Thessaly: From the Late Bronze Age to the Early Iron Age (c. 1600-700 BC)

Eleni Karouzou

Lincoln College

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Thessaly during the Late Bronze (LBA) and Early Iron Age (EIA) is a relatively little-known region that only recently has started to be studied more thoroughly. The present thesis seeks to examine Thessaly during those two periods and understand its social, cultural and political character and the way it changes from the one period to the other.

The focus of this thesis is the transformation of Thessaly from the LBA to the EIA. This research will offer a new approach to the changing network of interactions among sites within Thessaly and their connections with the rest of the Greek mainland and the Aegean. This thesis will explore the similarities and differences among the Mycenaean centres of power in the Pagasetic Gulf, namely Kastro, Dimini and Pefkakia and attempt to define their relationship and in what ways they related to each other and with other places in Thessaly and the Aegean and ultimately, try to understand the extent and organisation of the local Mycenaean administrative system. Another issue that is explored is how Thessaly overcame the crisis after the collapse of the Mycenaean palaces during the transition from the LBA to the EIA. Through the study of changes in the settlement and cemetery patterns throughout these periods in Thessaly, this thesis explores population movements to and from Thessaly and re-evaluates theories about the societal structure, outside influences, invasions and population decline. It is concluded that Thessaly emerges as part of the Mycenaean world and not as a peripheral entity, certain 'big' sites show a remarkable degree of continuity from the LBA to the EIA, which is also reflected in the burial practices, and finally the emergence of new centres of power in the inner route that connects the Almiros plain with the region of Elasson.

Chapter 1 provides a brief history of research and sets the aims of the thesis: to examine Thessalian settlements, sanctuaries and burials from the LBA to the EIA to understand how Thessaly changed socio-politicaly and culturally from the one period to the other. Chapter 2 examines closely the site of Kastro Volou which I employ as a case study for those two periods since it is one among few in Thessaly occupied continuously and one of the rare sites for which we have evidence from both the settlement and the cemeteries. Chapter 3 explores in detail the LBA and EIA Thessalian settlements. The chapter focuses on 12 sites throughout Thessaly which offer more substantial evidence, while other smaller sites that could offer valuable information are also mentioned. The settlements are examined in a geographical order and the evidence of the remains of architecture and other small movable finds are assessed in a chronological order. Chapter 4 presents the evidence for Thessalian sanctuaries in a chronological order. Chapter 5 offers a study of the burial practices in Thessaly during the LBA and EIA. The chapter explores the similarities and differences in burial practices and is organised by grave types. Chapter 6 presents a summary of the evidence and a final discussion.

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VOLUME 1: TEXT

List of abbreviations used in volumes 1-3 and the bibliographies

AA: *Archäologischer Anzeiger*

AAA: *Ἀρχαιολογικά Ἀνάλεκτα Ἐξ Ἀθηνῶν*

Achaeophthiotika 1: *Αχαιοφθιωτικά 1. Πρακτικά του Α΄ Συνεδρίου Αλμυριωτικών Σπουδών «Ιστορία, Αρχαιολογία, Λαογραφία Αχαϊας Φθιώτιδας», Αλμυρός 31/08-01/09/1991 (Αλμυρός 1993)*

Achaeophthiotika 2: *Αχαιοφθιωτικά 2. Πρακτικά του Β΄ Συνεδρίου Αλμυριωτικών Σπουδών «Ιστορία, Αρχαιολογία, Λαογραφία Αχαϊας Φθιώτιδας», Αλμυρός 03/06-04/06/1995 (Αλμυρός 1997)*

Achaeophthiotika 3: *Αχαιοφθιωτικά 3. Πρακτικά του Γ΄ Συνεδρίου Αλμυριωτικών Σπουδών «Ιστορία, Αρχαιολογία, Λαογραφία Αχαϊας Φθιώτιδας», Αλμυρός 13/10-15/10/2000 (Αλμυρός 2007)*

AETHSE 1: *Το Αρχαιολογικό Έργο Θεσσαλίας και Στερεάς Ελλάδας 1. Πρακτικά επιστημονικής συνάντησης, Βόλος 27/02-02/03/2003 (Βόλος 2006)*

AETHSE 2: *Το Αρχαιολογικό Έργο Θεσσαλίας και Στερεάς Ελλάδας 2. Πρακτικά επιστημονικής συνάντησης, Βόλος 16/03-19/03/2006 (Βόλος 2009)*

AETHSE 3: *Το Αρχαιολογικό Έργο Θεσσαλίας και Στερεάς Ελλάδας 3. Πρακτικά επιστημονικής συνάντησης, Βόλος 12/03-15/03/2009 (Βόλος 2012)*

AETHSE 4: *Το Αρχαιολογικό Έργο Θεσσαλίας και Στερεάς Ελλάδας 4. Πρακτικά επιστημονικής συνάντησης, Βόλος 15/03-18/03/2012 (Βόλος 2015)*

AETHSE 5: *Το Αρχαιολογικό Έργο Θεσσαλίας και Στερεάς Ελλάδας 5. Πρακτικά επιστημονικής συνάντησης, Βόλος 26/02-01/03/2015 (In press)*

AJA: *American Journal of Archaeology. The Journal of the Archaeological Institute of America*

AM: *Mitteilungen des Deutschen Archäologischen Instituts, Athenische Abteilung*

Anaskama: *Ανάσκαμμα: Ανασκαφικό περιοδικό του Αριστοτελείου Πανεπιστημίου Θεσσαλονίκης*

Ancient Greece: *S. Deger-Jalkotzy and I.S. Lemos (eds.), Ancient Greece: From the Mycenaean Palaces to the Age of Homer (Edinburgh 2006)*

Ancient Iolkos: *Νεότερα δεδομένα των ερευνών για την Αρχαία Ιωλκό. Πρακτικά Επιστημονικής Συνάντησης, Βόλος 12 Μαΐου 1993 (Βόλος 1994)*

Ancient Thessaly: *Διεθνές συνέδριο για την Αρχαία Θεσσαλία, στη μνήμη του Δ.Ρ. Θεοχάρη (Athens, 1992)*

AnnLiv: *Annals of Archaeology and Anthropology, Liverpool*

Anthropologika: *Ανθρωπολογικά: Περιοδική Έκδοση Θεωρίας και Πρακτικής, Παρατηρητής*

AR: *Archaeological Reports (Supplement to Journal of Hellenic Studies)*

Archaeology: *Περιοδικό Αρχαιολογία και Τέχνες*

ArchDelt Chr: *Ἀρχαιολογικό Δελτίο (Χρονικά)*

ArchDelt Mel: *Ἀρχαιολογικό Δελτίο (Μελέτες)*

ArchEph: *Ἀρχαιολογική Ἐφημερίς*

ASAtene: *Annuario della Scuola Archeologica di Atene e delle Missioni Italiane in Oriente*

Athanasia: *Athanasia: The Earthly, the Celestial and the Underworld in the Mediterranean from the Late Bronze and the Early Iron Age. International archaeological conference, Rhodes 28-31 May 2009 (Ηράκλειο 2012)*

Atti e Memorie 2: *Atti e Memorie del secondo congresso internazionale di micenologia, Roma – Napoli 14-20 ottobre 1991 (Roma 1996)*

BCH: *Bulletin de Correspondance Hellénique*

BJb: *Bonner Jahrbücher des Rheinischen Landesmuseums in Bonn und des Vereins von Altertumsfreunden im Rheinlande*

BSA: *Annual of the British School at Athens*

CMS Beih. 8: *Corpus der Minoischen und Mykenischen Siegel 8: Die Bedeutung der Minoischen und Mykenischen Glyptik VI. Internationales Siegel-Symposium aus Anlass des 50 jährigen Bestehens des CMS, Marburg 9-12 Oktober 2008 (Mainz 2010)*

CretChron: *Κρητικά Χρονικά: Κείμενα και Μελέται της Κρητικής Ιστορίας*

Deltio Othrys: *Δελτίο της Φιλαρχαίου Εταιρείας Αλμυρού «Όθρυς»: Περιοδική έκδοση της Φιλαρχαίου Εταιρείας Αλμυρού «Όθρυς»*

DossPar: *Les Dossiers d'Archéologie (Previously: Les Dossiers d'Histoire et Archéologie, Paris)*

EchCl: *Echos du Monde Classique (Classical Views)*

EIA Aegean : *Το Αιγαίο στην Πρώιμη Εποχή του Σιδήρου. Πρακτικά του Διεθνούς Συμποσίου, Ρόδος 1-4 Νοεμβρίου 2002 (Αθήνα 2004)*

Ergon: *Τό Ἔργον τῆς Ἀρχαιολογικῆς Ἑταιρείας*

Eulimene: *Ευλίμενη: Μελέτες στην Κλασσική Αρχαιολογία, την Επιγραφική, τη Νομισματική και την Παπυρολογία. Επιστημονικό Όργανο της Μεσογειακής Αρχαιολογικής Εταιρείας*

Historia: *Zeitschrift für Alte Geschichte*

Historical Metallurgy: *Historical Metallurgy: The Journal of the Historical Metallurgy Society*

History and Culture of Thessaly: *1st International Congress on the History and Culture of Thessaly. Congress Proceedings, Larisa 9-11 November 2006*

Horos: *Ένα Αρχαιογνωστικό Περιοδικό της Ελληνικής Επιγραφικής Εταιρείας, Αθήνα*

Hypereia 1: *Υπέρεια, Α΄, Συνέδριο «Φεραί – Βελεστίνο – Ρήγας», Βελεστίνο 30 Μαΐου – 1 Ιουνίου 1986 (Βελεστίνο 1990)*

Hypereia 2: *Υπέρεια, Β΄, Πρακτικά Διεθνούς Συνεδρίου «Φεραί – Βελεστίνο – Ρήγας», Βελεστίνο 2-4 Οκτωβρίου 1992 (Βελεστίνο 1994)*

Hypereia 3: *Υπέρεια, Γ΄, Πρακτικά Διεθνούς Συνεδρίου «Φεραί – Βελεστίνο – Ρήγας», Βελεστίνο 2-5 Οκτωβρίου 1997 (Βελεστίνο 2002)*

Hypereia 4: *Υπέρεια, Δ΄, Πρακτικά Διεθνούς Συνεδρίου «Φεραί – Βελεστίνο – Ρήγας», Βελεστίνο 2-5 Οκτωβρίου 2003 (Βελεστίνο 2006)*

Hypereia 5: *Υπέρεια, Ε΄, Πρακτικά Διεθνούς Συνεδρίου «Φεραί – Βελεστίνο – Ρήγας», Βελεστίνο 4-7 Οκτωβρίου 2007 (Βελεστίνο 2010)*

Hypereia 6: *Υπέρεια, ΣΤ΄, Πρακτικά Διεθνούς Συνεδρίου «Φεραί – Βελεστίνο – Ρήγας», Βελεστίνο 4-7 Οκτωβρίου 2012 (Βελεστίνο 2014)*

JFA: *Journal of Field Archaeology*

JHS: *Journal of Hellenic Studies*

JMA: *Journal of Mediterranean Archaeology*

JRGZM: *Jahrbuch des Römisch-germanischen Zentralmuseums, Mainz*

JSav: *Journal des savants*

Kernos: *Kernos: Revue internationale et pluridisciplinaire de religion grecque antique. Centre international d'étude de la religion grecque antique*

LH IIIC Chronology and Synchronisms 1: *LH IIIC Chronology and Synchronisms 1. Proceedings of the international workshop held at the Austrian Academy of Sciences at Vienna, Vienna 7-8 May 2001 (Vienna 2003)*

LH IIIC Chronology and Synchronisms 2: *LH IIIC Chronology and Synchronisms 2: LH IIIC Middle. Proceedings of the international workshop held at the Austrian Academy of Sciences at Vienna, Vienna 29-30 October 2004 (Vienna 2007)*

LH IIIC Chronology and Synchronisms 3: *LH IIIC Chronology and Synchronisms 3: LH IIIC Late and the transition to the Early Iron Age. Proceedings of the international workshop held at the Austrian Academy of Sciences at Vienna, Vienna 23-24 February 2007 (Vienna 2009)*

MAA: *Mediterranean Archaeology and Archaeometry*

Monuments of Magnesia: *Μνημεία της Μαγνησίας. Πρακτικά Συνεδρίου «Ανάδειξη του Διαχρονικού Μνημειακού Πλούτου του Βόλου και της Ευρύτερης Περιοχής, Βόλος 11-13 Μαΐου 2001 (Βόλος 2002)*

OJA: *Oxford Journal of Archaeology*

OpAth: *Opuscula Atheniensia*

Periphery of the Mycenaean World 1: *Η Περιφέρεια του Μυκηναϊκού Κόσμου 1: Πρακτικά Α΄ Διεθνούς Διεπιστημονικού Συμποσίου, Λαμία 25-29 Σεπτεμβρίου 1994 (Λαμία 1999)*

Periphery of the Mycenaean World 2: *Η Περιφέρεια του Μυκηναϊκού Κόσμου 2: Πρακτικά Β΄ Διεθνούς Διεπιστημονικού Συμποσίου, Λαμία 26-30 Σεπτεμβρίου 1999 (Αθήνα 2003)*

Pharos: *Journal of the Netherlands Institute at Athens*

Praktika: *Πρακτικά της Ἀρχαιολογικῆς Ἑταιρείας Ἀθηνῶν*

PZ: *Präehistorische Zeitschrift*

Rethinking Mycenaean Palaces 2: *M.L. Galaty and W.A. Parkinson (eds.), Rethinking Mycenaean Palaces II: Revised and expanded second edition (Los Angeles 2007)*

RivFil: *Rivista di filologia e d'istruzione classica*

ScAnt: *Scienze dell'Antichità: Storia, archeologia, antropologia*

The Dark Ages Revisited: *The "Dark Ages" Revisited. Acts of an international symposium in memory of W.D.E. Coulson, Volos 14-17 June 2007 (Volos 2011)*

Thessalie: *La Thessalie. Quinze années de recherches archéologiques, 1975-1990: Bilans et Perspectives. Actes du colloque international, Lyon 17-22 Avril 1990 (Athènes 1994)*

Thessalika: *Θεσσαλικά. Αρχαιολογικόν Περιοδικόν Δημοσίευμα. Επιστημονικόν Όργανον της Φιλαρχαίου Εταιρείας Βόλου*

Thessaliko Hemerologio: *Θεσσαλικό Ημερολόγιο. Περιοδικό του Ομίλου Φίλων της Θεσσαλικής Ιστορίας*

Common abbreviations used in the text:

EN, MN, LN: Early, Middle and Late Neolithic respectively
EH, MH, LH: Early, Middle and Late Helladic respectively
SM: Sub-Mycenaean
EBA, MBA, LBA: Early, Middle and Late Bronze Age respectively
EIA: Early Iron Age
PG: Protogeometric
EPG, MPG, LPG: Early, Middle and Late Protogeometric respectively
SPG: Sub-Protogeometric
G: Geometric
EG, MG, LG: Early, Middle and Late Geometric respectively

CHAPTER 1:
INTRODUCTION

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1.1 HISTORY OF SCHOLARSHIP

The period from the Late Bronze Age to the Early Iron Age (c. 1600-700 BC) in Thessaly, has not been examined in depth until recently. This was due partly to the lack of sufficient evidence for these periods and partly to the focus of scholarly interest in the Neolithic, Classical and Hellenistic periods.

For the Late Helladic period the early work of Wace and Thompson, as well as the contribution of Hope-Simpson and Dickinson remain indispensable, while the pioneering work of Hunter, Feuer and later Gallis enriched our knowledge considerably.[1] In the past, Thessaly was considered as being in the periphery of the Mycenaean world. Based on material evidence coming mostly from graves and less from settlements, scholars such as Hunter, Desborough, Hope-Simpson and Feuer argued that Thessaly did not display some of the most common characteristics exhibited by other parts of the Mycenaean world where palace-states had been founded such as the Argolid and Boeotia.[2] Feuer has elaborated this idea further in recent articles[3] and he suggested a theoretical model in order to explain the position of Thessaly in the Mycenaean world.

In his theoretical construction, Feuer divides the Mycenaean world in four geographic zones according to the degree of integration of Mycenaean characteristics. The 'Core' of the Mycenaean world is in the Peloponnese and the southern Mainland Greece up to Boeotia, while the coastal area around the Pagasetic Gulf is considered as the 'Inner Border'. The area beyond that point and up to the Peneios River is the 'Outer Border'. Finally, the region that lies beyond the Peneios River is the 'Frontier'. These zones are defined according to the presence or

[1] Wace & Thompson 1912; Hunter 1953; Hope-Simpson & Dickinson 1979; Feuer 1983; Gallis 1992.
[2] Hunter 1953; Desborough 1964; Hope-Simpson 1981; Feuer 1983.
[3] Feuer 1992: 286-287; 1994: 211-214; 1999: 7-14; 2003: 15-24; 2011: 507-536; 2016: 363-392.

absence of certain characteristic features.[4] This model gives a simple picture of the Mycenaean world but has problems that have already been recognised by other scholars, as well as by Feuer himself. Recent discoveries in Thessaly, Macedonia and Epirus create a different picture, leading scholars to place the northern 'frontier' of the Mycenaean world farther north, in the Olympos region.[5] Moreover, the level of material culture displayed by the finds from the sites discovered around the Volos Bay and further inland in Velestino and around Lake Karla, as well as from the funerary evidence discovered in those regions, could not considered to be peripheral or provincial.[6] On the contrary, as it will be shown in the present thesis their character suggests that, these particular areas are an important part of the Mycenaean world.

The period that followed the demise of the Mycenaean palaces is still very little investigated in Thessaly and information remains limited. Even though SM material had been reported from various sites in Thessaly, little attention was given to the LH IIIC period (c. 1200-1100 BC). The recent publication of some LH IIIC material from the settlement at Kastro and the cemetery of Nea Ionia in Volos, as well as from the settlement at Velestino and from the survey conducted in the Almiros and Sourpi plains has helped to shed some light in this period which only very recently became the subject of any study.[7]

[4] In the 'Core Zone' of the Mycenaean world one would find, according to Feuer, palaces, frescoes, Linear B scripts, tholoi and chamber tombs, luxury goods, jewellery, weapons, seal-stones, pottery and figurines, characteristic of the Mycenaean material culture. In the 'Inner Border' palaces, frescoes and Linear B script are absent. Here palaces are replaced by 'Megaron' type buildings. and cist tombs appear more often. In the 'Outer Border', cist tombs are predominant. Mycenaean weapons and figurines are again present. What characterises the 'Outer Border' zone is that both Mycenaean and non-Mycenaean pottery and jewellery are found together. Finally, in the 'Frontier' non-Mycenaean buildings, burials, pottery and jewellery are predominant. Only Mycenaean types of weapons and pottery are found in the 'Frontier'.

[5] Eder 2009: 113-122. For Thessalian Mycenaean settlements at Palamas Karditsas, Makrichori Larisas and Asvestaria Petrotou Trikalon see: Toufexis 2001-2004: 541-542; 2006: 25-27; Hatziagelakis 2007: 35-36, Vaiopoulou 2015a: 205-220; Toufexis et al. 2015: 159-168. For recent LH and PG-G discoveries in Macedonia see: Poulaki-Padermali 2006: 115-129; Koulidou 2015: 105-112. For Epirus see: Tartaron 2004.

[6] Kourouniotis 1906: 212-240; Theocharis 1964: 255-258; Avila 1983: 15-60; Adrimi-Sismani 2000: 474-475; 2001-2004: 499-504; 2004-2005: 1-54; 2005a: 490-491; 2007: 159-177; 2013: 331-350; Arachoviti 2000: 355-371; Stavrakoudi 2002: 167-172; Laffineur 2003: 81-85; Adrimi-Sismani & Alexandrou 2009: 133-149; Papathanasiou 2009: 151-161; Papathanasiou et al. 2012: 193-204; Skafida et al. 2012a: 55-73; Batziou-Eustathiou 2015a: 51-85.

[7] For finds from the Nea Ionia cemetery and the settlement at Kastro see: Batziou-Eustathiou 1999: 117-130, 2003: 253-262. For finds from the settlement at Velestino see: Batziou-Eustathiou 1994: 215-224, Intzesiloglou

The PG period in Thessaly is, again little explored. Until recently PG Thessaly was mainly known through its material culture and especially the pottery and metal finds such as fibulae. The publications of the pottery from the settlement at Kastro Volou, and from graves such as those at Kapakli, Marmariani, and Theotokou, as well as a comparative study of Thessalian fibulae were the main contributions to the study of this period.[8] In the last 30 years however, new discoveries from rescue and systematic excavations and surveys such as those conducted in the Almiros and Sourpi plains, as well as the contribution of scholars, such as Kilian-Dirlmeier, Georganas, Gounaris, Morgan, Mili, and others, have considerably enriched our knowledge of the period.[9]

The diachronic contributions of the archaeologists of the Ephorates of Prehistoric and Classical Antiquities must also be emphasised here as their work, often conducted under difficult conditions, provides the source for any research. From the above it is clear that what is now needed is a re-evaluation of the available archaeological material and a new synthesis of old and recent finds.

1.2 AIMS AND PROBLEMS OF THE PRESENT STUDY

This thesis will examine the region of Thessaly from the Mycenaean to the Geometric period and focus on the transformation of the region from the Late Bronze Age (LBA) to the Early Iron Age (EIA). This research will offer a new approach to the changing network of interactions among sites within Thessaly and their connections with the rest of the Greek mainland and the Aegean. One of the aims of this thesis is to explore the similarities and differences among the Mycenaean centres of power in the Pagasetic Gulf, namely Kastro, Dimini and Pefkakia and

& Arachoviti 2006: 233-243, Mountjoy 2009: 289-312. For finds from the Almiros and Sourpi plains see: Reinders 2004: 91-115, Malakasioti & Mousioni 2004: 353-368. See also discussion in chapters 2 and 3.

[8] For the PG pottery from Kapakli tholos tomb see: Verdelis 1958. For the PG pottery from the settlement at Kastro see: Sipsie-Eschbach 1991. For the Thessalian fibulae see: Kilian 1975. For PG material from Marmariani and Theotokou see: Wace & Droop 1906-7: 309-327; Heurtley & Skeat 1930-1: 1-55.

[9] Georganas 2000: 47-54; 2002: 289-298; 2005: 63-74; 2009: 195-205; Kilian-Dirlmeier 2002; Morgan 2003; Reinders 2004; Malakasioti & Mousioni 2004: 353-368; Gounaris 2009: 163-194; 2012: 251-268; Mili 2015.

attempt to define their relationship and in what ways they were connected with each other and with other sites in Thessaly and the Aegean. Another aim of this thesis is studying the changes of settlement and cemetery patterns throughout Thessaly during the LBA and EIA. In this way it will be possible to explore population movement to and from Thessaly, understand how Thessaly overcame the crisis after the collapse of the Mycenaean palaces and re-evaluate theories about the societal structure, outside influences, invasions and population decline. Finally, a third aim is to examine the political organisation of Thessaly around 700 BC, the period of the formation of the first city-states in the Southern Greek Mainland. It might be possible to explore whether city-states were formed in Thessaly or whether Thessaly followed a different trajectory from that of other Southern regions and, if so, why.

The diachronic character of the site of Kastro Volou offers an ideal case study to answer the above questions since it is one among few in Thessaly occupied continuously from the Mycenaean to the Geometric period. I have been offered the unique opportunity to study unpublished and original material for my thesis from Kastro. The material includes pottery and figurines of Mycenaean date from the earlier excavations conducted by D.R. Theocharis during the late 1950's and early 1960's. The aim of my project is to study in detail the architectural remains, pottery and metallurgical evidence and incorporate the new finds in a comprehensive diachronic study of the site from the LBA to the EIA. The importance of the site of Kastro is evident after the recent discovery of Linear B tablets, new metallurgical evidence and the quality of the pottery found there. The new evidence suggests that Kastro was a Mycenaean palatial administrative centre.

This thesis will offer a synthesis and re-evaluation of the currently available material and will provide an updated study of the whole region from the Mycenaean to the Geometric period. This will be achieved by integrating the finds from Kastro with all the available evidence from settlements, burials and sanctuaries from other sites in Thessaly. This thesis will attempt to

give a brief overview of the research up to date, and to explore further regional and inter-regional similarities and/or differences, and the links that Thessaly shared with other regions in the Greek Mainland and the Aegean. An additional contribution to the research of this area will be provided by an updated gazetteer and distribution maps of Thessalian sites from 1600 to around 700 BC.

This thesis will investigate Thessaly in its entirety. Defining the borders of Thessaly from the LH to the G period is not an easy task as they appear to change through time.[10] The written sources are few, problematic and date before or after this period. Homer[11] describes an area divided into various kingdoms and inhabited by several different people, while Thucydides[12] informs us in the 5th century BC that Thessalians came into the area 60 years after the Trojan War, fought with the previous inhabitants, which were not any of the people listed in the *Catalogue of Ships*, and expelled the Boeotians from Arne. In Homer, however, the Boeotians were already living in Boeotia. Finally, according to Strabo,[13] Thessaly extended from Olympus to Thermopylae and from Pindus to the Aegean.

There is an ongoing debate among scholars whether Homer's *Catalogue of Ships* should be used as a source to reconstruct LBA or EIA topography. Although, several archaeologists use Homer as a means to explore the LH topography of Thessaly[14], others remain sceptical.[15]

[10] Thessaly has been divided in four regions which correspond to the four modern nomes of Magnesia, Larisa, Karditsa and Trikala. The examination of the evidence in this way is purely used for practical reasons and does not imply any political or social division between or within these areas, even if one such form of organisation existed. For example the district of Phthiotis was the southernmost of ancient Thessaly at least since the 6th c BC (Strabo ix, 430). The PG-G pottery from two settlements at Magoula Mati south-east of Domokos and Neo Monastiri (Dakoronia 1990: 181-182; 1986: 69-70; 1992: 206-2072; 1992b:211-212; 1993b: 220-221; 1994: 233-242), the material from two small PG-G tholos tombs and a PG cist grave at Neo Monastiri, and two SPG-G cist graves at Magoula Paliochori at Sophiada indicate the existence of close links during the PG-G period between the regions that today belong to Thessaly and north Phthiotis (Dakoronia 1992: 206-207; 1992b: 211-212; 1993: 213; 1994: 233-242, Onasoglou 1981: 227).
[11] Homer, Iliad: 2.681-759.
[12] Thucydides: 1.12.3.
[13] Strabo: 9.5.1; 9.2.29; Mili 2015: 220-225.
[14] Intzesiloglou, B. 1994: 31-56; 1994b: 71-85, Adrimi-Sismani 2007: 159-177.
[15] Gounaris 2012: 251-268.

Finley[16] argued for a 10th century date for Homer's work, while Morris[17] outlined the evidence suggesting oral poetry represents a time closer to the date at which the poet was writing and he proposed an 8th-century date for Homeric society. Dickinson[18] deconstructed further the arguments that the *Catalogue of Ships* is a Mycenaean survival and claimed that it represents more accurately EIA settlement patterns. Finally, Gounaris[19] after examining the various blood relations of the leaders of the Thessalian contingent through their genealogy argues for the importance of kinship ties between them and goes as far as to suggest that 'these ties render pointless any examination of boundaries and states with unified territories'. According to him this absence of boundaries indicates a nomadic society that could belong either to the LBA or EIA period. Even though the existence of nomadism is possible for both periods it is difficult to prove and in any case it would have existed alongside permanent settlements some with long history such as those at Kastro Volou and Velestino.

According to the Copenhagen Polis Project the geographical term *Thessalia* was used during the later archaic and classical period to designate the four *tetrades* of the Thessalian Confederacy (Pelasgiotis, Hestiaiotis, Thessaliotis, and Phthiotis) which were surrounded by the perioikic regions of Ainis, Oitaia, Malis, Achaia, Magnesia, Perraibia and Dolopia.[20] According to Classical authors each adjacent area was considered to be an individual entity and not part of *Thessalia* during the Classical period. The people inhabiting these areas were sometimes collectively called the *perioikoi* of Thessaly, a term that according to Mili 'indicates the existence of ties between these people and Thessaly and possibly hints at some form of control that Thessaly exercised over them'.[21] Furthermore, Thessaly and its adjacent regions

[16] Finley 1956.
[17] Morris 1986b: 81-138.
[18] Dickinson 1986: 20-37.
[19] Gounaris 2012: 251-268.
[20] Decourt et al. 2004: 676-731.
[21] Mili 2015: 2

appear to have been outside the Greek city-state culture and the twenty-five archaic and classical poleis that have so far been identified in Thessaly appeared to have formed federal states instead. It is not possible to verify if this political organisation extended back to the LBA and EIA.

The present study will cover the period from the Mycenaean to the Geometric period (c. 1600-700 BC). Only material which is already published will be used in this research. The information comes from monographs, as well as from articles in conference proceedings and periodicals. Information from preliminary reports will also be utilised. We will study the material evidence deriving from settlements, sanctuaries and burials. The material will be examined in four chapters and will include an introduction and conclusions (Chapters 1 and 6).

Chapter 2 examines closely the site of Kastro Volou which I utilise as a case study for the LH and PG-G periods since it is one among few in Thessaly occupied continuously and one of the few sites for which we have evidence from both the settlement and its respective necropolis. Chapter 3 explores in detail the LBA and EIA Thessalian settlements. The chapter focuses on 12 sites in Thessaly which offer more substantial evidence, while other smaller sites are also mentioned if they offer valuable information. The settlements are examined in a geographical order and all evidence for architecture and other small movable finds are examined in a chronological order. For reasons of practicality Thessaly has been divided in the following smaller geographical regions in order to study the evidence for settlements, namely: the Bay of Volos, the Magnesian Promontory, the Northern or Thessalian Sporades, the plains of Almiros and Sourpi and the Bay of Pteleos, Lake Karla and the valley of Velestino and Aerino, Pharsala and the Enipeas valley, Larisa and the eastern Thessalian plain, Elasson, the valley of Peneios and the region of Trikala, and finally Karditsa. Chapter 4 presents the evidence of the Thessalian sanctuaries in a chronological order. Chapter 5 offers a study of the burial practices

in Thessaly during the LBA and EIA. The chapter explores the similarities and differences in burial practices and is organised by grave types.

Any scholar working in Thessaly will be familiar with the challenges that such a research must overcome such as, material from surveys or rescue excavations that are only preliminary published, sites excavated in the early 20th century and therefore insufficiently reported, heavily overbuilt sites where evidence for the LH and PG-G periods have become irrevocably fragmentary or irretrievable and so on. For the purposes of this thesis we must point out further that the great majority of the published ceramic material, which in most cases is the basic if not the only means to establish a relative chronology, is predominantly LH and PG while not much of the Geometric material is available for study. In addition, most of the available evidence comes from the modern regions of Magnesia and Larisa where many excavations have been conducted so far. Another key issue hindering the analysis of the various phases of the LBA and EIA is the very limited publication and study of the pottery finds from Thessaly. Since most excavations are only preliminary published the pottery coming from them is not yet properly examined and although we have information about new settlements, we do not know with any details the small movable finds from them. Therefore, it is still very difficult to conduct any detailed examination of the pottery of LBA Kastro because there is little to no comparative material available apart from the very recent publication of the pottery of LBA Dimini and the work of Mountjoy on regional Mycenaean decorated pottery.[22] Despite these inherent research problems there is enough evidence to give a picture of Thessaly during the periods under study.

[22] Mountjoy 1999; Adrimi-Sismani 2013.

1.3 GEOGRAPHY OF THESSALY

Before we commence our examination of the material evidence it is essential to briefly examine the geography of Thessaly. The two large fertile plains of Thessaly lie in the heart of the Greek Mainland. They are divided by the low hills of Revenia and they are surrounded by mountains.[23] Thessaly, however, was by no means isolated and communicated with the rest of the Greek Mainland and the Aegean not only through the outlet of the Pagasetic Gulf but also through a network of roads that lead from the northern mountain passes of Tempe and Elasson to the southern routes around Othrys and down Spercheios valley, while other roads lead from Thessaly to the west.[24] Parts of broad roads have come to light in at least three LH settlements.[25] Thessaly also communicated with the rest of the Aegean through various outlets in the Pagasetic Gulf, as the diachronic spread of settlement along its west coast suggests.[26] Additionally, the spread of settlement in the small plains north and south of Mt. Ossa could possibly indicate that their east coasts were also used as outlets to the Aegean during the LH and PG-G period. Peneios and Karla, Greece's second largest river and lake (at least until its drainage in 1962), appear to play a pivotal role both in the LH and PG-G period as the spread of settlement along their shores indicates. Especially, lake Karla would have provided a vibrant ecosystem with high biodiversity and would have been a source of wealth offering ample fish and game and together with lake Nessonis to the north would have created a large wetland

[23] The Aegean coast is separated from the east plain by Mt. Pelion, Ossa, and Olympus. The Kamvounian range defines the north limit of the Thessalian plains, while the Chasian range and Mt. Pindus extend to the west and south-west of the plains. Mt. Othrys is to the south-east of the plains. Geological research has shown that Thessaly is one of the most seismically and tectonically active areas in Greece. Thessaly, however, is nearly devoid of geomorphological features indicative of recent important tectonic activity. Landscape is usually smooth as if erosion was the main factor of landscape evolution (Stiros & Papageorgiou 1994: 29-36, Papageorgiou et al. 1994: 21-28, Demitrack 1994: 37-40, Stiros 1999:1-4, Papadimitriou & Papadimitriou 1999: 5-6). Resent research conducted in the settlement at Kastro Volou indicates that buildings show signs of damage possibly from earthquakes (Skafida et al. 2012b; 2015). The coastline shift caused by sea-level changes and the shift of the flow of the torrents of Anavros, Xerias, and Krausidonas appears to have had a big diachronic impact on the settlements in the bay of Volos (Zangger 1991: 1-15, Kampouroglou 1994: 41-52, Skafida et al. 2012b; 2015).
[24] Poulaki-Padermali 2006: 115-129, Dakoronia 1994: 233-242, Béquignon 1937b, Hammond 1931-2: 131-179.
[25] Adrimi-Sismani 2007: 161; Hatziagelakis 2006: 777-778; Toufexis 2006: 27.
[26] Vouzaxakis 2006: 297-313; Reinders 2004; Adrimi-Sismani 2011: 313-329; Tartaron 2013: 277-283.

along the shores of which settlements flourished.[27] In addition, it is widely accepted that certain sites in coastal Thessaly participated in the Euboean '*koine*', which traces its origin to overlapping networks of communication formed as early as the LH IIIC Middle period.[28] In this thesis it will become apparent that most probably all sites around the Pagasetic Gulf and even perhaps some located inlands such as Velestino and Pharsala participated in varying degrees in the Euboean '*koine*'.

[27] Agnousiotis 2008.

[28] The Euboean '*koine'* was essentially a ceramic '*koine*' and certain vase types occurring in coastal sites in Euboea, Boeotia, Phocis, Lokris, Thessaly, some Cycladic islands and Skyros defined its limits (Lemos 2002: 212-217). It has been argued that these sites appear to share more similarities from as early as the LH IIIC Middle-Late period, namely a certain measure of continuity in settlement and occupation history, the maintenance of external contacts, and the preservation of social inequality and hierarchical structures (Crielaard 2006: 271-297). Despite those similarities, however, we cannot talk of a Euboean '*koine*' during the LH IIIC period but envisage instead overlapping networks of communication or subsidiary Aegean '*koines*' with less clearly defined and more fluid limits between sites in the Euboean and Pagasetic Gulfs and nearby islands such as those described by Thomatos (2006; 2007: 315-327) and Mountjoy (2009: 289-312) dated to the LH IIIC Middle and Late period respectively encompassing in each case only some of the sites that were later to become part of the Euboean '*koine*'.

CHAPTER 2:
KASTRO VOLOU

CHAPTER 2: Kastro Volou

2.1 HISTORY OF RESEARCH

The site of Kastro (**Cat. no. 19-20**), at the southwest part of the modern city of Volos, presents a particularly interesting case study due to the degree of continuity of occupation that it displays. Kastro is an artificial mound (c. 12 m high) created by layers of habitation that date from at least the EH II to the present.[29] The hillock of Kastro, located at the densely populated area of Palaia, is the historical nucleus of the modern city of Volos (**fig. 1**). The LH and PG-G settlement of Kastro lies underneath the Byzantine fortification.[30] The site, c. 400 x 270 m in size, must have been bigger in the past but recent public works have considerably diminished its original dimensions.[31] Today, Kastro is situated c. 500 m from the sea, recent research however, has shown that it may have been closer to the coast line during the LBA (**fig. 2**).[32]

Tsountas was the first to note the thick BA layers at Kastro hill and highlight the importance of the site which he identified as ancient Iolkos.[33] Arvanitopoulos after a brief exploration reported the discovery of a building of considerable dimensions, 'with a floor of stucco, and painted stucco on the walls', which he interpreted as a 'Mycenaean palace' on top of 'Neolithic' layers (**fig. 3**).[34] Theocharis conducted excavations at the site from 1956 to 1961 and investigated four different areas on the north and northwest sides of Kastro hill (Trenches I-IV) (**figs. 4-5**), as well as an area south of Trench III, which he named 'Stratigraphic Section'

[29] Neolithic material reported underneath the Mycenaean palace at the northwest side of Kastro hill and at Karagianni plot at Agion Theodoron street, c. 160 m east of the Mycenaean palace remains unpublished and the nature of the finds is unclear (La Redaction 1921: 530; Wace 1921: 273; Arvanitopoulos 1928: 68; Davies 1929: 95-98, fig. 2; Deilaki 1973-4: 547). None of the other excavators have reported Neolithic material and there is a consensus that the earliest finds on Kastro hill date from the EH II period onwards (Malakasioti & Batziou-Eustathiou 2002: 140-147; Skafida et al. 2012: 55-73). It should be stressed, however, that most excavations stopped at a certain depth where they met with water. The recent study of the pottery and figurines from Theocharis' excavations has yielded a figurine and a few pot sherds that could potentially date to the Neolithic period. More research is needed, however, to confirm the existence of a Neolithic phase at Kastro.
[30] Theocharis 1956: 119; Skafida et al. 2012: 55-56.
[31] Theocharis 1956: 119; 1961: 46, n. 1.
[32] Vaxevanopoulos et al. 2015: 321-330, fig. 1.
[33] Tsountas 1901: 72-73; 1902: 41-42; 1908: 15-16, 400-401, n.2.
[34] La Redaction 1921: 530; Wace 1921: 273; Arvanitopoulos 1928: 68.

since its purpose was the study of the stratigraphy (**fig. 6**).[35] He established the continuous habitation of the site from the EH II onwards, retrieved evidence that suggested the existence of a Mycenaean palace (**fig. 7**) and settlement on Kastro hill and examined important PG-G layers above the LH remains (**fig. 8**).[36] Rescue excavations conducted in various plots on Kastro hill and to east of Theocharis' excavation trenches have confirmed the continuous habitation of the site from the EH II onwards, and provided a better understanding of the LH IIIC and PG-G periods. Moreover, Sipsie-Eschbach published in 1991 the PG pottery from Kastro.[37] Recently, a five-year project (2009-2013) focused on the study and publication of the finds of Theocharis' excavations in 1956-1961, and the cleaning and conservation of Trench III, where the remains of the Mycenaean palace are located. Cleaning of the preserved structures, and small-scale excavations in Trench III combined with information retrieved from Theocharis' archive allowed for the drafting of a new site plan and for fresh observations on the architectural remains, while a study of the movable objects has yielded fragments of two Linear B tablets among other important finds (**fig. 9**).[38]

2.2 KASTRO IN THE EBA PERIOD

As mentioned above Kastro was continuously inhabited from the EBA onwards. EH layers, c. 2 m thick, uncovered at the northwest side of the hill and to north of the Mycenaean palace, attest to two architectural phases, dating to the EH II and EH III respectively, and have yielded rectangular buildings with a carefully made stone socle and mudbrick superstructure.[39] It is

[35] Theocharis 1956: 119-130; 1956b: 43-50; 1957: 54-55; 1957b: 31-32; 1960: 49-59; 1960b: 55-61; 1961: 45-54; 1961b: 51-60.
[36] Skafida et al. 2012: 55-73.
[37] Deilaki 1973-4: 546-547; Malakasioti 1981: 252-253; 1988: 239-241; 1989: 218-219; 1994: 47-57; Sipsie-Eschbach 1991; Malakasioti & Batziou-Eustathiou 2002: 140-147; Batziou-Eustathiou 2003: 253-262.
[38] Skafida et al. 2009: 561-565; 2010: 1089-1093; 2011: 529-535; 2012: 55-74; 2012b: 386-389; 2013; 2015: 145-157; forthcoming; Rehren et al. 2013: 111-124; Vaxevanopoulos et al. 2015: 321-330; Asderaki-Tzoumerkioti et al. 2018: 1-15.
[39] Theocharis 1956: 121; Skafida et al. 2013. An EH layer, 0.30 m thick, excavated in 2013 at the same spot confirms Theocharis' observations. It has yielded the remains of walls and a fallen superstructure, including mudbricks, burnt organic material (animal bones and shells), bone tools and EH pottery. EH layers have also been

unclear if the EH settlement at Kastro was destroyed by fire or not.[40] The EH pottery is rather homogenous, with some imported Urfirnis at the lowest part of the layer, and includes locally made coarse ware for everyday use.[41] The discovery of a crucible in a thick layer of ash suggests that metal artefacts were manufactured locally in Kastro from the EBA.[42]

2.3 KASTRO IN THE MBA PERIOD

MBA remains discovered at Kastro hill suggest the existence of a substantial settlement. MH layers, c. 2-2.50 m thick, discovered at the northwest side of Kastro hill and to north of the Mycenaean palace, as well as underneath it, and in various plots on Kastro hill and to east of the Mycenaean palace, attest to four or five architectural phases, and have yielded rectangular buildings with a stone socle and mudbrick superstructure.[43] Some MH buildings appear to have been small with thin walls (c. 0.40-0.50 m thick),[44] while others were bigger and had c. 0.40-0.90 m thick-walls, preserved up to a height of c. 0.80 m, made of stone with a filling of gravel. The floors were made of clay mixed with gravel and shells or paved with schist slabs, with hearths.[45] The MH pottery is of good quality and includes characteristic wares such as grey and red minyan, matt-painted and polychrome wares, as well as locally made coarse wares for everyday use, while the discovery of imported Kamares ware at Kastro suggests connections

located at the east side of Kastro hill and at Kokotsika plot in Velisariou 38 street, c. 20 m north of the Mycenaean palace (Theocharis 1960: 49, n. 4; Malakasioti 1988: 241).

[40] Theocharis 1956: 123. Although an ash layer was found separating the EH and MH remains the evidence is inconclusive.

[41] Theocharis 1956: 121-123. No decorated pot sherds or sauce-boat vases, characteristic of EH southern pottery, were discovered by Theocharis. The simultaneous presence of Urfirnis and absence of sauce-boat vases, has also been observed at Kastraki, located south of Almiros (Batziou-Eustathiou 2010: 298).

[42] Theocharis 1956: 123; Asderaki-Tzoumerkioti et al. 2018: 1-15.

[43] Theocharis 1956: 123-125, 129; 1957: 54-55; Malakasioti 1988: 240-241; 1994: 51-52; Malakasioti & Batziou-Eustathiou 2002: 141; Skafida et al. 2011: 532-535; 2013. Recent excavations have revealed two MH III-late architectural phases underneath Room 1 of the Mycenaean palace, comprising a floor, made of clay mixed with gravel and shells, and a destruction layer upon it including mudbricks, ashes, animal bones, shells and pottery, as well as an oily layer underneath it with large quantity of shells, few animal bones, pottery and some ashes. A MH layer with stones, lime-slabs and pottery was also located underneath the oldest LH IIIA floor of Room 4 of the Mycenaean palace (Skafida et al. 2011: 532-535).

[44] Theocharis 1956: 124; Skafida et al. 2013. An MH layer, 0.46 m thick, excavated in 2013 at the same spot confirms Theocharis' observations. It yielded part of a 0.52 m thick-wall, while a mixed MH layer, c. 2 m thick, explored to the northeast produced part of another wall and a fallen superstructure.

[45] Malakasioti 1988: 241; 1994: 51-52; Skafida et al. 2011: 532-535; 2013.

with Crete.[46] A locally-made MH III-early LBA clay vessel decorated with a boat/ship is a good example of the mainland matt-painted polychrome ware and shares similarities with vessels found in the Shaft Graves at Mycenae.[47] The final phase of the MH period represents a smooth and gradual transition into the LH period.[48] Kastro is among 41 sites in Thessaly and north Phthiotis that have yielded MH III-early LBA material.[49] Interestingly, at least 25 of these sites including Kastro continue without a break in habitation into the next LH III period.

2.4 KASTRO IN THE LBA PERIOD

The settlement at Kastro appears to have been the biggest in the bay of Volos during the LBA and EIA. LH layers, c. 2 m thick, discovered at the northwest side of Kastro hill, as well as in various plots on the hill attest to four or five architectural phases.[50] Kastro was an administrative centre during the Mycenaean period, as the discovery of Linear B tablets indicates and has yielded evidence for smelting and the exploitation of imported and local metals throughout the LH and PG-G periods.[51] The remains of a substantial two-storey building with at least six rooms (c. 27.50 m long) and a courtyard (c. 12.50 m long) with a clay floor, dating to the LH IIIB have been discovered on the northwest side of the hill.[52] This elaborate structure was built on top of a significant LH IIIA building and was destroyed by fire in LH IIIB2-C Early (c. 1200 BC),[53] while evidence of a much earlier building, dating to the LH I-II

[46] Theocharis 1956: 124; Malakasioti 1988: 241; Skafida et al. forthcoming b.
[47] Theocharis 1956: 124-125; Immerwahr 1985: 85-87.
[48] Theocharis 1956: 123.
[49] Tsountas 1908; Bakalakis 1959; Maran 1992; Papakonstantinou 1999; Froussou 2007: 211-258; Agnousiotis 2008; Stamoudi 2010: 557-571; Adrimi-Sismani 2010: 301-313; Tsiouka & Agnousiotis 2015: 95-104; Almatzi & Agnousiotis 2015: 113-122; Vaiopoulou 2015: 205-220; 2015b: 175-184.
[50] Theocharis 1956: 125; Malakasioti & Batziou-Eustathiou 2002: 141-143; Skafida et al. 2012: 56.
[51] Skafida et al. 2012: 55-73; Rehren et al. 2013: 111-124; Asderaki-Tzoumerkioti et al. 2018: 1-15.
[52] Theocharis 1956: 119-130; 1957: 54-55; 1960: 49-59; 1961: 45-54; Skafida et al. 2009: 561-565; 2010: 1089-1093; 2011: 529-535; 2012: 55-74; 2012b: 386-389; 2013; 2015: 145-157; forthcoming. Recent excavations revealed a new room (Room 7) to east of Theocharis' Room 1 and confirmed that Theocharis' Corridor ε is in fact another room (Room 2). New numbers were subsequently assigned to the rooms of the building. Only these new numbers will be used henceforth. The new numbers are given below with the old numbers, assigned by Theocharis, in parenthesis: Room 1, Room 2 (Corridor ε), Room 3 (Room 2), Room 4 (Room 3), Room 5 (Bath), Room 6 (Room 5), Room 7.
[53] Theocharis 1956: 125-130; Skafida et al. 2012: 56-59.

period, have also been reported.[54] Although, it is difficult to reconstruct its actual plan, due to the overlying Byzantine fortification, the LH IIIB building most probably included a megaron unit flanked by smaller rooms. It was originally suggested that the LH IIIA building was smaller in size than the LH IIIB one. New evidence, however, indicates that most probably both buildings were similar in size and plan, while the courtyard was in use during both periods.[55] The walls of both buildings were constructed with stones joined with mud up to a height of c. 1 m and from that point up with mudbricks.[56] Some of the walls were thick enough (c. 1 m thick), to support an upper storey.[57] Stone walls had wooden beams embedded horizontally and vertically and were plastered with clay and then in some instances with white stucco.[58] The building material comprises mainly various marbles and schists, while the limited use of travertine has also been noted (**fig. 10**). A volcanic rock in wall 1, dated to the LH IIIA, is most probably in secondary use and would have originally been a grind stone. The marbles and schists came from the estuary of a nearby torrent, most probably associated with the modern day Krausidonas torrent. The course of the torrent, however, remains unclear since the

[54] Theocharis 1956: 125, 129; 1957: 54-55; Agnousiotis 2008; Skafida et al. 2012: 57. The remains of the earlier building were detected to north of the courtyard and include part of a wall and a floor plastered with white stucco that yielded locally-made minyan ware, monochrome coarse ware and a few early Mycenaean pot sherds of LH I-II date and have been tentatively interpreted as belonging to an earlier 'palace'. All other LH I-II buildings appear to have been simple houses similar, in plan and construction, to those dated to the MH period. The available evidence is limited and does not allow for a clear distinction between a LH I and LH II architectural phase.

[55] Theocharis 1956: 129; 1960: 50; Skafida et al. 2011: 533-535; 2013. Theocharis revealed LH IIIA remains only in Rooms 3, 4 and 5, while evidence of a LH IIIA architectural phase was recently discovered in Rooms 1 and 6. The similarities between the two buildings (e.g. continuous use of at least four walls and four rooms) might in fact suggest that this was one and the same building with at least two architectural phases dating to the LH IIIA and LH IIIB respectively. More research is needed, however, to confirm this hypothesis.

[56] Skafida et al. 2009: 563-565.

[57] Skafida et al. 2011: 533-535. Wall 5 (c. 1 m thick) is the strongest wall of the building. It is used without a break from the earliest architectural phase (LH IIIA) to the G period and on it lies the Byzantine fortification wall of the 6th c AD. During the LH IIIB part of wall 5 becomes thicker most probably to support better a second storey. Walls 7, 9 and 6 also appear to have been in use throughout the LH IIIA and LH IIIB periods and possibly during the EIA (Skafida et al. 2013).

[58] Theocharis 1956: 127-128; Skafida et al. 2012: 57; 2013. Walls 7 and 9 had wooden beams embedded in them. Küpper (1996: 67), has argued that the incorporation of wooden beams to the walls of both Mycenaean Houses and Palaces was the main construction technique of the era. It provided stability and offered protection from earthquakes. This technique has been identified also in the House of the Columns and the corridor of Tsountas' House at Mycenae and in House A also at Mycenae (Darcque 2005: 125-126; Adrimi-Sismani 2013: 94).

landscape has been altered greatly in modern times. Travertine came from Makrinitsa on Mt. Pelion, c. 6 km northeast of Kastro.[59]

Recent research has confirmed that the LH IIIA building comprised at least five rooms.[60] **Room 1** had a floor made of clay mixed with gravel. The destruction layer found on this floor included part of the collapsed superstructure, ashes, animal bones and shells, as well as LH IIIA pottery.[61] **Room 3** (c. 7 m wide, between c. 1 m thick-walls 5 and 6) had a clay floor plastered with white stucco, while its walls were also plastered with white stucco. This was the largest room of the building and recent research has confirmed that it had the same dimensions during both LH IIIA and LH IIIB periods.[62] **Room 4** had two architectural phases dating to the LH IIIA. During the latest phase the room had a clay floor plastered with white stucco. Recent excavations revealed an earlier clay floor with a hole (also plastered with clay), possibly for a wooden beam and a stone (found in situ) to better support the wooden beam. This earlier floor yielded LH IIIA pottery and a few MH pot sherds.[63] **Room 5** (**fig. 11**) was a small room with a paved floor, c. 3.50 m wide, between walls 2 and 3. Wall 2 continues to the east and over it there is the later long wall 4. This room has yielded only LH IIIA pottery. Due to its paved floor Theocharis interpreted this room as a 'bath' but it could have been a space used for storage.[64] Finally, at the southeast corner of **Room 6** there were three successive clay floors that represent the earliest phase of the room and date to the LH IIIA, while a destruction layer also dated to the LH IIIA with burnt clay masses, fragments of stucco and wood was revealed at the north part of the room and close to wall 5.[65] It has been suggested that the LH IIIA

[59] Skafida et al. 2012b: 387; Vaxevanopoulos et al. 2015: 321-330.
[60] Skafida et al. 2011: 529-535; 2012b: 386-389; 2013. Rooms 1, 3, 4, 5, and 6 have yielded evidence dating to the LH IIIA period. It is unclear from the available evidence if Rooms 2 and 7 had a LH IIIA phase as the excavations stopped at the LH IIIB floor.
[61] Skafida et al. 2011: 533.
[62] Theocharis 1956: 128-129; Skafida et al. 2011: 535; 2012b: 388.
[63] Theocharis 1956: 129; Skafida et al. 2011: 535.
[64] Theocharis 1956: 129; Skafida et al. 2011: 532. For a paved space used for storage at the nearby LH settlement at Dimini see: Adrimi-Sismani 2007: 165.
[65] Skafida et al. 2011: 533-535.

building was destroyed by an earthquake.[66] The evidence from Rooms 4 and 6 might possibly indicate a need for frequent repairs.

The LH IIIB building included at least six rooms all with carefully made clay floors plastered with white stucco.[67] Three of the rooms have produced wall-painting fragments, preserving blue and red colours.[68] During this period **Room 1** (**fig. 12**) was c. 6 m wide, between c. 1 m thick-walls 8 and 9. The east and south walls (7 and 9) of this room had wooden beams embedded in them horizontally and vertically and were plastered with clay and white stucco. A LH IIIB2-C Early female figurine of the Ψ-type was discovered in the layer of the imprint that one of the wooden beams had left on wall 9.[69]

Room 2 (**fig. 13**) (3.43 x 1.25 m, between c. 1 m thick-walls 6 and 9) originally characterised as a corridor is in fact another room with carefully constructed walls plastered with clay and white stucco and preserving traces of colour. A destruction layer (c. 0.67 m thick) found on the LH IIIB floor of this room comes possibly from the collapse of the second storey and includes mudbricks, fragments of clay with white stucco and gravel (from the floor of the second storey), LH IIIB pottery and part of an animal figurine.[70]

Room 3 (**fig. 14**) remained virtually unchanged throughout the LH IIIA-B period, with its floor and walls plastered with white stucco.[71] Both LH IIIA and LH IIIB white stucco floors were made of lime without any refuse (plants, manure etc.) possibly indicating frequent cleaning of

[66] Theocharis 1956: 129; Skafida et al. 2012b: 387. It has been noted that some of the building material was distorted by seismic activity, during both architectural phases of the building (LH IIIA-B). Cracks in the stones have been reported, while some walls diverge significantly from their vertical axis. The evidence suggests that a strong earthquake in the area of Nea Anchialos would have impacted the Mycenaean remains, but more research is needed in order to determine when the phenomenon took place.
[67] Skafida et al. 2011: 529-535; 2012b: 386-389; 2013. Rooms 1, 2, 3, 4, 6, and 7 have yielded evidence dating to the LH IIIB period. It is unclear from the available evidence if Room 5 had a LH IIIB phase.
[68] Theocharis 1960: 50; Skafida et al. 2011: 533; 2012: 57; 2013. Rooms 2, 3 and 6 have produced wall-painting fragments.
[69] Theocharis 1956: 128; 1960: 50; Skafida et al. 2011: 533; 2012b: 389.
[70] Skafida et al. 2013.
[71] Theocharis 1956: 128-129; Skafida et al. 2011: 535; 2012b: 388. LH IIIB wall-painting fragments have also been reported.

the room during both periods, while remains of charred wood and reeds, discovered on the destruction layer over the LH IIIA floor, might suggest differences in construction techniques between the LH IIIA and LH IIIB roof.[72] The destruction layer over the LH IIIB floor of Rooms 1 and 3 has also yielded remains of chestnut tree trunks possibly from Mt. Pelion which were used as columns to support the roof.[73]

Particularly interesting is the material coming from a refuse deposit in **Room 4.** It includes more than 300 undecorated kylikes of the carinated and conical type with a tall or short foot, as well as cups and deep bowls all dated to the LH IIIB.[74] The material from the refuse deposit suggests that large scale feasting took place in this building, a practice also attested in southern Mycenaean palaces.[75]

Room 6 (**fig. 15**) had a built bench (1.55-2.05 x 0.80-0.82 m) at its northwest side. The bench, clay floor and walls were all plastered with white stucco, while LH IIIB wall-painting fragments have also been reported. The west wall of the room (wall 4: 11 m long and 1.25 m thick) rests on LH IIIA wall 1 at its north part.[76]

Room 7 (**fig. 16**) (1.40 x 3 m), located east of Room 1, is demarcated by walls 7 and 9 to west and south respectively and by a clay construction (0.55 m high and 1.25 m long) to north, possibly part of another destroyed wall and has a clay floor and walls plastered with white stucco. LH IIIB pots, including more than 200 kylikes of the carinated and conical type with a tall or short foot were found in situ at the northwest corner and the south part of the room. A destruction layer found on the floor of this room comes possibly from the collapse of the second

[72] Skafida et al. 2011: 530-531.
[73] Theocharis 1956: 128.
[74] Theocharis 1956, 126, tab. 43b-c; Skafida et al. forthcoming. A similar deposit also dated to the LH IIIB was noted at the north side of Kastro hill (Trench I).
[75] Wright 2004b: 13-58; Stocker & Davis 2004: 59-75; Dabney et al. 2004: 77-95; Palaima 2004: 97-126; Shelton 2008: 221-228; Vitale 2008: 229-238.
[76] Theocharis 1960: 50; Skafida et al. 2011: 533-535. Although Rooms 1, 4 and 6 have yielded evidence dated throughout the LH IIIA-B period it is unclear from the available evidence if, like Room 3, they had the same dimensions during both periods.

storey and includes mudbricks, stones, gravel and pebbles, fragments of clay with white stucco, and LH IIIB-C pottery. The upper surface of wall 7 was constructed with small slab-shaped stones, gravel, pebbles and pot sherds in order to better support a second storey.[77] The LH IIIB building was destroyed by intense fire during the LH IIIB2-C Early period (c. 1200 BC).[78] This building has also produced Linear B tablets, high quality pottery, as well as evidence for storage and extensive feasting activities.[79] The considerable dimensions, meticulous construction and movable finds of this building suggest that is was a Mycenaean palace, similar to those found in the southern Greek mainland.[80]

More structures have been discovered north of the building identified as a Mycenaean palace. A deposit of more than 300 undecorated kylikes, of the carinated and conical type with a tall or short foot, dated to the LH IIIB period and a clay floor and bench both plastered with white stucco were discovered c. 60 m to the north, while more clay floors plastered with white stucco are reported c. 150 m to the north.[81] Despite the similarity in construction and contents, it is unclear whether some of them formed part of the palace or belonged to other elite buildings instead. With the notable exception of a LH IIIB megaron-type building, only simple houses were excavated to the south of the Mycenaean palace. They were rectangular with a stone socle and mud-brick superstructure, while an apsidal wall most probably belonged to an auxiliary building. Their floors were made of trodden earth or clay and were strewn with gravel at places. There were designated areas used as hearths inside the houses, while paved areas, identified as courtyards, have also been discovered. In some instances, holes for wooden beams supporting the roof of a house and/or a shed in a courtyard were also located. Five architectural phases

[77] Skafida et al. 2013.
[78] Theocharis 1956: 128; 1960: 50.
[79] Theocharis 1956: 126; Skafida et al. 2012: 55-73; forthcoming. For Mycenaean feasting see: Wright 2004.
[80] Theocharis 1956: 125-130; Skafida et al. 2012: 55-73. For Mycenaean palaces see: Wright 2006: 7-52; Cosmopoulos 2006: 205-228; Galaty & Parkinson 2007: 1-28; Shelmerdine 2011: 251-256; 2012: 75-78; Aravantinos & Vasilogamvrou 2012: 41-54.
[81] Theocharis 1956: 126, 129; 1957: 55; Skafida et al. 2012: 56.

dating from the LH IIIA to the LH IIIB2-C Early period have been identified.[82] The LH settlement appears to also extent east of the Mycenaean palace.[83] Excavations in various plots on the Kastro hill c. 150-200 m to southeast of the Mycenaean palace have yielded architectural remains dated to all the phases of the LH period including buildings interpreted as simple houses, as well as others with carefully constructed clay floors and walls plastered with white stucco most probably belonging to other elite buildings.[84]

Current evidence suggests that the houses of the settlement show little or no signs of destruction by fire during the LH IIIB2-C Early period (c. 1200 BC).[85] The thin layer of ash found at places between the LH and PG layers in the settlement, although contemporary with the destruction layer found over the Mycenaean palace, comes most probably from household hearths and is not the result of a destruction by fire.[86] There was, however, some destruction in the settlement during the LH IIIB2-C Early period which seems to have been sudden as the discovery of carbonised seeds of cereals and legumes and fragments of a cooking pot found on the clay-coated floor of a household hearth in the settlement suggests.[87] This destruction was quickly overcome, however, as the occupation in later periods of the settlement indicates.

The excavations of Theocharis (1956-1961) and those of the recent five-year project (2009-2013) conducted at the northwest side of Kastro hill have produced large quantities of LH pottery, as well as various other small portable finds such as an assemblage of 50 figurines, a lead vessel, jewellery, weapons and tools including weaving and metalworking implements.[88]

[82] Theocharis 1960: 57-59; 1961: 48-49, 50-54; Skafida et al. 2012: 58.
[83] Deilaki 1973-4: 546-547; Malakasioti 1981: 252-253; 1988: 239-241; 1989: 218-219; 1994: 47-57; Malakasioti & Batziou-Eustathiou 2002: 140-147.
[84] Malakasioti & Batziou-Eustathiou 2002: 141-142.
[85] Skafida et al. 2012: 58.
[86] Theocharis 1960: 57; 1961: 46-48.
[87] Theocharis 1960: 57.
[88] Theocharis 1956: 119-130; 1957: 54-69; 1960: 49-59; 1961: 45-54; Skafida et al. 2009: 561-565; 2010: 1089-1093; 2011: 529-535; 2012: 55-74; 2012b: 386-389; 2013; 2015: 145-157; forthcoming; Asderaki-Tzoumerkioti et al. 2018: 1-15. The small movable finds from the palace and settlement include three bronze daggers and a bronze arrowhead, conical and bi-conical steatite spindle whorls, loom weights, spools, graters, obsidian and flint

The pottery discovered on Kastro covers chronologically all the phases of the LH period. The main bulk of the LH pottery can be divided in two chronological periods, dating to the LH IIIA-B (c.1400-1200 BC) (**fig. 17**) and LH IIIC (c.1200-1100 BC) (**fig. 18**) respectively.[89] The first phase corresponds with the heyday of the Mycenaean palaces, while the second phase dates after their destruction. Pottery dating to the LH I-II period has also been identified at Kastro.[90] Grey and yellow minyan pottery and matt-painted wares form the bulk of the LH I pottery suggests a strong and enduring MH tradition. On the other hand, LH IIA pots occurred in Thessaly mainly as infrequent imports from the south, as was the case of Torone in Chalkidike.[91] According to Morris and Kramer-Hajos, Torone functioned as an "emporion," a gateway to the north, connecting the Aegean network of Lustrous ware to an overland network in the Balkans and received Lustrous pottery earlier than the bay of Volos.[92] Recent research, however, has revealed sherds of LH I-II Lustrous ware at Kastro. These include mostly sherds of LH I Vapheio cups and sherds with figure-of-eight shields. Moreover, sherds of possibly locally-made LH IIA Ephyraean goblets have also been identified among the material from the excavations of D.R. Theocharis.[93] The distribution of the early Mycenaean Lustrous ware as examined by Kramer-Hajos[94] suggests that it spread via maritime routes including the Euboean Gulf system. The new discoveries from Kastro attest that the Bay of Volos was also part of these routes. Kramer-Hajos has argued further that the Euboean Gulf functioned as a sailing route between the southern Aegean and Central Greece from the MBA, as indicated by fragments of Minoan Kamares pottery discovered at Pefkakia Volou and at Mitrou in

blades, a bronze nail-head, beads of semi-precious stones, glass-mass and faience, bone pins, five bronze pins, a bronze ring, six crucible fragments, a stone mould, a stone vessel, bronze rods, slags and masses of bronze, casting debris and an iron slag. The lead vessel was found compressed in the LH IIIB layer. Two similar vessels have been reported from Megaron A and B at nearby Dimini (Adrimi-Sismani et al. 2009: 695-705).

[89] For the relative and absolute chronology of these phases see: Mountjoy 1999: 16-18; Dickinson 2006: 10-23; Shelmerdine 2008: 3-7.

[90] Theocharis 1956, 125, fig. 2; Mountjoy 1999, 827, fig. 329; Skafida et al. forthcoming.

[91] Mountjoy 1999: 823, 826-827; Skafida et al. 2012: 57; forthcoming.

[92] Morris 2009-2010: 1-67; Kramer-Hajos 2016: 61-62.

[93] Skafida et al. forthcoming.

[94] Kramer-Hajos 2016: 61-62.

Phthiotis,[95] 'suggesting the existence of a Minoan maritime trade route of the Old Palace period between Euboea and the Central Greek mainland to Thessaly'.[96] The identification of imported Kamares ware at Kastro places the Volos Bay more firmly along this route.[97] Kramer-Hajos maintained that it was previously thought that the above described maritime trade route stopped operating during the LH I-II period.[98] This was based on the available evidence at the time that showed an absence of LH I pottery and the presence of only rarely imported LH IIA pottery found together with LH I jewellery. As for example is the case of the Kapakli tholos,[99] located c. 600 m north-west from Kastro at the Nea Ionia cemetery. She also argued that in the Volos Bay the circulation network of early Mycenaean Lustrous pottery was not the same as that of metal prestige goods and that the consumption of elite Minoanizing objects, such as LH I jewellery, preceded that of early Mycenaean pottery. She finally suggested that the Volos Bay, in contrast to Torone, was part of an elite network of prestige goods that served to enhance the status of local emerging elites.[100] The recent finds, however, from Kastro and the Kapakli tomb attest to the early and synchronous appearance and use of LH I-II Lustrous ware and LH I jewellery, indicating either that both pottery and jewellery circulated through the same network or that if two separate networks existed then the Volos Bay participated in both. Kastro, being a palatial establishment during the Mycenaean period, participated in a variety of trade networks, as suggested by imports from various regions, such as Aegina, the Argolid and the Eastern Mediterranean (**fig. 19-21**). [101] These networks were indeed controlled by the elite, from as early as the LH I-II period, as indicated by imported LH I-II Lustrous ware and LH I

[95] Rutter & Zerner 1984: 82, nos. 6, 9; Whitley et al. 2006-2007: 43; Kramer-Hajos 2016: 62.
[96] Kramer-Hajos 2016: 62-63.
[97] Skafida et al. forthcoming b.
[98] Kramer-Hajos 2016: 63.
[99] Avila 1983: 51; Laffineur 2003: 83; Kramer-Hajos 2016: 63. The LH I jewellery includes a gold-leaf ornament depicting a tripartite shrine that finds close parallels in Shaft Graves III and IV of Mycenae, and a cloisonné piece with a griffin.
[100] Kramer-Hajos 2016: 63.
[101] Skafida et al. forthcoming. For the distribution of Aeginetan tripod cooking pots in the Aegean during the LBA see: Gauss & Kiriatzi 2011: 241-257; Gauss et al. 2015: 65-74. For pottery from the Argolid see: Mountjoy 1999: 59-196. For the distribution of Canaanite amphorae in the Aegean during the LBA see: Rutter 2014: 53-69.

jewellery. However, at present evidence, although possible, it remains unclear whether the Volos Bay had at any point a function like that of Torone, namely being an 'emporion' for other inland sites in Thessaly.[102] In any case, although there were several inland routes, Volos Bay was the main outlet to the Aegean and provided access to a multitude of trade networks that encompassed the rest of the Greek mainland, the Aegean and the Eastern Mediterranean and could have potentially acted as an entry point for a number of imports to Thessaly in general.

LH IIB locally-made pottery has been recovered in sufficient quantities from Kastro to suggest the existence of a local production as was the case at Dimini.[103] The LH pottery includes wheel-made decorated and undecorated open and closed shapes for the storage, preparation and consumption of food and drink, as well as hand-made coarse ware for everyday use, mainly for the storage and preparation of food and drink, such as cooking pots, lekanai, jugs and storage vessels.[104] The LH pottery from Kastro is mainly locally-made, at least from the LH IIB onwards, and of very good quality. The local clay has a characteristic deep orange colour and, in some cases, especially during the LH IIIA-B period, it is covered by a whitish/yellow thick slip, imitating clay vessels from southern Greece.[105] It is noteworthy that the LH pottery from Kastro shares many similarities in shapes and decorative motives with pottery from Dimini,

[102] This is because the material from most other LH sites in Thessaly is still under study and has not been published yet. For example, imported LH pottery from the Argolid found in Asvestaria Petrotou Trikalon demonstrates the northward spread of southern imports in Thessaly (Vaiopoulou 2015a: 213). The material from Asvestaria is still under study and therefore it remains uncertain if it arrived there via Volos Bay or some other inland trade route.
[103] Theocharis 1956: 125; Mountjoy 1999: 823, 827-835; Adrimi-Sismani 1999: 131-142. LH IIB pottery shapes, such as alabastra (FS 82, 83), Vapheio cups (FS 224) and goblets (FS 254) have been identified at Kastro.
[104] LH IIIA pottery shapes include: piriform jars (FS 23, 39, 44/45), alabastra (FS 85), an askos (FS 194), stirrup jars (FS 171/173), hydriae (FS 129), amphorae (FS 58), a rhyton (FS 199), cups (FS 219), mugs (FS 225, 226), goblets (FS 255) and kylikes (FS 256, 257, 264). LH IIIB pottery shapes include: piriform jars (FS 39), alabastra (FS 84, 85, 94), stirrup jars (FS 171/173, 166/167), kraters (FS 8, 9, 281/282), cups (FS 214, 215), mugs (FS 226), kylikes (FS 258 A and B, 267, 274), deep bowls (FS 284, 305), lekanai (FS 294, 295), cooking amphorae (FS 66/65) and tripod cooking pots (FS 320). LH IIIC pottery shapes include: amphorae (FS 58), kraters (FS 282), deep bowls (FS 284), kylikes (FS 275) and tripod cooking pots (FS 320). The decorative motives of the scroll and tassel are very popular in Kastro throughout the LH IIIC period and appear mainly (but not exclusively) on the shoulder of closed vessels, such as hydriae and amphorae. For the LH IIIC period at Kastro see also: Batziou-Eustathiou 2003: 253-262.
[105] The characteristic local clay was also noted by Feuer (1983: 202) and can be found in most LH Thessalian sites.

Pefkakia and other sites in Thessaly.[106] Furthermore, the LH pottery from Kastro shows stylistic similarities, shared ceramic types and possibly even some imports from sites in the Peloponnese, especially with those in the Argolid,[107] as well as from sites in Phthiotis, Phocis, Euboea, and Boeotia as early as the LH IIIA-B.[108]

The LH material from Kastro also includes an assemblage of 50 figurines, which cover chronologically all the phases of the LH period. The assemblage includes human female figurines of the Φ, Ψ, and T type, as well as animal figurines (mainly bovines and other quadrupeds, and at least one bird).[109] Similarities between the pottery and figurines from Kastro suggest that they were most probably products of the same workshop. A similar phenomenon has also been observed at the nearby settlement at Dimini.[110] The figurines from Kastro share many similarities with figurines from Dimini and Pefkakia, as well as with those from other LH Thessalian sites.[111] The figurines from Kastro also share similarities with figurines from sites in the Argolid, Boeotia, and Phthiotis.[112] The LH figurines are mainly locally made but there are also a few imports, namely a human figurine (M 2610) (**fig. 22**) and some animal figurines.[113] Among the animal figurines particularly interesting are those of a bird (**fig. 23**) and a miniature of a quadruped animal (**fig. 24**), possibly a dog, c. 1.8 cm in height (M2189 and M2190).[114] Bird figurines are rare during the Mycenaean period and the small size of the

[106] Theocharis 1961: 48-49; Adrimi-Sismani 2000e: 279-291; 2004-2005: 1-54; 2007: 159-176; 2013; Batziou-Eustathiou 2012: 177-192; 2015: 51-85; 2015b: 135-144; Mountjoy 1999: 818-857.
[107] Mountjoy 1999: 59-196; Voigtländer 2003; Podzuweit 2007.
[108] Tsouknidas 1994: 109-124; Nikolopoulos 2003: 351-368; Kyriazi 2003: 281-288; Mountjoy 1999: 639-860; Evely 2006; Froussou 2006: 66-83; Kounouklas 2011; Lis & Rückl 2011: 154-168; Vitale 2011: 331-343; Tzavella-Evjen 2014: 15-50, 73-131.
[109] Theocharis (1961: 53) reported two LH bird figurines. Only one of them has been located by the recent research project.
[110] Adrimi-Sismani 2013: 255-310.
[111] Dimini: Adrimi-Sismani 1996: tab. IV, fig. 10-12; 2000: 287, fig. 16-19; 2013: 255-310; Pefkakia: Batziou-Eustathiou 2012: 190, fig. 19-24; Agrelia Almirou: Tournavitou 2012: 229, fig. 4; Philia Karditsas: Hatziagelakis 2007: 44-45, fig. 4, 6. Asvestaria Petrotou Trikalon: Vaiopoulou 2015a: 216, fig. 13; For LH figurines from north Thessaly see: Feuer 1983: 71, fig. 17.
[112] French 1971; Alram-Stern 1999: 215-222; Demakopoulou & Divari-Valakou 2009: 37-53; Weiberg 2009: 61-75; Tzavella-Evjen 2014: 51-55, 132-143.
[113] Theocharis 1961: 53; French 1971: 126, tab. 18a.
[114] Theocharis 1961: 53; French 1971: 160.

miniature quadruped animal makes it also a rare example. Among the human figurines particularly interesting are two female figurines of the Ψ-type (Kμ 4112 and BE 48070). The female figurine Kμ 4112 (**fig. 25**) with an oval polos, added breasts and a cylindrical lower body shares many similarities with two figurines from the sanctuary of Athena Itonia at Philia Karditsas, and Tholos Tomb B at Gritsa Pteleou.[115] The female figurine BE 48070 (**fig. 26**), found in Room 2 of the Mycenaean palace and inside the imprint of the wooden beam in wall 9, is the largest LH figurine discovered so far at the settlement at Kastro (c. 10 cm in height). Its decoration with a painted necklace and triangular 'loincloth/skirt' is unusual. The figurine has a c. 2 cm deep hole at its base and it was most probably placed at a shelf or some sort of base on the wall. It is dated to the LH IIIB2-C Early period.[116] It is possible that this figurine had a cult purpose. The study of the pottery and figurines reveals a multitude of communication networks that the settlement at Kastro maintained as early as the LH IIIA-B. The ability of the settlement at Kastro to sustain some of these networks and generate new ones after the destruction of the Mycenaean palaces c. 1200 BC is most probably the main reason for the site's survival and long history.

2.5 KASTRO IN THE LH IIIC-SM PERIOD

Kastro appears to have been the only settlement in the area that was occupied without a break until the PG-G period. After the collapse of the Mycenaean palaces c. 1200 BC and the final abandonment of the settlements at Dimini and Pefkakia,[117] Kastro appears to have been the only remaining settlement in the area, at least until the PG period when tombs are reported

[115] Verdelis 1952: 179, fig. 17; Pilali-Papasteriou & Papaeuthymiou-Papanthimou 1983: 63, fig. 10-11. Traces of a whitish/yellow thick slip are preserved on the surface of the figurine from Kastro.
[116] French 1971: 126-128, 133-139, 147-148; Skafida et al. forthcoming.
[117] Adrimi-Sismani 2006a: 465-481; 2006b: 85-110; 2011: 313-329; Batziou-Eustathiou 2012: 177-192; 2015a: 51-85; 2015b: 135-144.

from Pefkakia, Dimini and Sesklo.[118] Morgan[119] further notes the spread of settlement to Petra[120] and the Magnesian promontory[121] during the G period as graves found there indicate, while Lemos[122] argues for an even earlier PG date for the tholos tombs found at the Magnesian promontory. The settlement at Kastro appears to recover almost immediately after the destruction by fire of the Mycenaean palace c. 1200 BC. With the nearby cemetery of Nea Ionia, it goes on to survive from the LH into the PG-G period without a break in habitation. It has been suggested that after c. 1200 BC, the population of the area clustered at Kastro.[123] Some nucleation appears likely, but since the size of the settlement and nearby cemetery changed little from the LH to the PG-G period and other sites appear near Kastro from the PG period onwards this most probably would have been a small-scale and short-lived phenomenon.

Kastro appears to lose its monumental character after c. 1200 BC as only simple houses are, so far, reported from the area of both former palace and settlement. Pottery offers the main evidence for the LH IIIC period at Kastro. Habitation layers dating to all three phases of the LH IIIC period (Early, Middle A-B, and Late A-B) are present, both in the area of the former palace and settlement and can be further divided in five sub-phases which are equivalent to LH IIIC 1a-b, 2a-b and 3 at Lefkandi.[124] Recent excavations over Room 2 have revealed a c. 0.84 m-thick layer dating to the LH IIIC period, while a c. 0.86 m-thick layer dating to the LH IIIC period was also discovered over Room 7. These two layers over Rooms 2 and 7 include part of a collapsed superstructure (burnt mudbricks, wood and other organic material), as well as LH IIIC pottery and other small finds. The LH IIIC Early period is the last phase before the

[118] Wolters 1889: 261-270; Tsountas 1908: 75-115, 147-149; Arvanitopoulos 1911: 294-300; 1915: 155-156; Apostolides 1912: 36; Theocharis 1965: 5-9.
[119] Morgan 2003: 96.
[120] Almatzi 2007: 707-709.
[121]Arvanitopoulos 1906: 125-126; 1910: 216-227; 1911: 292-294, Hatziagelakis 1982b: 230, Wace & Droop 1906-7: 309-327.
[122] Lemos 2002: 175.
[123] Morgan 2003: 101-102.
[124] Batziou-Eustathiou 2003: 253; Skafida et al. 2012b: 389; 2013.

destruction of the Mycenaean palace c. 1200 BC.[125] The pottery includes wheel-made decorated and undecorated wares, as well as Handmade Burnished Ware (HMBW).[126]

The HMBW was originally thought to appear after the destruction of the Mycenaean palaces. Some archaeologists, however, have argued for an indigenous development of this ware, suggesting a household production fuelled by the needs of everyday life, once the palace workshops no longer operated.[127] Others have suggested that HMBW is the product of foreign people who might have played a role in the destruction of the palaces. Regions that have been suggested as the place of their origin include Epirus, Troy, the Balkans or Italy.[128] HMBW, however, is now known to exist before the collapse of the palaces at c. 1200 BC.[129] Vessels of the HMBW were first found and associated with LH IIIB layers (dated before 1200 BC) at the settlement at Kastro. Their appearance, however, is more common in the LH IIIC Early and Middle layers and they continue to be used into the PG period.[130] These HMBW vessels appear to have been locally made during the LH IIIC Early period, as the shapes reported so far from Kastro, as well as from the nearby settlement at Dimini are only found in Thessaly.[131] On present evidence, this ware had a domestic use in the LH IIIC period in both Kastro and Dimini, while in the PG it was also offered as grave goods. In any period HMBW comprises only a small percentage of the local wares. Adrimi-Sismani sees the HMBW as part of the local response to the 'crisis' that followed 1200 BC.[132] The evidence, however, suggests a more complicated picture: HMBW has been reported from several locations in mainland Greece,

[125] Batziou-Eustathiou 2003: 254.
[126] Batziou-Eustathiou 2003: 254. Popular decorated shapes include amphorae (FS 69), jugs (FS 106), hydriae (FS 128), stirrup jars, deep bowls (FS 284A), kylikes (FS 274), kraters (FS 282), lekanae (FS 294), kalathoi (FS 291) and trays (FS 322), while the monochrome carinated cup (FS 240) is a new shape. Common undecorated shapes comprise basins (FS 294), shallow angular bowls (FS 295), kylikes (FS 267), carinated cups (FS 240), and cooking pots. HMBW includes cooking pots and small pithoi.
[127] Walberg 1976: 186-187; Sandars 1983: 43-68; Small 1990: 3-25.
[128] Rutter 1975: 17-32; 1976: 187-188; Rutter & French 1977: 111-112; Catling & Catling 1981: 71-82.
[129] Kilian et al. 1979: 404.
[130] Sipsie-Eschbach 1991; Batziou-Eustathiou 2003: 254.
[131] Batziou-Eustathiou 2003: 254; Adrimi-Sismani 2006b: 91-92.
[132] Adrimi-Sismani 2006a: 465-481; 2006b: 85-110.

such as Tiryns, where it has been associated with the appearance of a certain type of clay spools.[133] At the moment, it is not clear if HMBW resulted from local social changes or was the product of 'newcomers'. The fact that this ware continued to be used at Kastro after the abandonment of Dimini might suggest that the people using it moved to the surviving settlement at Kastro, where their presence can be traced into the PG period.

Few architectural remains date to the LH IIIC Middle. The main evidence comes from repaired floors, refuse pits and layers containing pottery and other small finds.[134] The ceramic repertoire of the LH IIIC Middle includes closed vessels such as amphorae (FS 69), hydriae (FS 128), feeding-bottles and trefoil oinochoai, as well as open vessels such as kylikes (FS 275), deep bowls (FS 285), kalathoi (FS 291), shallow angular bowls (FS 295), semi-globular cups, and one-handled conical bowls.[135] The decoration of both closed and open vessels is mostly linear with few decorative motifs such as spirals, scrolls and tassels.[136] Vessels decorated in the 'Close and Granary Styles' found at Kastro suggest links with the Argolid, where these two styles were popular.[137] The most important fine ware pottery category found at Kastro, however, is the one decorated in the LH IIIC Middle 'Pictorial Style' (**fig. 27**).[138] The main shape bearing the 'Pictorial Style' decoration is the krater. Human figures with weapons, bows and riding chariots are depicted, along with animals, birds, snakes and fish. Although Kastro appears to be one of the main production centres of 'Pictorial Style' pottery there are also a few imports.[139] The 'Pictorial Style' pottery, even though made locally, demonstrates close stylistic links with other pottery production centres around the Euboean Gulf and nearby

[133] Rahmstorf 2003: 397-415.
[134] Batziou-Eustathiou 2003: 255.
[135] Batziou-Eustathiou 2003: 255.
[136] Batziou-Eustathiou 2003: 255; Skafida et al. forthcoming.
[137] Mountjoy 1999: 818-857.
[138] Vermeule & Karageorghis 1982; Immerwahr 1985: 88, fig. 2; Theocharis 1960: 58-59, figs. 4-5; Sipsie-Eschbach 1992: 308-311; Batziou-Eustathiou 2003: 255, 261, fig. 4.
[139] The pot sherd with the depiction of an archer is imported most probably from the Argolid (Theocharis 1960: 59, fig. 5).

islands.[140] The 'Pictorial Style' pottery connects Kastro with a network of sites in Euboea, Boeotia, Phthiotis, Phocis and some Aegean islands.[141] It has been suggested that sites in these regions share certain similarities already from the LH IIIC Middle-Late period[142] and that later many of these sites were part of the Euboean 'koine'.[143] Despite the similarities in pottery and other aspects of the material culture observed in sites within these regions we cannot speak of a Euboean 'koine' during the LH IIIC period but rather for various overlapping networks of communication with more fluid limits between sites in the Euboean and Pagasetic gulf and nearby islands, such as those described by Thomatos (LH IIIC Middle) and Mountjoy (LH IIIC Late) and which include only some of the sites that later formed the Euboean 'koine'.[144]

The material evidence dating to the LH IIIC Late phase at Kastro is very scanty and badly preserved. The houses are of a simpler construction than before and multiple repairs are visible.[145] Closed vessels include amphorae, hydriae, stirrup jars and jugs, while open vessels comprise mainly deep bowls, kraters, kylikes and trays.[146] During the LH IIIC Late B phase lekythoi, feeding-bottles and flasks are added to the closed shapes' repertoire. Popular open shapes are deep bowls and mugs, while fewer are the trays, semi-globular cups and kraters.

Even though the existence of SM architectural remains or pottery is not mentioned by Theocharis[147] or Sipsie-Eschbach[148] they both argue for a gradual development in the pottery repertoire. Furthermore, SM features have been noted in the pottery from Kastro by Jacob-Felsch, Mountjoy, and Lemos.[149] Material dated to the SM period has been found at the Nea

[140] Crielaard 2006: 271-297.
[141] For LH IIIC Middle 'Pictorial Style' pottery see: Vermeule & Karageorghis 1982. Although from a locally made vessel, a pot sherd discovered in the recent excavations at Kastro finds parallels in Troy (Vermeule & Karageorghis 1982: 229, XIII.24).
[142] Crielaard 2006: 271-297.
[143] Lemos 2002: 212-217.
[144] Thomatos 2006; 2007: 315-327; Mountjoy 2009: 289-312.
[145] Batziou-Eustathiou 2003: 255-256.
[146] Batziou-Eustathiou 2003: 255.
[147] Theocharis 1956: 126-127; 1960: 58; 1961: 51.
[148] Sipsie-Eschbach 1991: 186-190.
[149] Jacob-Felsch 1994: 556-562; Mountjoy 1999: 856; Lemos 2002: 3-8.

Ionia cemetery,[150] the Kapakli tholos tomb[151] and other sites around the Pagasetic Gulf and beyond.[152] Recent research has confirmed the existence of habitation layers with pottery identified as SM at Kastro,[153] while the settlement continues to exist and thrive during the PG-G period. Characteristic of this continuity is the fact that some of the walls of rooms of PG buildings are founded on and have the same orientation with the walls of LH buildings both in the area of the settlement and former palace.[154]

2.6 KASTRO IN THE EIA PERIOD

During the PG-G period a substantial settlement existed at Kastro hill (12 ha). Architectural remains, pottery and other finds dated to the PG-G period have been recorded over the Mycenaean palace, as well as to north and south of it, while PG-G material has also been reported from various locations on Kastro hill and to east of the Mycenaean palace. Theocharis excavated two PG layers over the Mycenaean palace, c. 1.20-1.50 m thick, and discovered the remains of one or more rectangular buildings with a stone socle and mudbrick superstructure that yielded plentiful locally-made PG pottery and a few imports. The buildings had clay floors, while a hearth and part of a paved courtyard were also identified.[155] Reportedly, PG refuse deposits reach at places the floor of the Mycenaean palace. Theocharis explored such a deposit in Room 3, the largest room of the Mycenaean palace.[156] Finally, according to Theocharis, only

[150] Batziou-Eustathiou 1999: 117-130.
[151] Verdelis 1958: 51-53.
[152] Velestino: Intzesiloglou A. 1980: 269-271; Theotokou: Wace & Thompson 1912: 213; Voulokaliva and Agrielia: Malakasioti & Mousioni 2004: 353-368; Tsiouka 2008; Palaiokastro and Ktouri: Béquignon 1932: 89-191. See also Ruppenstein 2012: 233-239.
[153] Mountjoy 1999: 826, 856; Skafida et al. 2012: 58; forthcoming.
[154] Malakasioti 1981: 252-253, tab. 153; Skafida et al. 2011: 533 (wall 5); 2013 (walls 6 and 9).
[155] Theocharis 1956: 126-127; 1961: 45-46. More specifically Theocharis noted that the two PG layers over the Mycenaean palace yielded parts of two PG walls and successive clay floors, some of which were connected to the above walls, while others were not.
[156] Theocharis 1956: 126; 1961: 46.

Trench IV and the Stratigraphic Section, located to east and south of the Mycenaean palace respectively, produced G pottery.[157]

New excavations conducted over the Mycenaean palace, to the east and close to the Byzantine wall, have revealed two layers dated to the PG and G period respectively.[158] **Trench 4**, located over **Room 3** of the Mycenaean palace, has yielded two layers, c. 0.20 and 0.40 m thick, dating to the PG and G period respectively. The PG layer includes a floor, made of clay and gravel with no traces of burning, that yielded iron slags, clay spools, a bone needle and PG pottery, as well as animal bones and shells, while a clay floor with beam holes, a rectangular clay hearth and a stone base for the support of a storage pithos dates to the G period. The finds associated with the G floor comprise of fragments of storage vessels (pithoi), stone tools, clay spools and spindle whorls, as well as animal bones and shells. A destruction layer[159] of the collapsed superstructure was found on the G floor. It has been suggested that the G remains belonged to a closed, roofed space/room, possibly a workshop.[160] The similarities in the finds that these two floors yielded might indicate that this space had a similar function in both periods. Furthermore, the fact that no traces of burning were detected between the PG and G layer might suggest a smooth transition from the PG to the G period.

Trench 10 (3.43 m N-S x 1.25 m E-W), located over **Room 2** of the Mycenaean palace, has yielded a layer dating to the PG period.[161] The PG layer includes walls 10 and 11. Interestingly, the PG walls are founded on and have the same orientation as the LH walls 6 and 9 respectively. The only difference is that the space is bigger in the PG period as walls 10 and 11 have half the

[157] Theocharis 1956: 127; 1960: 52. Trench IV and the Stratigraphic Section also yielded Archaic and Classical pottery, as well as architectural remains and pottery dated to the Hellenistic, Roman and Byzantine period confirming that there was no break in habitation form the Geometric period onwards.
[158] Skafida et al. 2012b: 388-389; 2013. New excavations were conducted in Trenches 4, 6, 10 and 11 over Rooms 2, 3 and 7 of the Mycenaean palace.
[159] The destruction layer includes mudbricks and burnt wood and other organic material (Skafida et al. 2012b: 388).
[160] Skafida et al. 2012b: 388. It remains unclear whether this was a household or industrial workshop.
[161] Skafida et al. 2013.

thickness (c. 0.50 m thick) of their Mycenaean counterparts. PG Walls 10 and 11 are not plastered and do not have a wooden skeleton.[162] The PG layer has also yielded parts of a collapsed superstructure, including burnt mudbricks, wood and other organic material, as well as a bone tool and PG pottery.

Trenches 6 and 11, located over **Room 7** of the Mycenaean palace, have yielded two layers, c. 0.90 and 0.20 m thick, dating to the PG and G period respectively.[163] The PG layer includes part of a room with a wall (11). Wall 11, oriented E-W, rests over walls 7 and 9.[164] The PG room has yielded bone and stone tools, clay loom weights and spools, stone spindle whorls and PG pottery, as well as animal bones and shells.[165] Four PG cist graves with child burials were discovered under the floor of the PG room and close to the foundation of wall 11. One of them was furnished with a bronze ring, while another was surrounded by many sea shells.[166] Part of another space/room with a floor dating to the G period has been found over the PG remains. The G room has yielded storage vessels, bone and stone tools, clay spools and spindle whorls, as well as G pottery including mainly storage and cooking vessels. The similarities in the finds of the PG and G floors might again indicate that this space had a similar function in both periods, namely that of a workshop. Furthermore, the fact that no destruction layer was detected between the PG and G layer might suggest a smooth transition from the PG to the G period.[167]

In addition to the PG remains discovered over the Mycenaean palace, Theocharis also explored PG layers, c. 2 m thick, in the 'Stratigraphic Section' on the west side of Kastro hill and to south of the Mycenaean palace, and over the LH settlement. He revealed rectangular buildings with a stone socle and mudbrick superstructure with three to four architectural phases. Their

[162] Skafida et al. 2013.
[163] Skafida et al. 2012b: 389; 2013.
[164] Skafida et al. 2013.
[165] Skafida et al. 2013.
[166] Skafida et al. 2013. Bones survive in only one of the graves.
[167] Skafida et al. 2013.

walls were c. 1 m high and c. 0.55-0.65 m thick.[168] Theocharis excavated a megaron-shaped rectangular building, divided into two or perhaps three rooms with a stone socle and mudbrick superstructure that yielded LPG pottery. The building is c. 7.50 m long but, according to him, it would have been bigger.[169] It has been suggested that this building had a closed porch, c. 2.30 m deep, in the front.[170] Theocharis reports that an earlier building (EPG-MPG) was found on top of the LPG building. Only one wall c. 3.50 m long, oriented S-N survives.[171] Five small PG cist graves with child inhumations furnished with few grave offerings were found close to these two buildings.[172] The EIA settlement at Kastro has yielded plenty EPG, MPG and LPG pottery. The skyphos appears to be the most common shape, while jugs and amphorae were also popular.[173] Theocharis has noted that PG features persist in the G pottery of Kastro and Thessaly in general.[174] According to him the absence of Dipylon style pottery at Kastro might be a result of this.[175] It has to be pointed out however that the study of the G pottery of Kastro is not as advanced as that of the PG pottery. Interestingly, Dipylon style pottery has been found at the Kapakli tholos tomb and might therefore have been considered as prestige items.[176]

Excavations conducted in various plots, on the Kastro hill and to east of the Mycenaean palace confirm Theocharis' observations on the EIA settlement at Kastro.[177] A building was discovered at Georgali plot at Papakyriazi 68-70 street, c. 200 m southeast of the Mycenaean palace. Three walls forming two spaces/rooms were revealed. Room X1 had a paved floor and was fragmentarily preserved, while part of a hearth, made of a thin layer of clay over small

[168] Theocharis 1960: 54-57; 1961: 46-50.
[169] Theocharis 1960: 54.
[170] Mazarakis Ainian 1997: 250. According to Mazarakis Ainian if the entrance was at the south short side the building could have had either two or three rooms and a porch and it would have been either c. 8.50 m or 14 m long respectively and less that c. 6 m in width.
[171] Theocharis 1960: 54-55.
[172] Theocharis 1960: 55-56.
[173] Theocharis 1960: 55.
[174] Desborough 1952: 295; Theocharis 1956: 127.
[175] Theocharis 1960: 56-57. Dipylon style pottery has been found at the LG sanctuary at Neochoraki and the PG tholos tomb at Kapakli.
[176] Verdelis 1958.
[177] Malakasioti 1981: 252-253; 1988: 239-241; 1989: 218-219; 1994: 47-57.

slab-shaped stones, was found in Room X2. The building has yielded pottery dating to the SM-EPG period, while two more architectural phases dated to the LH period have also been identified (**fig. 28-31**).[178] Excavations conducted at Kokotsika plot at Velisariou 38 street, c. 20 m north-east of the Mycenaean palace have revealed a PG-G layer, c. 2 m thick, with four architectural phases (**fig. 32-33**). Parts of more carefully constructed rectangular buildings with a stone socle and mudbrick superstructure with many rooms were discovered. Their floors were made of clay or stone slabs. Circular or rectangular hearths made of clay and/or stones and holes for wooden beams were found on the floors, while areas identified by the excavators as storerooms, workshops and courtyards have also been reported. The EIA buildings have yielded spools, spindle whorls, loom weights, and needles, jewellery made of stone and shell, fine decorated and undecorated pottery and coarse wares, as well as various clay, stone, bronze and iron tools.[179] Three PG cist graves with child burials were found close to the EIA buildings. Only one of them was furnished with pots and bronze objects. These graves were dug into the Mycenaean layer.[180] Even though the available evidence does not permit a reconstruction of the settlement's plan we could envisage a substantial settlement, comprised of rectangular houses, perhaps similar in plan with that for example at Xeropolis, Lefkandi.[181]

Thirty-six intramural child burials have been located either among the houses of the settlement at Kastro or underneath their floors (**fig. 34-35**).[182] The graves, dating from the LH IIIC to the SPG period, are mostly cists of small dimensions. They are made of schist slabs and are strewn with small slab-shaped stones. There were also three simple pit graves. All graves contained a single child inhumation, apart from three, all with double burials. The grave offerings include

[178] Malakasioti 1981: 253.
[179] Malakasioti 1988: 239-240; 1989: 218-219; 1994: 47-57.
[180] Malakasioti 1988: 240.
[181] Popham et al. 1980, Lemos 2003-2004: 39-40; 2004-2005: 50-52; 2005-2006: 62-63; 2006-2007: 38-40; 2007: 123-133; 2007-2008: 51-54; 2008-2009: 47-49.
[182] Theocharis 1960: 49-59; 1961: 45-54; Malakasioti 1988: 239-241; 1989: 218-219; 1994: 47-57; Sipsie-Eschbach 1991: 160-184; Lemos 2002: 173-174; Skafida et al. 2013.

more than 24 pots, spindle whorls and jewellery (fibulae, rings, bracelets and beads). Interestingly, some of the vases given as grave offerings are small but others are like those found in the settlement deposits. The most common shapes are the cup and jug, while only two feeding bottles were reported. The skyphos was another popular shape, while oinochoae and small amphorae were rare. Intramural child burials dating to the PG-G period have also been found in other Thessalian settlements.[183] This practice is also reported from sites in the southern Greek Mainland such as Asine and Oropos, while LH IIIC examples have been recorded at Lefkandi and Kynos.[184]

The cemetery of the settlement at Kastro lies to north at Nea Ionia Volou and includes more than 500 tombs dating from the EH to the Byzantine period.[185] It extends from the church of Agioi Anargyroi to the ring road of Volos and Kazanaki including Nea Ionia Volou. The settlement at Kastro and the cemetery at Nea Ionia have been associated due to their proximity, the coincidence of their periods of use and the similarities in the pottery found in both. The norm here is single inhumation, in the supine position, in rectangular cist graves for all ages and both sexes, while a pithos burial and a double burial of an adult and child (possibly mother and child) in a cist grave have also been reported (**fig. 36-40**).[186] Grave goods consisted of clay vessels and bronze, iron and occasionally gold personal ornaments, while some of the vases

[183] Intramural child burials, in cist and pit graves, found among buildings and/or under floors have been reported at both LH and PG-G Thessalian settlements at Dimini, Kephalosi, Pharsala, Ambelia, Petroto, and Trikala (Wace & Thompson 1911-1912: 1-29; Béquignon 1932: 98-100; Theocharis 1964: 260-261; 1965: 316; Karapanou 1999: 423; Lewartowski 2000: 90; Alexandrou 2001-2004: 473-475, 505; Adrimi-Sismani 2013; Malakasioti & Mousioni 2004: 355-356; Vaiopoulou 2015: 212-213) and possibly also at Velestino and Larisa (Tziafalias 1976b: 184; Intzesiloglou A 1988: 245-247).

[184] Wells 1976: 11-19; Musgrave & Popham 1991: 273-291; Nikolaou 1999: 153-156; Lemos 2002: 151-190; Vlachou 2007: 213-240. Cist graves with child burials, either furnished or not, have also been found underneath the floors of MH houses at Kastro (Theocharis 1956: 124; Malakasioti 1994: 51; Sismani 2012: 149-158). The exact date of the LH cist grave reported by Deilaki (1973-1974: 547), at the northwest side of Kastro hill and close to Theocharis' 'Stratigraphic Section', remains unknown. A LH I-II date could possibly by suggested based on the excavator's observation that the pottery recovered retains some MH features.

[185] For PG-G burials see: Theocharis 1963: 140-141; Theochari 1966: 47-53; Intzesiloglou A. 1981b: 252; Hatziagelakis 1982: 225-226; 1983: 197; Batziou-Eustathiou 1984: 140-142; 1987: 254; 1999: 117-130; 2000: 463-465; Malakasioti 1998: 419-422; Triantafillopoulou 2007: 695; 2008: 678-680.

[186] Multiple burials in cists during the PG period have also been reported recently (Triantafillopoulou 2008: 679). There were PG cist graves that included two to four burials.

were found placed outside the grave. Interestingly the burial rites practised in this extended cemetery appear to change little throughout its prolonged period of use.[187] Only the position of the deceased changed from contracted to supine and the grave offerings became slightly fewer in the PG-G period.

During the LH period two tholos tombs, one located at Agioi Anargyroi/Kapakli (LH IIB-IIIA1) (**figs. 41-43**) and the other at Kazanaki (LH IIIA1-2) (**figs. 44-48**), appear to demarcate the limits of the cemetery[188], while a cluster of 5 PG tholoi, with diameters ranging from 2.20 to 6.67 m, has been located at the area of Paspalia (300m north-west of Kastro) and along Kolokotroni Street close to the LH tholos tomb at Agioi Anargyroi (**figs. 49-51**).[189] All these tholoi were part of the Nea Ionia cemetery. The five PG tholoi were used for an extended period and contained multiple interments furnished with clay vessels and metal objects, while the mortuary practices employed ranged from inhumation to primary and secondary cremation.[190] The fact that the community at Kastro choses to bury its dead in one extended cemetery instead,

[187] For LH burials see: Theocharis & Theochari 1970: 198-203; Intzesiloglou A. 1981b: 252; Hatziagelakis 1982: 225-226; Batziou-Eustathiou 1984: 140-142; 1985: 17-70; 1999: 117-130; Triantafillopoulou 2007: 695-696.

[188] Kourouniotis 1906: 212-240; Avila 1983: 15-60; Adrimi-Sismani & Alexandrou 2009: 133-149; Papathanasiou 2009: 151-161. Interestingly, these two LH tholoi, with diameters ranging from 6.70 to 9.95-10 m, were among the largest in Thessaly, comparable in size to those in Pylos, Messenia, and contained rich grave offerings including among others pottery, gold jewellery, seal stones, gold signet rings, and objects made of ivory and faience, while a bronze dagger comes from the Kazanaki tholos (Avila 1983: 15-60; Galanakis 2008: 218-228; Adrimi-Sismani & Alexandrou 2009: 133-149; Adrimi-Sismani 2010: 37-55; Pantou 2010: 386-387, fig. 4). The tholoi at Georgiko, Rachoula and Ano Ktimeni in Karditsa appear to share similarities in architecture, grave offerings and burial rites with those in Volos Bay indicating the existence of elite networks of communication between the two regions (Karagiannopoulos 2007: 751-753; 2008: 739-741; Galanakis 2008: 139; Galanakis & Stamatopoulou 2012: 205-218; Intzesiloglou 2010: 239-247). All the above large LH tholoi appear to be strategically situated in Volos Bay and in the case of Karditsa close to important land passes. The use of the tholos at Kapakli could possibly extend to the LH IIIB period (Adrimi-Sismani 2007: 159-177). It has been suggested that the tholos at Kazanaki might have belonged to an as yet undiscovered settlement in the area. The fact, however, that other LH, G and R graves have been found close to it might suggest that in fact the tholos tomb was part of the Nea Ionia cemetery which extended to Kazanaki (Theocharis 1963: 140-141; Theochari 1966: 47-53; Adrimi-Sismani & Alexandrou 2009: 133-149).

[189] Arvanitopoulos 1914: 141; Verdelis 1958; Rodiri 1993: 231-233; Triantafillopoulou 1997: 457-459; 2008: 678-680; Malakasioti 1998: 419-422. There has been some confusion whether the LH tholos at Agioi Anargyroi was re-used during the PG period. Avila (1983: 15) argues against this hypothesis. According to him there are two tholos tombs one dated to the LH (Kapakli 1, Agioi Anargyroi) and the other to the PG period (Kapakli 2, Paspalia) located 600 and 300 m respectively, north-west of Kastro. The first was excavated by Kourouniotis (1906: 212-240) and published by Avila (1983: 15-60), while the other was explored by Arvanitopoulos (1914: 141) and some of its pottery was published by Verdelis (1958).

[190] It is possible that the use of some of these 5 PG tholoi extended to the SPG (Lemos 2002: 174) or even to the G period and some of them were re-used during the Classical period.

for example, in three or more separate burial grounds, as is the case at the settlement at Velestino might suggest that it was more closely interwoven.

The settlement at Kastro was an important administrative centre during the Mycenaean period as the discovery of Linear B tablets suggests.[191] Fragments of two leaf-shaped Linear B tablets were recently discovered among the material coming from the excavations conducted by Theocharis at Kastro between the years 1956 to 1960.[192] These are the first Linear B tablets to have been found in Thessaly.[193] The first fragment (**VOL X 1**) preserves part of an inscription, on the *recto*, which consists of four lines (**fig. 52**). The text could be referring to small shafts, a manufacturer (or more) of head-bands and could present nouns or adjectives in its second part. Additionally, the female connotation of some of the words seems likely.[194] The second fragment (**VOL X 2**) is in a poor state of preservation, badly burnt and eroded, and no signs are visible on either of its surfaces (**fig. 53**). The only incision visible is that of a horizontal line, used to divide the tablet surface in writing spaces. Most probably this fragment belongs to the lower part of the tablet.[195]

The drawing of a third leaf-shaped Linear B tablet, along with its section, has been recovered from Theocharis' archive (**fig. 54**). The tablet depicted, however, has not been located among the excavation finds. It is unclear whether this drawing represents an actual find or not. It is

[191] Skafida et al. 2012: 55-73.
[192] Skafida et al. 2012: 59-65. The exact findspot and context of the tablets remains unclear. One tablet (**VOL X 1**) was found in a crate of pottery labelled 'Iolkos 1956-1960', while the other tablet (**VOL X 2**) was discovered in another crate of pottery simply labelled '1960'. The trenches that produced Mycenaean layers during those years were 'Trench I' (north of the palace), 'Trench III' (the Mycenaean palace), and the 'Stratigraphic Section' (south of the palace).
[193] Linear B symbols have been found on other media in Volos Bay, including three Linear B signs inscribed on a stone weight in Megaron A at Dimini, seven Linear B signs inscribed on the lintel of the Kazanaki tholos identifying the deceased within and a Linear B symbol engraved before firing on the base of an imported LH IIIA monochrome cup or kylix at Pefkakia (Adrimi-Sismani 2004-2005: 20; 2007: 167; Adrimi-Sismani & Godart 2005: 47-70; Adrimi-Sismani & Alexandrou 2009: 133-149; Galanakis & Stamatopoulou 2012: 205-218; Batziou-Eustathiou 2015a: 51-85; Feuer 2016: 384).
[194] Skafida et al. 2012: 60-63. The **VOL X 1** tablet fragment measures: 2.4 cm length, 3 cm width, and 1.1 cm thickness.
[195] Skafida et al. 2012: 63. The **VOL X 2** tablet fragment measures: 1.85 cm length, 3 cm preserved width and 0.80-0.91 cm thickness.

nevertheless interesting that, although the section is not in the same scale as the tablet itself, one trait is shared with **VOL X 1**, namely a carinated edge created where the recto joins with the thin side of the tablet. This is a technical detail that Theocharis could not have known unless he was drawing an actual find.[196]

The Linear B tablets from Kastro are similar in shape as and bear the same characters with those from all other Linear B archives.[197] Most of the seven different Linear B signs that have been identified on the VOL X 1 tablet do not deviate from the already known ones. Only two signs deserve special mention. The sign ja appears in a known, yet somewhat rare, form with three instead of four horizontal strokes. It is attested in this shape very rarely at Knossos. The sign pu is the only one that deviates significantly from its attestations in other archives. In fact, the form of pu used in this tablet is so far unique. Additionally, the VOL X 1 tablet bears four lines of writing, a feature that, although not a novelty, is not very frequent. Only 28 leaf-shaped tablets from Knossos, Pylos, Mycenae, Tiryns and Thebes have been found so far to present texts arranged in four rows. The vocabulary attested is Greek and the reconstructed words find their parallels in the archives of Knossos and Pylos.[198] The Linear B tablets from Kastro verify the existence of a Linear B scribal '*koine*' and it has been suggested that the archival and administrative uniformity that this implies could possibly also be translated into a form of political unity which extended throughout the Mycenaean world.[199]

2.7 ECONOMY OF KASTRO

The settlement at Kastro was a thriving urban centre throughout the Mycenaean period and especially during the LH IIIA-B period that displayed central planning and social ranking. The

[196] Skafida et al. 2012: 63-64. For accidents known to have occurred to fragile and badly preserved tablets see: Evans 1909: 17.
[197] Skafida et al. 2012: 62-63.
[198] Skafida et al. 2012: 65.
[199] Skafida et al. 2012: 65; Olivier 2006: 183-188.

settlement at Kastro appears to have been unfortified during both the LBA and EIA. Throughout the LH and PG-G periods the settlement's economy was based on agriculture, animal husbandry and craft production including weaving, the manufacture of metal objects and pottery, as well as trade.

The nearby plains must have supported the residing population with a sufficient agricultural produce, as storage facilities found in the settlement at Kastro during the LH and PG-G period suggest. Even though we have not so far discovered storerooms such as those found in nearby Dimini it must be stressed that most of the Mycenaean palace at Kastro remains unexplored due to the overlying Byzantine fortification. The small paved Room 5 of the Mycenaean palace dating to the LH IIIA could have been used for storage, while LH and PG-G storage vessels have also been recovered from the same building.[200] In addition extensive feasting activities attested at the Mycenaean palace at Kastro imply the existence of substantial reserves of foodstuff.[201] Remains of cereals were found in almost all floors of the Mycenaean palace. It has been noted that the variety of the by-products of cereals recovered suggests that they were cultivated here and indicates activities such as harvesting and thrashing. Wheat and barley were cultivated for human and animal consumption alike.[202] Moreover, designated areas for storage (e.g. storage pithoi and other storage facilities) have been recorded from the houses of both the LH and PG-G settlement at Kastro.[203] Additionally, skeletal analyses conducted in the nearby LH Kazanaki tholos show that the nutrition of the deceased had been amongst the best hitherto recorded from Mycenaean Greece.[204] According to archaeobotanical evidence barley, bitter vetch, figs and vines were cultivated during the PG period at Kastro Volou. Barley (Hordeum

[200] For Room 5 see: Theocharis 1956: 129; Skafida et al. 2011: 532. For LH pottery see above. For PG-G pottery see: Sipsie-Eschbach 1991.
[201] Theocharis 1956: 126; Skafida et al. 2012: 55-73; forthcoming.
[202] Skafida et al. 2011: 531.
[203] Batziou-Eustathiou 2003: 253-262; Skafida et al. 2012c: 145-157; 2013; forthcoming.
[204] Adrimi-Sismani & Alexandrou 2009: 133-149; Papathanasiou 2009: 151-161; Papathanasiou et al. 2012: 193-204.

vulgare L.) is a very resistant cereal species and can tolerate poor and dry soils, a fact that might indicate the need to cultivate less-rich soils. Bitter vetch (Vicia ervilia L.) is a legume that can be used also as fodder for animals. Barley, figs and vines are also reported from other PG sites such as Kastanas, Kalapodi, Delphi and Nichoria, while bitter vetch has only been recorded at PG Iolkos.[205] Animal husbandry was equally important at Kastro during both the LH and PG-G period and evidence suggests that goats, cows and sheep were reared here, while hunting and fishing would have provided an additional source of food.[206] Weaving implements such as, conical and bi-conical steatite spindle whorls, as well as clay loom weights and spools dating both to the LBA and EIA indicate that weaving was diachronically an important activity at Kastro.[207] Pottery is mainly locally produced in large quantities since LH IIB in a kiln found among the houses of the settlement at Kastro and shares many similarities in shapes and decorative motives with pottery from Dimini, Pefkakia and other sites in Thessaly.[208] Furthermore, the LH pottery from Kastro shows stylistic similarities, shared ceramic types and possibly even some imports from sites in the Peloponnese, especially with those in the Argolid, as well as from sites in Phthiotis, Phocis, Euboea, and Boeotia as early as the LH IIIA-B,[209] while an even wider network of connections is attested by imports from Crete, the Argolid, Aegina and the eastern Mediterranean.[210] The multitude of trade networks and connections attested at Kastro might have been one of the primary reasons for its exceptionally long history as some of them developed later in the PG-G period into a part of the Euboean 'koine'.[211]

[205] Jones 1982: 75-78, Megaloudi 2004: 151-160.
[206] Skafida et al. 2011: 531; forthcoming. Traces of manure and plant remains that have been detected in both LH IIIA and LH IIIB floors of Room 3 of the Mycenaean palace indicate the breading of animals. Interestingly manure was used a fuel for the hearths and not as architectural material.
[207] Theocharis 1961: 53; Skafida et al. 2013; forthcoming.
[208] Theocharis 1956: 125; 1961: 48-49. See also above note: 78.
[209] See above notes: 79-80.
[210] See above notes: 18, 65, 73.
[211] Lemos 2002: 212-217. See also above notes: 114-116.

Metalworking appears to have been another important industry at Kastro with a long history offering evidence for smelting, as well as the exploitation of local and imported metals from the EBA and throughout the LBA and EIA. Artefacts made of a cooper-base alloy were manufactured at Kastro from the EBA, while a metallurgical workshop dated from the LH to the G period (14th-8th c BC) has also been identified.[212] Theocharis interpreted the latest BA architectural phases of one of the buildings to south of the Mycenaean palace as a metallurgical workshop.[213] Recent research has confirmed that this was indeed a metallurgical workshop dating from the LBA to the G period.[214] The assemblage of finds associated with this workshop includes fragments of at least seven crucibles with remains of copper alloys in them, a stone mould for the casting of circular pendants (**fig. 55**), a stone vessel of unknown function and a piece of iron smithing slag,[215] while Theocharis also mentions bronze rods, slags and masses of bronze.[216] Most of the crucible fragments were found in the metallurgical workshop. One of the crucibles comes from the earliest layers and is dated to the EBA II (c. 2500 BC), while the rest date to the LBA.[217]

The crucibles from Kastro are internally-heated, thick-walled bowls made from ordinary heavily-tempered clay, their shape is broadly shallow and open-mouthed.[218] The two biggest crucible fragments from Kastro BE 48051 (EBA) (**fig. 56**) and M 2664 (LBA) (**fig. 57-58**) are flat-bottomed, shallow round-oval with a protrusion on one side containing a deep rectangular socket to receive a wooden handle. They were both used repeatedly to melt a copper-based

[212] Rehren et al. 2013: 111-124; Asderaki-Tzoumerkioti et al. 2018: 1-15.
[213] Theocharis 1961: 48, 52.
[214] Rehren et al. 2013: 112.
[215] Rehren et al. 2013: 112-113.
[216] Theocharis 1961: 48, 52. A piece of casting debris associated with the metallurgical workshop has also been analysed recently (Asderaki-Tzoumerkioti et al. 2018: 5). Interestingly, excavations conducted c. 150 m to southeast of the Mycenaean palace on top of Kastro hill have revealed another assemblage of finds, including three stone moulds and slags, dated to the LH IIB-IIIA1 suggesting possibly that more than one workshops were operating during the LH period at Kastro (Malakasioti & Batziou-Eustathiou 2002: 141-142).
[217] Rehren et al. 2013: 112-113.
[218] Rehren et al. 2013: 113. This design is common for prehistoric smelting and melting crucibles and it did not change from the LN to the LBA and into the classical antiquity. There are, however, stylistic and typological variants.

alloy.[219] Interestingly, a contradiction between the form and function of these two crucibles has recently been noted. Crucible BE 48051 has an EBA date and form, but contains traces of tin bronze, as well as the more typical early arsenical copper, while crucible M 2664, with a socketed handle typical of EBA crucibles is LBA in date and has been used for processing tin bronze, a typical LBA alloy, as have most of the other fragments from that context.[220] The fabric variability seen in the various crucible fragments is remarkable and suggests that at least seven crucibles are represented in this assemblage. The ceramic is made from ferruginous clay with variable but generally low lime content, and not particularly refractory. More importantly a visual inspection suggests that the same clay was used for both domestic and technical ceramics.[221] The best parallel to the socketed crucibles described here are from the EBA, from Tepe Ghabristan in Iran and from Fidan and Tell Magass in Jordan.[222] The EBA crucible BE 48051 conforms to the early shapes known elsewhere, while the LBA crucible M 2664, which has a close EBA parallel in Sesklo and a possible further parallel in LBA Crete, is unusual for its date in having a socket.[223] This could suggest that both the socketed Kastro finds are more likely of an EBA date, even though one is firmly dated to the LBA based on its stratigraphic context.[224]

All crucibles from Kastro were used for copper alloys and most analysed fragments yielded evidence for tin as the main alloying element, except for the small LBA fragment BE 49638, which has a copper arsenic alloy, and the large EBA fragment BE 48051 which has produced a complex signature including a combination of arsenic, tin, antimony and various transition metals. Although this is an unusual copper alloy signature, metal objects from LN and EBA

[219] Rehren et al. 2013: 113-114. These two crucibles have a diameter c. 150 mm and are c. 60-70 mm deep.
[220] Rehren et al. 2013: 114.
[221] Rehren et al. 2013: 114.
[222] Adams 1999; Thornton 2009: fig. 5; Rehren et al. 2013: 115.
[223] Tsountas 1908: fig. 288; Evely et al. 2012: 1824; Rehren et al. 2013: 115. The Cretan crucible is an unpublished example from LM IIIB Malia in Central Crete.
[224] Rehren et al. 2013: 115. The other fragments are too small to discuss typologically.

nearby sites such as Sesklo, Dimini, Petromagoula, Pefkakia and Mikrothives have produced a similarly complex signature.[225] In contrast, all layers in the LBA handled fragment M 2664 yielded very clean tin bronze spectra, with only a little arsenic. Analyses confirmed this for all the LBA fragments except BE 49638, with the additional identification of low concentration of lead oxide in some samples.[226] Most importantly metallic tin and fresh copper were alloyed to produce bronze, as opposed to the mere re-smelting of existing bronze. Thus, while the alloy type, tin bronze, is in line with the LBA date of the workshop it does additionally show that the workshop had access to metallic tin, supporting the idea that this was part of an elite or palatial establishment.[227] Both large crucible fragments were used repeatedly, a characteristic also observed in prehistoric crucibles from southern Germany and Crete, indicating the value that these tools held for their owners.[228] The metal used during the EBA at Kastro comes from the region of Pelasgia in south-eastern Mt. Othrys and not from Cyprus as was originally suggested, while during the LBA the workshop had access to a range of metal sources, including probably some of the major copper sources of the Bronze Age in Jordan/Israel, Bulgaria and either Lavrion or Northern Greece.[229] The many different metal sources create the picture of a well-connected and privileged workshop. The diversity in raw material access contrasts to the apparent consistency of location of the workshop which over more than a millennium and a half (c. 2800-1200 BC) only moved c. 40 m.[230]

The correlation of specific working techniques (casting, hammering etc.) as appropriate for specific alloy types, and the selection of alloys for their colour and other properties at the

[225] Tsountas 1908; Theocharis 1973; McGeehan-Liritzis & Gale 1988; Rehren et al. 2013: 115; Asderaki-Tzoumerkioti et al. 2018: 5. A group of Chalcolithic tin bronzes from the Balkans has also produced a similarly complex signature (Radivojević et al. 2013).
[226] Rehren et al. 2013: 115-116.
[227] Rehren et al. 2013: 116.
[228] Mecking & Walter 2004; Evely et al. 2012: fig. 16; Rehren et al. 2013: 116.
[229] Rehren et al. 2013: 116-119; Asderaki-Tzoumerkioti et al. 2018: 9-13. The use of copper sulphide or Fahlerz ores, both commonly used during the BA, is also possible at Kastro.
[230] Rehren et al. 2013: 119.

metallurgical workshop at Kastro diachronically reveals the high level of craftsmanship. The workshop appears to have been versatile and produced a range of artefacts from a wide range of alloys and copper sources, indicating that although it was controlled by the elite it was nevertheless serving the wider community and was not narrowly specialised on a particular product only.[231] Jewellery is predominant over weapons or utilitarian objects. Artefacts from the EBA to the G period were made mainly of pure copper, arsenical copper, bronze and arsenical bronze. Casting has been identified, while slightly worked (combination of as-cast and mild metal working, such as hammering and annealing), worked and intensively worked structures have been observed, as well.[232]

2.8 CONCLUSIONS ON KASTRO

The site of Kastro presents a particularly interesting case study due to the degree of continuity of occupation that it displays. Kastro is an artificial mound created by layers of habitation that date from at least the EH II to the present. Interestingly, the final phase of the MH period represents a smooth and gradual transition into the LH period. Kastro is among 41 sites in Thessaly and north Phthiotis that have yielded MH III-early LBA material. Interestingly, at least 25 of these sites including Kastro continue without a break in habitation into the next LH III period.

The remains of a substantial two-storey building with at least six rooms and a courtyard with a clay floor, dating to the LH IIIB have been discovered on the northwest side of the Kastro hill. This elaborate structure was built on top of a significant LH IIIA building and was destroyed by fire in LH IIIB2-C Early, while evidence of a much earlier building, dating to the LH I-II

[231] Asderaki-Tzoumerkioti et al. 2018: 9.

[232] Asderaki-Tzoumerkioti et al. 2018: 9-13. At Kastro, pins from the LBA to the IA were as-cast with a light hammering except from one case (EIA pin ID 17719) which seems to be heavily hammered. The fibulae belong to the EIA and the parts of the fibulae that were hammered had undertaken hard working. Rings seem to have been worked in the same way both in the EIA and in the 4th-6th c AD. They were as-cast with a light hammering. The weapons were very corroded and were not examined.

period, have also been reported. The LH IIIB building most probably included a megaron unit flanked by smaller rooms. Most probably both LH IIIA and LH IIIB buildings were similar in size and plan, while the courtyard was in use during both periods. Kastro was an administrative centre during the Mycenaean period, as the discovery of Linear B tablets indicates and has yielded evidence of smelting and the exploitation of imported and local metals throughout the LH and PG-G periods, as well as high quality pottery, evidence for storage and extensive feasting activities. The considerable dimensions, meticulous construction and movable finds of this building suggest that is was a Mycenaean palace, similar to those found in the southern Greek mainland. The LH settlement at Kastro appears to extent to east, north and south of the Mycenaean palace. Interestingly, current evidence suggests that the houses of the settlement show little or no sign of destruction by fire during the LH IIIB2-C Early period. There was some destruction in the settlement, but it was overcome quickly.

After the collapse of the Mycenaean palaces c. 1200 BC and the final abandonment of the settlements at Dimini and Pefkakia, Kastro appears to have been the only remaining settlement in the area, at least until the PG period when tombs are reported from Pefkakia, Dimini and Sesklo. If there was some clustering of the population of the area at Kastro it would have been a brief phenomenon indeed. Kastro appears to lose its monumental character after c. 1200 BC as only simple houses are, so far, reported from the area of both former palace and settlement. Pottery offers the main evidence for the LH IIIC period at Kastro. Recent research has confirmed the existence of habitation layers with pottery identified as SM at Kastro, while the settlement continues to exist and thrive during the PG-G period. Characteristic of this continuity is the fact that some of the walls of rooms of PG buildings are founded on and have the same orientation with the walls of LH buildings both in the area of the settlement and former palace. Architectural remains, pottery and other finds dated to the PG-G period have been recorded over the Mycenaean palace, as well as to north and south of it, while PG-G material

has also been reported from various locations on Kastro hill and to east of the Mycenaean palace. Room 3 and Room 7 of the Mycenaean palace has yielded two layers dating to the PG and G period respectively. The similarities in the finds that these two floors yielded might indicate that this space had a similar function in both periods. Furthermore, the fact that no traces of burning were detected between the PG and G layer might suggest a smooth transition from the PG to the G period. Even though the available evidence does not permit a reconstruction of the settlement's plan, during the PG-G period, we could envisage a substantial settlement, comprised of rectangular houses, perhaps similar in plan with that for example at Xeropolis, Lefkandi.

Thirty-six intramural child burials have been located either among the houses of the settlement at Kastro or underneath their floors. The graves, dating from the LH IIIC to the SPG period, are mostly cists of small dimensions. The cemetery of the settlement at Kastro lies to north at Nea Ionia Volou and includes more than 500 tombs dating from the EH to the Byzantine period. It extends from the church of Agioi Anargyroi to the ring road of Volos and Kazanaki including Nea Ionia Volou. The settlement at Kastro and the cemetery at Nea Ionia have been associated due to their proximity, the coincidence of their periods of use and the similarities in the pottery found in both. Interestingly the burial rites practised in this extended cemetery appear to change little throughout its prolonged period of use. Only the position of the deceased changed from contracted to supine and the grave offerings became slightly fewer in the PG-G period. During the LH period two tholos tombs, one located at Agioi Anargyroi/Kapakli and the other at Kazanaki, appear to demarcate the limits of the cemetery, while a cluster of 5 PG tholoi has been located at the area of Paspalia (300m north-west of Kastro) and along Kolokotroni Street close to the LH tholos tomb at Agioi Anargyroi. All these tholoi were part of the Nea Ionia cemetery. The fact that the community at Kastro choses to bury its dead in one extended

cemetery instead, for example, in three or more separate burial grounds, as is the case at the settlement at Velestino might suggest that it was more closely interwoven.

The settlement at Kastro was an important administrative centre during the Mycenaean period as the discovery of Linear B tablets suggests. The Linear B tablets from Kastro are similar in shape as and bear the same characters with those from all other Linear B archives. The vocabulary attested is Greek and the reconstructed words find their parallels in the archives of Knossos and Pylos. The Linear B tablets from Kastro verify the existence of a Linear B scribal 'koine' and it has been suggested that the archival and administrative uniformity that this implies could possibly also be translated into a form of political unity which extended throughout the Mycenaean world.

Metalworking was an important industry at Kastro with a long history offering evidence for smelting, as well as the exploitation of local and imported metals from the EBA and throughout the LBA and EIA. A metallurgical workshop at Kastro dating from the LBA to the G period has yielded seven crucibles. One of the crucibles comes from the earliest layers and is dated to the EBA II (c. 2500 BC), while the rest date to the LBA. The workshop had access to metallic tin and fresh copper, supporting the idea that this was part of an elite or palatial establishment. The metal used during the EBA at Kastro comes from the region of Pelasgia in south-eastern Mt. Othrys, while during the LBA the workshop had access to a range of metal sources, including probably some of the major copper sources of the Bronze Age in Jordan/Israel, Bulgaria and either Lavrion or Northern Greece. The many different metal sources create the picture of a well-connected and privileged workshop. The workshop appears to have been versatile and produced a range of artefacts from a wide range of alloys and copper sources, indicating that although it was controlled by the elite it was nevertheless serving the wider community and was not narrowly specialised on a particular product only.

Kastro due to its very strategic position on the Bay of Volos, the main Thessalian outlet to the Aegean, was able to maintain several networks that helped in its survival for such as long time. These networks of connections can be seen clearly not only in the metals available to its workshop but most importantly in the pottery and figurines from Kastro. The main bulk of the LH pottery can be divided in two chronological periods, dating to the LH IIIA-B (c.1400-1200 BC) and LH IIIC (c.1200-1100 BC) respectively. The first phase corresponds with the heyday of the Mycenaean palaces, while the second phase dates after their destruction. Pottery dating to the LH I-II period has also been identified at Kastro. Recent research has revealed sherds of LH I-II Lustrous ware at Kastro while, sherds of possibly locally-made LH IIA Ephyraean goblets have also been identified among the material from the excavations of D.R. Theocharis. This suggests that Kastro was part of the maritime trade network that facilitated the distribution of Lustrous ware. The recent finds from Kastro and the Kapakli tomb attest to the early and synchronous appearance and use of LH I-II Lustrous ware and LH I jewellery, indicating either that both pottery and jewellery circulated through the same network or that if two separate networks existed then the Volos Bay participated in both. Kastro, being a palatial establishment during the Mycenaean period, participated in a variety of trade networks, as suggested by imports from various regions, such as Aegina, the Argolid and the Eastern Mediterranean. These networks were indeed controlled by the elite, from as early as the LH I-II period, as indicated by imported LH I-II Lustrous ware and LH I jewellery. Volos Bay was the main outlet to the Aegean and provided access to a multitude of trade networks that encompassed the rest of the Greek mainland, the Aegean and the Eastern Mediterranean and could have potentially acted as an entry point for several imports to Thessaly in general.

It is noteworthy that the LH IIIA-B pottery from Kastro shares many similarities in shapes and decorative motives with pottery from Dimini, Pefkakia and other sites in Thessaly. Furthermore, the LH pottery from Kastro shows stylistic similarities, shared ceramic types and

possibly even some imports from sites in the Peloponnese, especially with those in the Argolid, as well as from sites in Phthiotis, Phocis, Euboea, and Boeotia as early as the LH IIIA-B. The LH figurines are mainly locally made but there are also a few imports. Similarities between the pottery and figurines from Kastro suggest that they were most probably products of the same workshop. The figurines from Kastro share many similarities with figurines from Dimini and Pefkakia, as well as with those from other LH Thessalian sites. The figurines from Kastro also share similarities with figurines from sites in the Argolid, Boeotia, and Phthiotis.

The LH IIIC Middle 'Pictorial Style' pottery, even though made locally, demonstrates close stylistic links with other pottery production centres around the Euboean Gulf and nearby islands. The 'Pictorial Style' pottery connects Kastro with a network of sites in Euboea, Boeotia, Phthiotis, Phocis and some Aegean islands. It has been suggested that sites in these regions share certain similarities already from the LH IIIC Middle-Late period and that later many of these sites were part of the Euboean 'koine'. Despite the similarities in pottery and other aspects of the material culture observed in sites within these regions we cannot speak of a Euboean 'koine' during the LH IIIC period but rather for various overlapping networks of communication with more fluid limits between sites in the Euboean and Pagasetic gulf and nearby islands, such as those described by Thomatos (LH IIIC Middle) and Mountjoy (LH IIIC Late) and which include only some of the sites that later formed the Euboean 'koine'. The PG pottery from Kastro suggests that it was a part of the Euboean 'koine'.

Kastro, together with the nearby sites of Dimini and Pefkakia most probably formed a political unit, a Mycenaean polity, that maintained full control of the Pagasetic Gulf and possibly also of the Almiros and Sourpi plains. Both a hierarchical and heterarchical models have been proposed to explain the political organisation of the area during the LH period. Vasiliki Adrimi-

Sismani[233] has proposed that a hierarchy existed between the three sites with Dimini being the centre of power. Recent finds, however, indicate that if there was such a hierarchy, Kastro would have probably been the administrative centre.[234] Conversely, Panagiota Pantou[235] has advocated a heterarchical relationship, focused not on territorial expansion but, for example, on commerce as a considerable number of imports implies. These local elites would have established and legitimised their power by organising religious festivals and communal feasting. Alternatively, these settlements could have formed a single 'big site' during the LH period with the administrative, religious and industrial functions 'dispersed' between Kastro, Dimini and Pefkakia respectively.

[233] Adrimi-Sismani 2007: 174-175.
[234] Skafida et al. 2012: 55-74.
[235] Pantou 2010: 396.

CHAPTER 3:
LBA AND EIA THESSALIAN SETTLEMENTS

CHAPTER 3: LBA and EIA Thessalian Settlements

3.1 INTRODUCTION

The chapter focuses on 12 sites in Thessaly which offer more substantial evidence, while other smaller sites are also mentioned if they offer valuable information. The settlements are examined in a geographical order and all evidence for architecture and other small movable finds are examined in a chronological order. For reasons of practicality, Thessaly has been divided in the following smaller geographical regions in order to study the evidence for settlements, namely: the Bay of Volos, the Magnesian Promontory, the Northern or Thessalian Sporades, the plains of Almiros and Sourpi and the Bay of Pteleos, Lake Karla and the valley of Velestino and Aerino, Pharsala and the Enipeas valley, Larisa and the eastern Thessalian plain, Elasson, the valley of Peneios and the region of Trikala, and finally Karditsa. The settlement of Kastro will not be examined here as its history was presented diachronically in chapter 2.

LH Thessalian settlements (152) (**Map 2**) outnumber burial grounds and necropoleis (60) considerably, while the reverse is true for the PG-G period when the number of burial grounds and necropoleis (107) is much higher than that of settlements (56).[236] The collapse of the Mycenaean palaces ca. 1200 BC is followed by what appears to be a period of population decline and therefore possibly of increased mobility, as only 16 LH IIIC and 15 SM Thessalian sites have been reported so far.[237] The presence of LH IIIC and/or SM material at a site does not necessarily imply continuity from the LH to the PG-G period. As it will become apparent below only a handful of sites displays such a degree of continuity. It should be noted, however, that most sites have been explored through surveys and are only known through preliminary

[236] Wace & Thompson 1912: 8-12; Hunter 1953; Hope Simpson & Dickinson 1979: 272-298; Feuer 1983: 208-211; Maran 1992; Gallis 1992: 85-195; Adrimi-Sismani 2007: 159-177; Hatziagelakis 2007: 15-82; Agnousiotis 2008. For the number of LH sites, their location, associated finds and bibliography see: Catalogue of Sites.
[237] Middleton 2010; Cline 2014.

reports. Interestingly, the number of Thessalian settlements dating to the PG (45) and G (46) periods does not change and 35 settlements date to both periods, which suggests stability and continuity (**Map 1**).[238]

This picture comes in contrast with theories advocating a 10th century BC date for the Dorian invasion.[239] The Dorian invasion or migration theory was created on the basis of later myths and to explain the significant decline and increased mobility of the post-palatial population. Even though many scholars dismiss later myths as origin legends created to reinforce the claims of the Dorians,[240] there are still those who argue that Dorians, led by the Heracleidai, descended from the north to the Peloponnese.[241] Some scholars have argued further that the Dorians were responsible for the collapse of the Mycenaean palaces, around 1200 BC, and suggested a number of regions for their origin such as Epirus, Macedonia, the Danube, the central Balkans, Thessaly, Italy and south-east Romania.[242] Problems of archaeological visibility, however, made Desborough propose a theory of attacking and retracting Dorians, and Chadwick argues for a submerged class of Dorians that revolted against their Mycenaean masters.[243] Even though there are examples of historical invasions that leave little or no trace[244] these theories cannot be proven. Furthermore, the fact that some aspects of the material culture remained predominantly Mycenaean during the LH IIIC and SM periods does not support invasion theories.[245] It has been further pointed out that archaeological evidence such as handmade burnished pottery (HMBW), violin bow fibulae, Naue II type swords, single inhumation in cist tombs and cremation, adduced as evidence of new populations were already present before the

[238] Tziafalias & Zaouri 1999: 143-152; Gounaris 2009: 163-194. For the number of PG-G sites, their location, associated finds and bibliography see: Catalogue of Sites.
[239] Parker 1995: 130-154.
[240] Beloch 1890: 555-598, Osborne 1996, Hall 1997; 2007, Dickinson 2006.
[241] Eder 1998.
[242] Hammond 1931-1932: 131-179; 1967: 389-395, Skeat 1934, Deger-Jalkotzy 1983, Drews 1988; 1993, Popham 1994, Rutter 2000. See also Middleton 2010 for the opposite view.
[243] Desborough 1972, Chadwick 1976, Hooker 1976.
[244] Winter 1977, Sandars 1983.
[245] Lemos 2002.

collapse and may be linked to economic changes rather than population movements.[246] It is generally accepted, at present, that the Dorian invasion or migration should not be viewed as the cause of the collapse of the Mycenaean palaces but rather as population movements that occurred as a result of the 1200 BC crisis created by the collapse of the palatial society. There is a degree of scholarly consensus that a combination of factors brought the collapse of the Mycenaean palaces.[247] At a first glance the evidence from Thessaly appears to support this view as the collapse of the Mycenaean palaces around 1200 BC is followed by a period (LH IIIC-SM) of population decline and therefore possibly of increased mobility which in turn is followed by a period (PG-G) that appears to be generally more stable. It is indeed noticeable that while more than 100 sites date to the Mycenaean period[248] LH IIIC and SM material has, so far, been reported only from 16 and 15 sites respectively a fact possibly indicating the impact that the 1200 BC crisis had on Thessaly.[249] A closer examination of the evidence, however, reveals a more complex picture with certain sites, mostly located around the Pagasetic Gulf, displaying a remarkable degree of continuity (without of course excluding the possibility of population movements especially after 1200 BC), such as Kastro Volou and Velestino, while evidence, especially from the region of Karditsa might indicate population movements referred to in later literary sources as 'the coming of the Thessalians'.

[246] Crielaard 1998; Sherratt 2003; Dickinson 2006; 2006b. HMBW was already present in Thessaly since LH IIIB (Adrimi-Sismani 2006a: 465-481) as well as single inhumation in cists (Voutsaki 2000). See also Middleton 2010.
[247] Shelmerdine 2001; Bennet 2006; Dickinson 2006; Hall 2007; Deger-Jalkotzy 2008; Middleton 2010. Recently, Cline (2014) has taken this argument further. Seeing the Mycenaean palaces as part of the 'cosmopolitan and globalised world system' of the LBA Eastern Mediterranean he has convincingly argued that 'the cultures of the Near East, Egypt and Greece were so intertwined and interdependent that the fall of one ultimately brought down the others' (Cline 2014: 171). See also Knapp & Manning 2016: 99-149; Sherratt 2001: 214-238; Voutsaki 1992; 2001: 195-213.
[248] Hunter 1953; Hope Simpson & Dickinson 1979; Feuer 1983; Gallis 1992; Adrimi-Sismani 2007: 159-177.
[249] Batziou-Eustathiou 1984b: 74-86; 1999: 117-130; 2003: 253-262; Arachoviti 2000: 355-371; Malakasioti & Mousioni 2004: 353-368; Katakouta 2012: 241-250; Heurtley & Skeat 1930-1: 1-55; Hope Simpson & Dickinson 1979: 272-298; Verdelis 1953: 120-127; 1958: 51-53; Deger-Jalkotzy 2006: 161; Feuer 1983: 210; Jacob-Felsch 1994: 556-562; Lemos 2002: 3-8; Intzesiloglou A. 1980: 269-271; 1996: 342-344; Wace & Droop 1906-1907: 309-327.

Both LH and PG-G Thessalian settlements were mostly located on low hills and/or magoules (with few exceptions situated on the plain, such as Dimini), close to water resources, and controlled large expanses of arable land and important roads and land passes.[250] To this date there is no evidence for PG-G fortifications and the only fortification wall dated to the LH period is located in the settlement at Palamas, Karditsa,[251] while the LH date suggested for some fortification walls, such as the one at Petra, has recently been challenged.[252] In most of the sites pottery and/or other small finds are the main or only evidence to attest to LH and/or PG-G habitation and no settlement plans are available so far, inhibiting thus the examination of the internal organisation of LH and/or PG-G Thessalian settlements. Even when architectural remains are mentioned by the excavator the information is scarce and, in most cases, limited to 'a few walls of houses associated with LH and/or PG-G pottery'. Substantial remains are encountered in only 12 sites, while large buildings are reported from seven more sites. Of these 12 sites, six date to the LH (Dimini, Pefkakia, Koryphoula, Palamas, Makrichori and Petroto), one to the PG-G (Kephalosi), and five date to both periods (Kastro Volou, Velestino, Aerino, Larisa, Pharsala).

Kastro Volou, Velestino and Phrourio hill Larisas feature prominently among Morgan's[253] 'big sites', sites that 'could be considered big by contemporary local standards' and for which information is adequate and allows 'a basic reconstruction of their size and possible morphology'. To this list we can possibly add Kephalosi Almirou, Pharsala and Aerino. If we

[250] Wace & Thompson 1912: 8-12; Hunter 1953; Hope Simpson & Dickinson 1979: 272-298; Feuer 1983: 208-211; Gallis 1992: 85-195; Adrimi-Sismani 2007: 159-177; Hatziagelakis 2007: 15-82; Gounaris 2009: 163-194.
[251] Hatziagelakis 2007: 35-36.
[252] Hope Simpson & Hagel 2006: 97-101. A LH date had been suggested for fortification walls at Petra, Ktouri, Pyrgos Kieriou, Ano Lechonia and Palaiokastro hill at Agios Andreas near Trikeri. Gallis (1992: 97, 174) mentions some possible fortification walls at Amygdalia 2 and Pournari (Bounarbasi) but their date is uncertain, and it is generally accepted that there were no other securely dated LH and PG-G fortification walls in Thessaly. The same is true for the sites of Rodia and Argyropouli 1 that included a large Magoula and a steeper hill that according to Feuer (1983: 112-113) would have been used as a fortified retreat. Since only surveys have been conducted in the area and the evidence is limited the date of these two settlement sites remains uncertain.
[253] Morgan 2003: 45-47.

combine the evidence from these sites together with that from other settlements of various sizes, sanctuaries and burials we may be able to partially reconstruct the various regional 'histories' for beyond the general similarities described above there is interregional and even regional variation. It has been noted that to such a narrative the variables of space and time play a vital role. It is indeed important to understand that different landscapes may have shaped accordingly the character of sites and how these sites evolved through time from the presiding LH down to the G period.[254]

Starting with the Bay of Volos, where evidence is more plentiful, we will examine the evidence for settlements in Magnesia (**Maps 9-10**), Larisa (**Maps 11-12**), Trikala (**Maps 13-14**) and Karditsa (**Maps 15-16**).

3.2 MAGNESIA: BAY OF VOLOS

Three Mycenaean settlements have been identified at the Bay of Volos namely, Kastro (**Cat. no. 19-20**), Dimini (**Cat. no. 15-16**) and Pefkakia (**Cat. no. 36-37**) occupying an area of ca. 12, 10 and 8 ha respectively. These settlements were located at 3-5 km from each other. During the LBA Dimini was situated 1.5 km from the sea, while Kastro and Pefkakia were located 500-200 m from the sea.[255] They all apparently lacked evidence for smaller satellite settlements. All three settlements were associated with tombs of various types. It has been suggested that Kastro and Dimini were Mycenaean administrative centres, while Pefkakia was a settlement with a workshop for purple dye.[256]

[254] Mili 2015: 161-164.
[255] Zangger 1991: 1-15; Vaxevanopoulos et al. 2015: 321-330.
[256] Adrimi-Sismani 2004-2005: 1-54; Skafida et al. 2012b: 55-74; Batziou-Eustathiou 2015a: 51-85.

3.2A DIMINI

The Mycenaean settlement of Dimini (**Cat. no. 15-16**) lies in the plain and had two main architectural phases, dating to the LH IIIA-B, while a few LH I-II architectural remains have also been discovered (**fig. 59**).[257] The settlement displayed an urban plan as early as the LH IIIA period. So far 11 blocks of houses, with the same orientation, were found on either side of a central road (4.50 m wide, 95 m long) which was paved with earth and small pebbles.[258] The houses are rectangular and freestanding, with a stone socle and mud-brick superstructure, each covering an area of c. 60-120 m^2. They have several rooms around courtyards with wells and are equipped with hearths and clay tubs. Some houses preserve a drainage system, and rooms for storage and specialized working areas. The layout of the settlement indicates a complex, well organised community with central planning and craft specialization.

So far only seven houses have been explored and published in more detail.[259] The houses were built in parallel rows, on either side of the central road, oriented N-S. None of the houses had access to the central road. According to the excavator all houses had two main phases of use, as well as a third phase of shorter duration dating after c.1200 BC and the destruction of the Mycenaean palaces.[260] The first phase (LH IIIA) is fragmentarily preserved, because the houses of the second phase were built on top of it, in the exact same spot, and in many cases using walls of the pre-existing buildings. During the second phase (LH IIIB1-end of LH IIIB2) the houses built in LH IIIA are expanded with the addition of new rooms or are renovated with the redistribution of internal walls to create more rooms. During this phase the expansion of the

[257] Adrimi-Sismani 2007: 161. The LH settlement at Dimini was located to east of the hill with the Neolithic settlement and has also yielded EH layers, as well as MH architectural remains, pottery and other small finds.
[258] Adrimi-Sismani 2004-2005: 6-7; 2007: 161.
[259] Adrimi-Sismani 2013: 84-125. The Houses that will be examined here in more detail are Houses A and Z, as well as the North, South and East Houses. The LH Megaron on the hill with the Neolithic settlement will also be examined here. House K, a household shrine or communal sanctuary, will be examined separately in the chapter for Thessalian sanctuaries.
[260] Adrimi-Sismani 2013: 87.

settlement to the northeast, implies economical development and a population growth. The architectural remains of the third phase (LH IIIC Early) are badly preserved and difficult to identify, as most buildings are destroyed by modern agriculture. Nevertheless, the excavator notes that during this phase there had been an attempt of rebuilding/restructuring of some houses or the creation of new smaller houses on top of the old ones.[261]

House A located c. 160 m east of the Neolithic acropolis and to east of the central road in the second row of houses after the road, was built over MH III-LH I-II layers as the discovery of polychrome matt-painted and yellow-reddish burnished wares at its foundation indicates.[262] During LH IIIA, House A (**fig. 60**) had the form of a small Megaron-type building with a main room (2), where all the activities took place, a small storage room (3), and a shallow covered prothalamos created by two pilasters.[263] **Room 2** (2.80 x 4.70 m) was the centre of House A during LH IIIA. It had a 0.80 m-wide entrance at the east side of the south wall and its floor was made of clay and gravel. It yielded mainly undecorated pots for everyday use and storage and fewer decorated LH IIIA2 pots for food consumption and drinking.[264] **Room 3** (1.70 x 4.45 m) a small, rectangular storage room to north of Room 2 with a 0.50 m-wide entrance at its west wall, had no internal communication with Room 2.[265] A refuse deposit in a square pit (1.30 x 1.30 m, 1 m deep) covered with two slabs and located to south of House A has been associated with its first phase of use during LH IIIA (**fig. 61**). The pit is demarcated by a row

[261] Adrimi-Sismani 2013: 87.
[262] Adrimi-Sismani 2013: 88-89.
[263] Adrimi-Sismani 2013: 89. For the typology of the architectural plan of House A see: Mylonas-Shear 1968: 454-470 (Type C); Hiesel 1990: 30-38, 48-49, 203-204 (House with pilasters, where many different size rooms develop along an axis with an open prostoon in the façade); Darcque 2005: 165, 347 (House that develops along an axis and comprises many rooms e.g. LH IIIA Houses H and L at Korakou, Megaron 2 at Mycenae, House F3 and Megaron W at Tiryns, unit IV-4A at Nichoria and House V at Eutresis). This type of building is widespread in eastern Thessaly already from the MN, e.g. Megaron-type House 7-8-9 on the acropolis of Sesklo (Theocharis 1973: 65).
[264] Adrimi-Sismani 2013: 89-90. A stone spindle whorl was discovered in Room 2, while a clay spindle whorl and a perforated shell were found in Room 3.
[265] Adrimi-Sismani 2013: 90.

of stones placed in a square plan. According to the excavator this refuse deposit had a ritual character as it is suggested by the presence of carefully placed complete LH IIIA2 vases on and around the cover slabs, while no human bones were found in the pit. The pit contained matt-painted and yellow-reddish burnished ware sherds of MH date, as well as LH pot sherds, while a complete wheel-made, undecorated two-handled kantharos was located at the bottom of the pit. [266]

During the LH IIIB2 period House A (**figs. 62-63**) expanded with the addition of a new room to the south. During this phase there are two main rooms (1 and 2) and a smaller storage space (3) to the north, as well as two smaller auxiliary open spaces to the south.[267] The pilasters of the original LH IIIA2 building were expanded towards the south to create large **Room 1** (5.35 x 5.60 m) which is now the centre of House A.[268] Its floor is made of clay and gravel and its south wall was reinforced with the addition of a second wall along its entire length. The walls of the room were plastered with clay. A large rectangular hearth (1.40 x 1.80 m) made of clay and gravel was found at the middle of the north wall of Room 1, while an almost square slightly raised paved platform (1.20 x 1.60 m) was found at its northwest corner. The platform was paved with stone slabs and fragments of a large clay bathtub and was most probably used for sleeping. Room 1 yielded both decorated and undecorated pots for the preparation and consumption of food and drinking, while a pithos was found in situ between the hearth and platform. Interestingly, some of the tripod cooking-pots appear to be imported from Aegina.[269] A small refuse deposit of irregular size (0.60 x 0.80 m) defined by small stones was found at

[266] Adrimi-Sismani 2013: 90-91. For a similar deposit discovered at nearby Pefkakia see: Batziou-Eustathiou 2015a: 69-78.
[267] Adrimi-Sismani 2013: 91. During the LH IIIB2 period House A belongs again to the type of building that develops along an axis and comprises many rooms. The main entrance here, however, is in the middle of the east long side and not on the south short side. Darcque (2005: 350) mentions a similar arrangement for Building III at Tiryns and the Wine storerooms at Pylos.
[268] Adrimi-Sismani 2013: 91.
[269] Adrimi-Sismani 2013:91-92.

the northeast corner of Room 1. It represents a closed context possibly of ritual character dated to the LH IIIB1-2 and it includes a small stirrup-jar, a cup, a dipper, and kylikes, as well as a Ψ-type figurine, fragments of a clay bathtub, animal bones and sea shells (**fig. 64**).[270]

Room 2 had the same dimensions during LH IIIA and LH IIIB2 and could be accessed through a small door (0.80 m) at the east end of the north wall of Room 1.[271] Room 2 had a small square clay hearth (0.70 x 0.60 m) at the middle of its north wall, while an almost square slightly raised paved platform (1.30 x 1.10) was found at its southwest corner, both structures like those found in Room 1.[272]

Room 3 (1.70 x 4.45 m) to north of Room 2 had a small entrance (0.50 m) at the south end of its west wall and did not communicate directly with the other rooms of the house. Room 3 was a small elongated space with a clay floor. Fragments of a pithos found on its floor indicate that it was used for storage.[273] An unfurnished cist grave (0.65 x 0.75) with a child burial was discovered at the northeast corner of Room 3.[274]

An auxiliary space was created south of House A with the addition of a small vertical wall, where part of a clay floor was also found. This space yielded undecorated kylikes and pot sherds of vases for the consumption and preparation of food, including two handles from cooking pots with incised potter's marks. Another small auxiliary space, also possibly for the preparation of food as it is suggested by the presence of cooking pots and burnt remains, was found west of the above auxiliary space.[275]

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[270] Adrimi-Sismani 2013: 92-93.

[271] Adrimi-Sismani 2013: 93. This was the main entrance of the building during the LH IIIA. A built square pilaster (0.40 x 0.40 x 1.20 m) which supported the door was found over the stone threshold of Room 2.

[272] Adrimi-Sismani 2013: 93. An alabastron was found on the platform, while Room 2 has also yielded three Ψ-type figurines and a bovine figurine.

[273] Adrimi-Sismani 2013: 93.

[274] Adrimi-Sismani 2013: 93.

[275] Adrimi-Sismani 2013: 94. It remains unclear whether three burnt wooden beams found outside the main entrance of House A came from the walls or the roof of the house (Adrimi-Sismani 2013: 93). It should be noted, that the walls during the LH IIIB2 were not thick enough (c. 0.50 -0.55 m) to support an upper storey (Adrimi-Sismani 2013: 91).

Rooms 1 and 2 of House A were living quarters where the hearths were used for light, heating and cooking, while the two platforms were areas for sleep. The fact that no tools were found suggests that no workshop existed in this house. The large pithos found in situ in Room 1 suggests that some storage also took place here, while the small storage Room 3 indicates that this house might have less resources than others, as other houses have, according to the excavator, larger storage spaces. House A is, so far, the only building in the settlement with hearths in two successive rooms and it has been suggested that possibly in its second phase it housed two families.[276] House A has yielded LH IIIB2 pottery mainly for the storage and consumption of food and drinking, as well as a marble vase, Ψ-type figurines, animal figurines, a bathtub, clay and stone spindle whorls and a perforated shell.[277]

Modern agriculture has destroyed the architectural remains dated to the LH IIIC Early phase and only pottery dated to this period survives. It includes mainly pots for everyday use, while the decorated vases were fewer (**fig. 65-66**). The pottery includes shapes such as the amphora decorated with bands. Two new categories of pottery introduced were the handmade burnished ware (HMBW) and the grey pseudo-minyan ware (GPMW), which are represented by shapes such as, the shallow phiale and the kantharos respectively.[278]

House Z located c. 200 m east of the Neolithic acropolis and to east of the central road in the third row of houses after the road, was built over LH IIIA2 layers as the discovery of pottery shapes such as, FS 255 and 264 kylikes indicates. No layers with earlier material or LH IIIA2 architectural remains were noted. House Z had three phases of use dated to the LH IIIB1, LH

[276] Adrimi-Sismani 2013: 94.
[277] Adrimi-Sismani 2013: 93-95.
[278] Adrimi-Sismani 2013: 96.

IIIB2 and LH IIIC Early respectively. During LH IIIB2, House Z had a much greater storage capacity than any other house in the settlement.[279]

Only few architectural remains survive from the LH IIIB1 phase. It is therefore unclear which was the original plan of House Z. The continuous repairs and changes of the building, as well as the re-use of walls throughout its successive phases do not allow for the identification of the walls dated to the first LH IIIB1 phase. Only **Rooms 3** and **4** have yielded architectural remains dated to the LH IIIB1 period (**fig. 67**).[280]

The first almost complete plan of House Z dates to the LH IIIB2 period. House Z comprised a complex almost square building which developed along two main parallel wings, east and west, and was oriented N-S (**figs. 68-69**). These two wings were connected through two elongated auxiliary spaces, Rooms 3 and 8. The east wing includes Rooms 4 and 6, while the west wing comprises Rooms 1, 2, and 9.[281] The stone socle of House Z was reinforced with large vertical slabs at the exterior of its corners to protect the foundation from humidity, and all walls were plastered with clay.[282] Some of the rooms have yielded a thick burnt layer that resulted from the burnt destruction of House Z at the end of LH IIIB2.[283]

Room 1 (5 x 4 m) was the largest of House Z. It had a clay floor and an entrance (1 m) at the east end of the north wall. In front of the entrance there was a paved threshold (1.40 x 1.20 m) (**fig. 70a**). Immediately after the entrance and along the east wall of Room 1 there was a small portable clay oval lekane (0.75 x 0.40 m), without a drainage hole, resting on the floor (**fig. 70b**).[284] According to the excavator this lekane could not have been a bathtub since it was

[279] Adrimi-Sismani 2013: 108.
[280] Adrimi-Sismani 2013: 108, 142, fig. 23.
[281] Hiesel 1990: 72, 75-76; Adrimi-Sismani 2013: 109.
[282] Darcque 2005: 75-78, 91-100; Adrimi-Sismani 2013: 109.
[283] Adrimi-Sismani 2013: 109.
[284] Adrimi-Sismani 2013: 109.

portable and lacked a drainage hole, and it is unlikely that it would have been used for the storage of cereal and/or fruit since it was placed so close to the entrance.[285] The closest parallel for this structure comes from the Religious Centre at Mycenae (Room 31 with the frescoes) where a large lekane was found in front of the entrance and it could have been used for ritual cleansing.[286] Besides the clay lekane Room 1 has also yielded LH IIIB2 pottery for everyday use, clay spindle whorls, and fragments of small handmade figurines.[287]

Room 2 (3.90 x 2.85 m) to south of Room 1 is smaller with a floor made of clay and gravel. A large storage case was located at its southeast corner. It was comprised of a low Π-shaped built stone wall that touched on the south and east walls of Room 2. No organic remains were found inside this construction. Only an oval wheat grinder was found on the low stone wall, suggesting wheat storage. Room 2 has yielded a destruction layer with large quantity of pottery for everyday use, mostly pots for drinking and food consumption. **Room 9** (14.25 m^2), a large room with clay floor to south of Room 2 has not been fully excavated due to modern overlying buildings.[288]

Large **Room 6** (4.65 x 3.20 m) is on the east wing of House Z, next to Room 1. Room 6 had a floor made of clay and gravel. A slightly elevated, handmade, shallow clay lekane (0.60 x 0.30, 0.15 m deep) was found at the south wall of the room, where during the previous phase existed an entrance. A conical steatite spindle whorl and the base of a large krater were found inside the lekane. The lekane was closed off with a large irregular stone. Its use remains unclear. Around the lekane there was a low semi-circular wall. Two stone stoppers of pithoi were found on the wall surrounding the lekane. Next to this construction and on the floor were open drinking vessels, mainly kylikes (FS 267) and angular bowls (FS 295). Kylikes, two-handled

[285] Onasoglou 1995: 110; Darcque 2005: 185; Adrimi-Sismani 2013: 109.
[286] Taylour 1970: 271, 275; Smith 1995: 169; Adrimi-Sismani 2013: 109-110.
[287] Adrimi-Sismani 2013: 110.
[288] Adrimi-Sismani 2013: 110.

piriform jars and pithoi with narrow neck were found at the east side of the room, while a stone base for a large pithos was located at the northwest corner of the room. Room 6 also yielded four clay spindle whorls, a dice, a bronze arrowhead, two human figurines (Ψ- and Φ-type) and an animal figurine (**fig. 71**). According to the excavator, the finds from Room 6 hinder its identification as residential quarters and suggest instead a complex function.[289]

Room 3 (1.10 x 1.95 m) is located southwest of Room 6. The two rooms are connected through a narrow entrance with a built threshold. Room 3 is a small narrow storage space without natural light that can only be accessed through Room 6. It has yielded fragments of pithoi, two wet-stones and burnt mudbricks all in a destruction layer. **Room 8** (1.10 x 2.80 m) (**fig. 72**) to south of Room 3 is another storage space with a clay floor. It yielded LH IIIB2 pots such as, deep bowls, cups, kylikes and kraters.[290]

Finally, **Room 4** (4.10 x 4.75 m) to south of Room 6 is another storage space. The room is almost square with a floor made of clay and gravel and has yielded a destruction layer with burnt mudbricks, sherds from pots for everyday use and fragments of pithoi. The pottery from Room 4 includes typical LH IIIB2 decorated and undecorated shapes such as, kylikes, angular bowls, cups, and deep bowls which were found together with fragments from large coarse-ware pots and pithoi (**fig. 73-74**).[291]

Rooms 2 and 6 have yielded many clay and stone spindle whorls, in addition to the pottery, suggesting that these two rooms were used for weaving during LH IIIB2. The presence of the two wet-stones in Room 3, as well as the arrowhead and dice in Room 6 suggests other activities. Notable is the substantial number of sherds from monochrome two-handled piriform jars and pithoi combined with pottery for everyday use found in all rooms of the east wing of

[289] Adrimi-Sismani 2013: 110.
[290] Adrimi-Sismani 2013: 111.
[291] Adrimi-Sismani 2013: 111.

House Z. The presence of small, possibly specialized, storage spaces, where pithoi were also located, might be suggestive of the building's function. House Z had pithoi and storage cases in almost every room suggesting possibly an excess of agricultural produce. Interestingly, although characterised as a residential building by the excavator, House Z lacks features found in other houses of the settlement such as sleeping areas, hearths and bathtubs. The conspicuous absence of those features in conjunction with the large amount of space devoted to storage might be indicative of a different function for this building, perhaps it functioned as storage for the entire community. Future research and the final publication of all other houses of the settlement at Dimini will allow for a more precise interpretation of this building's function.[292]

After House Z was destroyed by fire at the end of the LH IIIB2 it was re-occupied during the LH IIIC Early (**fig. 75**). A new room (**7**) was added to the north, while Room 4 was divided in two rooms, almost similar in size, with the construction of a wall, namely **Rooms 4** (4.10 x 2.15 m) and **5** (4.10 x 2.10 m). The new rooms added during LH IIIC Early developed along the two parallel wings of the building, just like in the previous phase of use suggesting the need to create new small spaces, while rooms 1, 2, 3, 6, and 8 were also re-used. **Room 7** (3.60 x 2.30 m) to north of Room 6 was roughly constructed with thinner walls and yielded sherds of large pithoi. The LH IIIC Early pottery includes mainly pots for everyday use, while the decorated pottery is significantly reduced. Two new pottery categories include the HMBW and the GPMW.[293]

The North House located at the east foothills of the Neolithic acropolis is the largest Mycenaean house explored so far in Dimini. The North House together with the nearby South and East Houses confirms that the urban plan of the Mycenaean settlement extended as far as the east foothills of the Neolithic Acropolis (**fig. 76**). The excavator notes that there were open

[292] Adrimi-Sismani 2013: 111-112.
[293] Adrimi-Sismani 2013: 114.

communal spaces between these three houses, as well as a 4 m-wide vertical road that separated the North and South House equipped with a drainage duct which drained the rainwaters from both houses (**fig. 77**).[294]

The North House (20.85 x 13.35 m), oriented N-S, deviates slightly from the general orientation of the settlement, possibly due to the terrain at that spot (**fig. 79**). It was built over an earlier building, which was destroyed by fire during LH IIIA2. Below this earlier building there were layers with LH I-IIIA1 material, as well as architectural remains of a MH house, while no layers dated to the EH and LN were noted. The main phase of use of the North House dates to the LH IIIB2 period (**fig. 78**). The house comprised of nine rooms, developing along three wings. Rooms 1, 7, 8 and 9 of the west wing were constructed first and then the rest of the rooms were added gradually. The smaller rooms 2, 3, 4, 5 and 6 were storage and auxiliary spaces.[295]

Room 1 (8.70 x 5.80 m) is the southernmost room of the west wing and the main room of the house. It is an elongated large room with a floor made of clay and gravel. It had an entrance (1.85 m wide) at the south side of the east wall and a second door (0.85 m wide) again at the east wall that connected Rooms 1 and 2. Outside of the main entrance there was a large pithos, fixed on the ground and immediately after it part of a stone drainage duct for rainwater. Room 1 yielded pottery for everyday use, mainly pots for the consumption of food and drinking, dated to the final LH IIIB2 period, as well as clay Φ-type and animal figurines.[296]

Rooms 7 (4.35 x 3.30 m) and **8** (4.35 x 2.10 m) to north of Room 1 are fragmentarily preserved. They have yielded a destruction layer including burnt mudbricks and LH IIIB2 pottery like that from Room 1(**fig. 80**). **Room 9** (3.30 x 3.35 m) had its own entrance (1 m wide) to the east and

[294] Adrimi-Sismani 2013: 114.
[295] Adrimi-Sismani 2013: 115.
[296] Adrimi-Sismani 2013: 115-116.

a clay floor. It yielded LH IIIB2 pottery for everyday use including a complete krater (FS 8) with a depiction of birds (FM 7) (**fig. 81**).[297]

The rooms of the east wing were added gradually and are mainly small auxiliary spaces. The first to be added was **Room 2** (1.95 x 2.30 m). Room 2 communicated with Room 1 through a large door to the west. A bit later, but still during the same phase, a wall was added and thus **Room 3** (3.25 x 2.75 m) was created. This wall does not follow the general orientation, highlighting the need for the addition of a new room. **Room 4** (2.75 x 3.15 m) was constructed at a later phase. Room 4 communicates with the small **Room 6**, which most probably functioned as a prothalamos to Room 4, through a door (0.80 m wide) with a stone threshold. The entrance is created by the north wall and a small pilaster at the west elongated wall, while an alcove is located at the exterior for the placement of a wooden beam to support the door. Most probably Rooms 4 and 6 formed a unit and were used for storage. Room 4 has yielded fragments of a large pithos, found in situ. The pottery from Room 4 included deep bowls (FS 284), kraters (FS 9) and undecorated kylikes (FS 267) (**fig. 82**). A mug (FS 226) decorated with bird-heads was found east of Room 6 (**fig. 83**). This mug is locally produced. Interestingly, the head of a bird figurine found at another location in the Mycenaean settlement of Dimini is the closest parallel to the decoration on this mug. **Room 5** (2.40 x 3.10 m) (**fig. 84**) to east of Room 4 on the third wing of the North House is only fragmentarily preserved, just like Room 3. The wing including these two small rooms does not continue to the north. The area east of Rooms 8 and 9 was most probably an open courtyard with a lot of refuse.[298]

The North House was destroyed by fire at the end of LH IIIB2 period. According to the excavator the fire caused its roof to collapse. After the destruction of the North House only Room 1 was re-occupied for a brief period during the LH IIIC-Early (**fig. 85**). Two cases found

[297] Adrimi-Sismani 2013: 116.
[298] Adrimi-Sismani 2013: 116-117.

along the south wall of Room 1 date to the LH IIIC-Early. The first construction was defined by a low stone wall at the southwest corner, while the second construction, to east of the first one, was defined by a thin clay wall, only the trace of which survives on the floor. Inside the second case were found fragments of a pithos with a narrow neck, while immediately outside the case there was a very large tripod cooking pot. A third clay construction, only fragmentarily preserved, defined by a clay wall and containing burnt traces could have been a hearth, used for the preparation of food. A cist grave with a child burial was revealed to north and close to these three constructions. It contained the bones of an infant and was furnished with an undecorated one-handled cup. Room 1 of North House yielded LH IIIC-Early wheel-made and handmade pottery for everyday use including deep bowls (FS 284), cups and an undecorated kantharos (FS 240). There were also HMBW and GPMW.[299]

The South House located to south of the North House also develops along two parallel wings (**fig. 86-88**). The excavation is still ongoing. So far, four rooms, dated to the LH IIIB2, have been revealed. At the first, north wing there is **Room 1** (5.40 x 3.90 m) with an entrance to the east, almost at the centre of the wall. At the second, south wing there are three smaller rooms, parallel to Room 1. From these only **Room 4** (1.85 x 2.95 m) communicates directly with Room 1 through a door at the west end of the south wall. **Room 3** (1.60 x 2.75 m) has an independent entrance that leads to a courtyard (**fig. 89**). The South House has yielded typical decorated and undecorated LH IIIB2 pottery for everyday use (**fig. 90**). From the South House comes the only lead ring found at the settlement at Dimini. The East House was located to east and close to the South House. The East House has the same orientation as the South House. Only part of two of its rooms has been explored so far. These rooms develop towards the east. Pottery for everyday use recovered from these two rooms dates the East House to the LH IIIB2 period.[300]

[299] Adrimi-Sismani 2013: 117.
[300] Adrimi-Sismani 2013: 120-123.

A ‘Megaron’ oriented N-S has been found at the southwest corner of the Central Court of the Neolithic acropolis on the hill to west of the Mycenaean settlement at Dimini. Only part of the west and south wall of the ‘Megaron’ survive.[301] Although, originally suggested that this ‘Megaron’ dated to the EH period, Adrimi-Sismani has recently argued that it dated between the LH I and LH IIIB2 period since cover slabs from MH graves were used in its foundation.[302] Stais found the remains of a hearth and an extensive layer of ash around it to northeast and in front of the ‘Megaron’ and Tsountas subsequently associated the ‘Megaron’ with the hearth and suggested that possibly cult rituals took place there.[303] No evidence to support this theory survives and it remains unclear whether the ‘Megaron’ and hearth were contemporary or not. This theory might have some merit as a similar circular construction (altar) with an extensive layer of ash, containing burnt bones and sherds of LH IIIB2 and LH IIIC-Early pottery was found near the entrance of Megaron A and was interpreted as used for cult rituals. Another possible explanation for the function of the ‘Megaro’ at the Central Court is that it was the house of a local ruler during the LH I-II. Although, it was at an advantageous position on the hill, there are no other constructions to support the function of a complex Megaron or ruler’s dwelling and there is otherwise very little Mycenaean habitation on top of the hill (where the Neolithic settlement is located). In any case during the 14th-13th c BC the administrative and religious power resided in the Megaron A and B in the Mycenaean settlement at Dimini. There is no doubt, however, that the building on the hill was no ordinary house but its function remains uncertain as not all evidence survives.[304]

The most important complexes are two megaron type buildings with the same orientation, Megaron A and B, separated by a central court. They had a stone socle and mud-brick

[301] Adrimi-Sismani 2013: 124.
[302] Tsountas 1908: 66-67; Adrimi-Sismani 2013: 124.
[303] Stais 1892: 46; Adrimi-Sismani 2013: 125.
[304] Adrimi-Sismani 2013: 125.

superstructure and were the only buildings with access to the central road of the settlement through a large propylon.[305] Megaron A (31 x 30 m) consists of two wings of rooms with a corridor between them and had a central drainage system. The north wing comprises of an open peristyle court, which leads to a prothalamos and a main room equipped with a rectangular clay hearth, located at its centre. This would have been the administration centre.[306] A room interpreted as residential quarters lies behind the main room to the west. The south wing includes ten small rooms used for the preparation and storage of food and the manufacture of goods. They yielded evidence of ivory and metal workshops, and pottery sherds and stone objects inscribed in Linear B.[307] Megaron B is comprised by a central wing of three rooms and is flanked by storerooms and other auxiliary rooms. The discovery of an altar in Megaron B suggests the existence of an urban cult centre, while the large number of kylikes found in two large rooms behind it, indicates a connection between cult and large-scale feasting.[308]

The settlement at Dimini was a thriving urban centre throughout the LH IIIA-B that displayed central planning and social ranking. Its economy was based on agriculture, animal breeding and craft production including the manufacture of metal objects and pottery, as a LH IIB-IIIA kiln (3.40 x 3.85 m) discovered 100 m east of the settlement suggests, as well as trade.[309] A wide network of connections is attested by imports from the Argolid, Aegina and the eastern Mediterranean.[310]

The settlement suffered destruction during the LH IIIB to IIIC-early (ca. 1200 BC) and was abandoned after a brief period of re-occupation. At least two phases dated to the LH IIIC-early

[305] Adrimi-Sismani 2004-2005: 9-34; 2007: 163-164.
[306] Adrimi-Sismani 2004-2005: 15.
[307] Adrimi-Sismani and Godart 2005: 47-70.
[308] Wright 2004; Adrimi-Sismani 2004-2005: 37-51; 2007: 165-166.
[309] Adrimi-Sismani 1999: 131-142; 2007: 167.
[310] Adrimi-Sismani 2007: 167; Gauss and Kiriatzi 2011: 241-257; Rutter 2014: 53-69; Gauss et al. 2015: 65-74.

period can be observed when debris was removed, and buildings were repaired.[311] New simple houses were built in the courtyard between Megaron A and B. Megaron B and the storerooms and workshops adjacent to Megaron A were never repaired or reused. The construction of a smaller megaron in the area of the Mycenaean Megaron A, might suggest the attempt of a local elite to establish their power through the manipulation of ancestral ties.[312] Cult sites will be discussed in detail in chapter 3.

3.2B PEFKAKIA

The tell site of Pefkakia (17 m high) (**Cat. no. 36-37**) is situated on a promontory 3 km southeast of Dimini and was occupied from the Late Neolithic to the LH IIIB to IIIC-early (**fig. 91**).[313] It has been suggested that Pefkakia may have been the harbour of Dimini.[314] However, the proximity of Kastro, Dimini and Pefkakia to the protected Bay of Volos during the LBA favours the hypothesis that all three participated equally in seafaring. At Pefkakia, LH IIIA-B imports from the Argolid, Aegina and Cyprus suggest networks of connections, while notable are the similarities with the pottery from Dimini and Kastro, as well as with that from Mitrou in Phthiotis and sites in the Peloponnese.[315]

From the MH III to the LH IIIA1 the slopes of Pefkakia hill were transformed from a habitation area into a burial ground. During this phase evidence for occupation at Pefkakia comes from the area south of the hill. In LH IIIA2 and the beginning of LH IIIB, the settlement expanded,

[311] Adrimi-Sismani 2011: 316-317.
[312] Adrimi-Sismani 2011: 317.
[313] Pantou 2010: 391-392.
[314] Batziou-Eustathiou 2015a: 51-85.
[315] Batziou-Eustathiou 2015a: 79.

reaching 8 ha and it was abandoned at the end of LH IIIB to IIIC-early.[316] Unlike Dimini and Kastro, Pefkakia yielded no evidence for destruction by fire.[317]

Five rectangular buildings have been excavated so far at Pefkakia, while more are reported. All buildings have a stone socle and mud-brick superstructure and some rooms are reported to have clay plastered floor and/or walls. A large LH IIIA building with substantial walls (c. 1.30 m thick) and many rooms, some of which were used as a workshop for the elaboration of murex was excavated a few metres to the SW of the top of the hill.[318] Another LH IIIB building was uncovered on the south side of the hill. It was described as a large house with interior courtyard and domestic quarters with ovens and storage pithoi.[319]

Recent excavations have brought to light three more buildings (Houses A-C) with two architectural phases, dating to the LH IIIA1-2 and LH IIIB-C Early period that have also been associated with domestic and industrial activities including the elaboration of murex and the dyeing or other treatment of woollen fabrics, as the large quantity of murex, Pinna nobilis and Spondylus gaederopus shells found in House C suggests (**fig. 92**).[320] The assemblage recovered from House C includes a larnax placed on a clay structure over a large hearth, a stone mortar and other tools, a brazier, cooking pots, basins and other clay vessels associated with the preparation, consumption, storage and distribution/measurement of food and liquids, as well as a rectangular flat slab that could have a practical and/or ritual purpose.[321]

[316] Pantou 2010: 391; Batziou-Eustathiou 2015a: 51-85.
[317] Batziou-Eustathiou 2015a: 81.
[318] Theocharis 1957: 61-65.
[319] Milojčić 1973; 1974: 43-75; Maran 1992.
[320] Batziou-Eustathiou 2015a: 51-85.
[321] Batziou-Eustathiou 2015a: 54-69.

A unique find comes from the area north of House C and below the depth of its floor, where two cist-shaped structures were discovered in front of a hearth (**fig. 93**). Both structures contain decorated pottery dated to the LH IIIA1-2, as well as matt-painted late MH and unpainted pottery.[322] Their proximity to the hearth, the complete lack of skeletal material, the presence of a female figurine, burnt animal bones and goblets made the excavator suggest that a funeral banquet took place before the building of the houses, as a gesture of respect to the dead and a request for their protection. After the ceremony the cists were sealed.[323] Most probably these two structures were initially graves. The discovery of a cist grave with an unfurnished inhumation of an older adult female in the area south of House C and at the same depth supports this theory.[324] The site of Pefkakia was abandoned after LH IIIB2-IIIC Early.

3.3 MAGNESIAN PROMONTORY

Only a small number of sites dating to the LH and PG-G period have been reported so far from the Magnesian Promontory east-southeast of Volos Bay. Evidence for the LH period comes mainly from the area of Argalasti, where two sites have reportedly yielded evidence for habitation. A Bronze Age settlement has been recently discovered at the hill of Profitis Ilias close to Xynovrysi (**Cat. no. 65**),[325] while the existence of a tholos tomb has been postulated at Pyrgos hill in Chorto (**Cat. no. 63**). It has been suggested that two LH IIIA2-B alabastra, a bronze double-axe and a seal stone reported from the area might come from this tholos.[326] Two more sites where Mycenaean habitation appears to have been probable are the acropolis hill of Nevestiki (**fig. 94**) (**Cat. no. 62**), to north of the village Ano Lechonia, at the southern end of the Agria plain, overlooking the Pagasetic Gulf and Palaiokastro hill (**Cat. no. 73-74**) on the

[322] Batziou-Eustathiou 2015a: 69-78.
[323] Batziou-Eustathiou 2015a: 78.
[324] Batziou-Eustathiou 2015a: 74-78.
[325] Vouzaxakis 2015: 60.
[326] Galanakis 2008: 228; Vouzaxakis 2015: 59.

narrowest part of the isthmus which connects the peninsula of Trikeri to the main part of Magnesia. Wace noted traces of a circuit wall at both sites.[327] A survey conducted later by Hope Simpson and Hagel, however, yielded mainly Classical and Hellenistic sherds and no LH material making them argue for a later date for both fortifications. They discovered only some obsidian and coarse ware sherds on the Nevestiki hill that could suggest prehistoric habitation but not necessarily during the Mycenaean period. Although not able to locate LH material they note the probability of these two sites being Mycenaean settlements.[328]

The best documented site, so far, is that of Theotokou (**Cat. no. 71-72**), where a PG-G settlement has been reported together with four cist tombs dating from the SM to the G period (**figs. 95-96**),[329] while another EPG cist tomb has been found in the area.[330] They all contained single inhumations (apart from one with multiple interments) of both sexes and all ages furnished with pots, jewellery and an iron blade. Five sites situated along the Magnesian promontory have yielded groups of small tholos tombs or isolated ones (**fig. 97**).[331] These tholoi were identified as Geometric and very little else is known about their contents, plan, exact date and length of use. Lemos suggests that these graves could have also been in use during the PG period as well.[332] The existence of these tholos tombs suggests that more, yet undiscovered, settlements existed in the Magnesian promontory during the PG-G period.

[327] Wace 1906: 148-149, 153-154.
[328] Hope Simpson & Hagel 2006: 100-101.
[329] Wace & Droop 1906-7: 309-327; Vouzaxakis 2015: 60.
[330] Hatziagelakis 1982b: 230.
[331] Arvanitopoulos 1906: 125-126; 1910: 216-227; 1911: 292-294. Clusters of PG(?)-G tholos tombs have been reported close to Labinou (**Cat. no. 67**) and Milies (**Cat. no. 70**). At Milies seven skeletons were reportedly found in one of the tholos tombs together with pots, stone tools and beads. Single PG(?)-G tholos tombs were discovered at Lyri (**Cat. no. 68-69**) and Argalasti (village of Paou or Pais) (**Cat.no. 64**). The tholos at Lyri contained the remains of three inhumations furnished with pots. Finally, a cluster of three PG(?)-G tholos tombs has been located at the site of Lestiani close to Kerasia (**Cat. no. 66**). The tholoi were built with small stones and were covered with slabs. Their diameters ranged from 5.20 m (Tholos 1) to 3.50 m (Tholos 2) to 2.67 m (Tholos 3). They were all found robbed. A small pit was found in the centre of each tholos tomb. These pits were found empty. Only some G pot sherds were found in the dromos of the largest tholos tomb. Interestingly, two of the tholoi had lateral entrances, a feature also observed in Tomb 23 of the PG-G cemetery at Girlenia Krannonas (**Cat. no. 116**), described by the excavator as an enclosure (Tziafalias 1983: 204-208; Tziafalias & Zaouri 1999: 147, figs. 9-10).
[332] Lemos 2002: 175.

3.4 NORTHERN OR THESSALIAN SPORADES

(SKIATHOS, SKOPELOS, ALONNISOS)

Only three sites in the Northern or Thessalian Sporades Islands have yielded evidence dating to the LH and PG-G period. The earliest evidence comes from Staphylos Skopelou (**Cat. no. 75-76**), where a built rectangular grave has been excavated and published by N. Platon.[333] It contained bronze weapons and vases, a bronze double-axe, gold ornaments and pottery dating from the LH IIA to the LH IIIA1.[334] Two burials were identified but the range of pottery suggests there might have been more. Part of what appears to be an extensive stone building oriented NE-SW associated with LH II Ephyraean kylikes and goblets and a clay bi-conical spindle whorl, as well as with LH III pottery has been reported close to the grave at Staphylos, at the south-east end of the island and along the strip of land that connects the bays of Staphylos and Velanio indicating the existence of a settlement.[335] The information about this site is generally very limited since only rescue excavations have taken place here so far. Recently it was confirmed that a later hero cult developed in front of the grave at Staphylos as it is suggested by the discovery of miniature pots, parts of two clay plaques with the depiction of horses and riders, as well as pottery all dated to the beginning of the 5th c BC.[336] Another built rectangular grave has been recently located near Agios Konstantinos Alonnisou (**Cat. no. 77**).[337] The grave was found robbed and partially destroyed. According to the excavator, it could possibly be dated to the Iron Age (9th c BC) if an SPG oinochoe found close by belongs indeed to this grave. The existence of a settlement near by is possible but more research is needed to confirm this.

[333] Platon 1949: 534-573.
[334] Mountjoy 1999: 857-860.
[335] Platon 1949: 547-548; Hunter 1953: 98-99.
[336] Skafida 1995: 368; 2000: 402-404.
[337] Skafida 1995b: 373, tab. 127a.

Most of our information comes from the site of Cape Kephala (**Cat. no. 78**) at the north-east coast of Skiathos where an EIA settlement existed.[338] It has been suggested that this was the earliest of Skiathos' two poleis namely Palaiskiathos.[339] The site was strategically situated between two bays and the settlement was fortified. The fortification includes an acropolis and lower town situated on an elongated narrow plateau (140 m N-S x 37 m north width, 50 m south width) (**fig. 98**).[340] Today fortification remains may be seen in the strip of land that connects Cape Kephala to Skiathos. The fortification is made of roughly worked small and medium-sized stones and its height is preserved up to 3 m at places. The pottery from the filling suggests that it was constructed during the LG period. The main entrance of the fortification wall was to the south-west of the settlement. There four walls created an elongated space (7 x 2 m). Most probably in the interior of the fortification wall there were covered rectangular spaces used for various purposes.[341] The plan of the settlement is comparable to that of Xeropolis at Lefkandi, Chalkis, Kerinthos at Euboea, and Torone in Chalkidike,[342] while the fortification is like that of Vathy Limenari at Donousa and Zagora in Andros.[343]

Three buildings from the settlement have so far been excavated (**fig. 99**). Two of them date to the EIA and EA period, while a third building dates later.[344] Building A (4.05 x 3.30 m) had an oval shape and was oriented E-W. Its entrance was at its N-NW narrow side, while its back was in contact with the fortification wall. It had a narrow stone socle (0.50 m) and a roughly constructed mudbrick superstructure. Slab-shaped stones found in contact with the south and north socle in the interior of the building have been interpreted as remains of a paved floor or bench. According to the excavators the discovery of loom weights confirms that this was a

[338] Mazarakis Ainian & Alexandridou 2017: 131-140.
[339] Intzesiloglou A 2001: 101-113.
[340] Mazarakis Ainian & Alexandridou 2017: 131.
[341] Mazarakis Ainian & Alexandridou 2017: 133.
[342] Malkin 1998: 74-81; Mazarakis Ainian & Alexandridou 2017: 131.
[343] Frederiksen 2011: 196-197, 199-200; Mazarakis Ainian & Alexandridou 2017: 131.
[344] Mazarakis Ainian & Alexandridou 2017: 133-134.

house.[345] Building A has also yielded kraters and drinking vessels dated to the late 8th and early 7th c BC. Most importantly this building offers a *terminus ante quem* for the construction of the fortification wall in the late 8th c BC.[346] Building C (7 x 2 m) to north of Building A was a rectangular semi-open space, possibly with an open side to the south. Interestingly, both the NW and NE corners of the building have been carved in the rock to form an oval structure like Building A. Its roof was most probably made of perishable materials. This building yielded pottery dated to the EA period (early 7th c BC).[347] Building C and the NE part of Building A were destroyed by the later Building B. The discovery of two metal ingots close to Building A indicates that possibly industrial activities took place here during the EA period. According to the excavators, even though no pottery kiln has been found yet many pot fragments appear to be trial pieces.[348]

Underneath the buildings and to the west there was an extensive black layer of soil with copious quantities of shells, pebbles, and ashes. This layer dates from the PG to the early LG period and it has been described as a refuse deposit after food consumption.[349] The pottery from this settlement indicates that it flourished during the EIA. The earliest evidence dates to the LPG-SPG III (10th c BC) and includes mostly open shapes for drinking such as pendent semi-circle skyphoi. According to the excavator, there are Euboean and Thessalian imports, as well as locally made pots. The Euboean imports appear to be the most prolific since they continue to appear until the LG period (late 8th c BC), while skyphoi of Thapsos type have also been identified.[350] The settlement has also yielded early transport amphorae of Catling's Group I and II, as well as transition amphorae all dating from the PG to the early LG period indicating

[345] Mazarakis Ainian & Alexandridou 2017: 133.
[346] Mazarakis Ainian & Alexandridou 2017: 134.
[347] Mazarakis Ainian & Alexandridou 2017: 134.
[348] Mazarakis Ainian & Alexandridou 2017: 134.
[349] Mazarakis Ainian & Alexandridou 2017: 134-135.
[350] Mazarakis Ainian & Alexandridou 2017: 135.

further connections with Thessaly, the northern Aegean and central Greece.[351] The pottery from Kephala shows the settlement's connection with Euboea and Thessaly suggesting the existence of an important node between central and northern Greece. Based on the pottery, architecture and the settlement's organisation and plan it has rightly been suggested that it was not only part of the Euboean koine but that it also confirmed the active role of Thessaly in the EIA trade networks. Interestingly, it has been noted that the site of Kephala shares some similarities with that of Theotokou in the Magnesian Promontory and it has been suggested that perhaps these two sites formed links in the network that connected the north and central mainland.[352]

3.5 PLAINS OF ALMIROS AND SOURPI AND THE BAY OF PTELEOS

Although, LH pottery has been reported from the settlement at Kephalosi (**Cat. no. 23-24**)[353] and there is evidence for LH IIIA2/B to IIIC-early habitation in the area of the cemetery of Agrielia (**Cat. no. 6-7**) and some LH I-IIB graves in the Voulokaliva inhumation cemetery (**Cat. no. 58**),[354] there is so far no evidence supporting a degree of continuity from the LH to the PG-G period similar to that attested at Kastro Volou (**Cat. no. 19-20**). The material from all three sites does not suggest the existence of a large and important centre during the LH period but rather of one or more smaller or medium sized settlements.

Additionally, LH sites reported from the area appear to have constituted smaller settlements and were all abandoned after 1200 BC, either permanently or temporarily.[355] A cluster of richly furnished tholos tombs might indicate that an important LH centre existed south of Kephalosi

[351] Mazarakis Ainian & Alexandridou 2017: 136.
[352] Mazarakis Ainian & Alexandridou 2017: 137-138.
[353] Batziou-Eustathiou et al. 1990: 208-210; Malakasioti and Reinders 1992: 236-237.
[354] Tournavitou 2012: 219-232; Tsiouka and Agnousiotis 2015: 95-104.
[355] Hope Simpson and Dickinson 1979: 276-279; Stissi 2004: 91-93.

in Pteleos Bay (**Cat. no. 42-44**).[356] This site, however, appears to lose its importance during the PG-G period.[357]

The only site that has yielded finds dating from the Late Neolithic to the end of the EIA is the Voulokaliva site 1990/35 (**Cat. no. 57**). It is located at a central position in relation to the tumulus cemetery of Voulokaliva (**Cat. no. 59**) and is described as a large artefact scatter (ca. 28.500m^2).[358] Interestingly the period in which this site appears to have been more extensive coincides with the date of the apsidal building at Kephalosi (**Cat. no. 23**).[359] Although, it has been tentatively suggested that this could have been a small settlement or hamlet[360] the evidence, so far, is insufficient to determine its actual nature and it is possible that its character and function could have changed through time.

A settlement dating from the SPG to the LG period has been discovered at Kephalosi (**Cat. no. 23**), in the plain of Almiros, west-southwest of Volos Bay (**fig. 100**).[361] An apsidal building (11.65 x 4.50 m) with a stone socle and a mudbrick superstructure preserving parts of seven large storage pithoi in its apses, as well as parts of two other buildings have been excavated (**fig. 101-102**).[362] Two G pottery kilns found nearby confirm that pottery was locally produced (**fig. 103**).[363]

This settlement most probably extended not only further west, in the area around the acropolis of Hellenistic Halos, but also to east, in the area of the Lower Town.[364] Accordingly, we may tentatively associate this settlement with the Voulokaliva tumulus cemetery (**Cat. no. 59**)

[356] Verdelis 1951: 129-154; 1952: 164-185; 1953: 120-127.
[357] Verdelis 1953: 123; 1958: 16.
[358] Reinders 2004b: 39-40; Stissi et al. 2004: 99-102.
[359] Malakasioti and Mousioni 2004: 353-368; Stissi et al. 2004: 99-102.
[360] Stissi et al. 2004: 99-102.
[361] Malakasioti and Mousioni 2004: 353-368.
[362] Malakasioti and Mousioni 2004: 355-356.
[363] Nikolaou 2006: 123-136.
[364] Wace and Thompson 1911-1912: 1-29; Batziou-Eustathiou et al. 1990: 208-210; Malakasioti and Reinders 1992: 236-237; Dyer and Haagsma 1993: 165-174; Reinders et al. 2008: 685-686.

located 1 km to the north.[365] Furthermore, if the PG child burials found in the area of the Hellenistic acropolis (**Cat. no. 24**) belong indeed to this settlement and therefore place its beginning to the PG period it could possibly also account for the existence of the large SubMyc-SPG cemeteries at Agrielia (**Cat. no. 7**) and Voulokaliva (**Cat. no. 58-59**), 1 km to the south and north of Kephalosi respectively.[366]

3.6 LAKE KARLA, VALLEY OF VELESTINO AND AERINO

During the LH period, several sites existed around Lake Karla and in the valley of Velestino. It has been suggested that they constituted mainly agrarian settlements, possibly connected with specific crops or with the exploitation of the lake's resources.[367] A LH IIIA-B settlement has been found on the north foothills of the Koryphoula hill at the southern shore of Lake Karla, 11 km south of Kanalia (**Cat. no. 26**). At least five well-constructed rectangular buildings of various sizes (20-70 m^2) with many rooms have so far been excavated at the north part of the settlement.[368] They were all built with a stone socle and mud brick superstructure, while remains of a drainage system have been detected outside and near one of the buildings. The settlement also included an open communal space with a well. Interestingly, twelve LH IIIB Φ-type figurines and a steatite seal stone were found in a building that appears to have been centrally located in the settlement. The building had at least two phases of use and although not the largest in the settlement (40 m^2) was carefully constructed with a clay floor and an internal retaining wall during the LH IIIB period. The settlement displays urban planning[369] and its organisation finds close parallels in that of Dimini[370] and Aerino.[371]

[365] Malakasioti 2000: 331-338; Malakasioti and Mousioni 2004: 353-368; Malakasioti and Tsiouka 2011: 609-625.
[366] Malakasioti and Mousioni 2004: 353-368; Tsiouka 2008.
[367] Adrimi-Sismani 2007: 171.
[368] Adrimi-Sismani 2001-2004: 501.
[369] Adrimi-Sismani 2001-2004: 501.
[370] Adrimi-Sismani 2004-2005: 1-54.
[371] Arachoviti 2000: 364-369; Stavrakoudi 2002: 167-172.

A cluster of ten LH IIIA-B small and crudely built tholos tombs (1.50-2.50 m diam.) (**fig. 104-105**) and a cist grave found at the southeast foothills of Koryphoula hill has been associated with this settlement (**Cat. no. 27**). The tholos tombs contained multiple inhumations of both sexes and all ages furnished with grave offerings.[372] Galanakis[373] notes that their construction is like that of the Aerino tholoi. According to him the Koryphoula and Aerino tholoi "prove the existence of cemeteries of small and crudely built tholos tombs, already in LBA times".[374]

Another, perhaps smaller, Mycenaean settlement existed at the site of Tsigenina (**Cat. no. 52**), c. 8 km northeast of Koryphoula, where a rectangular building comprised of smaller rooms has been excavated. The building had two phases of use, both dated to the LH IIIB period, and was surrounded by a peribolos wall during its final phase of use, possibly to separate it from the small LH IIIA2-B burial ground to the southeast.[375] The burial ground (**Cat. no. 53**) included a small tholos tomb (2.50 m diam.) (**fig. 106**) with multiple inhumations furnished with grave offerings[376] "somewhat better built" than the tholoi in Koryphoula,[377] and six cist graves, three of which contained child burials.[378] A LH IIIA2-B pottery kiln located east of the LH IIIB building has also been associated with this settlement.[379] It has been suggested that the settlements at Koryphoula and Tsigenina could have been connected to a larger site, such as Petra (**Cat. no. 38-39**) or Agios Athanasios (**Cat. no. 4-5**).[380] Only LH pottery and a tholos

[372] Adrimi-Sismani 2000b: 474-475; 2001-2004b: 499-500; 2005: 490-491; 2007: 172.
[373] Galanakis 2008: 136.
[374] Galanakis 2008: 136.
[375] Adrimi-Sismani 2001-2004: 503.
[376] Adrimi-Sismani 2001-2004: 502.
[377] Galanakis 2008: 136, 228.
[378] Adrimi-Sismani 2001-2004: 504.
[379] Adrimi-Sismani 2001-2004: 502-503.
[380] Adrimi-Sismani 2007: 172.

tomb, possibly of LBA date, have been reported from Agios Athanasios hill, c. 8 km southwest of Kanalia, so far,[381] while little is known about the settlement at Petra.

The site of Petra (**Cat. no. 38-39**) on the west shore of Lake Karla, located 3 km northeast of Stephanovikeio, is formed by three low hills and during antiquity it would have been a peninsula, surrounded on all sides but the southwest by the waters of the Lake. Extensive LH IIIA2-B, and possibly also LH IIIC-early, material has been found in many and widely separated parts of the hills and the area between and around them, often associated with the remains of houses and cist graves, indicating the existence of an important site.[382] The entire site, an area of over 1 km^2, was surrounded by a circuit wall 4-5 km in length, while separate circuit walls surrounded the two larger hills. If the circuit walls around the entire site are indeed Mycenaean this would be the largest fortified Mycenaean site so far known. The dating of the circuit walls, however, is extremely problematic, as they are badly preserved. Furthermore, the site is only known through preliminary reports of surveys and small-scale excavations conducted in the 1st half of the 20th century. It has been recently argued that the circuit walls surrounding the entire site are in fact Classical or Hellenistic in date and while the possibility that the two smaller circuit walls were Mycenaean is not rejected; only further research can confirm their actual date.[383]

All the sites around Lake Karla were abandoned after ca. 1200 BC and only Velestino (**Cat. no. 54-55**) and Aerino (**Cat. no. 1-3**) to the south continue into the PG-G period, while the discovery of graves at the sites of Ovria Karlas (**Cat. no. 14**) and Kerasia (**Cat. no. 66**) suggests that new settlements were established there during the PG-G period.[384] It has been suggested

[381] Adrimi-Sismani 2001-2004: 504-505; 2007: 172; Galanakis 2008: 136, 228.
[382] Hope Simpson and Hagel 2006: 98; Adrimi-Sismani 2007: 172.
[383] Hope Simpson and Hagel 2006: 98.
[384] Arvanitopoulos 1911: 292-294; Almatzi 2007: 707-709.

that the rise of the level of the lake ca. 1200 BC impacted the settlements at its shores by causing a decrease in the cultivable land and pushing the population further south to Velestino and Aerino.[385] Although this is possibly the case for Koryphoula and Tsigenina, found submerged by the waters of the lake after the end of the Mycenaean period, further research is needed in order to confirm if this was the case for more sites around Lake Karla. It appears more likely that more than one factors caused the abandonment of the settlements around Lake Karla ca. 1200 BC.[386]

The settlement at Velestino (**Cat. no. 54**) lies 20 km northwest of Volos Bay, on the road to Larisa. There is convincing evidence for continuous occupation from the LH to the PG-G period and onwards at the area demarcated by the Hypereia Spring, Kastraki hill and Magoula Bakali as scant architectural remains, pottery, weapons and other small finds indicate.[387] During the LH IIIA the settlement appears to expand as architectural remains, including part of a road, discovered 200 m east of Kastraki hill suggest.[388] The settlement at Velestino has yielded pottery dating to all phases of the LH period, starting from the LH I-II,[389] while SubMyc pottery has also been reported.[390] Most interesting is a LH IIIC-middle pottery kiln confirming that pottery was locally produced (**fig. 107**),[391] while the discovery of LH IIIC-late White Ware pottery places Velestino within the limits of the East Mainland-Aegean Pottery Koine.[392] Even though, a thriving LH site of considerable size, as the evidence from settlement and graves suggests,[393] Velestino has yet to yield any elaborately constructed LH buildings.

[385] Adrimi-Sismani 2011: 318-319.
[386] Middleton 2010.
[387] Arachoviti 2000: 359-363; Morgan 2003: 92-95; Gounaris 2009: 180-182.
[388]Arachoviti 1987: 260-261.
[389] Apostolopoulou-Kakavogianni 1979: 181-183; Agnousiotis 2008.
[390] Mountjoy 1999: 856.
[391] Batziou-Eustathiou 1994: 215-224.
[392] Mountjoy 2009: 289-312.
[393] Arachoviti 2000: 359-361; Papathanasiou et al. 2012: 193-204.

It has been suggested that Velestino emerged as the local centre during the PG-G period, most probably due to a Postcollapse shift of population towards this site.[394] Although EIA architectural remains and substantial SubMyc-PG retaining walls have been revealed,[395] judging by PG-G graves discovered where LH buildings used to be it appears that the EIA settlement might have been reduced in size.[396] According to Catherine Morgan[397] "[EIA] remains at Velestino are sufficiently scattered to suggest an arrangement of dispersed households (individual or clusters)". A thriving metalworking industry existed at Velestino from the 8th century onwards,[398] while the cult of En(n)odia and Zeus probably also started during the PG-G period with the dedication of votives on an altar.[399]

The limits of the PG-G settlement were defined by at least three burial grounds at Alepotrypes, Kastraki and the area of the later temple of En(n)odia and Zeus (**Cat. no. 55**). These consisted of cist and pit graves used for both sexes and all ages.[400] It is possible that three more burial grounds existed to east and south of Kastraki hill.[401] The various locations could relate to different residential and/or kin groups, but this remains uncertain.[402] Interestingly, most EIA burial grounds have also yielded LH graves (**fig. 108**).[403] Finally, a cluster of PG tholos tombs and pit graves has been excavated at Chloe along the road to Larisa (**figs. 109-112**).[404]

Another relatively large and important settlement that shows signs of continuous occupation from the LH to the PG-G period and onwards, is located 6 km south of Velestino at Kastro hill,

[394] Morgan 2003: 92-95.
[395] Intzesiloglou 1989: 219-220.
[396] Morgan 2003: 92; Gounaris 2009: 180-182.
[397] Morgan 2003: 92.
[398] Orfanou 2015b: 107-116.
[399] Chrysostomou 1998; Arachoviti et al. 2012: 451-458. See also chapter 4 on sanctuaries.
[400] Lemos 2002: 174-175; Gounaris 2009: 180-182.
[401] Gounaris 2009: 180-182.
[402] Morgan 2003: 93.
[403] Arachoviti 2000: 355-371.
[404] Arachoviti 1994: 125-138; Intzesiloglou 1996: 342-344.

a flat toped mound c. 1.5 km south of Aerino (**Cat. no. 1-3**). The settlement, situated at the intersection of the ancient roads that led from Velestino to Pharsala and Mikrothives, had access to sufficient water resources and arable land as well as natural defence.[405] Four megaron-type buildings excavated in the northeast foothills of Kastro hill had two architectural phases, dating to the LH IIIA-B period, and have been associated with domestic activities, while the remains of more LH buildings have also been reported (**fig. 113**). All buildings are rectangular, free standing with a stone socle and mud-brick superstructure and floors made of packed earth or clay.[406] A hearth was found among the buildings as well as a courtyard with storage pithoi, while two wells were also discovered near the settlement.[407] Among other finds, the settlement has also yielded SubMyc pottery.[408] Even though, the actual size of the settlement is unclear, as the research is still ongoing, it appears to slightly expand in the PG-G period from its LH core at Kastro hill towards a nearby hill to southwest, as habitation remains and pottery found in both locations suggest.[409] Part of an extended LH IIIA-C and PG-G cemetery has come to light north of Kastro hill,[410] which includes cists, pits, chamber and tholos tombs. Interestingly, according to the excavator one of the tholos tombs was used continuously from the LH to the PG-G period. If correct, this would be indeed very exceptional as most EIA tholoi were constructed during the PG-G period.

3.7 LARISA: PHARSALA AND THE ENIPEAS VALLEY

Pharsala (**Cat. no. 167**), 38 km southwest of Velestino, located along the road that connects the plains of Karditsa and Larisa to the Pagasetic Gulf and the southern Greek mainland, is another settlement occupied continuously from the LH to the PG-G period and onwards.

[405] Adrimi-Sismani 2007: 172.
[406] Arachoviti 2000: 364-369; Stavrakoudi 2002: 167-172.
[407] Stavrakoudi 2002: 167-172.
[408] Stavrakoudi 2002: 169.
[409] Di Salvatore 1994: 93-124; Arachoviti 2000: 365.
[410] Arachoviti 2000: 367-369.

During the LH and PG-G period, the focus of habitation was on Agia Paraskevi hill located towards the southwest part of modern Pharsala and close to the Spring of Apidanos River.[411] Recent excavations, however, have confirmed that the settlement extended at least 500 m south and north of Agia Paraskevi hill in the LH period, while from the G period habitation extended further to the east as scant architectural remains, pottery and other small finds suggest.[412] The cemetery, for both adults and children, was located west of the settlement and comprised a variety of grave types dating from the LH to the SubMyc-SPG periods (**Cat. no. 168**).[413] A PG-G tholos tomb is reported from Agia Paraskevi hill, while two SubMyc-SPG tholoi with multiple inhumations excavated 6 km north of Pharsala might indicate the existence of another settlement (**fig. 114-117**) (**Cat. no. 169**).[414] It is difficult to trace the extent of the territory and influence of Pharsala during the LH and PG-G period because it was surrounded by four settlements, three of which have also yielded material dating both to the LH and PG-G periods, while all five settlements later evolved into political entities.[415]

The settlement located on and around Magoula Tapsi at Neo Monastiri, southwest of Pharsala, has yielded evidence of continuous occupation from the LH to the PG-G period in the form of scant architectural remains, cist graves, pottery and other small finds. Although, located in the region of north Phthiotis similarities in the pottery production and the existence of two small tholoi dated to the PG and G period respectively suggest that the settlement at Neo Monastiri was, at least during the PG-G period, under the sphere of Thessalian influence.[416] A cluster of seven EIA small tholoi and two cist graves suggests the existence of another substantial

[411] Theocharis 1960: 175; 1964: 260-261; Karapanou 1996: 375-376; Katakouta 2012: 241-250.
[412] Karapanou 2001-2004: 542-543; 2005: 516-518; 2008: 704-706.
[413] Papadimitriou 2001: 124-127; Katakouta 2012: 241-250.
[414] Katakouta 2012: 241-250.
[415] Béquignon 1932: 89-191; Froussou 2006: 67-83; Tziafalias et al. 2006: 224-231; Katakouta 2012: 241-250.
[416] Froussou 2006: 67-83.

settlement at Kastro hill east of and above Kallithea (**Cat. no. 164**), southeast of Pharsala.[417] The settlements at Palaiokastro Ambelias (**Cat. no. 157-158**) and Ktouri Magoula near Elliniko (**Cat. no. 161-162**), located north of Pharsala, have yielded material dating both to the LH and PG-G periods. Further research is needed, however, to confirm whether habitation was continuous from the one period to the next. LH material as well as large PG-G rectangular buildings and three cist graves have been reported from Palaiokastro, while Ktouri Magoula has yielded only LH IIIB and PG-G pottery and other small finds.[418] Finally, a LH III-PG settlement has been reported near Dilopho (**Cat. no. 93**), halfway between Pharsala and Larisa.[419] If this dating is indeed correct this would be one of the few settlements occupied throughout this period in Thessaly.

3.8 LARISA AND THE EASTERN THESSALIAN PLAIN

At Larisa (**Cat. no. 120-121**), 44 km north of Pharsala, activity continued from the LH to the PG-G period on and around Phrourio hill, one of several LH settlement locations within the modern town (**fig. 118**).[420] During the Mycenaean period the settlement extended in an area of ca. 60 ha as it is suggested by scant architectural remains and pottery, dating from LH IIB to LH IIIC-Late, located on and around Phrourio hill.[421] LH III pottery has also been reported from Magoules Arapadiki and Averof, located 3-4 km east and south respectively from Phrourio hill suggesting the existence of two smaller settlement locations within the limits of the modern town.[422] In addition, Souphli Magoula, 3 km northeast of Larisa, has yielded habitation layers with LH IIB-IIIB pottery, as well as a LH IIB-IIIA1 cist grave with a child inhumation furnished with an askos and amber bead and a LH IIIA2 chamber tomb with

[417] Tziafalias et al. 2005: 521.
[418] Béquignon 1932: 89-191.
[419] Katakouta 1994: 338.
[420] Tziafalias 1994a: 153-157; Morgan 2003: 89-91; Vaiopoulou 2016.
[421] Vaiopoulou 2016.
[422] Gallis 1992: 139.

multiple inhumations.[423] It is possible that Souphli Magoula was a smaller satellite settlement to Larisa.

The settlement at Larisa appears to shrink during the PG and early G period. Layers with PG-G habitation remains, and pottery have been excavated on Phrourio hill,[424] while G pottery has been found inside an apsidal building at its east foothills (**fig. 119**).[425] Mazarakis Ainian[426] suggests the restoration of a bench and a circular paving in its interior. Most probably the building had a domestic function since the area was reserved for houses during the G period. A PG burial has also been discovered at Phrourio hill, while pottery possibly coming from PG graves has been reported from Kioski, northwest of Larisa.[427] It has been proposed that Phrourio hill was the focus of EIA habitation[428] or even that it served as a stronghold for the area during this period.[429] If so, this was of short duration and lasted only during the PG and early G period. The evidence suggests that the settlement started to expand beyond the hill from the LG period onwards.[430] It is difficult to trace the extent of Larisa's territory and influence during the LH and PG-G period as it was surrounded by settlements some of which later evolved into poleis,[431] while at least two substantial Mycenaean settlements have been discovered at a radius of 20 km north of Larisa.

A LH IIIA2-B building complex (900 m^2) has been discovered at Amfithea (**Cat. no. 83**), 14 km north of Larisa, and a substantial quantity of clay storage vessels has been retrieved from

[423] Gallis 1992: 140-141.
[424] Arvanitopoulos 1910: 173-174.
[425] Tziafalias 1994a: 155.
[426] Mazarakis Ainian 1997: 114-115.
[427] Theocharis 1965: 318; Tziafalias 1976: 184.
[428] Morgan 2003: 89-91.
[429] Tziafalias 1994a: 155.
[430] Toufexis 1996: 367.
[431] Morgan 2003: 90.

its interior,[432] while another important Mycenaean settlement has been excavated close to Makrichori (**Cat. no. 123**), 20 km north of Larisa. The settlement at Makrichori had two phases of use, both dated to the Mycenaean period based on pottery, figurines, tools and other small finds. The buildings were rectangular, with a stone socle and mudbrick superstructure and their floors were often found covered with white stucco.[433] Only part of the northern building has been explored more fully (96.25 m^2), while the remains of more buildings have been uncovered (**fig. 120**). Three spacious rectangular rooms belonging to the northern building have been excavated so far. Interestingly, the architectural plan of the excavated part of the northern building bears close similarity to that from House A in Dimini. An intramural adult inhumation, in supine position, has been found underneath the floor of the northern-most room of the building, while two pit and two cist tombs have been located north of the building. West of the building a wide road (3.5-4 m), oriented north-south, was also uncovered. Its upper surface was plastered with white hard stucco on an infrastructure of compacted earth and pebbles. The cemetery of the settlement (**Cat. no. 124**) includes a built rectangular tomb, used from LH IIB-IIIA1 to LH IIIC Early.[434] Although, information is limited, since research is still ongoing, it appears that in Makrichori there might have been another important Mycenaean urban centre.

3.9 ELASSON

Evidence for the region of Elasson during the LH and PG-G period is extremely limited since it comes mainly from chance finds and a few rescue excavations. A LH settlement appear to have existed in Elasson (**Cat. no. 175-176**) as it is suggested by the presence of LH IIIA-B pottery at Panagia hill to north-west of and above the modern town, while LH pottery has also been reported from Tsaritsani (**Cat. no. 184-185**), Vouvala (**Cat. no. 186-187**) and Domeniko

[432] Tziafalias and Batziou-Eustathiou 2012: 157
[433] Toufexis 2001-2004: 541-542; 2006: 25-27.
[434] Toufexis et al. 2015: 159-168.

(**Cat. no. 174**).[435] The presence of LH and PG-G graves in various locations, as well as jewellery and pottery coming most probably from graves might indicate the presence of more settlements.[436]

3.10 THE VALLEY OF PENEIOS AND THE REGION OF TRIKALA

Until recently little was known about the region of Trikala during the LH and PG-G period. Most of the information came from cist graves at the sites of Agrelia (**Cat. no. 189**), Exalophos (**Cat. no. 191**) and Drosopigi/Fiki (**Cat. no. 190**), dated to the later phases of the LH and the transitional period between LH and PG. The settlement at Trikala (**Cat. no. 199-200**) has yielded scant evidence, mostly in the form of LH IIIA2 to IIIC-late and PG-G pottery, as well as a LH IIIC-PG pithos burial suggesting that the settlement extended on and around Phrourio hill.[437] Recent discoveries, however, have shown that a substantial MH III-LH IIIC settlement existed at Asvestaria Petrotou (**Cat. no. 194-195**), 17 km east of Trikala, while a large Mycenaean building comprised of ten rooms and another LH III building have been reported from Zarko (**Cat. no. 201**) and Pineiada (**Cat. no. 196-197**) Trikalon respectively, located halfway between Larisa and Trikala in the Peneios valley and along the Larisa-Trikala road.[438]

The settlement at Asvestaria (**Cat. no. 194**), 2 km south of Petroto, extends on either side of the Larisa-Trikala road (**fig. 121**). A cluster of low hills provides protection at the north, while the fertile plain and river of Peneios lie to the south. Seven buildings have been excavated and

[435] Hope Simpson & Dickinson 1979: 287; Feuer 1983: 140.
[436] Arvanitopoulos 1914: 168; Tziafalias 1994b: 181; Tziafalias & Zaouri 1999: 143; Lewartowski 2000: 90; Lemos 2002: 177; Gounaris 2009: 163-194. PG-G tumuli found at Domeniko (**Cat. no. 174**) and Libadi (**Cat. no. 178**) cover small clusters of tholos tombs, while two LBA or EIA tholos tombs have been reported from Lykoudi (**Cat. no. 179**) and Tsaritsani (**Cat. no. 184-185**). Jewellery and pottery possibly from graves have been reported from Domeniko (**Cat. no. 174**), Elasson (**Cat. no. 175-176**), Kalyvia (**Cat. no. 177**), Milia (**Cat. no. 180**), Pythio (**Cat. no. 181**), Skopia (**Cat. no. 183**). PG-G cist tomb cemeteries are reported from Sarantaporo (**Cat. no. 182**) and Lykoudi (**Cat. no. 179**), while a tholos that yielded some 50 clay vessels and jewellery from Elasson (**Cat. no. 176**) remains unpublished.
[437] Hope Simpson 1965: 162-163; Hope Simpson and Dickinson 1979: 298; Feuer 1983: 127-140; Batziou-Eustathiou 1984b: 74-87; Mountjoy 1999: 852-856; Deger-Jalkotzy 2006: 161.
[438] Tziafalias 2000: 85; Vaiopoulou 2015a: 205-220.

twenty more have been uncovered in the 2800 m^2 area explored so far in the main sector of the excavation.[439] All buildings are mostly made of local limestone with a limited use of mud-brick in their superstructure. The settlement had four phases of use dating to the MH III, LH IIA-B, LH IIIA-B and LH IIIC respectively. Only few MH III walls have been found, while mostly pottery dates to the final, LH IIIC, phase. Five apsidal buildings, each with more than one room and all with the same orientation date to the LH IIA-B. During the LH IIIA-B period buildings become rectangular and they don't share the same orientation with each other. One of the buildings, with three phases of use dating to the LH IIIA-B, adopts a megaron-type architectural plan and receives a monumental entrance at the last phase of its use but its size is much reduced in comparison to that of the previous period (**fig. 122**).[440]

Twenty-nine cist and pit graves have been found among the buildings of the settlement (**Cat. no. 195**). Cist graves (14) contained child burials, while pits (15), ranging from a simpler to a more elaborate construction, were mostly reserved for adults. Most of the graves were furnished with pots, tools, figurines and other objects and date to all phases of the LH period.[441]

During the LH period the economy of the settlement was based on agriculture, animal breading and hunting, craft production, including weaving and metalworking as it is suggested by the substantial number of tools for both crafts and the moulds for the creation of metal objects, as well as trade as it is suggested by the large number of imported pots from the Argolid.[442] According to the excavator, all the characteristic MH and LH pottery shapes are present in the settlement and the same as everywhere else in the Mycenaean world (**figs. 123-124**). The pottery has of course its local characteristics which include mainly a strong MH tradition, while

[439] Vaiopoulou 2015a: 206-209.
[440] Vaiopoulou 2015a: 209-212.
[441] Vaiopoulou 2015a: 212-213; 2017: 195-222.
[442] Vaiopoulou 2015a: 213-217.

both animal and human LH figurines were also found in the graves and the buildings of the settlement.[443]

3.11 KARDITSA

Finally, moving south of Trikala and to the region of Karditsa the earliest evidence comes from the settlement at Raches Mascholouriou (**Cat. no. 233**), while MH III-LH I-II pottery has been recently reported from Kallithiro (**Cat. no. 212**).[444] An interesting discovery has been made recently at the site of Raches Mascholouriou, c. 3 km east of Pyrgos Kieriou where LH IIIA-B material has also been recorded (**fig. 125**). At Raches Mascholouriou a substantial settlement, dating to the transitional phase between MH III and LH I-II has recently been explored. Two large rectangular buildings (136 and 145 m^2 respectively) and a small pear-shaped pottery kiln (**fig. 126**) have been excavated so far, while more buildings and other structures have been reported.[445] Both excavated buildings have a stone socle and mudbrick superstructure and display a megaron-type architectural plan. One of the buildings has three rooms and an open porch in the front, while the other has two rooms and is equipped with a hearth, while both have yielded evidence for extensive storage of wheat, barley and olives.[446] Interestingly, no traces of destruction by fire or earthquake have been detected so far and the settlement appears to have been gradually abandoned at the end of LH II.[447] It is possible that the population of this settlement moved to a nearby site such as Pyrgos Kieriou or even further to Palamas were habitation was continuous into the next period.

[443] Vaiopoulou 2015a: 217.
[444] Karagiannopoulos 2011b: 608. Pits containing large irregular-shaped limestones and pottery with shapes possibly dated to the late MH III and beginning of the early LH period were found at the south-east part of the Zouloumi plot at Kallithiro underneath later architectural remains. A G pithos burial has also been reported from Kallithiro (Intzesiloglou B 1990b: 205).
[445] Vaiopoulou 2015b: 175-184.
[446] Vaiopoulou 2015b: 175-176.
[447] Vaiopoulou 2015b: 178.

A substantial Mycenaean settlement, dating from the LH IIB to the LH IIIC period, based on pottery and other small finds, has been identified on Papoutsi/Chantaki Magoula at Palamas (**Cat. no. 218**), 20 km southeast of Asvestaria Petrotou.[448] The settlement at Palamas appears to display a clear urban plan with buildings lining a wide road (5.70 m), as is the case in Dimini. Furthermore, the Mycenaean settlement here appears to have been fortified since part of an outer wall of considerable thickness has been reported (6.30 m preserved length, 1.60 m thickness) (**fig. 127**). The fortification wall was built using good quality local worked limestones in the exterior and with a filling of rumble in between. Although, the excavation conducted was of a small scale and information is scarce the available evidence suggests the existence of an important Mycenaean settlement. This view is further supported by the discovery of abundant Mycenaean material in four other Magoules located in and around Palamas,[449] while the existence of scant architectural remains, graves, pottery and other small finds indicates the existence of three other, perhaps smaller, Mycenaean satellite settlements at Petrino (**Cat. no. 221-222**), Astritsa (**Cat. no. 207**) and Ermitsi (**Cat. no. 208**), located east of and at a radius of 5-6 km from Palamas.[450]

Another LH settlement existed at Pyrgos Kieriou (**Cat. no. 227-228**) as it is suggested by architectural remains discovered at Tsiana plot in the modern village.[451] Part of a building with a stone socle and mudbrick superstructure and a floor made of clay and gravel has come to light here. It yielded pottery dated to the end of the LH period. LH pottery has also been reported from the acropolis of ancient Kierion, as well as from the site of Makria Magoula to south-west.[452] G pottery has also been found here, as well as PG tumuli.[453] Although, material

[448] Hatziagelakis 2007: 35-36.
[449] Nikolaou 1994: 333.
[450] Hatziagelakis 2007: 32-42.
[451] Nikolaou 1995: 377-378.
[452] Hope Simpson & Hagel 2006: 100.
[453] Milojčić 1955: 229-231; Intzesiloglou B 1981: 254; Hatziagelakis 2007: 48.

dated to the LH and PG-G period has been recovered from this site it remains unclear if habitation was continuous from one period to the next and what exactly was the size of the settlement in each period. It has been argued that the site was of greater importance during the historic periods, as it is shown by the ancient cemeteries around it.[454] Hope Simpson and Hagel have argued that the fortification located on the citadel of ancient Kierion resembles the one at Ktouri and dates to the Classical and/or Hellenistic period. They believe, however, that a small Mycenaean fort like that at Ktouri could have existed here with the main LH settlement been located at the foot of the later citadel.[455]

Finally, at least three more Mycenaean settlements most probably existed close to Georgiko (**Cat. no. 209**), Rachoula (**Cat. no. 229**) and Ano Ktimeni (**Cat. no. 205-206**) in west Karditsa as it is suggested by the presence of LH tholos tombs that appear to share similarities in the architecture, grave offerings and burial rites with those at the bay of Volos.[456]

3.12 CONCLUSIONS ON SETTLEMENTS

Both LH and PG-G Thessalian settlements were mostly located on low hills and/or magoules, close to water resources, and controlled large expanses of arable land and important roads and land passes. To this date there is no evidence for PG-G fortifications and the only fortification wall dated to the LH period is located in the settlement at Palamas, Karditsa, while the LH date suggested for some fortification walls, such as the one at Petra, has recently been challenged. In most of the sites, pottery and/or other small finds are the main or only evidence to attest to LH and/or PG-G habitation and no settlement plans are available so far. Substantial remains are encountered in only 12 sites, while large buildings are reported from seven more sites. Of

[454] Hope Simpson & Hagel 2006: 100.
[455] Hope Simpson & Hagel 2006: 100.
[456] Karagiannopoulos 2007: 751-753; 2008: 739-741; Galanakis 2008: 139; Galanakis and Stamatopoulou 2012: 205-218; Intzesiloglou 2010: 239-247.

these 12 sites, six date to the LH (Dimini, Pefkakia, Koryphoula, Palamas, Makrichori and Petroto), one to the PG-G (Kephalosi), and five date to both periods (Kastro Volou, Velestino, Aerino, Larisa, Pharsala).

The Mycenaean settlement of Dimini lies in the plain and had two main architectural phases, dating to the LH IIIA-B, while a few LH I-II architectural remains have also been discovered. The settlement displayed an urban plan as early as the LH IIIA period. So far 11 blocks of houses, with the same orientation, were found on either side of a central road. They have several rooms around courtyards with wells and are equipped with hearths and clay tubs. Some houses preserve a drainage system, and rooms for storage and specialized working areas. The layout of the settlement indicates a complex, well organised community with central planning and craft specialization. So far only seven houses have been explored and published in more detail. None of the houses had access to the central road. It is possible that three of the houses did not have a domestic function. House K was a communal sanctuary and House Z could have been used for communal storage, while the Megaron on the hill could have had a cultic function.

The most important complexes are two megaron type buildings with the same orientation, Megaron A and B, separated by a central court. They were the only buildings with access to the central road of the settlement through a large propylon. Megaron A consists of two wings of rooms with a corridor between them and had a central drainage system. The north wing comprises of an open peristyle court, which leads to a prothalamos and a main room equipped with a rectangular clay hearth, located at its centre. This would have been the administration centre. A room interpreted as residential quarters lies behind the main room to the west. The south wing includes ten small rooms used for the preparation and storage of food and the manufacture of goods. They yielded evidence of ivory and metal workshops, and pottery sherds and stone objects inscribed in Linear B. Megaron B is comprised by a central wing of three rooms and is flanked by storerooms and other auxiliary rooms. The discovery of an altar in

Megaron B suggests the existence of an urban cult centre, while the large number of kylikes found in two large rooms behind it, indicates a connection between cult and large-scale feasting. The settlement suffered destruction during the LH IIIB to IIIC-early and was abandoned after a brief period of re-occupation.

The tell site of Pefkakia was occupied from the Late Neolithic to the LH IIIB to IIIC-early. It has been suggested that Pefkakia may have been the harbour of Dimini. However, the proximity of Kastro, Dimini and Pefkakia to the protected Bay of Volos during the LBA favours the hypothesis that all three participated equally in seafaring. Recent excavations have brought to light three buildings with two architectural phases, dating to the LH IIIA1-2 and LH IIIB-C Early period that have been associated with domestic and industrial activities including the elaboration of murex and the dyeing or other treatment of woollen fabrics. The site of Pefkakia was abandoned after LH IIIB2-IIIC Early.

A settlement dating from the SPG to the LG period has been discovered at Kephalosi, in the plain of Almiros. An apsidal building with a stone socle and a mudbrick superstructure preserving parts of seven large storage pithoi in its apses, as well as parts of two other buildings have been excavated. Two G pottery kilns found nearby confirm that pottery was locally produced. This settlement most probably extended not only further west, in the area around the acropolis of Hellenistic Halos, but also to east, in the area of the Lower Town.

A LH IIIA-B settlement has been found on the north foothills of the Koryphoula hill at the southern shore of Lake Karla. At least five well-constructed rectangular buildings of various sizes with many rooms have so far been excavated at the north part of the settlement. The settlement also included an open communal space with a well. Interestingly, twelve LH IIIB Φ-type figurines and a steatite seal stone were found in a building that appears to have been centrally located in the settlement. The building had at least two phases of use and although not the largest in the settlement was carefully constructed with a clay floor and an internal

retaining wall during the LH IIIB period. The settlement displays urban planning and its organisation finds close parallels in that of Dimini and Aerino.

At the settlement at Velestino there is convincing evidence for continuous occupation from the LH to the PG-G period and onwards at the area demarcated by the Hypereia Spring, Kastraki hill and Magoula Bakali. During the LH IIIA the settlement appears to expand as architectural remains, including part of a road, discovered 200 m east of Kastraki hill suggest. The settlement at Velestino has yielded pottery dating to all phases of the LH period, starting from the LH I-II, while SubMyc pottery has also been reported. Most interesting is a LH IIIC-middle pottery kiln confirming that pottery was locally produced, while the discovery of LH IIIC-late White Ware pottery places Velestino within the limits of the East Mainland-Aegean Pottery Koine. Even though, a thriving LH site of considerable size, as the evidence from settlement and graves suggests, Velestino has yet to yield any elaborately constructed LH buildings.

It has been suggested that Velestino emerged as the local centre during the PG-G period, most probably due to a Postcollapse shift of population towards this site. Although EIA architectural remains and substantial SubMyc-PG retaining walls have been revealed, judging by PG-G graves discovered where LH buildings used to be it appears that the EIA settlement might have been reduced in size. A thriving metalworking industry existed at Velestino from the 8th century onwards, while the cult of En(n)odia and Zeus probably also started during the PG-G period with the dedication of votives on an altar.

Another relatively large and important settlement that shows signs of continuous occupation from the LH to the PG-G period and onwards, at Kastro hill, a flat toped mound c. 1.5 km south of Aerino. The settlement, situated at the intersection of the ancient roads that led from Velestino to Pharsala and Mikrothives, had access to sufficient water resources and arable land as well as natural defence. Four megaron-type buildings excavated in the northeast foothills of Kastro hill had two architectural phases, dating to the LH IIIA-B period, and have been

associated with domestic activities, while the remains of more LH buildings have also been reported. A hearth was found among the buildings as well as a courtyard with storage pithoi, while two wells were also discovered near the settlement. Even though, the actual size of the settlement is unclear, as the research is still ongoing, it appears to slightly expand in the PG-G period from its LH core at Kastro hill towards a nearby hill to southwest, as habitation remains, and pottery found in both locations suggest.

Pharsala, located along the road that connects the plains of Karditsa and Larisa to the Pagasetic Gulf and the southern Greek mainland, is another settlement occupied continuously from the LH to the PG-G period and onwards. During the LH and PG-G period, the focus of habitation was on Agia Paraskevi hill located towards the southwest part of modern Pharsala and close to the Spring of Apidanos River. Recent excavations, however, have confirmed that the settlement extended at least 500 m south and north of Agia Paraskevi hill in the LH period, while from the G period habitation extended further to the east as scant architectural remains, pottery and other small finds suggest.

At Larisa activity continued from the LH to the PG-G period on and around Phrourio hill, one of several LH settlement locations within the modern town. During the Mycenaean period the settlement extended in an area of ca. 60 ha as it is suggested by scant architectural remains and pottery, dating from LH IIB to LH IIIC-Late, located on and around Phrourio hill. The settlement at Larisa appears to shrink during the PG and early G period. Layers with PG-G habitation remains, and pottery have been excavated on Phrourio hill, while G pottery has been found inside an apsidal building at its east foothills. Most probably the building had a domestic function since the area was reserved for houses during the G period. It has been proposed that Phrourio hill was the focus of EIA habitation or even that it served as a stronghold for the area during this period. If so, this was of short duration and lasted only during the PG and early G

period. The evidence suggests that the settlement started to expand beyond the hill from the LG period onwards.

Another important Mycenaean settlement has been excavated close to Makrichori. The settlement at Makrichori had two phases of use, both dated to the Mycenaean period. The buildings were rectangular, with a stone socle and mudbrick superstructure and their floors were often found covered with white stucco. Only part of the northern building has been explored more fully, while the remains of more buildings have been uncovered. Interestingly, the architectural plan of the excavated part of the northern building bears close similarity to that from House A in Dimini. West of the building a wide road, oriented north-south, was also uncovered. Although, information is limited, since research is still ongoing, it appears that in Makrichori there might have been another important Mycenaean urban centre.

Recent discoveries have shown that a substantial MH III-LH IIIC settlement existed at Asvestaria Petrotou. The settlement at Asvestaria, 2 km south of Petroto, extends on either side of the Larisa-Trikala road. A cluster of low hills provides protection at the north, while the fertile plain and river of Peneios lie to the south. Seven buildings have been excavated and twenty more have been uncovered in the area explored so far in the main sector of the excavation. The settlement had four phases of use dating to the MH III, LH IIA-B, LH IIIA-B and LH IIIC respectively. Only few MH III walls have been found, while mostly pottery dates to the final, LH IIIC, phase. Five apsidal buildings, each with more than one room and all with the same orientation date to the LH IIA-B. During the LH IIIA-B period buildings become rectangular and they don't share the same orientation with each other. One of the buildings, with three phases of use dating to the LH IIIA-B, adopts a megaron-type architectural plan and receives a monumental entrance at the last phase of its use but its size is much reduced in comparison to that of the previous period. The large number of imported pots from the Argolid shows that trade was important for this settlement.

A substantial Mycenaean settlement, dating from the LH IIB to the LH IIIC period, based on pottery and other small finds, has been identified on Papoutsi/Chantaki Magoula at Palamas. The settlement at Palamas appears to display a clear urban plan with buildings lining a wide road, as is the case in Dimini. Furthermore, the Mycenaean settlement here appears to have been fortified since part of an outer wall of considerable thickness has been reported. Although, the excavation conducted was of a small scale and information is scarce the available evidence suggests the existence of an important Mycenaean settlement. This view is further supported by the discovery of abundant Mycenaean material in four other Magoules located in and around Palamas.

CHAPTER 4:
LBA AND EIA THESSALIAN SANCTUARIES

CHAPTER 4: LBA and EIA Thessalian Sanctuaries

Cult activity is attested in two LH and seven PG-G Thessalian sites, while LH material has also been reported from three of the later PG-G Thessalian sanctuaries (**Map 3**).

4.1 DIMINI: MEGARON B

The main evidence for cult during the LH period comes from Dimini in Magnesia. The unique altar in Room 1 of Megaron B suggests the existence of an urban cult centre (**Cat. no. 1**) (**fig. 128**).[457] The large clay H-shaped altar (0.74 m long, 0.80 m wide and preserved at a height of 0.50 m) has an elliptical low platform to the east and a low rectangular base with two triangular mud-bricks with circular holes embedded on either end to the west possibly for the placement of plants, branches and/or other decorative elements.[458] The altar bears intensive traces of fire and burnt liquids, while a large painted mug found close by is suggestive of libations.[459] A low structure comprised of three schist slabs located in front of the altar to the east could have been the base of an offering table.[460] Cups with burnt animal bones uncovered in three small side rooms (Rooms 7a-c) attached to Room 1 attest to further cult practices.[461] The stone-paved road (3.70 m wide and 17.50 m long) leading directly to the altar, through a monumental 2.60-2.80 m-wide double-door, is reminiscent of those in procession scenes depicted on Mycenaean frescoes.[462]

Cult in Megaron B would have been connected to large-scale feasting as the substantial number of kylikes and other vessels associated with drinking and food consumption, found in two large

[457] Room 1 was small but meticulously constructed with clay-plastered walls and a clay floor reinforced with lime and gravel (Adrimi-Sismani 2004-2005: 37-39).
[458] Adrimi-Sismani 2004-2005: 39-41; 2007: 165. For representations of altars decorated with plants on Mycenaean gold signet-rings and seal stones see: Mylonas 1977: 29-30, 53.
[459] Adrimi-Sismani 2004-2005: 40, fig. 26a; 2007: 165. The intensive traces of fire on the altar have been interpreted as a result of its destruction rather than its function.
[460] Similar constructions have been reported from Megaron A and House K at Dimini (Adrimi-Sismani 2004-2005: 39-40; 2013: 101).
[461] Adrimi-Sismani 2004-2005: 41; 2007: 165. Rooms 7a-c were roughly constructed later additions and most probably had an auxiliary character.
[462] Adrimi-Sismani 1999-2001: 90; 2007: 165; Brecoulaki et al. 2015.

rooms (Rooms 2-3) behind Room 1 suggests.[463] Access to Rooms 2-3 is possible only through Room 3, before the entrance of which a large rectangular limestone slab (1.60 m long and 0.75 m wide) with cavities was uncovered together with objects reminiscent of cult activities and offerings (**fig. 129**).[464] A wing comprising of specialized storage rooms and kitchens (Rooms 4-6 and corridors to N and S of them) attached to Room 3 would have supported large scale feasting.[465]

Although most of the finds from Megaron B date to the LH IIIB-C Early period, Megaron B most probably would have been in use throughout the LH IIIA-B. It was destroyed in the LH IIIB-C Early period, ca. 1200 BC and unlike Megaron A and the other buildings of the settlement was never repaired or reused.[466] Adrimi-Sismani has argued that Megaron B was most probably emptied before its destruction. This would explain the absence of large wheel-made figurines and the limited number of imports (one Canaanite amphora and an Aeginetan cooking pot) and precious utensils (a large lead vessel).[467]

The centralised access, monumentality and careful construction of Megaron B, as well as the presence of a few imports and precious utensils and the proximity to the specialised workshops (metal, ivory etc.) and storerooms of Megaron A clearly suggests that this was a cult place reserved for the elite. The altar and associated finds indicate that the cult here included libations, the offering of votives and large-scale feasting. Rousioti noted that the altar in Room 1 of Megaron B shares some similarities in form and placement with a structure found in the

[463] The pottery recovered includes also bowls, cups, mugs, kraters, stirrup jars, alabasters, amphorae, hydriae, jugs and tripod cooking pots (Adrimi-Sismani 2007: 165-166). For feasting practices in Mycenaean Greece see: Wright 2004.

[464] Adrimi-Sismani 2004-2005: 42-44; 2007: 166. The assemblage comprises of a seal-stone, the rim of a kylix with a Linear B inscription, 17 clay figurines, a marble figurine, bronze jewellery (mainly pins and sheets) and pottery including a miniature cup, an alabastron, kraters (some with figurative decoration) and two rhyta.

[465] Adrimi-Sismani 2004-2005: 45-50, 2007: 165-166. Rooms 4, 5 and 6 were used for the storage of oil and wine, drinking vessels and other feasting implements, and cereals respectively. The S corridor has been associated with food preparation, while the N corridor (Room 8) has been interpreted as a kitchen and has yielded substantial quantities of pots containing food remains.

[466] Adrimi-Sismani 2011: 316.

[467] Adrimi-Sismani 2007: 165; Adrimi-Sismani et al. 2009: 695-705; Aulsebrook 2015: 201-211.

House of Frescoes, one of the organised urban sanctuaries at the acropolis of Mycenae.[468] Even though, these two structures appear to have had a different function (the one in Mycenae has been interpreted as a hearth, while the one in Dimini has been identified as an altar connected with libations) they are indeed similar.[469]

4.2 DIMINI: HOUSE K

Cult activity has also been attested in Room 2 of House K at Dimini (**Cat. no. 2**) (**fig. 130**). The discovery of an assemblage including a large clay wheel-made bovine figurine made the excavator suggest the existence of a domestic shrine.[470] House K was built in LH IIIA, over LH I-II layers. Its main phase of use dates to the LH IIIB2, while a short final phase dates to the LH IIIC Early.[471] Evidence for cult in Room 2 dates to the LH IIIB2, while a LH IIIA2 origin of the cult cannot be excluded.[472]

During LH IIIB2, House K was a complex building (c. 38.05 m^2), comprising of at least six rooms (Rooms 2-7). Room 2 (5.10 x 4 m), which is the largest, has yielded most of the evidence for cult activity. It had a clay floor and its walls were plastered with white stucco. The main feature of Room 2 was a carefully constructed and plastered with white stucco low L-shaped stone wall which created a rectangular enclosure (1.80 x 1.70 m) at the north-west corner of the room. A small circular space, defined by another low stone wall, was found at the south-west side of the rectangular enclosure. A stone slab (0.60 x 0.70 m), interpreted as a small altar or the base of an offering table, and a hole (0.30 m diam.), possibly for a wooden beam, were discovered east of the rectangular enclosure.[473]

[468] Rousioti 2015: 126.
[469] French 1981: 47, fig. 11; 2002: 90, fig. 41; Albers 2004: 121-127; Rousioti 2006-2007: 390-392; 2015: 126.
[470] Adrimi-Sismani 2007: 161; 2013: 96-107.
[471] Adrimi-Sismani 2013: 97.
[472] Adrimi-Sismani 2013: 97-104, 260-262.
[473] Adrimi-Sismani 2013: 100-101.

A large LH IIIB2 clay wheel-made decorated bovine figurine was found in front of the rectangular enclosure's east wall.[474] The figurine was either placed in a niche in the N wall of the room or on the low wall of the rectangular enclosure, as its feet and horns were discovered inside the enclosure. According to the excavator it shares some similarities with large bovine figurines found at Delphi and Philakopi on Melos.[475] Fragments of a LH IIIB2 wheel-made decorated female figurine of type A have also been found just outside House K.[476] According to Adrimi-Sismani these two figurines either co-existed as cult figurines and/or images of deities or possibly one replaced the other.[477] Room 2 has also yielded part of a double stone mould for the manufacture of simple metal rods.[478] It is unclear if this mould was an offering or if it was part of a small-scale specialised production that took place in Room 2. In any case, it is the only so far reported mould from the site.[479] Other finds from Room 2 include two smaller Ψ-type and a proto-Φ-type (LH IIIA2) figurines, as well as LH IIIA and LH IIIB pottery comprised of both decorated and undecorated pots, mostly for drinking and the consumption of food, while no storage or cooking vessels were found.[480]

The other rooms of House K had an auxiliary role during LH IIIB. Room 3 most probably function as a 'prothalamos' to Room 2, while Room 4 was reserved for the preparation of food and small-scale storage.[481] The function of Rooms 5 and 7 is unclear, while Room 6 has not been excavated.[482] A stone paved courtyard W of Rooms 4-5 has yielded fragments of large

[474] Adrimi-Sismani 2013: 101, 260-262. A LH IIIA2 date cannot be excluded for this figurine.
[475] Nicholls 1970: 9; French 1985: 236-252; Renfrew 1985: 425; Muller 1992: 479; Adrimi-Sismani 2013: 102.
[476] Adrimi-Sismani 2013: 101, 259-260.
[477] Adrimi-Sismani 2013: 101.
[478] Adrimi-Sismani 2013: 101, 314.
[479] Adrimi-Sismani 2004-2005: 21-25; 2013: 101. Similar moulds have been reported from Megaron A.
[480] The pottery recovered includes predominantly open shapes such as, kylikes, deep bowls, cups, and mugs, as well as lekanai (Adrimi-Sismani 2013: 97, 102, 104).
[481] Adrimi-Sismani 2013: 103-104. Room 4 had a clay floor and its walls were carefully plastered with white stucco and ochre. Its south-west corner was paved and closed-off by a small stone wall. A small refuse pit containing pottery for everyday use, animal bones and shells was also found at the south-west part of the room.
[482] Adrimi-Sismani 2013: 104. Room 5 had a paved floor and a groove at the middle of its east wall possibly for the drainage of water. The groove was closed-off with a stone.

pithoi and two small LH IIIB2 (or LH IIIC Early) unfurnished child burials in cist graves.[483] No hearth or traces of a drainage system have so far been reported from House K.[484] House K was destroyed by fire at the end of LH IIIB2-beginning of LH IIIC Early. Afterwards the sanctuary was never reused. During LH IIIC Early Room 2 received a stone paved floor which covered both enclosures, as well as the stone slab and beam base.[485]

North of House K there was an open paved communal courtyard. The courtyard was demarcated by House K to the south and House A to the west, while more houses had easy access to it (at least the houses located E of the main road). This courtyard had the only so far known well for water supply within the settlement. The well (15 m deep and 0.90 m diam.) was located less than 1 m away from the north wall of Room 2 and functioned from the establishment of the settlement until its destruction at the end of LH IIIB2-beginning of LH IIIC Early. Afterwards it fell into disuse and its opening was sealed-off with a thick layer of clay.[486] The well has yielded material dating from MH III to the end of LH IIIB2 including human and animal figurines, a miniature throne, animal bones and shells, as well as pottery comprised of both decorated and undecorated pots, associated with the storage, preparation and consumption of food and drink.[487] It has been noted that the preservation of most finds in the courtyard and inside the well was fragmentary, possibly the result of cleaning of the area.[488]

Adrimi-Sismani originally suggested that Room 2 of House K was a household shrine.[489] Rousioti has recently argued that it constituted a small-sized urban sanctuary where communal feasting was also part of the cult.[490] If this is the case, then there is evidence to suggest a social

[483] Adrimi-Sismani 2013: 104.
[484] Adrimi-Sismani 2013: 104, 107. Fragments of a clay bathtub found outside the north wall of House K have no certain provenance.
[485] Adrimi-Sismani 2013: 104, 107.
[486] Adrimi-Sismani 2013: 97.
[487] Adrimi-Sismani 2013: 97-98. The pottery recovered includes kraters, piriform jars, amphorae, alabastra, a miniature jug, kylikes, deep bowls, cups, mugs, dippers, a kalathos, cooking pots (at least one of which from Aegina) and cooking amphorae, pithoi, as well as undecorated hydriae, amphorae, lekanai and kylikes.
[488] Rousioti 2015: 126.
[489] Adrimi-Sismani 2007: 161; 2013: 96-107.
[490] Rousioti 2015: 125-126.

stratification in cult practices in Dimini; cult in Megaron B was reserved for the local elite, while in House K the cult was open to the community. According to Rousioti similarities between the assemblage from House K and those identified in contemporary urban sanctuaries in Peloponnese and the Cyclades in conjunction with the fact that House K had access to a communal courtyard where finds indicate that feasting activities took place suggests that it was a communal rather than private/domestic sanctuary.[491] The careful construction of House K in conjunction with its location at an easily accessible spot of the settlement (at least for the houses located E of the main road) strengthens this hypothesis. The cult here included the dedication of offerings, as well as feasting inside House K and in the N courtyard.

4.3 MAVROMATI

A LH IIIA2 rural sanctuary has been recently discovered near Mavromati in Karditsa (**Cat. no. 3**) (**fig. 131**). The extent and form of the sanctuary are unclear as research is still on-going. So far, a deposit consisting of more than 70 clay vessels has been discovered at the trench of a rescue excavation (Trench 2: 4 x 4 m). The clay vessels were found placed upright or upside-down, mostly in groups of three to four, around a low square base (0.20 x 0.20 m) made of small unworked stones, either for a wooden beam, supporting a roof made of perishable materials, or possibly for a cult idol. Large unworked stones, lying on the soft bedrock in various levels, were also found dispersed within the excavation trench. Their function is unclear. No other architectural remains have been reported to date.[492]

The pottery recovered comprises mainly of local Mycenaean (LH IIIA2) wheel-made, undecorated pots.[493] Only few imported pots, mainly kylikes, have been reported. The

[491] Rousioti 2010: 21-26, 34, 208; 2015: 125-126.
[492] Tselios 2008: 733.
[493] Hatziagelakis 2007: 67-68; 2012: 162-163; Tselios 2008: 734. The pottery includes shapes such as bowls, jugs, lekanai, tripod vessels, kylikes with tall foot, a large krater, conical rhyta without a drainage hole, a piriform jar with a drainage hole, a hedgehog-shaped askos and a jug with cut-away neck.

assemblage also includes semi-globular hand-made bowls with pointed triangular handles, bovine figurines and fragments of kernoi.[494] Most intriguing is the discovery of a large clay bovine-shaped rhyton which finds its closest parallel in the large bovine figurine from House K at Dimini, indicating regional connections in cult activities.[495] The assemblage at Mavromati shares some similarities with that from the Mycenaean sanctuary at Agios Konstantinos in Methana.[496]

The sanctuary probably had two phases of use both dated within LH IIIA2. The pots were found in two distinct levels within a uniform, in terms of composition and texture, layer of soil. The presence of similar shapes in both levels suggests that within a brief period the space was filled and banked to receive more vessels. The fact that no settlement has been located nearby in conjunction with the absence of architectural remains and the nature of the finds (kernoi, bovine figurines and rhyton etc.) suggest that this was most probably an open-air rural sanctuary were libations and the dedication of offerings took place.[497]

4.4 LATE HELLADIC MATERIAL IN LATER SANCTUARIES

LH material has also been reported from the sanctuaries at Philia, Velestino and Mikrothives. The earliest finds at the area of the sanctuary of Athena Itonia at Philia in Karditsa include LH IIIB pottery and human and animal figurines (**Cat. no. 7**).[498] Theocharis discovered part of a small Mycenaean wall (0.46 m thick) in Trench Δ2, and briefly explored a Mycenaean (LH III) layer in Trenches A2-B2-Γ2 (**fig. 132**).[499] He later excavated the wall of a building with a stone socle and mudbrick superstructure in the north-east part of Trench Δ3. He dated the edifice to

[494] Tselios 2008: 734.
[495] Tselios 2008: 735; Adrimi-Sismani 2013: 101, 260-262.
[496] Konsolaki 2002: 15-36.
[497] Tselios 2008: 735.
[498] Theocharis 1963: 138; 1964: 246; 1967: 295.
[499] Theocharis 1965: 311-312.

the LH IIIB based on pottery and a Ψ-type figurine with polos.[500] Excavations conducted in 1980 in the north-east part of Trench Δ3 yielded the remains of a rectangular building.[501] According to the excavators, since the layers above and around the building produced mixed material dating from the LH to the Roman period, including pottery dated to the LH, SM, PG and G periods it is difficult to accept a LH IIIB date with absolute certainty. Since the earliest material dates to the LH period and the building was found underneath the extensive ash layer that contained the majority of LG-A finds, as well as a few PG-EG/MG objects, a LH date is more likely.[502] The above finds might imply continuity in cult practices from the LH period onwards at Philia, as was the case for other Geometric and Archaic sanctuaries in southern Greece.[503] This hypothesis, however, cannot be proven and it is equally possible that the finds belonged to a domestic context. The same applies for the LH pottery and figurines discovered at the area of the sanctuary of Ennodia and Zeus at Velestino (**Cat. no. 6**) and the LH material found in a mixed layer underneath the foundation of the temple of Athena Polias at Mikrothives (**Cat. no. 8**) in Magnesia as the finds may come from settlement deposits and/or graves.[504]

During the PG-G period, cult buildings were not common in Thessaly and religious practices were apparently conducted in the open air, in groves or perhaps in small '*oikoi'* made of

[500] Theocharis 1967: 295. All LH finds were discovered underneath the extensive ash layer that contained the majority of LG-A finds in the main excavation area (Sector A).
[501] Pilali-Papasteriou & Papaeuthymiou-Papanthimou 1983: 49-68. Only the west, north and east walls of the building survive (4.85 m, 2.10 m and 4.60 m long respectively).
[502] Pilali-Papasteriou & Papaeuthymiou-Papanthimou 1983: 54-56; Mili 2015: 339-341.
[503] For the sanctuary of Apollo at Kalapodi (Abai) in Phthiotis see: Whitley 2004-2005: 55-56, Whitley et al. 2005-2006: 68-69, Morgan 2007-2008: 47-49; 2008-2009: 43-45. For the sanctuary of Zeus at Mt. Lykaion in Arcadia, see: Morgan 2009-2010: 41. For the sanctuary of Zeus at Olympia in Elis, see: Eder 2001: 201-209.
[504] Arvanitopoulos 1907: 168-169; 1908: 178-180; 1925: 38, 41; Arachoviti et al. 2012: 453-454. At Mikrothives, Arvanitopoulos (1907: 168-169) reported that underneath the foundation of the temple of Athena Polias he found a layer of black soil which yielded G finds mixed with Neolithic and Bronze Age material (included Mycenaean) that comprises of stone tools, obsidian arrows, clay vessels, rings and a double-axe made of ivory, seal-stones made of rock-crystal, and beads made of glass-mass and amber. Arvanitopoulos (1908: 178-180) later refers to a mixed layer which yielded finds dating from the Mycenaean to the Archaic period, including finds dating mainly from the 8th to the 6th c BC mixed with Mycenaean wheel-made pots, necklaces of amber beads, double-axes, and objects made of ivory and rock-crystal. Later excavations at Mikrothives yielded no LH material (Adrimi-Sismani 1994: 323-324).

perishable materials.[505] Notable exceptions to this general rule, are the sanctuaries at Neochoraki in Magnesia and Gonnoi in Larisa.

4.5 SANCTUARIES AT NEOCHORAKI AND GONNOI

A simple rectangular building (12.50 x 5.10m) located c. 4.5 km south-east of Neochoraki has been interpreted as a sanctuary dedicated to Athena Itonia (**Cat. no. 4**) (**fig. 133**).[506] The building had a stone socle and mudbrick superstructure. It had an entrance at its south side and was surrounded by the remains of what appears to have been a peribolos wall. The excavator dates this edifice to the LG period based on Dipylon-style pottery, bronze jewellery (fibulae and rings), and two figurines of warriors.[507]

On the bases of its oval shape, a 7th c BC date has been proposed by Mazarakis Ainian for the archaic elliptical/horseshoe-shaped (10.75 x 7.50 m) urban temple of Athena Polias at the acropolis of ancient Gonnoi (**Cat. no. 5**) (**fig. 134**).[508] Others, however, date it to the early 6th c BC or in the archaic period in general.[509] Morgan[510] raises the question of whether the source for the inspiration for the oval temple at Gonnoi came from north[511] or south.[512] Even though, both regions are equally possible it is more probable that it came from the south as the SPG-LG building at Kephalosi Almirou might suggest.[513]

The temple had a stone socle, made of medium-sized local stones and preserved up to a height of 0.94 m, and mudbrick superstructure, and had two limestone Doric columns on either side

[505] Morgan 2003: 136; Hatziagelakis 2007: 45; Arachoviti et al. 2012: 452.
[506] Stählin 1906: 29-30.
[507] Stählin 1906: 29-30; 1924: 177; Daux 1958: 754; Theocharis 1960: 57; Mazarakis Ainian 1997: 311; Mili 2015: 334. A bone axe and boar's tusks are also reported to come from the LG building. It is unclear if this was an urban or extra-urban sanctuary.
[508] Mazarakis Ainian 1997: 86. Helly (1973: 72-74) and Marzolff (1994: 261) also place the construction of the temple to the 2nd half of the 7th c BC.
[509] Kalpaxis (1976: 81-82) argues for an early 6th c BC date, while Arvanitopoulos (1910; 1911) and Van Buren (1926: 38-39) date the temple to the Archaic period. See also Mili 2015: 341-342.
[510] Morgan 2003: 142.
[511] Poseidi in Chalcidice: Vokotopoulou 1989: 409-424; 1990: 399-410; 1991: 303-318; 1992: 443-450.
[512] Lefkandi in Euboea: Catling & Lemos 1990; Popham et al. 1993; Lemos 2002: 140-146.
[513] Malakasioti & Mousioni 2004: 353-368.

of its entrance.[514] Three small semi-circular retaining walls were located south-east of the temple. The date of their construction is unclear. The fact that the entrance of the temple was also oriented towards the south-east indicates a connection with the retaining walls. Most probably these retaining walls also facilitated access to the temple.[515] Interestingly, if an oblong baetyl (a large stone with a pyramidal top and a projection at its bottom part for placing it in the ground) found in situ, inside the temple is indeed associated with the cult this would be the only so far known evidence for aniconic cult in PG-G Thessaly.[516]

The excavator reports that architectural parts were recovered, while at a low level a layer gave clay figurines, and bone and metal objects.[517] Mili notes that a figure published by Arvanitopoulos shows also bronze fibulae and rings, lead pendants, iron knives, bone pins and parts of metal pots that could potentially be dated to the LG-A period.[518] Most probably the temple was first built in the LG-A period and was repaired without changing its plan, into the 4th-3rd c BC.[519]

A LG date is possible for these two temples, but it is difficult to comment any further due to the lack of a final publication. The extremely strategic location of both temples is noteworthy. The temple at Neochoraki was situated on a high hill at the north-west foothills of Mt. Othrys overlooking an inland pass to the south, while the temple at the acropolis of ancient Gonnoi was built on the tallest and least easily accessible of three rocky hills overlooking the Tempi pass that led to the north.[520] These two early Thessalian temples might indicate the need to demarcate important south and north routes in a period (LG-EA) when new important centres

[514] Arvanitopoulos 1910: 252-256. The temple was discovered underneath a medieval rectangular building.
[515] Arvanitopoulos 1910: 258-259.
[516] Gaifman 2012: 131, 43-44. Arvanitopoulos (1910: 258) suggested that the baetyl could have possibly represented the deity.
[517] Arvanitopoulos 1910: 256-258; 1911: 315-317. Arvanitopoulos discovered parts of clay metopes, the cornice, small clay decorative rosettes and many tiles with the inscription ΓΟΝΝΕΩΝ or with personal names (of dedicants or builders).
[518] Arvanitopoulos 1910: 258, fig. 24; Mili 2015: 327-328.
[519] Mili 2015: 328.
[520] Stählin 1906: 29-30; Arvanitopoulos 1910: 252.

immerge as it is suggested by the rich cemeteries of Voulokaliva, Pharsala and Agios Georgios.[521]

4.6 SANCTUARIES AT VELESTINO, PHILIA AND MIKROTHIVES

The most securely dated EIA evidence for cult comes from the extra-urban sanctuaries of En(n)odia and Zeus Thavlios/Aphrios at Velestino (**Cat. no. 6**) in Magnesia and Athena Itonia at Philia (**Cat. no. 7**) in Karditsa.[522] Deposits with hundreds of bronze votive offerings and pottery attest to the PG-G origin of both cults (**fig. 135**). Additionally, an 8th century layer with hundreds of bronze votives was excavated beneath the urban sanctuary of Athena Polias on the acropolis of ancient Phthiotic Thebes (**Cat. no. 8**) (Mikrothives in Magnesia).[523] Pottery and other finds from a deposit might indicate a G-A date for the urban sanctuary of Poseidon on the acropolis of Pyrgos Kieriou (**Cat. no. 9**) in Karditsa.[524]

At Velestino (**Cat. no. 6**), cult probably started during the PG-G period with the dedication of votives on an altar (**fig. 136**). The altar was located among the graves of the PG-G cemetery underlying the later sanctuary.[525] It was an elongated rectangular construction made of packed earth (10.65 x 1.25 m and 8-10 cm height) located near and parallel to the axis of the later

[521] Tziafalias 1994b: 179-188; Malakasioti & Mousioni 2004: 353-368; Katakouta 2012: 241-250.
[522] Velestino: Arvanitopoulos 1925: 37-42; Blinkenberg 1926: 19-110; Béquignon 1937: 50-74; Bouzek 1974; 1988: 47-60; Kilian 1975a: 6-8, 168-187; 1975b: 27; Kilian-Dirlmeier 1985: 215-254; Chrysostomou 1998: 35-38; Morgan 2003: 135-142; Arachoviti et al. 2012: 451-458; Orfanou 2015a; 2015b: 107-116; 2015c: 201-207; Mili 2015: 336-338. Philia: Theocharis 1961-62: 179; 1963: 135-139; 1964: 244-255; 1965: 311-313; 1967: 295-296; Bouzek 1974; 1988: 47-60; Kilian 1975a; 1975b: 27-28; Pilali-Papasteriou & Papaeuthimiou-Papanthimou 1983: 49-68; Intzesiloglou B 1985:197; 1988: 256-258; 1999b: 421-422; 2006: 221-237; Haarer 2000; Kilian-Dirlmeier 2002; Morgan 2003: 135-142; Schmid 2006: 239-248; Hatziagelakis 2007:43-45; Vaiopoulou 2012: 153-160; Mili 2015: 339-341.
[523] Arvanitopoulos 1907: 166-169; 1908: 170-180; Adrimi-Sismani 1994: 323-324; Stamatopoulou 2004-2009: 635-647; 2012: 17-29; Mili 2015: 341-342. The bronze votives include fibulae, rings and pendants.
[524] Intzesiloglou B 1981: 254; Gounaris 2009: 171, 187. Geometric pottery and other finds such as, tiles inscribed with the manufacturer's name and clay moulds for statues, statuettes and plaques some of which possibly depict Poseidon have been found in a deposit dating to the 4th c BC in the area of the urban sanctuary of Poseidon at the acropolis of ancient Arne-Kierion, west of and above Pyrgos Kieriou in Karditsa. Because of these finds it has been suggested that the sanctuary of Poseidon was in use from the Geometric period onwards.
[525] Arvanitopoulos: 1925: 37-42; 1926: 115-117; Béquignon 1937: 50–74; Arachoviti et al. 2012: 452-453. The cemetery consisted of more than 37 cist graves containing single or multiple inhumations of both sexes and all ages. The burials were poorly furnished with a vase and/or bronze ornament.

temple to the west. Its surface was burnt at places and fragments of bird bones and bronze rings were found on it. Similar bronze rings were also found at a small distance west and north-west of the altar. These rings find parallels with PG-G rings discovered at the deposits around the temple.[526] The altar was not damaged by the construction of the later temple and was in fact incorporated into it.[527] If indeed of PG-G date, it could suggest an ancestral origin of the cult. A change from an open-air cult to a temple took place later in the Archaic period.[528] There is a debate among scholars with some maintaining that Ennodia was originally worshiped only at Velestino, and that her cult spread elsewhere in Thessaly later in the 6th c BC either due to increased interactions or Pheraian propaganda[529], while more recently Mili has questioned this theory rightly pointing out that it relies on much later, 5th c BC inscribed dedications.[530]

The sanctuary at Philia (**Cat. no. 7**) retained its open-air character from the PG-EG/MG period (when the earliest offerings date)[531] until the 5th c BC and probably included a sacred grove and/or possibly an 'oikos' made of perishable materials.[532] Most of the finds were discovered in an extensive ash layer (**fig. 137**).[533] Intzesiloglou reported that small-scale excavations c. 200 m north-east of Theocharis' excavations revealed a similar ash layer with similar finds and

[526] Arachoviti et al. 2012: 453.
[527] Arachoviti et al. 2012: 453. Even though, the pottery found around the altar and in the layers above it is mixed (Late Helladic, Geometric, Archaic, Classical, Hellenistic, Post-Byzantine) the excavators claim that the altar was contemporary with the PG-G cist tomb cemetery as it was found at the same depth and very close to the graves.
[528] Arachoviti et al. 2012: 451-458; Mili 2015: 336-338. The existence of a small LG temple (8th c BC) made of perishable materials has been suggested because of hundreds of votive offerings found in three deposits around the later temple. Since no architectural remains survive from that period this hypothesis cannot be confirmed. Today, only the foundation and the crepis of the E façade of the Classical/Hellenistic temple (end of 4th c BC) survive in situ. It was built on top of an Archaic temple. The existence of an Archaic temple is confirmed by votive offerings and architectural remains. Both temples were destroyed by fire (Arvanitopoulos 1925; 1926; Béquignon 1937; Arachoviti et al. 2012: 451-458).
[529] Morgan 2003: 135-142; Chrysostomou 1998: 100; Mili 2015: 169-170.
[530] Mili 2015: 170.
[531] Kilian-Dirlmeier 2002; Mili 2015: 340. Some pieces, such as the tripods, obeloi, a few double-axes, a cheese-grater, several rings, and a few knives, swords and pins can be dated to the PG-EG/MG.
[532] Intzesiloglou B 2006: 221-237; Kilian-Dirlmeier 2002; Mili 2015: 339-341. Most of the architectural evidence uncovered dates to the Roman period, but there are signs of an early 3rd c BC building including marble tiles and other architectural members from poros stone (drums of Doric columns and parts of the cornice). There are also a few remains which can be associated with a late 5th c BC building phase, such as part of a clay cornice and a drum from a Doric column.
[533] Theocharis 1961-2; 1963; 1964; 1965; 1967; Kilian-Dirlmeier 2002.

suggested that the area might have been a grove which was burnt down. The wide distribution of the ash layer, its homogenous thickness and the absence of bones in conjunction with the fact that no altar has so far been located at the area of the sanctuary support the existence of a grove.[534] The sanctuary at Philia, at least from the Hellenistic period onwards, attained a federal status and according to Mili the cult of Athena Itonia had clear military overtones from at least the 5th c BC connected with the legendary invasion of the Thessalians into the territory and the military confrontation between them and the previous population.[535]

At Velestino and Philia the vast majority of finds date between the 8th and 6th c BC and consist of small, mostly locally-made, bronze objects, indicating the existence of a prosperous bronze working industry.[536] Only 2% of the 8th-7th c BC metal votives from Velestino are non-Thessalian in style, and of this half are Macedonian or Balkan, while the rest range from Italian to Egyptian. In Philia the pattern is similar, but there is a slightly wider variety in the provenance of the imports and their local copies.[537] At Velestino, bronze objects were produced from the 8th c BC onwards by several local workshops, following alloy recipes and employing various metalworking techniques. The addition of tin to the alloys suggests the production of fresh metal in copious quantities, while evidence for the exploitation of local copper ores has also been reported.[538] Bouzek has argued that the PG-G metal votives from the sanctuaries at Velestino and Philia find their closest parallels in Macedonian bronzes.[539]

[534] Intzesiloglou 2006: 229-231.
[535] Mili 2015: 226-227, 255.
[536] Kilian 1975: 6-8, 168-187; 1975b: 9-140; Kilian-Dirlmeier 1985: 215-254; 2002; Bouzek 1974; 1988: 47-60; Orfanou 2015a; 2015b; 2015c.
[537] Kilian-Dirlmeier 1985: 215-254; 2002: 225; Morgan 2003: 135-142; Schmid 2006: 239-248; Orfanou 2015a; 2015b; 2015c.
[538] Orfanou 2015a; 2015b; 2015c. An archaic workshop for the creation of bronze objects has also been reported from Velestino (Intzesiloglou A 1994: 78).
[539] Bouzek 1974; 1988: 47-60.

Fibulae were the predominant offering at both sanctuaries, suggesting specialized cloth production for dedications[540] and it has been suggested that a large bronze fibula and the garment possibly accompanying it could have potentially been an expensive offering.[541] Morgan[542] stresses the popularity of fibulae in PG-EA Thessaly in general and particularly as grave offerings, something which is indeed true for both male and female burials. In addition to fibulae, there were numerous rings, pendants, beads and figurines offered at Velestino and Philia. Some types of pendants, including globular, birdcage, bird pendants, and jug-stoppers, were popular at Velestino, whereas pendants in the shape of pomegranate are characteristic of the sanctuary at Philia.[543] Philia also yielded several weapons and tripods, while no tripods and only a small number of weapons have been found at Velestino.[544] Obeloi/spits discovered at Philia appear to be among the earliest such dedications in mainland Greece.[545]

The material found in a mixed layer beneath the urban sanctuary of Athena Polias on the acropolis of ancient Phthiotic Thebes (**Cat. no. 8**) (Mikrothives in Magnesia) has many similarities with that from the sanctuaries at Velestino and Philia (**fig. 138**). Arvanitopoulos reported numerous bronze objects including fibulae, rings, small pots and figurines (in the form of birds, fruits, utensils and weapons), lead rings and pendants, iron objects, a few silver and gold-plated pieces of jewellery, numerous clay figurines and reliefs, as well as G and A pottery most of which date between the 8th and 6th c BC.[546] Recent excavations yielded no G material and Adrimi-Sismani suggested that cult seems to start in the Archaic period (6th c BC).[547]

[540] For the role of fibulae as dress-fasteners and their association with clothing and the dedications of clothing with fibulae attached by women and men alike in sanctuaries see: Jacobsthal 1956; Kilian-Dirlmeier 1978: 219-222; 2002; Philipp 1981; Mansfield 1985; Ridgway 1987: 399- 409; Simon 1987; Morgan 1990; Dakoronia & Gounaropoulou 1992: 217-227; Kron 1996: 139-182; Foxhall & Stears 2000: 3-16; Morizot 2004: 159-170; Neils 2009: 135-147; Mili 2015: 34.
[541] Kilian-Dirlmeier 2002: 219; Mili 2015: 34.
[542] Morgan 2003: 138.
[543] Mili 2015: 339.
[544] Mili 2015: 30.
[545] Haarer 2000; Morgan 2003: 259.
[546] Arvanitopoulos 1907: 166-169; 1908: 170-180.
[547] Adrimi-Sismani 1994: 323-324.

Stamatopoulou has recently located the EIA material in the storerooms of the Ephorate and thus confirmed its existence.[548] Only the remains of the 4th c BC temple are visible today. This temple seems to have succeeded and copied in plan two earlier structures, a 5th c BC and a 6th c BC one. Material from these older buildings was found reused in the 4th c BC temple. It is possible that before the 6th c BC cult was conducted here in the open-air or in an 'oikos' made of perishable materials as no architectural remains dating to that period have been recovered so far.[549]

The rise in the number of votives from the LG period onwards in Thessaly finds parallels in the rest of the Greek mainland and several theories have been proposed for this phenomenon.[550] It has been argued that possibly the increase in the number of settlements and/or the expansion of settlements during what appears to have been a rather stable period might have raised territory issues and that an investment in sanctuaries might have contributed by reinforcing regional or interregional identities.[551] Another theory links the increase in votives and generally the investment in sanctuaries with the rise of the polis.[552] More recently Mili has attributed the phenomenon to the introduction of coinage.[553] The fact that in Thessaly temple building became visible only during the late Archaic period and the scarcity of PG-G monumental offerings[554] might jointly indicate that the Thessalians either favoured other forms of dedication or that they 'competed in different arenas'.[555]

[548] Stamatopoulou 2004-2009: 635-647; 2012: 17-29.
[549] Mili 2015: 341-342.
[550] Morgan 2003:107-134; Mili 2015: 30-37.
[551] Polignac 1984; Morgan 2003: 140-141.
[552] Snodgrass 1980: 52-4; 1989-90: 287-294; Morris 1986: 1-17; Morgan 1990; 1994: 105-142; 2001: 20-44; Polignac 1996: 59-66.
[553] Seaford 2004: 66-7; Mili 2015: 33-34.
[554] Morgan 1990: 141; 2003: 142-143.
[555] Mili 2015: 36.

4.7 SANCTUARY AT KASTRO VOLOU

The sanctuary of Artemis Iolkia at Kastro Volou (**Cat. no. 10**) demonstrates the enduring importance of a G-A cult.[556] Finds dated from the G-A to the Classical period discovered within the ruins of a Doric temple dedicated to Artemis Iolkia under the church of Agioi Theodoroi at the hillock of Kastro Volou indicate the early date of this urban sanctuary.[557] According to Kravaritou the relocation of the temple of Artemis Iolkia from Kastro Volou to the Hellenistic polis of Demetrias is indicative of the cult's enduring popularity, which was exploited for the promotion of the new polis identity by forging links with the past.[558]

4.8 GEORGIKO

The sanctuary at Georgiko in Karditsa (**Cat. no. 11**) dedicated to the local hero cult of Aiatos, as a 7th-6th c BC inscription on a tile indicates and located south of the dromos of a LH tholos tomb is the case of a LH burial site that later was used as sanctuary (**fig. 139**). A similar phenomenon of a later cult developing outside a LH built tomb has been reported at Staphylos Skopelou and Menidi, Attica.[559] The sanctuary at Georgiko is comprised by a stone cairn occupying an area of 530m^2 on top of which were placed hundreds of votives, such as figurines of men, women and riders, iron knives and miniature pots as well as pottery, while an area of 130m^2 with black soil and animal bones, was most probably used for burnt animal sacrifices.[560] Most of the finds seem to date to the 6th-5th c BC. But it is possible that the cult originated in the LG(?)-A period, or even in the PG period, as the 7th-6th c BC inscription and PG pot sherds from the dromos of the tholos tomb might indicate. It could be argued that the later use of this

[556] Kravaritou 2011: 119-120.
[557] Arvanitopoulos 1909: 157-158; Kravaritou 2011: 119-120; 125. The nature of the finds is unclear from the rescue excavation report.
[558] Kravaritou 2011: 119-120.
[559] Lolling 1880; Wolters 1898: 13-28; 1899: 103-135; Antonaccio 1995: 104-109; Skafida 2000: 402-404; Boehringer 2001; Galanakis & Stamatopoulou 2012: 205-218.
[560] Intzesiloglou B 1997: 478-480; 1998: 439; 1999a: 408-409; 2002: 289-295; Hatziagelakis 2007: 61-62; Mili 2015: 334.

tholos is a good example of a conscious manipulation of the past in order to support and strengthen political and/or territorial claims since the hero Aiatos is again connected with the invasion of the Thessalians into the territory.[561] If this is indeed true that would make this the second sanctuary (the other being that of Philia) in the region of Karditsa with that orientation. The evidence from these two sanctuaries even though later might indicate population movements that took place sometime in the LH or PG-G period. It is not possible, however, to determine if and when these would have actually happened and whether they would have been a gradual or not phenomenon. It is more likely that if population movements did occur they would have taken place sometime after 1200 BC rather than during the PG-G period as the evidence suggests, although the possibility cannot be excluded. The existence of a LH fortification wall at the settlement at Palamas in Karditsa might be a further indication of unrest or uncertainty in this region.[562] Interestingly, no PG-G fortification walls have so far been reported from Thessaly, while the LH date previously suggested for some fortification walls has recently been challenged.[563]

4.9 SANCTUARIES AT SOROS AND KTOURI

The Archaic period saw a rise in temple building which started most probably from the LG-EA period as evidence from two sites in Thessaly suggests. A small building (Building E, 3.4 x 3.4 m) located north-west of the sanctuary of Apollo at Soros in Magnesia yielded a few sherds dated from the EA to the Classical period (**Cat. no. 14**) (**fig. 140**).[564] Its use is unknown, but the excavator has suggested that it may have been the earlier cult building which, after the construction of the LA temple, was used as a treasury. A rectangular building (14 x 6.3m) located north of Ktouri Magoula, c.12km north-west of Pharsala, has also been interpreted as

[561] Intzesiloglou B 2002: 289-295; 2006: 221-237; Mili 2015: 226-227, 255.
[562] Hatziagelakis 2007: 35-36.
[563] Hope Simpson and Hagel 2006: 97-101.
[564] Mazarakis Ainian 2009: 269-294; 2012: 287-298; Mili 2015: 343-345.

an archaic temple (**Cat. no. 15**) (**fig. 141**).[565] According to the excavator Minyan, SM and PG-G pot sherds discovered in a refuse deposit underneath the north-east part of the building do not support an earlier use for the temple. The finds from the temple include fragments of marble architectural remains (possibly of an archaic date), a series of circular terracotta plaques, weights, bobbins, few stone objects, a figurine, metal arrow and fibula, and few glass beads, while a bronze figurine of a warrior (early 6th c BC) found nearby might have also come from this building.[566]

4.10 CONCLUSIONS ON SANCTUARIES

Two LH and seven PG-G Thessalian sites have so far yielded evidence for cult activity, while LH material has also been recovered from three of the later PG-G Thessalian sanctuaries. The main evidence for cult during the LH period comes from Dimini where Megaron B and House K have yielded evidence for elite and communal cult activities respectively, while a LH IIIA2 rural sanctuary has also been reported at Mavromati Karditsas. The sanctuaries at House K at Dimini and Mavromati share some similarities suggesting close links between the regions of Magnesia and Karditsa. LH material has also been reported from the later sanctuaries at Velestino, Philia and Mikrothives. However, it remains unclear whether cult in these sanctuaries had such a long history. The LH finds could in all three cases have come from either a domestic or in the case of Mikrothives perhaps from a mortuary context since the small finds as described by Arvanitopoulos share similarities with those from the large tholos tombs at the Bay of Volos and Karditsa.

During the PG-G period, cult buildings were not common in Thessaly and religious practices were apparently conducted in the open air, in groves or perhaps in small 'oikoi' made of perishable materials. Notable exceptions are the LG sanctuaries at Neochoraki in Magnesia and

[565] Béquignon 1931: 450-522; 1932: 89-191.
[566] Béquignon 1932: 89-191; Mili 2015: 331.

Gonnoi in Larisa. The extremely strategic location of these two early Thessalian temples might indicate a need to demarcate important south and north routes in a period (LG-EA) when new important centres immerge as it is suggested by the rich cemeteries of Voulokaliva, Pharsala and Agios Georgios. The most securely dated evidence for cult in the EIA comes from the extra-urban sanctuaries at Velestino and Philia, where deposits with hundreds of votive offerings and pottery attest to the PG-G origin of both cults, while an 8th century layer with hundreds of bronze votives was found beneath the urban sanctuary of Athena Polias on the acropolis of ancient Phthiotic Thebes (Mikrothives Magnesias).

At Velestino cult probably started during the PG-G period with the dedication of votives on an altar located among the graves of the PG-G cemetery underlying the later sanctuary suggesting perhaps and ancestral origin for the cult. A change from an open-air cult to a temple took place later in the Archaic period. The sanctuary at Philia retained its open-air character from the PG-EG/MG period, when the first offerings date, until the 5th century BC and probably included a sacred grove and/or possibly an 'oikos' made of perishable materials. Most of the finds were discovered in an extensive ash layer the characteristics of which indicate the existence of a grove where all the votives were displayed. The sanctuary at Philia attained a federal status from the 5th c BC and the cult of Itonia had clear military overtones from at least the 5th c BC connected with the legendary invasion of the Thessalians into the territory and the military confrontation between them and the previous population. At Velestino and Philia the vast majority of finds date between the 8th and 6th century BC and consist of small, mostly locally-made, bronze objects, indicating the existence of a prosperous bronze working industry. Only a very small percentage (c. 2%) of the 8th-7th century BC metal votives are non-Thessalian in style and of this half are Macedonian or Balkan, while the rest range from Italian to Egyptian in both sanctuaries, suggesting that these were sanctuaries visited primarily by Thessalians.

Their strategic location along the two main routes indicated by the spread of settlement and cemeteries shows their importance during the EIA.

The sanctuary of Artemis Iolkia at Kastro Volou demonstrates the enduring importance of a G-A cult, which was later in the Hellenistic period exploited for the promotion of a new polis identity by forging links with the past. The tholos at Georgiko Karditsas where a sanctuary dedicated to the cult of the local hero Aiatos presents the case of a LH burial site that later was used as sanctuary. The later use of this tholos is a good example of a conscious manipulation of the past to support and strengthen political and/or territorial claims since the hero Aiatos is associated with the invasion of the Thessalians into the territory. These two later sanctuaries demonstrate how cults were used to support political and territorial claims.

CHAPTER 5:
LBA AND EIA THESSALIAN BURIALS

CHAPTER 5: LBA and EIA Thessalian Burials

5.1 INTRODUCTION

The study of mortuary practices reveals some general trends throughout Thessaly during the LH and PG-G period, such as the widespread use of tholoi, a preference for inhumation, and the variety of grave types that often co-existed in the same burial ground.[567] Cist and pit tombs were used simultaneously with tholos tombs of various sizes, rock-cut and built chamber tombs, tumuli, enclosures, open burials, urns and pithos burials. This phenomenon had been explained in the past as the result of the coexistence of different ethnic groups, namely one of Mycenaean origin, one indigenous and two intrusive.[568] Recent research, however, has shown that the material culture as reflected in both grave offerings and grave types is homogenous and that the difference in burial practices should be regarded as the result of socio-political dynamics.[569] Additionally, a similar variety in grave types has recently been observed in Crete by Eaby.[570] In Crete, however, Eaby suggests the existence of six distinctive mortuary regions while something similar does not appear to be the case for Thessaly. In Thessaly pithos and open burials appear only at a few sites during the LH and PG-G period and thus do not seem to have been very popular.

5.2 BURIAL RITES: INHUMATION AND CREMATION

Inhumation was the preferred form of interment in Thessaly throughout the LH and PG-G period, so far reported from 32 and 54 sites respectively, while cremation (primary and/or secondary) is reported only from 14 PG-G sites (**Map 7**).[571] In contrast to Thessaly come

[567] Lewartowski 2000: 90-92; Papadimitriou 2001: 123-130; Lemos 2002: 173-178; Adrimi-Sismani 2007: 159-177; Galanakis 2008: 76-85; Eder 2009: 113-131; Gounaris 2009: 163-194; Georganas 2009: 195-205.
[568] Snodgrass 1971: 154-155; Desborough 1972: 98-105; Coldstream 1977: 43-44, 87-88.
[569] Georganas 2009: 201.
[570] Eaby 2007; 2011: 165-202.
[571] PG-G cremations have been reported at Rodia, Agios Georgios, Argyropouli, Krannon, Omolio, Libadi, the W cemetery of Pharsala, Nea Anchialos, Sesklo, the cemetery at the temple of Ennodia, Velestino, Agrielia, the Voulokaliva tumulus cemetery and Kapakli (Arvanitopoulos 1911: 287-289, 294-300; 1914: 141; 1925: 37-42;

Athens and Lefkandi where cremation was the most widespread practice during the PG-G period.[572] Kurtz & Boardman[573] suggested that cremation had no special meaning, while according to Snodgrass[574] it was a social fashion. Musgrave[575] has pointed out the symbolic value of cremation. In any case cremation was a much more expensive rite[576] and perhaps provided a communal spectacle and thus strengthened the bonds of community or highlighted hierarchy. Additionally, even though, in most sites examined here cremation most probably emphasised social status there are at least two cases where cremation was also used to differentiate age.[577]

Secondary fire rituals have been reported from five LH tholoi at Rachoula (**Cat. no. 229**), Ano Ktimeni (**Cat. no. 206**), Kazanaki (**Cat. no. 34**), Kapakli (**Cat. no. 33**) and Dimini (**Cat. no. 16**) and perhaps from two of the chamber tombs at Mega Monastiri (**Cat. no. 130**).[578] According to Galanakis and Stamatopoulou,[579] these rituals are attested in several LBA tombs across the Aegean, especially during the 14th-13th centuries BC.[580] They argue that these rituals, usually viewed as part of fumigation and/or purification rituals, should be examined separately as their performance appears to differ from place to place. They also note that the similarity between those rituals performed in sites in Karditsa and the Volos area may suggest the existence of networks connecting the two regions.

Béquignon 1937: 50-74; Tziafalias 1978: 156-182; 1981: 255-257; 1983: 204-208; 1994b: 179-188; Intzesiloglou A 1997: 469; Tziafalias & Zaouri 1999: 1434-152; Malakasioti 2000: 331-338; Malakasioti & Mousioni 2004: 353-368; Malakasioti & Tsiouka 2011: 609-625; Batziou-Eustathiou 2011: 595-608; Katakouta 2012: 241-250; Tsiaka 2012: 433-438; Lagia et al. 2013: 197-219). For LH and PG-G sites with inhumations see: Catalogue of Sites.

[572] Lemos 2002: 151-190.

[573] Kurtz & Boardman 1971.

[574] Snodgrass 1971: 146.

[575] Musgrave 1990: 271-272.

[576] Lemos 2002.

[577] Krannon, Grave 35: Tziafalias 1983: 206; Tziafalias & Zaouri 1999: 147-148. Voulokaliva, Tumulus 36: Malakasioti & Mousioni 2004: 361-362; Malakasioti & Tsiouka 2011: 569-571; Lagia et al. 2013: 205-206.

[578] Theocharis 1964: 256-258; Avila 1983: 15-60; Adrimi-Sismani & Georgiou 2002: 86-93; Papathanasiou 2009: 151-161; Karagiannopoulos 2008: 740; Galanakis & Stamatopoulou 2012: 205-218; Galanakis 2016:189-196.

[579] Galanakis & Stamatopoulou 2012: 210-211.

[580] Wace 1932: 140-141; Blegen 1937: 250-252; Nilsson 1950: 595-599; Wells 1990: 136-138; Cavanagh & Mee 1998: 112-113; Gallou 2005: 120-123; Galanakis & Stamatopoulou 2012: 205-218.

At Ano Ktimeni (**Cat. no. 206**), some 31 extended burials were placed on the floor of the tholos, while two elliptical charnel pits were located at the entrance and on the opposite side (**figs. 142-143**).[581] Both pits yielded burnt bones and layers of 'pyres', as well as small finds like those discovered on the chamber floor. One of the pits was covered with fire remains (charcoal). The burials on the chamber floor were described as partially burnt. Animal bones (possibly from bovines and birds) are also mentioned, some of which are also described as burnt.[582] According to Galanakis & Stamatopoulou,[583] since the position of at least 22 'complete' skeletons was identified on the chamber floor it may be suggested that the fire remains reported were the result of a secondary cremation ritual. A similar secondary cremation ritual would have most probably taken place in the LH IIIA Kapakli tholos (**Cat. no. 33**).[584]

At Rachoula Karditsas (**Cat. no. 229**), a square pit (2.40 x 2.40 m) was found dug in the floor of the tholos (**figs. 144-145**). It contained ashes, burnt organic material (mainly wood), as well as pot sherds from an undecorated drinking vessel. A layer with burnt soil was also reported from inside the tholos.[585] Another rectangular pit (2.80 x 1.40 m) was later discovered also dug into the floor of the chamber with a similar content. Due to its larger size it was characterised as a burial pit by the excavator even though no human bones were found in it.[586] At the tholos at Kazanaki (**Cat. no. 34**) located by the ring road of Volos the bones of the deceased buried within the chamber pits were exhumed, after their flesh had completely decomposed, for the performance of a fire ritual in which the bones were smoked and blackened but not properly

[581] Arvanitopoulos 1911: 351-353; Galanakis & Stamatopoulou 2012: 210.
[582] Arvanitopoulos 1911: 351-353; Galanakis & Stamatopoulou 2012: 210.
[583] Galanakis & Stamatopoulou 2012: 210.
[584] Kourouniotis 1906: 212-240; Avila 1983: 15-60.
[585] Karagiannopoulos 2007: 751-753; 2008: 739-741; 2010: 1140-1141. It should be noted that the tholos discovered here had been plundered prior to the excavation and was found almost empty of grave offerings, as well as human bones. The excavator tentatively ascribed this tholos to the LBA, possibly LH IIIA, due to its large diameter (c. 9 m) which is almost equal to that of Georgiko tholos at Karditsa (c. 8.70-8.85 m diam.). The excavations are still on-going, and more evidence may come to light by future research.
[586] Karagiannopoulos 2011: 613-615.

cremated.[587] The remains of this fire ritual were found scattered on the chamber's floor. Once the bones and a quantity of the funerary assemblage were fired they were then randomly redeposited in three of the four main pits on the chamber floor and in six smaller and shallower pits on the periphery of the chamber floor. The three main pits were then properly sealed while the fourth remained empty. Some of the bones were unburnt, including a skull found next to the doorway. A similar fire ritual probably took place in the Lamiospito tholos tomb at Dimini (**Cat. no. 16**), while traces of fire were also observed on the chamber floor of Mega Monastiri chamber tombs B and D.[588]

The highest concentration of PG-G cremations is found in the tumulus cemeteries of Agios Georgios (**Cat. no. 81**) (LG-A) and Voulokaliva (**Cat. no. 59**) (SPG II-A).[589] Most urn burials also come from the cemetery of Agios Georgios (**Cat. no. 81**).[590] Cremation urns (**Map 8**) are reported from cemeteries such as those at Pharsala (**Cat. no. 168**) and Kastri Rodias, (**Cat. no. 111**)[591] while secondary, single or multiple, cremations interred in pits inside tholoi have been reported from Sesklo (**Cat. no. 47**) and Velestino (**Cat. no. 55**).[592]

The west cemetery at Pharsala (**Cat. no. 168**), dated to the SM-SPG period, has yielded five urn burials found among the cist graves of the cemetery and placed close to each other. The urns were found upright and at the same depth placed directly on the natural bedrock. All five urn cremations were interred in amphorae. In two instances a small skyphos placed upside down functioned as the lid of the cremation urn. The excavator was unable to discover any traces of primary cremation neither she could locate the exact place where any secondary

[587] Papathanasiou 2009: 152; Galanakis & Stamatopoulou 2012: 210.
[588] Lolling & Wolters 1886: 435-443; Theocharis 1964: 256-257; Galanakis & Stamatopoulou 2012: 211; Adrimi-Sismani 2013: 332-334.
[589] Wace & Thompson 1911-1912: 1-29; Tziafalias 1978: 156-182; 1994b: 179-188; Malakasioti 1992: 229-234; 1993: 238-241; 2000: 331-338; Malakasioti & Mousioni 2004: 353-368; Stissi et al. 2004: 98-112; Malakasioti & Tsiouka 2011: 609-625; Lagia et al. 2013: 197-219.
[590] Tziafalias 1978: 156-182; 1994b: 179-188.
[591] Katakouta 2012: 241-250; Tsiaka 2012: 433-438.
[592] Arvanitopoulos 1911: 294-300; Intzesiloglou A 1997: 469.

cremations might have taken place.[593] The cemetery at Kastri Rodias (**Cat. no. 111**), dated to the G-A period, has also yielded cremations interred in amphorae (**fig. 146**). Here some of the urns were placed inside pits covered with schist slabs. The amphorae had a globular body and no recognisable base and were supported by small stones and soil inside the pit. In some cases, the urns were covered by a slab-shaped stone and were furnished with weapons, miniature vases, fibulae and pins. According to the excavator, the fact that the urns were in many instances placed the one on top of the other or in small pits or over pit graves, might possibly indicate the existence of a tumulus.[594]

Five PG-G tholoi at Sesklo (**Cat. no. 47**) have yielded various forms of primary and secondary cremations (**fig. 147**). Three secondary cremations have been reported from Tholos 1 together with an inhumation found in a pit in the dromos, while burnt human and animal bones were found in Tholos 2. Tholos 3 contained four skeletons, possibly partially cremated, while two inhumations and a secondary cremation were discovered in Tholos 4. Tholos 5 had a pit with a primary cremation, while an inhumation was found on top of it.[595] The wide variety in the forms of primary and secondary cremation is a feature not only encountered at Sesklo but a more general phenomenon in EIA Thessaly indicating that this type of burial was not standardised. Perhaps in the case of Tholos 3 we might have secondary fire rituals like those observed in the LBA tholoi at Volos and Karditsa. Of interest is a secondary cremation discovered in a pit inside a PG-G tholos at Boura plot at the area of the Health Centre at Velestino (**Cat. no. 55**) since it is the only so far reported cremation from this area.[596] The only other indication that the practice was known in the area is a cremation pit discovered at Chloe

[593] Katakouta 2012: 242.
[594] Tsiaka 2012: 433.
[595] Arvanitopoulos 1911: 294-300.
[596] Intzesiloglou A 1997: 469.

Velestinou (**Cat. no. 12**) next to a cluster of built PG-G tholos tombs which contained only the remains of inhumations.[597]

Cremations have also been reported from the cluster of tholoi covered by a tumulus at Libadi Elassonas (**Cat. no. 178**) and from the cluster of tholoi at Kapakli (**Cat. no. 33**) at Nea Ionia Volou.[598] According to Triantafillopoulou,[599] traces of burning on human bones indicate that a form of secondary cremation took place at two of the PG tholoi at Kapakli, while urn burials were also found in one of them. The 70 primary cremations interred in a single PG-G tholos at Kapakli mentioned by Arvanitopoulos[600] seem an exaggeration and most probably a form of secondary fire ritual also took place as was the case at Sesklo. The case of the tholos tombs at Nea Anchialos (LPG-SPG) (**Cat. no. 31**) (**fig. 148-150**) and Argyropouli (**Cat. no. 88**) (PG) (**fig. 151**)where, according to the excavators, the burials were cremated in situ and then afterwards a tholos tomb was erected on top of the pyre is very interesting as most EIA Thessalian tholoi contained multiple interments and were used for a long period of time whereas these two tholoi appear to have been used only once and for a limited number of burials.[601] The burial rites employed in these tholoi in conjunction with the fact that a northern (Boubousti style amphora) and a Near Eastern (necklace of faience beads) import were located at the Nea Anchialos tholos may possibly indicate that members of a local elite were interred there. Finally, it should also be noted that cremation was practiced together with inhumation in the SM-SPG cemetery of Agrielia Almirou (**Cat. no. 7**), where nine cremations interred in pits were found in a cemetery of inhumations buried in various grave types.[602] Seven of the

[597] Intzesiloglou A 1996: 342-344.
[598] Arvanitopoulos 1914: 141; Verdelis 1958: 3; Tziafalias 1994b: 181; Triantafillopoulou 1997: 459; 2008: 679.
[599] Triantafillopoulou 1997: 457-459; 2008: 678-680.
[600] Arvanitopoulos 1914: 141.
[601] Tziafalias 1981: 255-257; Tziafalias & Zaouri 1999: 143-152; Batziou-Eustathiou 2011: 595-608.
[602] Malakasioti 1999: 391-393; 2006: 111-121; Malakasioti & Mousioni 2004: 353-368.

cremations contained iron weapons, while two were only furnished with shells and obsidian blades.

5.3 CIST AND PIT TOMBS

Cist and pit tombs, together with tholoi, are perhaps the most popular grave types in LH and PG-G Thessaly (**Maps 5, 17**). Cists are made of schist slabs and stones and some have a floor strewn with slabs or pebbles, while pits vary from simple trenches to more elaborate pits covered with slabs and lined with stones and/or clay. It has been noted that their dimensions appear to vary according to the age of the deceased, with those of children being smaller than the ones for adults. They are found either isolated or in clusters forming burial grounds and cemeteries and contain burials of all ages and both sexes. The quantity and quality of the offerings of all Thessalian LH and PG-G cist and pit graves varies widely and some have been found almost empty, while others are richly furnished.[603] Georganas also notes that weapons are rarely found in PG-G cist graves and that more examples of such prestige offerings come from tholos tombs and tumuli.[604] It is interesting that when cist and pit graves form cemeteries either in the LH or PG-G period they almost always appear together with at least one other type of grave such as a tholos or an enclosure. Besides the Nea Ionia (**Cat. no. 32**) cemetery that we have examined already in the chapter for Kastro Volou other characteristic examples of cemeteries comprising mostly of cist and pit graves are the LH cemetery at Makrichori Larisas and the PG-G cemetery at Girlenia Krannonas.

The cemetery at Makrichori Larisas (**Cat. no. 124**) dates from the LH IIB to the LH IIIC Early and comprises of two cists, four pits and one built camber tomb. The cemetery has been associated with the nearby Mycenaean settlement at Makrichori (**Cat. no. 123**). The cist and pit graves contained single adult inhumations, while the built chamber tomb included multiple

[603] Lewartowski 2000: 90-92; Lemos 2002: 173-178; Eder 2009: 113-131; Georganas 2009: 195-196.
[604] Georganas 2005: 63-74.

inhumations. The cist and pit graves were oriented E-W. The orientation of the deceased, however, varies. In most graves with one burial (T. 1, 4, 5, 7) the head was placed towards the east but in two cases (T. 2, 3) it was placed towards the west.[605] All burials were placed in the supine position except for the one in the chamber tomb which was extended. All burials were furnished with at least one clay vase and in some cases, there are more vases and/or other small objects such as clay bi-conical buttons and small stone cones, as well as jewellery such as bronze rings and necklaces.[606] The excavator notes that the grave offerings found here are similar with those from other burial sites in LH Thessaly.[607] The pottery from the graves is locally made. The most popular shape is that of the alabastron, with nine examples out of the 19 pots found all together. The alabastron is particularly popular as a grave offering during the LH period throughout Thessaly. Other shapes that appear here are also popular LH Thessalian grave offering such as the piriform jar and kylix.[608]

The PG-G cemetery at Girlenia Krannonas (**Cat. no. 116**) is a characteristic example of an EIA extended cemetery (**fig. 152-154**). The cemetery was dug into a Neolithic and EBA settlement. 42 PG graves have been excavated but only 36 of them have been published, so far, in preliminary reports.[609] The 36 PG tombs were mostly rectangular cist graves. One of the tombs as we have seen has been described as a circular enclosure built with lime slabs and stones and located in a central position of the cemetery. The excavator also reported that poorer burials were given 'open' tombs covered with slabs.[610] Each cist tomb contained either one or more burials, usually two or occasionally four. Most of the burials were inhumations, apart from one case: a cremation of a child in a double vase. In one tomb, two children were buried together

[605] Toufexis et al. 2015: 159-162.
[606] Toufexis et al. 2015: 162.
[607] Batziou-Eustathiou 1985: 17-71; 1998; Malakasioti 1992: 267-271; Adrimi-Sismani & Alexandrou 2009: 133-149; Toufexis et al. 2015: 162.
[608] Toufexis et al. 2015: 162.
[609] Tziafalias 1983: 204-208; Tziafalias & Zaouri 1999: 143-152; Lemos 2002: 177-178.
[610] Tziafalias 1983: 204-208.

and among their offerings were feeding bottles.[611] The dead were given many offerings. These included, apart from pottery, many bronze and iron objects such as weapons and personal ornaments. The combination of weapons and ornaments might suggest that in the multiple burials men and women were buried together. Most of the pottery is of the 'Grey Bucchero' Ware. There are also typical Thessalian vases, such as kantharoi, along with some which were probably imported from the east coast, such as a pendant semi-circle skyphos. The date of most of the vases varies from PG to SPG. According to the excavator the cemetery continued to be used during the 8th c BC.[612]

Particularly interesting are three SM-SPG cemeteries located in Voulokaliva and Agrielia Almirou and Pharsala. The cemeteries at Voulokaliva (**Cat. no. 58**) and Pharsala (**Cat. no. 168**) were in use also in the MH III-LH I-IIB and LH period respectively, while the one at Agrielia (**Cat. no. 7**) appears to have been formed near a LH habitation site remains of which were swept in a refuse pit found among the graves of the cemetery.[613] What is most interesting is the variety of grave types in these three cemeteries located in nearby regions showing perhaps that the SM-SPG period was a time for experimentation and that there were no strict rules for the selection of a grave type and/or burial rites. According to the excavators, the grave offerings were similar in all grave types and the only feature noted is that some graves were more richly furnished than others. All these cemeteries are only preliminary published and only further research will reveal more information.

At Voulokaliva (**Cat. no. 58**), 141 graves dated to the MH III-LH I-IIB, SM-SPG III, and the Hellenistic period were discovered on either side of the modern national road (**fig. 155-156**).[614] 38 graves date to the SM-SPG III period. So far only two SM graves furnished exclusively with

[611] Tziafalias 1983: 204-208.
[612] Tziafalias 1983: 204-208.
[613] Verdelis 1952b: 190-198; 1953b: 128-132; Tournavitou 2012: 219-232; Tsiouka & Agnousiotis 2015: 95-104.
[614] Malakasioti & Mousioni 2004: 353-368 ; Malakasioti & Tsiouka 2011: 610-613.

bronze jewellery (bronze fibula and pin) have been reported. The SM-SPG III graves are organized in four clusters (A-D). Each cluster had more than two graves and contained both adult and child burials. The graves of each cluster had the same orientation. It is possible that these clusters were family burial plots.[615]

The cemetery at Voulokaliva includes four types of graves namely, 16 cist graves built with slabs and/or stones, six pit graves, three urn burials of babies in handmade vessels (**fig. 157**) and a circular tomb (**fig. 158**). The circular tomb dated to the MPG period (diam. 1.70 m and height 0.30 m) and contained two burials. Although it has the shape of a pseudo-tholos its small dimensions in conjunction with the absence of an entrance and dromos does not allow for an identification as a tholos or an enclosure and the only parallel so far remains a grave excavated by Wace and Thompson in the area.[616] Most of the burials in this cemetery are inhumed in the contracted or semi-contracted position and only few are in the supine position. Few instances of double and/or triple burials have also been reported, as well as the reuse of graves.

The graves are furnished with clay vessels, jewellery and weapons. The pots are wheel-made locally and include jugs, trefoil oinochoai, cups and small amphorae. The similarities between the pottery from this cemetery with that from Iolkos, Euboea, Skyros and Phthiotis suggests according to the excavator that this site belonged to the Euboean koine, while the absence of other characteristic types of vessel such as the Thessalian/Macedonian kantharos might indicate limited contacts with the north.[617] In contrast the metal jewellery and weapons show more similarities with northern parallels and might suggest some age stratification as there are no

[615] Malakasioti & Tsiouka 2011 : 610-613.
[616] Wace & Thompson 1911-1912: 4-8; Desborough 1952: 151; Lemos 2002: 236; Malakasioti & Tsiouka 2011: 611.
[617] Desborough 1972: 343; Verdelis 1958: 40-48; Crielaard 1999: 55; Lemos 2002: 212-217; Malakasioti & Tsiouka 2011: 611.

metal objects in the child burials while two adult burials reportedly of warriors were furnished only with weapons.[618]

The cemetery at Agrielia (**Cat. no. 7**) presents an equally complex picture (**fig. 159-160**). So far, 46 burials (9 cremations and 37 inhumations) and a refuse pit have been found.[619] According to the excavator the burials were richly furnished with clay and stone vessels, iron weapons, and iron, bronze and gold personal ornaments, as well as tools made of stone, bone or lead.[620]

The cremations were interred in circular pits (0.80 x 1.50 m). The pits were very shallow, dug into the soft limestone and defined by small stones. The pits contained a layer of ash and the remains of burnt bones along with burnt ceramic vessels (amphorae, oinochoai, skyphoi etc.). Seven of them contained also iron weapons, while two were only furnished with shells and obsidian blades.[621]

The 37 inhumations were found in various types of graves: four small tholos tombs, 14 cist tombs made of stones (oval shape), six cist tombs made of slabs (rectangular shape), 10 pit graves, and three circular pit graves with pebble strewn floor and defined by small stones. According to the excavator the tombs in the W part of the cemetery formed a tumulus round Tholos tomb 2, which was richly furnished, while the rest of the tombs were found without specific orientation. According to the excavator the tumulus was surrounded by a peribolos. The norm was single inhumation in the supine, contracted or semi-contracted position. Four double burials have also been recorded as well as 10 cases of re-use of tombs after the removal of earlier interments. The burials were furnished with vases (trefoil oinochoai, skyphoi, cups etc.), iron, bronze and gold personal ornaments (fibulae, pins, rings, spirals etc.), iron weapons,

[618] Malakasioti & Tsiouka 2011: 611-612.
[619] Malakasioti & Mousioni 2004: 356-359; Tournavitou 2012: 219-232.
[620] Malakasioti & Mousioni 2004: 357-358.
[621] Malakasioti & Mousioni 2004: 357.

tools (swords, spearheads, arrowheads, large and small knives, daggers etc.), and whetstones.[622]

Finally, the cemetery at Pharsala (**Cat. no. 168**) is equally interesting and very similar with the two cemeteries above in the grave type variety, as well as the burial rites variety. The SM-SPG organized burial ground has been found within the limits of the west cemetery of ancient Pharsalos, N of the late archaic tholos tomb and the LH/SM graves excavated by N. Verdelis.[623]

The SM-SPG burial ground is comprised of 35 graves (27 cist tombs, a tholos tomb, two stone enclosures, and five cremation urns) and a tumulus covering a pit tomb, two tholos tombs, and five cist tombs. According to the excavator the graves usually had the same orientation (E-W) and were found clustered in small groups. The tumulus was located on the W part of the cemetery. The excavator has noted the existence of more tumuli in the area which have not yet been explored. Both adults and children were interned in this burial ground.[624]

All cist graves are built with slabs and stones apart from three which are built with mud bricks. They each contain a single inhumation in the supine or contracted position usually with the head towards the E. In some cases, the remains of an earlier burial were pushed aside, and the grave was re-used.[625]

The tholoi have a circular or oval plan and their diameter ranges between 1.90-2.30 m. They are built with lime stones and according to the excavator their construction is not meticulous. They all have a built dromos (2 m long and 0.60-0.80 m wide) blocked with earth and unworked stones. They contain multiple inhumations. According to the excavator the remains of earlier burials were placed in shallow pits close to the walls of the tholoi.[626]

[622] Malakasioti & Mousioni 2004: 357.
[623] Verdelis 1952b: 190-198; 1953b: 128-132; Katakouta 2012: 241-250.
[624] Katakouta 2012: 241.
[625] Katakouta 2012: 242.
[626] Katakouta 2012: 241-242.

The stone enclosures have a circular or oval plan and their diameter ranges between 1.90-2.30 m. According to the excavator these stone enclosures are very similar to the one found at the PG cemetery at Girlenia, Krannon. They contain multiple inhumations. According to the excavator the remains of earlier burials were placed in shallow pits close to the walls of the stone enclosures.[627]

The cremation urns were found close to each other and among the cist graves. They were placed standing on the natural rock and were found in, approximately, the same depth. Clay amphorae were used as urns and in two cases a small skyphos was used as a lid. Each urn contained the remains of a single secondary cremation. According to the excavator the location of the pyre has not been found so far.[628]

According to the excavator the grave offerings found in the above tombs include clay vessels, iron and bronze personal ornaments and tools. The wheel made clay vessels include: small and large trefoil oinochoai, jugs, one-handled cups with conical foot, monochrome cups with flat base, amphorae, and skyphoi. The handmade clay vessels include: beaked jugs, jugs with cut-away neck, amphorae and kantharoi. Few examples of Grey Ware have also been found. The personal ornaments include: fibulae, pins, spirals, earrings, hoops and necklace beads. The tools include: small iron knives, clay spindle whorls, and whetstones.[629] Interestingly, the excavator notes the similarities with other sites within the Euboean koine placing Pharsala and its cemetery in the same group of sites.[630]

[627] Katakouta 2012: 242.
[628] Katakouta 2012: 242.
[629] Katakouta 2012: 242-243.
[630] Katakouta 2012:243-244.

5.4 CHAMBER TOMBS

Chamber tombs were more popular during the LH period (**Map 18**) as only one example dates to the PG period so far. They appear in several sites along two inner routes connecting the Bay of Volos with the Tempe Valley and Velestino with Pharsala as early as the LH IIB period. Chamber tombs were either rock-cut or built. They had a rectangular, circular/oval or irregular shaped chamber with a lateral, in some cases, entrance blocked with slabs and an earth-cut dromos.[631] In most cases their roof was flat but in some cases such as the rock-cut chamber tomb at Kato Mavrolophos (**Cat. no. 21**) they had a pitched roof (**fig. 161**).[632] They were used for a prolonged period and contained multiple inhumations of all ages and both sexes. Interestingly, the chamber tombs at Mega Monastiri (**Cat. no. 130**) (**fig. 162**) (especially Chamber Tomb B) and Velestino (**Cat. no. 55**) (**fig. 163**) contained many child burials.[633] Chamber tombs can be isolated, form clusters or be part of larger cemeteries. LH rock-cut chamber tombs have been reported from Souphli Magoula Larisas (**Cat. no. 126**), Mega Monastiri (**Cat. no. 130**), Velestino (**Cat. no. 55**), and Kato Mavrolophos (**Cat. no. 21**),[634] while built chamber tombs have been found at Pefkakia (**Cat. no. 37**), Dimini (**Cat. no. 16**) (**fig. 164**), Aerino (**Cat. no. 2**) (**figs. 165-166**), Makrichori (**Cat. no. 124**), Agios Antonios (**Cat. no. 156**) and Pharsala (**Cat. no. 168**).[635] The cluster of PG rock-cut tombs at Omolio[636] (**Cat. no. 139**) resemble chamber tombs, while the one at Mesorrachi[637] (**Cat. no. 132**) is akin to a tholos tomb. What is particularly striking about the LH chamber tombs is the similarity in the variety of grave offerings with that from the large LH tholoi at Volos and Karditsa, even if

[631] Cavanagh & Mee 1998; Papadimitriou 2001: 123-130.
[632] Malakasioti 1992b: 267.
[633] Theocharis 1964: 256; Papathanasiou et al. 2012: 193-204.
[634] Theocharis 1964: 255-258; Gallis 1973-4: 573-574; Intzesiloglou A 1989: 219-220; 1990: 201-203; Malakasioti 1992b: 267-271; Arachoviti 2000: 358-360; Papathanasiou et al. 2012: 193-204.
[635] Arachoviti 2000: 367-369; Papadimitriou 2001: 123-130; Adrimi-Sismani 2005c: 494-495; Toufexis *et al.* 2015: 161.
[636] Theocharis 1961-2: 175-178. The Omolio tombs were richly furnished. They contained iron weapons and gold personal ornaments.
[637] Tziafalias 1983: 203-204.

the grave offerings' quality and quantity in some cases are somewhat lacking in the chamber tombs. It may be argued that perhaps some chamber tombs might have belonged to a sub elite or as Arachoviti[638] argues, in the case of Velestino, to simple families living in a prosperous society. The exception to this rule is Chamber Tomb C, at Mega Monastiri (**Cat. no. 130**) which was uncommonly richly furnished, and the wealth of its finds can only be compared with that from the large tholos tombs at Volos and Karditsa. Together with 12 pots dating to the LH IIIA2-B there were found more than 1.000 pieces of glass-mass ornaments, carnelian beads, many gold ornaments, a seal-stone, an amber bead, a gold signet ring with a worship scene, and two faience cylinders, most probably Near Eastern imports.[639] Unfortunately, the great majority of the Thessalian chamber tombs are badly preserved and/or only preliminary published so here we will examine only two examples, namely the rock-cut chamber tomb at Kato Mavrolophos Almirou and the newly discovered built chamber tomb at Makrichori Larisas.

The rock-cut chamber tomb at Kato Mavrolophos (**Cat. no. 21**) is located at the site of Mamaleika c. 12 km to east of Phylaki. No other LH or PG-G graves or a settlement have so far been identified in its vicinity.[640] Its dromos and chamber were carefully dug into the soft bedrock. The dromos (6.37 m long and 1.45-0.45 m wide) was small and steep with roughly formed steps. The walls of the dromos had a slight gradient, making them converge in their upper part. A completely empty small cist tomb (0.70 x 0.40 x 0.31 m) was located on the floor of the dromos. The entrance, oriented southwest, was roughly blocked with two schist slabs and mudbricks. The chamber (4.40 x 2.85 x 1.96 m) was oriented NE-SE and had a pitched roof.[641] The floor of the chamber tomb was 0.20 m lower from the entrance, creating thus a

[638] Arachoviti 2000: 360.
[639] Theocharis 1964: 256-257.
[640] Malakasioti 1992: 267. Pottery and other small finds suggest the existence of a LH settlement at Phylaki but since the grave is c. 12 km away it is unlikely that it belonged to this settlement.
[641] Galanakis 2016b: 155-177.

small step.[642] At least six previous burials were pushed to the sides of the grave and traces of burning on the bones might indicate secondary fire rituals. Secondary fire rituals may indeed have been more popular in Thessaly, more so than in other Aegean regions during the Mycenaean period. Only one burial was found in situ at the right side of the entrance.[643] It was placed directly on the ground in a contracted position and was found unfurnished. The chamber tomb has yielded many grave offerings, however, including three alabastra, two piriform jars, two stirrup jars, a kylix, and a one-handled cup, as well as many glass-mass beads, steatite and glass-mass seal-stones, and buttons. No gold ornaments were found here.[644] The pottery indicates that the grave was in use from the LH IIIA2 to the LH IIIB.[645]

The newly discovered built chamber tomb at Makrichori (**Cat. no. 124**), c. 18 km to north of Larisa, was in use for a much longer period from the LH IIIA1 to the LH IIIC Early.[646] The chamber tomb at Makrichori was part of a cemetery which included also two cists and four pits. This cemetery has been associated with the LH settlement at Makrichori.[647] The chamber tomb here was a rectangular built one. Its north and west side were almost destroyed during the excavation and only its east and south part remain. The east wall (3.60 x 0.45 x 0.90 m) survives in a better condition, while a small dromos (1.20 m long and 0.60 m wide) was uncovered at the south side.[648] The chamber contained at least nine previous burials pushed to the sides of the grave. A stone slab separated these nine burials in two layers. Traces of burning on the bones might indicate secondary fire rituals. Only one burial was found in situ in the extended position.[649] The chamber tomb yielded several grave offerings but since it contained multiple burials it remains unclear which burial received specific grave offerings. The grave

[642] Malakasioti 1992: 267.
[643] Malakasioti 1992: 268.
[644] Malakasioti 1992: 268-270.
[645] Malakasioti 1992: 270.
[646] Toufexis et al. 2015: 161.
[647] Toufexis 2001-4: 540-542; 2006: 25-27.
[648] Toufexis et al. 2015: 161.
[649] Toufexis et al. 2015: 161.

offerings included two jars, two kylikes, a three-handled piriform jar, four straight-sided alabastra, the foot of a kylix which was used as a lid, as well as clay bi-conical spindle whorls, stone buttons, a flint fragment and a carnelian bead.[650] Although the excavators are cautious about ascribing this grave to the built chamber tomb type they note the similarities with other built chamber tombs in Agios Antonios Pharsalon, Aerino Magnesias, Pefkakia Volou and Pharsala.[651]

5.5 THOLOS TOMBS

Thessaly is one of the few regions of Greece, together with Crete, where tholoi continued to be built and used throughout the EIA.[652] Smaller and medium sized tholoi appear to be much more popular during both the LH and PG-G period (**Maps 4, 19**).[653] Of interest are the large LH IIIA-B tholoi in Volos and Karditsa. According to Pantou[654] the tholoi at Kapakli (**Cat. no. 33**), Kazanaki (**Cat. no. 34**), Toumba (**figs. 167-168**), and Lamiospito (**figs. 169-171**) (c. 6-10 m diam.) (**Cat. no. 16**) in the area of Volos are comparable in size to those in Pylos, Messenia, and contain rich grave offerings including among others pottery, gold jewellery, seal stones, gold signet rings, and objects made of ivory and faience, while a bronze dagger and an arrowhead come from Kazanaki and Lamiospito respectively.[655] The tholoi at Georgiko (**Cat. no. 209**), Rachoula (**Cat. no. 229**) and Ano Ktimeni (**Cat. no. 206**) in the area of Karditsa appear to share similarities in architecture, grave offerings and burial rites with those in the area of Volos, indicating the existence of elite networks of communication between the two regions.[656] All the above large LH tholoi appear to be strategically situated in the Bay of Volos

[650] Toufexis et al. 2015: 161.
[651] Toufexis et al. 2015: 162. See also Arachoviti 2000: 367-369 and Papadimitriou 2001: 123-130.
[652] Eaby 2009: 98-105.
[653] Galanakis 2008: 76-85, Georganas 2000: 47-54.
[654] Pantou 2010: 385-387.
[655] Avila 1983: 15-60; Adrimi-Sismani & Alexandrou 2009: 133-149; Adrimi-Sismani 2007: 169-171; 2010: 37-55; Galanakis 2008: 131-134.
[656] Karagiannopoulos 2007: 751-753; 2008: 739-741; Galanakis 2008: 139; Galanakis & Stamatopoulou 2012: 205-218; Intzesiloglou 2010: 239-247.

and in the case of Karditsa close to important land passes. Most LH tholoi in Thessaly appear to stop being used for interments after 1200 BC, except for the tholos at Aerino (**Cat. no. 2**) and the cluster of four tholoi at Pteleos (**Cat. no. 43**) in Sourpi plain that were used until the LH IIIC Early-Middle, and two of them perhaps during the EIA.[657] The excavator has argued that the two PG trefoil oinochoai and PG jug found inside the LH Tholos Tomb 3 at Gritsa Pteleou might possibly indicate a re-use of the tholos during the PG period for interments. Since these clay vessels were found inside the tholos tomb a re-use for burials is possible. The case of Georgiko (**Cat. no. 209**) (**fig. 172-174**), where a LH tholos was later (7th-6th century BC) re-used as a sanctuary dedicated to the local hero cult of Aiatos, is a good example of the conscious manipulation of the past in order to support political and/or territorial claims, since the hero Aiatos is connected with the invasion of the Thessalians.[658] The G pot sherd discovered at the dromos of the late archaic tholos tomb at the west cemetery of Pharsala (**Cat. no. 168**) does not support an earlier use of the tholos or a re-use of the LH chamber tomb discovered underneath the late archaic tholos.[659]

Most of the EIA tholoi are circular in shape, with a diameter ranging between 2-4 m., although there are bigger ones as well. They lack relieving triangles and the usually low stomion seems to be transformed into a long entrance not clearly distinguished from the dromos.[660] The great majority of the EIA Thessalian tholoi were constructed during the PG and were in use until the

[657] Arachoviti 2000: 367; Galanakis 2008: 144-145.
[658] Intzesiloglou B 2006: 221-237, Mili 2015: 226-227, 255.
[659] Verdelis 1951b: 154-163; 1952b: 185-204; 1953b: 127-132; 1954: 153-159; 1955: 140-146, Katakouta 2012: 241-250.
[660] Intzesiloglou B. 1990: 204-205, Malakasioti & Mousioni 2004: 353-368, Malakasioti & Tsiouka 2011: 609-625, Malakasioti et al. 1993: 93-100, Malakasioti 1998b: 423; 2000: 331-338, Wace & Thompson 1911-12: 1-29, Stissi et al. 2004: 98-112, Lagia et al. 2013: 197-219, Arvanitopoulos 1906: 125-126; 1910: 185-264; 1911: 287-300; 1914: 168-177; 1914b: 141; 1915: 153-156, Tziafalias 1979: 222-224; 1981: 255-257; 1994b: 179-188; 2000: 85-96, Tziafalias & Zaouri 1999: 143-152, Tziafalias et al. 2005: 519-522, Zaouri 1996: 372-373, Intzesiloglou A. 1996: 342-344; 1997: 469, Theocharis 1964: 261-262; 1965: 5-9, Theochari 1960: 47-56; 1962: 35-50, Touchais 1996: 1215-1216, Heurtley & Skeat 1930-1: 1-55, Hatziagelakis 2007: 51, Batziou-Eustathiou 2011: 595-608, Rodiri 1993: 231-233, Triantafillopoulou 1997: 457-459; 2008: 678-680, Verdelis 1958, Gardalinou et al. 1995: 384-385, Arachoviti 1994: 125-138; 2000: 355-371, Tsountas 1908: 75-115, Katakouta 2012: 241-250, Georganas 2000: 47-54.

G period and in some cases were built close to LH tholoi, a fact that could suggest the importance that lineage and earlier traditions played in determining socio-economic status and that these might have been consciously manipulated by certain families or kin groups in order to create their identity, and to support and strengthen their political claims. Both LH and PG-G tholoi contained multiple interments of both sexes and all ages and were, in some cases, in use for several generations. It has been noted that they were richly furnished with grave offerings and some have indeed yielded many clay vessels, jewellery and weapons. However, since they contain multiple interments it is, in most cases, impossible to establish which grave offerings belong to which burial. It must further be pointed out that the grave offerings of the Thessalian tholoi display a strong local character as is the case for grave offerings found in other types of graves.

Tholoi appear to be popular throughout Thessaly and can be isolated, form clusters usually together with cist and pit graves (e.g. Spilia Ossas (**Cat. no. 149**), Pteleos (**Cat. no. 43**), Chloe Velestinou (**Cat. no. 12**), Kerasia/Lestiani Peliou (**Cat. no. 66**), Marmariani (**Cat. no. 128**), Sesklo (**Cat. no. 47**), Kallithea Pharsalon (**Cat. no. 164**) and Omolio (**Cat. no. 139**)) or located close to larger cist tomb cemeteries (e.g. Nea Ionia Volou (**Cat. no. 32-34**)) possibly indicating the existence of a social hierarchy.[661] The great majority of tholoi are located at key sites of strategic importance close to land passes and/or roads (e.g. Chloe Velestinou (**Cat. no. 12**)) or dominating large flat expanses (e.g. Agioi Theodoroi Karditsas (**Cat. no. 202**)) and therefore likely acted as 'territorial markers' at least in some cases. During the archaic period elite families dominated the political life of Thessaly. Their power was mostly based on the exploitation of large estates and it has been argued that to support their claims they tried to forge links with the past by choosing to be buried in tholos tombs.[662] It is possible that this

[661] Arvanitopoulos 1911: 292-300; Heurtley & Skeat 1930-1: 1-55; Verdelis 1951: 129-154; 1952: 164-185; 1953: 120-127; Theocharis 1961-2: 175-178; 1969: 223; Intzesiloglou A 1996: 342-344; Tziafalias *et al*. 2005: 519-522
[662] Stamatopoulou 2007: 309-341, Morgan 2003: 192-195.

trend might have started as early as the PG period. There are also instances where EIA tholoi were re-used for burials during the later Archaic and Classical period (e.g. Kapakli (**Cat. no. 33**)).

5.6 TUMULI

Tumuli were not popular during the LH period and there are only three examples at Pharsala (**Cat. no. 168**), Gonnoi (**Cat. no. 102**) and Exalophos (**Cat. no. 191**) all containing cist graves with single inhumations.[663] Tumuli become more prominent during the EIA (**Map 4**). They appear in several sites along the inner route connecting the Almiros plain with the region of Elasson as early as the PG period. The tumuli at the cemeteries at Agrielia (SM-G) (**Cat. no. 7**) and Voulokaliva (LPG-A) (**Cat. no. 59**), Pharsala (SM-SPG) (**Cat. no. 168**), and Agios Georgios (LG-A) (**Cat. no. 81**) contain a variety of tomb types,[664] while the tumuli found at Domeniko (G) (**Cat. no. 174**) and Libadi (PG) (**Cat. no. 178**) in the region of Elasson cover small clusters of small tholos tombs.[665] PG tumuli have also been reported at Pyrgos Kieriou (**Cat. no. 228**).[666] Interestingly, isolated tholoi covered by a mound, such as the ones at Agioi Theodoroi (PG-G) (**Cat. no. 202**), and possibly Kastri Agias (G) (**Cat. no. 111**) and Argyropouli (Anastasiou plot) (PG) (**Cat. no. 88**) also appear in close by sites to the above examples.[667] In their earlier form they appear to cover clusters of tholos tombs[668] or a variety of tomb types (such as cists and pits) arranged around one or two tholos tombs[669] and cremation was the prevalent type of interment. During the EIA tumuli also occur in the neighbouring regions of Macedonia (Palaio Gynaikokastro, Vergina, Dion, and Chauchitsa), Epirus

[663] Verdelis 1952: 195-196; Arvanitopoulos 1910: 241-264; Deger-Jalkotzy 2006: 161.
[664] Malakasioti & Mousioni 2004: 353-368, Malakasioti & Tsiouka 2011: 609-625, Malakasioti 1992: 229-234; 1993: 238-241; 1999: 391-393; 2000: 331-338; 2006: 111-121, Stissi et al. 2004: 98-112, Wace & Thompson 1911-12: 1-29, Katakouta 2012: 241-250, Tziafalias 1994b: 179-188.
[665] Arvanitopoulos 1914: 168-177, Tziafalias 1994b: 179-188.
[666] Hatziagelakis 2007: 46-48.
[667] Intzesiloglou B 1990: 204-205, Tziafalias 1979: 222-224; 1981: 255-257; 1994b: 179-188, Theocharis 1965: 318.
[668] Arvanitopoulos 1914: 168-177; Tziafalias 1994: 181.
[669] Tournavitou 2012: 219-232; Katakouta 2012: 241-250.

(Pogoni), and Phthiotis (Marmara).[670] There are, however, several differences between these tumuli and their Thessalian counterparts. Cist tombs were the only or prevalent type of grave used in most tumuli of Macedonia, Epirus and Phthiotis, while the Thessalian tumuli contained either a variety of tomb types or clusters of small tholos tombs. Furthermore, cremation is the prevalent or only type of interment in the Thessalian tumuli while inhumation is preferred in the other regions. It has been argued that the closest parallel for the tumuli at Agios Georgios (**Cat. no. 81**) comes from Palaio Gynaikokastro in central Macedonia, where the tumuli contained stone enclosures with multiple urn cremations[671], while recent skeletal analysis conducted at Voulokaliva Tumulus 36 (**Cat. no. 59**) has shown that the burial rites (inhumation and various types of primary and secondary cremation) display close links with mortuary practices observed in Lefkandi in Euboea and more specifically with the Toumba cemetery.[672] The cemeteries at Agios Georgios and Voulokaliva in Thessaly offer most of our information even if not fully published yet.[673]

The cemeteries at Agios Georgios (**Cat. no. 81**) and Voulokaliva (**Cat. no. 59**) date, on the basis of pottery and metal objects, to the LG-A and LPG/SPG-A period respectively.[674] It has been suggested that both cemeteries comprised around 40 tumuli. So far, two tumuli have been excavated at the sites of Xirorema and Karaeria close to Agios Georgios (**fig. 175-179**).[675] Both tumuli cover large periboloi with multiple secondary cremations placed inside urns as well as several grave offerings. According to the excavator the pottery found in the graves as well as the bronze personal ornaments and the iron weapons follow the usual local types, while some

[670] Savopoulou 2001: 169-185, Andronikos 1969, Padermalis 1989: 46-47; 1997, Casson 1919-1921: 1-33; 1923-1925: 1-29, Andreou & Andreou 1999: 77-90, Dakoronia 1987.
[671] Savopoulou 2001: 169-185.
[672] Lagia et al. 2013: 197-219, Popham & Lemos 1996.
[673] Tziafalias 1994b: 179-188; Malakasioti & Mousioni 2004: 353-368; Stissi *et al*. 2004: 98-112; Lagia *et al*. 2013: 197-219.
[674] Tziafalias 1994b: 179-188, Malakasioti & Mousioni 2004: 353-368, Stissi et al. 2004: 98-112, Stissi 2004b: 116-124, Lagia et al. 2013: 197-219.
[675] Tziafalias 1975: 194-196; 1976: 181-183; 1978: 156-182; 1983c: 208-212; 1984: 150-151; 1987: 274-276; 1994b: 179-188, Tziafalias & Zaouri 1999: 143-152.

Attic and Corinthian imports date later. Tziafalias claims both genders and all ages were interred at the Xirorema tumulus, while he interprets the Karaeria tumulus as a 'polyandrion' which contained exclusively male burials furnished among others with iron weapons and parts of a funerary wagon.[676]

Recently, an LPG-SPG III (middle of 10th-middle of 9th c BC) peribolos containing cremation urns has been located at the site of Alonaki at Anavra Karditsas (**Cat. no. 235**) (**fig. 180**).[677] The peribolos was found covered by a large stone cairn/tumulus (39 x 28 m) of irregular elliptical shape, oriented NW-SE. The peribolos (4.60 x 3.90 m) was rectangular, oriented also NW-SE, and made of lime and schist slabs placed upright in the ground. The peribolos contained seven cremation urns with a single secondary cremation each.[678] All burials were furnished with clay vessels and metal objects such as jewellery and weapons. The discovery of jewellery and weapons in different urns indicates according to the excavator the presence of both female and male burials. Grave markers (oblong slab-shaped limestones) have also been discovered, even though none was found in situ.[679] Interestingly, according to the preliminary report the discovery of sherds mainly from serving and drinking vessels among the cremation urns might indicate that funerary meals or some other ritual took place there.[680] A layer c. 1.50-2 m-thick of black soil found outside the peribolos wall and in contact with it at its north-northwest side might be suggestive that at least some of the cremations took place at this spot. According to the excavator this layer contained burnt human bones and grave offerings including a substantial quantity of pottery, as well as bronze, iron and glass-mass jewellery.[681] The evidence from this site present the closest Thessalian parallel to the Agios Georgios tumuli

[676] Tziafalias 1994b: 179-188.
[677] Karagiannopoulos 2012: 413-417.
[678] Karagiannopoulos 2012: 414. Cooking pots, amphorae and kraters were used as cremation urns.
[679] Karagiannopoulos 2012: 414.
[680] Karagiannopoulos 2012: 414-415.
[681] Karagiannopoulos 2012: 415.

to date and also shares some similarities with the Voulokaliva tumuli namely, the grave markers, funerary meals and in situ cremations.

Four tumuli, only one of which is more substantially reported (Tumulus 36), have been excavated so far at the area of Voulokaliva (**Cat. no. 59**) (**fig. 181-185**).[682] Tumulus 36 consists of precincts (small periboloi) dating to the SPG, LG and A period arranged in a concentric/beehive-like structure.[683] The earliest SPG precincts (some of which have been characterised by the excavators as tholos-shaped or vaulted constructions) served as a nucleus around which the later LG and A structures developed. Tumulus 36 included also three urn burials and infant and adult inhumations in cist graves mostly located at its south limit. It is noticeable that the child burials in Tumulus 36 are a later archaic addition[684] and that originally the tumulus would have comprised of adult burials a characteristic also observed in the Xirorema tumulus at Agios Georgios[685], where the child burials appear to date to the archaic rather than the LG period. The precincts mainly comprise the remains of cremations. Offering tables and grave markers were recovered from a number of precincts while pottery and metal objects were abundant.[686] High status items, probably imported were found in three precincts in addition to 'killed' weapons.[687] According to the excavators the pottery and personal ornaments, mostly locally made, show influences from north (Macedonia) and south (Euboea, Boeotia, Attica, Corinth, Argos and the Aegean).[688] It has also been reported that the cremated burials were furnished with a large number of iron weapons. Interestingly, the possibility that some of the iron objects from Tumulus 36 were made of Cypriot iron either in Thessaly or

[682] Malakasioti 2000: 331-338, Malakasioti & Mousioni 2004: 353-368, Malakasioti & Tsiouka 2011: 609-625, Lagia et al. 2013: 197-219.
[683] Lagia et al. 2013: 197-219.
[684] Lagia et al. 2013: 197-219.
[685] Tziafalias 1994b: 179-188.
[686] Malakasioti & Mousioni 2004: 353-368, Malakasioti & Tsiouka 2011: 609-625.
[687] Lagia et al. 2013: 197-219.
[688] Malakasioti & Mousioni 2004: 363-367.

ready made imported from Cyprus has recently been suggested.[689] A recent study of the skeletal remains has highlighted the great variety in burial rites practiced in Tumulus 36 (inhumation and various types of primary and secondary cremation) and has shown the close links with mortuary practices observed in Lefkandi in Euboea and more specifically with the Toumba cemetery.[690] The creation of the Voulokaliva tumuli has been attributed to new and changing social realities by Georganas.[691] As we have seen above however tumuli appear in a number of sites along the inner route connecting the Almiros plain with the region of Elasson as early as the PG period. In their earlier form they appear to cover clusters of tholos tombs (Libadi) or a variety of tomb types (such as cists and pits) arranged around one or two tholos tombs (Agrielia, Pharsala). In addition, at least during the earlier phases of their use, the so far excavated tumuli appear to consist mainly or only of adult burials as child burials appear to be a rather later archaic addition. Furthermore, the existence of several imports, many iron weapons and in the case of the Karaeria tumulus at Agios Georgios a funerary wagon might be indicative of the use of tumuli to highlight social hierarchy. Finally, the addition of LG and A constructions around a core of earlier SPG precincts as well as the addition of offering tables among the later precincts at the Voulokaliva Tumulus 36 could possibly be interpreted as a conscious manipulation of ancestral ties by a local elite which in order to support its claims tried to forge links with the past or venerate its ancestors.

5.7 ENCLOSURES

Another type of grave that appears at few locations during the PG-G period is the enclosure (**Map 4**). There appear to be at least three distinct types of enclosures. The first type represented by two examples at Kastri Agias (**Cat. no. 111**) and Krannon (Grave 23) (**Cat. no. 116**) is

[689] Asderaki & Rehren 2007: 714-716, Rehren et al. 2009: 207-216.
[690] Lagia et al. 2013: 197-219, Popham & Lemos 1996.
[691] Georganas 2002: 295-296.

perhaps the most controversial.[692] The grave at Kastri Agias (**Cat. no. 111**) had been plundered and was found partially destroyed and without most of its contents (**fig. 186**). The grave was circular. The wall of the enclosure is preserved at a height of 0.15 m and a width of 0.32 m. According to the excavator the fact that the walls of this structure had a slight gradient inward might suggest that this was a G tholos tomb (diam. 3.70-3.80 m).[693] However, no entrance or dromos were found. The grave was made of small unworked stones connected with mud and contained multiple secondary cremations. Three piles of burnt human bones were discovered inside the grave. According to the excavator the deceased were burnt in a different location and then their bones were placed in three shallow pits inside the enclosure. The burials were furnished with clay vessels and bronze jewellery including two fibulae and two pins, as well as an iron knife and spearhead and conical stone beads. The grave offerings were placed un-burnt next to each pile of burnt bones.[694]

The PG Grave 23 at Krannon (**Cat. no. 116**) has been described as a circular enclosure (2.90 m diam., 0.47 m height, 0.40 m width) built with lime slabs and stones. It had a lateral entrance (0.64 m wide) on its west side made with two standing slabs.[695] It contained four adult inhumations, while the 'open' burial of a child (0.73 x 0.25 m), oriented E-W, was found close to the entrance of the enclosure. Interestingly, this grave was in a central position within the cemetery at Krannon, indicating perhaps that the burials there were considered more important. The meagre number of offerings, however, comes in contrast with the prominent location of this grave and does not indicate a higher status for those buried within.[696]

[692] Georganas 2009: 201.
[693] Tziafalias 1979: 222-224; Tziafalias & Zaouri 1999: 143-152; Lemos (2002: 176) argues that it is possible that the grave was used from the PG period onwards.
[694] Tziafalias 1979: 222-224.
[695] Tziafalias 1983: 204-208; Tziafalias & Zaouri 1999: 143-152; The lateral entrance is a feature also observed in two of the tholos tombs at Kerasia in the Magnesian Promontory (Arvanitopoulos 1911: 292-294).
[696] Tziafalias 1983: 204-208. The adult burials were furnished with six jugs with cut-away neck, seven cups and two bronze pins, while the child burial was left unfurnished.

The second type of enclosure in PG-G Thessaly is that of the small precincts within the large tumuli at the cemetery at Voulokaliva (**Cat. no. 59**). These small enclosures or precincts dating to the SPG, LG and A period were arranged in a concentric/beehive-like structure and contained mainly the remains of cremations. The burials within were those of adults furnished with clay vessels, personal ornaments and iron weapons.[697] The third type of enclosure is that of a large peribolos that includes urns. The large periboloi at the cemeteries at Agios Georgios Larisas (**Cat. no. 81**) and Anavra Karditsas (**Cat. no. 235**) contained secondary cremations placed inside urns, as well as several grave offerings including clay vessels, personal ornaments and iron weapons and were covered by a large tumulus.[698]

5.8 OPEN BURIALS

Burials found in Makrichori (**Cat. no. 124**), Agnandero (**Cat. no. 204**), Krannon (**Cat. no. 116**), Agrelia (**Cat. no. 7**) and the tumulus cemetery at Voulokaliva (**Cat. no. 59**) have been characterised as 'open burials' according to the excavators due to an absence of a grave. In all five sites the deceased in the burials described as 'open' seem to have been placed directly on the ground and covered with earth and/or one or more slabs. Even though all 'open burials' belong to adults of both sexes there appears to be little else in common between them and each case should be examined separately. An adult supine inhumation discovered underneath the floor of a Mycenaean building at Makrichori Larisas (**Cat. no. 124**) presents a rare occurrence as few intramural adult burials have been recorded so far.[699] The LH III A-B open burial at

[697] Malakasioti 2000: 331-338; Malakasioti & Mousioni 2004: 353-368; Malakasioti & Tsiouka 2011: 609-625; Lagia et al. 2013: 197-219.
[698] Tziafalias 1978: 181-183; 1994b: 179-188; Karagiannopoulos 2012: 413-417;
[699] Toufexis 2006: 27. It is unclear if the burial was furnished with grave offerings. Two pits and two cists were also found among the houses of the settlement, while a cemetery of two cists, four pits and a built chamber tomb was discovered to west of the Mycenaean settlement at Makrichori. The use of the cemetery dates from the LH II to the LH IIIC Early (Toufexis et al. 2015: 159-168). Intramural adult burials have recently been reported from the settlement at Asvestaria Petrotou at Trikala (Vaiopoulou 2017: 195-222).

Agnandero Karditsas (**Cat. no. 204**) furnished, among others, with faience and amber beads, a valuable offering recorded from few other graves is also a unique example.[700]

Eight PG burials at the cemetery at Girlenia Krannonas (**Cat. no. 116**), although described as 'open burials' by the excavator could have in fact been interred in shallow pits.[701] The deceased were found placed directly on the ground and covered with one or more slabs or in one case (Grave 49) in a reportedly 'open' grave with only two of its sides built with slab-shaped stones.[702] Each grave contained a single adult inhumation except Grave 15 with a double adult inhumation.[703] The most common grave offerings are the one-handled cup, jug with cut-away neck and kantharos, appearing usually in a combination including a jug and one or more drinking vessels, while two bronze fibulae, a bronze pin and an iron knife were additionally found in graves 14, 49 and 61 respectively.[704] Only Grave 47 was unfurnished and was discovered below cist grave 27.[705] It should be noted that the grave offerings found with these 8 burials are in fact the norm for all burials in this cemetery.[706]

The 'open burial' at Agrielia (**Cat. no. 7**) found in a refuse pit located among the graves of the cemetery and containing material from the clearing of a nearby LH habitation site is another exceptional example.[707] The burial was found at the north-east part of the refuse pit, in a depth

[700] Hatziagelakis 1998: 446. Other grave offerings include an alabastron and glass-mass beads. A LH IIB jug, LH IIIB1 stirrup jar, LH IIIA-B one-handled cup and two LH IIIA2-B1 piriform jars may also come from this grave. This is another adult supine inhumation. The open burial was found together with a LBA cist grave and two Hellenistic pit tombs.
[701] Tziafalias 1983: 204-208; Tziafalias & Zaouri 1999: 143-152. Graves 14, 15, 25, 47, 49, 54, 58 and 61 were characterised as 'open burials' by the excavator.
[702] Tziafalias 1983: 207.
[703] Tziafalias 1983: 205.
[704] Tziafalias 1983: 204-208.
[705] Tziafalias 1983: 207.
[706] Tziafalias 1983: 204-208.
[707] Tournavitou 2012: 219-232. The large circular refuse pit (c. 4.50 m diameter and 0.90 m depth) is in the E part of the cemetery of Agrelia Almirou and close to a small tholos tomb (T 36) and to two cist tombs (T 42 and 43) all dating to the EPG period. The refuse pit was covered by a low tumulus. A standing slab (c. 0.50 m high) found between these tombs and the refuse pit has been interpreted by the excavator as a marker but it remains unclear whether it was marking the location of the 'open burial' or the other graves or the refuse pit. The refuse pit contained burnt organic material, masses of clay, a large quantity of wheel-made and hand-made pottery, animal bones (goats, sheep, bovines, pigs and possibly horses) and shells, as well as other small finds. Most of the pottery found in the refuse pit belongs to undecorated closed storage/pouring vessels for everyday use (tripod cooking

of c. 0.50 m, and according to preliminary examination dates to the Iron Age. Skeletal analysis has shown that this was the supine inhumation of an adult female (c. 35-40 years old) that had suffered bad living conditions, had anemia due to malnutrition, and growth arrest during childhood due to either malnutrition or disease. The burial was furnished with a bone bead.[708] 'Open' burials have also been reported from the Voulokaliva tumuli (**Cat. no. 59**) in the Almiros plain. Three open burials were found in Tumulus A and four were discovered in Tumulus 36. All include single adult inhumations and are most probably later additions to the tumuli dating to the LG-EA period placed on top of cist and pit graves containing child burials.[709] Interestingly, a skeletal analysis of the burials from Tumulus 36 has shown that the deceased were not young at the time of death, while evidence of stress episodes during growth were also observed on the cranial vault of one adult in the form of healed porosity.[710] The evidence from the cemeteries at Agrielia and Voulokaliva might indicate that perhaps 'open' burials were reserved for older members of the community perhaps with a lower social status, at least in the Almiros area, during the EIA and EA period.

5.9 PITHOS BURIALS

Little is known about the three pithos burials discovered at Trikala (**Cat. no. 200**), Volos (**Cat. no. 32**), and Kallithiro (**Cat. no. 212**). The pithos burial excavated at Trikala (**Cat. no. 200**)

vessels, other cooking vessels etc.) and is extremely difficult to date. Some fine ware pottery dating to the Mycenaean, PG-G and Archaic period was also found in the refuse pit. The Mycenaean pottery found in the refuse pit dates from the 2nd half of the 14th c BC to the beginning of the 12th c BC (LH IIIA2-C Early) and can be classified in nine vessel types (kylikes, skyphoi, lekanae, cups, kraters, alabastra, stirrup jars, tripod cooking vessels etc.). The use of the refuse pit could be dated either to the SM-G period (the period of use of the cemetery) or later to the archaic period. This pit most probably contained refuse from the clearing of a nearby Mycenaean habitation area.

[708] Tournavitou 2012: 220. The excavation report mentions five more objects which were found close to the skeleton (two stone tools, a bone needle, a circular clay tile, and part of a female Mycenaean figurine). It remains unclear if any of these objects accompanied the 'open burial' as grave offerings.

[709] Malakasioti 2000: 331-338; Malakasioti & Mousioni 2004: 353-368; Malakasioti & Tsiouka 2011: 609-625. It remains unclear from the excavation report if the adult inhumations were furnished with grave offerings or not.

[710] Lagia et al. 2013: 205-206. The adult inhumed skeletal remains were found in a poor state of preservation in anatomical order in situ, in extended position, or commingled and fragmented among cremated remains. At least one adult was male.

was furnished with a LH IIIC Late locally-made jug with cut-away neck that displayed some early PG features.[711] Interestingly, this shape is rare for Mycenaean Greece and shows connections with the Ionian islands, which is the only other place where it appears during this period.[712] The jug with cut-away neck will become one of the most popular grave offerings in the next PG-G period throughout Thessaly.[713] A G pithos burial has been reported from the Nea Ionia cemetery at Volos (**Cat. no. 32**),[714] while another G pithos burial, furnished with handmade vases, has been found at the site of Ragazi at Kallithiro Karditsas (**Cat. no. 212**).[715] From the limited information available for these pithos burials it may be suggested that they were perhaps reserved for poorer members of the community as their offerings seem to be meagre.[716] Pithos burials are popular in the G period in Athens and Euboea.[717]

5.10 CHILD BURIALS

Children were given burial along with the adults during the LH and PG-G period (**Map 6**). Cist and pit graves are the main type used for intramural child burials found among buildings and/or under floors at both LH and PG-G settlements such as, Dimini (**Cat. no. 16**), Petroto (**Cat. no. 195**), Kastro Volou (**Cat. no. 20**), Kephalosi (**Cat. no. 24**), Ambeleia (**Cat. no. 158**).[718]

At Dimini (**Cat. no. 16**) the excavator reports that graves with child burials were dug among the houses of the settlement, in areas that were not built, or were abandoned, or in courtyards

[711] Theocharis 1958:76; Theochari 1959: 75-77. The burial was found at the square in front of Agios Nikolaos church.
[712] Mountjoy 1999: 852-853.
[713] See for example the PG-G cemetery at Girlenia Krannonas (Tziafalias 1983: 204-208).
[714] Batziou-Eustathiou 1987: 254. The burial was located at the northwest bank of the Krausidonas river c. 500-600 m from Kastro and is part of the Nea Ionia cemetery.
[715] Intzesiloglou B 1990b: 205. The burial belongs to the east cemetery of the settlement on Agios Athanasios hill. All other burials reported date later, to the 4th-3rd c BC.
[716] It remains unclear from the excavation reports whether these burials belonged to adults or children.
[717] Kurtz & Boardman 1971; Lemos 2002.
[718] Alexandrou 2001-2004: 473-475; Adrimi-Sismani 2001-2004: 505; 2013; Lewartowski 2000: 90; Sipsie-Eschbach 1991: 160-184; Malakasioti 1989: 218-219; Skafida *et al*. 2013; Wace & Thompson 1911-1912: 1-29; Malakasioti & Mousioni 2004: 355-356; Béquignon 1932: 98-100; Vaiopoulou 2015: 212-213. For the intramural child burials at Kastro Volou see the chapter for Kastro Volou.

or underneath the floors of houses and in some rare cases inside small storage spaces.[719] The grave types used were those of the cist and pit and the burials reported, so far, date from the LH IIIA2 to the LH IIIC Early.[720] Most of these graves were of smaller dimensions and were found unfurnished or containing meagre offerings such as two sea shells,[721] a steatite spindle whorl and pot sherds of monochrome vases,[722] or a small LH IIIB jug (FS 114).[723] Unlike Dimini, at Asvestaria Petrotou (**Cat. no. 195**) the intramural burials included adults as well as children.[724] Twenty-nine cist and pit graves have been found among the buildings of the settlement. Cist graves (14) contained child burials, while pits (15), ranging from a simpler to a more elaborate construction, were mostly reserved for adults. Most of the graves were furnished with pots, tools, figurines and other objects and date to all phases of the LH period.[725] Interestingly, the discovery of pot sherds, charcoal, and burned clay underneath the remains of children and adults alike indicates that a ritual took place before the burial, while seeds and burnt pots found inside and outside the graves confirm this theory.[726] Many PG-G intramural child burials came to light in the settlement at Kephalosi Almirou (**Cat. no. 24**). The children were interred mainly in cists that did not have a common orientation and were furnished with clay cups, skyphoi, trefoil oinochoai and feeding bottles,[727] while another PG intramural child burial has been reported from Palaiokastro Ambeleias (**Cat. no. 158**). Although, found unfurnished the grave was located close to two other PG graves and at the same level making

[719] Adrimi-Sismani 2013: 336.
[720] Adrimi-Sismani 1987: 245-246; 1988: 238-239; 1990: 196; 2001-4: 505; 2013: 336-337; Alexandrou 2001-2004: 474. Since the excavations are still on-going and the burials of Dimini have only been published in preliminary reports their actual number remains unclear.
[721] Adrimi-Sismani 1988: 238-239.
[722] Alexandrou 2001-2004: 474.
[723] Adrimi-Sismani 2001-2004: 505.
[724] Vaiopoulou 2017: 195-222.
[725] Vaiopoulou 2015a: 212-213; 2017: 195-222.
[726] Vaiopoulou 2017: 219-220.
[727] Nikolaou 2006: 127.

the excavator argue for a PG date. The discovery of a PG skyphos and krater nearby support this interpretation.[728]

Children were interred together with adults in burial grounds, such as the one at Theotokou (**Cat. no. 72**), Ovria (**Cat. no. 14**) and Tsigenina (**Cat. no. 53**),[729] organised cemeteries, such as the ones at Velestino (**Cat. no. 55**), Voulokaliva (**Cat. no. 58**), Nea Ionia Volou (**Cat. no. 32**), Kastri Rodias (**Cat. no. 111**), and Pharsala (**Cat. no. 168**),[730] and tholoi and tumuli.[731]

Children were buried in chamber tombs along with adults. Interestingly, chamber tomb B in Mega Monastiri (**Cat. no. 130**) contained mostly multiple inhumations of children, while a relatively substantial number of children inhumations has been reported from the cluster of chamber tombs at Velestino (**Cat. no. 55**).[732]

It is noteworthy that, even though inhumation appears to be the main mode of interment for children, instances of cremation have also been reported. Sometimes their bodies appear to have been treated in deliberate opposition to those of adults, for instance at Krannon (**Cat. no. 116**), where we have a child cremation interred in an urn in a cemetery of mainly adult inhumations in cist graves,[733] and in Voulokaliva Tumulus 36 (**Cat. no. 59**), where adults were cremated whereas children were inhumed in cist graves,[734] indicating that cremation was used to differentiate age. This is a practice also observed in other southern Greek Mainland burial grounds and cemeteries.[735] In the case of the tumulus at Xirorema Agiou Georgiou (**Cat. no.**

[728] Béquignon 1932: 98-100.
[729] Wace & Droop 1906-7: 309-327; Adrimi-Sismani 2001-2004: 504; Almatzi 2007: 707-709.
[730] Béquignon 1937: 50-55, 73-74; Hatziagelakis 1982: 225-226; Malakasioti 1998: 419-422; Tsiouka 2008; Malakasioti & Tsiouka 2011: 609-625; Tsiaka 2012: 433-438; Katakouta 2012: 241-250. For child burials at the Nea Ionia cemetery at Volos see chapter for Kastro Volou.
[731] Arachoviti 1994: 125-138; Tziafalias 1994b: 179-188; Adrimi-Sismani & Alexandrou 2009: 133-149; Lagia *et al*. 2013: 197-219. For child burials in tumuli see above. Children were also found buried together with adults in the LH Kazanaki tholos and the PG cluster of tholoi at Chloe.
[732]Theocharis 1964: 255-258; Papathanasiou *et al*. 2012: 193-204.
[733] Tziafalias & Zaouri 1999: 147-148.
[734] Malakasioti & Mousioni 2004: 361-362.
[735] Nea Ionia Athens: Smithson 1961: 150-155.

81), where during the LG-A period both adults and children were cremated, it may be suggested that, cremation might have indicated inclusion and perhaps a symbolic similarity in status.[736]

Most child burials were furnished with grave offerings and some of them were even given valuable, high status items. Characteristic are three LH IIIA-B child burials in Souphli Larisas (**Cat. no. 126**), Amfithea II (**Cat. no. 83**), and Tsigenina (**Cat. no. 53**) furnished among others with an amber bead or a seal stone, offerings that were otherwise reserved for adult burials and indicate a desire to give a special 'high' status to the child burial.[737] Furthermore, some PG-G child burials reported from Kastro Volou (**Cat. no. 20**), Kastraki Velestinou (**Cat. no. 55**) and Kephalosi (**Cat. no. 24**) are furnished with a necklace of faience beads a valuable and 'exotic' piece of jewellery that is otherwise only known from Voulokaliva Tumulus 36 (**Cat. no. 59**) and the tholos at Nea Anchialos (**Cat. no. 31**) during that period.[738] Finally, the combination of a gold spiral coil, necklace of faience beads and lead wheal reported from the PG-G intramural child burials at Kephalosi[739] (**Cat. no. 24**) finds parallels in some child burials from Lefkandi.[740]

5.11 CONCLUSIONS ON BURIALS

The study of mortuary practices reveals some general trends throughout Thessaly during the LH and PG-G period, such as the widespread use of tholoi, a preference for inhumation, and the variety of grave types that often co-existed in the same burial ground. The material culture as reflected in both grave offerings and grave types is homogenous and the difference in burial practices should be regarded as the result of socio-political dynamics.

[736] Tziafalias 1994b: 179-188.
[737] Biesantz 1959: 62-67; Adrimi-Sismani 2001-2004: 504; Tsiaka 2012: 589.
[738] Sipsie-Eschbach 1991: 160-184; Intzesiloglou A 1980: 270-271; Malakasioti & Mousioni 2004: 356, 366; Batziou-Eustathiou 2011: 597.
[739] Malakasioti & Mousioni 2004: 353-368.
[740] Popham et al. 1980.

Inhumation was the preferred form of interment in Thessaly throughout the LH and PG-G period, so far reported from 32 and 54 sites respectively, while cremation is reported only from 14 PG-G sites. Cremation most probably emphasised social status but there are at least two cases where cremation was also used to differentiate age. Secondary fire rituals reported from LH tholoi that are usually viewed as part of fumigation and/or purification rituals, should be examined separately as their performance appears to differ from place to place. The similarity between those rituals performed in sites in Karditsa and the Volos area may suggest the existence of networks connecting the two regions. The highest concentration of PG-G cremations is found in the tumulus cemeteries of Agios Georgios and Voulokaliva. The wide variety in the forms of primary and secondary cremation is a general phenomenon in EIA Thessaly indicating that this type of burial was not standardised.

Cist and pit tombs, together with tholoi, are perhaps the most popular grave types in LH and PG-G Thessaly. Cists are made of schist slabs and stones and some have a floor strewn with slabs or pebbles, while pits vary from simple trenches to more elaborate pits covered with slabs and lined with stones and/or clay. It has been noted that their dimensions appear to vary according to the age of the deceased, with those of children being smaller than the ones for adults. They are found either isolated or in clusters forming burial grounds and cemeteries and contain burials of all ages and both sexes. The variety of grave types observed in the SM-SPG cemeteries located in Voulokaliva, Agrielia and Pharsala might indicate that the SM-SPG period was a time for experimentation and that there were no strict rules for the selection of a grave type and/or burial rites.

Chamber tombs were more popular during the LH period as only one example dates to the PG period so far. They appear in several sites along two inner routes connecting the Bay of Volos with the Tempe Valley and Velestino with Pharsala as early as the LH IIB period. Chamber tombs were either rock-cut or built. They were used for a prolonged period and contained

multiple inhumations of all ages and both sexes. Chamber tombs can be isolated, form clusters or be part of larger cemeteries. What is particularly striking about the LH chamber tombs is the similarity in the variety of grave offerings with that from the large LH tholoi at Volos and Karditsa, even if the grave offerings' quality and quantity in some cases are somewhat lacking in the chamber tombs. It may be argued that perhaps some chamber tombs might have belonged to a sub elite or as Arachoviti argues, in the case of Velestino, to simple families living in a prosperous society.

Thessaly is one of the few regions of Greece, together with Crete, where tholoi continued to be built and used throughout the EIA. Smaller and medium sized tholoi appear to be much more popular during both the LH and PG-G period. The tholoi in the area of Volos are comparable in size to those in Pylos, Messenia, and contain rich grave offerings. The tholoi in the area of Karditsa appear to share similarities in architecture, grave offerings and burial rites with those in the area of Volos, indicating the existence of elite networks of communication between the two regions. Most LH tholoi in Thessaly appear to stop being used for interments after 1200 BC, except for the tholos at Aerino and the cluster of four tholoi at Pteleos in Sourpi plain. The great majority of the EIA Thessalian tholoi were constructed during the PG and were in use until the G period and in some cases were built close to LH tholoi, a fact that could suggest the importance that lineage and earlier traditions played in determining socio-economic status and that these might have been consciously manipulated by certain families or kin groups in order to create their identity, and to support and strengthen their political claims. Both LH and PG-G tholoi contained multiple interments of both sexes and all ages and were, in some cases, in use for several generations. Tholoi appear to be popular throughout Thessaly and can be isolated, form clusters usually together with cist and pit graves or located close to larger cist tomb cemeteries possibly indicating the existence of a social hierarchy. The great majority of tholoi are located at key sites of strategic importance close to land passes and/or roads or

dominating large flat expanses and therefore likely acted as ‘territorial markers’ at least in some cases.

Tumuli were not popular during the LH period and there are only three examples at Pharsala, Gonnoi and Exalophos all containing cist graves with single inhumations. Tumuli become more prominent during the EIA. They appear in several sites along the inner route connecting the Almiros plain with the region of Elasson as early as the PG period. The tumuli at the cemeteries at Agrielia and Voulokaliva, Pharsala, and Agios Georgios contain a variety of tomb types, while the tumuli found at Domeniko and Libadi in the region of Elasson cover small clusters of small tholos tombs. PG tumuli have also been reported at Pyrgos Kieriou. In their earlier form they appear to cover clusters of tholos tombs or a variety of tomb types (such as cists and pits) arranged around one or two tholos tombs and cremation was the prevalent type of interment. It has been argued that the closest parallel for the tumuli at Agios Georgios comes from Palaio Gynaikokastro in central Macedonia, where the tumuli contained stone enclosures with multiple urn cremations , while recent skeletal analysis conducted at Voulokaliva Tumulus 36 has shown that the burial rites display close links with mortuary practices observed in Lefkandi in Euboea and more specifically with the Toumba cemetery. During the earlier phases of their use, the so far excavated tumuli appear to consist mainly or only of adult burials as child burials appear to be a rather later archaic addition. Furthermore, the existence of several imports, many iron weapons and in the case of the Karaeria tumulus at Agios Georgios a funerary wagon might be indicative of the use of tumuli to highlight social hierarchy. Finally, the addition of LG and A constructions around a core of earlier SPG precincts as well as the addition of offering tables among the later precincts at the Voulokaliva Tumulus 36 could possibly be interpreted as a conscious manipulation of ancestral ties by a local elite which in order to support its claims tried to forge links with the past or venerate its ancestors.

Another type of grave that appears at few locations during the PG-G period is the enclosure. There appear to be at least three distinct types of enclosures. The first type represented by two examples at Kastri Agias and Krannon is that with a plan similar to a tholos and is perhaps the most controversial. The second type of enclosure in PG-G Thessaly is that of the small precincts within the large tumuli at the cemetery at Voulokaliva. The third type of enclosure is that of a large peribolos that includes urns at Agios Georgios Larisas and Anavra Karditsas.

Burials found in Makrichori, Agnandero, Krannon, Agrelia and the tumulus cemetery at Voulokaliva have been characterised as 'open burials' according to the excavators due to an absence of a grave. In all five sites the deceased in the burials described as 'open' seem to have been placed directly on the ground and covered with earth and/or one or more slabs. Even though all 'open burials' belong to adults of both sexes there appears to be little else in common between them and each case should be examined separately.

Little is known about the three pithos burials discovered at Trikala, Volos, and Kallithiro. The pithos burial excavated at Trikala was furnished with a LH IIIC Late locally-made jug with cut-away neck that displayed some early PG features. Interestingly, this shape is rare for Mycenaean Greece and shows connections with the Ionian islands, which is the only other place where it appears during this period. The jug with cut-away neck will become one of the most popular grave offerings in the next PG-G period throughout Thessaly.

Children were given burial along with the adults during the LH and PG-G period. Cist and pit graves are the main type used for intramural child burials found among buildings and/or under floors at both LH and PG-G settlements. Children were interred together with adults in burial grounds, organised cemeteries, and tholoi and tumuli. Children were also buried in chamber tombs along with adults. Interestingly, chamber tomb B in Mega Monastiri contained mostly multiple inhumations of children, while a relatively substantial number of children inhumations

has been reported from the cluster of chamber tombs at Velestino. It is noteworthy that, even though inhumation appears to be the main mode of interment for children, instances of cremation have also been reported. Sometimes their bodies appear to have been treated in deliberate opposition to those of adults, indicating that cremation was used to differentiate age. In the case of the tumulus at Xirorema Agiou Georgiou, where during the LG-A period both adults and children were cremated, it may be suggested that, cremation might have indicated inclusion and perhaps a symbolic similarity in status. Most child burials were furnished with grave offerings and some of them were even given valuable, high status items, indicating a desire to give a special 'high' status to the child burial.

CHAPTER 6:
DISCUSSION AND CONCLUSIONS

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6.1 DISCUSSION

6.1.1 THE SETTLEMENTS

Many settlements (152) of varying sizes existed in Thessaly during the Mycenaean period as it is evident from the above survey. The material record is more extensive around Volos, where the sites of Kastro, Dimini and Pefkakia have been excavated and studied in a greater degree producing thus a more precise picture of the settlement patterns in that area. The evidence outside this area comes primarily from small scale rescue excavations or surveys and the results are mainly published in preliminary reports and/or articles in conferences. There is not much information including architectural plans of other Mycenaean settlements available at present. There are a few exceptions to this rule, namely Koryphoula near Lake Karla, Makrichori Larisas, Petroto Trikalon and Palamas Karditsas, while the settlements at Velestino and Aerino Magnesias, as well as Larisa and Pharsala date to both the LH and EIA. All these settlements in combination with other recent finds from sanctuaries and burials demonstrate the extent of the Mycenaean culture in Thessaly and indicate that both plains of Thessaly were extensively occupied during the Late Bronze Age.

The collapse of the Mycenaean palaces ca. 1200 BC is followed by what appears to be a period of population decline and therefore possibly of increased mobility, as only 16 LH IIIC and 15 SM Thessalian sites have been reported so far. However, this is also a very interesting period as evidence from SM-SPG cemeteries located in Voulokaliva and Agrielia Almirou and Pharsala suggests. The variety of grave types in these three cemeteries located in nearby regions shows perhaps that the SM-SPG period was a formative period and a time for experimentation and that there were no strict rules for the selection of a grave type and/or burial rites. According

to the excavators, the grave offerings were similar in all grave types and the only feature noted is that some graves were more richly furnished than others.

Although during the PG and the G period the number of settlements is much lower (45 and 46 respectively) than that of the Mycenaean period, the EIA appears to have been an era of stability and continuity since at least 35 settlements date to both the PG and G periods. During the EIA there are also several new sites such as Kephalosi, while another five sites date to both the LH and EIA namely Kastro Volou, Velestino and Aerino Magnesias, as well as Larisa and Pharsala. Kastro, Velestino and Larisa are considered as 'big sites' by Morgan[741] basically sizable sites where information is more plentiful due to more research and allows for the reconstruction of the individual 'history' of the site. To this list we can possibly add Kephalosi Almirou, Pharsala and Aerino. These 'big sites' indicate the emergence of centres of power for the EIA that were most probably controlled by strong families as was the case later in the archaic period.[742] The evidence for the EIA period for all other sites in Thessaly is again limited and fragmentary coming mainly from rescue excavations and preliminary reports. Despite the scarcity of the evidence, however, some general remarks can be made about the settlement patterns observed in Thessaly during the LH and EIA period.

Most of the LH and EIA settlements in Thessaly are located either on the plains or on low hills. Some as Kastro Volou are tells, called in Greek Magoules.[743] This is to be expected considering Thessaly's geography. Thessaly has a strategic location connecting the southern Greek mainland with the north. It consists of two large fertile plains, the eastern plain of Larissa and the western one of Trikala, surrounded by mountains.[744] The main outlets in the Aegean are

[741] Morgan 2003: 45-47.
[742] Stamatopoulou 2007.
[743] The differentiation between hills and tells is that hills are natural land elevations, while tells have been created by layers of continues habitation. The site of Kastro in Volos is situated on a tell.
[744] The Aegean coast is separated from the E plain by Mt. Pelion, Mt. Ossa and further north by Mt. Olympos. The Kamvounian range defines the N limit of the Thessalian plains, while the Chasian range and Mt. Pindus extend to the W and SW of the plains. Mt. Othrys is to the SE of the plains.

the Pagasetic Gulf in the S and the Valley of Tempe in the North. Mountain passes were used from the Mycenaean period onwards for communication with regions in the north of Thessaly. Such routes led either through the Valley of Tempe between Mts. Olympos and Ossa and along the coastal plain or over the pass at Elasson to Macedonia.[745] To the S, routes around Mt. Othrys and down the Spercheios valley led to Phocis and Boeotia.[746]

Almost all of the settlements were located close to natural water resources such as springs and rivers (e.g. The Hyperia Krini in Pherae) and controlled plentiful arable land that must have supported the residing population with a sufficient agricultural produce, as storage facilities found in the settlements suggest.[747] The dense woods that grew on the mountains surrounding Thessaly must have provided ample timber and game to the settlements. Most of the settlements were strategically located on obvious routes connecting the northern and southern regions of the Greek Mainland.[748] Furthermore, the Mycenaean settlements of Kastro, Dimini and Pefkakia and then later in the PG-G period only Kastro fringed the Pagasetic Gulf controlling thus the sea routes connecting Thessaly with the rest of the Aegean, the coast of Asia Minor and the Near East.

The great majority of the Mycenaean settlements in Thessaly were, to present evidence not fortified. Few possible Mycenaean fortifications have so far been identified in Thessaly,

[745] Poulaki-Padermali 2006: 115-129.
[746] Dakoronia 1994: 233-242.
[747] Malakasioti 1994: 47-57, Adrimi-Sismani 1999-2001: 71-100, Intzesiloglou & Arachoviti 2006: 233-243.
[748] One route passed E of Mt. Othrys and lead to Volos through the Sourpi and Almiros plains and then N to Larissa and to the Valley of Tempe and to the Elasson pass. A second route lead from the Almiros plain to Pharsala, Karditsa and Trikala and finally to Grevena, located between the Kamvounian Range and Mt. Pindus. This is to be expected considering the existence of extensive Mycenaean road systems emanating from Mycenaean centres in the S Greek Mainland, such as Mycenae, Tiryns and Pylos connecting these sites with their hinterland facilitating control over the provinces of these Mycenaean polities (Hope Simpson 1998: 239-260, Jansen 1997: 1-16; 2002, Hope Simpson & Hagel 2006: 144-175.). These road networks were used for multiple purposes such as, 'the effective passing of messages, personnel, and resources' within a Mycenaean polity and maybe even between Mycenaean polities (Mann 1986: 136, Halstead 2007: 66-73) or for military defence and chariot use (Hope-Simpson 1998: 239-260, Schon 2007: 141). The only roads located so far in Thessaly are the ones in the settlements at Dimini in Volos, Palamas in Karditsa and possibly the one in Makrichori in Larisa. Even though no surveys have been undertaken so far in order to identify larger road networks that might have existed in Mycenaean Thessaly, the location of the settlements suggests their existence.

namely at Kierion in Karditsa, Ktouri in Pharsala and Petra in Lake Karla.[749] The dating of these constructions, however, is extremely problematic. They are known primarily through surveys and small-scale excavations conducted in the early 1900s or later in the 1930s, 1950s or 1960s. The newly discovered fortified Mycenaean settlement of Palamas in Karditsa appears to be the only, so far, securely dated Mycenaean fortified settlement in Thessaly. The lack of Mycenaean fortifications might result in a bias of the research. Since very few extensive excavations have taken place, it is a possibility that the number of fortifications in Thessaly may increase in the future. If this is not the case, however, the lack of fortifications might possibly indicate stability in society. Furthermore, it should be stressed that most of the Mycenaean sites were occupied without break from the Middle Helladic period onwards.[750] No PG-G fortifications have been found in Thessaly so far either. In order to explore further the possible existence of stability in society it is necessary to examine closer the settlement patterns observed in LBA and EIA Thessaly.

6.1.2 SETTLEMENT PATTERNS IN LBA AND EIA THESSALY

Three Mycenaean settlements have been found in the area of Volos namely Kastro, Dimini and Pefkakia occupying an area of 12 ha, 10 ha and 8 ha respectively. These settlements fringed the head of the Pagasetic Gulf and were located at a distance of 3-5 km from each other.[751] They were not fortified and to present evidence lacked smaller satellite settlements (with the possible exception of Kazanaki).[752] All these settlements were associated with burial grounds of various types.[753] Dimini and Kastro were most probably Mycenaean palatial administrative

[749] Hope Simpson & Hagel 2006: 97-101. The fortifications at Kierion and Petra might date later, in the Classical or Hellenistic period but a Mycenaean date cannot be excluded as well. Ktouri, possibly a Mycenaean fort, was ideally situated to keep watch over the Enipeus Valley and the W Thessalian plain.
[750] For a comprehensive study of the MH period in Thessaly see: Agnousiotis 2008. See also below for further discussion on the possible implications of the lack of fortifications in Thessaly during the Mycenaean period.
[751] During the LBA Dimini was located at a distance of 1.5 km from the sea, while Kastro and Pefkakia were located closer to the sea and at a distance of 500m from it (Zangger 1991: 6).
[752] See below for a discussion for the role of Kazanaki.
[753] Two tholos tombs namely the 'Lamiospito' and 'Toumba' were associated with the settlement at Dimini, while an extensive cist tomb cemetery and a tholos tomb (Kapakli) were associated with the settlement at Kastro. A

centres as it is suggested by the use of Linear B, monumental architecture, evidence for metallurgy, religious activities, extensive storage, imports, feasting activities and pottery of a high quality.

The settlement pattern observed in the area of Volos during the Mycenaean period is very different from the one detected for example in Messenia, where Pylos, occupying an area of at least 18 ha controlled a large number of secondary settlements of smaller size in an area of at least 2000 km^2.[754] The settlement pattern in the Pagasetic Gulf might have shared some similarities with those in the Argolid, where three important Mycenaean centres namely Mycenae, Tiryns and Midea existed at a maximum distance of 20 km of each other.[755] There

group of built tombs has been associated with the settlement at Pefkakia. All these tombs were discovered within a distance of a few hundred metres of their respective settlement something to be expected if we follow the general rule, established by Cavanagh & Mee (1998: 61). In their comprehensive study of LH III A-B mortuary practises they suggest that LH III A-B cemeteries were typically located several hundred metres from their respective settlements. The association of settlements with tombs and cemeteries and the mortuary practises in general will be discussed below.

[754] A combination of archaeological (Blegen & Lang 1958: 175-191, Blegen & Rawson 1966, Blegen et al. 1973, Lang 1969) and textual evidence has allowed the reconstruction of the operation of the Mycenaean palatial centre of Pylos and the extent of its political control (Chadwick 1987, Shelmerdine & Palaima 1984, Shelmerdine 1987: 557-568, Bennet 1995, Bendall 2007). Pylos controlled an area of approximately 2000 km^2. This area extended E from Pylos to the foothills of Mt. Taygetos and N at least as far as Kyparissia (Wilson 1977: 67-125, Bennet 1995: 587-602; 1999: 139-142; 2007: 29-39, Bennet & Shelmerdine 2001: 135-140). The results of two extensive surveys namely, the University of Minnesota Mycenaean Expedition (UMME) (McDonald & Rapp 1972) and the Pylos Regional Archaeological Project (PRAP) (Davis 1998; 2004: 22-35, Davis et al. 1997: 391-494, Zangger et al. 1997: 549-641) in combination with the textual evidence have been used as basis for the reconstruction of the economic and socio-political organisation of the polity of Pylos. The evidence demonstrates the existence of two major districts within the polity in its final phase and the topographic evidence suggests that the boundary between the two districts was Mt. Aigaleon. The Linear B terminology for these two districts – 'this-side-of-Aigaleon' and 'beyond-Aigaleon' (or the Hither and Further provinces respectively)– strongly suggest that Pylos had extended its political control to the Messenian Valley in the E (Bennet 1995: 587-602; 1999: 139-142). Within its polity, Pylos controlled a number of smaller settlements through a network of roads (Hope Simpson & Hagel 2006: 161). The recent discoveries at Iklaina (Cosmopoulos 2006: 205-228, Shelmerdine 2011: 251-256; 2012: 75-78) in Messenia have added considerably to our knowledge for the political organisation of the Pylian kingdom. Pylos' territorial expansion to the 'Hither' and 'Further' province and consequent predominance in Messenia might have come as a result of competing regional centres for power. The discovery of Iklaina demonstrates eloquently that what previously was thought as small regional centres/settlements (or at least some of them) might have actually been 'a micrography' of the larger palatial administrative centres displaying features until recently thought to have been a monopoly of the larger Mycenaean palatial centres such as, Linear B documents, monumental architecture and frescoes.

[755] Tiryns and Midea are of smaller size (18 ha), while Mycenae occupies an area of approximately 40 ha (Whitelaw 2001: 29, fig. 2.10). Tiryns and Midea are situated at a distance of few km of each other, while Mycenae is at a distance of 18 km. Mycenae and Tiryns have been identified as Mycenaean palatial centres with 'Cyclopean' fortifications, monumental architecture and Linear B documents. Midea has also yielded monumental fortifications and architecture as well as Linear B documents. These Mycenaean centres had a number of smaller satellite settlements and were connected through a system of roads. Galaty and Parkinson (2007: 2, fig. 1.1) separate Mycenae and Tiryns as two different Mycenaean polities, while Cherry & Davis (2001: 141-159) suggest that Tiryns might have actually been under the control of Mycenae and acted as its harbour site. Pullen & Tartaron

are, however, notable differences between the two regions, such as the lack of fortification and the very close proximity of the settlements in the Pagasetic Gulf (all located within a radius of 3-5km of each other). A further factor to be considered is their similar size (8-12 ha). Mycenae, Tiryns and Midea, on the other hand, were all fortified and controlled several smaller satellite settlements. Mycenae occupied an area of 40 ha (almost twice the size of Tiryns and Midea) and was located at approximately 18-20 km from the other two sites. It is possible that Tiryns and Midea were smaller regional centres under Mycenae's sphere of influence.[756]

The question that arises here is whether this specific settlement pattern in the area of Volos indicates a different political organisation. Before we attempt to answer this question, we should take under consideration the local variations in political organisation and different relations that might have existed between ruling elites within and between different Mycenaean polities. For example, Pylos appears to have concentrated most of its efforts towards a territorial expansion that indicates a need to stabilise or legitimise its power in Messenia and seems to be lagging back in the international commerce of the period. Furthermore, in Messenia and the Argolid there is a clearer hierarchy between sites, which corresponds with their size as well. Mycenae, on the other hand, appears to have had the lead in international commerce as the number of Near Eastern imports found there suggests.

In contrast, in Thessaly the evidence is still limited and especially in the region of Volos it is not clear whether there existed a hierarchy between the Mycenaean centres. The evidence

(2007: 146-158) place Mycenae's sphere of influence even further in the region of Corinthia. If Mycenae's size (40 ha) is taken under consideration the hypothesis that Mycenae had such a wide sphere of influence seems possible. Furthermore, Mycenae located inland and away from the sea, would have controlled Tiryns which provided an outlet to the Aegean. Mycenae would have controlled thus the commerce with the Aegean and the Near East as the number of Near Eastern imports found in Mycenae suggests (Cline 1994, 2007: 190-200). For surveys examining the Argolid and Corinthia during the Mycenaean period see: Weisshaar et al. 1990, Zangger 1993; 1994: 189-212, Mee 1999: 67-79, Mee & Forbes 1997, Jameson et al. 1994, Wright 1990: 345-357; 2004c: 114-131, Tartaron et al. 2006: 453-523, Rutter 2003: 75-83, Morgan 1999, Davis 2004: 22-35, Blegen 1928, Voutsaki 1995: 55-64.

[756] It should be stressed that the reconstruction of the settlement patterns and the political organisation for Messenia is aided by extensive Linear B archives while for the region of Thessaly the Linear B evidence is limited so all attempts of a reconstruction are primarily based on the archaeological evidence.

suggests that Pefkakia was a settlement and not an administrative centre like Kastro-Palaia and Dimini. It has been proposed that Pefkakia was the harbour of Dimini, due to their closer proximity. So far, no harbour installations have been discovered in connection with Pefkakia or any of the other two sites in the Pagasetic Gulf. LBA harbour installations are generally rare in the Aegean and it has been proposed that a sheltered bay, especially adjacent to a settlement would have sufficed in most instances.[757] The close proximity of Kastro, Dimini and Pefkakia to the sea and the protected nature of the head of the Pagasetic Gulf makes more likely the hypothesis that all the sites participated equally in seafaring.

The use of Linear B in Kastro and Dimini suggests that these two sites were Mycenaean administrative centres.[758] Furthermore, the architectural plan and monumentality of Megaron A and B in Dimini finds parallels in that of other Mycenaean palatial centres such as Pylos, Mycenae and Tiryns.[759]

Since the archaeological evidence to date does not permit the reconstruction of a clear hierarchy between these sites a suggestion could be that a heterarchy existed between the centres in the Pagasetic Gulf and especially between Dimini and Kastro as both appear to be administrative centres.[760] It is possible that the ruling elites of Kastro and Dimini co-existed and concentrated

[757] For LBA harbours and seafaring see: Shaw 1990: 420-436, Chryssoulaki 2005: 77-90, Hope-Simpson & Hagel 2006: 210-212, Ward 2010: 149-160.
[758] Kastro is, so far, the only site in Thessaly that has produced Linear B tablets. One of these tablets bears part of a text that most probably refers to the manufacture of small shafts and head-bands and finds parallels in Linear B documents from Pylos and Knossos. For Linear B tablets from Kastro, see: Stamatopoulou 2010-2011: 73-84, Skafida et al. 2012: 55-73. For small inscriptions of the Linear B script on objects from Dimini, see: Adrimi-Sismani & Godart 2005: 47-69. For incised symbols (possibly the letter 'KA' of the Linear B script) on the lintel of the tholos tomb at Kazanaki, see: Adrimi-Sismani & Alexandrou 2009: 133-149.
[759] A comprehensive architectural plan is, so far, available only for the settlement at Dimini. No architectural plan is available for the settlement at Pefkakia, since the research is still on going. A simple plan of the old excavation of Theocharis in Kastro was published in 1956. The plan included only the small area excavated by Theocharis, namely a single building of the Megaron type. There is no architectural plan for the entire settlement at Kastro, since the area is densely populated. Small scale rescue excavations conducted in various locations on and around the area of Kastro, however, have contributed in defining the limits of the Mycenaean settlement. The research is still on going at Kastro and more precise plans will soon be available. Furthermore, the material culture displayed by Kastro and Dimini does not make any hierarchical association easy.
[760] For differences between hierarchy and heterarchy, see: Crumley 1995: 1-5, Schoep & Knappett 2004: 21-37, Small 2007: 47-53, Pantou 2010.

their efforts not in territorial expansion but for example in commerce as a considerable number of imports suggests. These local elites would have established and legitimised their power by organising religious festivals and feasting ceremonies, as the large number of kylikes and cups found in Megaron B in Dimini suggests.[761]

An alternative theory could be that all these three sites formed a single big site with administrative, religious and industrial functions 'dispersed' between Kastro, Dimini and Pefkakia respectively.[762] A closer look at Dimini suggests that although an important site it is difficult to be considered as a Mycenaean administrative centre since no Linear B archives have been found here so far. Another factor to consider is the difference in architectural techniques used in Dimini and Kastro. Kastro would have been a two-storey building that would have easily supported living quarters, while the two Megara at Dimini would not have that ability. Furthermore, the two Megara at Dimini with Megaron A equipped with many workshops and great storage capacity and Megaron B been completely dedicated to religion and feasting recalls the religious centre at Mycenae where a place used as temple is located close to workshops. It is possible to suggest that perhaps Kastro was the administrative centre where the Linear B archive also was discovered, Dimini acted as a religious centre. Finally, industrial activities took place at Pefkakia since a purple dye workshop was discovered there. These three sites would create thus a large palatial centre with different foci for administration, religion and industrial zones. This site would have possibly extended its power in the Mycenaean period over the fertile Almiros and Sourpi plains where no other centre of power has been located so far except that at Pteleos, which was most probably a second-tier site as it

[761] A large deposit of kylikes and cups has also been found in Kastro and it has been associated by Theocharis with feasting activities. For feasting in Mycenaean society, see: Wright 2004b: 13-58, Stocker & Davis 2004: 59-75, Dabney et al 2004: 77-95. For courts and squares in Mycenaean towns and their function in ceremonies, see Cavanagh 2001: 119-134.
[762] Pantou 2010.

does not have a palace, in the southern tip of Sourpi plain. Further research is needed to understand better the political organisation of the centres at the Bay of Volos.

Another important consideration is what was the connection between Dimini and Kastro and the Mycenaean settlement of Velestino, located inland, N of the Pagasetic Gulf. The settlement at Velestino occupied an area of 20 ha during the LBA, twice the size of the other two settlements.[763] Is it possible that we have here a model like that in the Argolid? The archaeological evidence, however, does not allow for such a hypothesis. Velestino was prominent and exerted its power over a large area from the PG/G period onwards. It is not clear though that this was the case in the Mycenaean period. So far, no evidence supports the existence of an administrative centre in Velestino. The material evidence points towards the existence of a large settlement in Velestino which most probably had Aerino as a satellite settlement. It is not clear whether the smaller settlements around Lake Karla (Koryphoula, Tsigenina etc.) were under the influence of Velestino, which seems the most likely hypothesis, or if they were associated with another centre, possibly one located at Petra. Since the fortifications in Petra are not securely dated the later scenario cannot be supported.

The settlement patterns observed in the rest of Thessaly are that of small, unfortified settlements located around one more prominent in size settlement as it is the case in Larissa, Elasson, Trikala, Pharsala the Almiros and Sourpi plains. In Karditsa, there appear to be at least three centres of power namely, Palamas, Georgiko and Rachoula where an impressive tholos tomb was built. Again, these centres most probably controlled several smaller settlements located close to them. Since the information at present is very limited this reconstruction is only theoretical and more research is needed in order to confirm this.

[763] Arachoviti 2000: 355-361.

The settlement pattern observed in almost all the areas in Thessaly, namely the concentration of a large number of small unfortified settlements around one or more centres of power may also be found in the region of Corinthia.[764] The fact that almost all of the Mycenaean settlements in Thessaly are unfortified and continue to be inhabited from the MH period onwards shows a remarkable degree of enduring stability and continuity. A feature also revealed in the mortuary practices.

The evidence of settlement patterns for the Early Iron Age is limited to six sites, five of which date to both periods and display an incredible degree of continuity as they seem to be occupied without a break. They include Kastro Volou, Velestino, Aerino, Larisa and Pharsala.

Interesting is the new site at Kephalosi and though the available evidence is limited, we may envisage an organisation of dispersed households akin to that of Velestino. The architectural plan of the building there resembles that of Lefkandi, Oropos, Eretria and Nichoria.[765] The emergence of a most probably substantial settlement at Kephalosi during the EIA is not accidental and heralds the emergence of a new centre of power at an area that in the LH period had no major centres and was most probably under the control of the palatial centre at Volos Bay. After the collapse of the Mycenaean palaces and in Thessaly in particular of the violent destruction of the Mycenaean palace at Kastro, the workshops and religious centre at Dimini, and the abandonment of the industrial installation at Pefkakia, followed a period where new centres such as Kephalosi emerge replacing Mycenaean centres of power. Even though, Kastro survives and is still important in this period the Mycenaean centre of power at Volos Bay has lost its former splendour. In the EIA Kastro remains prosperous with its participation in the Euboean koine but the site will gradually loose its prominence and later in the archaic period comes under the control of Velestino. The latter develops into an important archaic and

[764] For settlement patterns in Corinthia, see: Pullen & Tartaron 2007: 146-158.
[765] Mazarakis Ainian 2004: 369-389; Verdan 2013; McDonald et al. 1983.

classical centre. Kastro, however, never truly loses its importance, as it remained throughout its history the main harbour of Thessaly.

In the EIA, what the settlement patterns and the emergence of the sanctuaries suggest is the operation of two inland routes: one connecting Volos with Velestino and Larisa and a second one, connecting the Almiros and Sourpi plains with Pharsala, Larisa and the region of Elasson. Along these routes we observe the creation of important settlements, as well as sanctuaries such as those at Velestino and Philia.

6.1.3 LBA AND EIA THESSALIAN SANCTUARIES

Two LH and seven PG-G Thessalian sites have so far yielded evidence for cult activity, while LH material has also been recovered from three of the later PG-G Thessalian sanctuaries. The main evidence for cult during the LH period comes from Dimini where Megaron B and House K have yielded evidence for elite and communal cult activities respectively, while a LH IIIA2 rural sanctuary has also been reported at Mavromati Karditsas. The sanctuaries at House K at Dimini and Mavromati share some similarities suggesting close links between the regions of Magnesia and Karditsa. LH material has also been reported from the later sanctuaries at Velestino, Philia and Mikrothives. However, it remains unclear whether cult in these sanctuaries had such a long history. The LH finds could in all three cases have come from either a domestic or in the case of Mikrothives perhaps from a mortuary context since the small finds as described by Arvanitopoulos[766] share similarities with those from the large tholos tombs at the Bay of Volos and Karditsa.

During the PG-G period, cult buildings were not common in Thessaly and religious practices were apparently conducted in the open air, in groves or perhaps in small ‘oikoi’ made of perishable materials. Notable exceptions are the LG sanctuaries at Neochoraki in Magnesia and

[766] Arvanitopoulos 1907: 168-169.

Gonnoi in Larisa. The extremely strategic location of these two early Thessalian temples might indicate a need to demarcate important south and north routes in a period (LG-EA) when new important centres immerge as it is suggested by the rich cemeteries of Voulokaliva, Pharsala and Agios Georgios. The most securely dated evidence for cult in the EIA comes from the extra-urban sanctuaries at Velestino and Philia, where deposits with hundreds of votive offerings and pottery attest to the PG-G origin of both cults, while an 8th century layer with hundreds of bronze votives was found beneath the urban sanctuary of Athena Polias on the acropolis of ancient Phthiotic Thebes (Mikrothives Magnesias).

At Velestino cult probably started during the PG-G period with the dedication of votives on an altar located among the graves of the PG-G cemetery underlying the later sanctuary suggesting perhaps and ancestral origin for the cult. A change from an open-air cult to a temple took place later in the Archaic period. The sanctuary at Philia retained its open-air character from the PG-EG/MG period, when the first offerings date, until the 5th century BC and probably included a sacred grove and/or possibly an 'oikos' made of perishable materials. Most of the finds were discovered in an extensive ash layer the characteristics of which indicate the existence of a grove where all the votives were displayed. The sanctuary at Philia attained a federal status from the 5th c BC and the cult of Itonia had clear military overtones from at least the 5th c BC connected with the legendary invasion of the Thessalians into the territory and the military confrontation between them and the previous population. At Velestino and Philia the vast majority of finds date between the 8th and 6th century BC and consist of small, mostly locally-made, bronze objects, indicating the existence of a prosperous bronze working industry. Only a very small percentage (c. 2%) of the 8th-7th century BC metal votives are non-Thessalian in style and of this half are Macedonian or Balkan, while the rest range from Italian to Egyptian in both sanctuaries, suggesting that these were sanctuaries visited primarily by Thessalians.

Their strategic location along the two main routes indicated by the spread of settlement and cemeteries shows their importance during the EIA.

The sanctuary of Artemis Iolkia at Kastro Volou demonstrates the enduring importance of a G-A cult, which was later in the Hellenistic period exploited for the promotion of a new polis identity by forging links with the past.[767] The tholos at Georgiko Karditsas where a sanctuary dedicated to the cult of the local hero Aiatos presents the case of a LH burial site that later was used as sanctuary. The later use of this tholos is a good example of a conscious manipulation of the past to support and strengthen political and/or territorial claims since the hero Aiatos is associated with the invasion of the Thessalians into the territory.[768] These two later sanctuaries demonstrate how cults were used to support political and territorial claims.

6.1.4 BURIALS AND MORTUARY PRACTICES IN LBA AND EIA THESSALY

The burial customs in Thessaly during the Mycenaean period display a wide variety. It has been noted by some scholars that the predominant rite in Thessaly is that of single burials in cist tombs and pit graves. However, Thessaly had also large and small tholos tombs and chamber tombs.[769] The fact that most of the tholos tombs appear to be concentrated in E Thessaly might be a bias of the research since a considerable number of excavations have taken place in relation to major construction works in this area.

Most of the tholoi found in Thessaly are of a small size, with an average chamber area of a diameter c. 3.53m. Only six tholos tombs can be considered large, with an average chamber area of a diameter c. 8.50m. Four of these tholos tombs were located in the area of Volos, while

[767] Kravaritou 2011: 119-120.
[768] Mili 2015: 226-227, 255.
[769] Eder 2009: 115. Most LH IIIA-B cemeteries in the S Greek Mainland were located in some distance from their associated settlements, typically several hundred metres (Cavanagh & Mee 1998: 61). Following this rule we may be able to reconstruct more accuretly the settlement patterns in Thessaly, since in most cases the evidence for burials is more than that of settlements. The existance of a tholos tomb or a cemetery might indicate the existance of a settlement that has not yet been identified, as it is the case for the area around lake Boibe.

the fifth is located in Georgiko in Karditsa.[770] The pottery found in all of the tholos tombs has a clear Mycenaean character.[771] It is interesting to note that Thessaly has yielded the largest number of tholos tombs outside Messenia (approximately 40). It is noticeable that the largest Thessalian tholos tombs are comparable to size with those found in Messenia.[772]

In the area around the Pagasetic Gulf, four large tholoi with a diameter of around 8m are known, so far. These are the 'Lamiospito' and 'Toumba' in Dimini[773], the tomb found in Kapakli[774] and the tomb discovered in Kazanaki.[775] All these were built with local schist. The earlier ones have a cruder appearance, although some care was taken to use flat stones in their construction. Their lintels are relatively thin and unworked. The stomion of the tholos tombs in Kapakli and Kazanaki is very long and is crowned with a relieving triangle.[776] The 'Toumba' tholos finds parallels in Attica and the Argolid as several of its architectural features suggest a special connection with S Greece.[777]

The other large tholos tomb is in Georgiko in Karditsa. The tomb was built with limestone; a material not found in the immediate vicinity of the tomb and that had to be transported from some distance.[778] The chamber is built of small flat stones. The stomion and dromos were long and tall. The stomion is covered by five or six huge lintel blocks and a relieving triangle may

[770] Galanakis 2008: 76. The date of the Georgiko tholos tomb is not clear. Due to architectural similarities with the Kapakli tholos a LH IIB/IIIA1 date can be proposed here as well.
[771] Mountjoy 1999: 818-857.
[772] Pantou 2010: 387, fig. 4.
[773] Tsountas 1908: 125-156. The Lamiospito tholos dates to the LH IIIA1, while the Toumba tholos dates slightly later in the LH IIIA2.
[774] Kourouniotis 1906: 212-240. The Kapakli tholos dates to the LH IIB/IIIA1.
[775] Adrimi-Sismani & Alexandrou 2009:133-149. The Kazanaki tholos dates to the LH IIIA1.
[776] Galanakis 2008: 78. The arrangement of slabs in the façade of the Kazanaki tholos tomb finds a parallel in the Marathon tholos in Attica. Seven incised symbols on the vertical slab over the lintel and the horizontal slab crowning the triangle have been interpreted by Adrimi-Sismani as the Linear B sign '*KA*' but these marks might possibly correspond to the seven burials during the main use of the tomb (Galanakis 2008: 79).
[777] Galanakis 2008: 80.
[778] For quarries located 5-10 km W-NW of Georgiko, see: Higgins & Higgins 1996: 89, fig. 9.1. See also Galanakis 2008.

have been carried by all lintel blocks.[779] The prominence of Georgiko in its landscape is noteworthy. The tomb is covered by a mound, which is visible from a long distance. The architecture and prominence of this tomb in the landscape point to the existence of an important regional centre. The same is true for the tholos tomb at Rachoula, where the tholos is not so well preserved.

Small tholos tombs with a diameter between 3 and 5m are much more popular and continue to be built and used also in the EIA. Some small tholoi are located upland such as Agios Antonios and Anavra, while others are located close to the sea (Pteleos and Agioi Theodoroi). Most of the small tholos are located on the E Thessalian plain (Aerino and Marmariani). In some instances, these small tholos tombs form cemeteries (Aerino and Koryphoula) which find parallels to similar clusters of tombs in the S Greek mainland and Crete.[780] These tombs are crudely built with local small flat stones. Most of these tombs are situated on flat ground and lack a dromos. They have a low stomion and no relieving triangle. Monolithic slabs are placed in the stomion as doorjambs.[781]

Small chamber tombs are generally rare but have been found in several sites such as Kato Mavrolophos, Velestino and Mega Monastiri.[782] The pottery found in these chamber tombs is again exclusively Mycenaean. The shapes and decoration are very similar to those of Mycenaean vases found in the south.[783]

The tholos and chamber tombs were used for multiple burials and were probably family tombs. The most popular burial rite, however, is single inhumations in cist graves.

[779] Galanakis 2008: 81. This feature would have made this tomb the most impressive and technically sophisticated in the Aegean.
[780] Galanakis 2008: 82.
[781] Galanakis 2008: 83.
[782] Malakasioti 1992: 267-271, Adrimi-Sismani 2007: 173.
[783] Mountjoy 1999: 818-857.

The difference between cist and pit grave cemeteries and the above mentioned tombs is very pronounced not only in mortuary practices (single and multiple burials) but especially with respect to the grave offerings representing differences in wealth.[784] Cist tombs contained two or three vases and very few personal ornaments, while chamber tombs and tholos tombs were richly furnished with gold jewellery that has many similarities with examples from Mycenaean tombs in the south. All these differences may suggest the existence of a pronounced social hierarchy.

The cist tomb cemetery of Nea Ionia in Volos (LH IIB-IIIA1) is the best case-study. Here the predominant rite is single inhumation. Most of the Mycenaean burials here received almost exclusively Mycenaean vessels. The alabastron and the piriform jar are the two most popular shapes offered as burial gifts. Matt-painted vases and other hand-made pots form a rare exception in this general rule.[785] However, the preference in the alabastron is a Thessalian phenomenon also observed in Phthiotis and Euboea.[786] We should also stress here the unpopularity of the stirrup jar, which in LH IIIA-C becomes commonplace in central and southern Greece and Crete. In Thessaly the stirrup jar is mainly attested in SE sites mostly (e.g. Pteleos, Mega Monastiri, Aerino, Kazanaki, Dimini and Kastro) forming thus a discrepancy and perhaps showing that these sites had more contacts with the southern Greece and Crete.

In LBA, inhumation is the most popular rite. A few examples of partial cremation have also been recorded (e.g. tholos tomb at Kazanaki). It is very difficult to discuss gender differentiation because very few analyses of skeletal material are available. Only from the tomb in Kazanaki we have osteological analysis. There we have multiple burials of both sexes and all ages in one tholos tomb.[787]

[784] Eder 2009: 115, Laffineur 2003: 81-85.
[785] Batziou-Eustathiou 1985:17-70.
[786] Mountjoy 1999: 818-857.
[787] Papathanasiou 2009: 151-161.

Even though limited direct evidence for social hierarchy can be inferred from the evidence from EIA settlements and sanctuaries the use of tholoi and tumuli may possibly be interpreted as indicating a social hierarchy as was the case during the later archaic period when elite families in order to support their claims tried to forge links with the past by choosing to be buried in tholos tombs a tradition that starts as early as the PG period. EIA Thessalian elites would have supported their claims, consolidated and propagate their power through the conscious manipulation of the past, kinship and ancestral ties by choosing to be buried in tholos tombs in some cases located close to LH tholos tombs. Another important feature of tholoi is their potential use as territorial markers located in key sites with strategic importance close to land passes and/or roads or dominating large flat expanses. The case of the tholoi at Nea Anchialos and Argyropouli, having been created to house primary cremations and in the case of Nea Anchialos also furnished with a northern and near eastern import are exceptional and might indicate the existence of local elites.

The conscious manipulation of the past and the importance the kinship and ancestral ties played in EIA Thessalian society apart from burials is also visible in the establishment of the hero cult of Aiatos outside the LH tholos tomb at Georgiko. The gradual transformation of the EIA cemetery at the area of the later sanctuary at Velestino with the addition of what appears to have been an altar among the graves to a place of cult might also be interpreted similarly.

Finally, tumuli demonstrate the importance that kinship and ancestral ties played in EIA Thessalian society and how these were conscious manipulation by local elites in order to support their claims. It might have been a further policy in highlighting social hierarchy in EIA Thessalian society. The grave offerings and burial rites practised at the Agios Georgios and Voulokaliva tumuli demonstrate the military prowess of local elite families and/or kin groups and their ability to maintain networks of regional and inter-regional contacts. The manipulation of such resources suggests the rise of local elite families that were later overshadowed by those

at Pharsala and Larisa. Concluding, it could be suggested that EIA Thessalian elites 'competed' through the creation of new and/or the preservation of already existing regional and inter-regional networks. At least in the case of Velestino such agenda was reinforced with the maintenance of a thriving local metal working industry from the 8th c BC onwards and most importantly with the use of tholoi and tumuli tombs for the burial of local elite families. In the use of tholoi and tumuli we may also see the conscious manipulation of the past and the ancestral and kinship ties that helped EIA Thessalian elites consolidate and propagate their power.

6.2 CONCLUSION

Even though there are several new discoveries, the LH and PG-G periods in Thessaly are still poorly understood. Several important sites throughout Thessaly require investigation to evaluate further their significance, and future research may also confirm whether there were more Mycenaean palatial centres in the regions of Larisa, Trikala and Karditsa.

Situated in the heart of the Greek mainland, Thessaly had the unique advantage of relatively easy access to both northern and southern Greek Mainland and the Aegean. This location favoured the creation of networks of connections as well as trade from as early as the MH period if not earlier. The availability of large expanses of fertile land suitable for agriculture and pasturing as well as other resources such as metals would have created a wealth and 'self-sufficiency' rarely encountered in southern Greek Mainland sites. During the PG-G period Thessaly's limits extended into modern north Phthiotis as it is suggested by the use of tholoi and similarities in pottery production.

The LH was a flourishing period for Thessaly as the large number of settlements indicates. Several LH settlements had a clear urban organisation with buildings lining a wide road and/or

arranged around open communal spaces with wells displaying various levels of central planning and social ranking, while their economy was based on agriculture, animal breading, craft production and trade with other sites in the Greek mainland, the Aegean and the Near East. The absence or very limited presence of fortifications might suggest that this was a period of relative stability. During this period most of the pottery was locally produced, as was the case for the PG-G period, as it is suggested by the presence of kilns in several sites. All characteristic LH pottery shapes and figurines are present throughout Thessaly and the same as everywhere else in the Mycenaean world. A preference to certain shapes as well as imports indicate networks of connections with both northern and southern sites. Of course, the Thessalian LH pottery had its own local character often visible in the preference of certain shapes and decorative motifs and lingering MH traditions.

Most archaeological evidence comes from coastal Thessaly and especially from the bay of Volos where three important LH settlements existed. The evidence suggests that Pefkakia was a settlement with a workshop for purple dye,[788] while it has been proposed that both Kastro and Dimini were Mycenaean palatial administrative centres.[789] These three sites most probably formed one political unit, a Mycenaean polity, that maintained full control of the Pagasetic Gulf and possibly also of the Almiros and Sourpi plains, where no other large Mycenaean settlement has been recorded so far. A substantial settlement appears at Kephalosi later during the PG-G period. Both hierarchical and heterarchical model have been proposed to explain the political organisation of the settlements at Volos Bay. Vasiliki Adrimi-Sismani has suggested that a hierarchy existed between the three sites with Dimini being the centre of power.[790] Recent

[788] Batziou-Eustathiou 2015a: 51-85.
[789] Adrimi-Sismani 2004-2005: 1-54; Skafida et al. 2012b: 55-74.
[790] Adrimi-Sismani 2007: 174-175.

finds, however, indicate that if there was a hierarchy, Kastro would be the most likely candidate for an administrative centre.[791]

Similarities in the material record of Kastro, Dimini and Pefkakia, however, combined with their proximity to each other, lack of fortification and smaller satellite settlements, as well as similar size hinder the identification of a clear hierarchy between them and have made Panagiota Pantou suggest that a heterarchy existed between them instead, stressing their similar status and overlapping functions.[792] It is possible to imagine that the ruling elites of Volos Bay co-existed and concentrated their efforts perhaps not in territorial expansion but for example in commerce as a considerable number of imports suggests. These local elites would have established and legitimised their power by organising religious festivals and communal feasting, as it is suggested by the large quantities of kylikes and cups found at both sites, as well as by the creation of large and richly furnished tholos tombs. Another suggestion could be that these settlements formed a single palatial centre with the administrative, religious and industrial functions 'dispersed' between Kastro, Dimini and Pefkakia respectively. Although, further research is needed it is possible to suggest that the form of political organisation between these sites changed through time.

The settlement pattern observed in other areas of Thessaly during the LH period, although with variations corresponding most probably to local circumstances, appears to be that of many smaller and medium sized unfortified settlements concentrated around one or more centres of power. A similar settlement pattern can be found in the region of Corinthia in the south Greek mainland.[793] Five LH Thessalian sites display an incredible degree of continuity from the LH

[791] Skafida et al. 2012b: 55-74.
[792] Pantou 2010: 396.
[793] Pullen and Tartaron 2007: 146-158.

to the PG-G period. Interestingly, these sites are among the twenty-five sites that appear to continue from the MH III-LH I into the LH II and/or LH III period.[794] Kastro, Velestino and Larisa also feature prominently among Catherine Morgan's 'big sites',[795] Aerino most probably was a satellite to Velestino, while Pharsala was another important site.

Kastro, having yielded evidence from both settlement and cemetery throughout the LH and PG-G period, presents a unique case not only due to the degree of continuity that it displays but most importantly because it is one of the few sites that appears to have been an important Mycenaean palatial administrative centre that despite suffering destruction ca. 1200 BC and losing its monumental character continues without break into the next period. Kastro appears to gradually lose its LH prominence and sometime after the PG-G period it comes under the control of the settlement at Velestino which, together with Larisa and Pharsala, appear to gradually gain prominence. In later times these three centres are ruled by powerful aristocratic families that play a central part in Thessalian history,[796] while all four settlements at Kastro, Velestino, Larisa and Pharsala rank among the later Thessalian polis.[797]

Other sites, such as Kephalosi appear to date mainly to the PG-G period. Recent discoveries along the Peneios River and most importantly Asvestaria firmly place the limits of the Mycenaean world further northwest. Finally, it may be suggested that perhaps in the region of Karditsa we can detect the clearest gap between the LH and PG-G period as very few sites have yielded material dated to both periods and in most cases a continuity such as that evinced in other eastern sites has not so far been detected here. The LH fortification wall at Palamas and

[794] Maran 1992; Agnousiotis 2008; Tsiouka and Agnousiotis 2015: 95-104; Vaiopoulou 2015a: 205-220; 2015b: 175-184.
[795] Morgan 2003: 85-106.
[796] Stamatopoulou 2007: 309-341.
[797] Decourt et al. 2004: 676-731.

strategically placed settlements at western Karditsa combined with the later cult at the Georgiko tholos, which supported territorial claims, and the military overtones attached later to the cult of Athena Itonia at Philia may suggest unrest and/or population movement that might have taken place sometime during the LH and/or PG-G period.[798]

Thessaly was and still is considered by some scholars, as part of the periphery of the Mycenaean world. Feuer has suggested a theoretical model to explain the position of Thessaly in the Mycenaean world.[799] He divides the Mycenaean world in four geographical zones according to the degree of integration of Mycenaean characteristics. The 'Core' of the Mycenaean world is in the Peloponnese and the southern mainland Greece up to Boeotia, while the coastal area around the Pagasetic Gulf is considered as the 'Inner Border'. Finally, the region the lies beyond the Peneios River is the 'Frontier'. These zones are defined according to the presence or absence of certain characteristic features such as, certain types of buildings and/or graves frescoes, Linear B scripts, luxury goods, jewellery, weapons, seal stones, pottery and figurines. This model gives a simple picture of the Mycenaean world but has problems that have already been recognised by other scholars, as well as by Feuer himself. Recent discoveries, however, in the south Greek mainland, Thessaly, Pieria, Macedonia and Epirus create a different picture leading the scholars first to place the 'northern' frontier of the Mycenaean world farther north, in the Olympos region and secondly to recognise the various and complex models of organisation displayed by Mycenaean polities.[800] The evidence

[798] Mili 2015: 226-227, 255.
[799] Feuer 1983; 2016: 355-383.
[800] For new discoveries in the Peloponnese (New results from the Survey in Corinthia, and the sites of Ayios Vasileios in Laconia, Iklaina in Messenia and Kakovatos in Elis respectively), see: Tartaron 2010: 161-183, Aravantinos & Vasilogamvrou 2012: 41-54, Cosmopoulos 2006: 205-228, Shelmerdine 2011: 251-256; 2012: 75-78, Morgan 2009-2010b: 51-52. For a comprehensive summary for finds from Thessaly, see: Eder 2009: 113-122; Gounaris 2009: 163-194. For new discoveries in the Olympos region, see: Poulaki-Padermali 2006: 115-129; Koulidou 2015: 105-112. For evidence from Epirus, see: Tartaron 2004. For a comparison of BA settlement patterns in N Greece, see: Andreou 2001: 160-173. The settlement patterns observed in N Greece during the BA are different from those in S Greek mainland. The 'small scale societies' of the N emphasized equality and

presented here makes clear that Thessaly was part of the Mycenaean world and not in its periphery. The evidence coming from the settlements and burials throughout Thessaly is anything but peripheral or provincial.

Even though the collapse of the Mycenaean palaces around 1200 BC appears to have had a great impact on Thessaly, as it is suggested by the very small number of LH IIIC and SubMyc sites, the PG-G period appears to be rather stable. Settlement and cemeteries of various sizes co-existed alongside local and regional sanctuaries. The degree of continuity displayed by sites in the wider area of the Pagasetic Gulf may indicate that the maintenance of old and the creation of new networks of communications played a pivotal role in helping these communities overcome the 1200 BC crisis faster. While this area was part of the Euboean '*koine*', which originated in overlapping networks of communication formed as early as the LH IIIC-middle period, the distribution pattern of tumuli might indicate the co-existence of another network encompassing sites in the Almiros plain, Pharsala, Agios Georgios, Elasson, Euboean and Macedonia. During the PG-G period limited contacts with the Aegean, Cyprus and the Near East are attested through few imports from coastal sites and the sanctuaries at Velestino and Philia. Most probably, elite families would have controlled the contact networks during both the LH and PG-G period as was the case in the later Archaic period.

Social hierarchy is visible in several LH Thessalian settlements and perhaps in the two sanctuaries at Dimini as well as in the large and richly furnished tholoi especially in Volos Bay and west Karditsa, while smaller LH tholoi and chamber tombs might have been reserved in some cases for members of an elite with lower status. Although PG-G Thessalian settlements

residence in small village sites or hamlets and lacked any specialized political mechanism and institutions or the organisation of S urban centres.

and sanctuaries provide little direct evidence for social hierarchy, the use of tholoi can be interpreted as marking a higher stratum of society.

PG-G Thessalian elites appear to have expressed their claims to the ancestral past and propagated their power by choosing to be buried in tholos tombs, in some cases in demonstrative proximity to LH tholos tombs. A particularly clear case for the elite status of the interred is provided by the tholoi at Nea Anchialos and Argyropouli, where exceptional burial rites took place. Another important feature of both LH and PG-G Thessalian tholoi is their potential use as 'territorial markers' located in key sites with strategic importance close to land passes and/or roads or dominating large flat regions. There is also in at least two cases an attempt to link, in terms of visibility, the Neolithic 'magoulas' and the mounds of tholoi in Dimini Magnesias (LBA) and Paliouri Karditsas (EIA). The continued and widespread use of tholoi during the EIA in Thessaly suggests close links with Crete, where a similar phenomenon can be observed.[801] Concerning the tumuli, on the other hand, the grave offerings and burial rites practised at Agios Georgios and Voulokaliva underline the importance of military prowess for local elite families and/or kin groups and the ability to maintain contact networks. It seems plausible that we can detect the rise of local elite families, which were later overshadowed by those at Pharsala and Larisa.

It may be suggested that PG-G Thessalian elites 'competed' through the preservation of existing and the creation of new contact networks, through the control of the local metal-working industry, and, most importantly, using tholoi and tumuli. In the latter we recognize the conscious manipulation of the past and the ancestral and kinship ties that helped emerging PG-G Thessalian elites consolidate their power.

[801] Eaby 2009: 98-105.

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