category, apparently inspired by the Mycenaean crystal rock-globed import found in Grave Circle A, seems to include all the three types described by Jacobsthal and it is indeed the only type to have continued and evolved into the EIA.¹¹²⁴

Type 2, that Snodgrass considers near-eastern, had a more extended, fixed, swelling and a series of tight ring-constrictions which turn the shank almost into a consecution of attached spheres.¹¹²⁵ The development of these pins is clearly gradual. It seems to pass through a SM phase where their use is minimal and their form is uncouth, proceeding into PG with a major use and a subsequent more articulated shape.¹¹²⁶

Type 3 is again included into the near-eastern imports. It has no swelling; the whole body widens from an extremity to the other, the tip is decorated by using a spatula.¹¹²⁷

Type 4 has a light swelling incised, and a truncated-cone head while the whole shank is engraved with rings; it would seem an Aegean type confined to the Peloponnese.¹¹²⁸

Type 5 fulfills the last category elaborated by Snodgrass and presents itself as a thin bronze shank terminating in a hooked head, again abounding in Middle-Eastern contexts.¹¹²⁹

- **Fibulae:** Lorimer had defined them a non-Mediterranean invention, emerging by the end of the Bronze Age as a new form of dress fastenings originated somewhere in Central Europe.¹¹³⁰ They might imply a change of fashion in the Aegean that some scholars link to a climatic modification and the adoption of heavier clothes like the *peplos*,¹¹³¹ still in use in classical times.

When they first appear, the material of which they are commonly made is bronze, iron specimens are found later in PG contexts. Kostantinidi reminds us that all the fibulae coming from Greek contexts were made of a single piece, a characteristic that they have in common with foreign specimens found in the Alps, Italy, and the western Balkans.¹¹³² There are two main types according to Blinkenberg:¹¹³³ 1. Violin-Bow Fibulae: this earlier type, with a flat bow, often decorated with northern motives, appears in LH IIIB and continues to be used until the PG period. There is a number of

¹¹²⁴ Snodgrass 1971: 226.

¹¹²⁵ Snodgrass 1971: 226.

¹¹²⁶ Snodgrass 1971: 226.

¹¹²⁷ Snodgrass 1971: 226.

¹¹²⁸ Snodgrass 1971: 226.

¹¹²⁹ Snodgrass 1971: 226.

¹¹³⁰ Lorimer 1950: 354.

¹¹³¹ Drake 2012: 1862-1870.

¹¹³² Kostantinidi 2001: 29.

¹¹³³ Blinkenberg 1926.

variants of the violin-bow: they can be simple, with the bow made of wire, twisted or straight; decorated bow and triangular catch-plate, while the body is papyrus-shaped; straight bow with knobs swelling in the middle; bow with elongated forearms; with a figure-of-eight loop. Blinkenberg divided the violin-bow types in two categories: simple and advanced, the advanced being those with a more elaborate plate including decorations. The distribution of the first category covers Mycenae (eight specimens, the highest number); Korakou; Sparta; Dictean Cave, Crete; Karphi, Aetos.¹¹³⁴ The advanced violin-bow fibulae are found again at Mycenae, Tiryns, Delphi, Thebes, Therapnoi, Vrokastro, Dictean Cave and Enkomi.¹¹³⁵ Further evidence comes also from Cephalonia¹¹³⁶ and Crete,¹¹³⁷ dating to a timespan going from LH IIIC to PG.

2. Arched Fibulae: this second type appeared at the end of LH IIIC, and kept being in use during the EIA until the Geometric period. Blinkenberg's chronology, endorsed by Furumark,¹¹³⁸ needs to be confronted yet by the unique import of a golden arched fibula coming from a LH IIIB chamber tomb at Dendra.¹¹³⁹ Indicating that the two forms might have been contemporary in their original context and possibly used for different purposes albeit as fasteners; the chronological evolution of the two types probably regards only Greece and it is not related to their invention, but simply to their adoption, according to necessity. Iconographic representations of fibulae are not available, apart from the passage in the *Odyssey*¹¹⁴⁰, where Penelope's dress is described as having twelve fibulae on it.



Figure 82: Arched fibulae from Athens (Kerameikos Museum), Mureddu 2014.

¹¹³⁴ Desborough 1964: 55.

¹¹³⁵ Desborough 1964: 55.

¹¹³⁶ Tylour 2010: 186.

¹¹³⁷ Boardman 1961: 37.

¹¹³⁸ Furumark 1941: 94.

¹¹³⁹ Desborough 1964.

¹¹⁴⁰ Homer, *Odyssey*, XVIII, 292-294.

- **Buttons:** items interpreted as buttons can be of four different types: conical, concave-conical, biconical, discoid. The materials are various; clay and steatite buttons were popular in the Mycenaean age,¹¹⁴¹ but they remain popular fastenings during the whole Bronze Age, as seen in the LH IIIC graves at Perati. Their disappearance in SM in concomitance with a major popularity of pins and fibulae would suggest that with the arrival of the latter, buttons were no longer necessary, and perhaps, that clothes were of a different fashion.
- **Bracelets:** four main types are found in the Bronze Age. Type 1 is a simple metal wire or band with thickened ends, that were bent one over the other around the wrists. Type 2 is a spiralling string deemed to be a foreign shape, appearing for the first time in gold inside the treasure of Tiryns. Type 3 is simply a golden leaf covering a softer material, probably leather. Type 4 consists of a thread passing through a series of beads or seal-stones.¹¹⁴²
- **Finger Rings:** popular during the whole Bronze Age and going on until and over the Early Iron Age,¹¹⁴³ they could be made of bronze, silver and gold. They present themselves in two main shapes:
 - a) With a loop of simple or spiralled wire.
 - b) With a bezel soldered on the wire; which could be a metal plate with no decoration, decorated or with an inlaid semiprecious or precious stone.



Figure 83: Geometric jewellery from Athens (Kerameikos Museum), Mureddu 2014.

¹¹⁴¹ Iakovides 1977: 113-119.

¹¹⁴² Kostantinidi 2001: 29.

¹¹⁴³ Ruppenstein 2007: 206-216.

Two types of bronze rings did not survive the early SM period. One is a Mycenaean type with oval (and often decorated) bezel, found both in bronze (Athens and Salamis) and gold (Mouliana and Vrokastro). The second has a bezel created by a double spiral and has instead European origins; visible in Central European specimens and in peripheral areas of Greece like Macedonia, Epirus, and Thessaly, although both Athens and Lefkandi yielded up some of these types. Achaea produced eight rings of which three were golden and five of bronze, in form of plain circles or with bezels and amber gems found detached.¹¹⁴⁴

¹¹⁴⁴ Papadopoulos 1979: 140.

3. Pins and Fibulae in Context.

Understanding the origin and reasons behind the adoption of foreign accessories like bronze pins and fibulae after the collapse of the Mycenaean age is controversial. Hall had suggested that their arrival to Greece were due to the descent of the Illyrians and Thesprotians from the north, bringing with them items acquired from farther northern populations.¹¹⁴⁵ Later studies recognized the violin-bow fibulae in the evidence left by the pile-dwelling culture of Middle Bronze Age Northern Italy (Peschiera).¹¹⁴⁶ The presence of fibulae in Assyria during the LBA was also interpreted as a result of the exchanges of goods patronized either by the last Mycenaean traders or the Hittites before their own collapse.¹¹⁴⁷ Their inclusion in the class of dressing fastenings should imply a thorough knowledge of the dressing type, but clearly we have no satisfactory evidence for that in the Bronze Age fashion, while the Geometric one is too remote to be thought as representative of the previous periods. After all, as Desborough points out, SM is very close to the Late Mycenaean period and on the one hand this should account for a similarity of fashion; on the other hand these new fasteners betray a significant change of dressing types, leaving us in an impasse.¹¹⁴⁸ Hall clearly stated that such fastenings were not in use during the Mycenaean period because of the different system of dress-closure in use, made at the time of strings and buttons.¹¹⁴⁹ What Mycenaean men wore, according to iconography, was a short tunic and a cloak. The new fasteners postulate a retention of the tunic, but also the exchange of the cloak with a sort of heavier shawl.¹¹⁵⁰

Women on the contrary seem to have changed more deeply their fashion. They appear to be wearing in the Mycenaean period a long and fitting dress or alternatively a flanged skirt and a short jacket, which, according to Hall, were MH introductions.¹¹⁵¹

¹¹⁴⁵ Hall 1915: 241.

¹¹⁴⁶ Furumark 1941(B): 91.

¹¹⁴⁷ Furumark, 1941(B), 91.

¹¹⁴⁸ Desborough 1972: 294.

¹¹⁴⁹ Hall 1915: 241.

¹¹⁵⁰ Desborough 1972: 294.

¹¹⁵¹ Hall 1915: 235.



Figure 84: Proto-Geometric pins, fibulae and rings from Athens (Kerameikos Museum), Mureddu 2014.

The second type was already out of fashion during the late Mycenaean period; the first type must have been adapted in the ‘Dark Ages’, or substituted by a new form previously unknown: the Homeric *peplos*, created by sewing together a number of fabric strips, doubled up and sewn again by their short ends; the two wings had to be fastened at the height of the shoulders, bringing then their extremities down at the waist, where they had to be fastened again.¹¹⁵² The introduction of the new costume agrees with the adoption of the long pins as fasteners for the shoulders, a position in which they are usually found in tombs, as witnessed by our main information sources about the disposition of pins during the PG period: two sites with basically the same evidence, the Kerameikos cemetery of Athens¹¹⁵³ and the Fusco cemetery of Syracuse,¹¹⁵⁴ where 12th century depositions with double pins, one for each shoulder, are found most of the time, in contrast with depositions with single pins which seem to be related to male burials. At the same time single specimens of pins are found also in male depositions, but their location in the grave changes, and is apparently on the chest of the deceased,¹¹⁵⁵ implying a possible use of it to fasten the shawl or mantle. The use of *peploi* and shawls must have spread out in the whole Aegean since they were used both in the mainland and on the islands.¹¹⁵⁶

¹¹⁵² Orsi 1895: 132.

¹¹⁵³ Kübler, Kraiker 1954: 25.

¹¹⁵⁴ Lorimer 1950: 339.

¹¹⁵⁵ Desborough 1972: 295.

¹¹⁵⁶ Desborough 1972: 296.

The provenance of pins has long been debated, the Near-East seems plausible for some of the variants, but two early silver specimens from Cyprus would endorse Desborough's inference of a possible Cypriote provenance from there, as a result of near-eastern contacts. Nevertheless the type with small head and elongated swelling found at Vergina, Macedonia, is almost certainly a northern type, opening that channel of influence as well.¹¹⁵⁷ The globular type, defined type 'A' by Snodgrass, becomes the most popular during PG, refining the shape of its shaft from a nail-like head, to a disc-like one and finally to a combinational shape of a disc surmounted by a knob in the Geometric phase. An interesting feature is the fact that during the EIA bronze is gradually replaced by iron to produce the shafts of the pins.¹¹⁵⁸ The mix of Iron shafts and a movable separate bronze globe is one of the most popular types in the PG Kerameikos, but also in contemporary contexts at Theotokou, tomb B (Thessaly) where three pins of this kind were found together. Their position was as usual on the shoulders, but also on the breasts and on the waist.¹¹⁵⁹ Mouliana and Vrokastro also produced one specimen of the same pin from an EPG context.¹¹⁶⁰

As regards literary evidence for pins, we can count to a certain extent on a few sources. Homer is the earliest and foregone one:¹¹⁶¹ in the *Iliad*, Hera's *peplos* is said to be fastened with two gold pins *κατα στῆθος*, upon her chest. In another passage Athena mocks a wounded Aphrodite, claiming that her soft skin had gotten scratched by stroking by mistake the pin of a maiden.¹¹⁶² Also in the *Odyssey* Antinoos gifts Penelope with a *peplos* with two gold pins and six gold fibulae of which the position on the body is untold.¹¹⁶³ That pins were worn upon the chest is also shown in Sophocles, where they appear on the dresses of the Thracian maidens.¹¹⁶⁴ Another Sophoclean description can be found in the episode of Oedipus striking his eyes with a pin.¹¹⁶⁵ Euripides describes another scene where pins are used as weapons, when Polymnestor is blinded by the Trojan women.¹¹⁶⁶ Finally Herodotus recalls an episode in the battle between Aegina and Athens, where the only Athenian survived was killed by the pins of upset Athenian women.¹¹⁶⁷ All these instances account for the regular use of pins by the women of various Greek areas. What their position in tombs says is that they were stuck

¹¹⁵⁷ Desborough 1972: 298.

¹¹⁵⁸ Desborough 1972: 299.

¹¹⁵⁹ Wace, Thompson 1912: 213.

¹¹⁶⁰ See *Arch. Eph.* 1904: 26.

¹¹⁶¹ Homer, *Iliad*, XIV, 178-180.

¹¹⁶² Homer, *Iliad*, V, 422-425.

¹¹⁶³ Homer, *Odyssey*, XVIII, 292-294.

¹¹⁶⁴ Sophocles, *Trachiniae*, 924, 925.

¹¹⁶⁵ Sophocles, *Oedipus*, 1266.

¹¹⁶⁶ Euripides, *Hecuba*, 1169.

¹¹⁶⁷ Herodotus, V, 87.

into the fabric upwards, starting from the abdomen and twisting obliquely before ending up in an horizontal position on the chest.¹¹⁶⁸

Fibulae were not a PG invention, the origin of the earliest type, the violin-bow one, in the Bronze Age is itself a hard task. Initially Desborough admitted the possibility of a local development of the arched fibula, starting from the northern prototype offered by the violin-bow types.¹¹⁶⁹ Nonetheless this idea is not supported by evidence, since the Dendra specimen is contemporary with other specimens found in the Italian sites of the Bronze Age.¹¹⁷⁰ Even in Italy then their introduction in southern contexts and in Sicily occurs as early as the *Bronzo Recente* phase, contemporary of that LH IIIB which saw their arrival into Greece within the same chronological phase.¹¹⁷¹ If we turn to the Balkans, another area presenting similar fibulae, as another possible means of transmission, we would notice that one the two types found there, called by Caner ‘type a’, is the same found in Southern Italy and appears in the Balkans again in that timespan coinciding with the Greek LH IIIB and C.¹¹⁷² It is clear then that rather than a source for the Greek fibulae, their use in both those areas are nothing but the result of the same wave of influence. Caner’s theory of a link with the far northern Urnfield culture may be a possible explanation.¹¹⁷³ It is interesting how in a funerary context in Bodrum, Turkey, a bow fibula has been found together with a Late Bronze Naue II sword,¹¹⁷⁴ a fact that might be a coincidence, but strongly addresses our attention towards a possible voluntary association; especially when Italian examples from Northern Italy have been found in burial contexts with Peschiera daggers,¹¹⁷⁵ another post-palatial intrusive weapon type of which the ultimate origin is unclear. Fibulae become much more popular from SM onwards, acquiring the arched forms that will remain constant throughout the period.¹¹⁷⁶ If their system of fastening differentiates itself from the pins, their use seems to be the same. Desborough’s conjecture suggests that the shape of the arched fibula is, in comparison with the previous type, more apt to seize thicker layers of clothes and wherever they were found in large amounts they could have been linking different accessories to the main outfit.¹¹⁷⁷ This would

¹¹⁶⁸ Jacobsthal 1956 : 95.

¹¹⁶⁹ Desborough 1964: 57.

¹¹⁷⁰ Lo Schiavo 2010: 41.

¹¹⁷¹ Lo Schiavo 2010: 41.

¹¹⁷² Caner 1983: 27.

¹¹⁷³ Caner 1983: 27.

¹¹⁷⁴ Caner 1983: 27.

¹¹⁷⁵ Vasić 1999: 12.

¹¹⁷⁶ Vasić 1999: 296.

¹¹⁷⁷ Vasić 1999: 296.

also imply a climatic change which necessitated thicker fabrics for clothing, though hard to prove.



Figure 85: Some fibulae and rings from Athens (Archaeological Museum of the Kerameikos), Mureddu 2014.

Attributing to fibulae the simple role of dress fastener could be reductive. There are instances where several fibulae are found in a tomb, too many to meet simply a functional purpose; they must have had a role of ritual indicator and its presence or absence in a burial, together with its combination with other jewels might have had links with the social or the religious sphere.¹¹⁷⁸ Association of pins and fibulae not only does occur within inhumations, but also within cremated depositions,¹¹⁷⁹ which unfortunately deprive us of the evidence of their position on the bodies. The Peloponnesian communities are so far the most mysterious, since they do not show any evidence for the use of these accessories,¹¹⁸⁰ significantly detaching them, as descendants of the “Dorians”, from these foreign items. Eleusis gives evidence of the singular inhumation of a wealthy woman, still wearing a composite jewellery, consisting of earrings, bracelets and finger-rings, christened ‘Grave of Isis’. This produced two pins (as usual at the shoulders of the skeleton) and six fibulae of which two were behind the right shoulder and four were distributed around the body.¹¹⁸¹ This is an uncommon disposition of objects, hard to interpret, though it is evident the focus on the expression of status by means of the rich jewels interred with the person. The fibulae behind the body

¹¹⁷⁸ Lo Schiavo 2010: 32.

¹¹⁷⁹ Lorimer 1950: 344.

¹¹⁸⁰ Lorimer 1950: 345.

¹¹⁸¹ See *Arch. Eph.* 1898: 106.

possibly were holding another garment (a mantle or a shawl?) in place on the back of the woman. The fibulae around the body were probably personal belonging that the deceased used and fancied during life. Also Boeotia presents a use of these accoutrements, a characteristic of which is the decoration of their catch-plates.¹¹⁸² At Halos, in Central Greece, there was a tumulus covering six pyres, which in turn gave back among their ashes several fibulae, of course with no evidence of their position on the body.¹¹⁸³ More fibulae were found as offerings in the Perachora Geometric temples of Hera Akraia and Hera Limenia, but being out of their original context they are of no use for understanding their social role.¹¹⁸⁴ Of course, the fact itself that they were offered would seem to endorse a possible sacred value.

One thing that according to Lorimer is certain is the fact that fibulae started to disappear at the end of the 7th century¹¹⁸⁵ and in this phenomenon one can only infer a new trend motivated by the newer trade links and contacts that Greece was undergoing at that particular moment with both Near East and the Western Mediterranean. Among several interpretations, I think that Caner's connection of these fasteners to the Urnfield culture of central Europe is the most likely one, as already implied by older researches and discussed in this research.¹¹⁸⁶

¹¹⁸² Lorimer 1950: 347.

¹¹⁸³ Georganas 2002: 293 ff.

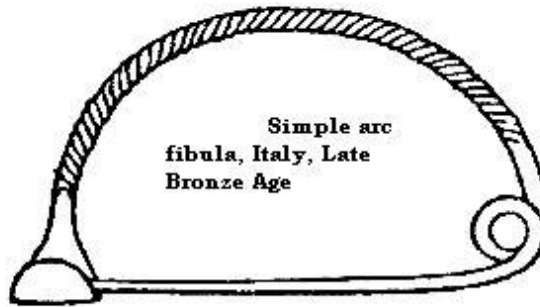
¹¹⁸⁴ Lorimer 1950: 347.

¹¹⁸⁵ Lorimer 1950: 351.

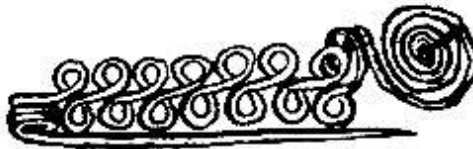
¹¹⁸⁶ Childe 1930: ff. 110, 111, 112.



Violin bow fibula,
Switzerland, Middle Bronze Age



Simple arc
fibula, Italy, Late
Bronze Age



Hungarian fibula with
looped bow, Late Bronze Age

Figure 86: European Bronze Age violin-bow and arched fibulae, after Childe 1930.

4. Regional Contexts.

4.1. Mycenae.

After the destructions in the 13th century, LH IIIc Mycenae kept being inhabited, but rather than as a main centre, as a peripheral area preserving very poor material evidence. This period does not show any metal object from the burials, but if we wanted to use a nearby site as an example of metal offerings in graves the Chania tumulus would be the ideal choice.¹¹⁸⁷ There, in a cluster of nine cremations, only one presented a metal offering. A bronze ring, obtained by hammering a tiny band, was found in the only child burial present in the tumulus. The fact that the ring was associated only with the child-burial could indicate many different things. If the bronze ring, together with a small steatite cone, belonged to adults to whom the child was related (the parents?), it could have been offered to the child as a latest form of link with his family, as Palaiologou implies. Yet the fact could also recall Morris' theory about a different treatment given to children in the post-palatial period.¹¹⁸⁸ Let us imagine that children were not yet recognised as part of the society until some unknown rite of passage took place, what could the family do to bury and honour their child together with the rest of their dead? Providing such a child with adult objects could have perhaps bent the rules, disguising him/her as an adult and allowing the same rituals to be fulfilled.

Nevertheless, the instance at Chania recalls the first appearance of jewellery in a SM grave at Mycenae. Tomb Γ31 from a cist within a citadel house produced a remarkable number of metal objects, including 2 bronze pins, 3 bronze arched fibulae and the mentioned bronze ring.¹¹⁸⁹ The ring is similar in type to the one found at Chania, but also to a contemporary specimen found at Athens,¹¹⁹⁰ and Desborough assigned its provenance to Central Europe.¹¹⁹¹ This was another child burial, possibly a female one. In this case the child was not cremated and not part of a collective burial, the skeleton was in situ and yet scattered by later disturbances. Nevertheless the position of the jewellery on the body was still identifiable. The pins were placed on the shoulders and the three fibulae at the right side of the chest. The ring was found on the left of the body, worn therefore by the right hand.¹¹⁹² The presence of double pins and fibulae in the positions described would imply that the child was wearing a sort of peplos, but since Kilian-Dirlmeier describes the presence of double pins

¹¹⁸⁷ Palaiologou 2013: 267.

¹¹⁸⁸ Morris 1986: 81 ff.

¹¹⁸⁹ Desborough 1973A: 94-98.

¹¹⁹⁰ Kübler, Kraiker 1939: 85, tomb 108.

¹¹⁹¹ Desborough 1973A: 98.

¹¹⁹² Desborough 1973A: 95.

already in the Mycenaean period this can no longer be taken for granted.¹¹⁹³ Even though different under many respects, the grave could represent so far the only conjunction ring between LH IIIC Chania and the unclear cremation described by Desborough in the PG tomb Γ26 where the also the first example of a hybrid pin with iron shank and a bronze globe was found.¹¹⁹⁴ Being these rituals and metal offerings absent in LH IIIC Mycenae, but starting to make themselves visible in nearby areas would suggest that the practices appearing during SM could have been inspired by external links. The PG period, if still containing a meagre quantity of metal offerings, offers enough specimens to allow sufficient tabulations. The absence of gold and precious materials is striking and agrees with Higgins' statement about a break of the traditional sources of precious metals after the collapse,¹¹⁹⁵ sources that might simply have been shifted to other areas of Greece by different dynamics not yet clear.

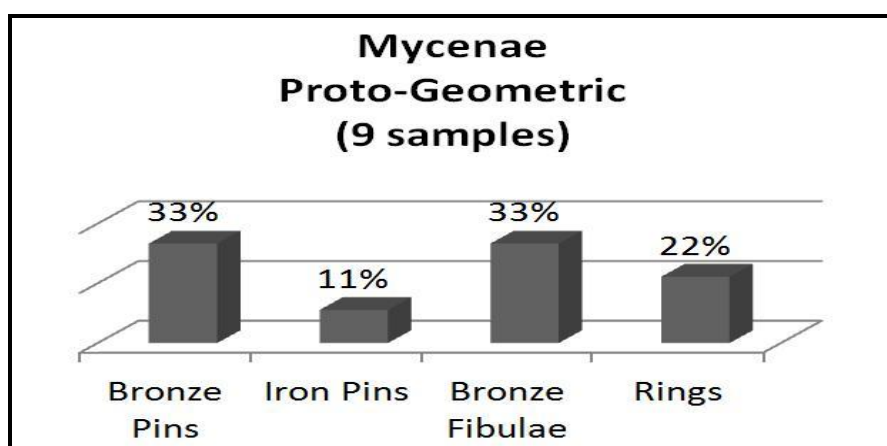


Table 60: Presence of jewellery at Mycenae, after Desborough 1973.

In the PG grave Γ23 is interesting to note that the only jewel was a globular pin made of iron. The use of single pins is attested also in tombs Γ21 and PG601 both providing unclear information on their use in life.¹¹⁹⁶ The metal used for the rest of the offerings is still bronze and the favourite ring model is the hoop type, if already hybridized by European channels and presenting spiraling motifs. Pins already present the swelling which will soon become popular in the subsequent PG sub-phases and fibulae are simply made with rudimentary catch plates still far from the refined specimens found in other regions such as Attica and Euboea where this European metalwork will find a more receptive background.

¹¹⁹³ Kilian-Dirlmeier 1984: 65.

¹¹⁹⁴ Desborough 1973A: 92.

¹¹⁹⁵ Higgins 1980: 88.

¹¹⁹⁶ Kilian-Dirlmeier 1984: 65.

4.2. Perati.

Perati, the eastern harbour of Attica, is with no surprise rich in exotic goods from its cemetery and maintains its wealth even after the collapse of the palatial power. The numerous chamber tombs gave back a long list of goods.¹¹⁹⁷ From almost two hundred tombs only forty-four ivory pins were found, very unevenly placed, since twenty-two of them were from a single chamber tomb (16).

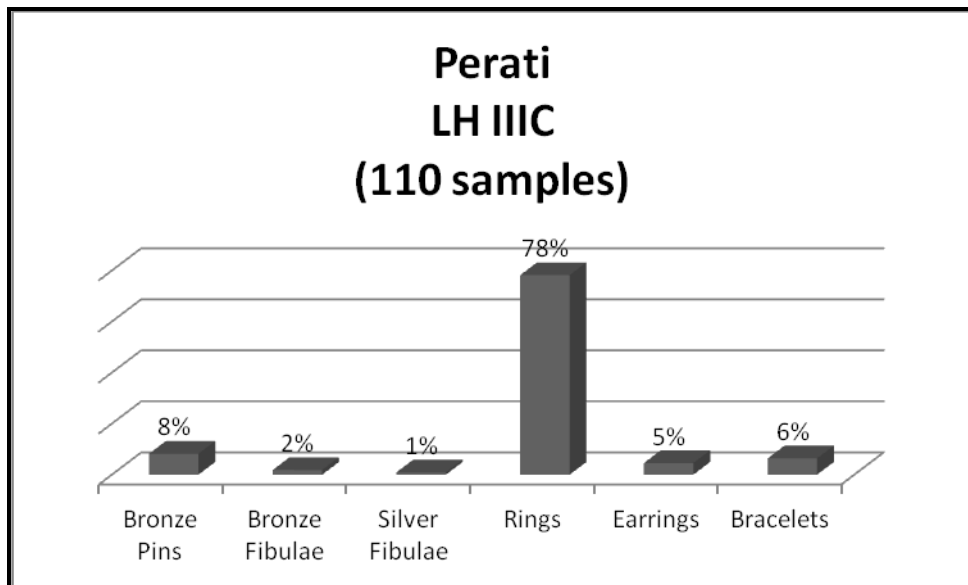


Table 61: Presence of jewellery at Perati, after Iakovidis 1970.

The other tombs, apart from tomb 13, have 9 in tomb 90, 1 in tomb 12, 1 in tomb 30, 3 in tomb 134, 1 in tomb 145. For the tombs with a single specimen we can again imply either a male deposition or a Doric *peplos* with a single shoulder covered. Nonetheless the curious presence of pins in tomb 90, with 8 pins made of bone and 1 of bronze could be showing a set of 4 couples and an extra metal one to fasten maybe a shawl. It is interesting to note that iron is absent in the production of pins and even bronze is a minor emergence if compared with the 22 ivory pins and the 8 bone ones. Only two fibulae appear, one of bronze and one of silver in two different tombs. It is evident that by the period covered at Perati their rare use was related more with exotic objects connected with status more than to a practical use as fasteners. A large number of rings (86 samples) was found in three different types;

- Simple with a keener oval bezel added.
- Simple-plated (the plate can be thinner or thicker).
- Spiral-shaped.

¹¹⁹⁷ Published in Iakovidis 1970.

All the three of them have Mycenaean predecessors, but the earlier oval bezel was more rotund. Their material is various, the majority is made of gold, but also silver and bronze are well represented and even lead examples. Gold earrings appear in two forms, 'hooped' and 'spiralled', though in lesser amounts. Bracelets, still in small amounts, are present and consist for the majority of threaded pearls, with a minor presence of bronze ones. The main category of goods present at Perati is that of the exotica, including beads of gold, glass, faience, coral, bone, steatite and hematite. It is not hard to recognize in many items the intermission of Egypt. Apart from the semiprecious stones of carnelian, steatite, agate and steatite together, Egypt provided 7 scarab-shaped faience amulets, 4 crocodile-shaped faience amulets and a golden amulet dedicate 'To the lord Ptah'. Perati appears with no doubt in a flourishing circuit of trade involving the Near-East Kingdoms, even though the Baltic amber beads betray also European contacts. Perati offers therefore a clear disproof of the supposed disruption between Greece and the neighbouring kingdoms after the collapse.¹¹⁹⁸ The most interesting feature is maybe the use of Egyptian steatite for the production of buttons, which are in such a number that clearly exceed pins as a fastening method, endorsing what Hall had theorised about a use of sewn buttons instead of metal pins during the Mycenaean age,¹¹⁹⁹ implying that the buttons went out of fashion after the arrival into Greece of foreign dresses and new ways to fasten them during LH IIIC and gaining a gradual popularity in the SM, becoming normal in the PG period.

4.3. Salamis.

If we had to judge the cemetery at Salamis by the jewels there contained, we would get the impression of a very poor population. Only three thin gold-threaded spirals, five bronze pins, and several rings. The latter are the most numerous jewels in the cemetery and remarkably some of them are made of gold.

¹¹⁹⁸ Higgins 1961: 88.

¹¹⁹⁹ Hall 1915: 241.

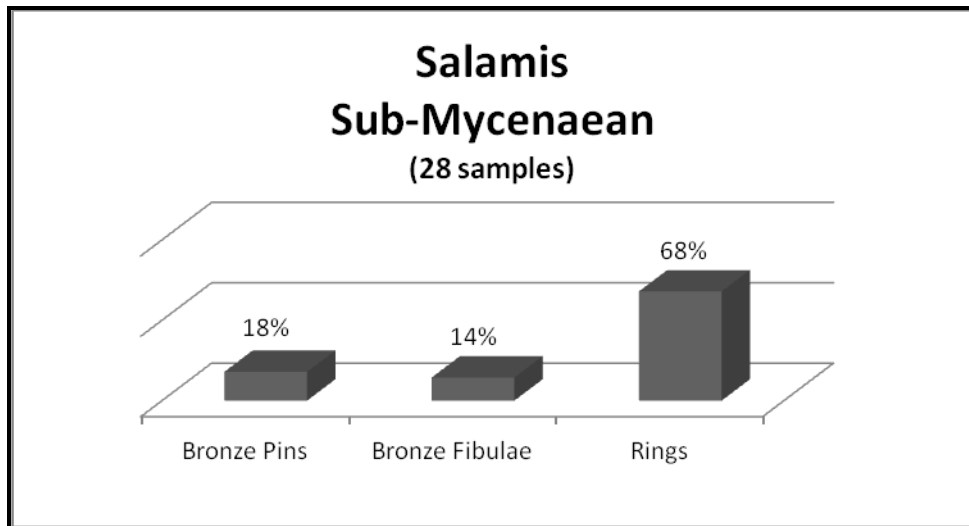


Table 62: Presence of jewellery at Salamis, after Wide 1967.

4.4. Athens.

In the Kerameikos cemetery we find that personal jewellery represents the largest amount of non-ceramic offerings. 36 rings were found, many were from female burials, several for each deposition. Men never have more than one specimen each. Only 9 were of iron, the remaining 27 were of bronze. The SM graves produced many specimens, especially tomb 136 which contained 6 rings, of which 4 were simple bronze hoops and two were spiral rings.¹²⁰⁰ During the PG period, iron specimens appeared. All of them were plain and made of thin wire, including the circular or spiraling types seen in SM. Eight tombs produced 9 rings each, among which there was one with a shield-shaped bezel, inherited from the Late Mycenaean period. Two of them had a dotted decoration of non-Mycenaean origin. Early attempts to recreate a common object in a different and harder metal such as iron can be seen in two SM/EPG iron rings from grave 129 and 141.¹²⁰¹ A smaller amount of jewellery was represented by bronze bracelets and earrings. Though unusual, it is remarkable the presence in the SM tomb 136 of a pendant and a gold hair-spiral, a sign that precious metals still circulated in the initial phases of the EIA.¹²⁰² Yet the female adornments so popular in LH IIIB and IIIC, so close to the near-eastern tastes become now less valued, and are visibly overshadowed by more popular jewels betraying European trade channels. In fact the most numerous metal objects in the cemetery are bronze fibulae, for a total of fifty specimens. 13 specimens were found in tomb 108, two of them were violin-bow-types, with a leaf-shaped

¹²⁰⁰ Ruppenstein 2007: 21.

¹²⁰¹ Ruppenstein 2007: 16, 26.

¹²⁰² Ruppenstein 2007: 21.

plate decorated with incised lines.¹²⁰³ The majority of them, 33, were arched types worked from a bronze wire, sometimes plain, sometimes twisted. At times they have a stilted arch developing into supporting bumps, a form popular during the PG period.¹²⁰⁴ Also Crete and the Dodecanese offer some bronze specimens of the same type, but it is interesting that the Peloponnese does not provide any specimen during the EIA, witnessing a lack of expertise not mirroring the Attic or Argive situations, in which the production seems to be equal. Iron fibulae appearing since EPG are instead rare, only 2 specimens in the LPG tombs 33 and 39.

A different picture is provided by pins, of which several specimens have been found in Athens, made of both bronze and iron. Pins were certainly not foreign items, they appeared in Mycenaean shaft graves and tholoi during the Bronze Age, and, as highlighted by Kilian-Dirlmeier, their real function is doubtful even in that period.¹²⁰⁵ She has also suggested a ritual function for the LH IIB short pins with big and heavy rock crystal globes. But she admits that the longer and more proportioned bronze ones might have been actually used as fasteners in daily life. Whatever the real explanation concerning this inconsistency of use, it is important here to underline the striking continuity after the collapse. Apart from variable sizes and materials, the social dynamic involved is the same and the SM Kerameikos cemetery witnesses well this continuity in the use of pins in the funerary sphere. As Desborough had noted, they are found mainly in female burials and in pairs, the position suggested is one for each shoulder. These were found in three main types: globular bulb form and unmovable swelling with incised decorations, ending with a projection which can be flat, semiglobular or nail-head-shaped.¹²⁰⁶ The globular type was indeed the most popular PG form. The metal is usually bronze, five PG specimens are of iron.¹²⁰⁷ These pins had a length spanning between 15 and 18 cm. If the bronze pins in the Kerameikos count so far 35 specimens, iron pins are 25. The ratio of bronze and iron pins contrasts with the enormous discrepancy in the ratio between bronze and iron fibulae. Obviously this cannot be considered an economic issue, iron pins and fibulae should have had roughly the same cost. There must be a different explanation, perhaps linked with the fact that arched fibulae, in comparison with pins, were seen as more exotic objects, imported for some kind of symbolic meaning which did not necessitate an iron form. Concerning their position in the burials, only in 2 (tombs 33 and 43)

¹²⁰³ Kübler, Kraiker 1939-1954; Desborough 1972: 65.

¹²⁰⁴ Desborough 1972: 65.

¹²⁰⁵ Kilian-Dirlmeier 1984: 65.

¹²⁰⁶ Desborough 1964: 53.

¹²⁰⁷ Desborough 1972: 66.

out of 18 graves the bodies had a single fibula on the chest and no pins around, possibly an indicator for a male burial.¹²⁰⁸

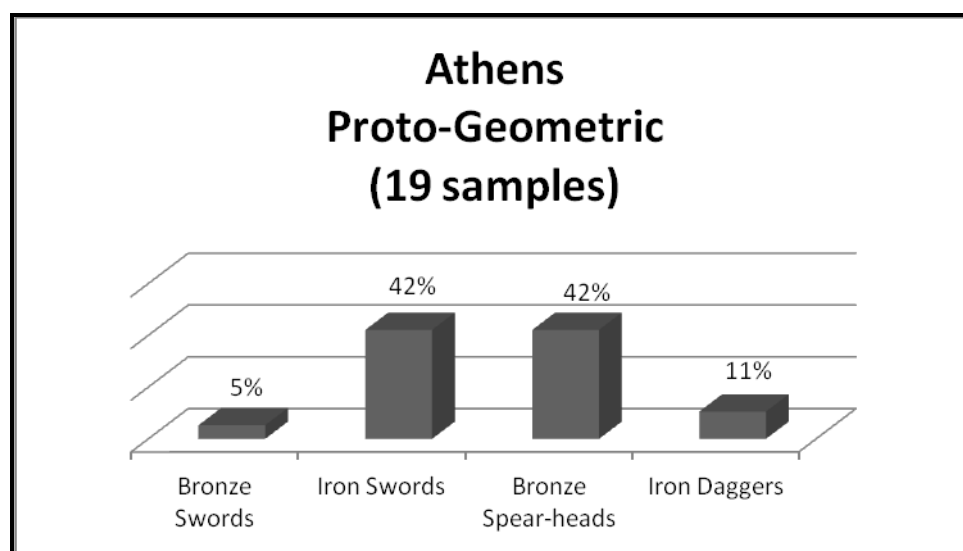


Table 63: Presence of jewellery at Athens, after after Kübler, Kraiker 1939 – 1954; Ruppenstein 2007.

On the other hand tombs 15 and 16 had two pins each and no fibulae, which classifies them as female depositions. But the absence of one or the other class of fasteners is not recurrent. There are cases where both pins, in pair, and fibulae are found in the same deposition, betraying the use of fibulae also by women, as in tombs 15 and 16, where the position of the pins is on the shoulders and fibulae are around the chest area. Tomb 27 has a pin for each shoulder, a fibula in the right side of the chest and another one at the right of the neck. Tomb 70 has two pins at the shoulders, two fibulae on the chest and one in the hand. Tombs 53, 99 and 101, though classified as female by the analysis of the skeletons, only produced one pin positioned on a single shoulder. So these are the possible models presented:

- Only pins, one at each shoulder: representative of female burials as simply fastening their *peploi*.
- Only fibulae, one on the chest: representative of male burials simply holding the shawl in place.
- Pins and fibulae together, two pins on the shoulders and fibulae upon their chests and collars: representative of female burials in presence of composite dresses, like *peploi* with shawls and other unclear garments.

¹²⁰⁸ Kübler 1939; Lorimer 1950: 340, 341.

- Pins and fibulae together, as in the previous model, but with one fibula on one hand: representative of some kind of extra value of the item, either religious or affective.
- Single pins on one shoulder in female burials: perhaps representing a slightly different dress, supported by a single fastening, which Lorimer suggested to have come from a Doric fashion, making slowly its way into the Greek clothing scene.¹²⁰⁹

Although these variation of their funerary position, their presence, number or total absence can only be related to the personal preference of the deceased or his/her family. There is no indication of ethnic change in the period covered by the Kerameikos (12th - 8th centuries),¹²¹⁰ but there is evidence of foreign influence in the religious and social ideologies. This influence arrived to Athens exclusively through metal objects and rituals attached to them and does not encourage any thought about violent intrusions.

4.5. Lefkandi.

As regards jewellery, Lefkandi and its cemeteries of Skoubris, Palia Perivolia and Toumba offer the overall impression of a wealthy site, growing and enriching even more in its LPG phases, while the rest of the Greek worlds seems still to be undergoing a clear economic distress. The catalogue of jewels and accessories derived by the archaeological report is the following:¹²¹¹ A total of 53 golden rings, 1 rare golden arched fibula, 12 pairs of earrings and part of a thirteenth piece, 3 golden foils, 4 golden diadems and several straps and attachments of gold to other materials and objects. Egyptian artefacts in form of amulets and faience beads appear to be a remarkable presence. It is striking that the presence of golden diadems is circumscribed to the Toumba cemetery and the Heroon, reinforcing the theory of a 'royal' couple buried there with their probable kinship and followers.¹²¹² Such a quantity of golden artefacts, coming mainly from the LPG graves of the Toumba cemetery, as rightly stated by Lemos, is not comparable to any other cemetery in the same period. If being a single case, makes its statistic value of little use, it can still demonstrate that gold was readily available during this period and that that there was no real shortage of resources. Moreover, the golden artefacts, unlike the bronze and iron ones, have a local style which implies a production in loco by artisans who re-established them in the area after a temporary abandonment, perhaps

¹²⁰⁹ Lorimer 1950: 341.

¹²¹⁰ Lorimer 1950: 341.

¹²¹¹ Until further notice the catalogue is from Popham, Sackett, Themelis 1980.

¹²¹² Whitley 1991: 341-365.

appealed by a prosperous clientele. Lemos implies that the golden and granulated heirlooms worn by the woman in the Toumba building might have inspired the local elites to imitate her and to request and reactivate local workshops and markets to obtain similar items.¹²¹³

It is true that EIA goldsmiths were particularly active on Cyprus in the same period and Higgins had suggested a Cypriot influence for the reintroduction of golden jewels and expertise to LPG Lefkandi.¹²¹⁴ Goring underlined that both the golden artefacts from Euboea and Cyprus seem to economise on gold. Thin wires or even gold-plated copper artefacts were being produced by both.¹²¹⁵ But the same Goring, endorsed by Lemos, adds that the Euboean and Cypriot typologies of jewels did not match each other (for instance, at Lefkandi golden bands in funerary depositions were preferred to the plaques used in Cypriot contexts). There must have been also a different ideology behind their use, given that on Cyprus golden jewels are seldom found in tombs, while in the Toumba cemetery they are commonly in the graves.¹²¹⁶ To conclude, the metallographic analyses of the gold used in Euboea showed its higher quality in comparison with the Cypriot one, which therefore was not its main source.¹²¹⁷

On why this couple had such a cortege and such an unusual display of offerings (nine out of seventy-six rings were on the fingers of the maiden in the Heroon)¹²¹⁸ several ideas have been expressed in the past. Among them an interesting approach is the theoretical acquisition from the anthropological ‘Big Men’ theory,¹²¹⁹ applied by Whitley to the ‘Dark Age’ communities in order to explain a new social model developed soon after the downfall of the palaces, consisting of small organisations of men gathered around high personalities still linked to the ancient order of the Bronze Age hierarchies.¹²²⁰ While the precious jewellery was in place on the skeleton, the fasteners were loose, after the decay of the clothes. It is again a fact that pins were usually in pair and on the shoulders, while fibulae were around the chest. When their number is superior to the pair we face the usual doubt of how they were arranged on the body. Apart from personal differences which could have been influenced by a number of factors, there is evidence a predilection for iron pins if compared to bronze fibulae. According to this evidence, the use of the *peplos* would seem to be confirmed. A clear

¹²¹³ Lemos 2002: 133.

¹²¹⁴ Higgins 1979 : 219-221.

¹²¹⁵ Goring 1977: 417-422.

¹²¹⁶ Lemos 2002: 133.

¹²¹⁷ Jones 1979: 461-464.

¹²¹⁸ Tandy 1997: 22.

¹²¹⁹ Sahlins 1963: 285-303.

¹²²⁰ Whitley 1991: 341-365.

evolution in the shapes of the fibulae is also perceivable at Lefkandi, unlike other sites where the presence is either scarce or univocal: here after an initial leaf-shaped version of Mycenaean ancestry, in use during the SM, the arched fibulae opened the EPG and continued until the end of the MPG, when they were supplanted by new types with asymmetrical bow and a swelling on the arches. This changed again during the LPG iron types with flat symmetrical bows, evolving rapidly into flat asymmetrical bows with a bead at one end and a double fillet on the spring. The latest types see the return of the leaf-shaped fibulae doubled and united by a double loop.

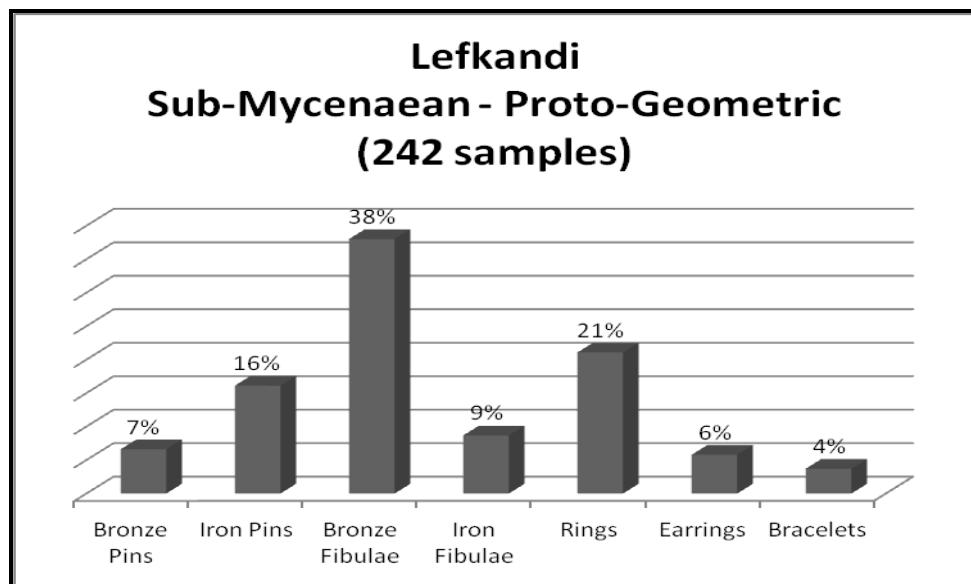


Table 64: Presence of jewellery at Lefkandi, after Popham, Sackett, Themelis 1979. Coldstream, Lemos 1991.

This is again the case of a society conscious of its past and tradition, but wanting to assert itself into the new world reshaped by new ideologies and symbols produced in the not so remote lands of Europe and by novel technologies developed by the near-eastern kingdoms.

4.6. Knossos.

The North Cemetery of Knossos is with no doubt one of the richest cluster of cemeteries of its time and gold artefacts are present in a considerable quantity.¹²²¹ It is immediately striking the reduced presence of bronze fibulae in comparison with bronze pins, a difference even greater if observed on iron specimens. Pins and fibulae usually seem to be associated to make a jewellery set with ideological meanings rather than mere fasteners. At Knossos we cannot state whether there were changes in clothing styles or not during the EIA, the rare

¹²²¹ Desborough 1972: 115.

monochrome silhouettes depicted on pots are of little use. To imply Doric clothes whenever we find fibulae could be misleading. The aforementioned literary evidence describes pins on the shoulders used before peploi were allegedly introduced. That fibulae could be interchanged in the same position on female dresses is not impossible though. When there was only one fibula, it might have been securing one side of the dress, but there is no reason why a belt could not have fulfilled the same task, soon disappearing from the archaeological records.

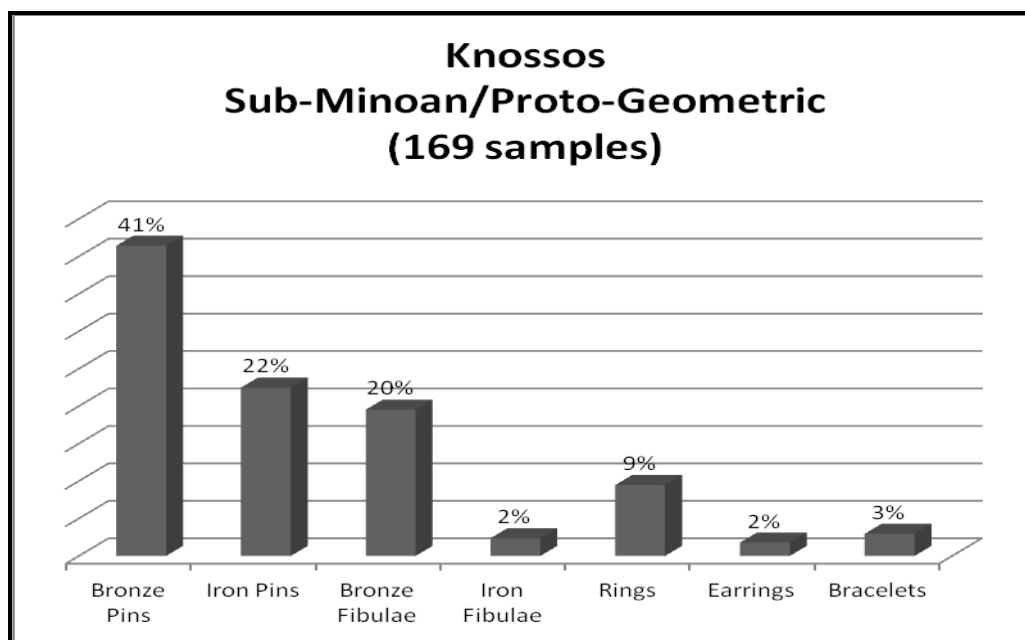


Table 65: Presence of jewellery at Knossos, after Coldstream, Catling 1997.

Even admitting that Mycenaean fashion spread off during the palatial period, how can we be sure that traditional Cretan clothes were not different and kept to be worn, evolving despite the mainland trends? Could not pins (and perhaps even fibulae) be adapted to different shapes and textiles without necessarily losing their social meaning? It must be said that the limited presence of fibulae is also counterbalanced by an interesting quantity of gold, silver and electrum rings, indicating that they were perhaps favoured as social markers, which, though not impressively numerous (about 16) are more numerous than in any other regional context in this period, where bronze and seldom iron are preferred for rings. What appears striking to me is the fact that Crete, as part of the new Mediterranean trade which followed southern routes and constantly touched the island, seems once again less interested in uniforming totally with the mainland and its fashions. Crete was crossed by several foreign contacts and influences arrived from many directions. Trade had not diminished and there was no necessity for a much solid local culture to seek goods from alternative lands like Europe.

4.7. Naxos.

All the graves at the Grotta site displayed a rich amount of jewels both at Kamini and Aplomata, confirming the prosperity ensuing the Mycenaean collapse. The number of golden items is important, even the newly acquired pins are made of gold, together with rings, earrings, pendants and clothing plates. Bronze is here rarely used for jewellery, only one ring and an arched fibula were made of that metal, for these objects bronze will continue to be the main material along the EIA.

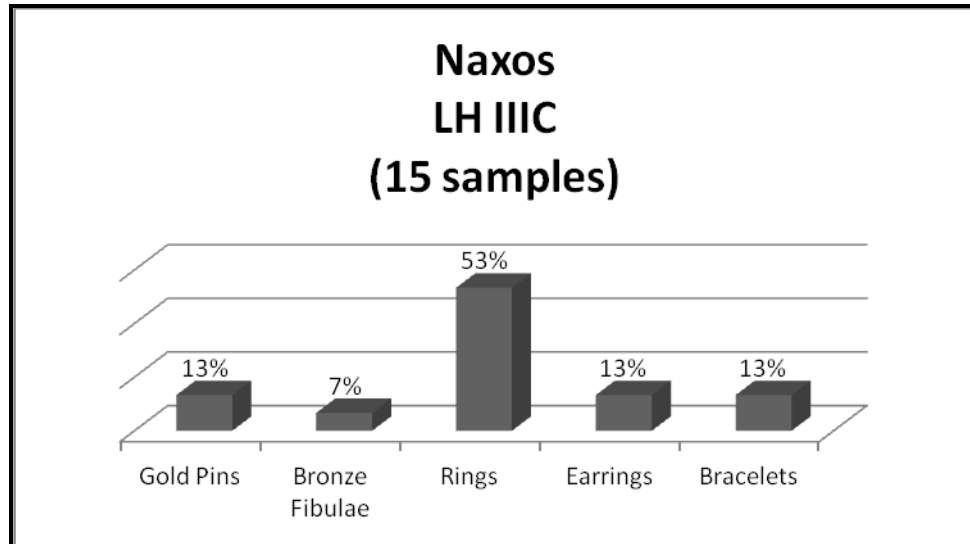


Table 66: Presence of jewellery at Naxos, after Vlachopoulos 2006, 2012.

Communication between the Cyclades, the Near-East and Cyprus is evident, since the aforementioned funerary golden plaques covering the child in Pit E seem to imitate techniques and functions of the so-called ‘Astarte plaques’ of Canaanite contexts, also found on Cyprus.¹²²² The bull symbology, preeminently Aegean, is present both in a bull-shaped stone pendant embedded on a gold granulated mount, and on golden sheets cut-out in the form of bucrania. Vlachopoulos interpreted these (and the gold sheets in form of lions) as insignia of aristocratic lineages on Naxos and this can be hardly objected.¹²²³ If we accost these golden artefacts with the bronzes found in both Kamini and Aplomata we would notice a neat division between a jewellery which remains basically Aegean with influences from the Near-East, and tools (especially weapons) which are instead imported as novel influences.¹²²⁴

This choice implies that self-expression and self-determination were entrusted in graves (and therefore in the most durable part of one’s ‘existence’) to jewels and insignia which had

¹²²² Vlachopoulos 2006: 277-284.

¹²²³ Vlachopoulos 2006: 301-303.

¹²²⁴ Vlachopoulos 2012: 434.

nothing to do with the European revolution underway, but had remained tied to the previous Aegean-Eastern connection. The European objects appear here gradually introduced for practical uses especially when improved by iron technologies from the East. In this cultural evolution nothing seems to highlight violent intrusions.

5. Preliminary conclusions on Metalwork.

Observing the data provided by the metal objects found in those cemeteries ranging from LH IIIC to PG it is immediately clear that continuity still exists but it is often broken by the choice of a different metal. As seen in the previous paragraphs, jewellery can usually be found in several materials: gold, silver, bronze. When objects are hammered in iron, they had traditionally been cast in bronze in the precedent periods, so this dichotomy bronze/iron was taken into consideration in the examination of continuity and change since there seems to be a clear passage from a metal to another. Objects that appear to be showing such a transition are essentially weapons (swords, spear-heads, daggers) and fastenings (pins, fibulae). My preliminary conclusion about metalwork in the transitional period highlighted several features. For the first time in the analysis of the material culture of the post-palatial Greece metalwork provides clear evidence of intensified foreign contacts after the collapse. The major horizon of change is represented by swords, daggers, and certain types of fastenings deriving from European contexts. If trans-Aegean contacts were common also in the palatial period, as proven by the mentioned exotica in the shaft graves, it is only in the EIA that we also see assemblages in tombs partly recalling European associations, if still grafted into a still solid Mycenaean tradition. The following paragraphs will help to focus on the main aspects emphasised by the evidence.

	LH IIIC Early	LH IIIC Middle	LH IIIC Late	Sub-Mycenaean/Sub-Minoan	Proto-Geometric
Bronze Swords	█	█	█		█
Iron Swords					█
Bronze Spear-heads	█	█	█		█
Iron Spear-heads					█
Bronze Daggers					█
Iron Daggers					█
Bronze Pins	█	█	█	█	█
Iron Pins					█
Bronze Fibulae					█
Iron Fibulae					█
Rings	█	█	█	█	█
Earrings					█
Bracelets	█	█	█		█

Table 67: Diachronic development of metalwork from LH IIIC to Proto-Geometric.

	Mycenae LH.III.C - Proto	Perati LH.III.C	Salamis LH.III.C - Sub	Naxos LH.III.C-Proto	Athens Sub - Proto	Lefkandi Sub - Proto	Knossos Sub-Proto
Bronze Swords		█		█			
Iron Swords					█	█	█
Bronze Spear-heads		█					
Iron Spear-heads							█
Bronze Daggers					█		
Iron Daggers						█	█
Bronze Pins	█	█			█	█	█
Iron Pins		█			█	█	█
Bronze Fibulae	█	█		█		█	█
Iron Fibulae						█	█
Rings	█	█		█	█	█	█
Earrings	█	█					
Bracelets		█				█	█

Table 68: Synchronic development of metalwork in the case studies proposed.

5.1. Evidence from weapons.

The association of Naue II swords, Naue II daggers (if not necessarily together in the same context) with fibulae and long pins is often real and seems to recall a pattern already seen in the assemblages of the Hallstatt culture. My analysis shows that among the few examples of swords found in the richest Greek tombs of the transitional period only the hilt-flanged cut-and-thrust types are, if not totally new, exclusively employed in the Early Iron Age, and made of iron. If we conjectured that these material novelties reached Greece peacefully from the Danube area, we must think of these weapons as products bartered by European traders to the Danubian cultures and by the latter to the Greek communities. Swords broadly similar to these, in bronze form, had appeared since the 15th century BC in Scandinavia¹²²⁵ and by the end of the 13th century they had probably reached the Mycenaean kingdoms (even though in form of exotic gifts) and Egypt via the same south-eastern route. From Europe, where the same association of swords and spear-heads in the same set occurred, these sword-types must have reached the neighbouring regions with the Urnfield cultures who spread west- and east-wards, later reaching the Danube areas and Eastern Europe. The Urnfield cultures, had spread from Germany to the Alps,¹²²⁶ from there to Northern Italy,¹²²⁷ and had by the 13th century reached the Balkans.¹²²⁸ All have sword-types with a very similar design to the Naue II, especially in their LBA, which in Central Europe was two centuries longer than in Greece.¹²²⁹

The same ritual killing of weapons introduced in the PG period, of which there is evidence in several contemporary European contexts,¹²³⁰ would seem to underline a more complex exchange of ideas together with a cult of individuality and war prowess which may have led a world in turmoil towards a new asset and new certainties, affecting both this life and the other. In the case of Greece, the initial warrior values which probably imposed the Indo-European culture to the MH Aegean, must have remained a solid ideal in the mind of the Mycenaean successors who took power after the collapse. This ideology that I assume remained compressed between the many layers of a sophisticated palatial reality and diluted in the administrative and somehow bureaucratic palatial machine, could have finally burst out in the post-palatial experience, re-expressed by charismatic leaders (perhaps members of what

¹²²⁵ Kristensen 1998: 63

¹²²⁶ Kristensen 1998: 117, fig. 59b.

¹²²⁷ Kristensen 1998: 118, fig. 59c.

¹²²⁸ Kristensen 1998: 116, fig. 59a.

¹²²⁹ Central-European Late Bronze Age: 1300 to 800 BC.

¹²³⁰ Peroni 1970; Hansen 1991; Bietti Sestieri 2013: 160 ff.; Lloyd 2015: 14-32.

once was the military aristocracy of the palaces) with the aid of a foreign and perhaps not completely unknown warrior culture.

Of course such a model would immediately expose a major weakness: the chronological discrepancy between the moment at which the palaces (and trade routes) collapsed and that in which the actual adoption of new items like Naue swords occurred. There is no clear answer to this, it is possible that the social dynamics which brought about the changes in fashion required this time to mature, or rather that the attempts to find new suppliers in a period stable enough to allow new trade links went on for a while before success. We are talking of less than two-hundred years, a lapse not excessively long for these changes to take place. If the Urnfield and Hallstatt cultures were the main fulcrum upon which the ideology of the LBA Europe revolved, the Danube must have been a favourable and relatively secure means of trade between them and the whole Eastern Europe, including not only the Balkans and Thessaly¹²³¹ but also Greece in the 11th/10th century BC. In this manner the Greek communities could have acquired the Naue II swords to complete a more efficient set of weapons. Here can also be added the point expressed by Crielaard: these weapons are rare in tombs not because they were not available, but because the households, which during the PG period would have represented the foundation of Greek society, could have also owned all weapons and provided the soldiers with them only for the period of their service, recovering them (perhaps eventually re-forging them?) at the moment of their retirement or death.¹²³² Then the few weapons found in the PG graves could have been prizes earned only by outstanding and personal acts of heroism and thus retained by their users.¹²³³

5.2. Evidence from jewellery.

The fact that the previous Mycenaean jewellery (rings, bracelets, earrings) undergoes minimal changes and also (especially rings) rarefies more and more in graves if compared with the new fasteners, implies that the foreign jewels appeared gradually, flanking the traditional jewels, and were eventually preferred, at least as grave goods. Whether the fastenings implied also a change in clothes, though possible, is not shown in burials, nor deducible from the absent or very sketchy PG iconography. As aforesaid, clothing accessories such as pins and fibulae, if not totally new during the Iron Age, showed clear connections with Anatolia, the Balkans and Italy. If we consider the arched fibulae and long pins popular

¹²³¹ Theodosiev 2011: 1-60.

¹²³² Crielaard 2011: 94.

¹²³³ Deger-Jalkotzy 2006: 152.

in the EIA in the same way we can see a similarity in the areas of their major popularity, the Western Balkans, Italy, Greece and Anatolia. Arched fibulae do appear among the goods accompanying the cremations of the Urnfield culture,¹²³⁴ and given the fact that they seem to be originally related to the need for thicker clothing we can agree again with a northern point of origin. The fact that recent studies of climate variation rule out a decrease of temperature in the Southern-European zone¹²³⁵ implies that these artefacts must have arrived from the north with a shape unsuitable for the lighter garments of the Greeks and they remained of that size only because, at least in the beginning, they were not produced in Greece, but only imported at some point at the end of the LH IIIC and SM periods, and becoming fully accepted in the PG. In fact, if we pay attention to the finds of the Geometric period at the Athenian Kerameikos, the fibulae, though keeping essentially the same shape, perceptibly decrease in size, indicating a possible adaptation to the Mediterranean clothing by means of new local craftsmanship.

Pins undergo some changes in the Iron Age, as previously described. As regards the bronze pins shorter than 20 cm, of which we can accept use as fastenings, it was already mentioned in Jacobsthal that the possible channel of transmission was from Anatolia to Europe via the Danube. It would not be implausible to think that the connection with Central Europe existing during the EIA and that the respective European evolution of these pins had had LBA origins. What marks them as the result of foreign influence is their length, reaching up to 50 cm, surely appropriate for some kind of dress code in the northern regions, but unnecessary and even dangerous if associated with light tunics. Whether the function was as a fastening or not, such a length appears enigmatic. If these accessories acquired such a symbolic meaning to be included in graves as indicators of status, it can only mean that the European ideology was providing new objects to a society which wanted to re-express itself. Even in the case of jewellery the regional evidence shows heterogeneity, and preferences fluctuate both synchronically and diachronically. This should therefore be seen as the natural result of the absence of a unifying political control, together with the uneven distribution of wealth ensued.

5.3. Concerning Iron.

In conclusion, on the one hand the use of iron for the production of Naue II swords, daggers, at times spear- and arrow-heads, pins and fibulae is another indirect proof that the

¹²³⁴ Caner 1983: 27.

¹²³⁵ Smiraglia, Bernardi 1999: 160. Kaniewski *et al.* 2013.

European influence was at some point locally transformed and improved. In fact, when trade with the Eastern-European and Northern Italian regions started to increase in LH IIIC and the metal objects arrived to Greece, they were all of bronze. The contemporary culture in Europe was the regionally fragmented Hallstatt A. Iron appeared in Greece in an unclear transitional period between SM and EPG, around the latest 11th and the initial 10th centuries, after two centuries in which the intrusive objects had started to circulate. Yet, while in Greece iron was used during the PG period, it reached the Hallstatt culture in its latest phase (Hallstatt C), roughly contemporary with the Greek LG.¹²³⁶

If the culture arriving to Greece in LH IIIB2 had imposed itself over the local culture, probably this ulterior and independent development would not have taken place without being transferred to the area from which the invasive culture had arrived. On the contrary, the circulation of European artefacts and rituals intensified even more during the PG period, when the new technology was introduced by Greece from a different place, and was not shared with Europe. All the innovations reaching Greece from LH IIIC and PG must have been rather the attempt of the Greek chiefdoms to absorb as many novelties as possible in order to be competitive with both internal and external regions and overcome the long period of political adjustment resulted from the collapse of the palaces. This exchange between the foreign culture likely to have been the European Hallstatt (probably through the East Hallstatt area along the Danube) and the post-palatial Greek 'chiefdoms' is well evidenced in graves. The rest of the material classes, especially pottery, and even some heirlooms used as links with the past Mycenaean prestige indicate that Greece was still broadly Mycenaean and that the European metal additions in graves were spontaneously introduced as part of a glorification of the dead which was accepted as more suitable to the new political realities of the post-palatial period.

¹²³⁶ See Morton 1952.

CONCLUSIONS

1. Centripetal and centrifugal forces in the LBA Mediterranean.

The analysis of the transitional graves and their contents have indicated two main characteristics. The first is the strong continuity of most of the Greek regions in preserving, and sometimes re-proposing with slightly different nuances, the Bronze Age tradition. The second is the non-violent introduction of tomb types, rites and metalwork (including weapons and jewels) from abroad to reassert and/or re-create a sort of elite authority which had become undefined after the collapse. In this work there is a reasonable endorsement of the most recent studies concerning the LBA in the Aegean and Eastern Mediterranean. In summary, these had highlighted that a radical change in the trade networks was the main catalyst of multiple factors that brought about the collapse (total or partial) of those important civilisations that were interconnected in a network of trade and international relations (especially by means of military alliances and acquirement and display of 'royal' status through prestige goods and luxuries).

The world-system theory and its undeniable division of one area into regional cores and peripheries provides a cogent argument, which reflects also in the artefactual evidence. Nevertheless, my study has shown that the circulation of objects and ideas originating in the LBA and progressing until the EIA could have been the result of a two-world system instead, one manifest (state-controlled trade) and the other subaltern (independent trade), both existing in the same contexts at the same time. Borrowing a suitable terminology from physics, the social dynamics involved were both centripetal and centrifugal. The Mediterranean and Near-Eastern kingdoms struggled to maintain their internal economies and to acquire control over important trade routes, increasing their importance on the political chessboard. In doing so, they needed and at the same time attracted luxury goods. This centripetal process involved continuous commercial contacts and specialised craftsmanship. The Mediterranean kingdoms became therefore poles of attraction for desirable objects and products, and most certainly for their producers and/or exporters. It has been found textual evidence in the Near-East about state-controlled merchants, suggesting that the states had their own agents to import what they sought and there were taxes to pay when trading in their harbours.¹²³⁷ On the other hand, the seaborne and overland traffic of objects, people and ideas, all committed to the satisfaction of the centres of powers, produced also the effect of creating an independent trade network. This subaltern network began to generate an opposite tendency, hence keeping the products away

¹²³⁷ Chapter II.2.

from the control of the state entities and trafficking within their own circuit, probably evading taxes and putting into circulation low cost exotic objects which before the collapse were seen as second class items with no prestige, but soon after they had already conquered a wide clientele. These independent merchants and their ‘black market’ *ante litteram* were so willing to take advantage of this new form of economy, that developed and shared also new naval technologies to make their journeys faster and more secure, becoming even more efficient than their state-dependent peers.

So, while the centripetal orbit of the Mediterranean states and their territorial economies failed to understand the danger of the evolving sea-based ‘network’ and kept trying to control the sea through the conquest of its coastal areas, the centrifugal activity of the independent markets kept working against it. The two opposite forces must have grown independently up to a point in which their power of attraction reached the same level. Once equipollent, they started to revolve against one another, slowly tearing apart the ‘economic tissue’ upon which the state-based Mediterranean economy sustained itself. Moreover, during the political crisis occurring because of the open warfronts in Anatolia and the East, state-controlled economy and trade became weaker and weaker at the end of the LBA, while the independent network was eventually growing stronger. After the collapse, this was the only one remaining active, providing the new state entities with ideas and objects once part of the underground market, but now become widely fashionable, especially the European bronze metalwork and the warrior culture behind it.

2. Mycenae’s international relations.

Before moving on to what was erroneously named the ‘Dark Age’, the collapse must be properly contextualised. The economic crisis, probably accompanied by all those causes proposed by past and present studies (climate change, geophysical instability, sea raiders, internal rebellions, exhausting military enterprises) provoked the collapse of most the states linked together in the Mediterranean *Gestalt* (Khatti, Egypt, Mycenae, Babylon). The magnitude of these collapses was greater and long lasting in those states already exhausted by internal issues (especially limited self-sufficiency), eventually leading them to a point of no return. This is the case of the Mycenaean and Hittite kingdoms, for both of which the collapse was rapid, progressive and highly transformative. I have dedicated the entire chapter II to reasserting the pressing necessity of recognising in the Hittite name *Ahhijawa* and the Egyptian *Tanaju* a Mycenaean kingdom and endorsing those theories seeing the Mycenaean

palaces as a federation of states under a Great King, not dissimilar from what Homer had described. In doing so, we can take advantage of the Hittite and Egyptian epigraphic and textual evidences and understand the political dynamics involved in the Aegean and Eastern Mediterranean during the LBA.

What is told by the texts is the story of a Mycenaean kingdom, perceived by the other states as united, constantly committed to warfare and territorial expansion. Since 1400 B.C. its primary interest was expanding and taking control over the western Anatolian coast and gaining access to the Dardanelles (of which Troy was the major stronghold), strategic and commercial hub towards the Black Sea regions. This target collided soon with the main local competitor of the time, the kingdom of Khatti. Both Anatolia and the area of the Dardanelles became the principal scene for two centuries of tireless international diplomatic, military and economic efforts on behalf of the Mycenaeans against the Hittites. Undisclosed alliances were probably secured through gift-exchange with another contemporary superpower, the Egyptian kingdom of the 18th and 19th dynasties, probably culminating in the battle of Qadesh. The subtle tactic of the Mycenaeans envisaged the mutual weakening of both Hittites and Egyptians. After all, the latter was interested in the occupation of the Levant and Syria as much as the Hittites and it was advantageous for Mycenae to weaken Egypt as well.

While the Egyptians kept the Hittites busy, Wilusa/Troy was probably being seized (several times) by Mycenaean troops taking advantage of a distraction which, I want to believe, they had contributed to create. The unexpected peace after the facts of Qadesh brought back the international equilibrium to its former boundaries, and probably frustrated the Mycenaean plans. It is perhaps no coincidence if the Mycenaean presence in Egypt decreased progressively after the Ramessides. At some point, under Tudkhaliya IV, the Mycenaean efforts against Khatti could no longer be tolerated and the Hittites decided to eradicate them from Anatolia once and for all. Though not mentioned in our text, the Hittites managed to cut off Mycenae from the Anatolian coast and ban any further endeavour to take part in the Eastern international chessboard. Later Mycenaean attempts to reach Assyria (the rising power now threatening Khatti) are a proof that the King of Mycenae had targeted a possible new ally to overcome his defeat, but then again the economic crisis occurring in the Mediterranean did not allow further developments over this matter. As aforementioned, the military efforts made by both Mycenaeans and Hittites must have been wearing for both. Such a long period of continuous conflict had probably drained enough resources, regardless the apparent winner, to weaken the two states in a moment when their power should have been stronger. Their respective internal situations during the late 13th century required more

attention for an upcoming crisis. During its final years the Kingdom of Mycenae was even committed to the construction of monumental fortifications which, whatever the reason behind them, could have resulted ruinous for the palatial economies.

Therefore, without necessarily discarding any other collateral cause presented in detail in the first chapter of this work, I want to keep focusing on the fact that when Mycenae was losing its colonies, trade routes, contacts with the Near-East and the luxuries it needed to reassert its power, it was at the same time engaged in too onerous expenses for the moment of recession the Hittite ban had caused. Such an illogical behaviour of the Mycenaean authorities necessarily implies a detachment between two different realities. On the one hand there was the centralised power, the Wanax and his crave for grandeur, constantly planning his expansion and enrichment, careless about what happened in the lower classes. On the other hand there was the overstressed internal administration of agricultural economy and commercial control operated by the territorial circumscriptions governed by the Wanax' subordinates (the Lawagetas?).

Large part of the resources were probably going to sustain the central authority and its military actions overseas and on foreign lands. After the events caused by the final Hittite success against them, the resources of the palaces rapidly decreased and the luxuries of the wanaktes ceased. The last attempts to gain new contacts in the western Mediterranean are attested by ample evidence, nonetheless such contacts were not enough fruitful to revive the Mycenaean economy. Once the grandeur of the Palaces could no longer be kept alive by luxuries and trade, the economy and the lower classes, on which it weighed the most, started to suffer. This, in conjunction with arid climate and poor harvests, could not implausibly have pushed the territorial *quasirei* (and the lower classes they represented) to a rebellion, overthrowing a central power by then too weak to stop them.

When the Hittite kingdom ceased to exist, it was too late for the Mycenaean to restart their former traffic. Their government was now different and still in the making. Moreover, the Mediterranean trade had changed as well. In their final moments the palatial authorities had tried unsuccessfully to find different maritime routes in order to gain old and new resources and survive the crisis. The contacts with Southern Italy and Sardinia are a clear example of new commercial targets. But the success of these new trade routes was limited and did not save the economy of the palatial institutions. The centrifugal subaltern world was too wide and competitive for a declining state to master. It connected the eastern and western Mediterranean, even reaching the Arabian Desert through an overland ridge passing through the Carmel mountains until the market of Megiddo. This independent network eventually

prevailed over the former one and it could no longer be controlled or impeded. I agree with Broodbank that the Mycenaeans found themselves inadequate to understand these new dynamics and were cut off again.¹²³⁸

The centripetal and centrifugal networks of the LBA obviously changed after the kingdoms' collapse. With no big centralised states requesting or exporting goods, the two opposite dynamic forces which had formerly coexisted were replaced by a fluid and homogeneous Pan-Mediterranean circuit, led by well equipped and expert mariners. This involved the connivance of smaller and less authoritative state realities, probably unwilling to control the merchants, but relying on their private entrepreneurship to acquire luxuries and exotica. The sea was now swarming with people transporting goods from the Levant to Sardinia and *vice versa*. Their precious cargoes had certainly increased the epiphenomenon of piracy, though the only sea-violence shown by this period is shown just by some sketchy pictorial evidence on pottery. After the collapse triggered by the defeat inflicted by the Hittites and the resulting internal turmoil, I can accept the theories of scholars like Sherratt, asserting the importance of Cypriot prospectors actively engaging with this new trade reality, acquiring (or even introducing) new navigational technologies and therefore more efficient ships, managing the imports/exports over long distances more securely and in lesser time.¹²³⁹ But I think Cyprus was just one of many competitors and its artefacts around the Mediterranean might be the result of an intercultural trade-system of which the Levantine island was only the most evident carrier. In this Pan-Mediterranean network, the Greek mainland started its political reorganisation with a fragmentation of the former kingdom into independent territorial entities (broadly covering the former palatial jurisdictions?) which will later transform into the archaic poleis and their surroundings.

3. The significance of tombs and their contents.

In the aftermath of the collapse it is hard to have a clear understanding of the Greek culture without relying on the material evidence buried within the tombs in the cemeteries. The burial contexts chosen by this work have immediately showed strong signs of continuity during the LH IIIC. From the 12th to the end of the 11th centuries the Greeks clearly tried to imitate and revive the major features of their ancestors, evident at a social level in the continued occupation of settlements and fortified areas, and with monumental or, at least, exclusive forms of funerary architecture, but also at a personal level with similar funerary

¹²³⁸ Chapter I.3.

¹²³⁹ Chapter I.3.

offerings: jewellery, vessels and some bronze weapons. The coastal sites, even if probably not actively joining the traffic, kept taking advantage of traders to import and export luxuries, as proved by the presence of Levantine and Egyptian artefacts in their tombs (Perati, Naxos, Crete). Weapons are limited in the aftermath of this transition, but when they appear they usually remain Aegean in shape and do not present any foreign features (though rare examples of European types started to be offered).

We have seen that in this period some changes in contents and rituals also occur. I have suggested that after the collapse of the palaces the religious institution which, we should imagine, had been in the hands of the Wanax and his attendants, must have ceased to exist. Very likely, some formal parts of the Mycenaean rites and its 'liturgy', including the oral formulary to address deities and deal with the funerary sphere, were lost after the cessation of the former priesthood. What emerged was a confused and lacking religious system in which only the divine addressees of the worship were known, but not the proper way of communicating with them to propitiate this life and the other. Therefore, I am suggesting that the religious gap is the possible access through which a new culture penetrated Greece, especially its funerary rituals, necessary to guarantee a smooth and successful passage into the realm of the dead. The tumulus of Chania, already during LH IIIC, is an example of how in a material culture essentially Mycenaean, burial practices were transforming in accordance with different cultural influences. The cremations at Chania and the presence of European blades (Naue II) in assemblages where most of the objects remained traditional (e.g. in the LH IIIB hoard at Mycenae), are initial and precocious symptoms of an influence which can hardly be unrelated to coeval Europe. Especially eschatology, which deals with the invisible and requires a liturgy to be understood and followed, was probably the most affected field after the end of the palaces. This need must have led the Greeks to the search for practices which could enable them to reach the divine after death and avoid the shadowy and 'thirsty' existence of which they kept memory from the past beliefs.

At the same time, the Urnfield cultures had produced in the 13th century a set of practices and symbols continued and refined in the subsequent Hallstatt cultures, which had spread from Central Europe to Eastern Europe. Hallstatt graves gave evidence of an extraordinary similarity with the trend which will become common in EIA Greece. Single graves with inurned cremations or inhumations, filled with metal artefacts (jewellery, vases and weapons, also ritually bent) to honour the dead as an individual (especially as a warrior) are Hallstatt's major funerary features. Kouvaras' assemblage (11th century BC), presented Northern-Italian blades together with metal cups and greaves made of Cypriot bronze. The

circulation of bronze ores and artefacts was clearly covering the entire extent of the Mediterranean already in the aftermath of the collapse and the ideas they brought with them were evidently filling all the ideological gaps left by the disappearance of the palaces. These foreign ideas were cautiously and gradually fused with the pre-existent identity without cancelling it. They provided an acceptable compromise to the understanding of life and death and could be associated with Mycenaean objects and practices, eventually creating a new and independent religious system.

From the end of the 11th century (SM) and during the whole 10th century (PG) the graves give evidence of an intensification and a clearer definition of the features begun during the 12th century. Being the funerary ritual from a European culture apparently focused on warfare and valour, as if to dying in battle ensued immortality in this life and a better afterlife, it is not surprising to notice the acquirements of similar values and funerary expressions also in the EIA Greece, which to violence and warfare had probably to resort to surviving a tougher present. Although the limited presence of weapons in the burials does not provide a strong evidence for such a cult of prowess in battle, we must admit that they could have been reused or left as heirlooms, apart from special cases in which the sword had to die with its master (outstanding prowess or excessive violence?). The warrior value was probably expressed (if not purposely constructed) by the entire assemblage of the status symbols offered in the burial, rather than just by weapons: pyre cremations, bronze fastenings, drinking sets and their decoration. A warrior society such as the Mycenaean one probably found also of great value to get hold of those effective cut-and-thrust swords which the Mycenaean *Wanaktes* had already tried to reproduce in their last kingship. These swords and daggers were likely to be used in combination with new armours and round shields, of which we hardly have any evidence. Together with these, new ideas and techniques for close hand-to-hand combat could have been devised, a *forma mentis* of extreme importance for the next generation of Greeks, who in the archaic world will find themselves absorbed in the philosophy of the warrior and continuously referring to those heroes of the past, not only sung by Homer, but also scratched on the pots of the 8th/7th centuries.¹²⁴⁰ With the ideology introduced by Europe and adapted to the Greek local realities, an entire set of materials could have become fashionable in the EIA. Possibly new clothing types were acquired and adopted at least by the elite, together with their exotic and attractive fastenings like the long pins and arched fibulae. The European implements to the Greek cult were joined, as would appear

¹²⁴⁰ See Powell 1991.

from the large amount of vessels connected with drinking,¹²⁴¹ by local beliefs and cultural elements. The main receptacle of this intercultural combination was probably Athens, which acquired, adopted and re-elaborated these foreign ideologies in an original way, rapidly exporting it to the rest of the Aegean.

The dead were imagined as resting in a sort of secret cocoon where their passage to the otherworld had to be safe and undisturbed. What the soul was believed to find in the after-life is unknown, but it could be similar to what was written on several funerary texts of the historical Greek period,¹²⁴² described also by the sources.¹²⁴³ There was a place in which the souls could find bliss together with those of the heroes and gods. Yet this ‘Elysium’ was at the end of a perilous trip in the realm of the dead, in which without blood and therefore without wits, a supernatural thirst would have doomed the souls to drink from the river of unmindfulness, losing themselves forever. This universal but somehow personal religion has to be thought of as separate from the rituals devoted to the gods who governed earthly life, although the existence of the latter does not exclude the former.

None of these arguments involves violent newcomers. Yet, as at present, there was no barrier for them to move to Greece in small numbers and to interbreed. Migrations of different ethnicities to Greece may well have occurred and some of the foreign objects found in tombs could have resulted from this encounter. Migrations of Greek people abroad (Cyprus, Crete, Italy, Anatolia) are archaeologically attested and their colonies could have been other areas from which new ideas were assimilated. This should make us more conscious about the complexity of the period and refrain us from the urgency to label lands and populations as ethnically and culturally impermeable. Population movements were since the LBA one of the most obvious results of the improved navigability and the enhanced interconnection between distant places. However, what I exclude here is the concept of invasive population movements, intended as mass migrations which would have occasioned a bigger and much more evident change in the early Greek society, a change the graves do not show.

What the burials provide with regard to foreign objects remains limited to bronze assemblages, largely European in style, probably imported from the contemporary Hallstatt cultures. Nevertheless, iron, the great protagonist of the 10th century, was already being used in Greece three-hundred years earlier than Europe (Hallstatt C) and therefore was the result of different contacts and technologies, highlighting both the multiplicity of ideas and cultural

¹²⁴¹ See IV.5.1.

¹²⁴² Graf, Johnston, 2007.

¹²⁴³ Pindar, Olympian Odes, II, vv. 50-60.

implements at work during the first Millennium and the political independence of Greece from any foreign authority. Although the Adriatic Sea remains one of the most accepted bridges to export European objects via Southern Italy, I would prefer not to exclude the Danube as a possible alternative. As proposed by some scholars,¹²⁴⁴ I would like to underline here the important associations of artefacts and burial practices occurring between Eastern Europe (especially the Balkan regions) and mainland Greece. It has been evidenced by recent metallographic analyses that most of the European metal imports found in LH IIIC Greece have a Northern Italian origin (Trentino, Veneto).¹²⁴⁵ But there is virtually no significant evidence of Greek artefacts in the north, while a reasonable presence is attested in the south, leading to the assumption that the Southern Italian cultures imported northern ingots through Adriatic trade and later produced and exported artefacts to Greece by sea. I think it is undeniable that the Adriatic was sailed and used as an intercultural link, judging by several objects reaching Southern and Central Italy. But the lack of Greek artefacts in Northern Italy should also discourage a direct connection between that part of Italy and the Aegean, even admitting the mediation of Southern Italian populations. I think unidirectional trade is hard to believe during pre-monetary periods, when the economy was characterised by exchange of objects. The presence of Northern artefacts in the Greek-frequented markets of Southern Italy should have produced more Greek artefacts also in the North. This anomaly should encourage present research to speculate more about the trading power represented by the Danube river. The Danube was, as today, a navigable and relatively smooth route which connected present Germany to Ukraine. It could service several docks throughout Eastern Europe, each stocking and exporting the goods collected to other trade centres scattered beyond the several ridges crossing the Balkans. Eventually the materials traded from the Danube would have reached Northern Greece. Furthermore, Southern Italy could have obtained Northern metalworks also from the closer Eastern European coast, via the Adriatic as well, and not from Northern Italy.

¹²⁴⁴ See Merhart 1952: 137-147; Hiller 1986: 135-169.

¹²⁴⁵ Chapter V.I.1.2.



Figure 87: Possible foreign interactions in Southern Italy

In my perspective, the economic reasons behind the end of the Palaces and their initial incapability to reinsert themselves into the independent trade network self-generated during the LBA brought Greece to generally reintroduce an agriculturally-based society, the order and safety of which was guaranteed by warrior elites who probably claimed rights on the possession of the land. This simpler and less monumental society continued to regard its Mycenaean past as glorious, re-proposing it in its material culture for at least a century after the collapse of the palaces, while new contacts and trade with European cultures geographically linked by the Danube river very soon brought new status symbols and ideologies. These had the effect of changing the material evidence especially with regards to warfare and the warrior ideology it encompassed. Whichever way we want to explore this transition and its natural consequences, we will always find that violent invasions are not part of the explanation and that, apart from a relatively immediate political reorganization, every other change was gradual, not abrupt, and parallel to a peaceful local development. There is no barrier between the LBA and the EIA, and therefore also the notion of cultural discontinuity can and should be dismissed.

Appendixes

APPENDIX I

Lists of pottery finds according to the excavation reports and other bibliographical sources.

MYCENAE:

Location	Shapes	Decoration	Chronology
Tomb XIV ¹²⁴⁶	1 Amphoriskos	Undecorated	LH IIIC Early
Citadel House 60	2 shallow bowls 1 amphora 1 Lekythos	Linear Linear Spirals	LH IIIC Early LH IIIC Middle Sub-Mycenaean
Citadel House 62	1 Kalathos	Linear	LH IIIC Middle
Citadel House 64	1 cup 1 Kylix 1 Deep Bowl 1 Cup 1 Lekythos	Dots Semicircles, Chevrons Fish pattern Wavy Lines Spiral, chevrons	LH IIIC Early LH IIIC Middle LH IIIC Middle LH IIIC Late Sub-Mycenaean
Citadel House 66	1 Stirrup Jar 1 Deep Bowl 1 Kalathos	Lozenges Undecorated Plastic Blobs	LH IIIC Early LH IIIC Early LH IIIC Early
Citadel House 68	1 Deep Bowl	Undecorated	LH IIIC Middle
Citadel House 69	1 Cup 1 Krater	Undecorated Panelled	LH IIIC Early LH IIIC Early
Kalkani Museum Kalkani Tomb 532 ¹²⁴⁷	MI: 2649 1 Jug MI: 2652 1 Stirrup Jar MI: 2713 1 Jug MI: 2723 1 Jug MI: 2542 1 Trefoil- mouthed Jug MI: 2721 Deep Bowl	Linear Foliolate Bands Linear Linear Hand-drawn Semicircles Reserved Bands	LH IIIC Early LH IIIC Early LH IIIC Early LH IIIC Early LH IIIC Middle LH IIIC Late
Cyclopean Terrace	1 Stirrup Jar	Lozenges, Zigzags	LH IIIC Middle
National Museum	MI: 1294.2 1 Cup	Dogtooth, Chevrons	LH IIIC Middle
Gortsulia G-III ¹²⁴⁸	Fragmentary	Undefined	LH IIIC Middle
Third Kilometre Cemetery 502	1 Kalathos 1 Shallow Bowl 1 Amphoriskos 1 Jug	Wavy Lines Wavy Lines Scroll and Tassel Undecorated	LH IIIC Middle LH IIIC Middle LH IIIC Late LH IIIC Late
Area XLVIII	1 stirrup jar	Unreported	LH IIIC

¹²⁴⁶ All the shapes until Kalkani after Mountjoy 1999(1): 155-196.

¹²⁴⁷ Wace 1939: 113; Thomatos 2006: 149.

¹²⁴⁸ Shelton 2000: 36.

Granary	1 Amphoriskos 1 Stirrup Jar 1 Cup 1 Krater	Concentric Arcs Wavy Lines Panel with bird Wavy Lines	LH IIIC Middle LH IIIC Middle LH IIIC Late LH IIIC Late
Bath Grave	1 Collar-necked Jar 1 Krater	Tassels Reserved Centre	LH IIIC Late LH IIIC Late
Pithos Burial	1 Amphora 1 Trefoil-mouthed Jug	Linear Triangles, Loops	LH IIIC Late LH IIIC Late
Lion Gate	1 Jug 1 Ring vase 1 Deep Bowl 1 Deep Bowl 1 Deep Bowl 1 Deep Bowl 1 Deep Bowl	Antitethic Loops Linear Reserved Zones, Bars Reserved Zones, Bars Cross-hatched Triangles Wavy Lines Cross-hatched Triangles	LH IIIC Late LH IIIC Late LH IIIC Late LH IIIC Late LH IIIC Late LH IIIC Late LH IIIC Late
South House 64	1 Kalathos 1 Jug	Cross-hatched Triangles Wavy Lines	LH IIIC Late Sub-Mycenaean
	1 Narrow-necked Jug 1 Lekythos 1 Stirrup Jar	Concentric Triangles Cross-hatched Triangles Undecorated	Sub-Mycenaean Sub-Mycenaean Sub-Mycenaean
Citadel House Γ31	1 Lekythos 1 Cup 1 Jug 1 Stirrup Jar 1 Lekythos	Fishnet, Lines Fishnet, Lines Linear Linear Linear	Sub-Mycenaean Sub-Mycenaean Sub-Mycenaean Sub-Mycenaean Sub-Mycenaean
Prehistoric Cemetery ¹²⁴⁹ Grave XXXIX	1 bowl 1 jug	Granary style; Undecorated.	LHIIIC; LHIIIC.
Grave PG601	1 belly-handled amphora 1 askos	Undecorated; Undecorated.	Proto-Geometric; Proto-Geometric.

¹²⁴⁹ Pakenham-Walsh 1955: 190-193.

PERATI:¹²⁵⁰

Location	Shape	Decoration	Chronology
Tomb Σ1	1 feeder 4 stamniskoi 3 stirrup jars 1 cup 1 deep bowl 1 alabastron 1 lekanis 1 pyxis 2 pithamphorae	Brown painted, 3 lines on the shoulder; Brown painted, linear; Spirals and semicircles. Linear and concentric circles. Solid red painted. Unpainted. Unpainted. Brown painted + circles and lines; Linear decoration; Circular and linear; Linear.	LH IIIC
Tomb Σ2	1 stamniskos 2 kraters 1 alabastron 1 lekythos 1 deep bowl 1 feeder 1 stirrup jar	Linear; Linear; Linear; Linear; Linear; Undecorated; Linear.	LH IIIC
Tomb Σ3	3 cups 3 stirrup jars 1 lekanis 3 jugs 1 alabastron	Linear; Linear; No decoration, no paint; No decoration; Solid yellow painted.	LH IIIC
Tomb Σ4	1 cup	No decoration, no painting.	LH IIIC
Tomb Σ9	3 stamniskos 1 stirrup jar 1 jug 1 cup	No decoration, brown-painted; Linear; Linear; No decoration.	LH IIIC
Tomb Σ14	1 stirrup jar 2 cups 1 lekythos 1 feeder	Spirals and semicircles; Linear; Linear; Linear.	LH IIIC
Tomb Σ14a	1 deep bowl 1 cup 1 stamniskos	Linear; Undecorated, unpainted; Linear.	LH IIIC – Phase II ¹²⁵¹

¹²⁵⁰ Iakovidis 1970.

¹²⁵¹ The division in three phases comes from Iakovidis 1980: 106. In his chronological reconstruction phase I includes the dates from 1190/1185 to 1165/1160 BC, so from the extremity of LH IIIB2 to LH IIIC Early; Phase II the dates from 1165/1160 to 1100 BC, encompassing LH III Early and Middle, while phase III from 1100 to 1075 BC, so from LH III Middle to part of LH IIIC Late.

Tomb Σ16	1 jug 2 stirrup jar 1 semi-conical vase 1 lekanis	Linear; Concentric circles; Unpainted; Linear.	LH IIIC
Tomb Σ17	1 pithamphora	Fringed style.	LH IIIC
Tomb Σ19	1 jug 2 lekanides 1 cup 1 feeder 1 stamniskos 1 deep bowl	Linear; Linear; No decoration, yellowish-red-painted; Linear; Linear; Linear.	LH IIIC
Tomb Σ20	5 stirrup jars 2 jugs 1 stamniskos 1 deep bowl 4 lekanides	Linear; Linear; Linear; No decoration, red- painted; Lines and spirals;	LH IIIC
Tomb Σ23	1 stamniskos 1 feeder 1 jug 1 lekythos 1 cup	No decoration, brown- painted; Linear; Linear; Linear; No decoration, dark- brown paint.	LH IIIC Phase II
Tomb Σ24	1 stamniskos 2 stirrup jars	No decoration, brown- painted; Linear.	LH IIIC
Tomb Σ32	1 feeder 1 stamniskos	Linear; Solid dark orange painted.	LH IIIC
Tomb Σ33	1 stirrup jar 1 jug	Concentric circles and semicircles; Linear.	LH IIIC
Tomb Σ41	1 deep bowl 1 alabastron 3 stirrup jars 1 stamniskos 1 kylix 2 jugs	Solid dark brown painted; Linear; Linear; Linear; Linear; Linear.	LH IIIC
Tomb Σ46	2 stamniskoi	Linear.	LH IIIC
Tomb Σ50	1 lekythos 1 feeder	Linear; Linear.	LH IIIC
Tomb Σ51	1 cup 1 stirrup jar 3 stamniskoi	No decoration, no paint; Lines, spirals, semicircles; No decoration, brown- painted.	LH IIIC

	1 lekythos	Linear.	
Tomb Σ51	4 stirrup jars 1 jug 1 lekanis 1 alabastron 1 stamniskos	Linear; No decoration, red- yellowish; Linear; Linear; Linear.	LH IIIC
Tomb Σ52	4 stirrup jars 1 jug 1 lekanis 1 alabastron 1 stamniskos	Linear; No decoration, red- yellowish paint; Linear; Linear; Linear.	LH IIIC
Tomb Σ57	1 jug 1 feeder	Linear; Linear.	LH IIIC
Tomb Σ60	2 stirrup jars 1 stamniskos	Rhomboids, concentric circles; Concentric circles, spirals.	LH IIIC
Tomb 1	10 stirrup jars 1 lekanis 5 stamniskoi 4 jugs 1 deep bowl 1 lekythos 1 pithamphora 1 cup	Linear; Lines and circles; Linear; Linear; Linear; Linear; No decoration, no paint; No decoration, no paint.	LH IIIC – Phases I, II.
Tomb 3	1 jug 1 deep bowl	Linear; Linear.	LH IIIC – Phase II.
Tomb 4	5 stirrup jars 4 jugs 5 stamniskoi 1 cup 1 deep bowl 1 lekythos 1 alabastron	Linear; Linear; Linear; No decoration, brown- painted; No decoration, brown- painted; Linear; No decoration, brown- painted;	LH IIIC – Phases I, II.
Tomb 5	8 stirrup jars 1 deep bowl 4 stamniskoi 1 alabastron 1 kernolekanis 1 jug	Lines and spirals; No decoration, brown- painted; Linear; Linear; Linear; Linear.	LH IIIC – Phase I.

Tomb 5a	2 lekythoi 2 stirrup jars 4 stamniskoi	Linear; Linear and arches; Linear.	LH IIIC – Phases II, III.
Tomb 6	1 stirrup jar 1 stamniskos	Linear; Linear.	LH IIIC Phase I
Tomb 7	1 cup 1 jug 1 deep bowl	No decoration, red-painted; Linear; No decoration, brown-painted.	LH IIIC Phase II
Tomb 8a	6 stirrup jars 1 jug 1 alabastron 3 stamniskoi	Spirals, concentric circles, lines and rhomboids; Lines and concentric circles; Linear; Spirals, concentric circles.	LH IIIC Phases I, II.
Tomb 9	2 jugs 1 cup 5 stirrup jars 1 hydria 1 deep bowl	Linear; No decoration, no paint; Rhomboids, concentric circles; Linear; Linear.	LH IIIC Phases I, II.
Tomb 10	1 stirrup jar 2 jugs 1 stamniskos 5 stirrup jars 1 alabastron 1 cup 3 deep bowls 1 pithamphora 1 oinochoe 1 cup 1 lekanis	Lines, spirals, concentric circles; Linear; No decoration; Linear; Linear; Linear; Linear; Fringed style; Linear; No decoration, no paint; No decoration, no paint.	LH IIIC Phase II.
Tomb 11	3 stirrup jars 2 jugs 1 lekanis 1 stamniskos	Spirals and concentric circles; Linear; Linear; Linear.	LH IIIC Phases I, II.
Tomb 12	14 stirrup jars 3 lekanides 5 lekythoi 1 cup 4 stamniskoi 7 jugs 2 deep bowls 1 flask 1 hidria	Linear; Linear; Linear; No decoration, no paint; Linear; Linear; Linear; Concentric circles; Linear.	LH IIIC Phases I, II, III.

Tomb 13	17 stirrup jars 1 lid 2 oinochoai 1 lekanis 2 cups 3 jugs 11 stamniskoi 1 lekython 1 deep bowl 1 lekanis 1 alabastron	Rosettes and concentric arches; Concentric circles, lines; Lines, spirals; Linear; Stripes and semiellipses; Linear; Linear; Linear; Lines and concentric arches; Lines and circles; No decoration, red-yellowish paint.	LH IIIC Phases II, III.
Tomb 16	2 stamniskoi 1 stirrup jar	No decoration, red-yellowish; Lines and spirals.	LH IIIC Phase I.
Tomb 18	1 feeder 1 jug	Linear; Linear.	LH IIIC Phase II.
Tomb 21	5 stirrup jars 1 lekanis 4 stamniskoi 1 feeder 4 cups 1 jug 1 lekanis 1 alabastron	Lines, concentric circles; Linear; No decoration, red-painted; Linear; No decoration, red-painted; Spirals and concentric arches; Linear; Linear; Linear.	LH IIIC Phases I, II, III.
Tomb 24	1 alabastron 1 stirrup jar	Linear; Lines and spirals.	LH IIIC Phases I.
Tomb 25	2 lekythoi 1 cup 2 stirrup jars 3 stamniskoi 2 alabastra 2 feeders	Linear; No decoration, red-yellowish paint; Linear; Linear; No decoration, red-yellowish paint; Linear.	LH IIIC Phases I, II.
Tomb 27	9 stirrup jars 2 stamniskoi 1 lid 1 deep bowl 1 Lekythos 1 Lekanis	1 with circular and linear decoration + pending semicircles; Linear; Linear; Linear; Ringed and linear; Linear decoration.	LH IIIC Phases II, III.

Tomb 29	1 deep bowl 1 cup	Solid brown painted; Ringed.	LH IIIC
Tomb 30	4 stirrup jars 1 pithamphora 1 jug 1 stamniskos 1 feeder 1 cup	Linear; Concentric arches; Fringed style; No decoration, dark-red paint; Linear; No decoration, no paint.	LH IIIC Phase II.
Tomb 30a	3 stamniskoi 4 cups 1 deep bowl 1 stirrup jar 1 pyxis 1 flask 1 lid	Linear; Linear; Stripes; Triangles and semicircles; Linear; Stripes and concentric circles; Lines and semicircles;	LH IIIC Phases II, III.
Tomb 31	1 stamniskos 2 alabastra	Linear; Linear.	LH IIIC Phase I.
Tomb 33	3 stirrup jars 1 alabastron 1 deep bowl	Lines and concentric circles; Lines and circles; No decoration, brown- painted.	LH IIIC Phases I, II.
Tomb 33a	1 lekythos 1 alabastron	Linear; Linear.	LH IIIC Phase II.
Tomb 34	1 flask 4 stirrup jars 1 cup 1 stamniskos 1 feeder 1 jug 2 deep bowls 2 cups	Lines, concentric circles; Rosettes and semicircles; Linear; Linear; Linear; Linear; Linear; Linear.	LH IIIC Phase II.
Tomb 35	1 krater 2 lekythoi 1 alabastron 1 stamniskos 1 lekanis 1 jug 1 stirrup jar 1 lid	Linear; Linear; Lines, spirals and triangles; Linear; Linear; Linear; Spirals, lines, concentric circles; Linear.	LH IIIC Phase I, II.

Tomb 36	1 lekanis 3 jugs 3 stirrup jars 1 stamniskos 2 oinochoe 1 cup 1 feeder	Linear; Linear; Circles and spirals; Linear; Linear; Linear; Linear.	LH IIIC Phases II, III.
Tomb 38	2 stamniskoi 1 deep bowl 8 stirrup jars 1 flask 2 jugs 2 lekanides 1 kylix 3 lekythoi 1 deep bowl	Linear; No decoration, dark- brown-painted; Spirals; Stripes and concentric circles; Linear; Linear; Linear; Linear; Linear.	LH IIIC Phase III.
Tomb 39	2 stamniskoi 1 feeder 1 cup 1 jug	Linear; Linear; No decoration, red- painted; Linear.	LH IIIC Phase I.
Tomb 43	3 lekanides 4 stamniskoi 3 stirrup jars 2 jugs 1 pyxis 1 deep bowl	Lines and concentric arches; Linear; Spirals, triangles, circles; Linear; Lines and trefoils; Linear.	LH IIIC Phase II.
Tomb 46	2 jugs 1 lekanis 1 stamnos 1 stamniskos 1 stirrup jar 1 oinochoe	Linear; Linear; Linear; No decoration, red- painted; Concentric circles; Linear.	LH IIIC Phases I, II, III.
Tomb 46a	1 jug 1 feeder	Linear; Linear.	LH IIIC Phase II.
Tomb 48	1 feeder	Linear.	LH IIIC Phase II.
Tomb 51	1 alabastron 1 stamniskos 1 stirrup jar	Concentric circles and arches; No decoration, red- painted; Linear.	LH IIIC Phase I.
Tomb 56	1 deep bowl 1 stamniskos 1 stirrup jar	Linear; Linear; Semicircles and five- petal rosettes;	LH IIIC Phase III.
Tomb 57	1 stirrup jar	Concentric circles;	LH IIIC Phase II.

	1 jug 1 stamniskos	Linear; Linear.	
Tomb 59	1 hidria 1 cup 1 feeder 1 stamniskos 1 kylix 1 deep bowl 1 stirrup jar 1 alabastron	Linear; Linear; Linear; No decoration, red- brown painted; No decoration, no paint; Linear; Linear; Linear.	LH IIIC Phase II.
Tomb 64	1 feeder 2 stamniskos	Linear; Linear.	LH IIIC
Tomb 65	1 jug 9 stirrup jars 6 stamniskoi 1 lekythos 2 alabastra 1 hidria 1 deep bowl 2 cups	Linear; Linear; Solid reddish painted; Linear; Linear; Linear; Solid dark red painted; 1 solid dark red painted; 1 unpainted	LH IIIC Phases I, II, III.
Tomb 69	3 stamniskos 2 lekythoi	Linear; Linear.	LH IIIC Phase I.
Tomb 70	1 cup 1 lekythos	Solid dark brown painted; Linear.	LH IIIC Phase II.
Tomb 73	1 stirrup jar	Linear.	LH IIIC Phase I.
Tomb 74	4 jugs 3 cups 1 amphoriskos 3 stamniskoi 2 oinochoai 6 stirrup jars 1 feeder 1 hidria 2 lekythoi 1 deep bowl	Linear; Linear, semi-elliptical; Linear; Linear; Linear; Linear and semi-circular; Linear; Linear; Linear; Linear; Linear;	LH IIIC Phase II, III.
Tomb 75	8 stirrup jars 7 stamniskoi 2 jugs 1 hidria 1 lid 1 deep bowl 2 alabastra 1 cup 1 kalathos	Loops, fivefold rosettes, leaves, triangles, semicircles; Ringed, linear; Linear; Linear; Ringed, linear; Ringed; Linear; No decoration; Ringed, linear; Linear;	LH IIIC Phases I, II, III.

	1 pithamphora 2 lekythoi	Linear; Linear.	
Tomb 76	3 stamniskoi 4 stirrup jars 1 kylix	Linear; Lines, semicircles; Ringed.	LH IIIC Phase I, II.
Tomb 77	2 jugs 1 feeder 1 cup 1 stirrup jar	Linear; Linear; Undecorated; Linear.	LH IIIC Phase II.
Tomb 78	2 stamniskoi 6 stirrup jars 1 jug 1 krater	Linear; Linear; Concentric circles; Undecorated;	LH IIIC Phase I.
Tomb 82	1 stirrup jar	Lines, triangles.	LH IIIC Phase I.
Tomb 84	1 jug 1 deep bowl 1 stirrup jar	Ringed, linear; Circles; Linear.	LH IIIC Phase I.
Tomb 85	1 jug 1 lekythos 1 deep bowl	Circular; Linear; Circles.	LH IIIC Phase II.
Tomb 87	2 deep bowls 1 miniature stirrup jar 1 jug	No decoration, brown- painted; No decoration; Linear.	LH IIIC Phase II.
Tomb 88	3 stirrup jars 1 alabastron	Linear; Linear.	LH IIIC Phase II.
Tomb 90	3 feeders 1 cup 2 stirrup jars 2 stamniskoi 1 lekanis	Linear; No decoration, red- painted; Linear; Linear; Linear.	LH IIIC Phase I.
Tomb 92	4 stirrup jars 1 cup 3 jugs 2 stamniskoi 1 cup 1 lekythos	Concentric arches; Semi-ellipses; Lines and spirals; Linear; Lines and circles; Linear.	LH IIIC Phases II, III.
Tomb 93	1 jug 3 stamniskoi 2 stirrup jars 1 cup	No decoration; Linear; Semicircles; No decoration, brown- painted.	LH IIIC Phase II.
Tomb 96	2 stirrup jars	Semicircles and rhomboids.	LH IIIC Phase II.

Tomb 97	3 stamniskoi	No decoration, black-painted.	LH IIIC Phase II.
Tomb 98	1 lekanis 2 stamniskoi	No decoration; No decoration.	LH IIIC Phase I.
Tomb 100	2 stirrup jars 1 lekythos	Spirals; Linear;	LH IIIC Phase II.
Tomb 101	5 stirrup jars	Spirals, concentric circles.	LH IIIC Phases II, III.
Tomb 104	1 alabastron 1 jug 1 cup 1 feeder 1 stirrup jar	No decoration, no paint; Linear; No decoration, no paint; Linear; Lines, concentric circles.	LH IIIC Phase I.
Tomb 105	1 pyxis 5 stirrup jars 1 oinochoe 1 stamniskos 1 lekanis 1 deep bowl 1 cup 1 feeder	Concentric circles; Spirals and trefoils; Linear; Lines and rings; Linear; Linear; No decoration, red-yellowish paint. Linear.	LH IIIC Phase II.
Tomb 106	1 deep bowl 1 cup 1 alabastron	Linear; No decoration; No decoration, no paint.	LH IIIC Phase II.
Tomb 108	8 stirrup jars 2 lekythoi 1 askos 2 jugs 1 alabastron 2 stamniskoi 1 alabastron 1 three-handled, wide-mouthed piriform vase	Lines, semicircles, concentric circles; Linear; Linear; Linear; Lines, trefoils and concentric arches; No decoration, brown-painted; Linear; No decoration, red-painted.	LH IIIC Phases II, III.
Tomb 110	1 lekanis 1 feeder 1 stirrup jar	Linear; Linear; Spirals and circles.	LH IIIC Phase II.
Tomb 111	3 cups 3 stirrup jars 2 alabastra 1 lekythos 1 stamniskos 3 jugs	Linear; Spirals, concentric circles; Linear; No decoration, no paint; Linear; Linear.	LH IIIC Phases I, II.
Tomb 111a	1 lekanis	Lines, concentric circles.	LH IIIC Phases I, II.

Tomb 112	2 jugs 3 stamniskoi 3 deep bowls 1 hidria 1 lekanis 1 stirrup jar 1 cup	Linear; Linear; 1 No decoration, red-painted, 2 linear; Linear; Linear; Lines, concentric arches; Linear.	LH IIIC Phase II.
Tomb 113	1 jug 2 deep bowls 2 stirrup jars 1 cup	Linear; Linear; Concentric circles; No decoration, no paint.	LH IIIC Phase II.
Tomb 114	1 lekanis 1 jugs 1 feeder 1 askos	Linear; No decoration, no paint; Linear; Linear.	LH IIIC Phase II.
Tomb 119	1 stamniskos 1 lekanis 1 jug 1 cup	Linear, concentric arches; Linear; Linear; No decoration, red-painted.	LH IIIC Phase II.
Tomb 122	1 deep bowl 1 jug 1 lekythos 1 lekanis 1 stamniskos 2 stirrup jars 2 trays 1 jug 1 lekanis 1 deep bowl	No decoration, red-brown-painted; Linear; Linear; Linear; No decoration, red-painted; Spirals, lines; No decoration, brown-painted; Linear; No decoration, red-painted; No decoration, red-painted.	LH IIIC Phases I, II.
Tomb 122a	3 stirrup jars	Spirals, concentric circles.	LH IIIC Phase III.
Tomb 123	1 krater 3 cups 1 stirrup jar 2 jug	Spirals; No decoration, red-painted; Linear; No decoration, brown-painted.	LH IIIC Phase II.
Tomb 124	3 stirrup jars 3 jugs 1 alabastron 1 cup	Linear; Linear; Linear; No decoration, unpainted;	LH IIIC Phase I.

Tomb 125	1 lekythos 1 alabastron 1 stamniskos	Lines, rhomboids, concentric arches; Spirals, concentric arches; No decoration, brown- painted.	LH IIIC Phase II.
Tomb 126	1 cup 1 jug	No decoration, dark- brown-painted; No decoration, black- painted.	LH IIIC Phase II.
Tomb 127	1 alabastron 1 stamniskos 2 stirrup jars 2 jugs 3 cups	Lines, concentric circles; Linear; Lines, spirals, bifurcated flowers; Linear; Linear.	LH IIIC Phases I, II.
Tomb 128	3 stirrup jars	Lines, spirals, concentric arches.	LH IIIC Phase II.
Tomb 129	2 feeders	Linear.	LH IIIC Phase III.
Tomb 130a	4 stirrup jars 1 pyxis 1 lekanis 2 cups 1 oinochoe 2 lekythoi 1 feeder 1 deep bowl 2 stamniskos	Lines, trefoils, semicircles; No decoration, red- painted; Linear; Linear; Linear; Linear; Linear; Linear; Linear.	LH IIIC Phase III.
Tomb 131	4 stamniskoi 3 jugs 1 deep bowl 1 feeder	Linear; Linear; Linear; Linear.	LH IIIC Phase II.
Tomb 132	1 oinochoe 1 stirrup jar	Linear; Linear.	LH IIIC Phase II.
Tomb 133	2 cups	Linear.	LH IIIC Phase II.
Tomb 134	1 stamnos 1 deep bowl 2 alabastra 2 feeders 4 stirrup jars 2 stamniskoi 3 cups 1 lekythos	Linear; Linear; Linear; Linear; Linear; Linear; No decoration, red- yellowish paint; Linear; Linear.	LH IIIC Phase II.
Tomb 136	2 lekanides 4 stirrup jars 2 cups	Linear; Linear; No decoration, red-	LH IIIC Phase II.

	5 stamniskoi 1 jug 1 hidria	yellowish paint; Linear; Linear; Linear.	
Tomb 137	4 stamniskoi 3 jugs 1 deep bowl 1 lekythos 6 stirrup jars 1 cup	No decoration; Linear; No decoration; Linear; Lines, semicircles, rhomboids; Linear.	LH IIIC Phase II.
Tomb 141	2 jugs 5 stamniskoi 1 stamnos	Linear; Linear; Linear.	LH IIIC Phase II.
Tomb 142	3 stirrup jars 3 stamniskoi 2 jugs 1 lekanis 1 deep bowl 1 lekythos	Linear; No decoration, dark- brown painted; Linear; Lines, concentric circles; Spirals, rosettes; Lines, rosettes.	LH IIIC Phase II.
Tomb 143	1 oinochoe 3 jugs 2 lekythoi 1 lid 2 stirrup jars 1 stamniskos 1 hidria	Linear; Linear; Linear; Linear; Lines and spirals; Linear; Linear.	LH IIIC Phases II, III.
Tomb 144	1 stirrup jar	Linear.	LH IIIC Phase I.
Tomb 145	6 stamniskoi 13 stirrup jars 3 lekanides 5 jugs 1 pithamphora 1 hidria 2 lekythoi 1 oinochoe 1 stamnos 1 cup 1 alabastron	Linear; Concentric circles; Concentric circles; Linear; Linear; Linear; Linear; Linear; Linear; Linear; No decoration, red painted; Linear;	LH IIIC Phases II, III.
Tomb 146	1 stamniskos 1 jug 1 deep bowl 4 stirrup jars 1 pithamphora 1 lid	Linear; Linear; No decoration, brown- painted; Linear; Linear; No decoration, red- painted	LH IIIC Phase II.

Tomb 147	3 alabastra 3 lekythoi 6 stamniskoi 3 stirrup jars 1 kalathos 1 cup 1 feeder 1 deep bowl 1 lid	Linear; Linear; No decoration; Linear; Linear; Linear; Linear; Linear; Linear; Lines and concentric circles.	LH IIIC Phase I.
Tomb 148	7 stirrup jars 2 deep bowls 3 jugs 3 stamniskoi 1 lekythos 1 kalathos	Concentric circles and semicircles; Circles; Linear; Linear; Lines, concentric arches; Linear.	LH IIIC Phase II.
Tomb 149	6 stirrup jars 4 stamniskoi 3 cups 3 jugs 2 pyxes 1 alabastron 1 glass	Lines and semicircles; No decoration, solid brown painted; Ringed and linear; Linear; Linear; Linear; No decoration.	LH IIIC Phases I, II.
Tomb 151	1 stirrup jar 1 stamniskos 1 deep bowl	Linear; No decoration, black paint; No decoration.	LH IIIC Phase I.
Tomb 152	1 amphora 1 cup 1 stamniskos 4 stirrup jars 1 hidria 1 deep bowl 2 lekythoi	Unpainted; Solid red painted; Linear; Linear; Linear; Solid brown painted; Ringed and linear.	LH IIIC Phases I, II.
Tomb 153	5 stirrup jars 1 jug 1 pithamphora	Linear; Solid brown painted; Linear.	LH IIIC Phase II.
Tomb 154	1 jug 2 stirrup jar 1 cup 1 stamniskos	Linear; Linear; Solid red-brown painted; Linear.	LH IIIC Phases I, II.
Tomb 155	1 oinochoe 1 big stirrup jar 7 stirrup jars 5 stamniskoi 4 jugs 4 deep bowls 3 cups	Ringed and linear; Fringed style; Linear; 1 Unpainted; 5 linear; Linear; Linear; Linear;	LH IIIC Phases I, II.

	1 feeder 1 Lekythos 1 stamnos 3 alabastra	Solid brown painted; Linear; Linear; Linear;	
Tomb 156	6 stirrup jars 3 jugs 6 stamniskoi 2 deep bowl 1 feeder 1 lidless pyxis	Semicircular, concentric circular, linear; Linear; Linear; Monochrome painted; Linear; Monochrome painted;	LH IIIC Phases I, II, III.
Tomb 157	5 deep bowls 4 jugs 5 stirrup jars 2 alabastra 1 stamniskos 1 oinochoe 1 hydria	Linear; Ringed and linear; Linear; Linear; Linear; Linear; Circular and linear.	LH IIIC Phase I.

SALAMIS:

Location	Shapes	Decoration	Chronology
Arsenal Cemetery ¹²⁵² Museum Inventory: 3639	1 hydria	Spirals, necklace;	LH IIIC Late - Sub-Mycenaean;
M.I. 3641	1 trefoil-mouthed jug	Running spiral;	LH IIIC Late - Sub-Mycenaean;
M.I. 3662	1 stirrup jar	Circles, triangles;	LH IIIC Late - Sub-Mycenaean;
M.I. 3612	1 stirrup jar	Wavy lines, loops;	LH IIIC Late - Sub-Mycenaean;
M.I. 3608	1 stirrup jar	Spirals, triangles;	LH IIIC Late - Sub-Mycenaean;
M.I. 3668	1 cup	Spiral;	LH IIIC Late - Sub-Mycenaean;
M.I. 3611	1 stirrup jar	Wavy line, loops, hooks;	LH IIIC Late - Sub-Mycenaean;
M.I. 3661	1 stirrup jar	Cross-hatched triangles;	LH IIIC Late - Sub-Mycenaean;
M.I. 3616	1 stirrup jar	Solid triangle, zigzags, concentric circles;	LH IIIC Late - Sub-Mycenaean;
M.I. 3613	1 stirrup jar	Wavy line;	LH IIIC Late - Sub-Mycenaean;
M.I. 3643	1 flask	Wavy line;	LH IIIC Late - Sub-Mycenaean;
M.I. 3644	1 flask	Undecorated;	LH IIIC Late - Sub-Mycenaean;
M.I. 3652	1 deep bowl	Undecorated;	LH IIIC Late - Sub-Mycenaean;
M.I. 3653	1 deep bowl	Undecorated;	LH IIIC Late - Sub-Mycenaean.
No Inventory	1 stirrup jar	Hand-drawn concentric circles, incised triangles;	Sub-Mycenaean
No Inventory	1 stirrup jar	Stripes, triangles, zigzags;	Sub-Mycenaean
M.I. 3607	1 stirrup jar	Wavy lines;	Sub-Mycenaean
No Inventory	1 stirrup jar	Bands, stripes;	Sub-Mycenaean
M.I. 3609	1 stirrup jar	Spirals, triangles;	LH IIIC Late
M.I. 3615	1 stirrup jar	Circles, crosses, loops, wavy lines;	Sub-Mycenaean
M.I. 3624	1 Amphora	Dots, bands, triangles, wavy lines;	Sub-Mycenaean

¹²⁵² Wide 1910: 17-29; Mountjoy 1999, I: 603-634.

M.I. 3629	1 Amphora	Stripes, dots, wavy lines.	Sub-Mycenaean
M.I. 3628	1 Amphora	Stripes, dots, wavy lines.	Sub-Mycenaean
M.I. 3630	1 Amphora	Stripes, dots, wavy lines;	Sub-Mycenaean
M.I. 3633	1 Amphora	Stripes, wavy lines;	Sub-Mycenaean
M.I. 3635	1 Amphora	Wavy lines;	Sub-Mycenaean
M.I. 3625	1 Amphora	Bands, stripes, wavy lines	Sub-Mycenaean
M.I. 3638	1 Amphora	Bands, stripes, dots, wavy lines.	Sub-Mycenaean
M.I. 3632	1 Amphora	Bands, wavy lines;	Sub-Mycenaean
M.I. 3634	1 Amphora	Wavy lines, stripes;	Sub-Mycenaean
M.I. 3627	1 Amphora	Hand-drawn circles, zigzags;	Sub-Mycenaean
No Inventory	1 Amphora	Stripes, wavy lines;	Sub-Mycenaean
M.I. 3631	1 Amphora	Undecorated	LH IIIC/Sub-Mycenaean
M.I. 3636	1 Amphora	Stripes;	Sub-Mycenaean
M.I. 3664	1 Amphora	Undecorated;	LH IIIC/Sub-Mycenaean
M.I. 3659	1 Jug	Stripes, wavy lines;	Sub-Mycenaean
M.I. 3660	1 Jug	Stripes, wavy lines;	Sub-Mycenaean
No Inventory	1 Jug	Undecorated;	LH IIIC/Sub-Myc
M.I. 3642	1 Jug	Dots, stripes;	Sub-Mycenaean
M.I. 3666	1 Jug	Undecorated;	LH IIIC/Sub-Myc
M.I. 3640	1 Jug	Bands, triangles;	Sub-Mycenaean
M.I. 3622	1 Jug	Concentric triangles;	Sub-Mycenaean
No Inventory	1 Jug	Stripes and hand-drawn concentric circles;	Sub-Mycenaean
M.I. 3633	1 Jug	Bands, stripes;	Sub-Mycenaean
M.I. 3620	1 Jug	Stripes;	Sub-Mycenaean
M.I. 3617	1 Jug	Stripes;	Sub-Mycenaean
M.I. 3648	1 Jug	Undecorated;	LH IIIC/Sub-Myc
M.I. 3649	1 Jug	Undecorated;	LH IIIC/Sub-Myc
M.I. 3644	1 deep bowl	Bands, wavy lines;	Sub-Mycenaean
M.I. 3667	1 cup	Undecorated;	LH IIIC/Sub-Myc
M.I. 3605	1 lid	Zigzags, spirals;	LH IIIC

Museum of Piraeus ¹²⁵³ No Inventory	1 krater	Diamonds, net pattern, multiple brush concentric circles;	Middle Proto-Geometric
No Inventory	1 pyxis	Lines, diamond shapes;	Late Proto-Geometric
No Inventory	1 pithos	Lines, diamond shapes, net patterns;	Middle Proto-Geometric
No Inventory	Shallow bowl	Diamonds;	Proto-Geometric
No Inventory	2 oinochoai	1 triangles, net pattern, 1 Lines and multiple brush concentric circles;	Proto-Geometric
No Inventory	2 jugs	triangles, net patterns	Proto-Geometric
No Inventory	2 kalathoi	Lines, dogteeth;	Late Proto-Geometric
No Inventory	1 neck-handled amphora	Diagonal lines;	Proto-Geometric
No Inventory	1 belly-handled amphora	Lines, fishscales, dots, multiple brush concentric circles;	Proto-Geometric

¹²⁵³ These finds from Salamis are mostly unpublished and some are contained in the Archaeological Museum of Piraeus, Athens, of which some Proto-geometric shapes are displayed in the first floor, room 2, as a cluster with no inventory numbers.

ATHENS:¹²⁵⁴

Location	Shape	Decoration	Chronology ¹²⁵⁵
Grave 1	1 lekythos	Lines and triangles;	Sub-Mycenaean;
	1 deep bowl	Monochrome paint, white band with brush stroke inside;	Sub-Mycenaean;
	1 neck-handled amphora	Lines, concentric semicircles;	Proto-Geometric;
	1 krater	Net pattern, concentric semicircles;	Proto-Geometric;
	2 stirrup jars	Linear;	Proto-Geometric;
	1 belly-handled amphora	Lines and triangles;	Proto-Geometric;
	2 jugs	Lines, concentric circles;	Proto-Geometric;
	1 flask	Lines, pintadera pattern.	Proto-Geometric;
	1 legged basin	Lines, concentric semicircles;	Proto-Geometric;
Grave 2	1 deep bowl	Lines and concentric semicircles;	Proto-Geometric;
	1 jug	No decoration.	Proto-Geometric.
	2 stirrup jars	1 Octopus style, 1 linear;	Sub-Mycenaean;
	1 amphoriskos	Linear and brush strokes.	Sub-Mycenaean;
	1 neck-handled amphora	Lines and multiple brush concentric circles.	Proto-Geometric.
Grave 3	1 belly-handled amphora	Lines, brush strokes, concentric circles.	Proto-Geometric.
Grave 4	1 lekythos	Linear;	Sub-Mycenaean;
	1 belly-handled amphora	Lines, brush strokes, concentric circles;	Proto-Geometric;
	3 kraters	Net patterns and concentric semicircles;	Proto-Geometric;
	2 jugs	Lines, checkers and triangles pattern;	Proto-Geometric.
	1 alabastron	Lines and multiple brush concentric semicircles;	Proto-Geometric;
	1 belly-handled	Lines and zigzags;	Proto-Geometric;

¹²⁵⁴ Kübler 1939; Kübler, Kraiker 1949; Kübler, Kraiker 1954, Styrenius 1967, Lemos 2002, Ruppenstein 2007.

¹²⁵⁵ The chronology followed here comes from the books mentioned in the footnote above. Since there were disagreements regarding the sub-phases involved in the transition from SM and EPG, the ceramic vessels have been named simply Sub-Mycenaean and Proto-geometric as in Kübler and Kraiker 1939-1954. For a more detailed study of the sub-phases in the Kerameikos, see especially the discrepancies between Styrenius 1967: 29-31, 89-91, Lemos 2002: 9, 14, 19, Ruppenstein 2007: 195-200, 243-245.

	amphora 1 fragmentary neck-handled amphora	Lines and multiple brush concentric circles; Lines and zigzags.	Proto-Geometric; Proto-Geometric.
	1 bowl		
Grave 5	1 belly-handled amphora	Lines, multiple brush concentric circles and semicircles;	Proto-Geometric;
	1 jug	Lines and multiple brush concentric circles;	Proto-Geometric;
	1 deep bowl	Lines, multiple brush concentric semicircles;	Proto-Geometric;
	1 deep bowl	Lines ad zigzags.	Proto-Geometric.
Grave 6	1 neck-handled amphora	Lines, multiple brush concentric semicircles.	Proto-Geometric.
Grave 7	1 neck-handled amphora	Lines, multiple brush concentric semicircles;	Proto-Geometric;
	1 jug	Lines.	Proto-Geometric.
Grave 10	1 amphoriskos	Lines and brush strokes;	Sub-Mycenaean;
	1 deep bowl	Linear;	Sub-Mycenaean;
	1 jug	No decoration.	Sub-Mycenaean.
Grave 11	1 belly-handled amphora	Lines and multiple brush concentric semicircles.	Proto-Geometric.
Grave 12	1 belly-handled amphora	1 lines, multiple brush concentric circles and semicircles.	Proto-Geometric.
Grave 13	1 stirrup jar	Linear	Sub-Mycenaean;
	1 belly-handled amphora	Lines, brush strokes, multiple brush concentric circles;	Proto-Geometric.
	1 pyxis	Lines, triangles, triangles, concentric semicircles.	Proto-Geometric;
	1 stirrup jar	Lines, multiple brush concentric semicircles.	Proto-Geometric.
Grave 14	1 Belly-handled amphora	Lines, brush strokes.	Proto-Geometric.
Grave 15	1 stirrup jar	Linear;	Sub-Mycenaean;
	1 amphoriskos	Lines and brush strokes.	Sub-Mycenaean;
	1 belly-handled amphora	Lines, brush strokes, multiple brush	Proto-Geometric;

	2 jugs 1 deep bowl 1 jug	concentric circles. Lines, multiple brush concentric circles; Lines, multiple brush concentric circles. No decoration.	Proto-Geometric; Proto-Geometric; Proto-Geometric.
Grave 16	1 stirrup jar 2 belly-handled amphorae 1 kalathos	Linear; Lines, brush strokes, multiple brush concentric circles; Lines and triangles.	Sub-Mycenaean; Proto-Geometric; Proto-Geometric.
Grave 17	1 deep bowl 1 jug 1 neck-handled amphora	No decoration, dark- painted; Linear; Lines and multiple brush concentric circles.	Sub-Mycenaean; Sub-Mycenaean; Proto-Geometric.
Grave 18	2 belly-handled amphorae	1 lines and brush strokes, schematic horse; 1 lines, brush strokes and multiple brush concentric semicircles.	Proto-Geometric.
Grave 19	1 stirrup jar 1 amphoriskos 1 jug 1 neck-handled amphora	Lines and semicircles; Linear; Linear; Lines and multiple brush concentric circles.	Sub-Mycenaean; Sub-Mycenaean; Sub-Mycenaean; Proto-Geometric.
Grave 20	1 stirrup jar 2 belly-handled amphorae 1 kylix 1 kalathos	Linear; Lines, rhombi, net pattern, multiple brush concentric circles; Lines; Lines, triangles.	Sub-Mycenaean; Proto-Geometric; Proto-Geometric; Proto-Geometric.
Grave 21	1 stirrup jar	Linear	Sub-Mycenaean.
Grave 23	1 amphoriskos	Lines and brush strokes.	Sub-Mycenaean.
Grave 24	1 stirrup jar 1 amphoriskos	Linear; Lines and brush strokes.	Sub-Mycenaean; Sub-Mycenaean.
Grave 27	1 amphoriskos 1 deep bowl	Lines and brush strokes; No decoration.	Sub-Mycenaean; Sub-Mycenaean.

Grave 33	1 stirrup jar 1 amphoriskos 2 amphorae	Brushed, dark-painted; Lines and brush strokes; Lines, brush strokes and concentric arches.	Sub-Mycenaean; Sub-Mycenaean; Sub-Mycenaean.
Grave 35	1 deep bowl	No decoration, dark-painted;	Sub-Mycenaean.
Grave 36	1 stirrup jar	Linear	Sub-Mycenaean.
Grave 42	1 stirrup jar 3 lekythoi 1 amphoriskos	Lines and semicircles; 2 Linear, 1 with semicircles; No decoration, dark-painted.	Sub-Mycenaean; Sub-Mycenaean; Sub-Mycenaean.
Grave 43	1 stirrup jar	Linear.	Sub-Mycenaean.
Grave 45	1 stirrup jar 1 deep bowl	Linear; No decoration.	Sub-Mycenaean.
Grave 46	1 amphoriskos 1 deep bowl	Linear; No decoration, dark-red painted.	Sub-Mycenaean; Sub-Mycenaean.
Grave 47	1 stirrup jar 1 lekythos 1 amphoriskos	Linear; Linear; Linear and brush strokes.	Sub-Mycenaean; Sub-Mycenaean; Sub-Mycenaean.
Grave 48	1 lekythos	Linear	Sub-Mycenaean.
Grave 49	1 lekythos	Lines and semicircles	Sub-Mycenaean.
Grave 51	1 deep bowl	No decoration, black-painted.	Sub-Mycenaean.
Grave 52	1 stirrup jar 1 amphoriskos	Linear; Linear.	Sub-Mycenaean; Sub-Mycenaean.
Grave 53	1 stirrup jar	Linear.	Sub-Mycenaean.
Grave 56	1 amphora	Linear.	Sub-Mycenaean.
Grave 57	1 jug	No decoration.	Sub-Mycenaean.
Grave 59	1 jug	No decoration.	Sub-Mycenaean.
Grave 62	1 amphoriskos	Linear.	Sub-Mycenaean.
Grave 63	2 amphoriskoi	Linear.	Sub-Mycenaean.
Grave 64	1 jug	Linear.	Sub-Mycenaean.
Grave 66	1 lekythos	Linear.	Sub-Mycenaean.
Grave 67	1 amphora	Linear.	Sub-Mycenaean.
Grave 69	1 stirrup jar	Linear.	Sub-Mycenaean.
Grave 70	1 stirrup jar 1 lekythos 2 amphoriskoi	Linear; Linear; Linear.	Sub-Mycenaean; Sub-Mycenaean; Sub-Mycenaean.
Grave 71	1 amphora	No decoration.	Sub-Mycenaean.
Grave 72	1 deep bowl	No decoration.	Sub-Mycenaean.
Grave 75	2 lekythoi 1 amphora	Lines and triangles; Linear.	Sub-Mycenaean; Sub-Mycenaean.

Grave 76	1 lekythos 1 amphoriskos	Linear; Lines and brush strokes.	Sub-Mycenaean; Sub-Mycenaean.
Grave 77	1 stirrup jar 1 pyxis + lid	Linear; No decoration.	Sub-Mycenaean; Sub-Mycenaean.
Grave 81	1 stirrup jar 1 deep bowl	Lines and semicircles; No decoration.	Sub-Mycenaean; Sub-Mycenaean.
Grave 84	1 lekythos	Lines and semicircles	Sub-Mycenaean.
Grave 87	1 jug	Linear.	Sub-Mycenaean.
Grave 88	1 lekythos	Linear.	Sub-Mycenaean.
Grave 89	1 stirrup jar	Linear.	Sub-Mycenaean.
Grave 91	1 stirrup jar	Lines and semicircles	Sub-Mycenaean.
Grave 92	1 lekythos	Lines and semicircles	Sub-Mycenaean.
Grave 94	1 deep bowl 1 jug	No decoration; Linear;	Sub-Mycenaean; Sub-Mycenaean.
Grave 97	1 amphoriskos 1 lekythos	Linear; Lines and triangles.	Sub-Mycenaean; Sub-Mycenaean.
Grave 98	1 stirrup jar	Linear.	Sub-Mycenaean.
Grave 105	1 high-handled jug	Linear.	Sub-Mycenaean.
Grave 106	1 stirrup jar	Lines, brush strokes and triangles.	Sub-Mycenaean.
Grave 108	3 amphoriskoi	2 Lines and brush strokes, 1 black- painted.	Sub-Mycenaean.
Grave 112	2 lekythoi	Lines and semicircles.	Sub-Mycenaean.
Grave 116 ¹²⁵⁶	1 jug	Linear	SM/PG ¹²⁵⁷
Grave 118	1 B.H. Amphora 1 deep bowl 1 lekythos 1 Krater	Lines, wavy lines; Bands, wolftooth; Triangles, bands; Lines, conc. circles;	SM/PG
Grave 119	1 Amphora	Bands, concentric semicircles.	SM/PG
Grave 120	1 Pyxis	Linear	SM/PG
Grave 121	2 Amphoriskoi; 2 Lekythoi; 1 Flask	Linear; Linear; Triangles; Concentric circles.	Sub-Mycenaean
Grave 126	1 B.H. Amphora 2 Amphoriskoi 2 Lekythoi	Lines, wavy lines; Wavy lin. Conc. circ. Linear	Sub-Mycenaean

¹²⁵⁶ Graves 116-147 are from Ruppenstein 2007: 9-39.

¹²⁵⁷ Ruppenstein 2007's transitional stage 4.

Grave 127	1 S.H. Amphora 2 Stirrup Jars 2 lekythoi 1 Cup	Linear; Lines, fishnets; Lines, Wavy lines; Lines, bands.	Sub-Mycenaean
Grave 129	1 Lekythos	Lines, Hand-made concentric circles.	Sub-Mycenaean
Grave 130	1 Amphoriskos 1 Stirrup Jar	Lines, wavy lines; Linear.	Sub-Mycenaean
Grave 131	1 Amphoriskos 1 Stirrup Jar 1 Jug	Linear; Lines, conc.semic.; Lines, conc. circ.	Sub-Mycenaean
Grave 136	1 Stirrup Jar 4 Amphoriskoi 2 Lekythoi	Fish-pattern, lines; Lines, wavy lines; 1 Painted monochrome 2 Lines, concentric circles	Sub-Mycenaean
Grave 138	1 Jug 1 Stirrup Jar	Painted monochr.; Lines, conc. circ.	LH IIIC/SM
Grave 140	1 Stirrup Jar 1 Jug	Linear Linear	Sub-Mycenaean
Grave 143	1 Lekythos	Lines, conc. circ.	Sub-Mycenaean
Grave 145A	1 B.H. Amphora 2 Deep Bowl 1 Lekythos 1 Krater	Lines, wavy lines; Lines, wavy lines; Fragmentary; Fragmentary;	SM/PG
Grave 145B	1 Lekythos	Lines, conc. circ.	SM/PG
Grave 146	1 B.H. Amphora 2 Kraters 5 Lekythoi 1 N.H. Amphoriskos 1 Ring Flask 1 Bird Askos 1 Deep Bowl 1 Jug 1 Amphoriskos	Linear; Chess pattern; Lines, conc. semic.; Lines, conc. semic.; Zigzag; Linear; Fragmentary; Fragmentary; Fragmentary.	SM/PG
Grave 147	1 Lekythos	Linear	SM/PG

Grave A Eridanos	1 lekythos 1 neck-handled amphora 1 belly-handled amphora 1 deep bowl 3 lekythoi	Lines and semicircles; Lines and multiple brush concentric circles; Lines, multiple brush semicircles, triangles; Lines, multiple brush concentric circles; Lines, concentric semicircles.	Sub-Mycenaean; Proto-Geometric; Proto-Geometric; Proto-Geometric; Proto-Geometric.
Grave A Akropolis	1 cup 2 jugs	Lines and brush strokes; Lines, brush strokes, concentric circles.	Sub-Mycenaean; Sub-Mycenaean.
Grave B Eridanos	1 deep bowl	Linear.	Proto-Geometric.
Grave B Akropolis	2 cups 3 jugs	Brush strokes; Lines, concentric semicircles;	Sub-Mycenaean; Sub-Mycenaean.
Grave C	1 neck-handled amphora 1 cup 1 bowl	Lines, multiple brush concentric semicircles, hourglass patterns; No decoration, dark-red paint; No decoration.	Proto-Geometric; Proto-Geometric; Proto-Geometric.
Grave D	1 neck-handled amphora 1 deep bowl	Lines, multiple brush concentric semicircles; Metopes with net and checkers patterns.	Proto-Geometric; Proto-Geometric.
Grave E	1 cup	Linear.	Proto-Geometric.
Tumulus 1	1 neck-handled amphora	Lines, multiple brush concentric semicircles.	Proto-Geometric.
Tumulus 2	1 neck-handled amphora	Lines, multiple brush concentric semicircles.	Proto-Geometric.
Tumulus 3	1 neck-handled amphora	Lines, multiple brush concentric semicircles.	Proto-Geometric.
Tumulus 4	1 neck-handled amphora	Lines, multiple brush concentric semicircles.	Proto-Geometric.
Tumulus 7	1 neck-handled amphora	Lines, multiple brush concentric circles.	Proto-Geometric.
Tumulus 8	1 neck-handled amphora	Lines and rhombi.	Proto-Geometric.

Tumulus 10	1 Neck-handled amphora	Lines and, hourglass patterns, concentric semicircles.	Proto-Geometric.
Tumulus 12	1 Neck-handled amphora	Linear.	Proto-Geometric.
Tumulus 13	1 Neck-handled amphora	Linear.	Proto-Geometric.
Tumulus 14	1 Belly-handled amphora	Lines, brush strokes, multiple brush concentric semicircles.	Proto-Geometric.
Tumulus 15	1 Belly-handled amphora	Lines, brush strokes, multiple brush concentric semicircles.	Proto-Geometric.
Tumulus 16	1 Belly-handled amphora	Lines, brush strokes.	Proto-Geometric.
Tumulus 19	1 hhydria	Lines, triangle, net, checker patterns.	Proto-Geometric.
Tumulus 20	1 belly-handled amphora	Lines, concentric semicircles.	Proto-Geometric.
Tumulus 22	1 deep bowl	Lines and spirals.	Proto-Geometric.
Tumulus 23	1 deep bowl	Lines and multiple brush concentric circles.	Proto-Geometric.
Tumulus 24	1 deep bowl	Lines, nets, multiple brush concentric circles.	Proto-Geometric.
Tumulus 25	1 deep bowl	Lines, nets, rhombi, multiple brush concentric circles.	Proto-Geometric.
Tumulus 28	1 krater	Lines, checker patterns.	Proto-Geometric.
Tumulus 29	1 tray	Lines and multiple brush concentric semicircles.	Proto-Geometric.

LEFKANDI:¹²⁵⁸

Location	Shapes	Decoration	Chronology
Skoubris Tomb 2 (child)	2 pedestalled bowls 1 deep bowl 1 feeder 1 shallow bowl	Undecorated; Undecorated; Undecorated; Undecorated.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 3	1 small neck-handled amphora 1 deep bowl	Bands; Dots.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 4	1 tripod 1 jug	Lines, dots; Undecorated.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 5	1 belly-handled amphora 1 small neck-handled amphora	Lines; Undecorated.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 8	1 trefoil oinochoe 1 lekythos 2 cups	Bands, bars; Lines, scales; Bands, dots.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 9	3 lekythoi	Fishnets, hand-drawn semicircles, lines.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 10	2 cups 1 triple-linked amphoriskos 1 lekythos 1 amphoriskos 1 jug	Undecorated; Undecorated; Groups of semicircles; Undecorated; Lost.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 12	1 trefoil oinochoe 1 cup	Undecorated; Undecorated.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 15	1 hydria	Wavy lines.	Sub-Mycenaean/ Proto-Geometric
Tomb 16	2 bird vases; 4 amphoriskoi; 1 pedestalled bowl; 1 cup; 1 triple amphoriskos 1 trefoil oinochoe 1 hydria 1 kalathos	Lines, triangles; Triangles, lines; Wavy lines; Undecorated; Chevrons, hatched triangles; Triangles; Wavy lines; Undecorated.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 17	1 deep bowl	Undecorated.	Sub-Mycenaean/ Early Proto-Geometric

¹²⁵⁸ Popham, Sackett, Themelis 1979.

Tomb 18	1 pedestalled bowl 1 deep bowl 1 jug 2 cups	Bands; Bands; Bars; Undecorated.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 19	1 cup 1 double amphoriskoi 1 amphoriskos 1 pyxis 1 askos 1 stirrup jar 1 hydria 2 cups	Undecorated; Intersecting concentric semicircles; Lines, triangles; Fishnet, schematic bovines; Undecorated; Undecorated; Wavy lines, triangles, hand- drawn semicircles; Lost.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 20	1 jug 1 bottle 1 amphoriskos 1 deep bowl 1 lekythos 2 cups	Undecorated; Undecorated; Wavy lines; Panels with antithetic arcs; Hand-drawn semicircles; Undecorated.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 21	2 cooking pots	Undecorated.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 22	1 deep bowl	Undecorated.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 23	1 shallow bowl	Undecorated.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 24	1 cup	Lines, wavy lines.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 25A	3 kalathoi	Undecorated.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 25B	1 cup 1 kalathos 1 trefoil oinochoe	Undecorated; Undecorated; Lines, zigzag.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 27	1 cup 1 jug	Undecorated; Lines, wavy lines.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 28	3 cups	Undecorated.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 29	2 cups 1 jug	Undecorated; Lines, wavy lines.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 31	1 hydria 1 amphoriskos 1 lekythos	Lines, wavy lines; Wavy lines; Hand-drawn semicircles.	Sub-Mycenaean/ Early Proto-Geometric

Tomb 32	1 lekythos 1 trefoil oinochoe 2 amphoriskoi 1 jug 1 deep bowl	Undecorated; Undecorated; Undecorated; Undecorated; Dotted wavy line.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 33	2 deep bowls 1 flask 3 neck-handled Amphorae 1 cup 5 pyxides 1 cooking pot	Dots; Undecorated; Undecorated; Undecorated; Undecorated; Undecorated.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 34	1 deep bowl 1 trefoil oinochoe	Undecorated; Undecorated.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 38	1 stirrup jar 1 triple amphoriskoi 1 amphoriskos	Triangles, lines; Hand-drawn dotted circles; Undecorated.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 40	1 trefoil oinochoe 1 jug 1 cup	Undecorated; Lines; Wavy lines.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 41	1 trefoil oinochoe 1 deep bowl	Undecorated; Undecorated.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 42	1 cup	Brush strokes.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 43	1 alabastron 1 neck-handled amphora 1 deep bowl 1 cup	Lines, wavy lines; Vertical wiggly lines; Undecorated. Undecorated.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 44	1 feeder	Lines, wavy lines.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 45	2 trefoil oinochoai 1 deep bowl 1 cup 1 cooking pot 1 dish 4 kalathoi	Lines, zigzags; Semicircles, dots; Undecorated; Undecorated; Undecorated; Undecorated.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 46	1 cup 1 lekythos 1 oval vase	Lines; Lines; Undecorated.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 49	1 cup	Bars.	Sub-Mycenaean/ Early Proto-Geometric

Tomb 51	1 jug 1 hydria 1 deep bowl 1 pedestalled bowl	Lines, wavy lines; Multiple zigzag, rows of wolfteeth, dots, figurative archers; ¹²⁵⁹ Undecorated; Undecorated.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 53	1 amphoriskos	Lines, wavy lines.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 55	1 lekythos 1 deep bowl	Hand-drawn semicircles, vertical brush strokes; Dots.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 56	1 belly-handled amphora 1 trefoil oinochoe 1 deep bowl 1 shallow bowl 1 kalathos	Lines, multiple brush concentric circles; Groups of semicircles, incisions; Two sets of sixteen pendent semicircles; Undecorated; Undecorated.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 59A	1 neck-handled amphora 1 kalathos 2 deep bowls 1 pyxis 3 kalathoi 1 miniature kalathos	Vertical strokes; Lines and triangles; Intersecting concentric semicircles; Battlement, lines, circles; Bands; Undecorated.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 59	1 trefoil oinochoe 1 deep bowl 1 cup 3 pyxides 1 miniature lekythos 9 kalathoi	Lines, oblique lines. Intersecting concentric semicircles; Undecorated; Zigzags, lines, hatchings. Undecorated; Undecorated;	Sub-Mycenaean/ Early Proto-Geometric

¹²⁵⁹ Rausing 1968: 98.

Tomb 60	1 deep bowl 1 cup 1 lekythos	Wavy lines; Undecorated; Sets of hand-drawn semicircles.	Sub-Mycenaean/ Early Proto-Geometric
Tomb 62	1 lekythos	Triangles.	Sub-Mycenaean/ Early Proto-Geometric
Pyre 1A	1 pyxis; 1 lentoid flask; 1 triple vase; 1 cup	Undecorated; Spiral; Lines; Undecorated.	Sub-Mycenaean/ Early Proto-Geometric
Pyre 1	1 quadrupede vase 1 stirrup vase	Obliterated; Obliterated.	Sub-Mycenaean/ Early Proto-Geometric
Pyre 3	1 hydria	Lines, concentric semicircles, wavy lines.	Sub-Mycenaean/ Early Proto-Geometric
Pyre 4	1 cup 1 deep bowl 1 amphora fragments	Hatching; Fishnet; Semicircles, bars.	Sub-Mycenaean/ Early Proto-Geometric
Pyre 6	1 jug 1 amphora fragments	Compass-drawn semicircles; Compass-drawn semicircles, wavy lines;	Sub-Mycenaean/ Early Proto-Geometric
Pyre 8	1 jug	Linear.	Sub-Mycenaean/ Early Proto-Geometric
Pyre 10	1 kalathos	Impressed triangles.	Sub-Mycenaean/ Early Proto-Geometric
Pyre 14	1 jug 1 amphora fragments	Undecorated; Bands, semicircles.	Sub-Mycenaean/ Early Proto-Geometric
Pyre 15	1 amphoriskos 2 lekythoi 1 belly-handled amphora 1 cup 1 deep bowl 1 jug	Brush strokes; Bands, cross- hatched triangles; Semicircles, circles; Undecorated; Pendent semicircles, lines; Semicircles.	Sub-Mycenaean/ Early Proto-Geometric
Pyre 17	2 lekythoi	Compass-drawn semicircles.	Sub-Mycenaean/ Early Proto-Geometric
Palia Perivolia Tomb 2	1 deep bowl	Pendent semicircles;	Middle Proto-Geometric

Tomb 3	2 trefoil oinochoai 1 jug 3 lekythoi 1 juglet 1 trefoil lentoid flask 1 pilgrim flask 1 small amphora 3 amphoriskoi 1 deep bowl 1 bowl 1 spouted bowl 8 kalathoi	1 Lines, triangles with fishnets, 1 lines concentric semicircles; Lines, concentric semicircles; Concentric semicircles; Undecorated; Concentric circles; Zigzags, concentric circles; Undecorated; Wavy lines, grooves; Pendent semicircles; Checkers, butterfly pattern, fishnet, squares, lines; Triangles, chevrons; Undecorated.	Late Proto-Geometric
Tomb 4	1 neck-handled amphora 2 jugs 1 trefoil oinochoe 1 cup 1 kalathos	Vertical strokes, bands; Undecorated; Undecorated; Zigzag, dots; Undecorated.	Proto-Geometric
Tomb 6	1 cup	Undecorated.	Proto-Geometric
Tomb 7	1 amphoriskos 1 trefoil oinochoe 4 kalathoi	Multiple brush concentric semicircles; Brush strokes; Impressed triangles.	Late Proto-Geometric
Tomb 8	1 kalathos	Lines, impressed triangles.	Proto-Geometric
Tomb 9	3 jugs 1 miniature lekythos 1 cup	Lines; Undecorated; Undecorated.	Middle Proto-Geometric

Tomb 10	1 amphoriskos 1 jug 1 trefoil oinochoe 1 cup 13 kalathoi 1 miniature hydria 2 miniature plates	Undecorated; Undecorated; Three sets of semicircles; Undecorated; Alternating triangles, dots; Vertical diamond chain between vertical bars; Undecorated.	Proto-Geometric
Tomb 12	3 pyxides	Lines.	Proto-Geometric
Tomb 13	3 amphoriskoi 4 jugs 5 lekythoi	Wavy lines; Undecorated; Lines.	Late Proto-Geometric
Tomb 14	1 hydria 2 cups 1 miniature jug	Languettes, intersecting vertical lines; Undecorated; Undecorated.	Middle Proto-Geometric
Tomb 15	1 feeder	Lines, rhombic figure.	Proto-Geometric
Tomb 16	1 trefoil oinochoe 2 jugs 1 lekythos 1 cup	Multiple brush concentric circles; Wavy lines, chevrons; Groups of four chevrons; Undecorated.	Middle Proto-Geometric
Tomb 17	1 kalathos	Undecorated.	Proto-Geometric
Tomb 18	3 Amphoriskoi 3 jugs	Zigzags; Undecorated.	Proto-Geometric
Tomb 19	1 trefoil oinochoe 1 jug 1 cup	Set of semicircles; Undecorated; Lines, wavy lines.	Late Proto-Geometric
Tomb 21	9 pyxides 1 deep bowl	Linear; Pendent semicircles.	Proto-Geometric

Tomb 22	<p>3 small amphorae</p> <p>1 chest with lid</p> <p>7 jugs</p> <p>4 trefoil oinochoe</p> <p>1 globular jug</p> <p>2 lekythoi</p> <p>1 flask</p> <p>3 pyxides</p> <p>1 spherical vase</p> <p>4 kalathoi</p> <p>2 bird vases</p>	<p>Sets of cross-hatched triangles;</p> <p>Checkers, fishnet, lines, zigzags;</p> <p>Lines, wavy lines;</p> <p>Undecorated;</p> <p>Set of semicircles;</p> <p>Undecorated;</p> <p>Bands;</p> <p>Triangles, lines;</p> <p>Lines, zigzags;</p> <p>Lines, triangles, zigzags;</p> <p>Undecorated.</p>	Late Proto-Geometric
Tomb 23	<p>1 double-spouted jug</p> <p>1 small amphora</p> <p>3 amphoriskoi</p> <p>2 jugs</p> <p>2 fragmentary lekythoi</p> <p>1 pyxis</p> <p>2 kalathoi</p>	<p>Cross-hatched triangles and diamond chains;</p> <p>Diamond chains, fishnet;</p> <p>Fishnets, checquers;</p> <p>Cross hatched triangles;</p> <p>Lost;</p> <p>Bands, wolftooth;</p> <p>Impressed triangles, incised lines.</p>	Late Proto-Geometric
Tomb 24	<p>1 neck-handled amphor</p> <p>2 amphoriskoi</p> <p>2 jugs</p> <p>1 shallow bowl</p> <p>5 kalathoi</p>	<p>Undecorated;</p> <p>Semicircles, arcs, bands;</p> <p>Wavy lines;</p> <p>Pendent semicircles;</p> <p>impressed triangles, incised lines.</p>	Late Proto-Geometric
Tomb 25B	<p>3 oinochoe</p> <p>1 cup</p>	<p>Cross-hatched triangles;</p> <p>Undecorated.</p>	Middle Proto-Geometric
Tomb 27	<p>1 oinochoe</p> <p>1 deep bowl</p>	<p>Four sets of semicircles;</p> <p>Pendent semicircles.</p>	Late Proto-Geometric

Tomb 28	1 jug 1 kantharos 1 cup 1 shallow bowl 1 kalathos 1 miniature neck-handled amphora 2 miniature jugs 2 miniature cups 1 miniature shallow bowl	Undecorated; Bands; Undecorated; Undecorated; Undecorated; Undecorated; Undecorated; Undecorated; Undecorated.	Proto-Geometric
Tomb 31	3 amphoriskos 2 lekythoi 1 lentoid flask	Triangles, fishnet; Lines, concentric circles; Concentric semicircles.	Late Proto-Geometric
Tomb 35	1 juglet 1 cup	Hatched triangles; Zigzags, dots.	Middle Proto-Geometric
Tomb 36	1 feeder 1 small trefoil oinochoe 2 juglets 1 cup	Undecorated; Undecorated; Undecorated; Undecorated.	Proto-Geometric
Tomb 37	1 kalathos	Checkers.	Proto-Geometric
Tomb 39	1 amphoriskos 2 pyxides 2 kalathoi	Concentric semicircles; Undecorated; Impressed triangles.	Proto-Geometric
Tomb 39A	1 feeder	Undecorated.	Proto-Geometric
Tomb 39B	1 jug 1 lekythos 1 amphoriskos 1 pyxis and lid 1 deep bowl 10 kalathoi 2 fragmentary bowls	Semicircles; Undecorated; Triangles filled with fishnet; Diamond chain, concentric semicircles; Pendent semicircles; Lines, impressed triangles; Lost.	Proto-Geometric
Tomb 41	1 lekythos 1 trefoil oinochoe	Semicircles, vertical lines; Concentric semicircles.	Late Proto-Geometric
Tomb 42	2 kalathoi	Impressed triangles, incised lines.	Late Proto-Geometric

Tomb 43	1 trefoil oinochoe 4 kalathoi 1 cup	Undecorated; Undecorated; Undecorated.	Proto-Geometric
Tomb 44	1 amphoriskos 1 cup 1 kalathos 1 triple amphoriskos 1 miniature vertical-handled amphoriskos 1 miniature jug 1 trefoil oinochoe 1 miniature jug 1 jug	Undecorated; Lines, wavy lines; Impressed triangles; Undecorated; Zigzags; Cross-hatched triangles; Concentric semicircles; Undecorated; Undecorated.	Proto-Geometric
Tomb 47	1 small neck-handled amphora 2 small amphorae 1 trefoil oinochoe 5 lekythoi 7 pyxides	Lines and zigzag; Undecorated; Undecorated; Undecorated; Lines, wolftooth, zigzags, hatched swastika.	Proto-Geometric
Pyre 9	1 amphora fragments	Undecorated;	Proto-Geometric
Pyre 11	1 neck-handled amphora 2 trefoil oinochoai 1 lekythos 1 jug 3 deep bowls 1 cup 1 pyxis	Set of concentric semicircles; Set of concentric semicircles; Cross-hatched triangles; Zigzags, horizontal bands; Wavy lines; Intersecting diagonal lines; Multiple brush concentric concentric.	Middle Proto-Geometric
Pyre 14A	2 fragmentary amphorae 2 jugs	Concentric circles; Incised lines.	Proto-Geometric
Pyre 14B	1 lekythos 1 amphoriskos 1 jug	Diagonal lines; Chevrons; Undecorated.	Late Proto-Geometric
Pyre 15	1 belly-handled amphora	Concentric circles.	Proto-Geometric

Pyre 19	1 cup	Undecorated.	Proto-Geometric
Pyre 28	4 kalathoi	Impressed triangles, incised lines.	Proto-Geometric
Pyre 31	1 deep bowl	Pendent semicircles.	Proto-Geometric
Pyre 32	1 sherds of amphorae 3 fragmentary kalathoi 1 sherds of jugs	Lost; Incised decoration; Unclear.	Proto-Geometric
Pyre 34	1 small amphora 4 pyxides	Diagonal lines; Lines, zigzag.	Proto-Geometric
Pyre 39	1 amphora 1 lekythos	Undecorated; Chevrons.	Proto-Geometric
Pyre 40	1 fragmentary bowl	Lost.	Proto-Geometric
Pyre 41	1 amphora 1 lekythos (fragmentary)	Set of multiple brush concentric circles with crosses inside, multiple brush concentric semicircles; Chevrons.	Late Proto-Geometric
Pyre 42	1 cup	Wavy band.	Late Proto-Geometric
Pyre 44	1 belly-handled amphora 1 neck-handled amphora 1 lekythos 1 globular pyxis	Undecorated; Circles; Undecorated; Undecorated.	Proto-Geometric
Toumba Tomb 1	1 trefoil oinochoe 1 bowl 1 dipper 1 lekythos	Concentric semicircles; Incised swastikas; Undecorated; Chevrons.	Late Proto-Geometric
Tomb 2	1 cup 2 kalathoi 1 cooking pot 1 jug 2 trefoil juglet	Undecorated; Undecorated; Undecorated; Undecorated; Undecorated.	Late Proto-Geometric
Tomb 3	1 lekythos 1 Donkey-shaped rython 4 lekythoi	Cross-hatched triangles; Stamped circles; Cross-hatched triangles, chevrons.	Late Proto-Geometric

Tomb 4	1 jug 1 small neck-handled amphora 3 kalathoi 1 shallow bowl	Undecorated; Zigzag pattern; Undecorated; Undecorated.	Late Proto-Geometric
Tomb 5	2 trefoil oinochoai 1 lekythos 1 jug 1 bowl 4 kalathoi	Lines and wavy lines; Undecorated; Undecorated; Undecorated; Undecorated.	Late Proto-Geometric
Tomb 7	2 jugs 1 cup	Concentric semicircles, lines; Wavy lines.	Late Proto-Geometric
Tomb 12A	2 jugs	Undecorated.	Late Proto-Geometric
Tomb 12B	1 trefoil oinochoe	Parallel zigzags.	Middle Proto-Geometric
Tomb 13	1 trefoil oinochoe 2 miniature jugs 1 cup 9 kalathoi	Incised grooves; Undecorated; Undecorated; Undecorated.	Late Proto-Geometric
Tomb 14	1 belly-handled amphora 1 neck-handled amphora	Groups of semicircles; Groups of semicircles.	Late Proto-Geometric
Tomb 15	1 hydria 2 lekythoi 1 trefoil oinochoe 1 small jug 1 cup 1 miniature cup 1 kalathos	Sets of semicircles; Chevrons; Undecorated; Undecorated; Wavy line; Undecorated; Interlocking triangles.	Late Proto-Geometric
Tomb 17	1 miniature cup 2 cups	Undecorated; Zigzags.	Late Proto-Geometric
Tomb 18	1 neck-handled amphora	Lines, multiple brush concentric semicircles.	Late Proto-Geometric
Tomb 19	1 trefoil oinochoe 1 feeder 1 kantharos 1 pyxis	Lines and triangles with fishnet pattern; Undecorated; Lines, zigzags; Triangles.	Late Proto-Geometric

Tomb 22	1 trefoil oinochoe 1 feeder 1 jug 1 cup 2 kalathoi	Undecorated; Three cross-hatched triangles; Undecorated; Undecorated; Undecorated.	Late Proto-Geometric
Tomb 23	1 jug 12 pyxides	Undecorated; Panels, straight lines, vertical lines, diagonal lines.	Late Proto-Geometric
Tomb 23A	1 mug 1 cup 1 pyxis 1 deep bowl	Wavy lines; Wavy lines; Wavy lines; Wavy lines.	Late Proto-Geometric
Tomb 24	1 spouted bowl	Linear.	Late Proto-Geometric
Tomb 25	1 trefoil oinochoe 2 kalathoi	Undecorated; Undecorated.	Late Proto-Geometric
Tomb 26	1 deep bowl 1 cup 6 lekythoi 2 jugs 4 trefoil oinochoai 3 vertical-handled amphoriskoi	Vertical panels with dots, triangles, zigzags, diamond chain, lines; Wavy lines; Multiple brush concentric circles; Undecorated; Multiple brush concentric circles; Multiple brush concentric circles.	Late Proto-Geometric
Tomb 27	1 cup 1 kalathos	Undecorated; Undecorated.	Late Proto-Geometric
Tomb 28	1 miniature neck-handled amphora 1 Cooking pot	Undecorated; Undecorated.	Late Proto-Geometric
Tomb 29	1 cup	Wavy lines.	Late Proto-Geometric
Tomb 31	3 trefoil oinochoai 1 feeder 1 deep bowl 1 kalathos 1 miniature trefoil oinochoe 1 miniature cup 1 cooking pot	Lines, wavy lines, hatched meanders; Hatched meanders; Wavy lines; Lines; Lines; Undecorated; Undecorated.	Late Proto-Geometric
Tomb 33	1 trefoil oinochoai 2 feeders 1 miniature trefoil oinochoe	Hatched meander; Wavy lines, hatched meander; Wavy lines.	Late Proto-Geometric

Tomb 36	1 kalathos	Reserved bands	Late Proto-Geometric
Tomb 39 ¹²⁶⁰	3 deep bowls 2 cups 1 jug 1 n.h. amphorae 1 amphora 5 pyxides 1 lid 1 kalathos 1 flask 1 krater 3 alabastra	Lines, wavy lines; Monochrome; Comp. Semic. Lines, comp. semic Lines. Linear. Monochrome Linear Monochrome Monochrome Languettes, plastic	Late Proto-Geometric
Tomb 42	1 oinochoe 3 jugs 1 Pyxis 2 deep bowls 1 tray 1 alabastron	Central band; Wavy lin., con. cir; Monochrome; Wavy band, conc.;; Conc. circles; Diamond shapes.	Late Proto-Geometric
Tomb 44 ¹²⁶¹	2 jugs 2 oinochoe 3 cups 1 kalathos 1 deep bowl 1 belly-handled amphora	Lines, gridded triangles, checkers, conc. circ; Monochrome; Wavy line; Impressed triang.;; Bands; Lines, concentric circles and semicircles.	Late Proto-Geometric
Tomb 45 ¹²⁶²	1 pyxis 1 kantharos 5 jugs 1 deep bowl 1 cup 1 oinochoe 18 kalathoi	Wavy bands; Wavy lines; 2 mono., 2 gridded triangles; Conc. pendent, semic; Linear; Monochrome; Lines, checkers, impressed.	Late/ Sub-Proto- Geometric
Tomb 46	2 trays 1 oinochoe 4 jugs 3 hydriai 1 flask 2 pyxides	Strokes; Unclear; Mono. Linear; Lines, grid. trian., conc. circles; Monochrome; Dogtooth, conc. circles.	Late Proto-Geometric

¹²⁶⁰ Popham, Touloupa, Sackett 1982: 217-220.

¹²⁶¹ Popham, Touloupa, Sackett 1982: 217-220.

¹²⁶² Toumba tombs 44-70 are from Popham, Lemos 1996: pls. 52-71.

	4 kalathoi	Impressed deco.	
Tomb 47	2 oinochoai 2 cups 2 deep bowls 1 hydria 2 kraters	1 mono; 1 con. cir; Monochrome: Zigzag; pendent semicircles; Linear; Monochrome.	Late Proto-Geometric
Tomb 48	3 cups 1 krater 2 kalathoi 1 n.h. amphora 1 hydria 1 jug 2 oinochoai 1 askos	Zigzag; Pendent semic; Lines, impressions; Conc. semic. checkers; Monochrome; Monochrome; Linear; Monochrome	Late Proto-Geometric
Tomb 49	1 jug 1 b.h. amphora	Linear; Lines, compass- drawn conc. circles.	Middle Proto-Geometric
Tomb 50	n.h. amphora	Lines, conc. circles;	Middle Proto-Geometric
Tomb 51	7 pyxides 2 deep bowls 1 b.h. amphora 1 krater	Lines, grids; Pendent semicirc; Conc. semicircles; Linear.	Middle Proto-Geometric
Tomb 52	1 jug 1 cup	Linear; Linear.	Middle Proto-Geometric
Tomb 54	11 jugs 1 oinochoe 1 krater 3 amphoriskoi 2 deep bowls 3 cups 2 kalathoi 1 hydria 1 pyxis 1 shallow bowl	Wavy band, conc. semicircles, monoch, lines; Zigzag band; Monochrome. Linear; Wavy lines; Impressions; Lines, checkers; Dogtooth, triang; Conc. semicircles.	Late Protgeometric

Tomb 57	3 oinochoai 1 jug 1 krater 1 cup	2 monoc. 1 conc. semicircles; Conc. semicircles; Pendent semic; Pendent semic.	Late Proto-Geometric
Tomb 62A	1 cup 1 tray 1 jug	Wavy line; Monochrome; Monochrome.	Late Proto-Geometric
Tomb 64	1 jug	Conc. circles, hourglass.	Late Proto-Geometric
Tomb 70	1 deep bowl 1 pyxis + lid 1 jug	Pendent semic; Linear; Triangles, conc. semic.	Late Proto-Geometric
Pyre 2	1 belly-handled amphora 1 amphora fragments 1 kantharos 4 pyxides	Multiple brush concentric circles and semicircles; Lost; Undecorated; Lines, wavy lines.	Late Proto-Geometric
Pyre 3	1 trefoil oinochoe 1 cup	Undecorated; Undecorated.	Late Proto-Geometric
Pyre 4	3 belly-handled amphorae 1 neck-handled amphora	Lines, fishnet, multiple brush concentric circles and semicircles; Lines.	Late Proto-Geometric
Pyre 7	Fragments of amphorae	Concentric circles and semicircles.	Late Proto-Geometric
Pyre 8	Fragments of amphorae 1 krater 1 amph. pithos	Concentric semicircles; Panelled concentric circles; Undecorated.	Late Proto-Geometric
Pyre 11	Fragments	Conc. circles;	Late Proto-Geometric
Pyre 12	Fragments	Diamond chain, checkers, zigzags.	Late Proto-Geometric
Pyre 13	Fragments	Diamond chain, pendent conc. circles.	Late Proto-Geometric

KNOSSOS:¹²⁶³

Location	Shape	Decoration	Chronology
Tekke Tomb A	1 neck-handled amphora 1 four-handled pithos 1 coarse-necked pithos	Multiple brush concentric circles, oblique bars, lines; Lines, zigzag, reserved panel with meanders; No decoration, unpainted.	Proto-Geometric; Middle Geometric; Early Geometric;
Tomb B	1 coarse-necked pithos 1 hydria 1 deep bowl	No decoration; No decoration; No decoration.	Proto-Geometric; Proto-Geometric; Middle Proto-Geometric.
Tomb D	3 deep bowls 1 lid 11 cups 2 krateroi (1 pedestalled) 4 oinochoai 1 stirrup jar 1 pithos 1 belly-handled amphora 2 neck-handled amphorae 2 bell-krateroi	Bars and stripes; Linear; No decoration; Bars, bands, multiple brush concentric circles, zigzag, hatched hourglasses, lines; No decoration; Bands, cross-hatched triangles, lozenges; Zigzag, rosettes within double outline, central meander with perpendicular hatching; Four birds alternating with four gridded diagonal crosses and four cross-hatched triangles; dots, lines, zigzags; Bands; Triangles, bands, lines, multiple brush, concentric circles;	Proto-Geometric; Proto-Geometric; Proto-Geometric; Late Proto-Geometric; Proto-Geometric; Late Proto-Geometric; Proto-Geometric; Proto-Geometric;

¹²⁶³ Coldstream, Catling 1996.

	1 conical lid 1 small-necked pithos	No decoration; Bands, multiple brush concentric circles, triangles, bands;	Early Geometric; Early Geometric;
	1 small two-handled pithos 25 oinochoai	Solid triangles, lines; Triangles, vertical panels, hatched triangles, zigzags.	Early Geometric; Early Geometric;
	3 jug-aryballoi 1 lekythos 7 hydriae	Reserved lines, bars; Bands, lines, dogteeth; Spirals, chevrons, 1 undecorated;	Early Geometric; Early Geometric; Early Geometric;
	1 jar 1 neck-handled amphoriskos 6 kraters	Spirals; No decoration, unpainted; Pendent solid triangles, lines, bands;	LMII Proto-Geometric; Proto-Geometric;
	6 pyxides 1 tray	Linear; No decoration, unpainted;	Proto-Geometric; Proto-Geometric;
	5 conical lids 5 kalathos lids	Bands, lines; Zigzags, bands, lines;	Early Geometric; Late Proto- Geometric; Early Geometric;
	18 cups	Fully painted, undecorated;	Early Geometric;
	2 jugs	No decoration, unpainted;	Proto-Geometric – Early Geometric;
	3 bell-deep bowls	No decoration, black- painted;	Proto-Geometric;
	1 pedestalled krater	Bars, zigzags, spirals, hooks, lozenges, check patterns;	Early Geometric;
	2 two-handled pithoi	Bars, spirals, bands, lines;	Early Geometric;
	1 juglet 1 bird-askos	Bars, dots; Brush strokes, meanders;	Early Geometric; Early Geometric;
	1 cauldron-krater	Reserved panel with meander;	Proto-Geometric;
	4 cups	Bars, zigzags;	Late Proto- Geometric;
	1 necked-pithos 1 tripod-basin	No decoration; Bars.	Early Geometric; Proto-Geometric.

Tomb J	2 necked pithoi	Undecorated;	Early-Middle Proto-Geometric;
	3 belly-handled amphoriskoi	Bands, lines;	Early Proto-Geometric;
	2 stirrup jars	Wavy lines, lozenges, chevrons;	Middle Proto-Geometric;
	4 oinochoai	Multiple brush concentric circles, hatched triangles;	Late Proto-Geometric;
	1 lid	Bands and lines;	Early Proto-Geometric
	3 deep bowls	Solid triangles;	Middle Proto-Geometric;
	14 cups	No decoration;	Middle Proto-Geometric;
	2 pyxides	Pendent bars;	Middle Proto-Geometric;
	3 deep bowls	Linear;	Middle-Late Proto-Geometric;
	2 neck-handled amphoriskoi	Wavy lines, bands;	Middle Proto-Geometric;
	2 high-footed deep bowls	Cross-hatched lozenges, multiple brush concentric circles;	Late Proto-Geometric;
	1 shoulder-handled amphoriskos	Bars, triangles;	Late Proto-Geometric;
	1 tray	Arcs and multiple brush concentric circles;	Early-Middle Proto-Geometric;
	4 high-footed cups	Undecorated;	Late Proto-Geometric;
	2 Tripod cooking pots	Undecorated;	Proto-Geometric;
	1 kalathos	Bands, multiple brush concentric circles;	Early Proto-Geometric;
1 kantharos	Undecorated;	Late Proto-Geometric;	
2 jugs	Bands, vertical bars;	Middle Proto-Geometric;	
1 aryballos	Bands;	Late Proto-Geometric;	
1 neck-handled amphora	Lines, circles;	Early Proto-Geometric;	
1 krater	Bands, lines, chevrons, multiple brush concentric circles.	Early Proto-Geometric.	
Tomb K	1 krater	Multiple brush concentric circles, bands, zigzags;	Early Proto-Geometric;
	1 lid of pyxis	Bands, lines;	Late Proto-

	2 deep bowls 1 pyxis	Undecorated; Bars, bands.	Geometric; Early Proto-Geometric; Middle-Late Proto-Geometric.
Tomb L	1 pyxides 1 lid for pyxis 4 deep bowls 1 belly-handled amphora 1 oinochoe 1 necked pithos 2 neck-handled amphorae 1 coarse necked pithos 1 cauldron-krater 1 stirrup jar 2 krateroi	Bands, lines; Linear; Undecorated; Bands, multiple brush concentric circles, lozenges, bands; Bands, lines, multiple brush concentric circles; Bands, bars, multiple brush concentric circles; Spaced bands; Undecorated; Bands, lines, solid triangles; Triangles, checked lozenges, bands, lines; Multiple brush concentric circles, bands.	Middle-Late Proto-Geometric; Middle-Late Proto-Geometric; Middle Proto-Geometric; Early Proto-Geometric; Late Proto-Geometric; Proto-Geometric; Late Proto-Geometric; Middle Proto-Geometric; Late Proto-Geometric; Middle Proto-Geometric; Proto-Geometric;
Tomb M	2 trays 3 krateroi 1 jug-aryballos 1 oinochoe 1 neck-handled amphora 1 necked pithos 1 belly-handled amphora 1 necked pithos 2 coarse necked pithoi	Bands, lines, bars, spirals, zigzags, chevrons; Undecorated; Chevrons, lines, bands; Spaced bands; Reserved panels, lines, bands; Bands, multiple brush concentric circles; Bands, bars, reserved stripes; Bars, multiple brush concentric circles; Undecorated.	Early Geometric; Proto-Geometric; Early Geometric; Middle Proto-Geometric; Early-Middle Proto-Geometric; Early Geometric; Early-Middle Geometric; Early Geometric; Early Geometric;

Tomb N	1 jug aryballos 1 pedestalled krater	Spaced bands; Bands, lines, lozenges, triangles, checked rectangles, zigzags, stripes;	Early Geometric; Proto-Geometric;
	1 hydria	Hatched chevrons, bars, spirals, bands;	Proto-Geometric;
	8 pyxides	2 Bands, lines, check patterns, 3 cross- hatched triangles, bands, lines, 2 zigzags, lines, 1 undecorated;	Early Geometric;
	1 conical lid 2 omphaloid lids 1 pithos	Meanders, chevrons; Circles, dots, lines; Solid triangles, bands, hatched leaves, lines;	Early Geometric; Early Geometric; Early Geometric;
	3 oinochoai	Solid triangles, bands, lines;	Proto-Geometric;
	1 deep bowl	Bars, bands, lines, zigzags;	Early Geometric;
	3 kalathos lids	Bands, multiple brush concentric circles;	Late Proto- Geometric;
	6 cups	Undecorated;	Proto-Geometric- Early Geometric;
	2 coarse pithoi 1 coarse necked pithos 1 necked pithos 1 feeder	Undecorated; Undecorated; Circles, bands, stripes; Undecorated.	Proto-Geometric; Early Geometric; Early Geometric; Proto-Geometric.
	Tomb O	2 oinochoai	Pendent hatched lozenges, lines, spaced bands; Bands; Undecorated; Undecorated;
	2 necked pithoi 1 kalathos lid 4 coarse necked pithoi	Reserved zone, brush stroke; Panel with diagonal check pattern, vertical meander with hatchings, figured scene with battlement and birds;	
	2 jugs		
	3 amphorae	Panel with diagonal check pattern, vertical meander with hatchings, figured scene with battlement and birds;	
	2 krateroi	Bars, bands, lozenges;	Late Proto- Geometric;
	3 lekythoi	Linear;	Late Proto- Geometric;
	1 amphora (base only) 1 stirrup jar	Unknown; Multiple brush concentric circles,	Geometric; Middle Proto- Geometric;

	<p>1 pyxis</p> <p>1 coarse pithos</p> <p>1 high-footed deep bowl</p>	<p>bars;</p> <p>Bands;</p> <p>Undecorated;</p> <p>Undecorated.</p>	<p>Late Proto-Geometric;</p> <p>Proto-Geometric;</p> <p>Late Proto-Geometric.</p>
Tomb P	<p>1 pyxis</p> <p>1 neck-handled amphora</p>	<p>Bands, lines, multiple brush concentric circles;</p> <p>Spaced bands.</p>	<p>Late Proto-Geometric;</p> <p>Late Proto-Geometric;</p>

	<p>3 bird askos</p> <p>1 necked pithos 2 stirrup jars</p> <p>2 high-footed deep bowls 4 bell-deep bowls</p> <p>1 Minoan larnax</p>	<p>Lozenge cross, double circles; Undecorated; 1 undecorated, 1 multiple brush concentric semicircles; Undecorated; Undecorated;</p> <p>Solid rock work, papyrus flowers with spiral leaves, circles enclosing crosses.</p>	<p>Proto-Geometric; Early Geometric; Middle Proto-Geometric; Middle Proto-Geometric; Late Proto-Geometric; LMIIIA2</p>
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Medical School Tomb 2	1 coarse pithos 1 stirrup jar 1 amphoriskos	Undecorated; Triangles, bands; Undecorated.	Sub-Minoan; Sub-Minoan; Sub-Minoan;
Tomb 13	1 aryballos 3 necked pithoi 1 pyxis 1 bird askos 1 deep bowl 1 two-handled pithos 1 kalathos lid 1 hydria 1 omphaloid lid 1 oinochoe 1 jug aryballos 1 tray 1 oinochoe 3 pyxides 1 kalathos lid 1 oinochoe 1 deep bowl 1 krater 1 domed lid 1 tray 1 kalathos lid 1 kalathos lid 1 kalathos lid 1 kalathos lid 1 tray 1 kalathos lid	Undecorated; Undecorated; Multiple brush semicircles, bands, lines; Chevrons, lambda pattern, solid lozenges; Undecorated; Curved stripes; Foliate bands, spirals, small pendent arcs; Undecorated; Solid double axes, alternating with bars; Cross-hatched triangles; Bars, bands, multiple brush concentric circles; Bucchero style; Undecorated; Multiple brush concentric circles; Plastic appliques; Zigzag; Undecorated; Arcs, bands, zigzags, multiple brush concentric circles; Undecorated; Reserved cross, bars, bands; Bands, cross-hatched triangles, lines; Bands; Solid triangles, bands; Bands, lines; Multiple brush; Concentric semicircles, triangles.	Proto-Geometric; Proto-Geometric- Early Geometric; Late Proto- Geometric; Proto-Geometric; Early Geometric; Proto-Geometric; Early Geometric; Early Geometric; Early Geometric; Early Geometric; Early Geometric; Early Geometric; Early Geometric; Late Proto- Geometric; Late Proto- Geometric; Proto-Geometric; Early Geometric; Proto-Geometric; Early-Middle Geometric; Early Geometric; Late Proto- Geometric; Late Proto- Geometric; Late Proto- Geometric; Late Proto- Geometric; Early Geometric; Late Proto- Geometric.

Tomb 16	1 small cup 1 carinated cup 1 stirrup jar	Undecorated; Undecorated; Brush strokes, spouts, bands, hatched triangles.	Early-Middle Geometric; Unclear; Sub-Minoan;
Tomb 18	3 cups 1 coarse necked pithos 1 juglet 1 Minoan larnax 1 neck-handled amphora 2 stirrup jars 1 necked pithos 1 hydria 1 olpe 1 jug aryballos 1 miniature cup	Undecorated; Impressions, grooves; Dots, bars; Undecorated; Bands; Concentric circles, triangles, bands; Undecorated; Zigzags, multiple brush concentric circles; Bands, lines; Undecorated; Undecorated.	Late Proto- Geometric; Late Proto- Geometric; Early-Middle Geometric; LMIIIA-B; Sub-Minoan; Sub-Minoan; Early Geometric; Late Proto- Geometric; Early Geometric; Early Geometric; Early – Middle Geometric.
Tomb 24	1 Ionian cup 1 stirrup jar 2 neck-handled amphorae	Shiny black gaze; Brush strokes, triangles; Loops, slashes, bands;	Unclear; Sub-Minoan; Sub-Minoan;
Tomb 25	1 cup 1 neck-handled amphora 1 stirrup jar	Vertical lines, bands; Wavy lines; Bars, bands.	Sub-Minoan; Sub-Minoan; Proto-Geometric.
Tomb 26	1 stirrup jar	Spirals.	Sub-Minoan.
Tomb 28	1 pyxis 1 miniature aryballos 1 coarse necked pithos 4 bell deep bowls 1 oinochoe 1 necked pithos 1 cup 1 bell krater	Undecorated; Undecorated; Undecorated; Undecorated; Bars, rings; Undecorated; Undecorated; Lozenges;	Late Proto- Geometric; Late Proto- Geometric; Late Proto- Geometric; Late Proto- Geometric; Late Proto- Geometric; Late Proto- Geometric; Late Proto- Geometric; Late Proto- Geometric;

	2 neck-handled amphorae	1 Spaced bands, diagonal cross, bars, bands, 1 bands, multiple brush concentric circles.	Geometric; Late Proto-Geometric.
Tomb 30	2 neck-handled amphorae 1 stirrup jar	1 Concentric circles, bands, curves; 1 Undecorated; Circles, bands, lines.	Proto-Geometric; Proto-Geometric.
Tomb 31	1 Minoan larnax 2 feeders	Undecorated; Bars, lines;	LMIIIA-B; Early-Middle Geometric;
Tomb 40	1 shoulder-handled amphoriskos 1 shoulder-handled amphora 3 stirrup jars 3 flasks 1 neck-handled amphora 1 small oinochoe 2 cups	Bands, vertical strokes; Bands; Brush strokes, triangles; Strokes, bands; Bands, cross-hatched triangles, spirals; Undecorated; 1 Brush strokes, scribbles, 1 hatched meander.	Sub-Minoan; Sub-Minoan; Sub-Minoan; Sub-Minoan; Sub-Minoan; Sub-Minoan – Late geometric;
Tomb 45	1 necked-pithos 1 bell deep bowl 2 stirrup jars 1 neck-handled amphora	Multiple brush concentric circles; Spirals; 1 Bars, 1 multiple brush concentric circles; rings, dashes, triangles lines; Spirals, bands, loops.	Proto-Geometric? Early Proto-Geometric; Early Proto-Geometric; Early Proto-Geometric.
Tomb 48	2 stirrup jars 1 bell-deep bowl 3 necked pithoi 1 bell-krater 1 neck-handled amphora 3 neck-handled amphorae	Zigzags, bands, lines; Reserved areas; Cross-hatched lozenges; Undecorated; Chevrons, cross-hatched triangles; Multiple brush concentric circles, wavy lines, bands,	Sub-Minoan; Early Proto-Geometric; Early Proto-Geometric; Early Proto-Geometric; Early Proto-Geometric; Early Proto-Geometric; Early Proto-Geometric;

		lines;	
Tomb 55	1 oinochoe 2 stirrup jars 1 bell-deep bowl	Undecorated; Triangles, hatchings, lines, bands; Undecorated.	Early Proto- Geometric; Early Proto- Geometric; Proto-Geometric.
Tomb 56	1 small bell-krater 1 squat oinochoe 2 neck-handled amphorae	Undecorated; Octopus scene, bands, chevrons; Slashes, loops, wavy lines.	Sub-Minoan; Unclear; Early Proto- Geometric.
Tomb 60	1 Minoan larnax 3 neck-handled amphorae 1 small oinochoe 3 bell-deep bowls 3 stirrup jars 1 feeder	Undecorated; Multiple brush concentric circles, lines, bands; Undecorated; Undecorated; 1 Linear, 2 triangles, cross-hatched lozenges; Undecorated;	LMIIIA-B; Early Proto- Geometric; Late Proto- Geometric; Early Proto- Geometric; Proto-Geometric; Late Proto- Geometric;
Tomb 63	1 oinochoe 1 pithos	Plastic ribs; Bars;	Late Proto- Geometric; Geometric.
Tomb 65	1 jug-aryballos 2 miniature tripod cauldrons 1 belly-handled amphora	Undecorated; Undecorated; Undecorated.	Late Proto- Geometric; Late Proto- Geometric; Late Proto- Geometric.
Tomb 75	5 oinochoai 16 cups 9 deep bowls	Bands, lines; Undecorated; Undecorated;	Late Proto- Geometric-Middle Geometric Late Geometric; Late Proto- Geometric – Late Geometric;

	<p>12 kalathoi 2 lentoid flasks</p> <p>3 small lids</p> <p>1 miniature jug</p> <p>1 kalathos lid 1 small bell krater 1 Minoan larnax</p>	<p>Undecorated; Lines, cross within circles, bars; Undecorated;</p> <p>Undecorated;</p> <p>Undecorated; Undecorated; Undecorated.</p>	<p>Early Geometric; Late Proto- Geometric; Late Proto- Geometric – Middle Geometric; Early Proto- Geometric; Early Geometric; Proto-Geometric; LMIIIA-B.</p>
Tomb 80	<p>1 stirrup jar</p> <p>1 neck-handled amphora</p>	<p>Bars, dashes, composites triangles; Lozenges, cross- hatched bands.</p>	<p>Early Proto- Geometric; Early Proto- Geometric.</p>
Tomb 98	<p>1 deep bowl 2 stirrup jars 1 neck-handled amphora 1 neck-handled amphoriskos 1 Minoan larnax</p>	<p>Undecorated; Dashes, triangles; Bands, diagonal slashes; Diagonal slashes; Undecorated.</p>	<p>Sub-Minoan; Sub-Minoan; Sub-Minoan; Sub-Minoan; LMIIIA-B.</p>
Tomb 100	<p>5 belly-handled amphorae</p> <p>1 tripod cauldron</p> <p>5 kalathoi</p> <p>8 bell-deep bowls</p> <p>2 coarse pithoi 6 oinochoai 1 coarse jug 1 coarse tripod jug 2 shallow deep bowls</p> <p>1 hydria</p> <p>2 deep rounded deep bowls 2 small conical lids</p> <p>3 pyxides</p> <p>1 lentoid oinochoe</p> <p>1 jug</p> <p>1 straight-sided pyxis</p>	<p>Zigzags, dots, multiple brush concentric circles; Undecorated;</p> <p>Undecorated;</p> <p>Undecorated;</p> <p>Undecorated;</p> <p>Undecorated; Undecorated; Undecorated; Undecorated; Undecorated;</p> <p>Bands;</p> <p>Undecorated;</p> <p>Bands, lines;</p> <p>Linear;</p> <p>Undecorated;</p> <p>Bands, zigzags, lines; Undecorated;</p>	<p>Late Proto- Geometric;</p> <p>Late Proto- Geometric; Late Proto- Geometric; Late Proto- Geometric; Proto-Geometric; Proto-Geometric; Proto-Geometric; Proto-Geometric; Middle Proto- Geometric; Early – Middle Proto-Geometric; Late Proto- Geometric; Late Proto- Geometric; Late Proto- Geometric; Late Proto- Geometric; Middle Proto- Geometric; Early Proto-</p>

	<p>10 trays</p> <p>5 cups</p> <p>2 deep bowls</p> <p>3 bell-krateroi</p> <p>3 neck-handled amphorae</p> <p>1 two-handled pithos</p> <p>1 pedestalled krater</p> <p>1 conical lid</p> <p>4 shallow krateroi</p> <p>1 stirrup jar</p> <p>1 lekythos</p>	<p>Undecorated;</p> <p>Undecorated;</p> <p>Undecorated;</p> <p>Lines, bands, multiple brush concentric circles;</p> <p>Undecorated;</p> <p>Triple zigzags, dotted lozenges, hatched meander;</p> <p>Bars, crossed, multiple brush concentric circles;</p> <p>Undecorated;</p> <p>Multiple brush concentric circles;</p> <p>Undecorated;</p> <p>Wavy lines, multiple brush concentric circles.</p>	<p>Geometric;</p> <p>Early Proto-Geometric;</p> <p>Late Proto-Geometric;</p> <p>Middle Proto-Geometric;</p> <p>Late Proto-Geometric;</p> <p>Late Proto-Geometric;</p> <p>Early Geometric;</p> <p>Late Proto-Geometric;</p> <p>Early Geometric;</p> <p>Late Proto-Geometric;</p> <p>Late Proto-Geometric;</p> <p>Late Proto-Geometric.</p>
Tomb 104	<p>1 coarse necked pithos</p> <p>1 feeder</p> <p>4 hydriai</p> <p>3 belly-handled amphorae</p> <p>21 deep bowls</p> <p>2 strainer askoi</p> <p>1 straight-sided lekythos</p> <p>1 sprinkler jug</p> <p>1 miniature bell deep bowl</p> <p>13 oinochoai</p> <p>3 small lids</p> <p>2 olpai</p>	<p>Undecorated;</p> <p>Pendent bars, wavy lines;</p> <p>Lines, wavy lines, hatchings;</p> <p>Bands, zigzags, hatched meander;</p> <p>Undecorated;</p> <p>1 Obliterated, lozenges, zigzags, dots;</p> <p>Bars;</p> <p>Circles, scribbles, hatched chevrons;</p> <p>Undecorated;</p> <p>Bars, bands;</p> <p>Undecorated;</p> <p>Bars;</p>	<p>Early Geometric;</p> <p>Late Proto-Geometric;</p> <p>Early Geometric;</p> <p>Early Geometric;</p> <p>Early-Late Geometric;</p> <p>Late Proto-Geometric;</p> <p>Late Proto-Geometric;</p> <p>Late Proto-Geometric;</p> <p>Late Proto-Geometric – Late Geometric;</p> <p>Late Proto-Geometric;</p> <p>Early Geometric;</p>

	<p>9 lekythoi</p> <p>2 shallow deep bowls</p> <p>1 high-footed deep bowl</p> <p>1 kalathos</p> <p>6 cups</p> <p>1 larnax</p> <p>1 two-handled pithos</p> <p>1 kalathos lid</p>	<p>Hatched chevrons, bars;</p> <p>Undecorated;</p> <p>Undecorated;</p> <p>Undecorated;</p> <p>Undecorated;</p> <p>Undecorated;</p> <p>Hatched meander, zigzags, diagonal cross;</p> <p>Dotted grid patterns;</p> <p>Multiple brush concentric circles.</p>	<p>Late Proto-Geometric;</p> <p>Early Geometric;</p> <p>Early Geometric;</p> <p>Early Geometric;</p> <p>Early geometric;</p> <p>Geometric;</p> <p>Early Geometric;</p> <p>Late Proto-Geometric;</p> <p>Proto-Geometric</p>
Tomb 106	<p>1 belly-handled amphora</p> <p>1 larnax</p>	<p>Undecorated;</p> <p>Undecorated.</p>	<p>Early Geometric;</p> <p>LMIIIA-B.</p>
Tomb 107	<p>4 hydriai</p> <p>6 lekythoi</p> <p>3 pyxides</p> <p>10 oinochoai</p> <p>6 cups</p> <p>1 straight-sided pithos</p> <p>4 small lids</p> <p>1 kalathos</p> <p>1 neck-handled amphoriskos</p>	<p>Bars, bands, lines;</p> <p>Zigzags, bands, Double circles, lines;</p> <p>Dots and painted details;</p> <p>Undecorated;</p> <p>Circles, lines;</p> <p>Painted scenes: winged nature goddess standing on wheeled platform between two trees with spiral branches. She wears a tall checked polos with upper fringe, wig-like hair, a shawl, triangular torso, arms raised, in each hand she holds a bird;</p> <p>Undecorated;</p> <p>Undecorated;</p> <p>Undecorated;</p>	<p>Late Proto-Geometric-Early Geometric;</p> <p>Late Proto-Geometric-Late Geometric;</p> <p>Late Proto-Geometric, Early Geometric;</p> <p>Late Proto-Geometric – Middle Geometric;</p> <p>Late Proto-Geometric;</p> <p>Late Proto-Geometric;</p> <p>Late Proto-Geometric;</p> <p>Late Proto-Geometric-Late Geometric;</p> <p>Late Proto-Geometric;</p> <p>Early Geometric;</p>

	1 tray 2 Minoan larnakes	Undecorated; figures wearing flounced skirts, spirals, female figure with round shield, spiral tree; 1 undecorated.	Early Geometric; LMIIIA-B.
Tomb 112	1 belly-handled amphora 1 bottle 2 stirrup jars	Brush strokes, wavy bands; Undecorated; Brush strokes triangles, bands.	Sub-Minoan; Sub-Minoan; Sub-Minoan.
Tomb 121	2 flasks 2 stirrup jars 1 small oinochoe with high handle 1 handmade juglet 1 thelastron	Brush strokes, bands; Brush strokes, lines, triangles; Undecorated; Incised ornaments; Undecorated.	Sub-Minoan; Sub-Minoan; Sub-Minoan; Sub-Minoan.
Tomb 126	1 four-handled pithos 1 domed lid 1 jug	Hatched bird, lozenges, diagonal cross between bars; Bars, multiple brush concentric circles; Undecorated.	Late Geometric; Late Geometric; Late Geometric.
Tomb 129	1 necked pithos 1 kalathos lid	Undecorated; Two circles under base.	Early Geometric; Early Geometric.
Tomb 134	1 miniature jug 1 jug-aryballos 1 oinochoe 1 jug 1 feeder 1 deep bowl 1 miniature jug- aryballos 1 straight-sided pithos 1 Minoan Larnax	Undecorated; Bars, lines; Quadruple triangles, zigzags, bars; Undecorated; Bars, bands; Interlocking pendent semicircles; Undecorated; Bird silhouette, dots, lozenges, nets; Incised lines.	Early Geometric; Early Geometric; Early Geometric; Early Geometric; Proto-Geometric; Proto-Geometric; Early Geometric; Early Geometric; LMIIIA-B.
Tomb 147	1 necked pithos 2 coarse necked pithoi	Bands; Undecorated.	Late Proto- Geometric; Proto-Geometric.
Tomb 160	1 stirrup jar	Concentric circles, brush strokes.	Sub-Minoan.

Tomb 178	1 deep bowl	Undecorated;	Early Geometric;
	4 aryballoi	Lines;	Early Geometric;
	3 neck-handled amphorae	Bars, S's, multiple brush concentric circles;	Early Proto-Geometric;
	2 oinochoai	Multiple brush concentric circles;	Proto-Geometric;
	2 oinochoai	Wavy lines, gridded chevrons;	Early Geometric;
	1 jug	Grooves;	Proto-Geometric;
	3 coarse necked pithoi	Grooves;	Proto-Geometric;
	1 small bell krater	Grooves;	Proto-Geometric;
	8 cups	Undecorated;	Late Proto-Geometric;
	1 coarse cauldron-pithos	Undecorated;	Late Proto-Geometric;
1 pyxis	Undecorated;	Proto-Geometric;	
1 krater	Undecorated;	Early Proto-Geometric in Sub-Mycenaean tradition;	
1 high-footed kraters	Multiple brush concentric circles, reserved cross, cross-hatched lozenges;	Middle Proto-Geometric;	
2 stirrup jars	Lines, S's, rings, triangles, zigzags;	Late Proto-Geometric;	
9 bell deep bowls	Obliterated;	Late Proto-Geometric;	
2 straight-sided pithoi	Panels of double zigzags, billets, lines, crossed lozenges, bars;	Early Geometric;	
1 giant cup	Bars;	Early Geometric;	
1 small lid	Undecorated;	Early Geometric.	
Tomb 182	1 jug-aryballos	Circles;	Late Proto-Geometric;
	1 miniature cup	Undecorated.	Proto-Geometric.
Tomb 186	1 stirrup jar	Concentric circles, brush strokes, triangles;	Sub-Minoan.
Tomb 200	3 stirrup jars	Horizontal strokes, concentric arcs, triangles, triangles;	Sub-Minoan;
	1 neck-handled amphora	Grooves, S pattern, bands;	Sub-Minoan.

Tomb 207	8 kalathoi 4 stirrup jars 8 high-footed deep bowls 1 high-footed krater 3 kalathoi 1 amphoriskos 7 amphoriskoi 6 deep bowls 4 cups 1 small lid 8 bell-deep bowls 1 tripod cooking jug 2 belly-handled amphorae 3 neck-handled amphorae 2 pyxides 1 jug 1 miniature oinochoe 1 straight-sided pyxis 1 small krater	Undecorated; Bars, zigzags, lines; Undecorated; Undecorated; Bars, lines, triangles; Freehand semicircles; Multiple brush concentric circles; Pendent semicircles; Undecorated; Undecorated; Undecorated; Undecorated; Undecorated; Obliterated; Multiple brush semicircles, pendent cross-hatched triangles; Gridded zigzags, cross-hatched triangles, bands, lines; Bands; Undecorated; Undecorated.	Middle Proto-Geometric; Middle Proto-Geometric; Late Proto-Geometric; Late Proto-Geometric; Middle-Proto-Geometric; Sub-Minoan; Early Proto-Geometric; Middle Proto-Geometric; Late Proto-Geometric; Late Proto-Geometric; Proto-Geometric; Proto-Geometric; Sub-Minoan, Early Proto-Geometric; Sub-Minoan; Late Proto-Geometric; Late Proto-Geometric; Late Proto-Geometric; Middle Proto-Geometric; Late Proto-Geometric.
Tomb 208	1 neck-handled amphora	Horizontal S, lines.	Sub-Minoan.
Tomb 218	2 kalathos lids 1 Coarse pyxis 3 oinochoai 4 oinochoai 1 jug 10 conical lids	Undecorated; Incised zigzags and lines; Undecorated; Undecorated; Undecorated; Circles;	Early Geometric; Early Geometric; Late Proto-Geometric; Early Geometric; Late Proto-Geometric; Early-Late Geometric;

	1 hydria 1 feeder	Grooves, bars; Zigzags, curved lined, cross-hatched triangles, lambda pattern;	Early Geometric; Proto-Geometric;
	3 lekythoi 2 small lids 2 omphaloid lids 2 deep bowls 1 miniature jug- aryballos	Composite triangles, bars; Undecorated; Undecorated; Reserved circles on floor; Zigzags, lines, bars;	Late Proto- Geometric; Late Proto- Geometric; Early Geometric; Early-Middle Geometric; Proto-Geometric;
Tomb 219	1 bird askos 11 bell deep bowls 1 jug-aryballos 1 oinochoe 2 oinochoai 4 cups 3 stirrup jars 1 double bird askos 1 lentoid flask 3 pyxides 1 pithos 1 coarse necked pithos 1 coarse conical lid 1 small lid 1 tripod jug 1 tray 1 high-footed deep bowl 1 Round House Model 5 belly-handled amphorae	Gridded zigzags, diagonals, bars, chevrons; Undecorated; Bands; Chevrons, bars; Hatched loops; Undecorated; Cross in thick circle, composite triangles; Lines, bars; Lines; Undecorated; Undecorated; Undecorated; Undecorated; Undecorated; Lines; Undecorated; Scribble, multiple brush concentric circles, dots; Cross hatched triangles, pendent semicircles on upper wall; Dogtooth, zigzags, diagonal lines, solid triangles, chevrons, bars, loops;	Late Proto- Geometric; Proto-Geometric; Late Proto- Geometric; Proto-Geometric; Early Geometric; Late Proto- Geometric; Middle Proto- Geometric; Proto-Geometric; Late Proto- Geometric; Late Proto- Geometric; Early-Middle Geometric; Proto-Geometric; Proto-Geometric; Proto-Geometric; Proto-Geometric; Midle Proto- Geometric; Late Proto- Geometric; Late Proto- Geometric; Proto-Geometric- Late Geometric;

Tomb 222	1 kalathos	Concentric circles, bands.	Sub-Minoan.
Tomb 229	2 necked pithoi 1 oinochoe 1 bell krater 1 kalathos 1 coarse necked pithos	Undecorated; Bands, pendent bars; Bars, bands, vertical zigzags; Undecorated; Undecorated.	Early Geometric; Middle Proto- Geometric; Early-Middle Proto- Geometric; Early-Middle Proto- Geometric; Proto-Geometric.
Tomb 242	1 stirrup jar 1 Feeder	Lines, composite triangles, hatchings, chevrons; Undecorated;	Middle Proto- Geometric; Proto-Geometric.
Tomb 280	1 coarse necked pithos 4 cups 1 miniature jug aryballos 2 miniature cups 1 shallow deep bowl 1 necked pithos	Undecorated; Undecorated; Undecorated; Undecorated; Undecorated; Concentric circles, zigzags.	Early Geometric; Early Geometric; Early Geometric; Early Geometric; Early Geometric; Early Geometric.

Tomb 283	<p>5 cups 4 oinochoai 1 straight-sided oinochoe 2 two-handled pithoi 8 cups</p> <p>2 coarse straight sided pithoi 1 miniature hydria 2 oinochoai 1 belly-handled amphoriskos 1 miniature cup</p> <p>1 bell krater 1 belly-handled amphora 3 miniature pyxides</p> <p>2 jug-aryballoi 1 kalathos 1 hydria 1 coarse jug</p> <p>1 coarse fenestrated stand 1 coarse-necked pithos</p>	<p>Undecorated; Crosses; Plastic ribs, trees, birds; Wavy lines, grooves; Vertical chevrons, cross-hatched lozenge chain; Bars, reserved circles;</p> <p>1 bands, lines; Chevrons, bars; Grooves;</p> <p>Gear pattern, bands, lines, zigzags; Undecorated; Bars, bands;</p> <p>Hatched leaves, pendent wave pattern with varied hatching; Undecorated; Undecorated; Undecorated; Bands, lozenges;</p> <p>Grooves;</p> <p>Undecorated;</p>	<p>Proto-Geometric- Early Geometric; Early-Middle Geometric; Proto-Geometric; Early Geometric;</p> <p>Early-Middle Geometric; Proto-Geometric; Proto-Geometric; Proto-Geometric;</p> <p>Early Geometric; Early Geometric; Proto-Geometric;</p> <p>Early Geometric;</p> <p>Geometric; Proto-Geometric; Early Geometric; Late Proto-Geometric; Proto-Geometric;</p> <p>Proto-Geometric;</p>
Tomb 285	<p>5 small lids 1 pyxis 1 coarse pithos</p> <p>1 jug-aryballos 1 coarse straight-sided pithos 1 coarse tripod basin 1 small oinochoe</p> <p>3 coarse necked pithoi</p> <p>1 bell krater 1 tray</p> <p>1 ring kernos</p> <p>4 pyxides</p>	<p>Bars; Undecorated; Undecorated;</p> <p>Undecorated; Linear;</p> <p>Undecorated; Bars, zigzags;</p> <p>Undecorated;</p> <p>Undecorated; Hatched cross, multiple brush concentric circles; Plastic birds;</p> <p>Undecorated;</p>	<p>Proto-Geometric; Proto-Geometric; Middle Proto-Geometric; Early Geometric; Proto-Geometric;</p> <p>Proto-Geometric; Early-Middle Geometric; Middle-Late Proto-Geometric; Sub-Minoan; Proto-Geometric;</p> <p>Late Proto-Geometric; Late Proto-</p>

	<p>6 cups 1 necked pithos 13 oinochoai</p> <p>27 bell deep bowls</p> <p>1 coarse lid</p> <p>1 krater 1 lekythos</p> <p>2 jug-aryballoi</p> <p>3 small oinochoai</p> <p>2 stirrup jars</p> <p>1 belly-handled amphoriskos 1 plate 1 kantharos</p> <p>1 Euboean shoulder-handled amphoriskos 1 straight-sided pyxis</p> <p>1 neck-handled amphora 1 bird askos</p> <p>1 miniature jug 1 high-footed deep bowl 1 belly-handled amphora</p> <p>1 coarse conical lid</p>	<p>Undecorated; Bars; Bars, lines, scribbles;</p> <p>Undecorated;</p> <p>Undecorated;</p> <p>Circles; Bars, lines;</p> <p>Bars, loops;</p> <p>Bars, bands;</p> <p>Bars, loops, cross-hatched triangles; Undecorated;</p> <p>Undecorated; Lustrous back painted;</p> <p>Undecorated;</p> <p>Undecorated;</p> <p>Bands, bars;</p> <p>Plastic decoration;</p> <p>Undecorated; Undecorated;</p> <p>Quadruple battlement, dogtooth, concentric circles, lozenges, bars, dots, triangles; Undecorated.</p>	<p>Geometric; Proto-Geometric; Early Geometric; Late Proto-Geometric; Middle Proto-Geometric; Late Proto-Geometric; Proto-Geometric; Late Proto-Geometric; Late Proto-Geometric; Middle Proto-Geometric; Middle Proto-Geometric; Early Proto-Geometric; Proto-Geometric; Late Proto-Geometric; Late Proto-Geometric; Early Proto-Geometric; Late Proto-Geometric; Late Proto-Geometric; Proto-Geometric; Late Proto-Geometric; Early Geometric;</p> <p>Late Proto-Geometric.</p>
Tomb 286	<p>2 aryballoi 3 necked-pithoi 1 small oinochoe</p> <p>1 shallow deep bowl</p>	<p>Undecorated; Undecorated; Wavy lines, bars, dots, billets; Wavy line.</p>	<p>Early Geometric; Early Geometric; Early Geometric; Early Geometric.</p>
Tomb 287	<p>5 cups</p> <p>2 hydriai</p>	<p>Undecorated;</p> <p>Cross-hatched lozenge, bars, diagonal cross between bars;</p>	<p>Late Proto-Geometric; Late Proto-Geometric;</p>

	<p>1 coarse necked pithos</p> <p>1 bell krater</p> <p>1 belly-handled amphora</p> <p>1 straight-sided pyxis</p> <p>1 small lid for pyxis</p> <p>1 neck-handled amphora</p> <p>7 oinochoai</p> <p>1 coarse cauldron</p> <p>1 coarse conical lid</p> <p>5 bell deep bowls</p> <p>3 pyxides</p> <p>2 small lids</p> <p>1 conical lid</p>	<p>Undecorated;</p> <p>Undecorated;</p> <p>Multiple brush concentric circles, check pattern, zigzags and chevrons;</p> <p>Undecorated;</p> <p>Undecorated;</p> <p>Bars, bands;</p> <p>Bands, cross-hatched triangles, bars, loops;</p> <p>Undecorated;</p> <p>Undecorated;</p> <p>Undecorated;</p> <p>Zigzags, solid triangles</p> <p>Undecorated;</p> <p>Undecorated;</p>	<p>Late Proto-Geometric;</p> <p>Late Proto-Geometric;</p> <p>Proto-Geometric;</p> <p>Late Proto-Geometric;</p> <p>Proto-Geometric;</p> <p>Middle Proto-Geometric;</p> <p>Late Proto-Geometric;</p> <p>Late Proto-Geometric;</p> <p>Proto-Geometric;</p> <p>Late Proto-Geometric;</p> <p>Late Proto-Geometric;</p> <p>Proto-Geometric;</p> <p>Late Proto-Geometric;</p> <p>Late Proto-Geometric;</p> <p>Late Proto-Geometric;</p>
Tomb 292	<p>8 small lids</p> <p>8 lekythoi</p> <p>2 kalathos lids</p> <p>8 oinochoai</p> <p>2 olpai</p> <p>2 omphaloid lids</p> <p>1 straight sided pithos</p> <p>2 trays</p> <p>10 domed lid</p> <p>1 pithos</p> <p>1 coarse necked pithos</p> <p>1 Minoan larnax</p>	<p>Undecorated;</p> <p>Scribbles, triangles;</p> <p>Undecorated;</p> <p>Grooves, zigzags;</p> <p>Cross-hatched panel;</p> <p>Undecorated;</p> <p>Schematised trees, birds, zigzags, curved stripes;</p> <p>Dots, circles;</p> <p>Undecorated;</p> <p>Undecorated;</p> <p>Undecorated;</p> <p>Spiral volutes, spirals, tricurved arches;</p>	<p>Proto-Geometric;</p> <p>Proto-Geometric;</p> <p>Proto-Geometric;</p> <p>Late Proto-Geometric;</p> <p>Early Geometric;</p> <p>Early Geometric;</p> <p>Proto-Geometric;</p> <p>Early Geometric;</p> <p>Early Geometric;</p> <p>Early Geometric;</p> <p>Proto-Geometric;</p> <p>LMIIIA2</p>
Tomb 294	<p>2 Minoan larnakes</p> <p>1 domed lid</p> <p>1 coarse straight pyxis</p> <p>1 kalathos</p>	<p>Undecorated;</p> <p>Undecorated;</p> <p>Grooves, zigzags;</p> <p>Undecorated.</p>	<p>LMIIIA-B</p> <p>Proto-Geometric;</p> <p>Late Proto-Geometric;</p> <p>Early Geometric.</p>

Tomb 306	1 oinochoe 2 necked pithoi 1 neck-handled amphora	Undecorated; Hatched chevrons, intersecting wavy lines; Bars;	Proto-Geometric; Early Geometric; Proto-Geometric.
Fortetsa Tomb 1	1 bell deep bowl 1 bell deep bowl 1 stirrup jar 1 belly-handled amphora 1 bell krater 1 deep bowl	Pendent hooks; Cross-hatched triangles, vertical wavy fringe; Bars, composite triangle on shoulder; Thick zigzag, multiple brush concentric circles; Undecorated; Bands.	Sub-Minoan; Early Proto- Geometric; Proto-Geometric; Late Proto- Geometric; Proto-Geometric; Early Geometric.
Tomb 5	1 belly-handled amphora 1 hydria	Bands, wavy lines; Bands, wavy lines;	Sub-Minoan; Sub-Minoan;
Tomb 13	1 small oinochoe	Undecorated.	Middle-Proto- Geometric.
Tomb 285	5 small lids 1 pyxis 1 coarse pithos 1 jug-aryballos 1 coarse straight-sided pithos 1 coarse tripod basin 1 small oinochoe 3 coarse necked pithoi 1 bell krater 1 tray 1 ring kernos 4 pyxides 6 cups 1 necked pithos 13 oinochoai 27 bell deep bowls 1 coarse lid	Bars; Undecorated; Undecorated; Undecorated; Linear; Undecorated; Bars, zigzags; Undecorated; Undecorated; Hatched cross, multiple brush concentric circles; Plastic birds; Undecorated; Undecorated; Bars; Bars, lines, scribbles; Undecorated; Undecorated;	Proto-Geometric; Proto-Geometric; Middle Proto- Geometric; Early Geometric; Proto-Geometric; Proto-Geometric; Early-Middle Geometric; Middle-Late Proto- Geometric; Sub-Minoan; Proto-Geometric; Late Proto- Geometric; Late Proto- Geometric; Proto-Geometric; Early Geometric; Late Proto- Geometric; Middle Proto- Geometric; Late Proto-

	<p>1 krater 1 lekythos</p> <p>2 jug-aryballoi</p> <p>3 small oinochoai</p> <p>2 stirrup jars</p> <p>1 belly-handled amphoriskos 1 plate 1 kantharos</p> <p>1 Euboean shoulder-handled amphoriskos 1 straight-sided pyxis</p> <p>1 neck-handled amphora 1 bird askos</p> <p>1 miniature jug 1 high-footed deep bowl 1 belly-handled amphora</p> <p>1 coarse conical lid</p>	<p>Circles; Bars, lines;</p> <p>Bars, loops;</p> <p>Bars, bands;</p> <p>Bars, loops, cross-hatched triangles; Undecorated;</p> <p>Undecorated; Lustrous back painted;</p> <p>Undecorated;</p> <p>Undecorated;</p> <p>Bands, bars;</p> <p>Plastic decoration;</p> <p>Undecorated; Undecorated;</p> <p>Quadruple battlement, dogtooth, concentric circles, lozenges, bars, dots, triangles; Undecorated.</p>	<p>Geometric; Proto-Geometric; Late Proto-Geometric; Late Proto-Geometric; Middle Proto-Geometric; Middle Proto-Geometric; Early Proto-Geometric; Proto-Geometric; Late Proto-Geometric; Late Proto-Geometric; Early Proto-Geometric; Late Proto-Geometric; Late Proto-Geometric; Proto-Geometric; Late Proto-Geometric; Early Geometric;</p> <p>Late Proto-Geometric.</p>
Tomb 286	<p>2 aryballoi 3 necked-pithoi 1 small oinochoe</p> <p>1 shallow deep bowl</p>	<p>Undecorated; Undecorated; Wavy lines, bars, dots, billets; Wavy line.</p>	<p>Early Geometric; Early Geometric; Early Geometric; Early Geometric.</p>
Tomb 287	<p>5 cups</p> <p>2 hydriai</p> <p>1 coarse necked pithos</p> <p>1 bell krater</p> <p>1 belly-handled amphora</p>	<p>Undecorated;</p> <p>Cross-hatched lozenge, bars, diagonal cross between bars; Undecorated;</p> <p>Undecorated;</p> <p>Multiple brush concentric circles, check pattern, zigzags and chevrons;</p>	<p>Late Proto-Geometric; Late Proto-Geometric;</p> <p>Late Proto-Geometric; Late Proto-Geometric; Proto-Geometric;</p>

	1 straight-sided pyxis	Undecorated;	Late Proto-Geometric;
	1 small lid for pyxis	Undecorated;	Proto-Geometric;
	1 neck-handled amphora	Bars, bands;	Middle Proto-Geometric;
	7 oinochoai	Bands, cross-hatched triangles, bars, loops;	Late Proto-Geometric;
	1 coarse cauldron	Undecorated;	Late Proto-Geometric;
	1 coarse conical lid	Undecorated;	Proto-Geometric;
	5 bell deep bowls	Undecorated;	Late Proto-Geometric;
	3 pyxides	Zigzags, solid triangles;	Late Proto-Geometric;
	2 small lids	Undecorated;	Late Proto-Geometric;
	1 conical lid	Undecorated;	Late Proto-Geometric;

NAXOS:¹²⁶⁴

Location	Shapes	Decoration	Chronology
Kamini			
Museum	1 pyxis	Linear;	LH IIIC Middle;
Inventory: ¹²⁶⁵			
1714	1 four-handled jar	Wavy line;	LH IIIC Middle;
M.I. 1748	1 amphoriskos	Undecorated;	LH IIIC Middle;
M.I. 1854	1 amphoriskos	Semicircles;	LH IIIC Middle;
M.I. 1738	1 amphoriskos	Zigzags;	LH IIIC Middle;
M.I. 1758	1 amphoriskos	Semicircles;	LH IIIC Middle;
M.I. 1713	1 amphoriskos	Zigzags;	LH IIIC Middle;
M.I. 2050	1 amphoriskos	Panel with fish;	LH IIIC Middle;
M.I. 1718	1 amphoriskos	Semicircles;	LH IIIC Middle;
M.I. 1763	1 amphoriskos	Wavy lines;	LH IIIC Middle;
M.I. 1824	1 amphoriskos	Streamers;	LH IIIC Middle;
M.I. 1840	1 amphoriskos	Wavy lines;	LH IIIC Middle;
M.I. 1765	1 collar-necked jar	Pendent triangles;	LH IIIC Middle;
M.I. 521	1 collar-necked jar	Wavy line;	LH IIIC Middle;
M.I. 1756	1 collar-necked jar	Semicircles;	LH IIIC Middle;
M.I. 1739	1 Amphora	Scroll;	LH IIIC Middle;
M.I. 1830	1 alabastron	Foliate band, zigzag, spirals;	LH IIIC Middle;
M.I. 1780	1 alabastron	Spiral, semicircles;	LHIIIC Middle;
M.I. 1744	1 alabastron	Foliate band, pendent triangle;	LHIIIC Middle;
M.I. 1716	1 alabastron	Wavy line;	LH IIIC Middle;
M.I. 1796	1 jug	Spirals;	LH IIIC Middle;
M.I. 1817	1 jug	Necklace;	LH IIIC Middle;
M.I. 1723	1 hydria	Chevrons;	LH IIIC Middle;
M.I. 1729	1 trefoil-mouthed jug	Wavy line;	LH IIIC Middle;
M.I. 1788	1 trefoil-mouthed jug	Wavy line;	LH IIIC Middle;
M.I. 1820	1 Strainer jug	Dotted semicircles;	LH IIIC Middle;
M.I. 1728	1 Strainer jug	Snake pattern;	LH IIIC Middle;
M.I. 1783	1 feeder	Wavy lines;	LH IIIC Middle;
M.I. 1743	1 feeder	Rock pattern;	LH IIIC Middle;
M.I. 1740	1 stirrup jar	Starfish with ray pattern;	LH IIIC Middle;
M.I. 1760	1 stirrup jar	Semicircles, zigzags;	LH IIIC Middle;
M.I. 1821	1 stirrup jar	Spiral on belly;	LH IIIC Middle;
M.I. 1855	1 stirrup jar	Semicircles;	LH IIIC Middle;
M.I. 1811	1 stirrup jar	Semicircles;	LH IIIC Middle;
M.I. 2090	1 stirrup jar	Spirals;	LH IIIC Middle;
M.I. 2091	1 flask	Concentric circles;	LH IIIC Middle;

¹²⁶⁴ Kardara 1977; Lambrinouidakis 1980; Mountjoy 1999, Vlachopoulos 2006, Vlachopoulos 2012.

¹²⁶⁵ The whole ceramic finds of LH IIIC Naxos were not available to me in detail, in this table will be reported only the vessels published in the inventory of the Archaeological Museum of Naxos (abbreviated in M.I.), which are significantly reduced in comparison with the actual finds. This is just to have an illustrative view. Nevertheless in the analysis of popularity of shapes, ulterior data, totals and percentages have been deduced from Kardara 1977, Lemos 2002, Vlachopoulos 2006 and 2012's volumes in order to be analysed.

M.I. 1831	1 flask	Linear;	LH IIC Middle;
M.I. 1782	1 cup	Wavy line;	LH IIC Middle;
M.I. 1741	1 cup	Wavy line;	LH IIC Middle;
M.I. 1779	1 cup	Linear;	LH IIC Middle;
M.I. 2078	1 cup	Linear;	LH IIC Middle;
M.I. 1736	1 mug	Undecorated;	LH IIC Middle;
M.I. 5298	1 mug	Wavy lines;	LH IIC Middle;
M.I. 1778	1 one-handed	Linear;	LH IIC Middle;
M.I. 1790	conical bowl		
	1 one-handed	Linear;	LH IIC Middle;
M.I. 1848	conical bowl		
	1 spouted cup	Wavy line;	LH IIC Middle;
M.I. 1846	1 deep bowl	Wavy line;	LH IIC Middle;
M.I. 1722	1 deep bowl	Undecorated;	LH IIC Middle;
M.I. 1776	1 deep bowl	Undecorated;	LH IIC Middle;
M.I. 1769	1 deep bowl	Undecorated;	LH IIC Middle;
M.I. 1813	2 kalathoi	1 Undecorated,	LH IIC Middle;
M.I. 1816		1 Wavy line;	
Aplomata			
M.I. 916	1 belly-handled amphora	Wavy line;	LH IIC Middle;
M.I. 947	1 amphoriskos	Wavy line;	LH IIC Middle;
M.I. 950	1 amphoriskos	Undecorated;	LH IIC Middle;
M.I. 974	1 amphoriskos	Undecorated;	LH IIC Middle;
M.I. 2060	1 amphora	Scroll;	LH IIC Middle;
M.I. 920	1 jug	Spirals;	LH IIC Middle;
M.I. 939	1 lekythos	Reserved lower body;	LH IIC Late;
M.I. 918	1 hydria	Vertical wavy lines;	LH IIC Middle;
M.I. 923	1 trefoil-mouthed jug	Triangles, semicircles;	LH IIC Middle;
M.I. 938	1 trefoil-mouthed jug	Necklace;	LH IIC Middle;
M.I. 911	1 stirrup jar	Octopus style;	LH IIC Middle;
M.I. 949	1 stirrup jar	Octopus style;	LH IIC Middle;
M.I. 948	1 stirrup jar	Octopus style;	LH IIC Middle;
M.I. 912	1 stirrup jar	Octopus style;	LH IIC Middle;
M.I. 951	1 stirrup jar	Octopus style;	LH IIC Middle;
M.I. 928	1 stirrup jar	Octopus style;	LH IIC Middle;
M.I. 975	1 stirrup jar	Octopus style;	LH IIC Middle;
M.I. 943	1 stirrup jar	Octopus style;	LH IIC Middle;
M.I. 914	1 stirrup jar	Octopus style;	LH IIC Middle;
M.I. 934	1 stirrup jar	Octopus style;	LH IIC Middle;
M.I. 952	1 flask	Linear;	LH IIC Middle;
M.I. 915	1 one-handed conical bowl	Linear;	LH IIC Middle;
M.I. 933	1 deep bowl	Reserved lower body;	LH IIC Late;
M.I. 941	1 deep bowl	Undecorated;	LH IIC Middle;
M.I. 927	1 kalathos	Cross-hatched triangles;	LH IIC Middle;

M.I. 940 M.I. 945	1 stirrup jar 1 stirrup jar	Cross-hatched triangles; Cross-hatched triangles, loops.	LH IIIC Late; LH IIIC Late.
Aplomata ¹²⁶⁶	1 cup 1 krater ¹²⁶⁷ 1 Lekythos ¹²⁶⁸ 3 cups 2 jugs ¹²⁶⁹ 2 deep bowls ¹²⁷⁰ 1 krater ¹²⁷¹ 1 treefoil oinochoe ¹²⁷² 1 bowl ¹²⁷³	Painted monochrome Undecorated Undecorated Painted monochrome Undecorated Circles Undecorated Undecorated Undecorated	Early Proto-Geometric Early Proto-Geometric Early Proto-Geometric Early Proto-Geometric Middle Protogeom. Middle Protogeom. Middle Protogeom. Late Proto-Geometric Late Proto-Geometric Late Proto-Geometric

¹²⁶⁶ Proto-geometric Aplomata is after Lemos 2002, 22 ff.

¹²⁶⁷ Kontoleon 1971: 155.

¹²⁶⁸ Kontoleon 1971: 155.

¹²⁶⁹ Verdelis 1958: 55.

¹²⁷⁰ Zapheiropoulou 1983: 124.

¹²⁷¹ Lambrinoudakis 1980: 259-262.

¹²⁷² Lambrinoudakis 1980: 259-262.

¹²⁷³ Kontoleon 1971: 175.

APPENDIX II

Lists of jewellery finds according to excavation reports and other bibliographical sources.

MYCENAE

Location	Pins	Fibulae	Finger Rings	Earrings	Bracelets	Other	Chronology
Citadel House Cist Grave Γ31	2, bronze	3, bronze (arched)	1, bronze				Sub-Mycenaean
Citadel House Cist Grave Γ21	1, iron						Proto-Geometric
Citadel House Cist Grave Γ23 ¹²⁷⁴	1, bronze globe on iron shank		1, bronze				Proto-Geometric
Prehistoric Cemetery Cist Grave PG601	1, iron						Proto-Geometric

¹²⁷⁴ Desborough 1973: 87.

PERATI

Location	Pins	Fibulae	Finger Rings	Earrings	Bracelets	Other	Chronology
Tomb Σ1			2, gold. 1 silver		3, of pearls	1 bead of carnelian 2 ivory combs. 2 glass beads Faience beads.	LH IIIC
Tomb Σ2			1, gold			1 agate bead 1 sardonyx bead 1 carnelian bead	LH IIIC
Tomb Σ3			1, gold			1 rock crystal cylinder 1 carnelian bead 1 heliotrope bead	LH IIIC
Tomb Σ14			1, gold			1 steatite bead 1 steatite button	LH IIIC
Tomb Σ19				1 gold		1 Sardonyx beads 1 Glass bead	LH IIIC
Tomb Σ20						2 steatite button 1 carnelian bead	LH IIIC
Tomb Σ26			1, gold			3 steatite buttons	LH IIIC
Tomb Σ42						1 steatite button	LH IIIC
Tomb Σ49			1, silver			1 sardonyx bead	LH IIIC
Tomb Σ51			1, gold 2, silver			2 steatite buttons 1 piece of lead wire	LH IIIC
Tomb 1			3, gold 2, silver			1 hematite Seal- stone 1 faience bead 1 agate cylinder 3 faience seal-stone 8 steatite button 9 glass beads 1 bone bead 1 faience cylinder 4 gold beads 7 golden 1 agate bead 1 faience bead 1 ivory comb 2 gold beads	LH IIIC
Tomb 4			1, gold 1, bronze			1 quartzite bead 1 carnelian bead 1 sardonyx seal- stone 4 steatite button 1 purple stone. 1 golden bead	LH IIIC
Tomb 8a			3, silver			2 steatite buttons	LH IIIC
Tomb 9				1, gold		1 Amorphous rock crystal 1 glass bead	LH IIIC
Tomb 10			4, silver			1 steatite button 1 ivory disk	LH IIIC

						1 bronze wire.	
Tomb 11				1, gold		2 steatite buttons 1 ivory bead 5 gold beads	LH IIIC
Tomb 12	1, bronze		6, silver 1, bronze			5 carnelian beads 1 steatite bead 9 steatite buttons 1 glass bead 7 gold rosette beads 3 golden beads 1 silver foil 1 gold foil 30 pieces of bronze wire	LH IIIC
Tomb 13	2 ivory pins		3 gold 2 silver			1 malachite bead 3 amorphous pieces of rock crystal 7 steatite buttons 7 sardonyx beads 1 rock crystal prism 1 blue glass bead 1 faience bead 1 ivory button 3 glass bead 4 faience scarab amulets 1 ivory plaque 2 faience bead 78 amorphous globes of red stone. 1 plate of bronze	LH IIIC
Tomb 16	22, ivory pins		1 gold 4 silver		1 gold	11 steatite buttons 1 glass bead	LH IIIC
Tomb 19						2 steatite buttons 1 bronze buckle	LH IIIC
Tomb 21						4 steatite buttons 1 glass bead	LH IIIC
Tomb 24						1 steatite amulet 1 steatite seal-stone 1 rock crystal bead 1 ivory comb 2 glass bead 1 faience bead	LH IIIC
Tomb 25			1, bronze				LH IIIC
Tomb 27						1 bead of steatite	LH IIIC
Tomb 30	1 bronze pin					1 calcareous amulet 1 chalcedony bead 1 steatite button 1 steatite bead 1 piece of rock crystal 3 steatite buttons 4 faience anthropomorphic figurines (1 in 5 pieces) 2 faience crocodile figurines	LH IIIC

						2 glass beads 2 faience beads	
Tomb 30a						1 dark red mosaic cube 1 steatite bead 1 hematite cylinder 1 amorphous rock crystal	LH IIIC
Tomb 31						1 sardonyx bead 4 steatite buttons 1 black coral bead	LH IIIC
Tomb 32			1, bronze				LH IIIC
Tomb 34						1 steatite button 1 piece of blue glass	LH IIIC
Tomb 35			1, gold 2, silver			2 sardonyx bead 1 steatite button 7, gold beads 12 pieces of lead wire	LH IIIC
Tomb 36						1 steatite button 1 bronze buckle	LH IIIC
Tomb 38					1, bronze bracelet	1 piece of golden wire	LH IIIC
Tomb 43						3, steatite buttons	LH IIIC
Tomb 46						1 steatite button 1 button of impure stone.	LH IIIC
Tomb 49						1 sardonyx bead 1 golden amulet	LH IIIC
Tomb 56						2 sardonyx beads 1 glass bead 25 conic shells.	LH IIIC
Tomb 58			1, bronze				LH IIIC
Tomb 59						3 glass beads	LH IIIC
Tomb 60			1, silver				LH IIIC
Tomb 62						2 steatite buttons	LH IIIC
Tomb 65	2 bronze pin		3 silver 1 gold			14 steatite buttons 1 quartzite bead 2 sardonyx beads 1 Carnelian bead 1 glass bead 1 ivory comb 1 ivory miniature figure-of-eight shield 2 black glass cylinder 3 simple glass beads 1 faience bead 4 pieces of bronze wire 3 gold plated beads 1 gold bead 2 bronze buckle	LH IIIC

Tomb 69					1 of pearls		LH IIIC
Tomb 74			1 bronze			1 rock crystal bead 1 malachite bead 3 glass bead 3 gold beads 2 bronze buckle	LH IIIC
Tomb 75	2 ivory pin		3 silver			4 steatite buttons 1 steatite bead 2 sardonyx bead 1 glass bead 2 faience scarab amulet 1 ceramic button.	LH IIIC
Tomb 77				1, of pearls		7 glass beads	LH IIIC
Tomb 78			1 silver			2 steatite buttons	LH IIIC
Tomb 80						5 bronze plates	LH IIIC
Tomb 84						1 calcareous button 1 steatite button	LH IIIC
Tomb 85						1 schist button	LH IIIC
Tomb 88						2 steatite button	LH IIIC
Tomb 90	8 bone pins 1 bronze pin					4 steatite buttons 1 faience scarab amulet	LH IIIC
Tomb 92			1, gold 1, silver			7 sculpted sardonyx beads 10 carnelian beads 1 steatite bead 1 ivory comb 1, glass bead 1 golden wire	LH IIIC
Tomb 93	1 ivory pin	1, bronze				2, steatite buttons 2 sardonyx beads 1 ivory comb 1 ivory plate	LH IIIC
Tomb 100						1 prism of rock crystal 1 amorphous piece of rock crystal 3 shells	LH IIIC
Tomb 104						1 sardonyx bead 1 faience ingot	LH IIIC
Tomb 106			1, lead				LH IIIC
Tomb 108			1, bronze			2, schist plaques 8 steatite buttons	LH IIIC
Tomb 110						2, steatite buttons	LH IIIC
Tomb 111						3 steatite buttons 1 glass bead 1 gold bead 1 bronze plate	LH IIIC
Tomb 112			1, bronze			1, steatite button	LH IIIC
Tomb 119			1, silver			2 sardonyx beads 1 steatite button 6 glass bead 2 gold beads	LH IIIC

Tomb 122a		1 bronze violin-bow					LH IIIC
Tomb 123						1 steatite button	LH IIIC
Tomb 124						5 steatite buttons 1 bronze hoop 1 stone button	LH IIIC
Tomb 125						1 steatite button 1 golden lamina	LH IIIC
Tomb 127						2 steatite buttons 1 alabaster bead 1 serpentine button 1 ivory disk 1 glass bead 1 gold disk	LH IIIC
Tomb 128			1, bronze + silver 1, silver			1 steatite disk 1 agate seal-stone 2 carnelian beads 1 sardonyx bead 1 steatite button 2 glass beads 3 ivory combs 1 bronze wire	LH IIIC
Tomb 131						1 amethyst bead 16 bronze laminas 75 lead laminas 1 gold lamina	LH IIIC
Tomb 134	3, bronze					1, carnelian bead 1 chalcedony bead 3 gold beads	LH IIIC
Tomb 136			1, gold 2, silver			1 faience bead 1 sardonyx bead 2 steatite buttons 1 glass bead 8 pieces of lead wire	LH IIIC
Tomb 137						1 steatite button 1 faience chip	LH IIIC
Tomb 141						15 glass beads	LH IIIC
Tomb 142		1, silver				1 black hematite seal-stone 1 agate seal-stone 18 steatite buttons 4 glass beads 1 ivory comb 1 stone bead	LH IIIC
Tomb 143						1 crystal rock prism 1 steatite button	LH IIIC
Tomb 145	1 bronze		6, silver 1, gold			1 steatite button 1 faience scarab 1 gold bead	LH IIIC
Tomb 146						1 steatite button	LH IIIC
Tomb 147			5 silver			1 amethyst bead 9 Sardonyx beads 1 Agate bead 1 faience bead 1 faience scarab 1 electrum bead	LH IIIC

						7 glass bead 1 faience bead 1 bronze bead 83 gold beads 2 gold pendants 5 bronze buckles.	
Tomb 148			1 silver			1, steatite button	LH IIIC
Tomb 152			1 Bronze bezel. 1 Silver ring	1, gold		Sardonyx bead 2 steatite buttons 1 glass button 4 glass beads 2 gold bead	LH IIIC
Tomb 153					1, of pearls.	1 bronze wire	LH IIIC
Tomb 154						1, agate bead 4 steatite buttons 1 bone bead 2 ivory combs 1 Golden hoop 1 bronze wire.	LH IIIC
Tomb 155						1 bronze buckle.	LH IIIC
Tomb 156						1 steatite button	LH IIIC
Tombs 157			2, silver rings			12 steatite button. 1 gold foil	LH IIIC

SALAMIS

Location	Pins	Fibulae	Bracelets	Spirals	Rings	Chronology
?	5, bronze					Sub-Mycenaean
?		4, bronze				Sub-Mycenaean
Tomb 17					3, bronze	Sub-Mycenaean
Tomb 18					2, bronze	Sub-Mycenaean
Tomb 19					2, bronze	Sub-Mycenaean
Tomb 20					2, bronze	Sub-Mycenaean
Tomb 21					2, bronze	Sub-Mycenaean
Tomb 25				1, gold	1, bronze	Sub-Mycenaean
Tomb 26					1, gold	Sub-Mycenaean
Tomb 27				1, bronze	2, bronze	Sub-Mycenaean
Tomb 28				1, gold	2, bronze	Sub-Mycenaean
Tomb 29					2, bronze	Sub-Mycenaean

ATHENS

Location	Pins	Fibulae	Finger Rings	Earrings	Bracelets	Other	Chronology
Kerameikos ¹²⁷⁵ Tomb 1N ¹²⁷⁶	1 bronze						Early Proto-Geometric
Tomb 2A ¹²⁷⁷	2 bronze	4 bronze					Early Proto-Geometric
Heidelberg B ¹²⁷⁸		1, bronze					Middle Proto-Geometric
Tomb 5	1 iron					2 bronze fragments	Middle Proto-Geometric
Tomb 9	1 bronze 1 iron						Middle Proto-Geometric
Tomb 11	1, bronze 1, iron						Early Proto-Geometric
Tomb 13 ¹²⁷⁹	1, bronze 2, iron						Early Proto-Geometric
Tomb 14	1 bronze						Early Proto-Geometric
Tomb 15	2 iron						Middle Proto-Geometric
Tomb 16	2, iron						Late Proto-Geometric
Tomb 18	1, iron						Middle Proto-Geometric
Tomb 20 ¹²⁸⁰	1, iron	1 bronze	1, iron				Sub-Mycenaean.
Tomb 24	2 bronze	2 bronze					Sub-Mycenaean.
Tomb 25	1, bronze 1, iron						Early Proto-Geometric
Tomb 26 ¹²⁸¹	2, iron						Late Proto-

¹²⁷⁵ Kübler 1939 unless differently stated.

¹²⁷⁶ Kübler, Kraiker 1941: 47.

¹²⁷⁷ Schlörb-Vierneisel 1966: 7.

¹²⁷⁸ Styrenius 1967: 83.

¹²⁷⁹ Schlörb-Vierneisel 1966: 6.

¹²⁸⁰ In Lemos 2007 this tomb is said to contain 1 iron pin only.

¹²⁸¹ From now on after Kübler, Kraiker 1941: 34-44.

							Geometric
Tomb 27	2, bronze	3 bronze	1, bronze				Sub- Mycenaean.
Tomb 29	2, iron						Late Proto- Geometric
Tomb 33		1, iron					Late Proto- Geometric
Tomb 35			1, bronze				Late Proto- Geometric
Tomb 37	2, iron						Late Proto- Geometric
Tomb 38	2, iron						Late Proto- Geometric
Tomb 39	2, iron	2, bronze 1, iron	3, bronze				Late Proto- Geometric
Tomb 40		1, bronze					Late Proto- Geometric
Tomb 41	2, iron	1 bronze					Late Proto- Geometric
Tomb 42	2, bronze	4 bronze	1, bronze				Late Proto- Geometric
Tomb 43		1 bronze	1, bronze				Late Proto- Geometric
Tomb 44		1 bronze	1, bronze				Late Proto- Geometric
Tomb 46	2, bronze	2 bronze			1, gold	Golden spiral	Late Proto- Geometric
Tomb 47	1, iron	1 bronze					Late Proto- Geometric
Tomb 48		1, bronze					Late Proto- Geometric
Tomb 52	2 bronze	3 bronze	1, bronze				Late Proto- Geometric?
Tomb 53	1 bronze						Late Proto- Geometric
Tomb 70	2 bronze	3 bronze					Late Proto- Geometric
Tomb 83			1, iron		1, bronze	1, bronze	Late Proto- Geometric
Tomb 84			1, iron				Late Proto-

							Geometric
Tomb 97	2 bronze		1, bronze				Late Proto- Geometric
Tomb 99	1 bronze						Late Proto- Geometric
Tomb 101	1 bronze						Late Proto- Geometric
Tomb 104	1 bronze						Late Proto- Geometric
Tomb 108	2 bronze	13 bronze					Late Proto- Geometric
Tomb 121 ¹²⁸²	1 bronze						Sub-Myc.
Tomb 129	1 bronze 1 iron						Sub- Myc/EPG
Tomb 136	2 bronze	2 bronze	6 bronze			1 gold necklace 1 gold hair- spiral	Sub-Myc.
Tomb 141	2 bronze					1 gold thread	Sub-Myc.
Tomb 143	1 bronze	2 bronze	4 bronze				Sub-Myc.
Tomb 146			1 iron				Sub-Myc

¹²⁸² Tombs 121-146 from Ruppenstein 2007: 13-30.

LEFKANDI

Location	Pins	Fibulae	Rings	Earrings	Bracelets	Other	Chronology
Skoubris Tomb 8		2 arched, bronze					Sub- Mycenaean /Early Proto- Geometric
Tomb 10	3, iron	2 arched 1 leaf- shaped, bronze		1 gold			Sub- Mycenaean /Early Proto- Geometric
Tomb 15		4 arched fibulae. bronze	1 bronze			Necklace, faience beads.	Sub- Mycenaean /Early Proto- Geometric
Tomb 16	2, iron	10 arched, bronze	5, bronze				Sub- Mycenaean /Early Proto- Geometric
Tomb 17			2, bronze				Sub- Mycenaean /Early Proto- Geometric
Tomb 19		4 arched, bronze	2, bronze	1, bronze			Sub- Mycenaean /Early Proto- Geometric
Tomb 20		1 bronze, 1 iron	1, bronze				Sub- Mycenaean /Early Proto- Geometric
Tomb 22		2 arched, bronze	1, bronze	1			Sub- Mycenaean /Early Proto- Geometric
Tomb 25		2 arched, bronze					Sub- Mycenaean /Early Proto- Geometric
Tomb 31		1 arched, bronze	4, bronze				Sub- Mycenaean /Early Proto- Geometric
Tomb 32		1 arched, iron	1, bronze				Sub- Mycenaean /Early Proto- Geometric
Tomb 33	3, iron	2 arched,		1 gold			Sub-

		bronze					Mycenaean /Early Proto- Geometric
Tomb 36	1 bronze						Sub- Mycenaean /Early Proto- Geometric
Tomb 37	2, bronze 2, iron	2 arched, bronze	1, bronze	1, gold			Sub- Mycenaean /Early Proto- Geometric
Tomb 38		1 arched, bronze	1, bronze				Sub- Mycenaean /Early Proto- Geometric
Tomb 40		3 arched, bronze	3 bronze				Sub- Mycenaean /Early Proto- Geometric
Tomb 43		3 arched, bronze					Sub- Mycenaean /Early Proto- Geometric
Tomb 45			1 gold				Sub- Mycenaean /Early Proto- Geometric
Tomb 46		3 arched, bronze (1 is leaf), 1 iron					Sub- Mycenaean /Early Proto- Geometric
Tomb 53			1, bronze				Sub- Mycenaean /Early Proto- Geometric
Tomb 54		1, Bronze					Sub- Mycenaean /Early Proto- Geometric
Tomb 59A		1, bronze					Sub- Mycenaean /Early Proto- Geometric
Tomb 59B	2 gold and iron	8, bronze	7, gold	2, gold		Gold foil	Sub- Mycenaean /Early Proto- Geometric
Tomb 60		1, bronze					Sub-

							Mycenaean /Early Proto- Geometric
Tomb 61	2, bronze						Sub- Mycenaean /Early Proto- Geometric
Pyre 2	2, iron and gold		1, gold				Sub- Mycenaean /Early Proto- Geometric
Pyre 4	2 iron	4 bronze 2 iron	4, gold	Pendant of 1, gold			Sub- Mycenaean /Early Proto- Geometric
Pyre 8	2, bronze						Sub- Mycenaean /Early Proto- Geometric
Pyre 14	1, iron						Sub- Mycenaean /Early Proto- Geometric
Palia Perivolia							
Tomb 3	4, iron	Bow and swelling, 1, bronze, 1, bronze + iron,				12 clay beads	Proto- Geometric
Tomb 10	1, iron						Proto- Geometric
Tomb 14					1 bronze		Proto- Geometric
Tomb 16		1, bronze					Proto- Geometric
Tomb 21	1, bronze					Faience necklace	Proto- Geometric
Tomb 22	1, iron		2, gold			2, hair spirals	Proto- Geometric
Tomb 23	2, iron	1 bow and swelling, bronze					Proto- Geometric
Tomb 24	2, iron					Faience necklace	Proto- Geometric
Tomb 25						Bead necklace of 36 pieces. 21 more beads.	Proto- Geometric
Tomb 29	1 iron						Proto- Geometric
Tomb 39		2, iron					Proto-

							Geometric
Tomb 41						Necklace faience	Proto- Geometric
Tomb 43	1 iron	1, bronze			2, bronze		Proto- Geometric
Tomb 45		2, bronze 2, iron					Proto- Geometric
Tomb 46	2, bronze						Proto- Geometric
Tomb 47						Gold strap Faience beads	Proto- Geometric
Pyre 9	1, iron						Proto- Geometric
Pyre 29	2, iron						Proto- Geometric
Toumba Building ¹²⁸³	5, bronze 2, iron						Middle Proto- Geometric
Toumba Tomb 1		2 bow and swelling, bronze		2 gold	2, bronze	1 faience necklace 1 glass bead	Late Proto- Geometric
Tomb 3		1 bow and swelling, bronze				2 gold attachments	Late Proto- Geometric
Tomb 5		5, bronze 1 iron	5, gold	2, gold	2, gold	2 rockcrystal beads with gold sleeve.	Late Proto- Geometric
Tomb 9		2, bronze					Late Proto- Geometric
Tomb 12A		1 bow and swelling, bronze				Faience beads	Late Proto- Geometric
Tomb 12B	1 iron+bronze					2 glass seals	Late Proto- Geometric
Tomb 13		1, gold 1, bronze	4, gold	2, gold	2, bronze	Faience beads	Late Proto- Geometric
Tomb 14	1 bronze 3 iron		4, gold			Faience beads	Late Proto- Geometric
Tomb 17		1 bow and swelling, bronze					Late Proto- Geometric
Tomb 19						Gold Diadem	Late Proto- Geometric
Tomb 22		9, bronze	7, gold		2, gold	2 beads Glass necklace of 107 beads	Late Proto- Geometric
Tomb 27		1, iron	4, gold		2, gold+bronze	Faience beads Glass beads Amber	Late Proto- Geometric

¹²⁸³ Popham, Calligas, Sackett 1993: 220.

						beads	
Tomb 31		3, bronze	6, gold			Gold foil Gold with rock crystal pendant.	Late Proto-Geometric
Tomb 32	2 gold+iron+amber	6, bronze	6, gold			Gold hair spiral Golden foil Amber amulet (Ptah)	Late Proto-Geometric
Tomb 33					1, bronze	2 golden diadems and foils 4 gold bead coverings 3 gold beads 1 gold strap 1 amber pendant. 1 bead. 1 Rock crystal pendant 4 glass beads.	Late Proto-Geometric
Tomb 36	1, ivory	3, bronze	2, gold		1, bronze	1 gold diadem 1 gold band 30 gold attachments 2 gold straps 1 gold disc Rock crystal bead Gold and faience scarab Steatite cuboid amulet Faience beads. 1 clay disc	Late Proto-Geometric
Tomb 38					1, bronze 1, iron		Sub Proto-Geometric
Tomb 39 ¹²⁸⁴		1 bow and swelling, 1 flat symmetrical bow, bronze					Late Proto-Geometric
Tomb 40					1, bronze		Late Proto-Geometric
Tomb 44		1 bead and double			1, bronze		Late Proto-Geometric

¹²⁸⁴ From tomb 39 onwards, data comes from Popham, Lemos 1996.

		fillet, iron 1 double leaf-shaped, iron and bronze					
Tomb 45		2 bow and swelling, iron					Late Proto- Geometric
Tomb 46		1 bow and swelling, bronze					Late Proto- Geometric
Tomb 49	2, iron and bone						Late Proto- Geometric
Tomb 54		2 bead and double fillet, iron					Late Proto- Geometric
Tomb 55		1 bow and swelling, 1 flat symmetrical bow, iron					Late Proto- Geometric
Tomb 57		1 flat symmetrical bow, iron					Late Proto- Geometric
Tomb 62a		1 bow and swelling, bronze					Late Proto- Geometric
Tomb 63		1 bead and double fillet, bronze					Sub Proto- Geometric
Tomb 64		1 bow and swelling, bronze					Late Proto- Geometric
Tomb 66		1 bow and swelling, bronze					Late Proto- Geometric
Tomb 70		6 bow and swelling, bronze					Late Proto- Geometric
Pyre 1	1 iron+faience	1, bronze					Late Proto- Geometric
Pyre 2		7 bow and swelling, bronze					Late Proto- Geometric
Pyre 10						1 gold and rock-crystal	Late Proto- Geometric

KNOSSOS

Location	Pins	Fibulae	Rings	Earrings	Bracelets	Other	Chronology
Tekke Tomb B		1, Bronze					MPG
Tekke Tomb H	4, iron						EPG - LPG
Tekke Tomb J	1						EPG - LPG
Tekke Tomb N	2, bronze					Pinhead? Gold	EPG - LPG
Tekke Tomb O	1, iron						EPG - LPG
Tekke Tomb P	4, Bronze 4, iron		2, gold				LPG
Medical Faculty Tomb 2	1, bronze 1, iron						SM
M.F. Tomb 18						Gold frame; gem of amethyst.	LPG
M.F. Tomb 19					1, iron		LPG
M.F. Tomb 24	1, bronze	1, bronze					SM
M.F. Tomb 25	2, bronze	1, bronze					SM/PG
M.F. Tomb 26	2, bronze 1, silver		2, bronze	1, silver			SM
M.F. Tomb 34	1, bronze						SM
M.F. Tomb 40	2, bronze 1, iron	1, bronze 1, iron	1, iron 1, silver			Gold wire	SM/PG
M.F. Tomb 45	1, silver	1, bronze					EPG
M.F. Tomb 48		2, bronze				Gold ornament	SM/EPG
M.F. Tomb 55	6, bronze	1	1, bronze 1, silver				EPG
M.F. Tomb 57						Bronze shank of unspecified object	SM/EPG
M.F. Tomb 59			1, gold				SM/PG
M.F. Tomb 60	2, iron						EPG - LPG
M.F. Tomb 75	3, Bronze 5, iron	4, bronze			1, bronze	1 Gold foil; 1 gold diadem	LPG

M.F. Tomb 78		3, bronze	1, silver	1, electrum		1 silver pendant (heart) 2 golden foils	LPG
M.F. Tomb 86	1, bronze						SM/PG
M.F. Tomb 98		1, bronze				1 Golden band	SM
M.F. Tomb 100	1, bronze						EPG – LPG
M.F. Tomb 104	2, Bronze 2, iron	2, bronze		1, gold			LPG
M.F. Tomb 107	8, Bronze 1, iron	2, bronze				1 Gold pendant (bee)	LPG
M.F. Tomb 121		2, bronze					SM
M.F. Tomb 123	3, iron	1, bronze					LPG
M.F. Tomb 159	1, bronze						SM
M.F. Tomb 163	1, iron						MPG
M.F. Tomb 175	1, bronze	3, bronze 1, iron			1, bronze		LPG
M.F. Tomb 200	1, bronze		1, gold			1 gold leaf 2 gold rosettes 1 gold necklace	SM
M.F. Tomb 201	2, iron		1, gold				LPG
M.F. Tomb 202	1, bronze					1 gold leaf	SM
M.F. Tomb 207	1, iron						SM/PG
M.F. Tomb 208	1, silver						SM
M.F. Tomb 218	1, bronze 1, iron 1, amber + iron	1, bronze					EPG – LPG
M.F. Tomb 219	1, bronze				1, bronze		MPG – LPG
M.F.	1,						EPG – LPG

Tomb 229	silver						
M.F. Tomb 283	2, Bronze 2, iron						LPG
M.F. Tomb 285	10, bronze 1, iron	1, bronze				1 gold foil	MPG – LPG
M.F. Tomb 292	15, bronze 5, iron	5, bronze	3, iron 1, silver			1 golden bead 1 golden leaf	LPG
M.F. Tomb 294		1, iron			1, bronze		LPG
Fortetsa Tomb F67	1, bronze						EPG

NAXOS

Location	Pins	Fibulae	Finger Rings	Earrings	Bracelets	Other	Chronology
Aplomata Tomb A			1, bronze			1 ivory plate 3 gold lion-shaped reliefs	LHIIC/Sub-Mycenaean
Aplomata Tomb B			1, silver			3 ivory plates 1 gold spiral 1 carnelian bead 1 agate seal-stone 84 gold rosettes	LHIIC/Sub-Mycenaean
External Group of Tombs	1, gold		5 gold 1 gold cloisonné	1, gold		1 gold shell 41 gold beads 9 clothing boucrania gold reliefs 1 gold band 3 gold rectangular plates 1 gold button	LHIIC/Sub-Mycenaean
Tsikalarío Unspecified tomb. ¹²⁸⁵				1, gold	2, gold		LHIIC/Sub-Mycenaean
Kamini Tomb M8	1, gold	1, bronze				1 gold diadem 1 gold pendant (human)	

¹²⁸⁵ Higgins 1961: 93.

Bibliography

Chronology Acronyms.

BA: Bronze Age.
EBA: Early Bronze Age.
EIA: Early Iron Age.
EM: Early Minoan.
EPG: Early Proto-Geometric.
LBA: Late Bronze Age.
LH: Late Helladic.
LM: Late Minoan
LPG: Late Proto-Geometric.
MBA: Middle Bronze Age.
MH: Middle Helladic.
MM: Middle Minoan.
MPG: Middle Proto-Geometric.
SM: Sub-Mycenaean
SMin: Sub-Minoan
SPG: Sub-Proto-Geometric.

Journal Abbreviations.

AA: *Archäologischer Anzeiger.*
AAS: *Les annales archéologiques arabes syriennes.*
AB: *Archaeologia Bulgarica.*
AJ: *Antiquaries' Journal.*
AJA: *American Journal of Archaeology.*
AM: *Mitteilungen des Deutschen archäologischen Instituts, Athenische Abteilung.*
Am.Anth: American Anthropologist.
Annuario: *Annuario della scuola archeologica di Atene.*
Ant.W: *Antike Welt.*
AOAT: Alter Orient und Altes Testament.
AR: Archaeological Reports.
ARA: The Association for Roman Archaeology.
Archaeometry: *Archaeometry - The Bulletin of the research laboratory for archaeology and the history of art.*
ArchKorr: *Archäologisches Korrespondenzblatt.*
BAR: *British Archaeological Report.*
BAR int.: *British Archaeological Report, international series.*
BCH: *Bulletin de Correspondance Hellénique.*
BICS : Bulletin of the Institute of Classical Studies.
BPI: *Bullettino di Preistoria Italiana.*

BSA: *Annual of the British School at Athens.*

CHT: *Catalogue of Hittite Texts.*

Corinth: *Corinth - Results of Excavations Conducted by the American School of Classical Studies at Athens.*

Delt.: *Archaologikon Deltion.*

Eph. Arch.: *Ἐφημερίς Ἀρχαιολογική.*

F. de D.: *Fouilles de Delphes.*

G&R : Greece and Rome.

JAS: *Journal of Archaeological Science.*

JAR: *Journal of Archaeological Research.*

JAOS: *Journal of the American Oriental Society.*

JDL: *Jahrbuch des Deutschen Archäologischen.*

JDI: *Jahrbuch des Deutschen Archäologischen Instituts.*

JRGZM: *Jahrbuch des Römisch-germanischen Zentralmuseums.*

KUB: *Keilschrifturkunden aus Boghaskoi.*

LAAA: *Liverpool Annals of Archaeology and Anthropology.*

OJA: *Oxford Journal of Archaeology.*

OI. Fors.: *Olimpische Forschungen.*

Olynthus: *Excavations at Olynthus.*

Op. Ath.: *Opuscula Atheniensia.*

PBF: *Prähistorische Bronzefunde.*

PPS: *Proceedings of the Prehistoric Society.*

PPhS: *Proceedings of the Philological Society.*

Πρακτικά: *Πρακτικά της εν Αθήναις Αρχαιολογικής Εταιρείας.*

PZ: *Prähistorische Zeitschrift.*

RGF: *Römisch-Germanische Forschungen.*

RSP: *Rivista di studi pompeiani.*

ScAnt: *Scienze dell'Antichità.*

SCIEM: *The Synchronisation of Civilisation in the Eastern Mediterranean.*

SCE: *The Swedish Cyprus Expedition and its members - Studies in Mediterranean Archaeology.*

SIMA: *Studies in Mediterranean Archaeology.*

SMEA: *Studi Micenei ed Egeo-Anatolici.*

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TUAS: *Temple University Aegean Symposium.*

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