

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

**Bell & Howell Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA**

UMI[®]
800-521-0600

**IMPORT CONSUMPTION IN THE BRONZE AGE ARGOLID (GREECE):
EFFECTS OF MEDITERRANEAN TRADE ON MYCENAEAN SOCIETY**

by

Bryan Edward Burns

**A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
(Classical Art and Archaeology)
in The University of Michigan
1999**

Doctoral Committee:

**Professor John F. Cherry, Chair
Professor Sharon C. Herbert
Assistant Professor Janet E. Richards
Professor Norman Yoffee**

UMI Number: 9959712

UMI[®]

UMI Microform 9959712

Copyright 2000 by Bell & Howell Information and Learning Company.

**All rights reserved. This microform edition is protected against
unauthorized copying under Title 17, United States Code.**

**Bell & Howell Information and Learning Company
300 North Zeeb Road
P.O. Box 1346
Ann Arbor, MI 48106-1346**

© Bryan Edward Burns 1999
All Rights Reserved

For Mom and Dad.

ACKNOWLEDGMENTS

It is my pleasure to thank so many people for their help and support, beginning with the members of my committee. John Cherry has provided not only the good criticism that I expected, but also friendly council and much needed copy-editing. I appreciate how seriously he has taken the role of advisor. Sharon Herbert, Janet Richards, and Norm Yoffee have offered positive feed-back and encouragement from the beginning of this project. As a group, they have inspired me with their insistence that my work could actually be of interest to those outside the sub-field of Aegean prehistory.

The University of Michigan has provided financial support in the form of a Mellon Dissertation Fellowship (1997-98), a Rackham Predoctoral Fellowship (1998-99), and employment in the Department of Classical Studies. The Interdepartmental Program in Classical Art and Archaeology has provided supplemental research and travel funds and has displayed a true committment funding my graduate studies. I have been fortunate to use the resources of several units of the university, namely the Kelsey Museum of Archaeology, the Department of Classical Studies, and the Harlan Hatcher Graduate Library.

My research in Greece was conducted through the American School of Classical Studies at Athens, whose staff was of immense assistance. Maria Pilali, assistant to the director of the ASCSA, was especially zealous in attaining permits, and my work there was greatly assisted by Bob Bridges, Valia Kapetanaki, Popi Kyriakopoulou, and Nancy Winter. Access to material was granted (and additional information supplied) by K.D. Demakopoulou and E. Zervoudaki (National Museum of Archaeology); E. Spathari and E. Pappi (Nauplion Ephoreia); E.B. French, H. Hughes-Brock, and O.H. Krzyszkowska (Mycenae); Dr. J. Maran, G. Albers, and L. Rhamstorf (Tiryns).

A number of scholars have provided feed-back, references, and friendly support, most notably Brendan Burke, Alexis Castor, John Fischer, Bernard Knapp, Ken Lapatin, Susan Lupack, David Scahill, Cynthia Shelmerdine, Mike Smith, and Jim Wright. Others who have offered advice and interest include Sue Alcock, Sara Forsdyke, Michalis Fotiadis, Traianos Gagos, Laurie Talalay, and Terry Wilfong. Sharing my burden on a more daily basis have been the dissertating Classicists Bob Caldwell, Collin Ganio, Dave Kutzko, Dave Phillips, and Jeremy Taylour. Fellow IPCAA students (dissertators past, present, and future) have provided interest, concern, and food with equal measure; I especially thank Jen Gates, Jeremy Hartnett, Brenda Longfellow, Jane Remple, Dave Stone and Molly Swetnam-Burland. In addition to these friends, Zeuler Lima and Todd Reeser have offered much nurturing support.

Camilla MacKay and I were not able to write the joint dissertation we once dreamed of, but her companionship through every phase of this work has been the next best thing. Kristina Milnor has inspired me throughout my graduate career, though more recently from afar, and on countless occasions has shared my frustration or joy, but never my doubts. Any balance between academic pursuits and normal life that I have been able to maintain in the final year of writing is thanks to Amanda Pringle, who moved to Ann Arbor at just the right time. Finally, I wish to thank my family, who first inspired my interest in other cultures with childhood travels and have continued to share in my pursuits. This includes my brothers, extended family, and neighbors, but above all my parents, to whom this work is dedicated.

TABLE OF CONTENTS

DEDICATION	ii
ACKNOWLEDGMENTS.....	iii
LIST OF ABBREVIATIONS	vii
LIST OF TABLES.....	viii
LIST OF FIGURES.....	ix
LIST OF APPENDICES.....	xii
CHAPTER	
1. ECONOMIC AND IDEOLOGICAL EFFECTS OF MEDITERRANEAN TRADE.....	1
Previous Studies of the Aegean's Foreign Relations	3
Acts of Consumption and the Materialization of Ideology	14
The Present Study	18
2. IMPORTS, ECONOMY, AND SOCIETY IN MYCENAEAN GREECE.....	22
Economic Systems.....	24
Social Relations and Political Structures	29
Ideology and Material Culture.....	36
Long-distance Exchange and Mycenaean Greece	40
The Distribution of Imports in Mainland Greece.....	48
3. SITE HIERARCHY AND IMPORTED ITEMS IN THE LATE BRONZE AGE ARGOLID.....	53
Political Dynamics in the Argolid	54
Imported Items in the LBA Argolid.....	65
Late Helladic III.....	75
4. IMPORT CONSUMPTION AND COMPETITION DURING THE PALATIAL PERIOD.....	84
Settlement Contexts.....	86
Funerary Contexts	101
Funerary Ritual and Ideological Meaning.....	109

5.	IVORY CARVING AND CONSUMPTION.....	115
	The Ivory Trade: Sources, Choices, and Mechanisms	116
	Arrival of Ivory in the Mycenaean Argolid	120
	Use and Esteem of Ivory in the Palatial Period.....	124
	Consumption of Ivory in the LH IIIA-B Argolid.....	132
	Motifs as Messages.....	138
	Control of the Ivory Industry.....	144
6.	GLASS CASTING AND CONSUMPTION.....	147
	Vitreous Materials: Manufacture and Identification	148
	Glass as a Trade Commodity	151
	Development of Mycenaean Glass-working.....	156
	Mycenaean Values of Glass	161
	Consumption of Glass in the LH IIIA-B Argolid.....	163
	Iconography	167
	Strategies in Glass	170
7.	CONCLUSIONS.....	176
	Consumption and Social Agency	177
	Trends in the Evidence	182
	Imports and Collapse.....	187
	Future Directions and Closing Thoughts.....	190
	FIGURES.....	195
	APPENDICES.....	240
	REFERENCES	307

LIST OF ABBREVIATIONS

AA	<i>Archäologischer Anzeiger</i>
AAA	<i>Archaiologika Analekta ex Athenon</i>
Aegaeum	<i>Annales d'archéologie égéenne de l'Université de Liège</i>
AJA	<i>American Journal of Archaeology</i>
ArchEph	<i>Archaiologike Ephemeris</i>
ArchDelt	<i>Archaiologikon Deltion</i>
AthMitt	<i>Mitteilungen des Deutschen Archäologischen Instituts, Athenische Abteilung</i>
BAR	<i>British Archaeological Reports</i>
BCH	<i>Bulletin de correspondance hellénique</i>
BICS	<i>Bulletin of the Institute of Classical Studies</i>
BSA	<i>Annual of the British School at Athens</i>
CMS	<i>Corpus der minoischen und mykenischen Siegel</i>
JHS	<i>Journal of Hellenic Studies</i>
JMA	<i>Journal of Mediterranean Archaeology</i>
OJA	<i>Oxford Journal of Archaeology</i>
OpAth	<i>Opuscula Atheniensi</i>
PCPS	<i>Proceedings of the Cambridge Philological Society</i>
Praktika	<i>Praktika tes en Athenais Archaiologikes Etaireias</i>
PZ	<i>Prähistorische Zeitschrift</i>
SMEA	<i>Studi micenei ed egeo-anatolici</i>
SIMA	<i>Studies in Mediterranean Archaeology</i>

LIST OF TABLES

1.1	Approximate chronology for the Greek Bronze Age.....	2
3.1	Linear B analogies to names in the Belid line	63
3.2	The number of imported items found in LH contexts at Argolid sites	66
3.3	The number of imported items found in LH II contexts at Argolid sites	72
3.4	The number of imported items found in LH III contexts at Argolid sites	76
4.1	Number of imported items found in LH IIIA-B settlement contexts	87
4.2	Number of imported items found in LH IIIA-B funerary contexts.....	105
4.3	Markers of wealth and status in the LH IIIA-B chamber tombs where imported items were found.....	107
5.1	Number of ivory pieces found in LH IIIA-B contexts at Argolid sites ...	133
5.2	Types of ivory pieces found in LH IIIA-B contexts at Argolid sites.....	133
5.3	Motifs preserved on ivory objects found in LH IIIA-B Argolid contexts.....	141
6.1	Number of glass objects found in LH IIIA-B contexts at Argolid sites...	164
6.2	Number of glass objects with motif found in LH IIIA-B contexts at Argolid sites.....	166
6.3	Motifs preserved on glass ornaments found in LH IIIA-B Argolid contexts.....	168
6.4	Motifs preserved on stone molds found at Mycenae	171
7.1	Number of imports, ivory, and glass items from LH IIIA-B contexts....	179
7.2	Number of imports, ivory, and glass items from LH IIIA-B burial contexts.....	186
7.3	Number of imports, ivory, and glass items from LH IIIC contexts.....	189

LIST OF FIGURES

1.1	Locations of Late Bronze Age Mediterranean shipwrecks and extra-Aegean finds of Mycenaean pottery and "Minoan-style" frescoes.....	196
1.2	<i>Orientalia</i> found in LH/LM IIIA-B Aegean contexts and the Uluburun shipwreck: a) percentage by country of origin (after Cline 1994: fig. 22); b) percentage by material; c) percentage by object-type	197
2.1	Major settlements of the Late Bronze Age Aegean	198
2.2	Combined evidence for the Mycenaean palatial economy (after Halstead 1992b: fig. 4).....	199
2.3	Social hierarchy in the Linear B archives (after Kilian 1988b: fig. 1).....	200
2.4	Monochrome faience kylix (after Wace 1954: pl. 19).....	201
2.5	Amenhotep III faience plaque fragment, Myc Exc 68-1000 (after Cline 1990: fig. 1).....	202
2.6	Distribution of imported items in Late Helladic contexts	203
3.1	Reconstructed landscape of the Late Bronze Age Argolid (after Dietz 1991: fig. 83).....	204
3.2	Mycenae area (after Wace 1949: map 2).....	205
3.3	Tiryns area (after Jantzen 1975: fig. 96).....	206
3.4	Excavated areas within the Midea Citadel (after Walberg 1998: plan 3) ..	207
3.5	Late Helladic finds in the city of Argos (after Touchais 1996: fig. 2).....	208
3.6	Late Helladic settlement and tombs of Prosymna (after Blegen 1937: pl. 1).....	209
3.7	Hierarchical map of the Mycenaean settlements in the Argolid (after Kilian 1988b: fig. 3).....	210
3.8	Excavated areas at the site of Asine, with restoration of the interior harbor (after Zangger 1994a: fig. 15).....	211
3.9	The affiliation of sites according to the <i>Iliad's</i> Catalogue of the Ships (after Hope Simpson and Lazenby 1970: map 3).....	212

3.10	Select genealogy of the Belid line according to pseudo-Apollodorus, with names of those who held political power in bold print.....	213
3.11	Sites in the Northeast Peloponnese where imported items have been found in Late Helladic contexts.....	214
3.12	Distribution of sites where imported items have been found among excavated Late Helladic tombs and settlements in the northeast Peloponnese.....	215
3.13	Distribution of imported items in LH IIIA-B Argolid contexts	216
4.1	Structures in the citadel of Mycenae (after Iakovides 1983: plan 4).....	217
4.2	The Citadel House Area at Mycenae (after French 1981a: fig. 1)	218
4.3	The West House Group at Mycenae (after French 1967: fig. 1).....	219
4.4	Tiryns Citadel area (after Rieger and Böser 1990: plan 4).....	220
4.5	Tiryns Unterburg, LH IIIB phase (after Kilian <i>et al.</i> 1982: fig. 23; Kilian 1988c: fig. 9)	221
4.6	The “Presentation Scene” from the Ayia Triada sarcophagus, with restorations.....	222
4.7	Restoration of Citadel House Room 31 east wall with altar and fresco (after Marinatos 1988: fig. 3)	223
5.1	Section of an elephant tusk (KW 162) and a hippopotamus incisor (KW 167) from the Uluburun shipwreck, scale 1:2 (after Bass 1986: figs. 18-19)	224
5.2	NMA 210 ivory pyxides: a) joined fragments with spiral and curvilinear decoration (after Poursat 1977b: pl. XVIII); b) fragments depicting a chariot, a seated woman and animal, and the feet of an animal (after Patrianakou-Iliaki 1975: figs. 47, 49, 55)	225
5.3	Common motifs of ivory inlays found in LH IIIA-B chamber tombs	226
5.4	Eponymous ivories from the House of Sphinxes and House of Shields.....	227
5.5	Human figures in ivory: a) warrior head appliqué from Mycenae Chamber Tomb 27 (after Krzyszkowska 1991: fig. 3b); b) (enigmatic) relief head from the Dendra tholos (after Rehak and Younger 1998: pl. XXVI:h); c) Orientalizing mirror handle from the Mycenae Chamber Tomb 55 (after Poursat 1977b: pl. XXXII).....	228
5.6	Ivory relief figures: a) Minet el Beida pyxis lid, b) Mycenae NMA 2473, 2475, c) Mycenae NMA 5897 (after Kantor 1947: pl. XXII: F,G, J).....	229

6.1	Glass ingots (KW 3, KW 4) from the Uluburun shipwreck, scale 1:1 (after Bass 1986: figs. 15, 16).....	230
6.2	Common types of glass ornaments (conical and kalyx ornaments after Kilian <i>et al.</i> 1979: fig. 53: 21, 23; whorlshell after Tsountas 1888: pl. 9:7; all others after Higgins 1980: fig. 13)	231
6.3	Stone Mold NMA 1018 from Mycenae (after Schliemann 1880: fig. 162).....	232
6.4	Bead typology (after Pierce Blegen 1937: fig. 599).....	233
6.5	Glass vessel fragments: a) krateriskos from Mycenae acropolis (NMA 4530); b) mold-made bowl from Kakovatos (after Muller 1909: fig. 13).....	234
6.6	Reconstruction of the alabaster frieze with glass inlays in solid black from the Tiryns megaron (after Moser von Filseck 1986: figs. 1, 2).....	235
6.7	Glass ornaments from Tsountas' House Shrine (after Tsountas 1887: pl. 13).....	236
6.8	The genius motif: a) Tawaret figure from a Middle Kingdom ivory knife (after Weingarten 1991: pl. 9a); b) Minoan genius on a sealing from Phaistos (after Gill 1964: pl. 1:1); c) typical Mycenaean genii on glass libation plaques from the Tomb of the Genii (after Wace 1921-23: fig. 86)	237
7.1	Percentage of imports, ivory, and glass items from all LH IIIA-B contexts.....	238
7.2	Percentage of imports, ivory, and glass items from LH IIIA-B burial contexts.....	239

LIST OF APPENDICES

	Explanatory Note.....	241
A.	Imported Items Found in the Late Bronze Age Argolid.....	243
B.	Ivory Objects Found in the Bronze Age Argolid	253
C.	Glass Objects Found in the Bronze Age Argolid	276
D.	Lapis Lazuli Objects Found in the Bronze Age Argolid	305

CHAPTER 1

ECONOMIC AND IDEOLOGICAL EFFECTS OF MEDITERRANEAN TRADE

The first item in the inventory of Athens' National Museum of Archaeology is a gold diadem from Shaft Grave III at Mycenae, described by Schliemann as "one of the most interesting and most precious objects that I collected at Mycenae."¹ As part of the Shaft Graves treasure, it was considered a symbolic piece of Greece's heroic past and early culture.² Only in more recent years was this piece, along with numerous other Shaft Grave objects, recognized as a work of foreign craftsmanship, in this case Kassite.³ Such identifications inspired many theories about the origins of early Mycenaean wealth or the early Mycenaeans themselves, including suggestions that the "Shaft Grave princes" came from Egypt or the Near East.⁴ Obviously, there are significant implications to assertions that the first kings of Greece were east Mediterranean transplants, as the discussions generated by Bernal's claims for eastern dominance over early Aegean civilization demonstrate.⁵ Most scholars now agree, however, that the individuals buried in the Shaft Graves were in fact members of an indigenous elite, and the material deposited with them

¹ NMA I (Schliemann 1880: 184, fig. 281; Karo 1930-33: 43, pls. XI, XII; Appendix A: 28).

² It was largely on account of the "masses of gold" in Grave III that Schliemann found himself with "now the firmest conviction that these are the tombs which...belong to Atreus, Agamemnon, Cassandra, Eurymedon etc." (Schliemann's writings as excerpted by Trail 1995: 160).

³ Erlenmeyer and Erlenmeyer (1965: 177-78, fig. 1) draw parallels with works of the Kassites, an ethnic group in Mesopotamia who came to rule in Babylon from the 16th century until 1155 BCE (Brinkman 1968: 86-90, 247-59).

⁴ Suggestions of eastern origins are generally based on the style of artifacts, e.g. Persson 1942: 176-96; Marinatos 1968a: 266; Stubbings 1973: 633-37; while other theories are based on linguistic relations, e.g. Drews 1988.

⁵ Bernal 1987; 1991; *Arethusa* 22.3 (1989); *JMA* 3 (1990); Lefkowitz and Rogers 1996; van Binsbergen 1997; *Berlinerblau* 1999.

Chronological Period	Abbreviation	Approximate years, BCE
Early Helladic I	EH I	3000 to 2700
Early Helladic II	EH II	2700 to 2200
Early Helladic III	EH III	2200 to 2000
Middle Helladic I	MH I	2000 to 1900
Middle Helladic II	MH II	1900 to 1800
Middle Helladic III	MH III	1800 to 1700
Late Helladic I	LH I	1700 to 1500
Late Helladic II	LH II	1500 to 1400
Late Helladic IIIA	LH IIIA	1400 to 1300
Late Helladic IIIB	LH IIIB	1300 to 1200
Late Helladic IIIC	LH IIIC	1200 to 1100

Table 1.1 Approximate chronology for the Greek Bronze Age.

results from the exchange of goods rather than the migration of people.⁶ Their use of foreign items, is then better explained in terms of local dynamics, as individuals distinguished themselves by laying claim to exotic materials and unfamiliar symbols.

The Shaft Grave material provides a natural starting place for the study of interregional relationships, as it marks the beginning of a long practice of import consumption at the site of Mycenae. The use of foreign items, however, was not long confined to that by a single group at a single site. Rather, imports were acquired by individuals at a number of sites in the Argolid, and are best examined in terms of regional dynamics. Nor were the items themselves restricted to the class of “prestige goods.” Over the course of the Late Bronze Age (LBA; see Table 1.1), as a palatial (state-level) society emerged, raw materials and more “utilitarian” items were also acquired from beyond the Aegean. As these foreign goods were then incorporated into a Mycenaean system, they fulfilled a variety of social needs and took on different symbolic values which are evident in

⁶ Vermeule 1975; Dickinson 1977; Graziadio 1991.

the archaeologically visible patterns of circulation, production, consumption, and deposition.

This dissertation considers the consumption of imported items and materials in the LBA Argolid in order to assess the active role taken by the members of a developing society, in response to contact with more complex cultures. In this introductory chapter, I explore ways in which long-distance exchange could be connected with the internal political and social order of an inchoate state. Perhaps the most direct link is through the artifacts themselves, which play a special ideological or communicative role when recognized as a particular class of material culture, “imports.” This approach also concentrates on the effects of trade as the “movement of goods” within the wider range of (intersocietal) human interactions, to the extent that is possible.⁷ But first, the need for such an analysis of foreign material in Mycenaean Greece is demonstrated by a brief review of scholarship on relations between the Aegean and its Mediterranean neighbors.

Previous Studies of the Aegean’s Foreign Relations

Trade is a necessary component in the definition of the “Aegean Bronze Age,” since the region depended on outside contact for the acquisition of copper and tin. The exchange, however, went far beyond metals, to include other raw materials (such as ivory, wood, and glass), as well as finished goods ranging from coarse-ware ceramics to the gold diadem of Shaft Grave III. The importance of extra-Aegean contact has long been recognized, and the foreign items found over generations of fieldwork have been compiled into an impressive body of evidence for exchange with other Mediterranean cultures.⁸ Yet there has been little consideration of the *subsequent* use of these items or the concomitant effect of this exchange, especially on the Greek mainland.

⁷ cf. Renfrew 1975.

⁸ Pendlebury 1930; Kantor 1947; Stevenson Smith 1965; Lambrou-Phillipson 1990; Cline 1994.

The majority of the LBA Aegean's long-distance trade was with the "older civilizations" of the east Mediterranean, as evidenced both by the foreign items found in Aegean contexts and by the spread of Aegean material abroad (see Fig. 1.1).⁹ The distribution of Mycenaean ceramics outside the Aegean does include significant amounts (i.e., hundreds of vessels) in the central Mediterranean, at sites such as Vivara and Nuragi di Antigori; and less frequent finds further west, such as the single Mycenaean sherd at Montoro.¹⁰ In the eastern Mediterranean, however, Aegean pottery is more common, in terms of the number of sites, and the size of deposits, especially at major centers like Amarna and Ugarit.¹¹ Other classes of artifacts thought to be of Mycenaean manufacture, such as the ivory plaques at Megiddo or the type B sword found at Boğazköy, remain rare.¹² Evidence for the actual transport of such goods has been provided by the recovery of three LBA shipwrecks: two off the southern coast of Anatolia, at Cape Gelidonya and Uluburun;¹³ and a third recently discovered at Iria, in the Gulf of Argos.¹⁴ There are also pieces of textual and iconographic evidence in the east that apparently record particular cases of exchange with the Aegean. Among these, the best case for material exchange is probably the Egyptian tomb paintings which include the Keftiu among other "tribute-

⁹ Harding (1984: 229-66) compares the Mycenaean exports to different regions; Cline (1994: 9, figs. 2, 3) summarizes the origins of imports into the Aegean.

¹⁰ For the distribution of Mycenaean ceramics in the central and western Mediterranean, see Taylour 1958; Smith 1987; Martín de la Cruz 1990; Almagro-Gorbea and Fontes 1997. For the impact of this contact on Italian societies, see Bietti Sestieri 1988. While the Mycenaean-style pottery found at Vivara may well be from Messenia or another region of the southern Peloponnese (Jones 1994), the Montoro sherd conforms more tightly to the Argolid chemical profile (Mommsen *et al.* 1990).

¹¹ Hankey's (1973) distribution of Aegean pottery in Egypt and the Near East has been updated by the works of Kemp and Merrillees (1980); Hiller (1991); Mee (1998); and Leonard (1994), who is compiling a database of all such extra-Aegean finds of Mycenaean ceramics (1996). Chemical characterization of many of exported vessels is consistent with production in the Argolid (Jones 1986; Mommsen *et al.* 1992).

¹² Megiddo: Loud 1939: nos. 32-35; Poursat 1977a: 143, pl. XVIII:1; Boğazköy: Ünal *et al.* 1991; Hansen 1994.

¹³ Bass 1967; Pulak 1997.

¹⁴ Vichos and Lolos 1997.

bearers," but even with these interpreting the nature of exchange and identifying the Keftiu as specifically Aegean remain problematic.¹⁵

Further difficulties arise in the integration of different types of data, and the articulation of various types of exchange. In fact, the trade of the Late Bronze Age constitutes only one part of a wider set of interactions between the Aegean and the more developed cultures of Egypt and western Asia. This relationship is generally conceived in terms of "influence," which might take the form of direct military or political dominance, economic interdependence, or more subtle connections indicated by changes in technology, style, and other cultural behavior. As applied to the prehistoric Aegean, such influences have been identified as flowing from a number of eastern sources: Egypt, Mesopotamia, the Levant, Cyprus, and Anatolia.

Eastern influence on the Aegean has been acknowledged most often in the rise of Minoan culture, especially on the developments of the pre- and proto-palatial periods. Evans and Childe considered Minoan culture as a whole to be a (European) development of eastern influences on the earliest phases of civilization on Crete—i.e., the Neolithic period and Early Bronze Age.¹⁶ Many scholars since then have followed their lead in tracing the diffusion of material goods and artistic style as well as the "more intangible influences that may have been brought to bear in the domain of ideas—in Cretan religion for instance, in law and government, or even in literary tradition."¹⁷

¹⁵ The fullest preserved scene is that from the tomb of Rekhmire, who served under Thutmose III (Davies 1973: esp. pls. XIX, XX). For interpretation, see Wachsman 1987; Liverani 1990. Textual records which apparently refer to trade with the Aegean include those from the Middle Bronze Age palace at Mari, which mention items and individuals from Caphtor (Heltzer 1989).

¹⁶ Evans (1921: 13-19) and Childe (1957: 20) both recognized the active creation of a Minoan civilization on Crete, but considered it dependent upon the original movement of people and ideas from Egypt and western Asia.

¹⁷ Evans 1921: 19. For influence on Minoan administration, see Warren 1987; and religion, Watrous 1998. S.P. Morris (1992) demonstrates the eastern influence in the art, poetry, and religion of Greece throughout the LBA and into the Early Iron Age.

In recent decades, however, scholars have turned inward in their search for the causes of cultural development. For the Aegean, this was marked most notably by Renfrew's theory which tied the rise of a social elite (and Minoan palatial society) to a need for the redistribution of agricultural commodities.¹⁸ But there remains the possibility of a more nuanced relationship between the growth in social complexity and contemporary exchange between Crete and the Near East. This was envisioned by Cherry not in the sense of direct diffusion of administrative structures or "some vaguely defined 'civilising influence' from the East as the direct cause of state origins," but rather in terms of the opportunities and pressures created by external contacts.¹⁹

At the same time that these scholars have been working to define the nature of eastern influence on Aegean society, others have emphasized an Aegean influence upon the arts and cultures of the east. This is, in fact, the main thrust of Kantor's seminal work, *The Aegean and the Orient in the Second Millennium* and has been a major theme of subsequent studies.²⁰ Such efforts have been stimulated again by new finds of "Minoan" fresco fragments at the Hyksos capital Avaris (Tell el-Dab'a) in the Nile Delta.²¹ Combined with similar material from Alalakh and Tel Kabri (see Fig. 1.1),²² there is now evidence for overlapping style in Aegean and east Mediterranean painting. Though this has been taken as evidence for the itinerancy of artists, one need not necessarily accept Woolley's vision of the Cretan palaces built and decorated by "members of the Architects'

¹⁸ Renfrew 1972; further developed by Halstead 1981; Halstead and O'Shea 1982.

¹⁹ Cherry 1984: 38.

²⁰ Kantor 1947; Crowley 1989; Barber 1991.

²¹ Bietak and Marinatos 1995; Bietak 1996. The subject matter, including a bull-leaping scene, is perhaps the most significant (or at least the most-discussed) factor, though subsidiary designs also include Aegean content.

²² For an overview of the evidence from all three sites, see Niemeier and Niemeier 1998.

and Painters' Guilds...from Asia,"²³ nor Hankey's suggestion of eastern-bound artisans traveling in the entourage of a Minoan princess bride.²⁴

Mycenaean Trade: The Sport of Kings?

Scholarship has more often treated Mycenaean interaction with the east as an economic relationship rather than a catalyst for change (at least by those who do not see a connection between these two descriptions). Thus, the focus of this scholarship has been on "trade," with reassessments of the origins of foreign goods and the means of transport.²⁵ This follows a general understanding that state-level society on the mainland developed over the course of the early Mycenaean period (LH I-II), under significant Minoan influence.²⁶ So, the Mycenaean polities that directly entered into Mediterranean exchange in the LH III period are treated as mature states, when in fact they had just recently developed. When this economic activity is put into a social context, it is most often conceived in political terms of the highest level and of an international character. For example, when Starr (somewhat obliquely) recognized the political significance of exchange for Mycenaean civilization, he expressed it as a pursuit of kings, "vigorous in war and in trade."²⁷

The concentrated control of exotic prestige goods typifies many early societies and is often identified as a factor in the development of social complexity.²⁸ Political leaders—be they kings, chiefs, or revolutionaries—often take advantage of the social and economic

²³ Woolley 1953: 74-75. He went on to suggest that a later generation of "Cretan artists were summoned to Egypt to paint in durable fresco the palace floors of the XVIIIth Dynasty Pharaohs."

²⁴ Hankey 1993: 29. For further discussion, see Negbi 1994; Morgan 1995; Shaw 1995; Knapp 1998; cf. Zaccagnini 1983.

²⁵ E.g., provenience of metals (Stos-Gale and Macdonald 1991; Knapp and Cherry 1994; Laffineur 1995); shipping routes (Marazzi *et al.* 1986; Bass 1998).

²⁶ Wright 1995b.

²⁷ Starr 1961: 49.

²⁸ Classic archaeological studies include Flannery 1968; Rathje 1973; Frankenstein and Rowlands 1978.

benefits of long-distance exchange.²⁹ The Mycenaean evidence has not been treated in these terms of elite strategy or internal process. More often, distribution patterns have been explained by (re?)created historical events, which aim to bring the Aegean further into the better documented realm of the east Mediterranean. For example, Hankey interpreted the Aegean finds of Egyptian items carrying the name of Amenhotep III as evidence for a political embassy to Mycenae and other sites.³⁰ She finds support in the “Aegean list,” one of five statue bases from Amenhotep III’s mortuary temple at Kom el-Hetan, which each record the cities of a particular region as conquered by the pharaoh. Most scholars have discounted the assertion of political dominance as propaganda, and have suggested that the list displays knowledge of distant lands, perhaps an itinerary for the route of Hankey’s embassy.³¹ The scenario could be correct, but the interpretation of the inscription is not proved by the interpretation of the artifacts, nor *vice versa*.

Other theories which bring political history into the Bronze Age Aegean are more problematic, in that they seek to explain large patterns of material evidence through a single aspect of interregional exchange. For example, a more extreme interpretation of the Egyptian evidence is offered by Bernal, who strings together a series of would-be events to posit political domination over the Mycenaean Aegean.³² Rather safer, but still inventive, is one interpretation of an absence of artifactual evidence. Cline has suggested a Hittite embargo against the Mycenaeans to explain the lack of central Anatolian material found in the Aegean, and *vice versa*.³³ This theory is dependent, in part, on the equation of the “Ahhiyawa” in Hittite texts with Mycenaean Greece, in which case there would appear to

²⁹ cf. Kipp and Schortman 1989; Liverani 1990; Brumfiel 1994: 6.

³⁰ Hankey 1981: 45-46; expanded upon by Cline 1991a; 1995. The Aegean evidence associated with this theory is addressed in Chapter 2, but more fully in Chapter 4. For a fuller consideration of Amenhotep III’s international relations, see Weinstein *et al.* 1998.

³¹ Edel 1966; Wachsmann 1987: 95-99. The route described would be extensive, including sites from Crete, Messenia, the Argolid, and western Anatolia.

³² Bernal 1987: esp. 17-21, 44-45; 1991: esp. 389-408.

³³ Cline 1991c; 1994: 70-74.

be political difficulties between the two regions.³⁴ Nonetheless, it is questionable that the evidence of a long-term relationship, or lack thereof, can be explained by a single text or even the policy of one regime.

These “historicizing” theories attempt to explain process in terms of events, which are supposedly mirrored by the archaeological record. One problem with these theories is their reliance on a single text or historical individual, when the material evidence lacks the chronological precision necessary to be linked with a single event or reign.³⁵ Moreover, it is apparent that the interregional relationships cannot be reduced (or elevated?) to state-administered exchange. It was by means of several co-existing processes that goods were exchanged across the Bronze Age Mediterranean, including multiple levels of political interaction and freelance trade.³⁶ Also, since the theories which center on the political motives of the more developed polities offer little to the Aegean perspective—its material demands, use of items, effect of exchange.

A similar reliance on the eastern texts can be seen in the interpretation of LBA shipwreck evidence as well. For example, the cargo of the Uluburun ship has been compared with the listings of goods in select examples of the Amarna Letters and identified as a royal gift—sent by an eastern king to an ever-expectant Aegean one.³⁷ As with the historical sketches described above, this calls for a high degree of conformity between archaeological and written records, which is rarely encountered in practice. Also, such an explanation automatically places all prerogative with the central authority of a ruler, rather

³⁴ For possible interpretations, see Mee 1998; Niemeier 1998: 19-25, fig. 3.

³⁵ cf. Manning 1998.

³⁶ Knapp and Cherry (1994: esp. 123-55) offer a history and clear analysis of earlier studies, which they reduce to four non-exclusive mechanisms of trade: centralized control, localized control, freelance trade, and gift-exchange. Like many others (e.g., Cline 1994; Gillis 1995), I accept that a combination of these models is necessary to describe the complexity of Bronze Age trade.

³⁷ Pulak 1997: 256. It has also been suggested that the ship had a predominantly Syrian crew, though connecting “personal” items to ethnicity apparently indicates the presence of (one or two) Mycenaeans as well (Bass 1997: 168-170; 1998: 188-89; Pulak 1997: 252-53).

than leaving room for other actors, who transported and received these goods. This interpretation of the Uluburun cargo does have the merit that it refers to a single act of exchange, whose alleged character need not be applied to the greater set of transactions.³⁸

The Uluburun material, however, is so well preserved and so regularly referred to in any discussion of Bronze Age trade,³⁹ that it has come to be spoken of as essentially representing the whole of east Mediterranean exchange in this period. This sentiment has been most clearly expressed by Cline, who considers the range of imports found in the Aegean so closely matched by those of the Uluburun, that he described the ship as a “microcosm, an absolute miniature, of the international trade ongoing between the Aegean, Egypt and the Near East during the late 14th and early 13th centuries BC.”⁴⁰ He supports this statement with a chart, included here as Fig. 1.2a, showing the similarity between the ship’s cargo and the finds of the LH/LM IIIA-B Aegean, with respect to the proportions of imported items from each area of the eastern Mediterranean.⁴¹ The particular nature of the ship’s holdings, however, are revealed when these same items are broken-down by artifact-type and material, as demonstrated in Fig. 1.2b-c. These aspects of the objects, which are in fact more likely to factor in their use and value, do not maintain the relative similarity found for in the analysis of their origins. This qualification does not reduce the importance of the Uluburun as an archaeological find, it merely recognizes the particular character of its cargo. In fact, the ship is truly a unique find especially relevant to this

³⁸ Similarly, Porada’s (1981: 68) identification of a horde of lapis lazuli seals found in Thebes as a royal gift from the east need not be extended to all the site’s acquisitions.

³⁹ As presented most dramatically by Bass 1987.

⁴⁰ Cline 1994: 100, figs. 20-22. Similarly, Pulak (1997: 256) writes that the single ship “epitomizes the *various* means by which Near Eastern goods reached the Late Bronze Age Aegean” (emphasis mine).

⁴¹ It should be specified that these percentages are based on the numbers of finished items from the Uluburun, and do not include the considerable raw materials. Also, the *orientalia* from the Aegean are those identified by Cline 1994 (summarized in tables 7-18).

study, since its cargo of finished items, agricultural commodities, and raw materials was heading to the Aegean during the peak of the Mycenaean palatial period.⁴²

On the Periphery?

It is true that Mycenaeans were involved with the polities of the east Mediterranean exchange circuit described by the Amarna Letters, but they did not necessarily participate on an equal level, or with the same frequency. In fact, even when the Mycenaean palatial states reached their apex of internal centralization, they never became the peers of the Near East's kingdoms and remained essentially peripheral to their elite gift exchange and political intimacy. In recent years, such relationships have been increasingly explained in the language of World-Systems theory. But as in other applications of this model to ancient societies, the original terms of Wallerstein's formulation must be significantly modified, for example, to acknowledge the importance of the exchange of luxury goods.⁴³ Even with such adjustments, it remains to be considered whether there is sufficient evidence to describe the Aegean and Near East as connected such that the "political and economic developments in one region deeply conditioned local histories" in the other.⁴⁴

There is apparently a general agreement that the Bronze Age Mediterranean was not, strictly speaking, a world-system. All applications of the model have indulged in relaxing the assumptions of the original model,⁴⁵ essentially lightening the degree of core

⁴² The most recent dendrochronological analysis of a timber sample (without bark and not part of the ship itself) dates its final ring to 1305/1306 BCE, and the sinking of the ship is most likely in the early years of the 13th century (Pulak 1997: 257; Cline and Harris-Cline 1998: 190).

⁴³ Explicit discussions of the model's applicability include Wallerstein 1974; Schneider 1977; Schortman and Urban 1987: 55-61; Kohl 1989; Chase-Dunn and Hall 1991; Edens and Kohl 1993.

⁴⁴ As defined by Edens and Kohl (1993: 31), who elaborate that "the model requires connections between societies that were more basic, fundamental, and long-lived than other forms of contacts such as technological diffusion, simple exchange networks, or even movements of peoples."

⁴⁵ cf. Stein 1999: 154, who specifies these assumptions as: "(1) that the core dominates the periphery...(2) that the core controls an asymmetric long-distance exchange system...and (3) that changes in the organization of long-distance exchange structure all other aspects of political economy in the polities of the periphery."

dominance and/or recognizing that different levels of exchange may mean that a region played more than one role. Thus the terminology has been altered to demonstrate these possibilities, such that the Aegean has been described as a “semi-periphery,”⁴⁶ or a case of “core/periphery differentiation,”⁴⁷ and was included in the “cycles” of Frank’s Bronze Age world system.⁴⁸ As with numerous other cases, the world system perspective becomes so weakened by the necessary modifications, that little benefit can be found in its application to the Aegean.⁴⁹ Also, it is illogical to define the Near East as a “core,” since it is not a unified whole, but itself a network of polities with fluctuating dynamics.

What might be profitably retained, however, is an awareness of the power relations of interregional exchange, and the potential importance of this interaction for social change.⁵⁰ This is a more productive starting point for the study of Mycenaean interaction with the east, as it does not deny the agency of the periphery through its emphasis on the more developed region or on the larger system. Rather, the goal of this study will be to determine the manner in which external stimulus was taken into a Mycenaean system and to define the importance of exchange in more direct (even experiential) terms, from the Aegean point of view.

Sherratt and Sherratt have taken a similar approach by calling attention to the importance of demand and “conspicuous consumption” within the societies taking part in Mediterranean exchange.⁵¹ Their general model for interregional trade posits an initial

⁴⁶ Wilkinson (1991: 121, 127) describes the region as connected to a core, but having its own (weakly connected) periphery as well.

⁴⁷ Kardulias (1999: 184-86) borrows this definition from Chase-Dunn and Hall (1991: 19), who distinguish “core/periphery differentiation, in which societies at different levels of complexity and population density are in interaction with each other” as opposed to a “core/periphery hierarchy,” which includes “the existence of political, economic or ideological domination.”

⁴⁸ The Aegean is one of many interconnected regions in a truly global system which spans continents and millennia (Frank 1993).

⁴⁹ Renfrew 1993: 7; Stein 1999: 159.

⁵⁰ e.g. Schortman and Urban 1987: 62; Sherratt and Sherratt 1991; cf. peer-polity interaction (Renfrew and Cherry 1986).

⁵¹ Sherratt and Sherratt 1991.

exchange of preciousities (materials for manufactured goods) and eventually leads to “full linkage,” wherein each side provides bulk materials and products. In reaching this final step, though, local production is not only stimulated by external trade, but often restructured, as new social institutions become necessary to control increased production and circulation. This occurred, for example, with the copper industry of LBA Cyprus, where increased demand stimulated the development of supply and storage networks, and specialization was accompanied by ideological shifts as well.⁵² Long-distance exchange also provided status-seeking individuals and groups access to the prestige symbols of neighboring elites.⁵³ While other scholars have recently endorsed the value of a consumption-centered approach,⁵⁴ in-depth studies have yet to appear.

One challenge is to identify the economic and systemic effects of exchange, in a way that acknowledges how they were brought about through individual agency.⁵⁵ Trade has been recognized for some time as a conscious economic activity, in which the individuals and groups attempt to obtain an optimal return or meet their own goals.⁵⁶ Yet such a notion need not imply profit-maximizing and rational-choice-theory, or even that all actors share the same pursuit. It simply recognizes that economic choices are framed by shared cultural values and assumptions, which particular individuals embrace, resist, or challenge according to their position and abilities.⁵⁷

⁵² Knapp 1986; Keswani 1993.

⁵³ Keswani 1989a. Similarly, Manning (1994: 243-44) suggested the needs of emergent elites on Crete as a major incentive for trade.

⁵⁴ e.g., Renfrew 1993; Knapp 1998.

⁵⁵ Giddens 1979; Robb 1999.

⁵⁶ Adams 1974; Frankenstein and Rowlands 1978.

⁵⁷ For example, Finley’s (1973: 50-61) discussion of wealth and status presents economic goals as constrained and constructed by social pressures in ancient Athens and Rome.

Acts of Consumption and the Materialization of Ideology

Identifying the connection between import consumption and social power depends upon the understanding of material culture as an information system.⁵⁸ Key to the application of this approach in the present study are two features of artifacts: *style*—what was expressed through the material objects, and *context*—who was sending this message and to what audience.⁵⁹ This ties into recent anthropological discussions that look for the materialization of ideology, the process by which cognitive messages are given material form, not only through crafting, but also performance and ritual.⁶⁰ The production of social order, however, depends upon the consumption of this material and the reception of these ideological messages. Although it is frustrating when specific components of belief remain unknown (as is often the case in pre- and proto-historic cultures), material symbols can nevertheless be identified.⁶¹ While the message remains somewhat ambiguous, the consumption of these goods provides an avenue towards recovering their social significance, if not their concrete meaning.

This is an approach potentially applicable to all societies, not merely the “consumer culture” or “consumer class” of modern capitalist economies.⁶² Douglas and Isherwood offer a broad definition for consumption as “a use of material possessions that is beyond commerce and free within the law,” but offer a more significant starting point with their notion of what is accomplished through acts of consumption:

Instead of supposing that goods are primarily needed for subsistence plus competitive display, let us assume that they are needed for making visible and stable the categories of culture.⁶³

⁵⁸ Wobst 1977; Hodder 1982b.

⁵⁹ Miller 1987: 109-30.

⁶⁰ DeMarrais *et al.* 1996: 16.

⁶¹ cf. Wright's (1995a) analysis of religious symbols and belief.

⁶² For a review of “consumerism” in current sociological and anthropological studies, see Miller 1995.

⁶³ Douglas and Isherwood 1979: 57, 59.

While this need could be met by any and all commodities, especially all crafted goods,⁶⁴ it is clear that some imports are especially good symbols. These include objects which more clearly play a “symbolic” role and which are often considered “luxury” items.

The basic distinction between “utilitarian” and “symbolic” artifacts has been called into question in recent years,⁶⁵ but at the same time the importance of prestige items in many ancient societies has been recognized.⁶⁶ Appadurai recognized that all classes of items are useful, but not necessarily in the same way, suggesting that luxury items should be regarded “as goods whose principal use is *rhetorical* and *social*, goods that are simply *incarnated signs*.”⁶⁷ He goes on to offer “luxury” as a more useful description of a “special ‘register’ of consumption” rather than as a type of object. To some extent, this mirrors Binford’s determination of different artifact types, which are characterized by their cultural function rather than form, material, or implicit value.⁶⁸

Within a social context, however, those more implicit features of an artifact’s style will take on meaning, and imported items function in comparison to other goods by virtue of the fact that they are different. The specific meaning of the import in its new context may or may not follow that which it held in the culture of its manufacture.⁶⁹ What these objects really communicate depends on the psychological parameters of distance and space, and the special status of those who are able to acquiring knowledge through contact with distant regions.⁷⁰ Yet it is not only those who travel who gain social power through

⁶⁴ Miller 1987: 112-15; Helms 1993; Dabney 1997.

⁶⁵ Fotiadis (1999) most recently questioned the consistency and stability of the category “prestige goods,” as well as the larger question of separating elements of *being* from those of *doing*.

⁶⁶ Schneider 1977; Frankenstein and Rowlands 1978; Kohl 1981.

⁶⁷ Appadurai 1986: 38.

⁶⁸ Binford 1962: esp. 219-20. Also see discussion of different types of meaning by Hodder (1987: 1-2), which include “how the object is used, and how it conveys information about social characteristics, personal feelings and religious beliefs...or the effects it has on the world.”

⁶⁹ Renfrew 1975: 22-24.

⁷⁰ Helms 1988. In some cases the emphasis lay “primarily in the very activity and practice of maritime movement itself” (Broodbank 1993).

connection with the outside. The acquisition of foreign items and materials is another “pathway to power,” since the material goods carry that ideological symbolism attributed to geographically distant peoples and places.⁷¹ This realization permits a consideration of trade’s effect on archaeologically recognizable participants – not the parties who transported the cargo, but those who received the goods once they arrived.

Goods and materials acquired through long-distance exchange are especially suited to manipulation in power strategies because access to these resources is limited and might be controlled. But to be effective symbols, imports must be recognized as exotic, by virtue of their rare material and/or style, especially in comparison to other items. As such, these potent symbols played an active role in the maintenance and development of social order, especially in strategies of group affiliation.⁷² Style can also be used in opposition to the social group, to communicate personal identification through comparison with others “whether it be to project a certain image, to mask an aspect of identity, or to raise questions about a person’s identity.”⁷³

With this in mind, it is clear how goods which convey the message of foreignness contrast with those of local, especially standardized, production. Previous consumption studies argue that homogeneity within each class of goods is greater in conditions where competition is intense, because of the “higher social risk of deviating from conventions” and the emulation of elite patterns by others.⁷⁴ That may explain one aspect of homogeneity, but what does that say about the choice of the unusual in contrast to the standard? It may be an individualizing statement: the conscious acquisition of symbols from beyond the relative safety of standard circulation patterns and the social connections

⁷¹ Appadurai 1986: 41; Miller 1987: 122; Helms 1988.

⁷² Hodder 1982b: 45; Knapp 1998: 196; Wattenmaker 1998: 12.

⁷³ Wiessner 1989: 57.

⁷⁴ Wattenmaker 1998: 16; following Douglas and Isherwood 1979: 144-45.

they represent.⁷⁵ In this case, imported items stand out as special goods, because of the external connections that they represent, rather than associations with internal systems of production and supply. In a system like the Mycenaean political economy, where the majority of materials goods are standardized and where a palace center is claiming dominance, the potential power of the consumption of exotic symbols is especially potent.

Consumption, in a broad sense, can include a number of intermediate stages following the initial acquisition of commodities: the production of goods from raw materials, the (conspicuous?) storage of amassed items, and the subsequent circulation of previously acquired items. Preserved texts from western Asia demonstrate that a king might boast of the tribute amassed in his storehouses, as much as their use in public constructions, or circulation through generous gift-giving.⁷⁶ Each action makes use of acquired (often foreign) materials to enhance his prestige, as appropriate to his audience or need. The conspicuous consumption of foreign symbols, however, might also be directed in other directions, in the status-building of other groups able to acquire them.⁷⁷ This means that imported items might be used to destabilize central power, if put to use by rival individuals or groups to attain a leading political position and form alliances. Although factions are generally associated with pre-state societies,⁷⁸ the same dynamics might be effective in an unstable or newly formed state. It is with an eye towards these issues of competition and power stability, that I examine the consumption of imported goods in a Mycenaean setting.

⁷⁵ "The object may lend itself equally to the expression of difference...and to the expression of unity" (Miller 1987: 130).

⁷⁶ Liverani 1990: 206-23.

⁷⁷ For example, in his analysis of Mycenaean ceramics as imports in the Levant, van Wijngaarden (1999b: 32) considers whether foreign vessels were sought simply by elites or by "groups with aristocratic aspirations."

⁷⁸ Kipp and Schortman 1989; Brumfiel 1994: 5.

The Present Study

The main goal of this dissertation is to work towards an understanding of effects of Bronze Age Mediterranean trade on the Argolid through an analysis of import consumption. It is largely a contextual study, examining the distribution of imported items and materials, beginning with a regional survey and working into closer detail. The analysis of import distribution is combined with considerations of style and classifications of material and artifact types, in order to determine the social value of these goods through their consumption. And the uses of imported goods reveal the variety of activities, strategies, and relationships in the Mycenaean Argolid that were enabled or altered through long-distance exchange.

This introduction has argued that the material evidence of trade—i.e., the imports—are too often taken only as traces of interregional influence or mechanisms of exchange, and need to be studied for the meaning they had in their (new) social context. Such an attempt is made here, with several classes of goods—imported items, ivory, and glass—in the specific setting of the Late Bronze Age Argolid. The decision to focus on this region and these materials was based on the expectation that they would provide substantial data to trace the effect of trade. Each of these material groups is represented throughout the period, beginning with the Shaft Grave period when they were first introduced to the region. In fact, chapters often contrast the evidence of this early phase (LH I) with that of the more mature palatial period (LH IIIA-B), and change in the patterns of exchange and consumption is a central concern of this study. Unfortunately, there is less evidence preserved for the transitional LH II period, not only for the study of trade in the Argolid, but for most aspects of Mycenaean culture as well.

The decision to include imported materials as well as finished items was prompted by the notion that crafting should be included as a form of consumption. A recent study of Near Eastern imports to Iron Age Crete examined only foreign-made objects, in order to assess features of foreign and local artistry as a means of an identifying immigrant

presence.⁷⁹ The goal of my work, however, is not the detection of a foreign presence, but of the *Mycenaean* response to external contact. In that sense, it is more akin to Wells' study of Iron Age Europe and the effects of contact with the Mediterranean, in which he traces the use of foreign objects and materials as related to changes in social complexity.⁸⁰ The present study also includes the consumption of exogenous materials, through detailed examination of ivory and glass, in conjunction with that of foreign-made objects. The discussion of these imported goods is based on the compilation of all known examples (i.e., those that are published or on display) from the Mycenaean Argolid, which are listed as Appendices A-D.⁸¹

The Following Chapters

Before concentrating on the Argolid and its unique features, the evidence from other regions of Greece provides a larger social and economic context for the Mycenaean consumption of imported goods. Chapter 2 thus begins with a survey of the political and ideological power structures, especially those of the central administration described by the Linear B texts. An attempt is made, however, to recast the character of this system, which is generally conceived in hierarchical terms. I argue for the inherent instability of palatial power, pointing to the opportunities for individuals within the system to pursue their own goals. The distribution of all imported items found on the LBA mainland is then presented, and a comparison of regional patterns demonstrates why the Argolid is an especially interesting case.

⁷⁹ Hoffman 1997. More specifically, she eschews imported materials "because unworked raw materials do not provide a vehicle for the transfer of specific features of artistry" (19).

⁸⁰ Wells 1980.

⁸¹ In addition to the appendices for foreign-made items, ivory, and glass, is Appendix D, a listing of the lapis lazuli objects found in the Bronze Age Argolid, which enables Chapter 6's comparison of this material with glass.

Chapter 3 presents import consumption as a new approach to competition between the sites of the Argolid. This follows a review of previous attempts to delineate power in the region, which have incorporated text-based models, geographical factors, and archaeological remains. The distribution of imported items offers a new perspective on site hierarchy across all periods of the LBA, and allow various models of economic integration (e.g., wealth finance, non-palatial exchange) to be considered.

Chapter 4 examines the palatial period in more detail, through a survey of the imports in burial and settlement contexts. The archaeological contexts are taken as representative of the social groups who acquired and consumed the imported items. Mycenae provides evidence for a number of such groups within the site, who can be interpreted as rivals to the centralized administration. The burial contexts of imported items are shown to be the tombs of elite groups, in locations across the Argolid. The patterns in consumption also reveal the role of imports in different activities, which relate to their perceived meaning and symbolic value. This formulation of Mycenaean values for particular imports leads to a more complete interpretation of competition both within and between the Argive sites.

Chapters 5 and 6 investigate the consumption of exotic materials, through their transformation in local workshops and their use as finished products in social settings. The first examines ivory, a natural material available only in certain non-Aegean regions; the second focuses on glass, an artificial material that was imported rather than made in Greece. The range of uses for each material is surveyed, followed by an iconographic analysis of all available artifacts from the Argolid. Each of these chapters demonstrates how a foreign commodity was integrated into Mycenaean society and how the control of production and circulation were means of maintaining political position.

Chapter 7, my conclusion, compares various categories of imported goods and materials, revealing that they were subject to different strategies over time and across the region. Foreign-made items are contrasted with those of locally-produced ivory and glass

objects, in terms of symbolic value and consumption. The variation in the distribution of ivory and glass objects shows that the imported materials were employed in different strategies, both centered at Mycenae. I also argue that imported items retained their exotic appeal throughout the Late Bronze Age, in spite of their increased quantities in the palatial period and the inevitable loss of their novelty. The role of material consumption in social and political competition is completed with a consideration of trade and imports in relation to the collapse of centralized power.

CHAPTER 2

IMPORTS, ECONOMY, AND SOCIETY IN MYCENAEAN GREECE

This chapter provides context for the study of import consumption in the Late Bronze Age Argolid, with an overview of Mycenaean economy and society. The potential meaning of imports, in general, as symbols of wealth and a connection with external power has been explored in Chapter 1. How well this model fits the case in question requires an investigation of the social structures behind the material patterns of Mycenaean Greece. After setting the socio-economic stage, attention will turn to evidence for the incorporation of foreign elements into Mycenaean society, namely the material remains of long-distance exchange found in mainland Greece.

Linear B Evidence

Examination of Mycenaean social and economic systems most usefully begins with the Linear B documents, which preserve an early form of Greek written in a syllabic script.¹ While full analysis depends on the archaeological record to augment this textual information, the tablets provide essential information for the understanding of Mycenaean society. Much of what one might suspect from archaeology, or would like to borrow from Homeric descriptions, is confirmed by the Linear B writings. And while these documents

¹ For Ventris' decipherment of the Linear B script, see Chadwick 1958; for overview of the archives' content and organization, with translation of select texts, Palmer 1963; Ventris and Chadwick 1973; and definitions in light of more recent scholarship, Aura Jorro 1985-93.

The Knossos texts have been published in a comprehensive four volumes by Chadwick *et al.* (1986-99). Bennett and Olivier (1973) present revised transcriptions of the Pylos tablets, but for drawings see Bennett 1955. The transcribed Mycenae and Tiryns texts appear in Melena and Olivier 1991, but for drawings and photographs see Sacconi 1974; Godart *et al.* 1983; Godart 1988. Similarly, the Thebes tablets published by Godart and Sacconi (1978) are revised in Melena and Olivier 1991.

go into much further detail than could ever be asked of material culture alone (e.g., individual persons and isolated transactions), the meaning of specific terms is sometimes ambiguous.² Also, larger social systems are not explicitly described, but must be pieced together from the patterns established by repeated accounts and exchanges.

The administration and society described by the Linear B texts are those of the developed Mycenaean states, essentially of the LH IIIA - IIIB periods. The most extensive archives are from Pylos and Knossos, palatial centers coordinating vast resources of various kinds; smaller numbers of tablets have been found at Thebes, Chania, Mycenae and Tiryns, see Fig. 2.1.³ These were apparently short-term records, whose tallied information might have been transcribed onto some other medium which has not survived.⁴ The wealth of information from these archives provides a general framework for the economic and social structures of Mycenaean states. While particular arguments may focus on the practices of a single palace or region, the overall reconstruction of Mycenaean administration combines fragmentary evidence from the different sites, but especially Pylos and Knossos. The smaller groups of tablets from Mycenae and Tiryns indicate the use of similar administrative strategies in the Argolid, though each administration no doubt

² Although the Linear B writing has been deciphered, the fragmentary nature of texts and the fact that the syllabary script is ill-designed for the Greek language complicate transliteration (Woodard 1997: 8-19). Also, a term's definition in this Mycenaean context is often difficult to align with its later use in Homeric or Classical Greek.

³ The mainland tablets are predominantly from LH IIIB contexts: ca. 1100 at Pylos, 65 from Mycenae, 25 from Tiryns, and over 150 from Thebes (for the site's recent finds, see Aravantinos 1995). Similarly, the 6 tablets at Chania are from LM IIIB contexts (Hallager *et al.* 1992), but the vast numbers from Knossos (over 3000) are traditionally dated to significantly earlier years, LM II or IIIA. Palmer's attempt to date the entire Knossos archives to an LM IIIB destruction has not gained acceptance (Palmer and Boardman 1963), though there is evidence to down-date some deposits (for a review of these debates, see Driessen 1997).

⁴ The content of the tablets indicates their temporary nature; the Pylos documents, for example, all date within the year preceding the destruction of the palace (Ventris and Chadwick 1973: 114, 138, 407). It is often suggested that additional records were kept on parchment or leather, but even more extensive Mesopotamian archives were not intended for long term record-keeping. The clay tablets themselves were not intentionally fired, but have usually been preserved through the destruction by burning of surrounding structures. Unbaked tablets, inscribed while wet and allowed to air-dry (and harden), could be reused by adding water and re-shaping (Chadwick 1958: 16).

developed in response to its particular environment—natural, historical, and human.⁵ And since the individualized practices of Knossos, Pylos, or Thebes can not be directly applied to the Argolid, it is the more general structure (presumably common to all) that is of relevance to this study.

Economic Systems

Conceptions of the economic structures operating in Late Bronze Age Greece depend heavily on the transactions of commodities, land-holdings, and labor recorded in the Linear B documents. In one of the first syntheses of the Mycenaean economy, Moses Finley classified it as a “palace economy,” redistributive, Asiatic.⁶ Thus spread the notion that the palace dominated all aspects of the local economy:

“One would suppose that not a seed could be sown, not a gram of bronze worked, not a cloth woven, not a goat reared or a hog fattened without the filling of a form in the Royal Palace; such is the impression made by only part of the files for a single year.”⁷

Indeed, this may be the impression one takes from the archives and perhaps the intent of the administration was along these lines, but the tablets themselves do not tell the whole story.

Comparisons have been drawn with the “palace economies” of western Asia, based on basic similarities in texts, as well as apparent similarities in the systems.⁸ Arguments have been made more recently that more appropriate comparisons should be sought elsewhere, since Aegean states were not of the same scale (and therefore complexity) of the

⁵ Dickinson 1982; Olivier 1984.

⁶ Finley 1957: 141. Though his fuller discussion of Asiatic economies included private land-holders, independent craftsmen and peddlers alongside palace- or temple-complexes, such individuals make little impact on the system he envisioned (Finley 1973: 28-29).

⁷ Page 1959: 102.

⁸ As observed by Ventris and Chadwick (1973: 106), but more fully investigated by B.R. Foster (1987) and Uchitel (1988).

Near Eastern polities and empires.⁹ These Eastern economies, however, were not as stable as once envisioned; palace- and temple-estates were joined in competition by private entrepreneurs also active in the economic spheres of agriculture, craft production and exchange.¹⁰ Compared to this less monolithic reading of the Near Eastern system, the Mycenaean palace economy has been typified as more concentrated, combining the activities that Mesopotamian temples and palaces divided or shared “within a single institution rather than in their partial differentiation.”¹¹ It is perhaps more realistic to extend the diversified model of the Near East to the Aegean, and read the palatial texts with an eye towards the diversity of actors.

The centrality of the palace is to be expected from the context of the Linear B archives, which do provide the most readily accessible economic information. In his overview of this evidence, Killen specifically recognized that the palace archives are self-referential and thus might give “an exaggerated impression of the importance of the centre in the workings of the economy, taken as a whole.”¹² He nonetheless concluded that the “role which the palaces played in the economy of Mycenaean states was not merely significant, but central and dominant.”¹³ Yet there is textual evidence for the existence of other economic actors: the palace officials themselves, religious institutions, private landholders, and perhaps entrepreneurs. While references do not provide enough information (in quantity or detail) to determine the impact of their choices on palace “dominance,” it must be recognized that the centralized archives do not cover all aspects of the Mycenaean economy. Further refinement depends upon the use of supplementary evidence and a

⁹ Voutsaki 1995b: 14; Galaty and Parkinson 1999: 3-4

¹⁰ Diakonoff 1969; Gelb 1969; Lipinski 1979; Archi 1984; Yoffee 1995.

¹¹ Sherratt and Sherratt 1991: 365. Similarly, comparisons with feudal systems (e.g., Hutchinson 1977) have been countered by the argument that the Mycenaean system is built on direct relationships with the center, rather than a network of loyalties (Killen 1985: 259, who raises other objections as well, 274-75).

¹² Killen 1985: 243.

¹³ Killen 1985: 255.

consciously chosen model (for the textual, as well as the archaeological evidence), rather than the assumption that fully preserved archives would detail every aspect of the regional economy.

Direct evidence for the independent behavior of the religious sector or private individuals is not readily found in the Mycenaean texts, as it is in those of second millennium Ur or Ugarit, where non-palace archives have also survived.¹⁴ Reconstructing their activity relies on the incorporation of archaeological evidence and ethnographic analogy, which makes a strong case for a more disparate Mycenaean economy. Combining such evidence, Halstead has presented the most coherent model for the coexistence of different kinds of transactions between various sectors of the economy, illustrated in Fig. 2.2. The archives represent only a small portion of the total economic activity in each territory, with a natural emphasis on the land and people in the direct vicinity of the palace and conscious specialization in industries and activities which reinforced its position.¹⁵

Indeed, both philological and archaeological studies have demonstrated specific interests of the palaces. For example, the Linear B symbol for olive (ideogram *122) is regularly modified by one of two ligatures, probably representing different types, one of which was much more common in the Knossos records.¹⁶ In other cases, the archival accounts do not represent the range of products known from archaeobotanical and zooarchaeological finds. This apparently indicates the concern of the palaces to collect cereals, but not pulses, and to monitor the raising of wool-producing sheep, but not goats, pigs, or cattle.¹⁷ Also, it has been argued that the archaeological record of the Pylos palace

¹⁴ Heltzer 1978; Van de Mieroop 1992.

¹⁵ Halstead 1992b: 72-74; Bennet 1988b: 31-37.

¹⁶ Melena (1983: 97-102) expands upon an earlier suggestion that the ligatures *A* and *T7* stand for ἄγριος "wild" and τιθησός "domesticated" (Chadwick 1976: 122), explaining that the wild olive was preferred because its lower fat content made it more suitable for industrial use.

¹⁷ Halstead 1992a: 108-109, Table 1. Again, this could be linked to the palatial industries: wool for textile production and grain for the rations of dependent craftspeople (Palmer 1989).

and its region indicate palatial interest in certain industries such as perfumed oil, but not in others such as obsidian blades.¹⁸

Limiting the extent of the redistributive system allows for suggestions that other forms of exchange were practiced, perhaps on a significant scale. Halstead's model (again, Fig. 2.2) still centers on the redistribution of goods and services between palatial and non-palatial sectors. Indeed, it goes beyond the evidence afforded by the archives to include the provision of sustenance in times of need as well as in return for service.¹⁹ But market-type exchange could well have existed outside administrative control, supplementing the reciprocal exchanges through which on-going and short-term needs were met within the non-palatial sector.²⁰ Although there has been significant resistance to the notion of market exchange in the Mycenaean economy, the dominance of the redistributive system could not be absolute.²¹

As originally conceived by Polanyi, different forms co-existed at different levels, and those continuing his work have elaborated that the preeminence of one pattern does not preclude the existence of others "alongside the dominant one in the various sectors of the economy...and at varying levels of its organization."²² Liverani has reinterpreted these terms, employing reciprocity and redistribution as "two patterns of integration" which he considers "not as descriptive models of really different networks of exchange, but as interpretations, mental models, of a reality that in itself does not belong to any pattern."²³

¹⁸ For palatial workshops producing perfumed oil, see Shelmerdine 1985; and for the lack of obsidian-working, Parkinson 1999.

¹⁹ Halstead 1992b: 70-73.

²⁰ Morris (1986: 33) explicitly points out the possibility of markets not controlled by the palace as a secondary mode of exchange.

²¹ Berdan (1989) demonstrates that a combination of economic mechanisms and institutions is typically responsible for the movement of goods, even in early states and empires. For an example of the spirited debate over market exchange and redistribution in the Aegean, see the discussion following papers on "Economy, Trade and Craftsmanship," in Laffineur and Niemeier 1995: 169-72.

²² Dalton 1975: 91.

²³ Liverani 1990: 22.

Rather than type specific cultures as having a redistributive economy or argue that the existence of markets necessarily requires strict formalist analysis, more sensitive studies demonstrate the complex ways in which these different elements co-exist within each political economy.²⁴ Or, to borrow Yoffee's exhortative words, "economic forces exist within societal matrices, and the object is to get on with investigating the underlying factors of supply and demand as well as the institutional constraints upon their operation."²⁵

Despite the likelihood of other exchanges, it is difficult to undermine "the palace" and its demands as the most influential element in the utilization of resources. Other economic activities (whether it be household production, barter, or market-exchange) should be considered part of the informal economy, those exchanges which are generally absent from the central record-keeping system.²⁶ The manipulation of natural and human resources recorded in the archives was surely a concern to the people as well as the palace. Subjects paid taxes (in kind) to the centralized authority; many were dependent upon rations from this source; and even more served as *corvée* labor under its administration. The centralization of such resources makes it likely that power relationships were constructed with respect to the palace.

Details of the economic systems are, in effect, directly relevant to ideology and the experience of social inequality. The conception of an exchange relationship as reciprocal or redistributive was itself an ideological perception through which actors understood power relationships.²⁷ Thus, each individual's connection with, or independence from, the centralized system helped create their sense of identity, and also their position in the socio-economic hierarchy. But the palace administration also consisted of individuals, whose social position was constructed through economic acts.

²⁴ E.g., Hodges 1988; Halperin 1994.

²⁵ Yoffee 1981: 5.

²⁶ For the definition of "informal economy," see Gaughan and Ferman 1987; for its application to non-modern systems, Smith 1989; Halperin 1996.

²⁷ Liverani 1990: esp. 19-24.

Social Relations and Political Structures

The Linear B archives do not make explicit reference to the palace as an institution, or to the coordinated administration as a whole. Rather, the tablets record actions carried out by a number of individuals, who are described by administrative position, profession, personal name, and even ethnic identity. Though the variety of designations permits a broad reconstruction of Mycenaean society, more information is available for the *wanax* and other high-ranking titles, which occur more frequently. There remains, however, little consensus regarding the specific privileges and responsibilities of these offices, the base of their authority, or the relationships between them.²⁸ Yet most discussions regard the palace administration as a coherent system serving the interests of the *wanax*, as typified by Kilian's diagram of the social hierarchy in the Linear B archives, Fig. 2.3. The analysis that follows attempts to reveal the instability of this hierarchical model, which relies on incomplete evidence and contested interpretations.²⁹

Breaking Down the Palatial Administration

The identification of *wa-na-ka* or *wanax* as the ruler or "king" of each state is generally accepted, though the character of this kingship is the subject of much debate.³⁰ Although the authority of Indo-European kings was generally based on combinations of ritual, administrative, and warrior status, Palaima summarizes the more limited role presented in the Mycenaean texts:

²⁸ The following discussion reviews some of the different *personas* described in the tablets, but is by no means an exhaustive account. Major and recent references are given for the terms discussed here, but for more comprehensive presentation, see Lindgren 1973; Ventris and Chadwick 1973.

²⁹ In order to foreground the imperfection of current understandings, I present the points of disagreement among generally accepted translations. For a more skeptical view of all such interpretations, see Hooker 1987. For the problems of assuming a hierarchical structure, see Crumley 1995.

³⁰ In later Greek, ἄναξ generally meant "lord" and was used of divinities, heroes, and kings. In addition to the references that follow, fruitful contributions may appear in the publication of the 1993 conference *Kingship and the Organization of Power in Greek Society* (T.G. Palaima, ed. forthcoming).

“The term *wanax* appears in the Linear B tablets mainly on higher level documents, such as the Pylos Ta or Er series, or on texts recording religious offerings made by the palace proper, or in texts – including those on painted stirrup jars – dealing with important intensive industries (such as cloth production and perfumed oil manufacture) in which the *wanax* had some sort of stake or vital interest.”³¹

The Ta series records an inventory of elaborate furnishings and vessels, while the Er tablets, which detail land-holdings, record the largest single plot as belonging to the *wanax*.³² In addition to the evidence for royal interest in specific industries, Thomas tied the archaeological evidence for craft production in general and international trade to the *wanax*.³³ But not all palace workshops should necessarily be associated with the single figure of the *wanax*; only a few craftsmen are explicitly described in the texts as *wa-na-ka-te-ro*, who may have directly served royal needs.³⁴ Although there is a ritual dimension to the royal figure presented in the texts, the recorded acts all involve the circulation of goods and labor.³⁵

The economic dealings of the palatial administration, however, are not the sole interest of the *wanax*. As the following analysis shows, the Linear B texts feature a number of officials. Though they are traditionally described as coordinated to enact the authority of the *wanax*, the absolute centrality of this reconstruction has begun to be

³¹ Palaima 1995: 128. For a more positive comparison of Mycenaean and Indo-European kingship (and an emphasis on the military dimension), see Thomas 1976: esp. 97-98.

³² The land is described by the term *temenos*, which referred specifically to sacred space in later Greek, but here more literally describes an estate as “cut off”. The terminology for different types of land is complex and will not be entered into in detail here (but see Ventris and Chadwick 1973: 232-39, 443-46). For the Ta series, see Ventris and Chadwick 1973: 332-48, 496-97.

³³ Thomas 1976: 102-104, elaborating that “kingly power” was also a product of economic power.

³⁴ The preserved examples of *wa-na-ka-te-ro* craftsmen (all at Pylos) are limited to a potter, a fuller, and an *e-te-do-mo*. The meaning of this third title is essentially unknown; *-do-mo* is a common ending meaning “-worker;” and Carlier (1996: 572) offers “armurier” or weapon-smith as one possibility. For a fuller discussion, also see Carlier 1984: 72; Palaima 1997.

³⁵ Carlier 1990; Lindgren (1973: 150-55) also considers the divine aspects of the *wanax*, but these too can be reduced to the receipt of commodities, albeit in the company of “divinities.”

questioned.³⁶ The association of these individuals with the palace administration does not necessarily qualify their every action as an extension of royal power. Although the *wanax* appears to be the main recipient of palatial prestige, there was certainly opportunity for other officials to amass wealth, power, and status, perhaps to the detriment of the *wanax*.

A single individual in each “kingdom” held the position of *ra-wa-ke-ta* or *lawagetas*, often described as second in rank only to the *wanax*. His title “leader of the *laos*” may refer to military responsibilities, if *λαός* is taken as “people” in a military sense. He is recorded as overseeing two military bodies: the *e-qe-ta*, a group of men that may have served as a royal guard; and the *e-re-ta*, rowers.³⁷ But the *lawagetas* also held numerous other benefits/responsibilities: owning *temenos* land, making contributions to the ritual feasts of Poseidon, and perhaps retaining individual craftsmen.³⁸ Though he is always seen as beneath the *wanax*, sometimes postulated to be the crown prince, this individual might be a potential rival as well.³⁹ Even if not looking to supersede, the *lawagetas* surely had his own interests, which could be well served from his privileged position.

The administration of the Linear B tablets extends well beyond the palatial center, thus providing some information about local authorities as well. In the Pylos network, each town had a *ko-re-te* and *po-ro-ko-re-te*, “mayor” and “vice-mayor,” who appear to be directly responsible to the palace, due to their receipts of gold recorded in the archives.⁴⁰

³⁶ For example, Thomas (1995: 350-51) argues that military and economic matters were not completely centralized.

³⁷ For the military role of the *lawagetas* and his connection to the *egetai* at Knossos, see Driessen 1985: 191-93; for his position at Pylos and the supervision of rowers, Lindgren 1973: 49-50, 134-36. Thomas (1995: 351-52), however, emphasizes connections with land-holders rather than troops, and suggests that the *lawagetas* “should probably be moved to the hierarchy of local officials.”

³⁸ Palaima 1995: 129-32. Individuals described as *ra-wa-ke-si-jo* include a wheelwright and a swineherd (*a-mo-te-wo* and *su-qo-ta*, Lindgren 1973: 120, 139).

³⁹ Kilian (1987) went so far as to suggest that the *lawagetas* held court in the second (smaller) megaron regularly found in the Mycenaean palaces.

⁴⁰ E.g., Jo 438 (Lindgren 1973: 84-86, 122-23; Palaima 1995: 124).

But the status of another local official, the *qa-si-re-u*, is a matter of debate.⁴¹ The most extensive references are to three *qasirewe* who supervised the distribution of bronze to smiths (*ka-ke-we*) located across Messenia, leading to their characterization as labor organizers. But some scholars would instill them with broader power; for example, Palaima suggests that the *qasireu* was a more independent position than those of the *korete* and *porokorete*.⁴² But these “local chiefs” also had dealings with the central administration, and their local authority is not described beyond the groups of people they oversaw.

The tablets include a great number of other individuals who are connected to the central administration by virtue of land-holdings and/or the receipt of goods. A distinction can be made for such personnel between those who appear directly dependent on the palace administration and those termed indirect dependents. The latter were specifically assigned to an intermediary, whom Hiller describes as “another person who is a superior but himself depends on the palace.”⁴³ Some of these indirect dependents are described individually as *wa-na-ka-te-ro* or *ra-wa-ke-si-jo*, or in collective groups as *qa-si-re-wi-ja*; others are linked with a named individual, a “collector.”⁴⁴ As I have argued above, the *wanax*, *lawagetes*, and *qasireu* might each act out of his own interest, and similar motivations have been suggested for the “collectors.” These enigmatic figures sometimes oversaw progressive

⁴¹ Lindgren 1973: 126-30; Carlier 1995.

⁴² Palaima (1995: 124-25). These arguments for the expanded importance of the *qasireu* are generally constructed around the continuity or development from the Mycenaean position to the later meaning of βασιλεύς as “king.” Morpurgo-Davies 1979: 108; Ventris and Chadwick 1973: 121, 409. For fuller discussion of the Iron Age institution of the *basileus*, see Drews 1983.

⁴³ Hiller 1988: 53. The “direct dependents” are not listed under a superior, and are thus thought to be responsible to the “palace as an institution.”

⁴⁴ The “collectors” are identified not by a specific Linear B title, but by their supervisory position (Ventris and Chadwick 1973: 200-201). The exact identity of these individuals remains unclear, as reflected in other references to them as “owners” or “beneficiaries.” For a thorough overview, see Bennet 1992; Killen 1995.

phases of a single industry, whose final products perhaps went into their own storehouses, as well as those of the palace.⁴⁵ Hiller concludes,

“the palace regarded the personnel whom we call indirectly dependent as its property. Though they were assigned to functionaries for practical reasons, they nevertheless remained under the control of the palace, which also provided it with the necessary subsistence level.”⁴⁶

This distinction between the palace and its functionaries should not be dismissed as a matter of practicality. Individuals may act in coordination with the central administration, but there might also be competition, enacted through (or in spite of) palace dynamics. There is also the matter of whether workers were fully dependent upon the administration for rations and/or land, or whether such allotments were necessarily supplemented through other means, or at least diversified through some form of exchange.⁴⁷

Of course, the distinction between direct and indirect dependence would also have direct impact on the workers themselves. Those assigned to a palace official or “collector” had a primary relationship with a particular individual, which would certainly affect their view of the administration as a whole. Another conceptual distinction probably applied to those who worked in collective groups. Most commonly described in collectives are female rations-recipients of the Pylos archives, described by their profession (mostly in the textile industry) or ethnic identification (such as *ki-ni-di-ja*, “of Knidos”).⁴⁸ The status of the foreign women as slaves, captives, or simply dependent is unclear, as reflected in the interpretations for one particular term *ra-wi-ja-ja*.⁴⁹ The *kakewe* “bronze-smiths,” who

⁴⁵ Killen (1995: 213) hypothesized that they were “prominent members of the ruling élite (members of the royal family, high palace officials, and the like) who have been assigned part of the productive capacity of the kingdoms for their own benefit.” For their exploitation of the palatial system, see Carlier 1992; Killen (1995) presents texts that may demonstrate their economic position beyond the central administration.

⁴⁶ Hiller 1988: 56.

⁴⁷ Chadwick 1988, Palmer 1989.

⁴⁸ Chadwick 1988: esp. 78-87.

⁴⁹ Chadwick (1988: 83, 92) associates this term with *λεία* “booty” and identifies the *rawijaja* as captives (like the *γυναῖκες λιηάδες* in the *Iliad*), and argues that other women listed in groups were slaves. Lindgren (1973: 136) prefers *rawijaja* as an (untranslated) occupational or ethnic title, like the other female

were also regularly described in groups but are also holders of land and owners of slaves, appear to be somewhat independent of the palace.⁵⁰ So the terms of the administrative texts do not in themselves determine social status.

Kilian arranged these positions and titles into a hierarchical diagram (Fig. 2.3), though he did not elaborate on any particular figures “below” the *wanax*.⁵¹ Reviewing the evidence for these many others, however, does not instill confidence in this model. First of all, the understanding for each office is imperfect, and any larger description of the administration must supplement the texts with hypotheses. And the evidence afforded by the tablets makes it clear that the position of palatial officers and functionaries vis-à-vis one another can not be so neatly reduced. Their responsibilities overlap and the pre-eminence of one figure over another is not always explicit. In sum, the system described in the archives is not rigidly constructed, nor does all status necessarily rise to the *wanax*.

Rivals to Palatial Power

A number of institutions and individuals operated outside of the palace, and perhaps in opposition to the centralized system. The religious sector, for example, clearly played a role in economic activities and may have had considerable independence. The archives indicate that sanctuaries received palatial support, usually expressed in terms of offerings to a particular deity or *pa-si-te-o-i*, the pantheon of gods, in a particular location.⁵² But this does not reduce the sanctuaries to palace-dependencies. The offerings included raw

collectives of the Aa, Ab, and Ad series. For the status of these groups, see Billigmeier and Turner 1981; Palmer 1989.

⁵⁰ Gillis 1997.

⁵¹ Kilian 1988b: 292-93, fig. 1.

⁵² Ventris and Chadwick 1973: 303-12, which includes the Knossos references to *pa-si-te-o-i*. The location of the gods in Kilian’s diagram does not stem from Linear B evidence, but is part of his association of the *wanax* with divine and mythical beings, based on the archaeological evidence of the megaron (see below). Also note that while the divinities are included in the social hierarchy, religious personnel is not.

materials to be further processed, presumably by the craftspeople recorded in sanctuary locations.⁵³ Also, there are workers described as *po-ti-ni-ja-we-jo*, belonging to the goddess *Potnia*, as are land and even flocks of sheep.⁵⁴ Thus, the economic role of the sanctuaries was not only as a consumer, but as a producer as well.

Private land-holders are referred to as *te-re-ta* or *telestai*, or sometimes more literally as a *ko-to-no-o-ko* (“one who holds a *kotona*,” or plot of land).⁵⁵ Both terms are sometimes substituted with *da-mo*, which apparently refers to collective people at the village-level.⁵⁶ How the *damos* as an institution might represent these individual land-holders is unclear, but there are two events recorded in the Pylos archives which demonstrate its importance. The first is the inventory of ceremonial furniture and equipment, probably for a feast, “on the occasion when the *wanax* appointed Augewas *damokoros*.”⁵⁷ The exact nature of this office is not elaborated here or elsewhere, but its elements *da-mo* and *ko-ro* (as in *ko-re-te-re*) are clear. The fact that he is appointed by the *wanax* indicates the extension of palatial power to the *damos*-level, but the sumptuous nature of the material reviewed in the Ta tablets suggests palatial concern to demonstrate the importance of the *damokoros*. The second Pylos tablet records a less harmonious event, a dispute over land-holding at Pakijane:

⁵³ Chadwick 1985: 200.

⁵⁴ Lupack 1999; also Hägg 1996 (for archeological evidence of a sanctuary-workshop connection). Antonelli (1995) takes a more critical view of the textual and archaeological evidence for the economic power of sanctuaries. The title *potnia* may have been a title (meaning “mistress”) applied to all goddesses, rather than a single divinity (Chadwick 1985: 195). It is also possible that *potnia* was sometimes used in reference to the queen, who would otherwise be absent from the Linear B archives.

⁵⁵ Lindgren 1973: 88-89, 144-45. A *τελεστής* is a priest or religious official in later Greek, but there is no specific evidence for this qualification in the tablets (Chadwick 1976: 76).

⁵⁶ Chadwick 1976: 76-77. Another local institution may be that of the *ke-ro-si-ja*, which has been connected with *γεπουσία* “council of elders,” and was perhaps an advisory body for local officials (Ventris and Chadwick 1973: 122, 409).

⁵⁷ This is the first line of Ta 711 (Ventris and Chadwick 1973: 335-36 no. 235), which is taken as the introduction to the entire series, which was referred to briefly above (see n. 32).

“the priestess Eritha has and claims to have a ‘freehold’ (*e-to-ni-jo*) for the god, but the *damos* states that she has a ‘leasehold’ (*o-na-to*) of communal land.”⁵⁸

This passage demonstrates not only the (alleged) right of the religious sector to hold land free from the assessment of taxes, but also the *damos* as a rival power. Whether these two would be subject to a palatial settlement is not indicated.

This brief review of the social relations in the Linear B archives has demonstrated two important points. The first is that a variety of potential rivals exist within and outside the palace administration. Though antagonism is seldom directly expressed, the individuals described in the tablets are well positioned to compete for the resources on which wealth and status relied. Also emerging from this review is a picture of the individuals active in the social and economic transactions that will be discussed throughout this dissertation. Although direct associations between archaeological evidence and archival personality can only rarely (if ever) be made, it is important to establish that my approach to the material evidence for import consumption does not conflict with nature of Mycenaean society as preserved by the tablets.

Ideology and Material Culture

The Linear B tablets are strictly administrative; no literary or historical texts survive. While the details of economic transactions provide a framework for the construction of economic and social dynamics, there are few explicitly ideological statements. The detailed systems in the archives did, however, provide an important basis for the interpretation of archaeological evidence in Kilian’s formulation of the “*wanax* ideology”

⁵⁸ Ep 704 (Ventris and Chadwick 1973: 252-56 no. 135). The disagreement over the type of land in question is not surprising, given the complexity of the Mycenaean system. For an overview, which includes the issue of Eritha’s *e-to-ni-jo* or *o-na-to*, see Deger-Jalkotzy 1988: esp. 41-42.

(the first explicit discussion of Mycenaean ideology).⁵⁹ Indeed, all consideration of Mycenaean power must turn to ideological statements that were given material form.

Kilian's *wanax* ideology centered on the ruler, not only as preeminent in the socio-economic system of the archives, but also as the central figure of state ritual and palace architecture. Thus, he presented the megaron as the "architectural climax" of the palace and the focal point of official religion, where the *wanax* would interact with "the eternal."⁶⁰ Indeed, the megaron, elaborately decorated with "symbols of the transcendental sphere" and located in the center of the palace, must have created a dramatic setting and had great impact on those who reached it. The ritual legitimization which Kilian asserts could only have been witnessed by those who had access to the megaron, which probably included the administrative figures of the Linear B tablets. This aspect of Mycenaean ideology, then, was well-named by Kilian, since its aim was to set the *wanax* apart from other palace elites, and may indeed have put him in a superior position.

Wright has expanded on Kilian's analysis with his presentation of the "hearth-*wanax* ideology," which put more emphasis on particular features of state ritual. He identified the cultic responsibilities of the *wanax*, for example carrying out a libation ceremony before the hearth, as symbolic of the role played by the leader of every household.⁶¹ Thus, the importance of the megaron ritual could reach far beyond those actually present, and the *wanax* is not merely removed from the rest of the state, but responsible to it.

Representational art work is perhaps the most obvious source to turn to for materialized cultural meaning, whether it be expressed through narrative or iconographic

⁵⁹ Kilian 1988b. As discussed in Chapter 1, this approach reveals the negotiation of power relationships which took place through activities and artifacts (for the materialization of ideology, see DeMarrais *et al.* 1996).

⁶⁰ Kilian 1988b: 293-94.

⁶¹ Wright 1994: esp. 57-59.

components.⁶² Mycenaean crafts provide a rich source of images, especially the paintings preserved in fresco and pictorial pottery,⁶³ but offer no explicit evidence for the role of the *wanax*, aside from the decoration of the megaron. Although these include scenes in which human actors are differentiated by attributes of scale, dress, and activity (including ritual and battle), there are no recognizable representations of the ruler.⁶⁴ Understanding his position relies on the identification of activities by which power was created by all social actors with established position or aspirations thereof.

The structuring of Mycenaean society was a continuing process, in which individual positions were liable to be transformed or overturned. And while the voice of the *wanax* may have carried significant weight, ideology did not emit fully-developed from the palace. Rather, it was the product of statements made and received by all members of society, as they made sense of the world around them. The consumption and circulation of crafted goods were a part of this discourse in Mycenaean society, since certain materials and symbols were directly connected with politics and belief. Thus, ideological factors, as well as economic ones, directed the production, storage, and display of valued objects.

The exchange of goods between the central authority and the people of its realm, for example, creates a dependence on the center. The Mycenaean palaces operated a wealth finance system, wherein the collection of agricultural and pastoral products enabled the production of goods with more concentrated value.⁶⁵ While this system brought the products of the land to the palatial center, the prestige goods produced or acquired by the palace could be used to reinforce its position through display or secure ties with local elites

⁶² E.g., Morgan 1988.

⁶³ Karageorghis and Vermeule 1981; Immerwahr 1990.

⁶⁴ Crowley 1995; Davis 1995. Immerwahr (1990: 122-34) presents narrative compositions found in Mycenaean frescoes, the majority of which are battle and hunting scenes.

⁶⁵ D'Altroy and Earle 1985; Halstead 1992b.

through exchange. These were most often portable objects, which could be effectively employed in the transmission of ideology beyond the center and throughout a region.

Linear B tablets from Pylos and Knossos, for example, demonstrate the social relations enacted through the textile industry and its associated circulation of basic commodities and crafted goods. While the majority of this information relates to the collection of raw materials and supervision of production, the range of products and the significant labor invested therein indicate the prestigious nature of the manufactured cloths.⁶⁶ There is little information specifically about the exchange of these finished goods, but the Knossos archives do record one type of cloth, described as *ke-se-nu-wi-ja*, that may have been used as payment and/or uniforms for mercenary soldiers.⁶⁷ Also, the ritual use of textiles, familiar from Minoan iconography, is perhaps paralleled by an intriguing fresco fragment.⁶⁸

The circulation of imports can also be viewed as a series of meaningful exchanges, and would serve the palace well for wealth-finance and elite gift-exchange. But the palace archives do not specifically include imports among the few prestige items and more common staple commodities listed. So, unlike Mycenaean cloth for which textual information is plentiful but material evidence scarce, imports must be approached archaeologically. And, like other sources of power that originate or reside beyond cultural

⁶⁶ Specific types of cloth range from staples (collected by the palace) of predetermined material, size and thickness, to those of higher status, described by their color (often purple or red), decorative border and fringe, or terms such as *wa-na-ka-te-ro*, "royal" (Burke 1998: 96-174). The investment of labor in these products is indicated by the highly specialized professions in the textile industries of Pylos and Knossos, summarized by Morpugo Davies 1979: 99-101.

⁶⁷ This cloth may also have been intended for foreign trade, since *ke-se-nu-wi-ja* has been interpreted as "for export" or "for guest-gifts" based on the identification with later meanings of ξένοσ and ξενία (Ventrìs and Chadwick 1973: 318; Killen 1985: 263). But the regular association of *ke-se-nu-wi-ja* and *e-qe-si-ja* (referring to the *eqetai*) has led to the suggestion that the recipients, and perhaps the goods themselves, had a military role (Driessen and Macdonald 1984: 55-56).

⁶⁸ Pylos fresco fragment 40 Hne was originally identified as a woman holding a yellow flounced skirt (Lang 1969: 79, pl. 26, C), but the figure was later recognized as a genius-figure (Gill 1970: 404-406 no. 55, ill. 1), probably holding a flounced skirt or a sacral knot (Immerwahr 1990: 111-12, 196). Genii regularly appear as cult-attendants in Mycenaean art (Rehak 1995; Kontorli-Papadopoulou 1996: 172-73).

boundaries,⁶⁹ imports could function as a foil to palatial dominance as much as they might be used to legitimize it.

Long-distance Exchange and Mycenaean Greece

Evidence for long-distance trade is not readily available in the Linear B tablets, although foreign connections of some sort are indicated by non-Greek words for commodities, personal names, and places.⁷⁰ Detailed description of international exchange are found in contemporary Near Eastern writings. The Amarna Letters, for example, describe an array of commodities requested and sent between regions of western Asia, which range from precious objects, individually named and described, to large quantities of raw materials.⁷¹ Theories that metals were the prime commodity of ancient trade have been bolstered by the metal cargo of the shipwrecks at Uluburun and Cape Gelidonya, though the holdings of the Point Iria wreck point to the importance of other goods.⁷²

The evidence that remains in Aegean contexts, however, is less often a supply of unprocessed materials and more frequently individual items of foreign manufacture. The value of these surviving imports is often diminished; Cline, for example, described them as “an eclectic combination of containers for the primary trade goods, secondary trade goods imported for their own intrinsic value, and a variety of smaller objects which may be regarded as curios, souvenirs, and articles of personal adornment or significance.”⁷³ But these very goods, and their *personal* significance, represent a side of the economy not well-evidenced by the Linear B texts, what might be called “The Prestige Sphere in Staple

⁶⁹ Other external sources of power include the “other,” the divine, and the past as memory (Helms 1993).

⁷⁰ Palaima 1991: 273-84; also collected by Cline 1994: 128-31.

⁷¹ Moran 1992; for more on raw materials, see Bass 1997; for other perishables (such as foodstuffs, resin, wine, and perfumes), Haldane 1993; Knapp 1991.

⁷² Pulak 1997 (Uluburun); Bass 1967 (Gelidonya); Vichos and Lolos 1997 (Iria).

⁷³ Cline 1994: 97.

Finance.”⁷⁴ Objects crafted of semi-precious stones, ivory, and glass are recognizable from their luxurious (exotic) materials as prestige items. The value of other “utilitarian” objects could also be enhanced by their unusual form, or simply the novel fact of their foreignness. To combine such diverse objects under the single heading of “imports” does not remove their many typological and functional differences. Not all classes of imports were treated the same, nor did they necessarily play the same role in each region. The means by which they were acquired, however, does distinguish them from locally crafted items.

The Identification of “Imports”

Cline and Lambrou-Phillipson have separately produced catalogues of items imported into the Late Bronze Age Aegean, each defining an import as a finished item crafted outside of the Aegean.⁷⁵ Both authors are interested in the remaining artifacts as indicators of broad patterns of exchange. Lambrou-Phillipson aims at the volume of exchange over time, as she computes the relative intensity of imports per year for different regions. Similarly, Cline takes the surviving objects as representing the routes of exchange, which allows him to reconstruct historical changes in the patterns of Mediterranean trade. What neither does is to consider the role of the artifacts themselves in the context of Aegean society.⁷⁶

The identification of any particular object as an “import” is somewhat subjective; thus there is not complete overlap between the two catalogues. Combining the counts of

⁷⁴ Polanyi 1960.

⁷⁵ Lambrou-Phillipson 1990; Cline 1994 (Catalogue II now available as a searchable database, the Corpus of Late Bronze Age Imports from the Near East and Egypt <<http://oz.uc.edu/~clinee/CLINEDB.htm>>).

⁷⁶ Admittedly, Cline’s many articles cover a broad range of more specific subjects, which now include an attempt to understand the rationale behind importing one particular class of goods, wall brackets (Cline 1999). He has also written specifically about the imports at Mycenae (Cline 1995), but this piece is mostly descriptive and maintains an approach which uses artifact-distribution as a reflection of external choices (direct trade, embargoes, etc.), rather than internal processes.

Lambrou-Phillipson and Cline for items of foreign manufacture found in Late Helladic contexts gives a total of 406.⁷⁷ Of these, they agree on only 213, with Cline offering 144 more and apparently rejecting 49 of Lambrou-Phillipson's entries. Cline has added greatly to the earlier corpus but, compiling his catalogue second, had the advantage of passing judgment on items presented by Lambrou-Phillipson. He does not, however, specify why any particular object is included, excluded, or left in the limbo of his appendices, where it has no part in "statistics nor in the discussions and analyses."⁷⁸

I have included all these items in my analysis, since the reasons for their exclusion are either not apparent or rather easily overcome. For example, Cline's appendices include 20 mainland entries which come from contexts he considers unreliable.⁷⁹ Each of these items, however, is at least identified with a particular site, which allows analysis at a broad level (carried out in Chapter 3).⁸⁰ Other objects excluded by Cline are those identified as raw material, which includes 14 Helladic entries from LH contexts.⁸¹ For the most part these are not materials found in workshops or storage rooms, awaiting further processing.⁸² Rather, several are from graves, and their intentional deposition suggests that they were valued objects, even if in an unfinished state. Others of these are fully finished items; for example several entries are ostrich-egg rhyta, included here since they probably entered the Aegean as raw material but were then embellished by local crafters.⁸³

⁷⁷ Both authors catalogue imports found on Crete and the Cyclades as well, and Lambrou-Phillipson covers the entire Bronze Age, while Cline limits himself to the Late Bronze Age. Thus, only portions of their works are used here for a discussion of mainland Greece in the LBA.

⁷⁸ Cline 1994: xx.

⁷⁹ Cline 1994: Appendix III. "Unknown or Disputed Contexts," 252-57 nos. 1072-1118.

⁸⁰ Also, I find some inconsistency in what context information is judged reliable. For example, two stone vessels from Nauplion tombs (162, 163) are classed differently in Cline's catalogue (one being relegated to Appendix III), though the information for both comes from the same source (NMA inventory, as described by Warren 1969).

⁸¹ Cline 1994: Appendix I "Raw Material," 234-38 nos. 906-61.

⁸² Although this is apparently the case for several elephant tusks from Crete (Kato Zakro and Kommos), and the Uluburun material included were presumably intended for manufacture.

⁸³ Reese 1985b.

Similarly, there are an additional 52 entries from LH contexts, which Cline considers possible Aegean works—Minoan or Cycladic, if not locally manufactured.⁸⁴

More Recent Finds?

Although we can assume the combined catalogues of Cline and Lambrou-Phillipson to be a fairly complete listing of imports from the Argolid, there are without a doubt, items missing. Both scholars gained access to material not otherwise published and many imported items have been reported well in advance of a project's full publication.⁸⁵ Yet there is always the potential of further discoveries from new fieldwork, and perhaps in the on-going publication of work from decades past.

Four faience seals, for example, published in a 1993 *CMS* supplement, are possible imports and would likely have been included in Cline's and Lambrou-Phillipson's catalogues if known to them.⁸⁶ Two cylinder seals from the Midea area and a third from near Mycenae have all been identified as works of the Mitanni Common Style.⁸⁷ The design of each includes male figures whose dress certainly sets them apart from Aegean carving, and the general execution is fitting with this particularly recognizable style.⁸⁸ The fourth of these newer *CMS* entries is a scaraboid seal from near Mycenae, whose underside design features the buds and a stylized blossom of the lotus.⁸⁹ The scarab is originally an Egyptian object, but the form of this particular piece is rather simple and scaraboid seals

⁸⁴ Cline 1994: Appendix II "Dubious or Problematic Imports," 239-52 nos. 962-1071.

⁸⁵ Thus, there are many several cases where context information is not yet available, for example some of the material from recent excavations in the Tiryns Unterburg.

⁸⁶ Cline (pers. com.) confirms that without personal investigation, he considers these likely imports. Although most often identified with Egypt, faience objects were also produced across western Asia and the Aegean during the Late Bronze Age. The material itself should not be associated with any particular region.

⁸⁷ *CMS V Suppl. 1B*: nos. 82-83 (Exc Gr.Nr.3Beta and Gr.Nr.3Zeta, now in the Nauplion museum) are both from a burial at Panaritiss, 1 km South of the Midea acropolis. And *CMS V Suppl. 1B*: no. 80 (Nauplion 19373) is from a chamber tomb in the Batsourorachi Field, 1.5 km NW of the Mycenae acropolis.

⁸⁸ Pini 1983; Salje 1990.

⁸⁹ *CMS V Suppl. 1B*: no. 79 (Nauplion 19372), also from the Batsourorachi Field cemetery.

were made in the Aegean and the Syro-Palestinian Levant. The lotus motif was very rare in the Aegean and was apparently not executed by Mycenaean artists. In fact, I am aware of only four other pieces in the Argolid which carry this motif, three of which are recognized as imports by Cline and/or Lambrou-Phillipson: the faience bowl from the Prosymna tholos (171); and from Mycenae, the carved tusk from Chamber Tomb 55 (101) and a faience kylix from the House of Shields (64, Fig. 2.4). The other is a faience lotus-shaped pendant from Prosymna, which Pierce Blegen described as “probably Egyptian.”⁹⁰ The scarab’s design does, however, find numerous Egyptian parallels, for both the stylized form of the lotus blossom and the bending lotus bud stalks.⁹¹

I have decided, however, not to incorporate these pieces into my analysis. It is not my aim to update the list of imported items found in the Argolid and I have not systematically approached such a task. There are undoubtedly items in Appendix A which some (including myself) would argue to be local products.⁹² Just as I have chosen not to remove pieces catalogued by Cline and Lambrou-Phillipson, I will not add to this corpus either. Thus, a total of 406 entries are considered in the analysis of imported items found in Late Helladic contexts. It is nonetheless important to understand the means by which imports have been identified, since there is debate over the true origin of so many objects in these catalogues. I offer here some limited examples here in exploration of the unstable nature of “imports” and an attempt to move beyond debates of local or foreign manufacture. (These examples are taken from among the imported items found in Argolid, listed as Appendix A, to which bold numbers refer.)

⁹⁰ Pierce Blegen 1937: 312; fig. 143:16.

⁹¹ For Egyptian scarabs with similar lotus designs, see Petrie 1925: 18, pl. X nos. 388-409, 410-16. Perhaps a closer parallel for the design of the Batsourorachi scarab is the carved design on a wooden spoon from Memphis: Berlin Ägyptisches Museum (Staatliche Museen) Inv.-Nr. 1877 (Priese 1991: no. 147).

⁹² For example, the faience lantern bead, as a type, is not necessarily an import. Many of these ornaments are known from Mycenae (and other Mediterranean sites from the Levant to Sicily), but only one (54) has been considered foreign.

Scientific Analysis

A number of scientific means are now available for determining the provenience of archaeological material. Such techniques, however, have been applied to only a small portion of the items in question, and these analyses too remain open to further interpretation. For example, a number of faience plaques with the cartouche of Amenhotep III are known from Mycenae, and have been readily accepted as imports (31-38, 56, Fig. 2.5).⁹³ Some doubt has been cast on their Egyptian manufacture, however, by the chemical composition of one fragment from the Citadel House excavations (56).⁹⁴ Isotopic ratios in the glaze were found to be consistent with Type L leads, most of which came from mines of the Laurion region of Attica. The possibility that this plaque might have been made in Greece, or of Greek materials, certainly requires a reconsideration of the events and mechanisms suggested for the history of the plaques.⁹⁵ But the analysis also demonstrates that the pharaonic cartouche cannot be taken as a "Made in Egypt" label; even the most foreign-looking items are not necessarily imports.

This example does not fairly demonstrate the potential of scientific analysis in determining the origins of apparent imports. Ideally, samples from several (or all) of the Amenhotep III plaques would be subject to the same type of analysis in order to determine the coherence of the group and to rule out the possibilities of contamination and error.⁹⁶ And this should be part of a larger series of tests comparing pieces from known production contexts.⁹⁷ Even so, it is clear that room for doubt and the need for interpretation will

⁹³ A total of 11 fragments represent between six and nine original plaques (Cline 1990: 203).

⁹⁴ Cline (1990: 209) reports the conclusions of R.H. Brill, based on lead isotope analysis performed by the National Bureau of Standards in Gaithersburg, MD.

⁹⁵ Proposals for the use of these plaques at Mycenae (e.g., Cline 1990; Hankey 1981; Bernal 1987) will be discussed in Chapter 4.

⁹⁶ Cline (1990: 210 n. 44) raises the possibility that the plaque was contaminated by the lead vessel in which it was found, and also that of laboratory error.

⁹⁷ A second plaque fragment (33, NMA 2718) was included in a National Museum project employing atomic absorption spectroscopy to study the range of compositions found in Mycenaean faience (Andreopoulou-Mangou 1988). The plaque's core material was found to be similar to Mycenaean samples

remain, since the origin of finished items is not necessarily that of their constituent materials. The accurate identification of foreign products and local imitations is an important step in the understanding of culture contact. But since so few of the items involved in this study have been subject to scientific analysis, the classification of an “import” and its place of origin remains an exercise based on style.⁹⁸

Visual Analysis and Stylistic Identification

The identification of imported items by visual analysis and comparison can be obscured by the spread of stylistic features from one region to another. A number of faience vessels, for example, embody an “International Style” that was current across the Aegean and eastern Mediterranean. This mixture of visual elements from several regional traditions often confounds the identification of place of manufacture, the ethnicity of the artisan, or the intended consumer.⁹⁹ Since these works are not completely at home in any particular region, their status as imports (and if so, from where) is easily questioned.

One specific class of faience whose origin has been much discussed is the monochrome kylix, well represented by the eight examples from the House of Shields (64, 66, 67, 69, 71, 78, 84, 85).¹⁰⁰ Foster regards this group as locally made, because of the familiar shape and motifs which are “typically Mycenaean,” especially the helmets and a

in its low percentage of iron, rather than showing the high concentration found in some of the Egyptian pieces tested, a trend connected with “iron-rich Egyptian sands.” (Not all of the Egyptian samples were consistent, however, and the fact that they were taken from unprovenanced pieces casts some doubts on the results.) While its composition perhaps liberates the plaque from a necessarily Egyptian origin, it does not tie it to a specifically Mycenaean profile either.

⁹⁸ Neither Cline nor Lambrou-Phillipson specify their criteria for such identifications, but Laffineur (1990-91: 248) enumerates several elements of visual analysis (raw material, technique, shape and decoration, style, meaning and function).

⁹⁹ International Style, Stevenson Smith 1965: 33, 45; Crowley 1989: 221.

¹⁰⁰ The monochrome classification refers to the decoration in black (or dark brown) on the blue or green ground of the glaze, which has often faded to white. (The other faience kylikes in App. A are polychrome; see n. 105.)

number of subsidiary designs.¹⁰¹ There are non-Mycenaean motifs on these kylikes as well, which she describes as easily imitated. One of these is the lotus motif (64), which, as discussed above (p. 44), was common in the east Mediterranean but seen little in the Aegean.¹⁰² The decoration of another vessel (71) is described as papyri and possibly a Nile skiff.¹⁰³ Peltenburg argues that not only are particular elements foreign to Greece, but the decoration as a whole is “decidedly Egyptian,”¹⁰⁴ though this too could be imitated. The more convincing aspect of his analysis is when Peltenburg moves beyond the decoration of the vessels and considers characteristics of their manufacture. The techniques of assembly, apparent only when the glaze and core are revealed in fragments, reveal knowledge of east Mediterranean practices.¹⁰⁵

My own concern is not that these pieces are specifically Egyptian or Syrian, but that they are foreign, or at least invoke the foreign. When Smith coined the term “International Style,” he considered the ambiguity of these pieces’ origin to be an obstacle, insurmountable only until more examples became known.¹⁰⁶ But it may well be that the

¹⁰¹ Foster 1979: 127. For Mycenaean shape and motifs, she cites Furumark 1941: 56 type #255, fig. 16; motifs #73 (lozenge), 61:10 (zigzag), 61A:2 (triangle), and 42:30 (joining semicircles). Wace (1956: 111-12) considered, but rejected, the possibility of local manufacture, and tentatively identified them as Syrian manufactures.

¹⁰² cf. Crowley 1989: 80.

¹⁰³ As described by Cline (1994: 207 no. 654); Tournavitou (1995: 696) gives no description of the decoration.

¹⁰⁴ Peltenburg (1991: 164) compares them to lotus chalices in overall form.

¹⁰⁵ Peltenburg 1991: 164. He goes on to suggest a north Levantine source (166), which other scholars have followed (e.g., Cline’s assessment for the whole group). Peltenburg also has a paper, “The Oriental Character of Faience Vessels from the House of Shields, Mycenae” (cited by Cline and Tournavitou as forthcoming) that may up-date or alter this argument.

There are also a number of polychrome vessels in the International Style, about which opinions are similar: Peltenburg (1991: 165) discusses a Western Asiatic tradition in faience vessel-making practiced (alongside an Egyptian tradition) in the north Levant, which would be the likely origin of the polychrome vessels from the House of Shields as well. Alternatively, Foster considers the polychrome vessels Mycenaean as well, mainly because of style and subject matter (1979: 128-30), which are difficult to assess from the preserved fragments.

¹⁰⁶ Stevenson Smith 1965: 44, “It must be admitted that we are not yet in a position to determine the source of manufacture of the objects we are discussing.”

mixture of regional styles was an intentional choice of the artist, to the point where it can be found alternating with a more indigenous style on a single object.¹⁰⁷

The visual characteristics of imported items are essential to its value as exotic, since these are the features by which it was usually identified. The items that are “foreign” enough to persuade the modern scholar, are likely to have been recognized as such in antiquity as well. Although the parties involved in the actual transport of an object might *know* its origin, it is the *perception* of an object as foreign that was essential to its operation as an import. But not all imported items are so easily recognized by their material or style. A number of objects imported in the LH III period were of a “utilitarian” nature,¹⁰⁸ including coarse-ware ceramics, stone mortars, and terra-cotta wall brackets. Several scholars have considered why Mediterranean trade included such items—made of locally available materials and without significant added-value apparent in their crafting.¹⁰⁹ It may be the case that such mundane items were not recognized or valued as imports, but simply came as part of the bulk of trade that was motivated by the more obviously imported items. With their more detailed iconography and rare material, luxury goods were perhaps better symbols of the foreign. An inclusive study of the different types of imports, however, may reveal different social groups participating in trade and should demonstrate the multiple effects of trade.

The Distribution of Imports in Mainland Greece

The consumption of foreign-made items in Mycenaean Greece follows different patterns in the various regions of the mainland, created by factors of internal consumption

¹⁰⁷ Crowley (1989: 226 n. 17) offers this interpretation of the panels on an Ugarit ivory bed piece.

¹⁰⁸ I use the term “utilitarian” throughout the dissertation, for those objects which were not typically consumed as prestige-items, with the awareness that all items had both symbolic and functional value.

¹⁰⁹ Pottery, Artzy 1985; Sherratt 1999; wall-brackets, Cline 1999. Other scholars have doubted that such objects are all imports, for example the tripod mortars identified as Cypriot on account of their form (Buchholz 1974), are made of stone-types that were available within the Aegean (Evely and Runnels 1992), or perhaps even on mainland Greece (Demakopoulou 1998).

as well as external contact. Fig. 2.6 shows the distribution of imported items found in Late Helladic contexts, with the largest concentrations found at four sites: Mycenae, Thebes, Perate, and Tiryns. The mechanisms by which they came to these sites are not necessarily the same, nor the dynamics of their use once there. Putting each of these sites in its regional context demonstrates the different dynamics of import consumption, and the particular interest of this process in the Argolid.

The 47 imports at Thebes are all from the LH IIIA - IIIB period;¹¹⁰ 38 of these are from a single deposit, the "Treasure Room" of the New Kadmeion.¹¹¹ These are all cylinder seals, mostly of lapis lazuli, which are carved in a range of styles, though some have been identified as making up a single shipment.¹¹² The distribution of imports in contexts in Boeotia indicates that the palatial elite at Thebes maintained tight control over imports. While four imports were found among the 50 or so chamber tombs of Thebes,¹¹³ only one came from the hundreds of tombs of the Tanagra cemeteries.¹¹⁴ And while one import was found at the citadel of Gla,¹¹⁵ none have been found at Orchomenos (although

¹¹⁰ With the possible exception of an 18th Dynasty scarab from an unrecorded chamber tomb (now in the British Museum, Lambrou-Phillipson 1990: no. 310), though its Egyptian date roughly corresponds to the high Mycenaean period.

¹¹¹ The remains of Mycenaean Thebes have been excavated only in limited areas, due to its location beneath the modern town. Discontinuous portions have been identified as two sequential palaces, of which the "New Kadmeion" is the latter, though this interpretation relies more on orientation rather than stratigraphy. For the assignment of excavated areas to different phases or constructions, see Symeonoglou 1985: 40-50, with references to opposing opinions.

¹¹² Porada (1981: 68) interprets the Kassite seals as a distinct group and reports that their total weight equals 496 grams, "approximately one ancient mina" (if one includes the nine unengraved rolls of lapis lazuli "which have proportions corresponding to those of Kassite cylinders"). She identifies many of the others as Cypriot (or re-worked on Cyprus). And while most are lapis lazuli; two are faience, one agate, and one a blue stone (*not* lapis lazuli).

¹¹³ A glass scarab (Lambrou-Phillipson 1990: no. 310), a glass vessel (Lambrou-Phillipson 1990: no. 311), a Canaanite amphora (Cline 1994: no. 324), and an ivory pyxis (Lambrou-Phillipson 1990: no. 353). Hope Simpson 1981: 70

¹¹⁴ A faience cylinder seal (Cline 1994: no. 163; Lambrou-Phillipson 1990: no. 309). Hope Simpson 1981: 52.

¹¹⁵ Fragment of an ostrich-egg rhyton (Cline 1994: no. 946).

the tholos tomb here preserved no finds, and neither the palatial structures nor the chamber tombs have been systematically excavated¹¹⁶).

Not only was the vast majority of the region's imported items found in the Kadmeion, but also exotic raw materials were tightly concentrated here as well. The Treasure Room also contained onyx jewelry and fragments of ivories. A jewelry workshop contemporary with the Treasure Room, yielded numerous pieces of lapis lazuli and glass (along with smaller amounts of amethyst, agate, and amber), and an associated pit contained hundreds of burned ivory fragments.¹¹⁷ Even though the Mycenaean remains of Thebes have been uncovered only in part, this site clearly dominated the region's import acquisition and consumption. This may be a factor of the archaeological sample, yet it is surprising that there are not more imports from other likely contexts in the region.

The 47 imports from Perate were all found in the LH IIIC (or IIIB-C transitional) tombs of a single cemetery on the Attic coast. No associated settlement is known, but the location of the cemetery is above the bay of Porto Rafti, where ships might have brought the foreign items. The acquisition of imports here might be considered a separate phenomenon from that in other regions with dominant power centers. Although the fortified settlement on the Athenian acropolis did not suffer the IIIB destructions of other centers, there is little evidence for its dominance over Attica before the Iron Age. In terms of foreign contacts, it certainly does not match the activity seen at Perate; only three imported items have been found in LH IIIC Athens.¹¹⁸ While the inhabitants of Perate enjoyed access to these foreign items, their consumption cannot be associated with the same (palatial) power dynamics of other regions.

¹¹⁶ Hope Simpson 1981: 61, 211.

¹¹⁷ Symeonoglou 1973: 44-62, 66-70.

¹¹⁸ Cline 1994: nos. 983, 1064-65. One other contemporary import in Attica is an ornate mortar from Charvati, LH IIIB or IIIC (Cline 1994: no. 981; Lambrou-Phillipson 1990: no. 266).

Unlike those of Thebes and Perate, the imports found at Tiryns and especially Mycenae cannot be reduced to a single chronological period. Nor do these sites dominate their region to the degree seen in Boeotia and Attica. In fact, the two sites are both found in the Argolid, as are several others with significant numbers of imported items. The longer history of import consumption in the Argolid fits with other evidence for competition throughout the region's Mycenaean period. And the wider distribution of these items, compared especially to the tight centralization at Thebes, indicates that the role they played as material symbols was in relation to the entire Argolid, not a single center.

The same cannot be said for Messenia. It is surprising that so few imports have been found at Pylos, the palatial center whose archives have provided much of the information presented for Mycenaean economic and social systems. Only one imported object comes from the palace itself, and two more were found in the tholos tombs of the Englianos ridge.¹¹⁹ A few other items were found in nearby tholos tombs (at Koukounara, Osmanaga, and Routsis), but only a total of nine in Messenia as a whole. One might expect more imports given the evidence for Messenian contact with the West Mediterranean.¹²⁰ Also, the economic focus of the Pylos archives is largely on intensified industries (textiles, perfumed oil) suitable for long-distance exchange.

This disparity in the material patterns indicates the diverse function of import consumption in each region. I have chosen to focus on the northeast Peloponnese, as it offers ample evidence of outside contact: 220 (over one half) of the imported items were found in the Argolid. I concentrate my study on this area not because there was more exchange and therefore it had more of an effect, but because the social dynamics played out through import consumption should be more visible here, where the evidence remains in greater quantities and in a fuller variety. The distribution of imports not only between Mycenae and Tiryns, but also at a number of other sites, suggests the instability of the

¹¹⁹ Cline 1994: nos. 49, 323, 503.

¹²⁰ Marazzi *et al.* 1986.

palace administration(s) of the Argolid. The greater spread of imports across the Argolid might indicate an inability of the center(s) to restrict access to trade and the use of imports by others seeking to claim power. And the rival institutions and individuals outlined in this chapter may well have been the rival parties involved in import acquisition and consumption.

CHAPTER 3

SITE HIERARCHY AND IMPORTED ITEMS IN THE LATE BRONZE AGE ARGOLID

The Argolid stands out in comparison to other areas of Mycenaean Greece due to the many power centers concentrated in this one region. Clustered around the Plain of Argos, and all within ca. 200 square km, were a number of major settlements.¹ The largest was at Mycenae, already famous by virtue of its role in Greek myth and literature before the site's archaeological exploration, led by Schliemann's dramatic finds of the 1870s. Mycenae, however, is not the only Argive site distinguished by epic accounts or archaeological remains. Along with a number of other citadels, the Argolid featured smaller sites which included agricultural settlements, fishing villages, craft-production centers, rural sanctuaries, and military bases.

The keeping of Linear B records at Mycenae and Tiryns indicates that social and economic relations followed somewhat those described by the Linear B documents of other regions. But they do not provide evidence for the dynamics between the Argive sites, like those that outline the political geography of Messenia and Crete.² The archaeological remains of several palatial and/or fortified sites suggest that each centralized the resources of its immediate area, but specific definitions of dependence or autonomy cannot be made. Import consumption offers a different approach to the power dynamics of the Argolid, including the leading centers—those identified by settlement remains, wealth-laden burials and mythological accounts—and other, smaller sites as well. The distribution of imports is

¹ Bintliff (1977: 345, fig. 7) describes the spacing between sites as "about one hour on foot between major centres, half that between medium centres."

² For Messenia, see Chadwick 1972; Cherry 1977; Crete, Killen 1977; Bennet 1989.

not expected to reveal the political affiliation between sites, but it does invite comparison of their external contacts and intra-regional relations.

Political Dynamics in the Argolid

The major sites were located atop hills or outcrops ringing the alluvial plain: Mycenae on the northern edge, Argos in the west, Midea-Dendra³ to the east, and along the Gulf of Argos to the south Tiryns (and Asine). Fig. 3.1 shows these sites in the physical setting of the LBA Argolid, including the reconstructed coastline of the Gulf of Argos and the presence of a freshwater lagoon to the North of Lerna.⁴ The presence of Lake Lerna on the west and the extension of the coastline farther inland reduced the amount of arable land compared to the modern landscape. But they also have an impact on the location of some key sites, making Tiryns closer to the sea and separating Lerna from the other sites of the plain.

The political relationships between the many sites of the Late Bronze Age Argolid are not clear, despite many attempts to delineate power in this region. Mycenae is often pictured dominating the Argolid, and some have advanced it further as the leading center of mainland Greece. Theories of supra-regional Mycenaean hegemony have been fairly well defeated, though the unification of Mycenaean polities has still been considered by some seeking to identify Hittite references to “the Ahhiyawa” as a single Mycenaean kingdom.⁵ There is considerable support, however, for the view of Mycenae holding sway over the Argolid. Though there are a number of approaches by which scholars have presented

³ The tombs of Dendra have long been associated with the settlement of Midea (Persson 1931: 3-4), and will be treated as a unit in this chapter. Similarly, the burials of Prophitis Ilias are included as belonging to Tiryns, and the various cemeteries around Mycenae are combined with the site.

⁴ These features have been proposed by Zangger (1991: 7-13; 1994b: 194-96), based on geological cores taken by the Argive Plain Project. Landscape changes result from alluvial deposits carried by rivers in conjunction with a rise in sea-level of ca. 2 m since the LBA (Flemming *et al.* 1973: 7).

⁵ For reconsideration of Mycenaean hegemony, see Thomas 1970; Wright 1984; for the most recent review of scholarship on the equation of Ahhiyawa with Mycenaean Greece, see Niemeier 1998: 19-25, fig. 3.

Argive dynamics, these depictions are often that of an established, even static, coexistence that do not easily incorporate inconsistencies or allow change over time.

Some models look to environmental and geographical factors as determining the concentration of the whole region's limited resources under a single site. This view has been supported by historical analogy with the preeminence of Argos in the Classical period.⁶ And while Argos and Prosymna are more centrally located within the plain, Bintliff hypothesized that Mycenae's position between the Argive plain and the Corinthia (whence it reaped the benefits of both regions' fertility) allowed it to prevail.⁷ In addition to the produce of the land, Mycenae was well situated to control overland trade routes as well. The citadel looked over passes not only to the Corinthia, but also to the Berbati Valley in the East and Arcadia to the West. The connection of Mycenae with these adjacent areas is evidenced by the network of built roads which lead out from the citadel. While three of these head North into the Corinthia, the fourth highway leads to Prosymna, reaffirming Mycenae's connection with the sites of the plain and indirect access to the Gulf of Argos.⁸

Archaeological Evidence for Hierarchy

The importance of Mycenae in the Shaft Grave period has set the tone for the site's alleged primacy throughout the LBA. Hope Simpson, for example, cast all competition back to the Middle Helladic period: "by the beginning of the Mycenaean period, Mycenae had outstripped other possible rivals, such as Tiryns, Argos, Lerna, and Asine, and had become the single most important site in the whole area."⁹ While Mycenae did take an

⁶ Dickinson 1977: 54; though the early date for the dominance of Argos has been questioned: Morgan and Whitelaw 1991; Foley 1995; Hall 1995.

⁷ Bintliff 1977: 345-46.

⁸ Jansen (1997: 10-11) rejects the original interpretation that these roads served a military purpose (Steffen 1884: 5-7), and argues that they facilitated the transport of agricultural commodities, as well as immaterial means of administration.

⁹ Hope Simpson 1981: 9.

early lead in the Argolid, two centuries would pass before the bud of the Shaft Graves would blossom into a palatial society.¹⁰ And even at that point, Mycenae's position required reinforcement and legitimization. Such efforts are found throughout the palatial period, as the site was redefined as a visible power center. In addition to the actual palace constructions, the fortification walls were expanded twice to include Grave Circle A, and new houses spread in and around the citadel (Fig. 3.2). Also transforming the landscape was the proliferation of chamber tombs in diverse areas of the settlement along with the more prominent tholos tombs.¹¹

Mycenae's presumed dominance has always been undermined by the existence of the nearby palace at Tiryns. Like Mycenae, the citadel was centered around a palace at its peak, and through several phases of rebuilding, the fortification walls expanded to include larger areas. Although the well-preserved architecture of the Tiryns palace was uncovered long ago, relatively few artifacts, were known until the more recent excavations were carried out in the Unterburg.¹² Aside from simple graves in the habitation areas, the only tombs associated with Tiryns are those on either face of Profitis Ilias, to the east of the Citadel. On the nearer face are two tholos tombs and opposite is a chamber tomb cemetery, whose finds are (in general) rather modest compared to some of the wealthy Mycenae tombs (see Fig. 3.3).¹³ Tiryns did rival Mycenae, however, in its cyclopean fortifications and palace architecture, and also its Linear B administration.

The keeping of two contemporary archives within a single region of the mainland is indeed anomalous, as there is usually a single literate center "viewed in its wider context as

¹⁰ Dabney and Wright 1990:48-50.

¹¹ For general accounts of the citadel, see Wace 1949; Mylonas 1966b; tholoi, Wace 1921-23; Wright 1987; chamber tombs, Wace 1932; Xenaki-Sakellariou 1985; Shelton 1993.

¹² For the palace architecture, see Schliemann 1885; Müller 1930; Unterburg excavations, Kilian 1981; 1983; 1988a; Kilian *et al.* 1978; 1979; 1981; 1982.

¹³ Rudolph 1973; Müller 1975.

the primate settlement.”¹⁴ In keeping with a general Mycenaean pattern, then, Tiryns might be considered an autonomous capital and allotted its own territory, and as peer polities the two might have shared power in the northeast Peloponnese.¹⁵ In neither case, however, are these the main archives of the palatial administration. Rather they are small groups of tablets from areas located on the periphery or even outside of the citadel.

Linear B writing has also been found in recent excavations at Midea, but only on vessels and nodules, which do not connote the same level of record keeping as actual tablets.¹⁶ Compared to Mycenae and Tiryns, other evidence for the autonomy of Midea is slight as well. There are also some indications of a large structure at the peak of the acropolis, though their identification as remains of a palace is unsubstantiated, and the “megaron-type building” by the East gate is more akin to those of private houses than the halls of Mycenaean palaces (see Fig. 3.4).¹⁷

There are other citadel sites in the Argolid, whose (alleged) fortifications have led to their identification as power-centers, despite little remaining evidence. For example, the higher peak of Argos’ two peaks, the Larissa, served as the classical city’s acropolis and is thought to have served Mycenaean occupants as well. Among the extensive medieval fortifications, possible “Cyclopean” remains have been identified, namely blocks which are similar to the lintel and threshold stones of Mycenae and Tiryns.¹⁸ Traces of Mycenaean activity are also elusive on the Aspis (the lower hill where extensive MH structures have

¹⁴ Bennet 1988a: 513.

¹⁵ This is the view offered by Renfrew (1975: fig. 3) and elaborated on by Cherry (1986: 24, fig. 2.4) in the configuration of territories for LH centers. There are, however, other cases (e.g., Mesopotamian states) where writing and hegemony are not positively correlated. And Darcque (1998) suggests that Ugarit’s dependent harbor city of Minet el Beida would make a good parallel for Tiryns’ subordination to Mycenae.

¹⁶ Demakopoulou and Divari-Valakou 1994-95; Ostenson 1998: 157, pls. 112, 145; *Archaeological Reports* 1997-98: 31-32.

¹⁷ For the “palace” see Persson 1942: 3-12. For preliminary reports on the megaron-building, see Demakopoulou *et al.* 1994; Walberg 1996. The excavation of this structure will be published fully as *Excavations on the Acropolis of Midea II* (G. Walberg, ed. Svenska institutet i Athen).

¹⁸ Åström and Blomé 1964: 179 n. 4, figs. 3-5.

been uncovered), but salvage excavations have uncovered LH remains below the hill and burial remains scattered throughout the modern city (Fig. 3.5).¹⁹

Although lacking fortifications, Prosymna has been suggested as a seat of power on other grounds. Bintliff argued that site may have held “‘palace’ status” on account of its reconstructed population size, the presence of a tholos tomb, and its geographical location.²⁰ Prosymna was occupied throughout the Bronze Age, though only scant remains of the Mycenaean occupation have been uncovered among the structures of the later sanctuary (Fig. 3.6). Between this settlement hill and the LH II tholos to the west were a large number of chamber tombs, most of which were excavated by Blegen in the 1920s.²¹

The coordination of these many centers is depicted in Fig. 3.7, where Kilian has identified “a plurality of kingdoms.” He reconstructs each of the citadel sites (and Nauplion and Asine as well) as the capital of its own territory.²² The evidence for the importance of some sites, however, is less well preserved. The settlement of Asine, located on a coastal promontory that was once an island, was connected with the sea more directly than the other citadels of the Argive Plain. By the LBA, alluvial deposits formed a connection to the mainland on the East, but an inlet remained to the North of the Kastraki (Fig. 3.8).²³ It is unclear whether this inlet was used as a port,²⁴ but the Kastraki itself

¹⁹ see Touchais 1996: esp. fig. 2.

²⁰ Bintliff 1977: 288-89. He went on to identify other centers at Argos and Berbati, in addition to Mycenae, Tiryns, and Midea-Dendra (345, map 7).

²¹ A total of 54 tombs have been excavated (Alden 1981: 207-10).

²² Kilian 1988b: 296. Similarly, Bintliff (1977: 690-99, Appendix maps 1a-c) experiments with possible territories for each of his proposed centers.

²³ During the Neolithic period, the coastline was some 700 m further inland and the shallow plain to the North of the Kastraki was submerged. The island was connected to land by alluvial deposition during the EBA, and the remaining inlet was filled by a second phase of deposition sometime after the Hellenistic period (Zangger 1994a: esp. 231-33). In addition to these changes, the sea-level seems to have risen ca. 2 m since the LBA (Flemming *et al.* 1973: 7).

²⁴ There is also debate over the interpretation of the submerged wall on the west of the acropolis as a built quay. These features, however, most likely belong to the Hellenistic period, when fortification walls were built around the acropolis (Frödin and Persson 1938: 56; Bintliff 1977: 315; Zangger 1994a: 233).

sheltered the sandy beach to the West, where ships could make easy landing during the Mycenaean period. The only extensive remains of the Mycenaean settlement are those of Houses G-I in the lower settlement, though there are traces of LH activity on the acropolis.²⁵ The importance of Nauplion is also suggested by its location on a coastal peak, and by its funerary remains. In this case, however, it is the number of tombs rather than their wealth that distinguishes the site.

Oral Traditions: Epic and Myth

Whether there were two palatial territories within the Argolid or as many as six, archaeological evidence leaves the character of their interaction largely undescribed. The traditional view of the Argolid sites is that the centers “managed to coexist harmoniously in the relatively small Argolid...by alliance or by domination from Mycenae.”²⁶ These alternatives are reflected not only in interpretation of the archaeological data, but can also be found in the political geography of the Homeric epics and later mythological accounts. Although Greek texts are necessarily separated from the Mycenaean period by (at least) several centuries, there are connections which might be made between these later accounts of Argive heroes and the Mycenaean power dynamics. Earlier scholars accepted Homeric epic as preserving Late Bronze Age events or dynamics, transferred through generations of an oral tradition until put in written form, probably in the eighth century.²⁷ Most influential was Nilsson’s theory that the correlation between the “mythical importance” of a site and its

²⁵ Evidence for LH IIIC settlement was found in the most recent excavations of the acropolis (Penttinen 1996). For the structures of the lower city, see Frödin and Persson 1938: 74-77; 298-311; for a reconsideration of cult in House G, Hägg 1981; and for industry in Houses H and I, Sjöberg 1997.

²⁶ Vermeule 1964: 233.

²⁷ For example, Hammond (1976: 131) wrote, “the singers of the poems were recording facts, not fantasies, and geographical features, genealogical details and military strengths were no less relevant than the deeds and quarrels of men in the field of history... Thus a framework of fact was transmitted by the singers, however much they might develop the characters of the warriors or add religious colouring.”

the significance of its Mycenaean remains “precludes any thought of casual coincidence.”²⁸ The correlation, however, may more likely be a phenomenon of the Early Iron Age, when the ruins of these Mycenaean sites would have made strong impressions.²⁹ There are nonetheless arguments for the existence of narrative during the Bronze Age and elements of epic poetry, which may push the poetic tradition further back in time.³⁰

It is generally agreed that, given the nature of oral poetry, the *Iliad* and *Odyssey* were subject to change over the course of the Iron Age, and that passages were composed at different periods. One section that may record some details of Mycenaean geography is the “Catalogue of Ships.”³¹ This extended passage in Book 2 of the *Iliad* surveys the forces of the Greek navy as they assembled at Aulis (before sailing to Troy), listing the cities under each of the Achaean leaders. Here, the greater Argolid is divided between two allied rulers, which would support the notion of an alliance between independent rulers in the Late Bronze Age. Although Agamemnon is described earlier as “the king of many islands and all Argos,”³² the catalogue describes a more restricted territory. As shown in Fig. 3.9, it is Diomedes (of Argos) who oversees men from the sites of the Argive plain and the peninsula to the east, while the territory of Agamemnon (ruling from Mycenae)

²⁸ Nilsson 1932: 28. In more recent years, arguments for the historicity of the epics (e.g., Foxhall and Davies 1984; Mellink 1986; Thomas 1993) have focused on the sack of Troy—as a more general relationship between Greece and the Troad, if not a particular event.

²⁹ van Leuven 1996; cf. Snodgrass 1971: 192, 316; Morris 1988; Whitley 1988.

³⁰ For an overview of this matter, see Bennet 1997; for narrative in Aegean art, see, e.g. Morris 1989. West (1988) argues that elements of Homeric Greek actually predate forms found in Linear B.

³¹ Page (1959: 127-34) argues that the Catalogue was composed earlier and inserted into the epic. Among other rationales, Hope Simpson and Lazenby (1970: 153-55) argue that all the archaeologically-known sites of the catalogue had significant Mycenaean occupation, which did not always continue into the Iron Age. Also, Renfrew (1977b: 115-18, figs. 1, 2) demonstrates the striking similarity between the territories described in the Catalogue and those suggested by the location of Late Helladic central places.

³² Homer, *Iliad* 2.108. In the Homeric poems, “Argos” may refer to the site itself, but at times it indicates the entire plain, or even all of Southern Greece (Wathelet 1992; Hall 1995). Another discrepancy is 11.149-53, where Agamemnon offers Achilles rule over seven cities in the Southwestern Peloponnese (“in the utmost border of sandy Pylos”), suggesting his rule extended well beyond the Argolid.

stretches north across the Corinthia and into Achaea.³³ Diomedes, though a daring figure in assembly and battle, is submissive to Agamemnon's authority, as are the other kings in the *Iliad*.

Other accounts, however, “remember” the Argolid as a place filled with contention before the time of the Trojan war and the reign of Agamemnon. Myths record the region under the control of a single ruler at Argos, until divided between the quarreling twin brothers Acrisius and Proetus, which led to the founding of Tiryns and two lines that would continue to struggle for broader power—the Perseids and Proetids (see Fig. 3.10). Like other heroic tales, references are found in the Homeric epics, but the a full account is preserved only by later accounts. In the case of Argive political genealogy, the most coherent source is the much later *Library* of pseudo-Apollodorus.³⁴ According to this account, the territory was further divided when Proetus paid out two-thirds of his kingdom to Bias and Melampus, who was able to cure the madness of Proetus' daughters. Property negotiations continued in subsequent generations, when Perseus and Megapenthes exchanged the kingdoms of Argos and Tiryns, at which point Midea and Mycenae were also fortified.³⁵ From that point on, power disputes in the Argolid center on Argos and its territory or the sites of the Eastern plain, especially Tiryns and Mycenae, where the tumultuous reign of the Perseids (ending with Eurystheus) was followed by the house of Pelops.³⁶ The rivalry between Atreus and Thyestes initiated a dynasty of even more

³³ Homer, *Iliad* 2.559-63, 569-76.

³⁴ The *Library* is a 1st - 2nd century CE collection of myths, falsely attributed to Apollodorus of Athens (2nd century BCE).

³⁵ Apollodorus, *Library* 2.2.1-2.

³⁶ Sthenelos (son of Perseus and son-in-law of Pelops) established Atreus and Thyestes at Midea, when he seized power of both Mycenae and Tiryns (Apollodorus, *Library* 2.4.6). The rule of Argos, by this time, was held by the descendants of Bias—Adrastus and then Diomedes.

extreme competition, in which palatial power was destabilized by internal discord, judging from the tales of Agamemnon's clan.³⁷

The movement of scholarship is surely against the use of myth as a historical source. Many have persuasively shown that myth and folklore reflect concerns of the times in which they were composed and retold.³⁸ But the accounts of the Perseid and Proetid lines are relatively uniform, compared to other periods of Argive lore, and may have been more widely shared by later groups.³⁹ There are also apparent connections of some sort between the Mycenaean period and heroic legends. Vermeule argued for the Bronze Age origin of the *Thebaid*, by citing connections between components of the epic (as preserved in Homeric allusions and later versions) with archaeological remains and Linear B records.⁴⁰ In particular, she lists Linear B parallels for the personal and place names that figure in the *Thebaid*, and three of these—Adrastos, Amythaon, and Thyestes—are members of the Argive royal line(s). As demonstrated in Table 3.1, several other names also have parallels in Linear B texts. These are rather ordinary figures in the tablets, mostly from Pylos and Knossos, and I do not suggest that these are references to the same individuals as the Argive clans. The Linear B examples do, however, demonstrate that the names remembered in later myths were indeed used in the Mycenaean period. And the man who carried the name Acrisius (*Akrewios*) in LH IIIB Mycenae may have been one link to the cultural memory between an earlier king and a later mythographer.

³⁷ Hall (1997: 91-93) separates the Pelopid strain from the Argolid, suggesting that the figure of Agamemnon developed in Laconia and was later applied to the Argolid. 5th century Athenian tragedians located Agamemnon's kingdom at Argos, which was no doubt related to current political situations and the contrasting roles of Athens, Argos and Thebes (Zeitlin 1990: 145-47). The *Library* preserves the earlier tradition, and is faithful to the memory of Agamemnon at Mycenae (even if Clytemnestra wasn't).

³⁸ e.g., Morris 1986; Sourvinou-Inwood 1987. Though Hall (1997: 86) might admit "that there is an important historical dimension to myth," such a dimension is seldom demonstrated in his analyses.

³⁹ Hall 1997: 81.

⁴⁰ Vermeule 1987: esp. 134-36.

	Type of Name ⁴¹	Reference
<u>Abas</u> <i>a-qa-to</i>	MN ⁴²	KN As 1516
<u>Acrisius</u> <i>a-ke-re-wi-jo</i>	MN <i>Akrewios</i>	MY Ge 603, 604
<u>Adrastos</u> <i>a-da-ra-ti-jo</i> <i>a-da-ra-te-ja</i>	MN (patronymic) <i>Adrastios</i> FN <i>Adrasteia</i>	PY Aq 218, An 656 PY Ac 785, Ab 388
<u>Amythaon</u> <i>a-mu-ta-wo</i>	MN <i>Amuthawon</i>	PY Nn 831, KN V 756, TH Ug 9
<u>Anteia</u> (aka Sthenobia in later accounts) <i>a-na-te-u</i> <i>a-ne-a2</i>	MN FN <i>Ainea?</i>	PY Jn 415 MY Fo 101, V 659
<u>Belos</u> <i>qe-ro</i>	MN	KN As 602, Db 1204, V 479
<u>Bias</u> <i>qi-ja-to</i>	MN ⁴²	KN Db 1140
<u>Danaos</u> <i>da-na-jo</i>	MN <i>Danaios?</i>	KN Db 1324, V 1631
<u>Lynceus</u> <i>ru-ke-wo-wo-wi-ja</i>	PN based on gen. of MN (<i>ru-ke-wo</i>) "the boundaries of <i>Lynceus</i> "	PY Na 1053
<u>Proetus</u> <i>po-ro-te-u</i> <i>po-ro-to</i> <i>po-ro-we[</i>	MN <i>Proteus?</i> poss. MN <i>Protos</i> obscure	PY Eq 146 KN Od 562 KN X 1014
<u>Thyestes</u> <i>tu-we-ta</i>	MN, dat. <i>Thuwestai</i>	PY Un 267

Table 3.1 Linear B analogies to names in the Belid line.

⁴¹ MN = Masculine Name, FN = Feminine Name, PN = Place Name; as identified and translated by Ventris and Chadwick 1973.

⁴² Ventris and Chadwick (1973) offer no translation for these names, but I propose *Abastos* and *Biaustos*, which appear to be of the same stem as the shortened *Abas* and *Bias*.

Obviously, any such transmission was subject to change and reinvention over the centuries, but the Mycenaean link (or possibly beginnings) should not be dismissed. Hall argues that the division of power in the Argolid was an archaic period compromise for the competing Early Iron Age mythologies of Perseid or Proetid domination of the entire Argive plain.⁴³ He is right that there is little indication of the division in Homer, compared to the arrangements presented in archaic accounts.⁴⁴ For example, Proetus in *Iliad* 6.157 is not described as ruling Tiryns, but rather holding power which extends over Ephyre, “in a recess of (the land of) Argos,” and the *demos* of the Argives. Similarly, Eurystheus (a Perseid) became “lord over the Argives” according to *Iliad* 19.124, whereas later accounts specify his birth-right to the kingship of Mycenae. The fragmentation of rule in the Argolid, however, is suggested by the story of Melampus in the *Odyssey* 15.240, who comes to “be lord over many Argives,” but not all the Argives. Also, in Agamemnon’s recounting of the Seven against Thebes, Tydeus came to Mycenae not as an enemy but as a *xenos*, which might indicate its independence from Argos. And Mycenae’s autonomy is further suggested by their choice not to join the expedition.⁴⁵

Thus even in the earliest descriptions of the Argolid, power is already fragmented. Hall links the competing sites and dynasties with Iron Age communities of the Eastern plain in contrast to Argos.⁴⁶ It is tempting, however, to link this discord with unstable power of the Mycenaean Argolid—if not in terms of communal memory stretching back that far, then perhaps as a more general characterization of the region. For even if they refer more to the Iron Age than the Mycenaean period, these tales at least suggest the capacity of the Argive

⁴³ Hall 1997: 94, 98.

⁴⁴ For example, the pseudo-Hesiodic *Catalogue of Women* (which probably dates to the 6th century) includes Proetus’ share of land with Bias and Melampus (Merkelbach and West 1967: fr. 37). And Pindar, *Nemean Odes* 9 describes discontent within Argos between Adrastus and Amphiaraios. Though this is actually hinted at in *Iliad* 2.572, with a brief reference to Adrastus’ rule at Sikyon before becoming king of Argos.

⁴⁵ Homer *Iliad* 4.376-81. No single ruler is named, but rather it is the men of Mycenae, who have their mind swayed by Zeus.

⁴⁶ Hall 1997: 99.

landscape to support rival parties. Also, the instability of power described in the saga of the Proetid-Perseid years is an important counterpart to snapshot offered by the Catalogue of the Ships. If power was divided in the Mycenaean Argolid, as suggested by the archaeological evidence, it was not necessarily on the terms described in the *Iliad*. In fact, an alliance between two hierarchical regimes—Mycenae and Argos, or Mycenae and Tiryns—seems rather less likely than a more complex balance of major powers and lesser rivals.

All the classes of evidence for power in the Mycenaean Argolid have their vagaries. A site's standing was not determined by geographical position or expressed through any single feature (e.g., Linear B documents or cyclopean fortifications). These facts, as well as the memories of myth and epic, provide important clues for the character of each site. And it is against this background that other types of activity, such as import acquisition, must be examined. But since imports served as symbols of power, these objects also became a means of manipulating and perhaps overcoming the physical and political environment.

Imported Items in the LBA Argolid

This section analyzes the 220 entries from the catalogues of Cline and Lambrou-Phillipson found in Argolid sites. As discussed in the previous chapter, there is disagreement over the origin of particular items, but all are included here.⁴⁷ Appendix A provides the basic information for these imports, including each item's entry number in one or both catalogue and a reference to the fullest publication regarding context.⁴⁸ The imports of the entire northeast Peloponnese cluster fairly tightly in the sites of the Argive

⁴⁷ Cline 1994, Lambrou-Phillipson 1990. As with the numbers presented in Chapter 2, there is an overlap: 84 are listed by both; Cline added 109 and rejected 27. Cline's appendices include 18 "Dubious or Problematic Imports," 11 pieces of "Raw Material," and 17 items from "Unknown or Disputed Contexts."

⁴⁸ The coordination of Cline's and Lambrou-Phillipson's catalogues with the original publication of each item has led to numerous refinements and corrections, especially for contexts. The appendices are arranged by site and context (alphabetically, with settlement contexts preceding funerary), as that is the main unit of analysis for this study.

Mycenae	131
Tiryns	45
Midea-Dendra	11
Prosymna	9
Aidonia	8
Asine	4
Nauplion	3
Argos	2
Tsougiza	2
Kazarma	2
Iyrisa	1
Kandia	1
Kalavria	1

Table 3.2 The number of imported items found in LH contexts at Argolid sites.

Plain, as listed in Table 3.2 and shown in Fig. 3.11. There are a few cases of out-lying imports, e.g. the lone seals from Iyrisa and Kalavria. And while the imports were drawn to the leading centers, especially Mycenae and Tiryns, a significant portion found their way to lesser sites.

It is important to realize that imports have been found in only a small portion of the region's sites. Fig 3.12 shows the sites of the northeast Peloponnese where Mycenaean settlements and tombs have been excavated, further demonstrating the concentration of sites with imported items in the Argive Plain.⁴⁹ In addition to the sites indicated here, a great many more have been identified by extensive and intensive survey of the greater Argolid

⁴⁹ Based on the information in Hope Simpson 1981: 11-38; updated to include Aidonia (Demakopoulou 1996), Iyrisa (Pini 1983), Kokla (Demakopoulou 1990), Methana (Konsolaki 1995), and Myti Kommeni on Dokos (Papathanassopoulos *et al.* 1991). I have not included the evidence for Mycenaean activity North of the Corinthian Isthmus. Nor are the settlement and burial remains at Chania (*Archaeological Reports* 1984-85: 21) pictured, as none of the finds have yet been published.

region.⁵⁰ Survey information has not been included, however, as imported objects are seldom found by these means.⁵¹ Thus, the 18 settlements and 34 cemeteries shown here do not fully represent the occupation of the northeast Peloponnese. But they do show that excavation has been carried out in many sites where imports were not found, including areas distant from the Argive plain. While some are humble settlements or modest tombs, others might be considered likely to have imports due to their location or significance. For example, imports might have been expected to appear among the material from the tholos tomb and sanctuary site in the new excavations at Methana,⁵² due to its coastal location as well as the significance these contexts. Along similar lines, imports might well have appeared at the Apollo Maleatas sanctuary above Epidaurus or the tholos tomb at Kokla.⁵³ Imports have not been generally found in the coastal areas of the Corinthia or the eastern Argolis and its surrounding islands, except one at Kalavria on Poros and two from Kolonna on Aegina.⁵⁴

The distribution within the Argolid is not constant, and analysis by periods demonstrates different patterns over time. Not all items can be included in this more refined analysis. The Kalavria seal (16), for example, was found in the 19th century excavations at the Temple of Poseidon, and the deposit cannot be dated any more precisely

⁵⁰ Intensive surveys have recently been carried out in several areas of the Northeast Peloponnese which have been neglected by excavation: the Nemea Valley (Wright *et al.* 1990), the Berbati Valley (Wells 1996), the Methana peninsula (Mee and Forbes 1997), and the Southern Argolid (Jameson *et al.* 1994). The results of more extensive survey are reviewed by Hope Simpson 1981.

⁵¹ Imported items have been found in "surface levels" by excavations at Mycenae, Tiryns, and Tsoungiza. The lack of such finds by surface surveys may be a factor of the predominance of ceramics among surface assemblages and the smaller scale of sites located by survey (though imports certainly include ceramics and have been found in lesser sites).

⁵² Konsolaki 1995. Further reports of new finds and the site's significance will be found in E. Konsolaki, "The role of prehistoric Troizen as a border site in the NE Peloponnese" in the forthcoming *Trade and Production in Premonetary Greece VIII: Crossing Borders* (C. Gillis, C. Risberg, and B.L. Sjöberg, eds. *SIMA* Pocket-book).

⁵³ Lambrinudakis 1981; Demakopoulou 1990.

⁵⁴ Kalavria was connected to the Argive Peninsula in the Bronze Age and the imported seal is included in Appendix A (16). There are three imported items from Aegina: two from Kolonna, though without known contexts, and one without specific provenance (Lambrou-Phillipson 1990: nos. 526-28).

than LBA. Similarly, not much is known about the one imported item found at Kandia, where limited excavations have revealed only small portions of the Mycenaean settlement on the Kastro. It is likely that this wall-bracket (17), though without recorded context, belongs to the LH IIIB settlement based on the contexts of identical pieces at Tiryns (all IIIB, except for one IIIC).

The "Shaft Grave Period"

Aside from a few sporadic cases, non-Aegean objects first appear in the Argolid, and on the mainland in general, at the end of the Middle Helladic period.⁵⁵ While contact between Crete and the East Mediterranean became more regular over the course of the Middle Bronze Age, the imports were not passed on to the mainland until the end of this period. Mycenae provides the best evidence for the transition from Middle to Late Helladic, thus it is not surprising that it has produced all 22 imports from the LH I period. Though substantial MH settlements have been excavated at Argos (on the Aspis), Asine, and Lerna, none of these continued into the early Mycenaean period.⁵⁶ Nor do the scattered remains at Mycenae dated to the late MH and early LH give an impression of society at this time,⁵⁷ but the burials at Mycenae indicate the emergence of a social and economic elite. Even compared with the wealthiest of contemporary tombs in other regions, the Shaft Graves of Mycenae are unrivaled in the exotic nature of the material as well as the sheer quantity of wealth.⁵⁸

⁵⁵ Lambrou-Phillipson (1990) includes imports from EH contexts at Asine (no. 405) and Lerna (no. 425). The bossed bone plaque from MH Lerna (IV) indicates foreign contact, and may have been imported from Troy (Evans 1956: esp. 86-91; Banks 1967: 459-61 no. 1165).

⁵⁶ MH structures have also been uncovered at Tiryns and Berbati. All these excavations are reviewed by Dietz 1991: 281-94. Burial evidence does indicate the continuity of several communities across this transitional period.

⁵⁷ Dickinson 1977: 39.

⁵⁸ Though there is no precedent and little parallel on mainland Greece (Wright 1995b: 69, pl. XXVIII; Iakovidis 1981), the single shaft grave of the Kolonna settlement on Aegina produced similar wealth, but no extra-Aegean items (Kilian-Dirlmeier 1997).

The individuals buried in the graves of Circles A and B are recognized as the (ruling) elite of Mycenae, often given anonymous royal status (“Shaft Grave princes”) if not a particular identity. Though there are many theories as to who this group was and how they amassed their new wealth, the important factor here is that the emergent elite marked its detachment from others through the deposition of exotic items in these graves. The role of imports as markers of wealth or connections with cultures beyond local spheres of interaction coincides with other evidence for the Shaft Graves as symbols of status: the investment of labor in tomb construction, the key spatial position of the burials, and the marking of this space by peribolos and stelae.⁵⁹ Among the objects deposited in these lavish burials were a number of imports; the majority of these were found in the graves of Circle A and one came from Circle B.

The imported items of the Shaft Graves come from several areas of the Eastern Mediterranean. Identified as Egyptian are a faience jar (127), wooden pyxis (136), and the lone import in Grave Circle B, a rock crystal pyxis in the form of a duck (121).⁶⁰ A number of glass spacer beads (123-126) are probably from Nuzi in Mesopotamia, while a gold pin (131) and the silver stag rhyton (132) are Anatolian. This array of goods would apparently indicate Mycenaean contact with many cultures of the Near East from the beginning of the Late Bronze Age. But it may be more likely that these items came to Mycenae through an intermediary.

Several objects made of extra-Aegean materials were apparently fashioned or reworked in Crete. For example, the ostrich-egg rhyta were attached with faience and metal

⁵⁹ Graziadio (1991: esp. 404-407) reviews these features of the grave circles and gives full references. The identification of differential rank and status through burial evidence will be more fully considered in Chapter 4 with the analysis of LH III funerary contexts.

⁶⁰ All three items have been asserted as possibly of Aegean manufacture. Local (Mycenaean) production has been suggested for the jar (Foster 1979: 125-26) and the pyxis (Karo 1930-33: 319), but arguments are also made for non-Aegean production (jar, Pendlebury 1930: 53, 56 no. 90; pyxis, Persson 1942: 179-81). The rock crystal pyxis may be of Cretan origin (Hood 1978: 142; Sakellarakis 1976: 176-77; Warren [1969: 104] leaves its origin unspecified, but rules out Mycenaean manufacture). As discussed in Chapter 2, such evaluations are not judged here. Laffineur (1990-91) considers the foreign status of these and other works from the shaft graves, though he does not attempt to distinguish Minoan crafts from Mycenaean.

fittings which are Minoan in style, especially the dolphin appliqué of the rhyton from Shaft Grave V (139). The alabaster jar (138) also from this grave, was of Egyptian manufacture but was modified, presumably on Crete, to resemble a more Minoan shape.⁶¹ This practice leads to a question regarding all imports of the LH I period, whether they are evidence of the Mycenaeans' extra-Aegean contacts or those of the Minoans.

All extra-Aegean imports, not only those that were modified, were most likely brought through Crete in this early period. And in keeping with its monopoly on extra-Aegean works, Mycenae seems to have dominated Minoan connections in the Argolid. Other burials of this MH-LH transitional period (at Argos, Prosymna, Asine and Lerna-Miloi) preserve no evidence of contact with Crete.⁶² The Shaft Graves at Mycenae, however, contain Minoan ceramics, metal vessels, weapons, and jewelry. It must be considered, then, whether the extra-Aegean items were recognized as products of longer-distance exchange than the Minoan works.

The Argolid imports of LH I were not wholly limited to the Shaft Graves; the other three were found in another burial at Mycenae. A pit in Chamber Tomb 516 preserved a LH I deposit with three Nuzi spacer beads (111-113), similar to those in Shaft Grave I.⁶³ This same type was also found in early Mycenaean burials at Pylos and Kakovatos, which suggests that Messenia shared the same foreign connections as Mycenae.⁶⁴ In fact, the

⁶¹ The vessel was inverted: the base cut off to form a wide mouth (fitted with a gilded bronze lip), while the original neck was shortened and filled to create a solid base. Wooden handles, a shoulder spout, and further gold leaf were also added (Warren 1969: 104, with references to Minoan and Egyptian comparanda; Sakellarakis 1976: 177-78, pl. II:4). Similarly transformed vessels (106, 107) come from later contexts at Mycenae.

⁶² Dietz (1991: 242) presents only one possible exception, a conical cup from Grave 25 in Argos Tumulus Gamma, which he considers dubious as a Minoan product.

⁶³ Although this type is described as Nuzi, they are found in many sites of the Near East. Thus the exact location of their manufacture is not determined, and it may well have been at more than one site.

⁶⁴ Eight were found in the LH I Tholos Tomb IV at Pylos and two more in the LH II Kakovatos Tholos A, (Cline 1994: 137-38 nos. 40-49). LH III glass beads of this type, however, are considered local productions, and are indeed more numerous (for Argolid examples, see App. C: 298-99, 301). Also, an agate spacer bead in this form was found in Mycenae Chamber Tomb 58 (NMA 2792.13: Xenaki-Sakellariou 1985: 180, pl. 74).

only other imports in LH I Greece are in Messenia.⁶⁵ And as suggested for the Shaft Grave material, these items probably came through Crete, since Minoan influence is found in early Mycenaean Messenia as well. Though the origin of the tholos tomb (numerous in Messenia at this time) is not necessarily Cretan, other traces of contact exist.⁶⁶ For example, the custom of pithos-burial in the “Grave Circle” at Pylos was identified as Minoan in nature.⁶⁷ Given the evidence for Minoan contact with Messenia as well as Mycenae, it is perhaps more likely these items came through Crete, rather than directly from Mesopotamia.

Late Helladic II

By the LH II/LM II period contact between Crete and the Mainland had become more regular, and it is likely that Minoan crafts were becoming more familiar. Most of the items imported from beyond the Aegean, however, were significantly different in style and material. These seals, ornaments, and vessels were all made of faience or non-local stone, and most were decorated in styles that are recognizably eastern. It is still possible, however, that some or all of these objects arrived through Crete, since there are no Mycenaean finds in the eastern Mediterranean before the LH III period.

The Mycenae material from this period includes one object whose deposition was probably concurrent with the use of the Shaft Graves. Granted, the ostentatious display of the Shaft Grave burials was little threatened by the deposition of a carnelian bead (120) in

⁶⁵ In addition to the spacer beads are the faience scarab from Koukounara and faience pyxis from Osmanaga (Cline 1994: nos. 122, 700). Although no similar beads are known from Crete, there are a number of Mitanni (or more generally Mesopotamian) seals (and sealings) from proto- and neo-palatial Crete (Aruz 1995). Also a Mesopotamian stone box was found on Kythera (Cline 1994: no. 512), one conduit through which Minoan influence reached mainland Greece (Rutter 1979: 464).

⁶⁶ Arguments for and against Minoan origin of the Mycenaean tholos were recently reviewed by Voutsaki (1998: 42-43), who favored a local development. For a summary of Minoan influence on Messenian pottery and burial practices, see Hägg 1982; 1984: 119-122; Voutsaki 1998.

⁶⁷ Blegen *et al.* 1973: 150.

Aidonia	8
Mycenae	4
Kazarma	2
Prosymna	2
Dendra	1

Table 3.3 The number of imported items found in LH II contexts at Argolid sites.

Grave 9 of the Prehistoric Cemetery.⁶⁸ This grave, like many others in this area between Grave Circle B and citadel wall, was disturbed by later activity (most noticeably, the construction of the Tomb of Clytemnestra). Also, there was some LH II activity within the Grave Circles, including the construction of Grave Rho, with which the imported lapis lazuli scarab (122) was associated.

There is nonetheless a drop in numbers at Mycenae in LH II, which should not be taken literally. Few deposits here can be limited to the LH II period, due to the later disturbances of the early settlement by constructions in and around the citadel. And the chamber tombs which became rather common in this period provide few discrete deposits because of their continued use, and excavation history as well. The majority of these tombs surrounding Mycenae were excavated by Tsountas in the late 19th century, and much information has been lost. Although a mass of preserved material from these excavations was published by Xenaki-Sakellariou, they were inventoried only by tomb number.⁶⁹ There are, however, two imports at Mycenae from LH II deposits in chamber tombs: a stone jug (110) from Chamber Tomb 102 and a faience cylinder seal from 517

⁶⁸ Grave 9 was apparently empty aside from this spherical bead, described as the “sole survivor” by Wace (1950: 215); its precise date is unknown.

⁶⁹ Xenaki-Sakellariou (1985) does publish excerpts from Tsountas’ notes on particular tombs, but this provides little for more refined contextual analysis. Also, much material cannot be matched to a specific tomb but only to the year of excavation. Tsountas’ notes have also been re-examined by Shelton (1993), who has been able to re-identify many chamber tombs in the Mycenae area. Her further work will be reported in a contribution to the forthcoming *Archaeological Atlas of Mycenae*, S.E. Iakovides and E.B. French, eds. (E. French, pers. com.).

(114). Also, the tholos tombs at Mycenae were all robbed in antiquity, removing what might be expected to succeed the Shaft Graves as the highest tier of elaborate burials.

In her analysis of Argive mortuary practices, Voutsaki found a more even distribution of wealth in LH II, represented by the spread of tholos tombs across the region (at Berbati, Kazarma, Kokla, and Prosymna) in comparison to the tight concentration of the Shaft Grave period.⁷⁰ The distribution of imports follows this pattern to some degree, as the dominance of Mycenae gives way to their appearance in several sites. In fact, several of the LH II imports come from tholoi, a tomb form new to the Argolid at this time.

For example, two imported cylinder seals (18, 19) were found among the intact burials of the Kazarma tholos. Three interments were each preserved in a separate pit, including an adult male who was buried in pit II with the cylinder seals as well as a number of beads and weapons.⁷¹ The tholos is near the “Arkadiko” bridge, a corbelled vault of Cyclopean masonry, and appears to be located along a Mycenaean route. Perhaps this orientation along the road was more significant than connecting the tomb with a living settlement, though the hill of Kazarma appears to have been the site of some Mycenaean activity.⁷²

The Prosymna Tholos lies to the West of the settlement hill, site of the later Sanctuary of Hera, and large numbers of chamber tombs.⁷³ Although the tholos was robbed, fragments of two Egyptian imports were found among ceramics of the LH IIA period: a faience bowl and an alabastron (171, 172). Like the Kazarma tholos, the

⁷⁰ While Hope Simpson (1981: 9) specified that these tombs reflected “prosperity, but not necessarily independence,” Voutsaki (1995a: 57-58) put an emphasis on mortuary practices as “a strategy to *acquire* status.”

⁷¹ Protonariou-Deilaki 1969.

⁷² Hope Simpson 1981: 27.

⁷³ Though originally cleared by Stamatakis (1878), the most extensive report of the tholos is Wace 1921-23: 330-38. The sanctuary was comprehensively excavated by Waldstein (1902) and the majority of chamber tombs by Blegen (1937).

location of this tomb was probably also along a road leading to Mycenae.⁷⁴ As mentioned above (p. 58), the construction of a tholos tomb during LH II may indicate the independence of Prosymna from the larger sites surrounding it, especially near-by Mycenae. Even if not a reliable measure of political independence, the tholos and the imports deposited there do demonstrate a considerable investment and a monumental statement in the landscape.

The earliest of the Dendra imports is also from an LH II context, the “long shaft” of Chamber Tomb 6. This single amethyst bead (24), presumably strung with some of the glass beads found in this same deposit,⁷⁵ represents the early ability of those at Dendra to acquire exotic works, which continued into the following period. For while the wealthiest burials here are of the LH IIIA-B period, the cemetery got a significant start in LH II.

The largest number of imports from these LH II contexts is a group of faience seals (1-8) from Aidonia, a site located not in the Argive plain but the Nemea valley. All eight are from Chamber Tomb 15, one of twenty chamber tombs at this site, most of which had been disturbed by modern looting before systematic excavations begun. The imported seals are somewhat overshadowed by other finds of gold and stone jewelry from these excavations and by the dispute over more “Mycenaean Treasure” which appeared for sale in 1993.⁷⁶ This collection of jewelry was eventually handed over to the Greek government, who claimed it should be identified as the material looted from the Aidonia tombs.⁷⁷ Judging from the excavated material alone, considerable wealth was deposited in these

⁷⁴ Though the bridge between the tholos and the Argive Heraion is apparently a Geometric construction (Hope Simpson 1981).

⁷⁵ Persson 1942: 29, fig. 30:5-6; but also see App. C: 281 for glass finds.

⁷⁶ Demakopoulou 1996.

⁷⁷ The issue was resolved without a trial (Howland 1997), and the material has become implicitly accepted as from Aidonia, even though the association cannot be proven on archaeological or stylistic grounds (Cherry 1999). There are no imported items among the “Repatriated Treasure,” as it was labeled in its Greek exhibition, but there are pieces of ivory and glass, which are listed in Appendices B and C, but do not figure in Chapters 5 and 6, since they do not have dated contexts.

tombs, and the Minoan style of the engraved rings and seal stones indicates that influence from Crete reached beyond the centers of the Argive plain. The foreign identity of the seals from beyond the Aegean at this time may still be inseparable from Minoan objects. By the LH II/LM II period, however, contact between Crete and the Mainland had become significant, and it is likely that objects such as scarabs and cylinder seals would be recognized as more Eastern.

Late Helladic III

The distribution of imported items in the LH III period includes all of the sites that have been considered major or secondary centers in the models considered at the beginning of this chapter. And it introduces two sites—Irysa and Tsoungiza, whose peripheral location would otherwise keep them removed from discussions of the political hierarchy in the Argolid. More detailed contextual analysis of LH IIIA-B imports follows in the next chapter, with the consideration of which social groups acquired these items. What follows here is a review of each site's general character as an import consumer, though some sites, for example Irysa, are still largely unknown (or rather, unpublished).⁷⁸ The amount and types of imported items (origin, material) acquired by each community may reflect its long-distance connections, but the distribution of imports also provides clues to regional dynamics. Also, the imported items of this period are no longer limited to the more obvious types of prestige items imported in the Early Mycenaean Period (LH I-II), and it is important to consider the different types found in this period.

Mycenae once again has the largest number of imports, matching its lead in other arenas of competition. These items have been found at Mycenae in many of these contexts,

⁷⁸ Pini (1983: 125) was able to provide the essentials of the context for the imported cylinder seal (a chamber tomb with LH IIIA-B ceramics), but little more.

	LH III ⁷⁹	LH IIIA-B	LH IIIC
Mycenae	89	83	4
Tiryns	40	28	10
Midea-Dendra	10	10	-
Prosymna	7	3	-
Asine	4	4	-
Argos	2	1	-
Nauplion	2	1	-
Tsougiza	2	1	-
Iyrisa	1	1	-

Table 3.4 The number of imported items found in LH III contexts at Argolid sites.

especially chamber tombs and the buildings surrounding the palace. Apparently missing are the imports that once circulated among the highest of Mycenae's elite; few artifacts have been recovered from the disturbed tholoi or the palace itself. There are, however, surviving objects that might be classified as "utilitarian" or put in Sherratt's "sub-elite" class.⁸⁰ For example, seven stone mortars and four Canaanite amphorae were found in settlement contexts, the majority in the Citadel House area (44-46, 49-52, 57, 60, 62) and one of each (88, 89) in the West House group. An additional four amphorae were found in Mycenae burials (103, 104, 109, 145). The majority of the remaining 74 items, are more obvious prestige items crafted in exotic materials such as ivory, alabaster, and faience. As in the Shaft Grave period, palatial Mycenae imported items from a wide range of Mediterranean areas. Though several scholars have posited special relations between Mycenae and 18th Dynasty Egypt,⁸¹ the site preserves more evidence of its trade

⁷⁹ This includes items from contexts which cannot be specified to a period within LH III or refined beyond LH II - III.

⁸⁰ Sherratt 1999; as discussed in Chapter 2, p. 48.

⁸¹ Cline 1991a, 1995; Hankey 1981; Bernal 1987.

with Syro-Palestine. 52 items are identified as originating here, as opposed to 27 from Egypt.

Though Mycenae preserves over half of the Argolid's LH III imports, the site does not totally dominate its region as Thebes did in Boeotia. Tiryns also has a considerable number, apparently sharing with Mycenae an interest in foreign trade. It was in the lower area of the citadel, the Unterburg, which was only incorporated by the final extension of the fortifications in the LH IIIB, where most of the site's imports have been found. Few of the site's imports come from burial contexts, but also fewer burials are known for Tiryns than for other Argive sites (Fig. 3.3).

Though the citadel of Tiryns now lies ca. 750 m from the sea, the coastline came within 250 m during the LBA,⁸² and the citadel may well have looked down upon a harbor town. The possibility that Tiryns served as a port for the region is well tested by a comparison with the coastal emporium Kommos, where the distribution of imports on Mycenaean Crete was heavily concentrated. The indications of foreign trade here are extensive, including built facilities as well as the large number of imported items. Kommos apparently passed on any prestige-items that came its way, as the vast majority (179 out of 183) imported items are ceramic.⁸³ Also, there is only one Canaanite amphora found outside of Kommos in the LM IIIA-B period.⁸⁴ Tiryns, on the other hand, is the site where half (12 out of 24) of the Argolid's Canaanite amphora are found. Like Kommos, Tiryns' imports are dominated by ceramics, 28 of its 40 objects are pottery or terra-cotta wall brackets. There are four imported items of frit or faience (174, 178, 201, 205), but the majority of the other items are metal artifacts of the LH IIIC period that are probably

⁸² Zangger 1994b.

⁸³ For imported ceramics, see Watrous 1992. The other four items are: a glass vessel (Cline 1994: no. 784), two partially worked segments of elephant tusks (Cline 1994: nos. 914-15), and a group of ingot fragments (Cline 1994: no. 931).

⁸⁴ Cline 1994: no. 388 (found at Chania).

less indicative of Tiryns' character during the palatial era. The site clearly had a direct role in external exchange, but Tiryns' activities were not limited to this one dimension.

The nature of the Cypriot material at Tiryns may be elucidated by a look at the division of material between settlement and burials here and at Midea-Dendra. Cline detected a predominance of Cypriot goods among the imports found at Tiryns which he cited as evidence for directional trade, especially in contrast to the site's sparse Egyptian material.⁸⁵ Indeed, there is additional evidence for an involved exchange relationship between Tiryns and Cyprus, including the frequent occurrence of pottery marked with symbols from the Cypriot script.⁸⁶ The remains of the LH III shipwreck at Point Iria also suggest direct trade between Cyprus and the Argolid, since the only finds are Cypriot and Mycenaean ceramics.⁸⁷ The Cypriot connection represented by these finds, however, is only one facet of Tiryns' role in international exchange. The 23 Cypriot imports are rivaled by 21 from Syro-Palestine, indicating that the sources of imported items were by no means exclusively bound to Mycenae or Tiryns.

The tombs of Dendra received their wealthiest burials in the LH III period, when the settlement atop Midea was marked with significant fortifications and perhaps other markings of palatial administration. Though only two imported items have been found at the citadel of Midea, it is interesting that they are both of Cypriot origin, whereas the items deposited in the nearby tombs of Dendra are almost all Egyptian. This may shed light on the high number of Cypriot imports at Tiryns, which are almost entirely from settlement contexts. This is not to say that the origin of imported items made them more or less appropriate for inclusion in burials, but rather that different types of object were more likely bound for different purposes. The majority of Cypriot objects are items those that are less

⁸⁵ Cline 1994: 87. The only clearly Egyptian object is the frit monkey that is inscribed with the prenomen of Amenhotep II (178).

⁸⁶ Hirschfeld 1996.

⁸⁷ Vichos and Lolos 1997.

obvious imports, for example the terracotta wall-brackets that are so numerous at Tiryns or the stone mortars found exclusively in settlements. Thus the relationship with Cyprus may be more pronounced at Tiryns, but it is not absent from other sites.

Among the finds in the chamber tombs of Prosymna were four imported items: two Mitanni cylinders of faience (168, 169), a scarab with the cartouche of Thutmose III (167), and a carnelian figurine in the form of a hippopotamus (165). Again, the visual features of these objects (material, form, and iconography) clearly mark them as foreign, probably from Egypt and Syro-Palestine.

Although the Mycenaean structures on Asine's Kastraki promontory have been erased by later activity, the chamber tombs located on the Barbouna hill immediately Northwest demonstrate the wealth and external connections of Asine's inhabitants.⁸⁸ Four imported items were found in two tombs of cemetery I, though tombs more recently excavated here may have preserved additional objects.⁸⁹

Similarly, little remains of the Mycenaean settlement of Argos, but burial evidence suggests a sizable Mycenaean population, with considerable range in social rank. The most extensive cemetery is that of the Deiras hill, between the Larissa and Aspis. Among the chamber tombs here was only one imported item, a Canaanite amphora (9). Given that the site's only other imported item is cylinder seal (10) with no context, one might expect more given the alleged importance of the site, according to some models.

Nauplion presents a similar picture, with faint traces of Mycenaean fortification on the acropolis. There are, however, extensive chamber tombs on the neighboring Palamidi hill. Since these have not been published, the two imported stone vessels (162, 163) from this necropolis cannot be linked to individual tombs. The Egyptian origin of these pieces is nicely matched by the appearance of "Nauplia" among the place names of the

⁸⁸ Gillis 1996.

⁸⁹ This possibility is suggested because the one item published so far (an ivory mirror handle, Patrianakoulliaki 1996) indicates that there were at least some comparable finds.

“Aegean list,” the statue base from Kom el-Hetan discussed in Chapter 1 (p. 8). Even though there are problems with reading the list as an itinerary or evidence of Egyptian dominance,⁹⁰ the mention of Nauplion in a contemporary Egyptian document at least implies greater renown for the site than its archaeological remains would suggest.

The site of Tsoungiza sits atop a low hill in the Nemea Valley, geographically separated from the sites of the Argive plain. But as with other fertile areas adjacent the Argolid, e.g. the Cleonae Valley where Zygouries is located, socio-economic development may well have been related to Argive dynamics.⁹¹ The structures excavated at Tsoungiza include houses which date from LH I through IIIB, and though they may represent the leading settlement of its immediate region, there is little evidence that their inhabitants held significant wealth or status.⁹² There were, however, two imported items disassociated from their original contexts: a bronze dagger (219) and a Canaanite amphora (220).⁹³ These finds, especially in light of the Italian character of the dagger (219), demonstrate connections well beyond the Nemea valley, and are important for the consideration of Tsoungiza’s status in relation to other sites.

Regional Analysis

Of the LH III imported items reviewed here, most can be dated more specifically to the LH IIIA-B period, when Mycenaean exchange beyond the Aegean reached its peak. Fig. 3.13 shows the distribution of imported items found in LH IIIA-B contexts of mainland Greece. No single mechanism or model of exchange is evident in the distribution

⁹⁰ Edel 1966; Wachsmann 1987: 95-96. The route described would be extensive, including several sites on Crete as well as Messenia and Troy. Mycenae is the only other Argive site mentioned.

⁹¹ Wright *et al.* 1990: esp. 640-42.

⁹² Wright 1990; Dabney 1997.

⁹³ Although Cline calls the dagger a “surface find,” it is actually from salvage excavations which followed the significant disturbance of subsurface remains (Miller 1975: 151). The context of the Canaanite amphora is not yet published, though Cline’s description of a “surface level” deposit dated LH IIB, “with later material dating down to LH IIIB” (1994: 172) is intriguing.

of imports in the Argolid. Renfrew demonstrated that distinct processes often produce spatial patterns that are not unique, thus his own models for exchange are not all indistinguishable.⁹⁴ Nor does the Argolid meet the expectations of any of the models offered by economic geography and archaeology. And the imported items of the present study present an especially difficult case, compared to other distributional studies which track the pattern of a commodity against a single source. The pattern of the Argolid's imported items, then, is obscured by their relatively rare occurrence and their multiple places of origin.

There are spatial patterns of internal exchange that are visible in other subsets of the Aegean distribution of foreign-made items—the models of the gateway community and central place. As was discussed in Chapter 2 (p. 49-50), the distribution of imports in Boeotia during this period were concentrated almost exclusively in the palace at Thebes, the political center. And the distribution of imports on Mycenaean Crete was heavily concentrated at the coastal emporium Kommos, but not necessarily because it is a power-center. Rather, Kommos functioned as a port, or even a gateway community.⁹⁵ Clearly, consumption in the Argolid was not limited to a single center, but it would appear that the palatial centers at Mycenae and Tiryns attracted their fair share of the imported items. Tiryns' coastal position and external connections clearly contributed to the site's identity, but it was not the chief site of import consumption. Mycenae's ability to acquire (or retain) imports, while clearly ahead of most Argive sites, is significantly less than that of Thebes or Kommos. And Mycenae's higher level of consumption is not necessarily much greater than should be expected, given the site's high population as well as its long history of excavations.

⁹⁴ For equifinality, see Renfrew 1977a: 71-90; models of exchange, 1972: 465-71; 1975: 3-59, fig 10.

⁹⁵ Hirth 1978.

The distribution of imported items at so many other sites in the palatial period suggests that either there were opportunities for exchange either directly with the party that transported the item, or with a local individual or institution that mediated long-distance exchange. Given Mycenae's monopoly over foreign items in the beginning of the Late Bronze Age, it might be thought that the palatial administration controlled trade in the LH III period. If that is the case, then Mycenae is using foreign items in a very different way from the other regions of the mainland. While this material was tightly restricted at Thebes, and apparently not of significant interest at Pylos, it flowed more widely through the Argolid. It may well be that Mycenae was behind this circulation of imports, forging links with local elites and cajoling them into a subordinate position. The other possibility is that elites in various sites were able to directly acquire imported items. In this scenario, the power of Mycenae would have to be considered weakened from its position in the Early Mycenaean period.

In either case, the distribution of imported items at the non-palatial sites demonstrates their use in attempts to secure power. Whether they were actively sought by those trying to gain some form of independence from the palace, or whether they were used by the central authority in the attempt to maintain its preeminence, the shared use of these items indicates that power was not completely centralized. Rather, as with so many other approaches to Argive politics, the symbols of power are divided. This is not to say that the presence of imports indicates the independence of a citadel, or that sites should be ranked according to the number of foreign-made items are found. The distribution of imported items doesn't necessarily reflect the hierarchy of sites, but it should be seen as operating against such a system. The various approaches to mapping Argolid power that were reviewed at the beginning of this chapter are, after all, not mutually exclusive. Different forms of status and power were not shared in the same proportions, nor was any site's claim incontestable. Because of the nature of imported items, at least those prestige-items that were more recognizably foreign, these objects carried a message of external

connections. Thus, it seems more likely that the acquisition and consumption of these goods was a way for local elites to claim power that had its source outside of the local system.

Chapter 4 considers this period in more detail, with analyses of import consumption in settlement activities and in mortuary practices. The investigation of particular contexts helps identify the social groups that benefited from the use of foreign symbols. This allows a closer consideration of imports as devices of power, and examines the competition that took place inside citadel walls.

CHAPTER 4

IMPORT CONSUMPTION AND COMPETITION DURING THE PALATIAL PERIOD

Chapter 3 presented the evidence for an expanding use of imports in the Argolid over the course of the LBA, with the widest distribution in the LH IIIA-B period indicating that foreign items were acquired by people at sites across the Argolid. Determining who these people were and how they made use of these items is the goal of this chapter. These sites did not function as composite wholes, but consisted of individual actors, often organized as groups and factions; and competition existed not only between sites, but surely within each site as well. This type of activity is well approached through the study of import consumption, which can be examined at a group (if not individual) level. The evidence for this level of analysis, however, is only available for the palatial period, and this chapter will focus on LH IIIA-III B import consumption.

An examination of specific contexts demonstrates the many spheres of Mycenaean society in which imported items played a part. Find-spots indicate their potential social, economic, and symbolic values: stored away as a precious commodity, displayed in the rituals of funeral and cult, or even put to more “utilitarian” tasks. Indeed, it is through the archaeological context of the surviving imports that the different symbolic values can be found and different classes of imports distinguished. It has been demonstrated that the imported items of the palatial period were not only the obvious prestige-items, but now include objects that are not symbolically exotic in the same ways. The analysis in this chapter shows that these objects were (to a certain extent) used in different ways. But it is not the case that they were necessarily used by different social groups.

The majority of imports found in the Aegean are from funerary and palatial contexts, a fact that Lambrou-Phillipson laments, since

“graves and palaces cannot possibly give an objective picture of life in the prehistoric Aegean, no matter how useful such information may be for special studies. The majority of the information for the economic, social and everyday life of a people should come from settlements.”¹

In the Argolid, unlike the case in Thebes or Minoan Crete (e.g., Knossos and Zakros), very few imports were found in palace structures. A specific context was not recorded for all of the imports found in the early excavations at Mycenae and Tiryns, when the palace proper at each site was uncovered. One imported item (91) was found later at Mycenae among material that may have been linked to the palace, and one (20) is from the so-called “palace” area at Midea. Although the majority of imports have been found in and around these citadels, comparison among the different contexts demonstrates the considerable diversity of “everyday life” within these sites.² Similarly, social complexity is evident in the burials of the palatial period, and the deposition of imports in funerary contexts should not be divorced from the a consideration of their value among living society.³

The first portion of this chapter deals with imported items found in settlement contexts, including palaces and citadels. Given the lack of surviving evidence for early Mycenaean settlements, it is not surprising that the imports are found only in LH IIIA-B structures and deposits. These finds must be viewed as representative of the state of events during the palatial period, and the distribution created by past activity and modern archaeology limits in-depth analysis to Mycenae and Tiryns. The second portion of this

¹ Lambrou-Phillipson 1990: 167.

² Lambrou-Phillipson (1990: table XXIV) also separates citadel- and palace-finds from settlement-contexts, though the distinction is not always clear. Her “settlements” include some contexts within the Mycenae citadel, e.g. the Citadel House, Tsountas’ House, and Building M. Those from the Mycenae acropolis without specific context are considered citadel imports, along with those found at Midea, Teichos Dymaion, and the Athenian acropolis. Most of those from Tiryns citadel were not included in her catalogue, so it is unclear how she would characterize the Unterburg finds.

³ The active role of mortuary practices in Mycenaean society is considered below, p. 102-104.

chapter analyzes the role of imports in funerary contexts, which offers a view of consumption at a wider range of sites.

Settlement Contexts

Settlement contexts provide essential information for the various uses of imported objects, and thus some of the (social) activities effected by long-distance trade. The presence of these objects in certain structures and spaces indicates their use in particular activities and by identifiable groups of people. It is also interesting to note their association with other classes of material. For example, since many of the imports in Argive settlements have been recovered from areas which also preserved Linear B tablets, it is important to investigate the spatial relationship between the two.

Tsougiza certainly stands out compared to the other sites of Table 4.1 with imports in LH IIIA-B contexts.⁴ Unfortunately, this Canaanite amphora (220) can not be associated with a particular structure or activity, since it comes from a “surface level” deposit.⁵ Similarly, the disturbed context of a second import (219), a bronze dagger, could only be dated as LH III, but it is a type found in Italian contexts of the 13th and 12th centuries, so may well have been used in the IIIB period at Tsougiza. The lack of more specific contexts for these pieces is the result of the site’s heavy disturbance between the original excavations and more recent work. Excavations at Tsougiza demonstrate that there is much to be gained in the exploration of smaller sites, which might include more diffuse evidence for import consumption. Perhaps renewed work at sites such as Korakou and Zygouries, where only small portions of the site have been explored, or newly identified sites, would provide more detailed evidence for the use of imports in peripheral areas and at lesser sites.

⁴ The Tsougiza import is actually from an LH II-IIIB context, as are some of the items from funerary contexts, discussed below.

⁵ The description of the context by Cline (1994: 172) is based on pers. com. with J. Rutter.

Mycenae	59
Tiryns	26
Midea	2
Tsougiza	1

Table 4.1 Number of imported items found in LH IIIA-B settlement contexts.

Investigations have been resumed at the citadel of Midea,⁶ but the site's two imported items were found in earlier excavations. The handle fragment of a Cypriot cup (21) was found in one of the rooms in Trench A along the east fortifications (see Fig. 3.4). The other is from the so-called "palace" area, an L-shaped plateau near the top of the acropolis, whose longer side was labeled the "North Wing." The stone mortar (20) and other Mycenaean artifacts found here were in the isolated deposits among the rock-cuttings and isolated walls that were the only surviving structural remains. Though one might draw a distinction between these two contexts as palatial and peripheral, such isolated finds offer little to the definition of areas within the citadel.

Only at Mycenae and Tiryns do the number of imports found in settlement contexts allow a more in-depth consideration of their use by the inhabitants of these sites. The locations of imports will not necessarily reveal who was behind long-distance exchange, but rather who benefited from their eventual acquisition and consumption. Of course the distribution is created not only by the practices or events of the LH IIIA-B period, but also subsequent processes. The presence of any item in a particular context depends not only on its use in that space, but also the eventual formation (or closing) of its archaeological context, as well as later processes which do or do not leave it intact.

Mycenae, where imported items have been found in various contexts around the citadel, offers the best evidence for the material practices of different groups within a single

⁶ Demakopoulou 1995; Walberg 1998.

settlement (Fig. 4.2). Unfortunately, many of these were found among collapsed debris or in fills that only indicate the general area of use, and of course, several are without exact archaeological provenance (150-156). Given the poor state of preservation, it is not surprising that none are known from the central area of the palace. Nor were any found in the more intact House of the Columns or the Artisans' Quarters, which were part of the architectural sprawl identified as the East Wing of the palace.⁷ The closest possibility of a palatial context is the cylinder seal (91) found in the "Prinaria deposit" along with the famous ivory trio, a male figure-head in plaster, and fragments of stucco altar(s).⁸ This material was found high in the fill of two rooms that were built over by the wall supporting the Archaic-period temple. Although any architectural connection of this area to the palace was obscure, Wace interpreted these finds as the treasure fallen from a palace shrine atop the citadel.

The remaining imports were found in a number of smaller structures: domestic contexts where "utilitarian" items were put to active use, storage rooms where assemblages of like items were stored, and cult rooms where individual imports were found among votives. These contexts do not necessarily reveal the original function of an object at Mycenae, the reason for its acquisition, or the party behind the act of exchange. For example, contextual analysis offers little to the debate over the function and significance of a group of faience plaques which bear the cartouche of Amenhotep III (31-38, 56, fig. 1.4).⁹ Several other items bearing the name of Amenhotep III (99) or that of his wife Tiye (53, 94) have been found at Mycenae, all of which may have been imported as early as the

⁷ The House of the Columns was thought to be an independent structure (Wace 1949: 91) before further excavations (Mylonas 1966a; Iakovidis 1983: 63-66).

⁸ Wace 1949: 83-84, figs. 101-104b; Klein 1997: 268-69.

⁹ Cline (1990) fully publishes the two fragments found in the Helleno-British excavations, and reconstructs the whole group of eleven fragments from Mycenae as representing between six and nine original plaques. Despite the results of the scientific analyses of these plaques, discussed in Chapter 2 (p. 45-46), they are still regarded as Egyptian products by most scholars (see, e.g., n. 11 below).

LH IIIA period.¹⁰ These items have been interpreted as evidence for the official visit of an embassy from Egypt—tokens not of a commercial transaction, but of a political relationship or significant cultural connection.¹¹

The notion of an official visit and the occurrence of similar plaques in Egyptian foundation deposits (of both religious and secular buildings) has led to a number of theories about how the Mycenae plaques were used. Some have suggested the same use for the plaques at Mycenae as in Egypt: that they were originally placed in the foundation deposit of a public building, perhaps a shrine,¹² or were intended for an Egyptian temple at Mycenae, that was either not long-lasting or never erected.¹³ Others envision a more creative Mycenaean use, for example set into the door of an “Egyptian Room” or accompanying a statue of Amenhotep III.¹⁴ These studies have all focused on the plaques as Egyptian products, with theories of how and why they came to the Aegean and expecting their Egyptian function as the determinate of whether or not they were used “properly” in the Aegean.¹⁵ But considering these objects as imports into Mycenae (rather than exports from Egypt) is the only way to determine how they functioned in their Aegean context. And further, since some, if not all, of the surviving fragments were in circulation

¹⁰ Although there debate continues over the coordination of Aegean ceramic phases and Egyptian calendar years, there are numerous deposits in the Aegean, Egypt, and the Levant that include material dated to the reign of Amenhotep III (in the early 14th century) and LH IIIA(1) pottery (Hankey and Warren 1974, 147; Cline 1994: nos. 123, 128). The fact that there are a number of these plaques may bolster the notion that they were imported during Amenhotep’s reign; any single item might be in circulation elsewhere for some time before coming to Mycenae, cf. the Nefertiti scarab found in the Uluburun shipwreck.

¹¹ Hankey 1981; Cline 1987. Bernal (1991: 476-79) sees them as indicative not of a single journey, but as an example of the unequal relationship and repeated contact between Egypt and the Aegean since the time of Thutmosis III. Santillo Frizell (1998) associates them with technological diffusion.

¹² Hankey 1981: 46.

¹³ Bernal 1987, 478-79.

¹⁴ Helck 1979: 97; Cline 1987: 10-11.

¹⁵ cf. Cline’s comments in discussion (Cline and Harris-Cline 1998: 157), where he generalizes that the plaques had a religious connotation in Egypt that was maintained at Mycenae, though they were not necessarily used “properly.”

until the end of LH IIIB, the find-spots do little to support any of the aforementioned theories.¹⁶

Most of the plaque fragments were found in the area northeast of the Lion Gate. Tsountas recovered several fragments from this general area, perhaps between Buildings M and N (32-38),¹⁷ and Mylonas found two fragments in Building M (31). These pieces (probably of a single plaque) were recovered from a deposit in a megaron-like unit, which may have served as “living quarters,” though not enough evidence survived to explain the exact function of the room or building.¹⁸ More specific information is available for the context of the plaque found in the Citadel House excavations. Two fragments were found in Room 31, and while the item’s function within the room is unclear, its larger context associates it with particular (religious) activities. And in turn, this faience plaque provides information about the character of the Citadel House area and its inhabitants. But this is (probably) just one plaque out of nine, and could not necessarily be taken as indicative of the use of the whole group, especially the original use or rationale behind their transport.

The Citadel House Area at Mycenae

The largest concentration of imports within the citadel was found in the Citadel House Area, which is not a single building but a complex of structures running along the interior of the citadel wall between the South House and Tsountas’ House (Fig. 4.2).¹⁹ The area is also known as the “Cult Center” because it includes, in addition to the storage rooms of the South House Annex, numerous places of cult activity: the Room with the

¹⁶ Harding 1984: 106.

¹⁷ Cline (1990: 202) presents Iakovidis’ suggestion of this context for at least some of the seven Tsountas fragments.

¹⁸ Iakovidis 1983: 52. It makes little difference whether the plaque was found in M-2 or its adjacent vestibule M-3, as (incorrectly?) reported in *To Ergon tes Archaeiologikes Etaireias* 1963: 67.

¹⁹ Fig. 4.1 indicates the structures of the Citadel House excavations with solid walls. Taylour (1981) provides an account of the excavations, and more detailed publications are in progress, appearing under the title *Well Built Mycenae*, E.B. French and K.A. Wardle, eds.

Fresco Complex; the Temple (and its “Room with the Idols”); and the Megaron.²⁰ Also in this area, though not part of the Citadel House excavations proper, are the Tsountas’ House Shrine and a circular altar in the open air court south of the Room 35.²¹ A total of 25 imported items were found in and around these structures, 20 in LH IIIB contexts.²²

Room 31 is also known as the “Room with the Fresco” because of the well preserved wall-painting whose figures may include the divine.²³ Other indications of ritual activity are the built altar with deposits of ash and the contents of the adjacent Room 32 (the “Shrine”), which include a terracotta figure on a platform (“dais”).²⁴ The Amenhotep III plaque (56) was found in two fragments: the larger one in the mouth of a lead vessel in the floor deposit; the smaller fragment was within the fill above. Before the final destruction of this area, Room 31 was apparently damaged by fire, and a “deliberate backfill” of ca. 1 m was deposited.²⁵ Also found in the fill of Room 31 was an ivory head, identified as an import from Syria (55). The particular position or use of these items cannot be reconstructed due to the way that the room went out of use.

Imports were also found in two other “shrine” deposits within the Cult Center. Two of these (53-54) were found among the best material evidence for cult in Room 19, the “Room with the Idols.”²⁶ The room is named for its 21 terracotta figures, which are much larger than typical Mycenaean figurines and of a different style than other cult

²⁰ Mylonas 1981.

²¹ The Tsountas’ House Shrine was reinvestigated by Wace and later by Mylonas. The altar and the area south of the Citadel House was excavated by Mylonas (see Iakovidis 1983 for specific references).

²² Four were in LH IIIC contexts and one cannot be refined further than LH III.

²³ Discussed more fully below, p. 112-13.

²⁴ The identification of the bench as an altar is suggested by its painted decoration, which includes double axes and horns of consecration, and more directly by the shallow discs in its upper surface that were filled with ash (Taylour 1969: 94-95; Rehak 1984: 539). As for the adjoining room, French (1981a: 45, fig. 15) believes “that the ‘Shrine’ was more of a religious store than an actual ‘Shrine.’”

²⁵ Taylour 1981: 9, 10, 17.

²⁶ *Well Built Mycenae 10: The Temple* by A.D. Moore is forthcoming (scheduled for 1999).

figures.²⁷ Accompanying the “idols” were as many as 17 terracotta snakes and pottery, all of “very poor quality.”²⁸ One of these vessels, however, contained various ornaments of glass, stone, ivory, and faience. This “pot group” included two imported items: scarab (53) and lantern bead (54). It has been suggested that the idols, when arranged for ritual, held a string of beads in their outstretched hands.²⁹ Whether the pot group should be considered as a collection of votive items or a store of cult paraphernalia, its ritual association is clear.

Several imported items were also found in the Tsountas’ House Shrine, which was identified as a cult area because of the structure’s built features and portable contents.³⁰ Ritual activity was indicated by the presence of a built altar and a “slaughtering stone” in the north room.³¹ The material from the southern room, or the “rear chamber,” included a stucco plaque painted with a “cult” scene of two women flanking a figure-eight shield which may be a divine figure.³² The imported items were also found in this room, and though there is no information for a particular context or use, they were found with a number of other glass, metal, and ivory ornaments (the glass ones are shown in Fig. 6.8). It is possible that, as with the pot group, the imported items were votives, and it is interesting to note that all three may have been older than the IIIB items that they accompanied. The two glass ornaments (93-94) are both Nuzi in style, and may date as

²⁷ Often described as “grotesques,” the figures have been interpreted as evidence of a chthonic cult in the Temple (Moore 1988; French 1981b).

²⁸ French 1981a: 45.

²⁹ Taylour 1970: 277.

³⁰ French 1981a: 45. Tsountas simply called this area Room Gamma of the house which now bears his name (Tsountas 1886; 1887). Its cultic nature was not recognized by title until the area was again excavated by Wace (*Archaeological Reports* 1950: 254-55).

³¹ The stone and altar (designed for libation-pouring, Hägg 1990: 178) were covered with a new floor when the room was extended to the north. This second phase, however, included another altar by the northern entrance (French 1981a: 44; Iakovides 1983: 45).

³² NMA 2666: Tsountas 1887: 162-64, pl. 10:2; Immerwahr 1990: 121, 140, 191-92, pls. 62-63. The painting is not well preserved, and it is difficult to determine if there is a head associated with the shield, as suggested by Rodenwaldt (1912: 129-40, pl. VIII).

early as the 16th century are probably the best examples of imported items remaining in circulation for long periods of time.³³ Similarly, the faience scarab (94) was inscribed with the name of Tiye, and (like the Amenhotep plaques) may have been imported in the LH IIIA period.

These imported items found in shrine-contexts can all be classed as prestige-items. There were, however, a number of more utilitarian items among the Citadel House imports. For example, a trachite mortar (62) was found in Room XI, the antechamber of the "Temple." Found in the entrance to the Room with the Fresco Complex was another mortar (57), which was likely fallen from elsewhere, as its fragments were found both inside Room 38 and just outside.³⁴ Between these two cult buildings is Area 36, an unroofed court, well suited for work activities. And this space was originally interpreted as a workshop,³⁵ due to finds which include a stone jewelry mold and a trachite mortar (46). While closer study of the evidence has tempered notions of glass-working and jewelry crafting in this particular space,³⁶ the fact remains that the finds here are of a more secular, and perhaps industrial character.

Room 2 of the Megaron has also been suggested as a cult place, more on account of the architectural form and quality of construction, than because of any particular finds.³⁷ There were, however, intriguing artifacts preserved in the basement rooms (I-III), below the megaron antechamber. Room II produced several pieces of unfinished ivory, including part of a hippopotamus lower canine (59), which led to its identification as a workshop or

³³ For dates of production, see Harden 1981: 40 n. 36; Barag 1985: 38, 46.

Other items which appear to be significantly older than their contexts are mostly Egyptian stone vessels that were likely transported through Crete (e.g., 13, 87, 102).

³⁴ Evely and Runnels 1992: 4.

³⁵ Taylour 1981: 17-18.

³⁶ Evely and Runnels 1992: 22. This evidence will be considered in detail in Chapter 6.

³⁷ French 1981a: 44.

store room.³⁸ The presence of another mortar (60) among the material kept in this room also supports the notion of imported items being put to work here. And fragments of alabaster (58) and ostrich-egg (61) vessels in the fill of Room II suggest that more luxurious items were consumed in the area, perhaps displayed in the megaron above.

A number of imports were also found in the more secular setting of the South House Annex. These items include stone mortars from Corridor 4 (50) and Room 6 (52), and a Canaanite amphora found among fragments of storage vessels in Room 1 (51). This is also the area where the Linear B tablets of the Citadel House excavations were found, one in Room 1 and seven more in Corridor 4. And while these tablets provide important evidence for the working of imported goods and the connections between crafting and cult, they were fell into this area from above and can not be directly linked with the use of the imports in these rooms.³⁹ There were, however, several other imported items (47-49) among refuse and destruction debris of the "Causeway Deposit" in the area immediately north of the South House Annex. This deposit was not necessarily associated with the activities of the Citadel House buildings, but appears to have fallen onto the built ramp at the time of the area's destruction.⁴⁰

The use of foreign items in the Citadel House Area can thus be divided in terms of the type of context as well as the class of items. Imports of more luxurious materials were restricted to the actual cult rooms, whereas the stone mortars and ceramic vessels were found mostly in storerooms and possible work-areas. The distinction, of course, is not absolute, as demonstrated by the combination of items in ambiguous contexts, such as Room II. While the use of "utilitarian" items is seen in other domestic contexts at Tiryns, Midea, and perhaps Tsoungiza, the use of exotic symbols in cult is best demonstrated here.

³⁸ Taylour 1981: 19; for a reconsideration of the ivory fragments as workshop evidence, see Krzyszkowska 1997.

³⁹ Oi 701-708, which include an offering to a divinity, and material delivered to temple workers.

⁴⁰ Wardle 1973: 303-304.

The West House Group at Mycenae

The number of imports found in the buildings inside Mycenae's citadel is matched by those found just outside the fortifications in a group of four structures known as the West House group or the "Ivory Houses,"⁴¹ shown in Fig. 4.3. Here, a total of 28 imported items were found, all in LH IIIB contexts. These buildings (the West House, the House of Shields, the House of the Oil Merchant, and the House of Sphinxes, in likely order of construction) are often treated as a unit due to their overlapping functions and close grouping on a built terrace.⁴² The nature of these structures is unclear, as they apparently combine (to different degrees) domestic and mercantile or administrative functions. These different activities are suggested by the diverse finds, including pottery which ranges from cooking to transport vessels, Linear B tablets, and imported items. All the finds were badly damaged by the fire that destroyed the buildings in the middle of the LH IIIB period.

The *West House* is the largest of the four, with a plan similar to other houses at Mycenae, which has been identified as the developed form of the megaron house.⁴³ The finds here range from the hearth and cooking vessels in Room 4 to a group of 69 stirrup jars in Room 1. The latter have led to suggestions of oil export and the common entries of Linear B tablets from the West House (Room 1) and those of the House of the Oil Merchant suggest that they shared administrative activities.⁴⁴ There were, however, no imported items found in the West House.

The *House of the Oil Merchant* was built on two terraces, though nothing survives of the western sector. The eastern half preserves a long basement corridor running along west terrace wall. Twenty-nine stirrup jars with their stoppers were found in the north end;

⁴¹ This latter name, used in the full publication of the excavations (Tournavitou 1995), was inspired by the vast amounts of ivory found here. I prefer the name which is not limited to this one aspect.

⁴² In fact, the House of Sphinxes was built directly against the House of the Oil Merchant's, making structural use of its south wall.

⁴³ Like the House of the Columns and M House, the West House features a three-room megaron opening onto an enclosed courtyard (Shear 1987: 151).

⁴⁴ Tournavitou 1995: 262-63.

and among the other finds fallen from above was an imported amphora fragment (89). The rooms opening off the east side of the corridor include Room 1, where eleven pithoi originally stood between built-in supports. Also found here were fragments of a Linear B tablet recording the distribution of oil, which corresponds well with the room's built features. A total of 29 tablets was found in Room 2, whose content may explain the presence of few finds in this room. These tablets document the distribution of wool, which would itself leave no archaeological trace.⁴⁵ The stone mold for an ax (90) was part of the material fallen from above into Room 4, where two pithoi were stored. There is no indication of metal-working in the area. In fact there is no evidence for the mold's Mycenaean use, as no actual axes of this type are known in Greece.

The *House of Sphinxes* remains are limited to its basement level, which was cut into the hillside. Room 1 held a large store of drinking vessels (over 100 kylikes), but most of the other rooms preserved finds which had fallen from above. Most notable are the huge amounts of ivory fallen from above into Rooms 1 and 2 (also wood and pumice), and some in Room 4. And fallen into basement Room 6 were large storage vessels and a number of Linear B tablets that record the assessment of agricultural products to be collected. Fragments of two imported stone bowls (86-87) were found in a mass of burnt debris that had fallen into Room 10, which was an inaccessible area below the building's entrance. These were apparently used in the south end of the structure, on the upper floor. From the outside area just south of Room 10 (where Wace restored an exterior wooden staircase) came the building's other imported item, a stone mortar (88).

The foreign-made items found in the House of the Oil Merchant and the House of Sphinxes include both "utilitarian" and prestige items, which is consistent with the mixed nature of the buildings as both domestic and perhaps industrial/redistributive. The scatter of prestige items among the buildings' debris cannot be linked to specific spaces or

⁴⁵ Tournavitou (1995: 33-34) considers it likely that the tablets of Rooms 1 and 2 fell from above, though she concedes this could have been from shelving in the basement rooms rather than the floor above.

activities, but appear to have been used in the daily life of the inhabitants. This is not the case with the concentration of luxury vessels found in the House of Shields.

The majority of the imported items from the West House group were found in the *House of Shields*. This structure's ground floor consisted of two rectangular rooms (running parallel N-S) with a third room to the north. This unusual plan has no parallel, and was "not designed for regular domestic purposes."⁴⁶ The imports are all faience and alabaster vessels which were found mostly in the West Room (68-85) and also in the west half of the North Room (64-67). They were found among other prestige items, including thousands of ivory fragments and as many as 50 locally produced stone vessels (only 14 intact).⁴⁷ All of these items had apparently fallen from above (either an upper floor or wooden shelves in the ground floor room) during the building's destruction.⁴⁸ Tournavitou suggests that these ground floor rooms could have been work shops for ivory/wood furniture. The building's one Linear B tablet was also found in this room, but it was found in the east section, isolated from the majority of the finds.⁴⁹

In contrast to Tournavitou's suggestion of workshop activities, Shelmerdine concludes that:

"the West House group functioned as repositories and clearing houses, like their Theban counterpart, not as workshops. They mark a central place where goods from outlying locations could be brought and entered into the administration's record-keeping system."⁵⁰

This interpretation is based on the archaeological and textual evidence for the transactions of staple goods, such as wool and oil. But it is possible that some of the imported items were involved in similar activities. The unusual form of the House of Shields suggests that

⁴⁶ Hiesel 1990: 163; cf. Tournavitou 1995: 287.

⁴⁷ The vast majority of objects, including the ivory works and stone vessels, appear to have been finished products, not unworked material, Tournavitou 1995: 22-27.

⁴⁸ In areas where the stratigraphy is best preserved, there is a recognizable layer between the floor and the burnt deposits in which the artifacts were found (Tournavitou 1995: 18-28, figs. 7, 11).

⁴⁹ Tournavitou 1995: 19.

⁵⁰ Shelmerdine 1997: 394.

it was built specifically for storage, and the amount of imported as well as locally produced luxuries suggest collection, not consumption. But if these items were held here prior to further circulation, they were part of a higher level of a centralized exchange network than the distribution of rations to personnel.

While there is a loose association between settlement contexts of imports and Linear B tablets, there is no direct connection. This is not surprising, since the preserved tablets record no explicit mention of imported goods and few references to these types of items. But the general presence of imports and tablets in many of the same buildings does indicate that at least some of the people who were able to acquire imported items were also involved in transactions with the central administration.

Tiryas Unterburg

Most of the imported items with known settlement contexts are from the Unterburg, shown in Fig. 4.5, where a total of 28 were found in this area, 24 in LH IIIA-B contexts.⁵¹ Although the excavations of this area have only been reported in preliminary publications, the structures appear to be domestic structures, though these may include areas of ritual activity. This area was occupied in the LH IIIC period as well, and in fact the major cult installations are from this period.⁵² Earlier cult activity is suggested by a mass of finds which were apparently ejected from west Casemate Room 7, including hundreds of figurines and an ivory idol (203) imported from the Levant.⁵³ There are, however, remains of the IIIB structures, with significant finds among the debris.

⁵¹ Three were in LH IIIC contexts, and one cannot be refined further than LH III. An additional item was found just outside the walls of the Unterburg (Casemate 7). Only one import came from Schliemann's early excavations (208).

⁵² A sequence of structures (Rooms 117, 110, 110a) in the courtyard west of the earlier Building VI, Kilian 1981: 53-56.

⁵³ Kilian 1981: 57; 1988a: 144-45, fig. 46.

The structure which perhaps had a special significance is Building VI, whose finds include cult material and Linear B tablets. When the excavation produced an altar in Room 123 and several rhyta (one animal-headed) in the Room 130 across the corridor, Kilian dubbed it the "House of the Priestess" and suggested that it might be connected with the cult activity in west Casemate 7.⁵⁴ Eighteen fragments of Linear B texts (probably from three to five tablets) were found in the corridor, apparently fallen from a second story over Room 130.⁵⁵ The largest of these (Al 7) records a list of male personnel, though a description of the group's character or purpose is not preserved.⁵⁶ Smaller fragments include references to a variety of items: wheel(s), perhaps wool (or fennel), and possibly chariot(s).⁵⁷ The only import actually from Building VI is a ceramic lid (180) from Room 123 (in the SW corner). This is the room with the "house altar," a clay-brick construction stuccoed, with plastic horns of consecration, in its northern section.⁵⁸

In the immediate surroundings of Building VI were a number of other imported items, especially to the south. The contextual details have yet to be published; in fact only a few can be placed in a particular room and the details of these are vague. The Cypriot juglet (181) from Room 191 was found on the floor of the room (along with glass and stone beads, a miniature throne) which had a central hearth and a pit filled with objects including stone tools and scraps of metal, suggesting a combined living and working area.⁵⁹ The "milk bowl" (194) from the unroofed area west of Building VI was found

⁵⁴ Kilian 1981: 58, 1983: 277, 303-309.

⁵⁵ Godart *et al.* 1983: 411; for the transcription of all Linear B tablets and nodules from Tiryns, see Melena and Olivier 1991.

⁵⁶ Godart (1988: 245-47) incorporates an additional fragment with the number 1030, which if added to the listing of men would make this the largest group tallied on any Linear B tablet. The VIR ideogram, however, is not actually present.

⁵⁷ Also four bone styluses were found in scattered contexts throughout the Unterburg, none especially close to the deposit of tablets in Building VI (Godart 1988). Another tablet, which preserves only traces of writing, no complete or restorable signs, was found in from Room 226 (Olivier 1988: 253-54, 260).

⁵⁸ Kilian 1981: 58; 1982: 401-403.

⁵⁹ Kilian 1983: 304.

near a hearth.⁶⁰ Those from the area described only as “south of Building VI” (187-93) were found in the ashy deposit beneath a late LH IIIB, which Kilian suggests had traces of metal working.⁶¹

Other imports were found to the northwest of Building VI (195-96), but again little is known of their particular contexts. This is the general area of the court before casemate 7, which was apparently the location of cult activity in LH IIIC described above. But this area and the structures to its north (Buildings VII and VIII) may have been work areas, judging by the features described in preliminary reports: a stone floor, a drain, an area with traces of burning.⁶²

Although the Unterburg, especially Building VI, seem to have been the locus of some ritual and record-keeping. Compared to Mycenae, however, this area was devoted to neither cultic nor economic transactions, in the way that the structures of the Citadel House area and the West House group were. Further, the imported items have no obvious connection to these activities at Tiryns. The ceramic lid (180) was found in the apparent shrine of Building VI, but otherwise the imports are merely in the surrounding area, which cannot be described as having any particular character beyond domestic industries.

All of these items from Building VI and its sector have a “utilitarian” nature and all are made of clay. So are most of the other Tiryns objects: those from the North gate (197-99), and the structures near the cistern passage (175-77). The few imported items made of more prestigious materials were preserved with little information for their use. For the frit monkey in an LH IIIA deposit east of Building III (178) and the faience kylix from Building I (174), little more can be said about their contexts. Similarly, details of the faience vessel fragments in west Casemate 14 (201) are not yet published.

⁶⁰ Kilian 1981: 166. The area is described by Cline (1994: 180) as a “workshop.”

⁶¹ Kilian 1988a: 121.

⁶² Kilian 1988a: 120.

The imports found in settlement contexts at Mycenae and Tiryns do not necessarily bear connections to the palatial administration of either site. There are apparent correlations between the finds of tablets and imports, but only the material from the West House group suggests that activities of the central administration were being carried out. Or perhaps it is better said that activities *like* those of the central administration were carried out here, since they could have been privately operated. The cult activity of the Citadel House area may have been independent of the palace as well. In both cases, even if the buildings and their inhabitants were part of the administrative hierarchy, they were clearly separated from the central area of the palace and may well have used imported items in their attempt to garner status on their own terms. The character of import consumption in the Unterburg is of a different nature, as suggested both by the nature of the imported objects and the contexts as well. Imports here were apparently involved in the more ordinary tasks of household production and daily life. That these items were valued as imports is a distinct possibility, but their consumption here in a less conspicuous setting indicates that the statement made by those who acquired them was within their residential group.

Funerary Contexts

Since Aegean archaeology has traditionally focused on large centers, the concentration of settlement-imports in Argive citadels may be in part due to a bias in fieldwork. A number of different settlement types have been excavated in the northeast Peloponnese, but it is the larger centers which have received the most attention. The tombs of the Argolid have been investigated on a more equal level, and provide data for the distribution of valued items at a range of sites. Significantly more sites preserve imports in LH IIIA-B burial contexts (than the few with settlement contexts), and an understanding of mortuary practices in relation those of living society is essential to an analysis of import consumption. Their presence in burials is not only important in terms of the circulation of

foreign items among people in sites across the Argolid, but also for their role in the ideologically-charged rites of funerary practice.

Approaches to Mycenaean Mortuary Practices

The 1970s saw archaeological and anthropological theorists take on mortuary behavior in New Archaeology's more scientific investigation of long-held assumptions and cross-cultural expectations. The theories set out by Binford and the hypotheses of Saxe were tested and refined in the examination of how an individual's identity and/or status is reflected in their treatment at death.⁶³ Most studies sought to identify rank or a particular level of social complexity through differential treatment in a number of factors: preparation of body, type of tomb, location of tomb. A series of analyses by Cavanagh and Mee have approached several of these issues in Mycenaean chamber tombs, showing positive correlations between tomb size and wealth, and no particular spatial concentration of these wealthier burials within cemeteries.⁶⁴

My analysis seeks to associate differences in burial practices (especially the inclusion of imports and other specific items in tombs) with the social levels and groups of the type(s) already documented.⁶⁵ This requires an approach that is suited to the Mycenaean situation, where burial was most often made in group tombs.⁶⁶ Also, rather than examining the mortuary evidence as a direct representation of living society, I am interested in funerary practices as a (not necessarily consistent) part of larger social

⁶³ For the development of current approaches, including the recent turn to regional analysis (and full bibliography), on mortuary analysis, see Brown 1995; Chapman and Randsborg 1981; O'Shea 1984: 1-22.

⁶⁴ Cavanagh and Mee 1984; Cavanagh 1987; Mee and Cavanagh 1990. For these findings put in the much larger context of burial practices in prehistoric Greece, see Cavanagh and Mee 1998.

⁶⁵ For Mycenaean society, differences in rank are evident in the burials of the Shaft Grave era and more clearly articulated in the Linear B records of the palatial period (see Chapter 2).

⁶⁶ There are, of course, a large number of single interments, which more readily permit the study of the individual. These are, however, most often non-elite modes of burial (usually in the form of pit and cist graves), which seldom preserve significant wealth and or imported items. For a consideration of these "simple graves," see Lewartowski 1995.

structures and practices. The potential of mortuary practices to have a more active role upon social structure and power relationships has become well recognized,⁶⁷ and the depositions of objects in burials demonstrates an active role of material items in creating this ideology.

Discerning the connection between Mycenaean social organization and mortuary practice is made more difficult by the fact that most tombs were used for groups rather than individuals. Problems of tomb-robbing, preservation, and sampling are augmented by the fact that a series of depositional events made the tomb subject to continuous alteration over the period of its use. When re-opened, Mycenaean tombs not only received new interments, but the remains of previous burials were often displaced, damaged (burning was occasionally used to purify tombs), or removed.⁶⁸ This is further compounded by later cultic activity at Bronze Age tombs.⁶⁹ Thus, the details of any single interment are obscured, the assemblage of grave goods is usually incomplete, and the implications for social order drawn from this evidence are rendered less secure. Mortuary practices can nonetheless be interpreted as a mode of expression over a longer span of time. If the communal tomb is accepted as representing a "palimpsest of activities,"⁷⁰ general patterns are discernible, and theories of social identity or rank can be approached in terms of group affiliation.

Binford proposed that burial rites relate not only to the *social persona* of the deceased, but are also a factor of "the composition and size of the social unit recognizing status responsibilities to the deceased."⁷¹ Like most models of mortuary analysis, status still operates on the level of the individual (the deceased), and Binford incorporates the

⁶⁷ Hodder 1982a; Parker Pearson 1982; I. Morris 1992.

⁶⁸ Secondary burials are often found in dromoi, and these too should be considered a part of tomb group (Lewartowski 1996).

⁶⁹ Morris 1988, Whitley 1988, Alcock 1991.

⁷⁰ Chapman 1981: 398.

⁷¹ Binford 1971: 17.

social group in order to demonstrate a positive correlation between social complexity (or organization) and differential treatment of the dead. This recognition of the role of a group of living individuals who feel connected to the deceased is important in its own right. Burial is a moment of group-identification, and the inclusion of grave gifts contributed not only to the prestige of the deceased, but also to those who deposited them.

LH IIIA-B Burial Imports: Elite Use

The Mycenaean tomb is traditionally understood as used by the same family over several generations. While kin groups are often constructed around identification with the deceased ancestors,⁷² ethnographic studies demonstrate the potential range of qualifications and exceptions to the assumed equivalence of tomb and kinship.⁷³ Regardless of what other connections they share, the members of a tomb group are responsible for the interment of those who precede them. The rites and depositions provide an opportunity for group identification and the tomb itself may function as a significant place in the landscape, as often suggested by its monumentality or other markings.⁷⁴

Imported items were included in these activities at a number of Argolid sites, as shown in Table 4.2, which counts the number of imports from palatial period tombs at each site.⁷⁵ The items from these tombs cannot always be dated precisely due to the co-mingling of deposits in later re-use, excavation, and/or storage. This conflation of separate interments does not necessarily compromise the data, however, since it may capture one meaning of grave gifts, as reflecting the actions of those who carried out the funerary rites. The choice of the living to leave goods intact (or disturbed, but still there) suggests a connection with the earlier deceased. Although this is often assumed to reflect a feeling of

⁷² Sometimes literally on the site of their burial (Bloch and Parry 1982: 32-36).

⁷³ Keswani 1989b: 38-98.

⁷⁴ Bloch and Parry 1982; Barrett 1990.

⁷⁵ Six of the 43 items tabulated here are from contexts which cannot be refined more than LH II - IIIB: two from Mycenae and one each from Asine, Dendra, Prosymna, and Tiryns.

Mycenae	24
Dendra	8
Asine	4
Prosymna	3
Argos	1
Nauplion	1
Iyrisa	1
Tiryns	1

Table 4.2 Number of imported items found in LH IIIA-B funerary contexts.

obligation to one's ancestors, such a bond may have been by virtue of the shared tomb alone.

The tombs in which imported items have been found can be generally classed as elite burials. The few which were associated with tholos tombs, such as the burial in the dromos of the Tomb of Clytemnestra, need no further evidence that significant wealth was invested.⁷⁶ Yet chamber tombs, which were the most common type of burial form among import contexts, were not restricted to use by a particular class.⁷⁷ Though such assessments can be made by a number of factors, I have examined each context for the presence of other types of goods: seals, weapons, and metal vessels.⁷⁸ These reflect not only the general wealth or energy expenditure, but specific markers of elite status and connections. The particular nature of different objects and symbols deliver a message in this setting, and their function in daily life may indicate connections and identities held by the individuals of the tomb group. Table 4.3 shows the presence of seals, weapons, and

⁷⁶ The significant labor invested in these tombs was not limited to their monumental form, but sometimes the elaboration of the facade through carved stone (e.g., Treasury of Atreus: Higgins *et al.* 1968) or painted plaster: (Tiryns, Müller 1975: 2; Kokla, Demakopoulou 1990: 114, fig. 4).

⁷⁷ Cavanagh and Mee 1998: 124-25.

⁷⁸ Kilian (1988c: fig. 14) used similar categories (sword, dagger, gold ornament, seal) to demonstrate the social stratigraphy among tomb groups at Prosymna.

metal vessels among the chamber tombs in which imported items were found. Also the level of wealth determined by the quantities and values of all preserved grave goods is shown for those tombs which were included in the analysis by Cavanagh and Mee.⁷⁹ The wealth of the Argolid tombs has also been studied by Voutsaki based on the diversity of objects found in each tomb,⁸⁰ but unfortunately she has yet to publish her assessment of individual contexts.

Mycenaean sealing practices are thought to have “served primarily administrative and economic purposes,”⁸¹ but they were not limited to palace-use. Seals were used to document transfers towards the centralized collection of commodities, and may therefore represent a connection of the deceased with the palace. But the use of seals could also be used to make exchanges between individuals and institutions more official. The character of these transactions was marked by the act of sealing, which in turn affected the social, as well as economic, role of the participants. Thus, the ownership of a seal may have indicated a certain type of role the individual played in economic transactions, and served as a general mark of economic status.⁸²

Bronze weapons were central to one of the most basic forms of Mycenaean power, violent force. The state provides defense against outside enemies, but the threat of physical force directed towards disruption within the state is also present.⁸³ In this regard, the display of weapons represents a particular kind of status and is a marker of identity for the warrior elite; in fact, display may be as important as martial usage. Metal vessels were a

⁷⁹ Cavanagh and Mee 1990.

⁸⁰ Voutsaki 1995a: 55-56.

⁸¹ Palaima 1987: 249. For further consideration of administrative seal-use, see Aravantinos 1984; Palaima 1990.

⁸² Minoan seals have been identified as likely symbols of status in burials (Karytinos 1998) and connected with other markings of high rank in artistic depictions (Younger 1992: 272-73).

⁸³ See Cherry 1984: 23.

<i>Context</i>	<i>Wealth-group</i> ⁸⁴	<i>Seal</i>	<i>Bronze Weapon</i>	<i>Metal Vessel</i>
ARGOS				
Ch Tomb VI			arrow heads	
ASINE				
Ch Tomb I:1		CMS I 197-201, 225 ⁸⁵		silver, tin-coated
Ch Tomb I:2			arrow heads	tin-coated
DENDRA				
Ch Tomb 2	1	CMS I Spl 20, 21		silver, bronze
Ch Tomb 6		CMS V Spl 1B 67	arrow head	
Ch Tomb 7	1		sword, knife	bronze
Ch Tomb 8	1	CMS I 190	dagger, knife, helmet	
Ch Tomb 10	2	CMS I 191-193		gold, silver
MYCENAE				
Ch Tomb 11	2	CMS I 54		
Ch Tomb 47	2	CMS I 80-82	arrow & spear heads	bronze
Ch Tomb 49	2		knife	
Ch Tomb 52		CMS I 85		
Ch Tomb 55	2	CMS I 86-88		
Ch Tomb 58	2	CMS I 89-98	arrow head	
Ch Tomb 68	2	CMS I 102-107	arrow head	
Ch Tomb 88	1	CMS I 123-124	knife, arrow head	
Ch Tomb 95	2		arrow head	
Ch Tomb 523	3	CMS I 156-157		
Ch Tomb 526	3	scarabs ⁸⁶		
PROSYMNA				
Ch Tomb III	1	CMS I 207-209	arrow & spear heads, dagger, knife	
Ch Tomb XXIV	3	cylinder seal ⁸⁷	dagger	
Ch Tomb XXXVIII	1	lentoid & cylinder seal ⁸⁸	arrow head, knife	
TIRYNS				
Ch Tomb 19		CMS V 575-576		

Table 4.3 Markers of wealth and status in the LH IIIA-B chamber tombs where imported items were found.

⁸⁴ As determined by Cavanagh and Mee 1990: 55-58, table 2. This study sorted the tombs into four groups from 1 (wealthiest) to 4 (poorest).

⁸⁵ Also a carnelian seal, now lost (Frödin and Persson 1938: 373 no. 2).

⁸⁶ These are the imported Amenhotep scarabs (117-119, Wace 1932: 93, 198-99, pl. IX).

⁸⁷ Pierce Blegen 1937: 280 no. 21, fig. 596.

⁸⁸ Pierce Blegen 1937: 278 no. 12, 280-81 no. 22, figs. 590, 596.

class of prestige objects which might be one of the best indicators of wealth.⁸⁹

Suggestions that they may have been intended for burial use only (due to the thinness of the metal and fragile nature of the vessels) increases the importance of display as part of the funeral rite. What the vessels symbolized in this funerary context may be indicated by their use in palace ritual (PY Tn 316).

The chamber tombs in Table 4.3 all appear to have some retained some of their symbols of wealth and connection. Most of those that were ranked by Cavanagh and Mee fall in the two wealthier groups, but there is considerable variation. Of the ranked tombs, Dendra's burials are the wealthiest as a group, and Mycenae's the most "middle class," i.e., the most that are not in group 1. Indeed, it would appear—at least, to judge from these few examples—that the tombs outside of Mycenae were wealthier. Again, this judgment is based on differential preservation, but it seems likely that these tombs represent the highest elites of the periphery. Of course, the highest elites of Mycenae were most likely buried in tholos tombs, or elaborate chamber tombs, such as those with plastered façades or extended dromoi.⁹⁰

Turning to specific markers of wealth and status, almost all the chamber tombs in Table 4.3 had seals, and they all did have weapons and/or seals. Metal vessels appear less frequently, probably because they were more likely to be removed from tombs, since they were directly easily reconverted to other forms of wealth. The surviving items are perhaps more important as symbols—the presence of imports as representing external associations, accompanied by items that mark a connection with local sources of power. The consistency of seals in the tombs may indicate that the groups acquiring imports were the same who conducted economic transactions with the central administration, or in the

⁸⁹ Wright (1995b: 69 n. 35, table II) discusses metal vessels as prestige goods in the early Mycenaean period. For metal vessels as convertible storage of wealth, see Keswani 1989a: 67; Sherratt and Sherratt 1991: 360. The most complete listing of Aegean metal vessels is Davis 1977.

⁹⁰ Kontorli-Papadopoulou 1987.

manner of this administration. In these cases, the imports appear to be used by individuals who are economically involved with the palace. Perhaps these items not only reflect their enhanced economic statuses, but can be seen as reflections of an effort to connect with other (foreign) sources of power, independent of the local system.

Funerary Ritual and Ideological Meaning

Mycenaean funerary ritual is often envisioned in the setting of the tholos tomb, as its monumental form would lend further significance to the depositions and events carried out.⁹¹ While evidence for certain practices or features may be limited to tholoi, many aspects of burial ritual can be extended to all communal tombs. Chamber tombs could also be quite large, with impressive dromoi, and some had decorated facades as well.⁹² But more important is that all these tombs served the same function, as a physical and social frame for acts of deposition, of grave goods as well as the corpse. Several scholars have reviewed the evidence for reconstructing funeral rites, not all aspects of which are considered here.⁹³ I focus on the aspects of group participation and the potential role of the material deposited with the deceased, in order to appreciate the function of the imported objects found in these contexts.

A procession of mourners to the tomb-site is often envisioned as part of the funerary ritual, in part because of the frequent location of cemeteries at some distance from their associated settlements. Images of such mourners in procession are found among the painted *lanakes* from the chamber-tomb cemeteries of Tanagra (Boeotia).⁹⁴ Most common among these scenes is a series of mourning figures, usually females, with both hands

⁹¹ Wright 1987; Demakopoulou 1990; Kontorli-Papadopoulou 1995; Pelon 1990.

⁹² Kontorli-Papadopoulou (1987: 152-53, pl. XLV) lists examples from the Argolid and Thebes.

⁹³ Most recently Cavanagh and Mee 1998: 106-20; also Protonariou-Deilaki 1990a; Wells 1990 interprets motivations and meanings for some of these practices.

⁹⁴ Far from fully published, those examples which have been presented are collected by Cavanagh and Mee 1995, where they are compared with similar images from Geometric Greece.

raised to their heads. Other scenes include the laying-out of the deceased or dramatic gestures of mourning, such as the face-scratching indicated by red lines.

The practice of a funeral meal is difficult to identify among Mycenaean practices, though it has been suggested since the earliest excavations. The fill of the Shaft Graves in Circle B contained animal bones, shells, and other possible evidence for a meal at the time of interment.⁹⁵ Animal bones (sometimes burned) were also been recorded at a number of the Mycenae chamber tombs.⁹⁶ These animal remains, however, may be the result of sacrifices to be enjoyed by the dead, disarticulated counterparts to the careful burials of entire creatures found at other graves.⁹⁷

A “final toast” to the deceased or a libation ritual is well evidenced by the broken drinking vessels commonly found at tomb entrances. Such fragments of kylikes are perhaps the most frequently noted remains of the burial rites, usually described by excavators as having been emphatically, if not violently, deposited “smashed,” “shattered,” or in the case of Argos “*jetées*.”⁹⁸ Cavanagh and Mee point out that this practice is not

⁹⁵ Other evidence includes charcoal and stone slabs interpreted as tables (Graziadio 1988: 346). Similar animal bones and traces of burning have been found at various MH tumuli, but it not enough evidence to identify a funeral meal, rather than other sacrificial or purifying acts (Müller 1989: 28-30).

⁹⁶ Even Tsountas (1888: 130) identified sheep and cow bones in the chamber tombs of Mycenae, which he interpreted as food left for the dead. Hamilakis (1998) argues that such remains should be interpreted as feast remains, based on general practices he identifies for the Bronze Age Aegean.

⁹⁷ Most dramatic are the horse burials in, for example, the Marathon tholos (Mylonas 1966b: 116, fig. 111) and the MH tumuli of Dendra (Protonariou-Deilaki 1990b: 97-102). More common examples include two entire sheep/goat skeletons at Kokla (Demakopoulou 1990: 122) and Dendra (Persson 1931: 29, 80).

⁹⁸ Significant numbers led to the identification of a particular rite by Wace 1932: 131, 141; Blegen 1937: 237-38, 242; Persson 1942: 32; and Deshayes 1966: 244. In other cases, a well-placed kylix or two may also indicate such an act: a single vessel was found beneath a stone marker before the blocked entrance of Pylos Chamber Tomb K-1 (Blegen *et al.* 1973: 209, fig. 267), and two kylikes were found at the base of the stonion blocking-wall of the Kokla Tholos (Demakopoulou 1990: 122).

Efforts to identify further examples have met resistance. For example, there is disagreement over the interpretation of stemmed goblets in the fill of Shaft Grave Gamma at Mycenae (Marinatos 1968b: 60, defending this interpretation against Mylonas 1966b: 99). And the prevalence of kylix fragments among the pottery fragments identified with Pylos Tholos Tombs III and IV (Blegen *et al.* 1973: 67-68, 82, 111) may be explained by the kylix's more recognizable shape rather than necessarily greater numbers.

universal in the Mycenaean world, but it does appear to be common in the Argolid.⁹⁹ And this is perhaps the most direct evidence for the presence of a fairly large group at the moment of burial, or more precisely, the moment of the tomb's closing. As many as 40 kylikes, represented by over 200 fragments, were found at the entrance of Dendra Chamber Tomb 13.¹⁰⁰ This rite too may be represented on one of the Tanagra larnakes, where a female mourner holds a kylix in her extended hand (while another raises her hands to her head in a gesture of grief).¹⁰¹

So, there is evidence for the presence of a (sometimes rather large) group of mourners at the interment of the deceased. A sacrifice (and perhaps meal) was often performed and a libation or toast upon the closing of the tomb. Other rites that may have been carried out leave no archaeological trace. The missing element is, of course, exactly how the grave goods were involved these rites. Presumably these objects were on public display as part of the procession to the tomb, and perhaps in further rites carried out there.

Possible Depictions of Tomb Ritual

Artistic evidence may provide some clues for the activities which took place in the funerary setting. Rituals performed at a tomb may be shown in on the Late Minoan sarcophagus from Ayia Triada, which features a presentation scene among other images (Fig. 4.6). Although found on Crete, the burial context and the sarcophagus' iconography have a number of Mycenaean features. In one scene on the sarcophagus, gifts are brought

⁹⁹ Cavanagh and Mee 1998: 115. The practice was especially common in the LH IIIA-III B Argolid; for example, at Prosymna kylix fragments were found in "every dromos without exception" (Blegen 1937: 237).

¹⁰⁰ Åström 1977: 72. Similarly, Blegen (1937: 238) reconstructed 38 vessels from the dromos of Prosymna Chamber Tomb X.

¹⁰¹ Tomb 36 larnax (Cavanagh and Mee 1995: 50, fig. 9).

before a figure, who may be interpreted as an image of the deceased, or rather his spirit.¹⁰² Although the offerings are not especially appropriate for funerary use, the figure stands before a rectangular structure similar to the built tomb in which the sarcophagus was found.¹⁰³ The importance of the scene lies in the use of material offerings or paraphernalia in tomb ritual.

The rites depicted in the paintings of Citadel House Room 31 may also have a funerary setting (Fig. 4.7).¹⁰⁴ The East wall preserves three female figures each of whom is distinguished by an attribute (a sword, a staff or scepter, and sheaves of grain) that may indicate a particular role or identity. The relationship between the three figures is not clear, as they are separated in two zones around a projecting bench/altar, but the cultic nature of the painting is well accepted.¹⁰⁵

Each figure stands before a column, decorated with spiral carving and detailed bases and capitals. These columns are remarkably similar to those preserved in the carved-stone facades of the Treasury of Atreus and the Tomb of Clytemnestra. Also represented in the fresco is a doorway framed with a band of rosettes, which finds a strikingly similar parallel in the plastered facade of Mycenae Chamber Tomb 53.¹⁰⁶ While others have noted the similarity of the fresco to tomb architecture, they usually consider both tomb and fresco as representations of house and palace architecture which is not preserved.¹⁰⁷ None have

¹⁰² Long (1974: 44-46) explains that the spirit of the deceased may be sinking beneath the ground, as does the spirit of Patroklos in the *Iliad* XXIII, 100-101. French (1981b: 173-74) identifies this image with the large figurines (her type *b*) found in Citadel House Room 19.

¹⁰³ Long 1974: 47-50.

¹⁰⁴ Though not fully published, the scene has been discussed by several scholars, including N. Marinatos (1988), who will author the *Well Built Mycenae* fascicle on the Citadel House frescoes.

¹⁰⁵ The identification of a ritual scene is connected with the room's apparent cultic function, discussed above (n. 24).

¹⁰⁶ Tsountas and Manatt 1897: 61, fig. 16; Xenaki-Sakellariou 1985: 165-66.

¹⁰⁷ Rehak (1992: 43) sees the architectural elements "suggesting that the spectator is looking into a building," though he recognizes that this "'cutaway' view into an interior space would be unusual" (45 n. 63).

yet considered that the fresco's columns and doorway might be meant to evoke tomb exteriors, and that the fresco could represent tomb-side ritual.

The female figures are most often interpreted as some configuration of human and divine (priestess, warrior goddess, fertility goddess or mistress of animals), though there is no accord on the specific identifications.¹⁰⁸ Of equal importance to the scene's interpretation are two much smaller male figures, depicted in far less detail, which appear to be floating between the two armed women. One is completely red, superimposed above the other, which is black. Immerwahr suggests that these are *eidola* or souls/spirits, and connects them with the Tanagra images more explicitly interpreted as the souls of the deceased.¹⁰⁹ Marinatos, commenting on the non-human appearance of the figures' hyper-extended hands, also hypothesizes that they are "souls or spirits."¹¹⁰ This lends further weight to the suggestion of tomb cult.

The Mycenae and Ayia Triada scenes cannot be securely identified as the moment of burial, rather than later cultic activity at the tomb site.¹¹¹ Such later rituals, however, could possibly have included a re-opening of the tomb, in which case interred objects would be displayed again. And they point to the continuing importance of the tomb site, also seen (though articulated differently) in other societies that construct group identity around a communal tomb.¹¹²

The particular motivation for including imported items as grave goods remains undetermined. That they were personal belongings of the deceased cannot be implicitly accepted, as ethnographic studies have shown a variety of explanations for the burial of

¹⁰⁸ Immerwahr 1990: 121; Marinatos 1988: 246-47; Rehak 1992: 47-53; Tylour 1970: 276-77.

¹⁰⁹ Immerwahr 1990: 121, 155; Tanagra, Vermeule 1965: 128-29, 146-47.

¹¹⁰ Marinatos 1988: 248.

¹¹¹ Although Mylonas (1966a: 177-78) suggests that it is the burial shown on the Ayia Triada sarcophagus, by virtue of the detail of the "strange form of a three-line pattern, apparently attached to the people and directed toward the ground" which is otherwise found "only on sarcophagi with scenes connected with burials."

¹¹² Barrett 1990; Bloch and Perry 1982; Brown 1995.

objects with the deceased.¹¹³ Nor is it clear that they were offerings (the belongings of others) given to the deceased.¹¹⁴ What can be defined is the potential statement these objects made as part of the grave assemblage, and the status they reflected upon the deceased and those responsible for burial. On one level, this was part of an act by (and for) the members of the social group responsible for the care of the deceased. Its significance was widened through procession and ritual so that burial was also an opportunity for conspicuous consumption before others.

The distribution of imported items and other classes of artifacts in LH IIIA-B contexts follows several trends. The general association of imports with Linear B tablets and seal stones may indicate an overlap between the people who acquired imports and those with connections to palatial administrations. This connection, however, is neither explicit nor necessary. Imported items were consumed by different groups within an elite class—aristocrats and religious personnel as well as administrators—in the interest of status and power. The most explicit display of imported items is found in the association of foreign prestige items with ritual activity. The deposition of these imports in shrines and burials represent the selection of foreign symbols in moments of ideological importance and acts of self-representation and group identification.

¹¹³ Ucko 1969. Ethnographic analysis of three tribes of the Central Plains found exotic trade items as “symbolic designators” of wealth, with supra-local prestige symbols linked only with individuals of the highest rank (O’Shea 1981: 41–42, table 3.3). This is a more specific example of the trend in studies of burial practices that note non-local materials as indicators of status, reflecting the further efforts necessitated by distance, if not a more symbolic connotation of the exotic (e.g. Chapman 1981, Champion 1982: 69, Richards 1997: 37).

¹¹⁴ As Persson (1931: 70) imagined the custom to explain the collection of weapons in one Dendra burial: “Those who follow him on his last journey throw other treasures at his feet as a last token of respect, swords, spears, knives, helmets, etc., exactly as in our own days flowers accompany the dead into the grave.”

CHAPTER 5

IVORY CARVING AND CONSUMPTION

The previous chapters have considered the use of foreign-made items as material symbols used in attempts to build social power. The acquisition of exogenous materials was also a pathway to power, since these goods might also carry the ideological symbolism attributed to geographically distant peoples and places.¹ In fact, the exchange of commodities enabled a more active creation of ideological symbols through local crafting,² an activity which should be included as a form of consumption. Although metal is often considered the chief commodity of ancient trade, there were a number of other goods exchanged as raw materials.³ And even though luxury materials may seem trivial compared to necessities, such as metals and food-stuffs, there was considerable benefit to be gained through the processes surrounding less “essential” commodities.⁴

Ivory has been valued as a precious commodity in many regions where it was not naturally available, devoted to enhancing the surroundings of the wealthy in some cultures, and reserved for the divine in others.⁵ In Mycenaean society, personal items crafted of luxurious materials were among the most significant markers of wealth and prestige.

¹ Helms 1988; Appadurai 1986:41.

² Helms 1993; DeMarrais *et al.* 1996: 16; Knapp 1998.

³ Knapp 1991; Haldane 1993; Bass 1998. Theories that metals were the prime commodity of ancient trade have been bolstered by the metal cargo of the shipwrecks at Uluburun (Pulak 1997) and Cape Gelidonya (Bass 1967), though the holdings of the Point Iria wreck point to the importance of other goods (Vichos and Lolos 1997).

⁴ Halstead 1994: 209.

⁵ Clark 1986: 13-20. For the religious-centered consumption of ivory in medieval Europe, see Cutler 1985; Barnet 1997.

Previous studies relate Mycenaean ivories to the arts of contemporary cultures of the east Mediterranean, the material's geographical source, and have more recently addressed the technical aspects of ivory carving. Little attention, however, has been given to the Mycenaean use of finished ivory objects, whether acquired from abroad or carved in Greece. This chapter examines the consumption of ivory in the LBA Argolid, both the conversion of the raw material into finished products and the use of these objects as material symbols.

The chapter includes discussions of the value/associations of the material in its Mycenaean context and an iconographic analysis of ivory motifs as symbols of local and exotic connections. These sections are based on a compilation of all known pieces of ivory from the LBA Argolid, presented in Appendix B.⁶ My aim has been to include all published or displayed items, and I look forward to the full publication of additional material.⁷ As will be evident, my summation of ivories from the Argolid was only made possible by the publication of the National Museum holdings and the contents of the West House Group at Mycenae.⁸ For the distinction between ivory and other animal materials, especially bone, I have relied on the judgment of previous scholars, but unclear cases are explicitly indicated in the appendix and as they arise in this chapter.⁹

The Ivory Trade: Sources, Choices, and Mechanisms

Bronze Age Greece, like many other regions where ivory carving thrived, had to import the material. which comes from the tusks of a number of animals, including the walrus, sperm whale, elephant, and hippopotamus; only the last two of these were to be

⁶ As with the appendix of imported items, I have arranged the listings of imported materials by context.

⁷ For example, O.H. Krzyszkowska is preparing full publications of the ivory objects from Tiryns and the Citadel House excavations at Mycenae. The holdings of regional museums should also be further elucidated by the new Helleno-French project, the *Corpus of Minoan and Mycenaean Ivories*, directed by J. Tzedakis.

⁸ Poursat 1977b; Tournavitou 1995.

⁹ The works of Poursat (1977a; 1977b) and Krzyszkowska (1984, 1988) have been most helpful in this regard.

found in any of the areas of the Bronze Age Mediterranean. Elephants did inhabit areas of Greece in the Pleistocene age, but had become extinct long before the second millennium.¹⁰ Similarly, there is evidence for the existence of pygmy elephants and hippopotami on Aegean islands, though apparently a shorter-lived population than that on Cyprus.¹¹ And while the remains of these animals formed deposits of ivory on (or actually in) Greek soil, there is no evidence and little possibility that Mycenaeans knew of or exploited this material.¹² Fortunately, the Mycenaeans were able to import the tusks of both elephants and hippopotami from other Mediterranean regions.¹³

Hippopotami thrived along the Nile and the coast of Syro-Palestine throughout the Bronze Age, and hunting scenes are found in tomb paintings from the Old Kingdom on, though those of the 18th Dynasty (LBA) have been judged unrealistic.¹⁴ The Levantine population appears to have lasted throughout the second millennium and may then have declined in the first, since the use of hippopotamus ivory dropped significantly in Iron Age workshops.¹⁵ By the Late Bronze Age, Syro-Palestine was the only area of the Mediterranean where live elephants were to be found, though the history and exact species classification of the “Syrian elephant” has been the subject of much speculation. Most

¹⁰ Karali-Yannacopoulos 1992: 57; Mol *et al.* 1996.

¹¹ For populations on Crete, see Spaan 1996; and Tilos, Symeonides 1988. On Cyprus, bones of pygmy elephants and hippopotami have been found in association with evidence of the island’s early human occupation at Akrotiri-*Aetokremnos* (Simmons 1989), but their cohabitation did not last into the Late Bronze Age. For a review of the larger context of such finds, see Cherry 1990.

¹² Krzyszkowska (1990: 22; 37-38) explains that fresh mammoth ivory is suitable for carving, indeed very similar to elephant ivory, while fossilized material would be much more difficult to work. There are references to the use of “buried ivory” in later periods (e.g. Pliny, *Nat. Hist.* XXXVI, 134), but it is not clear whether this was still fresh or had become fossilized.

¹³ Hayward 1990. The term “tusk” refers to any teeth of continuous growth. While this characteristic applies only to the elephant’s two upper incisors, it describes the hippopotamus’ three pairs of incisors and two pairs of canines.

¹⁴ Säve-Söderbergh 1953: 5-12. Typical 18th-Dynasty scenes (e.g., Thebes Tombs 85, 123, 155) show the tomb-owner harpooning his prey, assisted only by a man (of a much smaller scale) who provokes the animal with a stick in order to make it open its mouth, revealing the best target for the harpoon. Reese (1985a: 394-98) surveys the osteological evidence for Egyptian hippopotami of the Bronze Age.

¹⁵ Caubet and Poplin 1987.

scholars now accept this as a population (not necessarily a specific sub-species) of the Asian elephant that survived in the Levant until the first millennium BCE, when deforestation and over-hunting drove the animal to extinction in this area.¹⁶

The natural features of each type of tusk affected its suitability for the manufacture of specific objects and overall desirability for carving. For example, the incisors and lower canines of the hippopotamus provided more material than its other tusks.¹⁷ The elephant tusk's larger size provided an even greater mass of material, though the significant pulp cavity created restrictions. Also, because it is harder and denser, hippopotamus ivory is more challenging to work than elephant tusks. The lower canines are especially difficult, due to their rigid surface enamel and curved form.¹⁸ Yet this particular tusk is prized by modern carvers as "the whitest and most resplendent ivory obtainable anywhere."¹⁹ In the ancient Levant, however, it was apparently the hardness rather than color of the material that mattered, as hippopotamus ivory was "the preferred choice for utility purposes," and elephant ivory was used "in palace workshops for larger and more luxurious ivory-works."²⁰

In Egypt too, there seems to be a royal interest in elephant ivory. Thutmose III contributed to the decline of the Syrian elephant, crossing into the Levant on hunting expeditions, since the African elephant had already been eliminated in Egypt.²¹ Elephant ivory also came to the pharaoh from the south according to 18th-dynasty reliefs and paintings. For example, scenes in the Tomb of Rekhmire show tusks among the "tribute"

¹⁶ Reese 1985a: 398; Krzyszkowska 1990: 15. Moorey (1994: 117) reviews previously held theories.

¹⁷ Barnett (1982: 8) is incorrect in his assertion that only the lower canines were used in antiquity (Reese 1985a: 392-97, with examples).

¹⁸ Barnett 1982: 8; Krzyszkowska 1990: 38, 42.

¹⁹ Ritchie 1969: 48. Penniman (1952: 23, pls. VI, XX) states that hippopotamus ivory (with its "brilliantly white gleaming surface") is "resistant to staining or the absorption of colour", which may indicate that it is elephant ivory only which is dyed red and blue, examples of which survive in both the Aegean and Near East.

²⁰ Moorey 1994: 115-16. For further examples, see Caubet and Poplin 1987; 1992.

²¹ According to Reese (1985a: 400), they were extinct in Egypt by the early Dynastic period.

brought from Nubia and the Land of Punt.²² Registers from this same tomb, however, show tusks brought by Syrians and the Keftiu, which suggests that the exchange of raw ivory went in many directions. These transactions are all on the highest order of state-controlled exchange, but records such as tomb paintings and state correspondence would be unlikely to document other types of transaction.

Direct evidence for the transport of the raw material is now provided by the excavations of the shipwreck at Uluburun, which have recovered one complete elephant tusk, a sawn section of another, and thirteen hippopotamus teeth, Fig. 5.1.²³ Since the ship was likely heading to the Aegean when it foundered,²⁴ it is interesting to note that it carried both elephant and hippopotamus ivory (even more of the latter). With the different types of ivory in circulation (hippopotamus, African and Asian elephant), one might expect the accurate identification of material to indicate its origin. Elephant ivory was apparently more often used in Mycenaean Greece,²⁵ and if elephant ivory was indeed a commodity subject to royal control in the Levant and Egypt, this may have been the mechanism by which it came to Greece. Whether elephant tusks came predominantly from Africa (through Egypt) or the Levant cannot be determined, as an ivory artifact cannot be identified as carved from the tusk of an African or Asian elephant.²⁶

²² Davies 1973: pls. XVII - XXIII. The location of Punt is thought to be at the southern end of the Red Sea, probably in Somalia.

²³ The hippopotamus teeth are seven incisors and six lower canines: Reese and Krzyszkowska 1996: 325.; Pulak 1997: 242; Reese 1998: 142. For illustrations and detailed descriptions, see Bass 1986: 282-83, figs. 18-19; Bass *et al.* 1989: 11, fig. 20.

²⁴ Pulak 1997: 251-55.

²⁵ Krzyszkowska 1988: 231-33; Karali-Yannacopoulos 1992: 57.

²⁶ The tusks of Asian and African elephants can be distinguished when unworked, as the African tusk is generally larger and more curved than the Asian, or at least when a piece is still fresh, since the material harder and more delicately grained (Moorey 1994: 116). Barnett (1982: 7) asserts the African tusk as preferred by carvers, and Mallowan (1966: 484) was surprised to learn that African tusks were judged better in modern India. Krzyszkowska (1990: 12) maintains that there are "no scientific grounds for ascribing a piece of elephant ivory to the Asian or African species."

It is also possible that the material came to Greece through an intermediary, such as Cyprus. One of the Amarna letters (EA 40) records the Egyptian import of two tusks from Alashiya, which most likely refers to Cyprus, and remains of hippopotami have been found at Kition and Hala Sultan Tekké.²⁷ Unfortunately, there are no explicit textual references to the transport of tusks into Bronze Age Greece. There is a mention in Linear B (PY Va 482) of several pieces of ivory that are described as *a-no-po*, which perhaps means “unworked ivory.” Even if this is a correct reading of the enigmatic text,²⁸ it does not record the import of the material, simply its existence.

Arrival of Ivory in the Mycenaean Argolid

Ivory was used on Crete by the end of the third millennium, but only for a limited range of objects.²⁹ Such objects did not cross to mainland Greece at this time, despite significant EM - EH contact.³⁰ In the proto-palatial period, the range of Minoan works increased and carving became more sophisticated, though relatively little has survived from this period.³¹ And the development of a particularly Minoan style in ivory-carving is seen in the three-dimensional human figures, such as the acrobat figures from Mallia and the Ivory Deposit at Knossos, and the more recently discovered kouros from Palaikastro.³² The earliest use of ivory in the Argolid, and indeed on the entire Greek mainland, is in the Middle Bronze Age. A few examples come from MH Lerna, where an oval lid was

²⁷ Moorey 1994: 115. This is not to suggest the presence of a local population, merely that other areas were importing the material (Syro-Palestine being the closest source) and were likely to pass some on.

²⁸ Ventris and Chadwick (1973: 348, 503) review the possible interpretations, including the equally plausible suggestion that *a-no-po* is a personal name.

²⁹ Ivory was mainly used for certain types of EM seals (Krzyszkowska 1989; Sbonias 1995: 52-57, 84-102). There is an ivory plaque from the MMI-II Burial Building 6 at Archanes, and also a Cycladic-style figurine and the head of another carved in bone from the EM III Tholos Tomb C (Sakellarakis and Sapouna-Sakellarakis 1997: 704-706, figs. 812-16).

³⁰ cf. Rutter and Zerner 1984.

³¹ Poursat 1992; Tournavitou 1997a.

³² Mallia. Pelon 1985; Knossos, Evans 1930: 428-33; Palaikastro, MacGillivray *et al.* 1991: 141-44; Musgrave 1992.

preserved in a burial and three pin fragments were found in the settlement (phase V).³³ The records of the original excavations at Asine also include the mention of two ivories from the MH settlement, but these pieces were not well documented and can no longer be located.³⁴ These are certainly humble beginnings for ivory-working on the mainland, but they mark a certain independence from Cretan influence. Other products new to the mainland at this time, for example faience items, are mostly Minoan in form and style, if not production, but the first types of mainland ivories are more essentially Helladic.³⁵

Shaft Graves

Aside from these reports of somewhat earlier use, the consumption of ivory in the Early Mycenaean Argolid was limited to Mycenae. And it is the Shaft Grave material that provides evidence for the ways in which ivory was received as a new material by the Mycenaean carving tradition. The burials of Grave Circles A and B contained a total of 89 ivory works, only one of which has been identified as a non-Aegean product.³⁶ Although there are a few which show the influence of Minoan style, the types of objects and the general character of the assemblage are Mycenaean.³⁷ The considerable range of these items demonstrate that Mycenaean artisans, who were already well versed in bone- and wood-carving, took various approaches to this new material.

³³ Banks 1967: 377, 396, 480-82. The lid is rather unusual for this period, but the pins have parallels in bone (rather than in ivory) from a number of MH sites, e.g. Argos (*BCH* 101 [1977]: 682), Asine (Frödin and Persson 1938: 252-55), and especially Lerna (Banks 1967: 377-405).

³⁴ The pieces are described only as a "knife" and a "worked piece" (Nordquist 1987: 39-40, 114).

³⁵ Poursat 1977a: 225-27. For the earliest faience on mainland Greece, see Foster 1981.

³⁶ This is the wooden pyxis (136), which has ivory ledges beneath the dog appliqué. Two additional ivory works were found among (but not in) the burials of Grave Circle B, and have been dated to the LH II period (Mylonas 1973: 23, 225).

³⁷ Poursat 1992; Tournavitou 1997a: 445. Karo (1930-33: 319) specified only one ivory work as clearly imported from Crete: NMA 785, the mirror handle with lion motif from Grave V. Kantor (1960: 15-17) noted the incorporation of Minoan elements into a nascent Mycenaean style.

Although the imported elephant or hippopotamus tusk was distanced from its identity as an animal product acquired through hunting, an early connection was made with the closest Mycenaean equivalent, the boar's tusk. Shaft Grave V included 5 pieces that Karo thought to be the curved tips of boars' tusks, but were identified by Krzyszkowska as carved from hippopotamus ivory.³⁸ These pieces are much more interesting as tusk-shaped appliquéés, since it suggests an attempt to capture with ivory the prestige of the boar hunt and its symbols.³⁹ But the new tusks were also apparently recognized as impressive in their own right, as is demonstrated by the deposition of the unworked tips of elephant tusks in Graves IV and V. Karo offered another Shaft Grave piece as evidence that the raw material itself was valued, interpreting a fragment of ivory (perhaps from a vase) from grave II as functionally useless, but still worthy of deposition since it had been acquired from afar.⁴⁰

This notion that the material itself was prestigious, is further suggested by the fact that the majority of the Shaft Grave ivories are without carved decoration. Bone ornaments in the Shaft Graves were ornately carved but usually covered in gold foil, as best exemplified by 205 "buttons" from Graves IV and V.⁴¹ But ivory went uncovered, and also (for the most part) uncarved. There are eleven objects which have carved motifs,⁴² and two more sword hilts are of ivory with an inlaid pattern in gold wire. That the

³⁸ NMA 894, 895 (Karo 1930-33: 154, pl. LXXI). Krzyszkowska's (1988: 222-23) reassessment would apparently include a group of rectangular plaques (NMA 893, 896) also identified by Karo as boar's tusk.

³⁹ Morris 1990. Also, for a listing of the archaeological finds of boars' tusks and representations of boar's tusk helmets, see Shelmerdine 1996: 479-92.

⁴⁰ NMA 226 (Karo 1930-33: 71, 319, pl. LXXII).

⁴¹ NMA 340-49, 668- 685 (Karo 1930-33: 89-90, 127, pls. LXI, LXVI).

⁴² Two combs (NMA 109, 310), two pyxides (NMA 210), two sword pommels (NMA 295b, 550a), one hilt plate (NMA 408), one rectangular plaque (NMA 9570), one mirror handle (NMA 785), one dagger handle (NMA 396), and one other (cylindrical) handle (NMA 550b).

remaining handles, pommels, and combs are “plain” suggests that ivory was appreciated for its own aesthetic qualities.⁴³

There is also a rare example of local experimentation with traditional carving practices and the new material. Fragments of two pyxides in Shaft Grave I preserve incised decoration in a linear style similar to the Shaft Grave stelae.⁴⁴ The joined fragments of one have spiral designs, and pieces of the second have designs identified as a chariot and portions of human and animal figures, shown in Fig. 5.2. The details are difficult to assess, given their fragmentary nature and poorly illustrated publication.⁴⁵ The character of the carving, however, is evident, and the work was judged to be a mainland product by Karo.⁴⁶

LH II Ivories

Only fifteen Argolid ivories, as well as some fragments from the Prosymna tholos, can be dated specifically to the Late Helladic II period. It is, however, an interesting group, in which both influence of Minoan arts and the development of the Mycenaean style are evident. For example, Poursat notes the influence of Minoan glyptic design in the decorative styling of anatomy in the staid griffin plaque from Wace’s excavations of the Prehistoric Cemetery, but sees this as the beginning of the Mycenaean “animal style.”⁴⁷ The continued use of Minoan iconography is demonstrated by the sacral knot carefully

⁴³ Clark (1986: 14) describes elephant ivory as having “among its chief attributes...its pleasingly creamy colour, its smoothness and coolness to the touch.”

⁴⁴ NMA 210 (Karo 1930-33: 69, pl. CL). The decoration is especially similar to stele NMA 1429 (Karo 1930-33: pl. VI).

⁴⁵ Details of the second pyxis, whose fragments are not on display, are not evident in Karo’s photograph. Poursat (1977b: 59, pl. XVIII) gives the fullest description (“jupe à volants de personnage féminin; char (?); pattes antérieures d’un animal; spirales”), but illustrates only the first pyxis. The only clear illustration of the other fragments are the drawings by Patrianakou-Ilaki (1975: 128, figs. 46-55).

⁴⁶ Karo 1930-33: 69, 319.

⁴⁷ Poursat 1977a: 188, 226-27, in regard to NMA 7634 (Wace 1953: 8, pl. 5). A specifically Mycenaean animal style was originally described by Kantor (1960: 21-22).

depicted (though in what use/context is not clear) beneath running human and bull figures in a fragmentary plaque from Shaft Grave Circle B.⁴⁸ The use of ivory (if it is fair to judge from these few surviving examples) is still restricted to large, detailed carvings compared to the more simplified designs about to come in the palatial period. For example, the LH II rosette inlays from Aidonia and Shaft Grave Circle B are much more detailed than typical pieces of, for example, the LH IIIA-B chamber tombs at Mycenae.⁴⁹

Use and Esteem of Ivory in the Palatial Period

The Mycenaean use of ivory became much more extensive in the LH IIIA-B period, as the products of local workshops trickled down to be used by a number of social groups as well as the highest of elites. Before turning to the distribution of ivory in the Argolid, however, a brief survey that includes other regions of the mainland reveals the symbolic value of ivory in Mycenaean society. The types of artifacts crafted from ivory and the contexts in which they were used enable the consideration of what meaning and associations the material held. Also, the extent to which ivory was used alongside or in place of other materials offers an important control on assessing its value.

Furniture

Among Mycenaean ivories, relief carving was much more common than three-dimensional works of Minoan Crete, and the majority of surviving artifacts on the mainland are plaques, inlays, and appliquéés that were fastened to larger objects. The major use of such pieces was the embellishment of wooden furniture as plain veneer, geometric trim, and figured decoration. Larger furniture components, completely of ivory, have been found at Thebes: a relief plaque which was probably a chair-back and a pair of legs, which

⁴⁸ NMA 9562 (Mylonas 1973: 23 no. 502, pl. 11a).

⁴⁹ Aidonia, Demakopoulou 1996: 55; Circle B, Mylonas 1973: 225, pl. 200b; chamber tombs, Xenaki-Sakellariou 1985.

might have supported a chair or bed.⁵⁰ More typical (especially as preserved in the Argolid) are small inlays, often in floral motifs, and appliqués which stand proud of the objects to which they were attached, such as the columns in Fig. 5.3.

Linear B tablets from Pylos describe one context in which such elaborate items were used, the appointment of a certain *damokoros* Augewas to office, as described in the Chapter 2 (p. 35-36). The tablets of this series form the most extensive textual reference to ivory's use, with the detailed description of ivory-embellished chairs, tables, and footstools.⁵¹ The tablets of this series also inventory a number of utensils and vessels, including lamps, goblets, jugs, and cauldrons. The original interpretation that these were "the furnishings of a luxurious reception room," has been followed by suggestions that they were the contents of a tomb (in which case Augewas is being buried by the *wanax*),⁵² or the paraphernalia of sacrificial rites and/or palatial banqueting.⁵³ Whichever of these possibilities is preferred (the last is perhaps most conducive to the fact that the material is being inventoried on/for a particular occasion), the tablets demonstrate the coordinated use/storage of a large group of furnishings and large amounts of ivory.

Most of the objects are described as stone or wood, with ivory inlay and "strutting" (e.g., Ta 642). Three pieces, however, are listed simply as "ivory table" (*to-pe-za e-re-pa-te-ja*, Ta 713, 715), which may indicate that they were completely veneered. Substantial pieces could be pieced together from smaller cuttings, as evidenced by the pieces from Thebes mentioned above or, more grandly, the ivory relief from Roman Ephesus.⁵⁴ The

⁵⁰ Krzyszkowska 1996b: 100-101, fig. 6:4-5.

⁵¹ Tablets Ta 642, 707, 708, 713, 714, 715, 721, and 722 record a total of five chairs, eleven tables, and fifteen footstools (Ventris and Chadwick 1973: 332-46).

⁵² Palmer (1963: 354-56) reviews his argument that the verb *te-ke* (3rd person aorist of τίθημι, ἔθηκε) should be translated as "buried" rather than "appointed" as suggested by Ventris and Chadwick.

⁵³ Reception room, Ventris and Chadwick 1973: 334, 497; tomb, Palmer 1957; 1960; feasting, Killen 1994.

⁵⁴ A 2nd century CE historical relief from Terrace House 2 at Ephesus, which may have been a furniture component, was at least 1.2 m long (Dawid and Dawid 1972-75: 546).

description of others as six- and nine-footers (*we-pe-za* and *e-ne-wo pe-za*) may indicate that they were quite large as well, though that this refers to length is only one possibility.⁵⁵ The sheer mass of ivory suggested by this inventory, which is most likely incomplete, offers some parallel (at least in terms of quantity) for the ivory finds from the West House Group.⁵⁶ The Linear B tablets also include reference to a palatial use of ivory for military furnishings, as inlay decoration on chariots and even parts of a horse's harness.⁵⁷

Personal Items

Objects that are perhaps more familiar as Mycenaean ivories are the small objects, crafted entirely of the material, such as combs and pyxides. Poursat added the third category of mirror handles in his characterization of "objets de toilette" as "la plus grande partie des chefs-d'oeuvre de l'art mycénien des ivoires."⁵⁸ The emphasis on such objects has led to a general association of ivory with cosmetic articles and therefore with women in the archaeological literature. Immerwahr, for example, cited the generalization that ivory in Mycenaean tombs was usually associated with female burials, and De Hoff suggested the use of personal objects carved in ivory as dowry wealth.⁵⁹

The majority of cosmetic articles are from burials which cannot be assigned to a sexed individual. There are, however, a few examples of cosmetic items in male burials. For example, an ivory comb from Kazarma Tholos A was found near the head of the male skeleton in pit III.⁶⁰ Also apparently from a male burial is the ivory mirror handle from

⁵⁵ Ventris and Chadwick (1973: 340, 342) have understandable difficulty imagining the form of a table "with nine feet."

⁵⁶ Tournavitou (1995: 244) follows Peltenburg's (unpublished) suggestion that the furniture stored in these houses was intended for a ritual purpose or destination.

⁵⁷ Chariot frames and horse-trappings: KN Sd 4401, 4403, and less clearly Se 1006+1042, Se 1028 (Palmer 1963: 315-20; Ventris and Chadwick 1973: 365-66, 369, 456); wheels: KN Sa 793 (Ventris and Chadwick 1973: 374).

⁵⁸ Poursat 1977a: 18.

⁵⁹ Immerwahr 1971: 106; De Hoff 1988: 172, 182-84.

⁶⁰ Protonariou-Deilaki 1969: 4.

Routsi Tholos Tomb 2, which was found on the floor of the tomb “with some ten sword and knives.”⁶¹ Most cases have been determined on similar grounds, where male gender is assigned by the presence of stereotypically masculine items, especially weapons. Conversely, burials in which toilet articles but no weapons were included are often assumed to be female. But in characterizing each individual, the grave goods should be remembered as having an active role in forming identity, not merely reflecting biology.

Even though these items were in all likelihood used by men, they were not necessarily linked with masculine and feminine genders in the same way. Comparison with contemporary Mediterranean cultures suggests that cosmetic items and adornments were most often associated with females, but not exclusively so. In New Kingdom Egypt, for example, burial assemblages of men and women could contain the same types of toiletry articles, but the male assemblage was further distinguished by items which spoke of his profession or social ties.⁶² Even in such cases, the ivory as a material is not implicitly gendered, but only as a reflection of certain classes of objects, and more accurately, cases of consumption.

The blurring of these distinctions is seen in Blegen’s location of “the ladies’ boudoirs” in the Palace of Nestor on the basis of ivory fragments. In his preliminary assessment of the finds Blegen wrote,

“Many still retain tantalizing traces of delicately carved decoration. It is clear that the apartment above, from which this material had obviously fallen, was the domain of a lady of the royal family whose dressing table was well stocked with receptacles, toilet articles, and ornaments of admirable workmanship in ivory.”⁶³

⁶¹ Marinatos and Hirmer 1960: 175. Korres (1983: esp. 95-96) provides more detailed description of the various interments within the tomb (including the ivory comb and pyxis from earlier burials in pit II). Another example comes from pit 2 in the Pylos “Grave Circle,” which contained a skeleton, identified (by Angel) as that of a young man, with a bronze mirror, knife, and an ivory-handled awl (Blegen *et al.* 1973: 136, 142, 158-59, fig. 207).

⁶² One such example from Deir el Medeina is discussed by Meskell 1998: 372-73, Table 1.

⁶³ Blegen 1955: 35; the area is discussed as Rooms 53 and 54 in this preliminary report, which were labeled 31 and 33 in the final plan. Blegen is followed by Vermeule 1964: 164, “Although this upper part of the palace was totally destroyed in the ultimate fire, it must have had ladies’ boudoirs among other

The publication of this material fallen into these rooms, however, describes the ivory only as fragments for which it was “impossible to determine what they once adorned.”⁶⁴

Indeed, in my opinion, these pieces appear to be furniture inlays and veneer strips, rather than particular implements or vessels. Even the amorphous fragments have features which suit the frame of wooden furniture, being flat in section and carrying motifs in rectilinear and curving compositions.⁶⁵

There are other classes of ivory artifacts that were more actively connected with female identity. For example, a number of implements used in the crafts of spinning and weaving, a more demonstrably feminine activity in Mycenaean Greece,⁶⁶ were sometimes made of ivory. It is possible that some ivory combs were used for refining wool, as Hittite texts specifically describe “combs for wool” made of ivory and Linear B texts include women who “comb” wool among the early stages of textile production.⁶⁷ Also, from the late Mycenaean graves of Perate come five ivory spindles, used to spin the prepared wool or flax into yarn.⁶⁸ One of these was found in the same deposition as an ivory comb, just

rooms, for charming fragments of ivory mirrors and other toilet articles fell though to the ground in the destruction.”

⁶⁴ Blegen and Rawson 1966: 163.

⁶⁵ These remarks are based on the photographs and very brief descriptions published in Blegen and Rawson 1966: 155, 163, figs. 284-85. There is a fragment identified as an ivory handle from Room 31 (NMA 7828; fig. 285:21), which cannot be recognized as part of a mirror or any particular class of object. The small finds from the Palace of Nestor are currently under re-examination by S.U. Hoffstra in preparation for a Ph.D. dissertation at the University of Texas-Austin, which may provide further information.

⁶⁶ The textile workers extensively recorded in the Pylos tablets are predominantly women (Billigmeier and Turner 1981; Chadwick 1988).

⁶⁷ According to Barber (1991: 283-84), the *pe-ki-ti-ta2* (*pekriai*) of Linear B texts (e.g., PY Ab16) either removed wool directly from the sheep, combing it out during the molt (a common alternative to the modern practice of shearing), or combed the raw wool so that the fibers lie parallel prior to spinning. This treatment produces a strong yarn, as opposed to the carding of wool, which makes it lie “fluffily in all directions, and produces a soft, weak yarn”, though there is no evidence for this practice until medieval times (Barber 1991: 261). For the Hittite references (e.g., KUB LXII 75 obv 1 and KUB XLII 32, 1), see Güterbock 1971: 3.

⁶⁸ Iakovides 1970: 350-52, fig. 155. The Perate inhumations were sexed only by virtue of the burial assemblage, and re-analysis is not possible since the skeletal material was not retained after study (Païdoussis and Sbarounis 1975: 145).

as a comb and possible spindle were among the ivory fragments found in the “Treasure Room” at Thebes.⁶⁹ This combination of utensils represents a natural ensemble for the production of yarn, and the fact that they are seldom found together is not surprising, considering how little archaeological evidence for Mycenaean textile production has survived.⁷⁰ Such pieces were not simply “pretty trinkets,”⁷¹ through they did perhaps give a sense of luxury to the implements of crafting. The prestige of ivory elevated these objects and activities above the mundane and would have transformed the daily tasks of elite women into leisure activities, perhaps similar to the description of Helen sitting and making use of her gold and silver spinning kit, her feet upon an (ivory?) footstool.⁷²

Similar Materials

Ivory offered several advantages over the similar animal materials available in Greece—namely bone, boar’s tusk, and antler. Both hippopotamus and elephant ivory were easier to carve than bone, offered more material than boar’s tusk or antler, were more durable than wood, and probably had more visual appeal than any of these.⁷³ Yet locally available materials continued to be used, sometimes in direct association with or substitution for ivory—especially bone, which was more often used for its own types of goods,⁷⁴ but sometimes mimicked ivory. Wood, of course, survives only in rare

⁶⁹ Perate Tomb 65, Iakovides 1969: 70-77, pls. 20, 23β; Thebes “Treasure Room,” Porada 1981: 4, *ArchDelt* 1965 B2: 232.

⁷⁰ Spindles were probably most often made of wood and do not survive. Stone conuli, sometimes identified as spindle whorls among other suggested uses (Iakovides 1977a), are fairly common. For other archaeological evidence of textile production, see Burke 1998: 160-64.

⁷¹ Barber’s (1991: 62) characterization of spindles in a Mycenaean context, as opposed to the Levant, where such implements in bone and ivory were more common.

⁷² Homer, *Odyssey* 4, 125-35. I do not agree with Kopcke’s assessment (1997: 141) that the inferior quality of Mycenaean ivories prevented them from creating the “climate of luxury surrounding Cretan establishments.”

⁷³ Clark 1986: 13-14.

⁷⁴ Perhaps most numerous are bone pins, which continue to be made into the LH III period (e.g., Blegen 1937: 285-86; figs. 107:6, 161:18; Deshayes 1966: 204, pls. XCII:5-6, LXIX:7; Poursat 1977b: 16-17 nos. 35, 39, pl. III).

instances. There are nonetheless a few examples which show how extremely similar wood carving was to that of ivory.

For example, two mirrors in Dendra Chamber Tomb 2 preserved significant portions of wooden handles, which are decorated with carved figures and designs very similar to ivory works.⁷⁵ Similarly, among the wood fragments from the House of Shields and Sphinxes at Mycenae are fragments with relief carving that find exact parallels in ivory works.⁷⁶ Also wooden fragments from these houses have been identified as column shafts, similar to the ivory appliqués from these same contexts.⁷⁷ Like other examples made from bone,⁷⁸ these column shafts were most likely joined with capitals carved from ivory (and there are several examples of ivory capitals which would have been joined to a separate shaft). Or even if each column was made entirely from a single material, the occurrence of these different columns in the same contexts (at least in the same room), allows the possibility that they were used together as part of a single object. In fact, the wooden column fragments from House of Sphinxes Room 2 were catalogued with two ivory appliqués, all of the same design.⁷⁹

It seems that bone was sometimes used as an ivory substitute, generally for smaller items or simpler pieces. There are, for example, undecorated combs made of bone in the

⁷⁵ NMA 7313 (Persson 1931: 97, pl. XXXIII:2) and 7312 (Persson 1931: 96, pl. XXXIII:1, fig. 71,72). The latter depicts two seated female figures in relief, one of whom holds a mirror, very similar to an ivory handle from Mycenae (NMA 2399/2413, Xenaki-Sakellariou 1985: 56, pl. 2).

⁷⁶ NMA 7495 (54-451): fragment with argonaut pattern in relief (Tournavitou 1995: 593)
 NMA 7496 (54-456): fragments (3) with running ivy pattern in relief (Tournavitou 1995: 597)
 NMA 7497 (54-452): fragments (16) with running ivy in relief (Tournavitou 1995: 593, pl. 29b)
 NMA 7498 (54-454): plaque fragments (13) with scale pattern in relief (Tournavitou 1995: 595, photo)
 NMA 7500 (54-457): fragments (2) with chevron pattern in low relief (Tournavitou 1995: 598)
 NMA 7504 (54-461): fragments (17) with running spiral pattern in relief (Tournavitou 1995: 601)
 NMA 7616 (54-335): misc. fragment with "Atreus pattern" in relief (Tournavitou 1995: 590).

⁷⁷ One such fragment (NMA 7501, Exc 54-458) comes from the House of Shields, West room (Tournavitou 1995: 598); and fragments of two shafts (NMA 7592, Exc 54-307) were found in the House of Sphinxes, Room 2 (Tournavitou 1995: 481, pl. 22b, fig. 29 7d).

⁷⁸ NMA 7450, Exc 53-670; NMA 7555, Exc 53-270 (Tournavitou 1995: 464, 479, figs. 29:7b, 29:5e).

⁷⁹ NMA 7592 (Tournavitou 1995: 481).

same shape as ivory works.⁸⁰ There are also more elaborate bone carvings, including two pieces from Mycenae: a figure-8 shield appliqué from Chamber Tomb 69 and inlays from the Prinaria deposit in the shape of lilies and a snail.⁸¹ From north of Tiryns Building VII comes a bone inlay in the shape of a duck, which Rehak and Younger have identified as recarved from a larger figure-eight shield.⁸² There are also examples of bone inlays found with ivory ones of the same shape, possibly for decoration of the same object same object. For example, a mass of rosette discs found in the House of Shields West room includes three made of bone, among 103 others in ivory.⁸³ And two bone plaques with incised “festoon” decoration were found with five similar pieces in ivory, in House of Sphinxes Room 1.⁸⁴

Putting Value into Words

The value of ivory compared to these other materials could be found in its physical features, such as its smoother surface, greater durability, and ability to absorb color. But its worth was no doubt enhanced by more cultural aspects, such as its restricted circulation. Linear B texts do not reveal symbolic aspects of ivory, but several traits are combined in a Homeric simile:

As when a woman stains ivory with crimson, a Maeonian or Carian woman, to make a cheek-piece for horses, and it lies in a treasury, though many horsemen pray to wear it; yet it lies there, a delight for a king, an ornament for his horse as well as a glory to its driver. So stained with blood, Menelaus, were your chiseled thighs and your calves and fine ankles below.⁸⁵

⁸⁰ E.g., from the Asine settlement (Frödin and Persson 1938: 311) and the Tiryns Unterburg (LXII 42/25 IV a 1600, Kilian *et al.* 1979: 388, fig. 8).

⁸¹ NMA 2928: figure-8 shield appliqué (Xenaki-Sakellariou 1985: 201); NMA 7728: 1 snail inlay, 2 plain lilies and 4 *waz* lilies (Wace and Porada 1957: 197, fig. 1a-d).

⁸² Exc LXI 40/38 C 13.20 XIX (Kilian 1988: 120, fig. 18:5; Rehak and Younger 1998: 253, pl. XXVII:i).

⁸³ NMA 7424 (Tournavitou 1995: 551-58).

⁸⁴ NMA 7576 (Tournavitou 1995: 497, pl. 24d).

⁸⁵ *Iliad* 4, 141-47 (my translation).

This short passage captures many aspects of ivory that most likely contributed to its esteem in Bronze Age Greece. The use of ivory for military equipment associates it with other forms of prestige, but the value of this object is created as much by its storage as by its envisioned use. With this in mind, let us turn to the uses of ivory in the Argolid.

Consumption of Ivory in the LH IIIA-B Argolid

The distribution of ivory objects in the palatial period demonstrates how highly valued the material was, through its restriction to a single site. As shown in Table 5.1; the overwhelming majority of surviving ivories come from Mycenae. The site's dominance is due largely to the finds from the West House Group, and it might be argued that such unusually large deposits have obscured a more natural balance. But even if the material from these buildings were removed from the calculations, Mycenae would still hold a clear majority of 85%.

The quantities of ivory from the West House group are certainly not typical of settlement contexts at Mycenae, but these many pieces were almost all used for the decoration of furniture—a very Mycenaean use of ivory. Admittedly, of a total of 18,973 inventoried pieces, most (13,392) are miscellaneous fragments whose form is unclear and which preserve no decoration. Of the recognizable types, though, the overwhelming majority are flat reliefs that were most likely attached to wooden furniture. Most of the 4,105 inlays, discs, plaques, and appliquéés were from the House of Sphinxes and Shields, found in association with significant amounts of carbonized wood. Moreover, several fragments preserve cuttings for inlaid decoration,⁸⁶ one of which was found with two

⁸⁶ From the House of Sphinxes, Room 2 come NMA 7618 (Exc 54-337) a rectangular bar with rectangular cutting for inlay (Tournavitou 1995: 591); and NMA 7619 (Exc 54-338) a fragment with four circular and one rectangular cuttings (Tournavitou 1995: 591). From the House of Shields, West Room are NMA 7497 (Exc 54-453) 10 fragments with traces of mortises/cuttings and sockets for inlay (Tournavitou 1995: 594, photo; Sakellarakis 1979: fig. 23).

	Total pieces	Settlement	Burial
Aidonia	1		1
Argos	19		9
Asine	32		32
Kokla	1		1
Midea-Dendra	34	3	31
Mycenae	20223	19811	412
Prosymna	58		58
Tiryns	5	5	
Zygouries	1	1	

Table 5.1 Number of ivory pieces found in LH IIIA-B contexts at Argolid sites.

	Inlays, etc. ⁸⁷	Implements ⁸⁸	Vessels
Aidonia	1		
Argos	14	5	
Asine	23	5	2
Kokla	1		
Midea-Dendra	21	5	2
Mycenae <i>minus</i> <i>West House</i> <i>finds</i> ⁸⁹	4528 423	32 21	16 15
Prosymna	31	8	3
Tiryns	3	1	
Zygouries		1	

Table 5.2 Types of ivory pieces found in LH IIIA-B contexts at Argolid sites.

⁸⁷ Appliqués, discs, inlays, ornaments, and plaques.

⁸⁸ Combs, knife handles, mirror handles, spatulas, sword hilts and pommels.

⁸⁹ Counts for Mycenae, with the holdings of the West House group subtracted.

ivory disc inlays intact.⁹⁰ And there truly was an emphasis on furniture, as hardly any other recognizable types of ivory objects occur: only ten sword hilts, one comb, and one pyxis lid.⁹¹ Table 5.2 demonstrates how particular the finds of the West House group are in comparison to the types of ivory objects from other Argive contexts.

Although the use of ivory in this context is mainly limited to the decoration of furniture, there is considerable variety in the images employed. Most famous are a large plaque with two sphinxes standing atop a column and a row of horns of consecration, after which the House of Sphinxes is named;⁹² the House of Shields takes its identity not from any single piece, but from the 49 figure-eight appliqués found in the West Room (see Fig. 5.4).⁹³ The remainder of the carved ivories are similar to those from other sites, though the 73 column appliqués is an unusually large group.⁹⁴

Most of the other ivories from settlement contexts at Mycenae were found in the Citadel House excavations, of which 47 objects have been published in preliminary reports.⁹⁵ Among the significant features evident from only this partial sample is the presence of ivory figurines in two of the shrine areas, Rooms 19 and 31.⁹⁶ Aside from these large groups come a number of ivories that were found in contexts across the citadel.

Of the other ivories from settlement, little can be said about their specific contexts. Three have been found at Midea: two from “palace area” and one from the excavations in

⁹⁰ NMA 7499 (Exc 54-455) two fragments with cuttings for circular inlay, one of which preserves two ivory discs (Tournavitou 1995: 597, pl. 29c, d).

⁹¹ Also, not included in Table 5.2, were two enigmatic classes of objects: four “candlesticks” (pierced discs supported by four short legs) and 17 “hoofs” (almost conical pieces with a flat base and flaring top), see Tournavitou 1995: 180-82, pls. 25-26.

⁹² NMA 7525 (Tournavitou 1995: 489, frontispiece).

⁹³ Tournavitou 1995: 443-454, fig. 28, pls. 20-21. Another eight shield appliqués were found in the structure’s North Room.

⁹⁴ Tournavitou 1995: 456-77, fig. 29, pl. 22.

⁹⁵ Krzyszkowska 1984; 1992; 1997.

⁹⁶ Taylour (1981: 17) reports that the ivory lion and male figurine-head were found “in the vicinity of the altar. Further contextual details will be included in publications of the *Well Built Mycenae* series. See Chapter 4 (p. 91-92) for a general description of these rooms.

the West Gate area, which have only received preliminary publication (App. B: 254-55). A number of pieces from Tiryns have also yet to be published, but since they are mainly from the older excavations of the site and are without context,⁹⁷ their inclusion in the present study would have little impact on this discussion of the LH IIIA-B period. The five pieces from the Unterburg which are included here, are very similar to works from Mycenae (App. B: 274-75). They include a column appliqué, which is rare outside of Mycenae, and an enigmatic type of object usually described as a “hoof,” which might be a furniture piece, based Egyptian bed legs more accurately shaped like bovine hooves.⁹⁸

The amounts of ivory found in LH IIIA-B tombs at each site may offer a more natural basis for comparison, since large numbers of chamber tombs have been explored at several sites.⁹⁹ In many cases, however, a site’s ivories are not shared equally among the excavated tombs, but were restricted to elite use. For example, at Argos, 13 out of 19 ivory objects from the burials of this period are from one tomb (App. B: 253). Deiras Chamber Tomb VI has a number of inlays, including three stylized palm trees and six argonauts which are good examples of the slight variation which often occurs within a set of Mycenaean ivories (Fig. 5.3). At Prosymna, where the ivory objects were found in 13 of the 50 excavated tombs, over half (38 out of 58) are from a single context, Chamber Tomb II.

Similarly at Asine, the 41 ivory pieces from burials of this period are concentrated in almost exclusively in three contexts (App. B: 253-54). Chamber Tombs 1, 2, and 7 from Cemetery I produced 40 objects, while the only other published piece is from the more recent excavations.¹⁰⁰ Among these, Tomb I:2 has the most pieces (25), which

⁹⁷ O.H. Krzyszkowska, pers. com.

⁹⁸ Krzyszkowska 1996b: 101, fig. 6:3; cf. Tournavitou 1995: 181-82, pl. 26; G. Killen 1980: pl. 1.

⁹⁹ As discussed in Chapter 4 (p. 101).

¹⁰⁰ Patrianakou-Iliaki 1996. Publication of the ivories from the original excavations (Frödin and Persson 1938) have been updated by Hughes-Brock 1996 and Krzyszkowska 1996a.

including the head (only) of an imported duck pyxis.¹⁰¹ The exotic aura of this eastern piece, however, was certainly matched by another ivory, probably the lid of a pyxis. Swirling around the rosette center of this piece are two animals, which have been variously identified as birds (in flight), lizards, or crocodiles.¹⁰²

Again, most of the burial pieces are at Mycenae. 103 objects are from the Tsountas excavations of 1887-88, when Chamber Tombs 1-52 were excavated, but no specific context is known (App. B: 268-69). Recorded from the excavation of individual chamber tombs are 302 objects from 29 contexts. Of course, ivory is not evenly distributed among these tombs: eleven of the tombs have only one or two objects. Others may have a high number of pieces, that were originally part of a single item. For example, the ivories from Chamber Tomb 518 include 50 inlays which were the decoration of one footstool.¹⁰³

Chamber Tomb 27 produced 97 objects, which includes both typical and unusual ivory works. Among the many pieces are three warrior head appliquéés, Fig. 5.5a.¹⁰⁴ This type of ornament is considered to have been used specifically on footstools.¹⁰⁵ These have been interpreted as representing three different stools, though it is equally possible that they were combined in one or two larger compositions.¹⁰⁶ In addition to other furniture pieces,

¹⁰¹ NMA 10552 (App. A 12). The remainder of the pyxis was probably made of wood, similar to examples known from Ugarit (Frödin and Persson 1938: 388, fig. 254:1; Gachet 1992: 68, fig. 2c).

¹⁰² NMA 10554. Frödin and Persson 1938: 388, fig. 253; Patrianakou-Iliaki 1975: 136, figs. 78-80; Krzyszkowska 1996a: 89, fig. 1:3.

¹⁰³ NMA 6443 (Wace 1932: 84, fig. 30; Sakellarakis 1996: 108, pl. 27c).

¹⁰⁴ NMA 2468-2470 (Xenaki-Sakellariou 1985: 98, pls. 22-23).

¹⁰⁵ Krzyszkowska 1991; Sakellarakis 1996.

¹⁰⁶ Rehak and Younger (1998: 248) speak of the appliquéés as representing three different footstools. Two such warrior-heads were combined with a number of figure-eight shield appliquéés and other inlays in a footstool from Archanes Tholos Tomb A (Sakellarakis 1996: 108, pl. 27b; Sakellarakis and Sapouna-Sakellarakis 1997: 721-29, figs. 836-47). None of the Mycenae heads are identical (in fact, one is an unusual frontal view) or even of the same size, but such variation could have been accommodated by the backing-plaque, only one of which is preserved.

is a relief plaque of a cow with its young that is unusual in that it is carved on both sides.¹⁰⁷

The 31 ivory objects from the Dendra tombs are perhaps distinguished by their high craftsmanship, rather than their numbers. The level of wealth invested in these tombs is represented by the five ivory objects which preserve gold, a combination which otherwise is found only at Mycenae.¹⁰⁸ A number of finely carved, yet poorly preserved, ivories come from pit IV of the Dendra tholos. These small fragments include such unusual representations (in ivory) as a horse's head and a genius facing a goat, the latter only recently identified by Rehak.¹⁰⁹ There is also a fragment with a human head that Persson described as a male "negro" because of its curly hair, but which Rehak and Younger identify as a female child, based on the hair styles associated with different age-groups in Thera frescoes (Fig. 5.5b).¹¹⁰ The problem of defining such basic, yet crucial aspects of iconography (i.e., gender, ethnicity), are not limited to this fragment; similar hair styles are seen on the women of several ivory mirror handles from Mycenae that are often considered orientalizing if not imports (Fig. 5.5c).¹¹¹

These examples of the ivory works found in the Argolid tombs demonstrate several important points. First, and obvious, that some tombs were invested with this form of

¹⁰⁷ NMA 2466 (Xenaki-Sakellariou 1985: 97-98, pl. 22; better illustrated by Tsountas 1888: pl. 8:13). Two (very) similar plaques are in the material from Tombs 1-52, on which details are only preserved on the back-side (NMA 2467, 2643, Xenaki-Sakellariou 1985: 154, pl. 54). Poursat (1977b: 86 no. 284b, pl. XXVI) has grouped the three together as if all from Chamber Tomb 27.

¹⁰⁸ Blegen (1937: 461; fig. 441:4) speculated that an ivory sword pommel from Prosymna was once covered with gold foil, but no traces remain.

¹⁰⁹ NMA 7359 (Rehak 1995: 227, fig. 9). This is an unusual representation; the only other Mycenaean depictions of the genius figure in ivory are a single relief appliqué from Pylos (NMA 7840, Gill 1964: 15 no. 1; Blegen and Rawson 1966: 202, fig. 284:4) and the chair-back from Thebes (Gill 1964: 21 no. 54; Symeonoglou 1973: 48-52, figs. 226-33). (There is an unpublished mirror handle from LM IIIA Pankalochori, see Rehak 1995: 231 no. 71.) For discussion of this motif, see Chapter 6 (p. 169-70).

¹¹⁰ NMA 7359 (Persson 1931: 41, 59, fig. 36; Rehak and Younger 1998: 247, pl. XXVI:h. One should also take note of Poursat's (1977b: 116) suggestion that it could be the head of a lion.

¹¹¹ Poursat 1977a: 234-35. The mirror from Chamber Tomb 55 is very similar to the two from the Tomb of Clytemnestra, which have been identified as foreign-made (App. A 142, 143).

wealth much more than others. More interesting to consider, is what symbolic meaning these objects held, and how much it was dependent upon its foreign material. The works described above include typically Aegean motifs, as well as some so unusual that they seem to defy identification. The factors motivating these choices in style are better handled by a more direct approach, encompassing the full range of material.

Motifs as Messages

It should already be apparent that ivory objects of this mature Mycenaean period carried a variety of messages, and that a significant group featured elements borrowed or derived from eastern iconography. Whereas the form of an ivory object was often determined by the natural material, culture determined its decoration. Previous studies of foreign elements and influences in ivory carving have been limited to a disparate selection of highly crafted, most often figural, pieces. Although the efforts to identify the regional workshop responsible for a particular carving, or even the ethnicity of the individual artist often lead to impasse, the discussion surrounding one such piece highlights several valuable issues.

The ivory pyxis lid from Minet el Beida (Fig. 5.6a), the harbor site of Ugarit, has been the subject of numerous analyses, in which stylistic and iconographic elements are taken as evidence to argue for Levantine or Aegean manufacture. The relief depicts a female figure flanked by wild goats, who is often recognized as a divinity—the *potnia theron* or so-called “Mistress of Animals,” a figure known in Ugarit as well as Bronze Age Greece.¹¹² The iconographic details, such as the convention for a rocky landscape, the altar with concave sides, and the figure’s dress are all taken from Aegean art. Upon its discovery in 1929, these features led to the lid’s identification as an import from Greece,

¹¹² At Ugarit, she was perhaps identified with the goddess Anat (Day 1992).

supported by a comparison from Mycenae (Fig. 5.6b).¹¹³ The two pieces are remarkably similar, but not all the common features are not particularly Mycenaean. For example, both figures are shown feeding the animals, which is common in eastern depictions but not Aegean ones.¹¹⁴ The Ugarit piece also bears a strong resemblance to another Mycenae relief (Fig. 5.6c), with similar pose and proportions.¹¹⁵

Many have attributed the Minet el Beida piece to a Syrian sculptor, because of its style: the figure's pendulous breasts, the bulbous musculature of the arms, and flat treatment of the skirt.¹¹⁶ Other scholars have re-asserted it as a Mycenaean work,¹¹⁷ or better yet as Levanto-Mycenaean, a mixture (perhaps intentional) of the two visual cultures.¹¹⁸ In this scenario, details may have been "confused" or "misunderstood" by the particularly daring or inexperienced artist, which is meant to explain peculiar details such as the pose (awkwardly between seated and walking) or the figure's bare torso, in place of a proper Aegean bodice.¹¹⁹

Despite the different interpretations offered, most arguments share some basic assumptions that can be applied to other cases of local vs. foreign style. First of all, the carver's use of Aegean (in this case) imagery is considered to be a conscious choice, not a

¹¹³ Dussaud and Schaeffer 1930: 1-9. Schaeffer's (1929: 293) comparison is with NMA 2473/2475 (Xenaki-Sakellariou 1985: 129, pl. 35), not NMA 5897 (Poursat 1977b: 19 no. 48; pl. IV), as Kantor (1947: 87 n. 51) incorrectly reports.

¹¹⁴ Frankfort notes this non-Aegean element of the Minet el Beida figure (1954: 266) as well as the Mycenae plaque, where only the front leg of a goat is preserved, and the figure is holding a sheaf of grain. For other examples (eastern and Aegean) of the *potnia theron*, see Crowley 1989: 34-38.

¹¹⁵ NMA 5897 (Poursat 1977b: 19 no. 48; pl. IV). Kantor (1947: 87-88) uses this piece as an example of authentic Mycenaean carving, while Rehak and Younger (1998: 250) point to the non-Aegean features of the Mycenae pieces, including the *à jour* technique of carving.

¹¹⁶ Frankfort 1954: 266; Kantor 1960: 23; Hood 1978: 131; Gachet 1992: 69.

¹¹⁷ Barnett 1982: 30; Gates 1992: 84; Demargne 1964: 33.

¹¹⁸ Kantor 1947: 86-89; Rehak and Younger 1998: 249-50. Crowley (1989: 234) concludes that it is an example of the "International Style, possibly the Severe Style because of clarity of the design and lack of extraneous detail." (For definition of her terms, see 221-27).

¹¹⁹ Kantor (1960: 23) sees the pose as "confused;" Rehak and Younger (1998: 250) describe the costume as "misunderstood," as are the shape and positioning of the Aegean altar, according to Crowley (1989: 233).

matter of confusion or misunderstanding. And it is because of these iconographic elements, *not* because of the way they are rendered, that the piece looks foreign in its Syrian context. A further lesson that can be taken from the Minet el Beida lid is that the repeated debate over the “ethnicity” of this single example has not led to consensus. And even if it did, the story of this one piece would not in itself reveal the amount or nature of influence from one region to another. The issue of foreign influence is best treated not by re-provenancing individual pieces, but through the comprehensive analysis of a wide body of material.

Argive Motifs: local and foreign

Foreign influence is considered pervasive in Mycenaean ivory-carving, such that Vermeule noted the craft’s “accentuated orientalism” and Rehak and Younger recently concluded that “few pieces found in the Greek world seem purely ‘Aegean’.”¹²⁰ Quantitative analysis, however, shows that the vast majority of decorated ivories featured images that were at home in the Aegean. Rather than emphasize distant origins, these carvings more often incorporated ivory into a communicative systems on local terms.

I have analyzed just over 2,400 examples of ivory with identifiable motifs from LH IIIA-B contexts in the Argolid. In Table 5.3, they are broken down in terms of iconography, as an indicator of the carvers’ intention to make ivory more “Mycenaean” or more “exotic.” The decision to follow iconography as an indicator of index is practical choice, but also follows the nature of the material. As Kantor assessed the relations between eastern and Mycenaean ivory carving: “When Oriental influence becomes clearly manifest in a Mycenaean ivory it is a matter of theme, not of style.”¹²¹ The counts represent the number of times each motif is carved, rather than the number of pieces with

¹²⁰ Vermeule 1964: 218; Rehak and Younger 1998: 254.

¹²¹ Kantor 1960: 25.

Aegean motifs		Eastern motifs	
ivy	432	waz lily	223
argonaut	325	human	38
rosette	298	lion	36
circle	223	sphinx	28
whorl-shell	204	palm tree	21
lily	108	papyrus	23
column	87	griffin	10
figure-8 shield	86	duck	2
spiral	60	genius	1
triglyph-rosette	43		
cockle-shell	39		
helmet	32		
snail	31		
tri-curved arch	30		
dolphin	26		
animal	16		
bull	18		
bird	6		
goat	3		
plume	2		
double ax	2		
deer	1		
dog	1		

Table 5.3 Motifs preserved on ivory objects found in LH IIIA-B Argolid contexts.

that motif; for example, a pyxis with two handles in the form of figure-of-eight shields counts as two. I chose this approach because so many of the objects were individual pieces that would have been combined in larger compositions; for example, a group of seven argonaut inlays may have originally been applied to a single object. Since, in most cases, it is impossible to know how such pieces were actually grouped, they have maintained their individual status. And in order to bring larger compositions to a comparable level, they have been multiplied or divided according to how many times an individual motif is featured.

Among the more evocative figures are composite animals such as griffins and sphinxes. Although these are “oriental creatures,” their iconography has been modified in Aegean art, with additions like the Adder Mark decorating wing feathers, and the particular headdress of a plumed hat for the sphinx (see Fig. 5.4).¹²² So, while these creatures were no doubt exotic in their Mycenaean context, they are not completely eastern.

Eastern plants are also to be found among the ivories from the Argolid. Many of these motifs have come to the mainland by way of Crete, and have undergone a Minoan transformation. For example, the Egyptian papyrus is recognizable, though rather stylized, in its Mycenaean appearance. While some Egyptian depictions are somewhat stylized by the Late Bronze Age, the papyrus is shown in traditional form and settings. In the Levant, papyri are sometimes shown attached to trees (rather than growing as reeds). But in Mycenaean art, the papyrus is often taken out of its context in nature and used as a subsidiary design—e.g., Tiryns frescoes and ivory plaques combining papyrus with spirals.¹²³ Much more common than this simple papyrus, however, is the hybrid form of the *waz*-lily, which combines the papyrus tuft with an Aegean lily.¹²⁴

¹²² The motif comes to Mycenae through Crete: Kantor 1960: 16; iconographic details, Crowley 1989: 51.

¹²³ Crowley 1989: 80

¹²⁴ Furumark 1941: 138.

The palm tree may represent a more direct iconographic import, as the Mycenaean form does not derive from Minoan depictions, where the lower fronds always spiral in towards the trunk.¹²⁵ Poursat states that this form of the palm did not derive from Minoan models and cites Furumark's proposition that pots and ivories with this motif were products of "the Mycenaean East."¹²⁶ The Argolid ivories do follow eastern works in their arrangement of the lower fronds curving out from the trunk.

The vast majority of Argolid ivories, however, were carved with motifs and scenes familiar in the Mycenaean visual tradition. Most of these also came from Minoan sources--not necessarily ivories, but a number of media, including frescoes, metal jewelry, and ceramics. The largest numbers are floral motifs, for example ivy, lilies, and rosettes. Local marine motifs also far outnumber non-Aegean ones: for example, there are hundreds of the argonaut inlays.

Other ivory motifs are more purely Mycenaean. Although the form of the figure-of-eight shield is first known in Minoan Crete, it came to be standard equipment for the Mycenaean warrior. The Argolid appliqués show the popularity of the motif as a decorative device as well.¹²⁷ The boars' tusk helmet in this form is also particular to Mycenaean culture, corresponding with Homeric descriptions and archaeological examples. The inlays from the Argolid are rather unusual, however, as none are preserved from other areas of mainland Greece.¹²⁸

Human representations show more stylistic variation. Again, some are very Mycenaean, for example the "warrior heads"--bearded men wearing the boars' tusk helmet. Many are at least Aegean-looking, especially female figures in court dress. Others show

¹²⁵ For example, in Kamares ware (Walberg 1976: 49); also cf. Furumark motives 14 (1941: 276) and 15 (1941: 278).

¹²⁶ Poursat 1977a: 115. Furumark himself (1941: 278), however, maintains that this motif was "ultimately a creation of Minoan art," as a part of the series of conventional plants in non-ceramic media.

¹²⁷ Such pieces were quite mysterious until Gardiner's 1893 identification.

¹²⁸ Poursat (1977a: 101) reports only these examples from the West House group and two pieces from Knossos.

obvious Eastern influence—mirror handle women with eastern hair or papyrus blossoms. Eastern influence is not always a matter of iconography, but is also present in the stylistic rendering of the facial features.

Control of the Ivory Industry

These messages composed in a Mycenaean vocabulary were not simply a translation of the exotic. Rather, it would appear that the consumption of ivory was geared to/for/by the promotion of local power. Not only was the vast majority of known finished items found at Mycenae, this is also the only site where there is good evidence for the production of these objects. Thus, the ivory that ends up in the hands of other Argolid elites has most likely come through Mycenae, where the exotic material has been tailored to suit a local agenda.

Locations of Production

The transformation of raw material to finished Mycenaean objects is another dimension of ivory consumption in which Mycenae has a clear lead. Debris from ivory-carving have been found at two locations within the citadel. The Artisans' Quarter, located in the East Wing of the Palace, was the site of a deposit which included over 700 ivory chips along with fragments of gold, semi-precious stones, pigments, and possible adhesives.¹²⁹ A wider range of pieces associated with the working of ivory have been found in the Citadel House area. These include raw material (a portion of a hippopotamus lower canine and a solid cube of ivory), various offcuts, and also several pieces which appear to be unfinished.¹³⁰ Although these finds are indeed suggestive of ivory-working, Krzyszkowska has noted that only some phases of ivory working are represented here and

¹²⁹ Mylonas 1966a: 425-26, pl. 96a.

¹³⁰ Krzyszkowska 1997: 146-147, pls. LVII, LVIII.

has urged caution in identifying a particular workshop space or even storerooms in this area.¹³¹

Ivory-working was suggested as one of the activities carried out in the West House group, because of the many pieces that were identified as “half-worked.”¹³² Thorough analysis of this material, however, has revealed that the vast majority of the pieces are “finished” items.¹³³ The evidence is better suited for another stage in the consumption of ivory—its use in the production of the large amounts of furniture stored here. Found along with the vast amounts of ivory and wood in the House of Sphinxes Room 2 were many pieces of pumice, which could be used in the attachment (and polishing?) of ivory to wood.¹³⁴

It is likely that ivory-working was a palace-sponsored craft, but that need not limit the activity to the area of the palace itself. There are also some “workshop” type pieces (e.g., offcuts, “bark”) from Tiryns, but unfortunately all these objects are without context and are not in themselves sufficient evidence for crafting.¹³⁵ This leaves the likely locations of ivory-working all at Mycenae, where it seems to have served a local agenda.

Circulation and Competition

The elite of Mycenae played a dominant role in the acquisition of ivory and oversaw stylistic choices in the carving of finished pieces. Given the predominance of local motifs in the production of ivory works, the carvers of Mycenae effectively domesticated the foreign material. The consumption of ivory was restricted mainly to Mycenae as well. In

¹³¹ For example, “there is a complete absence of debitage: tiny chips and trimmings” (Krzyszowska 1997: 148).

¹³² Sakellarakis 1979: 21-39, figs. 25-29, 34-46.

¹³³ Tournavitou 1995: esp. 191-93.

¹³⁴ Shelmerdine 1997: 393-94.

¹³⁵ Krzyszowska 1992: 27, pls. 2-3; App. B: 275.

local shrines, tombs, and store-houses, the use of ivory was apparently aimed at internal display and amassing the material for later use.

Compared with the consumption of foreign-made items, ivory is much more tightly controlled. This is not doubt due to the fact that the material had to be processed before use. Theoretically, ivory-carving could have been carried out by any number of individuals who were able to acquire the raw material. And perhaps this is the best evidence for Mycenae's control of foreign exchange. While the foreign-made objects could have come to Greece in a number of ways, on the small Iria ship just as easily as the Uluburun, raw ivory was a rarer commodity. Within the eastern Mediterranean circuit of exchange, tusks were involved in the highest levels of exchange. And apparently this elite monopoly crossed into the Aegean as well.

As well as represent a connection with foreign power, ivories could speak of a relationship with the local power center. This was the case in the Argolid, where ivory carving and circulation became a means of stabilizing power at Mycenae. In this sense, the elite at Mycenae exerted control over the ivory industry--not only through restricted circulation of the material, but through production of messages as well. The value of these items was still based in part on their material--probably its foreign status as well as natural features.

CHAPTER 6

GLASS CASTING AND CONSUMPTION

Glass as an imported commodity is different from ivory, in that it is an artificial material that could have been produced locally.¹ There is, however, no evidence that glass was ever manufactured in Bronze Age Greece. The raw material was imported from the eastern Mediterranean, but adopted a Mycenaean value through local crafting and consumption. This chapter traces that conversion of a foreign commodity into usable objects and considers how the material symbols of glass were put to use in social dynamics across the Argolid.

Glass is one of several vitreous materials whose use crossed from the eastern Mediterranean into the Aegean. Faience, for example, developed into a sophisticated industry in (proto-palatial) Crete, and then crossed to the mainland as part of the larger Minoan influence on LH I crafts and society.² I have chosen to focus on glass, since, like ivory, it appears to be less derivative of Minoan predecessors than other Mycenaean crafts. Also, in the Argolid at least, there is better archaeological evidence for the working of glass. While a specific workshop cannot be identified, the distribution of glass finds and of the equipment for glass-working point to certain locations as likely production centers. This allows for a consideration of where and under whose direction glass underwent the conversion from a raw material to consumable objects. This chapter also presents an iconographic analysis, similar to that of ivory in the previous chapter.

¹ Obsidian, abundant on Melos, is considered a naturally-occurring glass, but its use was completely different.

² Foster 1979. For the origin and development of faience in the Near East, see Moorey 1994: 166-81.

The discussion of glass consumption is based on the tabulation of all published or displayed examples of glass from the Bronze Age Argolid, listed in Appendix C. Additional glass objects from Tiryns and the Citadel House excavations at Mycenae are currently under study for publication,³ and I have been permitted to include a sample of the latter in my analyses. The finds from 1968 Citadel House excavations have been included in Appendix C (p. 282-84), most without detailed contexts since they are still under study; but I have listed the “pot group” of Room 19 separately, since the details of its context are clear and of particular interest, as already discussed in Chapter 4 (p. 91-92).⁴

Vitreous Materials: Manufacture and Identification

The distinction between glass and faience is not always evident, since they are made up of the same basic elements and were often used for the production of similar artifacts. The matter is further compounded by use of other vitreous materials, such as glass paste, glassy faience, frit, and Egyptian blue. Each material is distinguished by basic characteristics, or conventions, that are briefly reviewed here. All vitreous materials consist of silica, alkali, and lime, but vary in the amounts of each ingredient, particular techniques of combination, and the degree of heat involved.⁵ The chief component, silica (SiO₂), was most often supplied as sand, but could be obtained from crushed flint or quartz. An alkali (most often a soda, Na₂O), available in the ash of certain plants or natron (a sodium-rich mixture that occurs naturally in Egypt), lowered the mixture’s melting point

³ The small finds from Tiryns are under study by L. Rahmstorf for his University of Heidelberg Ph.D. dissertation. The Citadel House jewelry is to be published by H. Hughes-Brock in the *Well Built Mycenae* series.

There is as yet no comprehensive study of Mycenaean glass. Wiener (1983) offers interesting discussion on glass production, but the accompanying catalogue is incomplete and has many errors. Nightingale has presented a brief overview of the subject with his 1998 paper.

⁴ There is also a lapis lazuli ornament from this context included in Appendix D. I am grateful to E.B. French and H. Hughes-Brock for allowing me to study, list, and discuss this material.

⁵ Oppenheim *et al.* 1970: 114-15; Nicholson 1993: 16-17.

to a temperature that could be achieved in ancient furnaces.⁶ And the presence of lime (CaO) in one of these ingredients made the final product more durable.⁷

Ancient glass was formed in two stages.⁸ The first stage, known as *fritting*, required the heating and continual raking of materials to form a mass which (when cooled) included a layer of crystallized glass. After impurities were chipped away, this material was crushed into a fine glass powder, which could then be melted at a higher temperature to produce molten glass.⁹ Glass is chemically different from faience, in that it is homogenous throughout and has a “random, liquid-like (non-crystalline) structure.”¹⁰

In the manufacture of *frit*, the same ingredients were combined over heat, but never brought to a completely melted state. This mass was ground into a fine mixture which could be used as a pigment as well as for making artifacts. But unlike the second heating of glass, frit was never brought to a completely melted state. Frit is often thought to be an intermediate product in the evolution of vitreous material from faience to glass, but none of these necessarily preceded the invention of glass.¹¹

Egyptian blue is a particular type of frit with a definite chemical compound, a copper-calcium-tetrasilicate ($\text{CuOCaO}_4\text{SiO}_2$) with a pale blue color.¹² The few objects from the Argolid that are identified as frit appear to be imports, e.g. the monkey figurines.¹³ I believe Egyptian blue, as well as other frits, may have also been imported

⁶ Nicholson 1993: 9, 43.

⁷ Stern and Schlick-Nolte 1994: 19. This is necessary because alkali otherwise makes the mixture soluble in water.

⁸ Modern techniques bring the material to 1550° Celsius, at which point glass is relatively fluid, such that the carbon dioxide (produced by the reaction of silica and the carbonates present in alkali) is liberated and leaves no bubbles in the glass (Nicholson 1993: 42).

⁹ Although this second heating could reach no more than 1000° Celsius, the crushed nature of the material resulted in a product that would be relatively free of glass bubbles (Nicholson 1993: 43).

¹⁰ Oppenheim *et al.* 1970: 115.

¹¹ Brill 1963: 120, 123; Foster 1979: 5 n. 26.

¹² Oppenheim *et al.* 1970: 114.

¹³ App. A 155, 178; also a vase (99) and cylinder seal (205).

raw material (as it was in later periods), in the form of lumps of pigment, like those found at Mycenae, Prosymna, and Tiryns.¹⁴ None of these have been identified as frit or Egyptian blue nor have they been chemically analyzed, but they have visual characteristics very similar to lumps of Egyptian blue, like that in the University of Pennsylvania University Museum of Archaeology and Anthropology.¹⁵ One use of this material is seen in the terra-cotta ornaments from the Tomb of the Genii which preserve traces of the blue powder.¹⁶

Faience is essentially different from these other materials, in that the manufacture of the material cannot be separated from the production of the final object. It was made by molding a core of silica (usually quartz), lime, and an alkali; this body is covered with a soda-lime-silica mixture, which is absorbed by the porous, crystalline body. It dries to form a coating which becomes vitreous when fired.¹⁷ *Faience* can be distinguished from similar materials by the presence of a porous, crystalline core and a separate glaze layer.

The term *glass paste* is essentially misused in archaeological studies, as it properly refers to a modern technique of working glass.¹⁸ Many Aegean archaeologists have used the term for glass objects, often in opposition to *faience*.¹⁹ But this use has by no means

¹⁴ NMA 1344 (Mycenae) and 1606 (Tiryns) are both from Schliemann's excavations and on display, but unpublished. I have examined the blue pigment from the Prosymna Tholos (NMA 3332, Wace 1921-23: 337), but the "green colouring matter" mentioned by Wace could not be located. The pigments found in the Artisan's Quarter at Mycenae and described by Mylonas (1966a: 425) as "large chunks of blue paint," may be similar as well.

¹⁵ Penn. 29-85-482 (Friedman 1998: 167 no. 181, 256).

¹⁶ NMA 4543. Wace (1921-23: 385, fig. 87c, d) describes them as having "cobalt-blue powder...colored to imitate ornaments in lapis lazuli," though it must be stated that the shade is more accurately classified as Carolina-blue.

¹⁷ Nicholson 1993: 14, "Only one firing is necessary, unlike the glazing of pottery where the body is sometimes first given a biscuit (bisque) firing before the application of the glaze."

¹⁸ Grose (1989: 30) distinguished between true examples of glass paste or *pâte de verre*, e.g. the 19th-century works of Henri Cros and Emile Gallé, and the "either anachronistic or inaccurate" use of these terms in reference to ancient objects.

¹⁹ E.g., Wace 1921-23; Persson 1931; and in more recent decades: Deshayes 1966; Banks 1967; Shear 1987. These scholars were probably operating on the grounds that the "glass paste" of Mycenaean ornaments was not as refined as the "true glass" of vessels, though only Wace (1932: 206, 220) attempted to distinguish between these presumed types.

been consistent. For example, Blegen classified all objects made of vitreous materials as “paste” and Pierce Blegen then refined his description to glass or faience.²⁰ Generally, the “glass paste” artifacts are actually made of glass, and are so described in the present work. Still, the identification of glass from other vitreous materials is not always possible. The distinguishing characteristics are often obscured by the material’s degradation or devitrification—the loss its glass-like character, when the outer layers often become cloudy (white) or iridescent.²¹

Glass as a Trade Commodity

Glass was first produced in the east Mediterranean, most likely being invented in Western Asia.²² Although there are reports of glass beads from third-millennium contexts in Mesopotamia, Egypt and Anatolia, these early pieces may have been the unintentional products of already established faience and glaze manufacturing.²³ It is not until the middle of the second millennium that the regular production of glass objects began, including the objects that were imported into the Early Mycenaean Argolid. Thus, glass was not only new to the Aegean at this time, but was relatively new to the eastern Mediterranean, in general.

The exchange of glass ingots in the eastern Mediterranean is archaeologically demonstrated by the shipwreck at Uluburun, from which approximately 175 ingots have been recovered, examples of which are shown in Fig. 6.1.²⁴ They are all of a discoid

²⁰ Blegen 1937, which includes Pierce Blegen 1937.

²¹ Newton and Davison 1989: 155-59; these difficulties were also acknowledge by Wace (1932: 206). Such unclear cases are acknowledged in Appendix C.

²² Rather than in Egypt, as long assumed (e.g. Beck 1934; cf. Barag 1985: 35). The first glass produced in central Europe may have been an independent creation (Harding 1974).

²³ Moorey 1994: 190-93.

²⁴ Pulak 1997. Traded in this intermediate form, glass was classed as a “semi-product” by Sherratt and Sherratt (1991: 364).

form; and the majority are blue, but several are turquoise and one lavender.²⁵ These ingots are of special interest for the question of whence the Mycenaeans acquired glass, since the ship was heading west, most likely to the Aegean, when it foundered. Also, analysis of the glass ingots has shown them to be chemically similar to the glass used for Mycenaean jewelry, suggesting a common source.²⁶ Identifying this source, however, is a challenge, for raw glass was exported from a number of sites.

Sources of Glass

Texts document the export of glass from several locations in Syro-Palestine. Among the archives recovered from Ugarit is an Akkadian tablet from a certain Zulannu, requesting a shipment of glass from the prefect (*šakinu*) of Ugarit.²⁷ After enumerating the gifts (garments, horses, an iron dagger) which he has sent, Zulannu wished to receive gold and *mekku ehlipakku* in return. Even though *mekku* can refer to stones, use of the word in Assyrian texts make it clear that it can also be interpreted as glass.²⁸ Judging from the shipments of *ehlipakku* recorded in the Amarna letters, it would appear that Syria was the chief exporter of raw glass. As many as a hundred units of this material were sent to Egypt from the kings or “mayors” of a number of cities in this region: Acco, Ashkelon, Lachish, Tyre, and Yurša.²⁹

²⁵ Bass 1986: 281, figs. 15-16; 1997: 161.

²⁶ Bass (1986: 282 n. 55) reports R.H. Brill’s interpretations that the ingots are chemically similar to the glass used for both Egyptian vessels (18th D) and Mycenaean jewelry; and goes further to state that “The glasses from ‘Mesopotamia and Iran’, or perhaps western Asia in general, are of a different chemical type.” cf. Brill 1999.

²⁷ For a summary of the text, PRU VI: 6 (RS. 17.144, 40), which is described as “a commercial exchange of gifts,” and the possibility that Zulannu is a Hittite king, see Heltzer 1978: 9-10. (No set quantity of glass is requested).

²⁸ Oppenheim 1973: 261; followed by Heltzer (1978: 35, 80) for the Ugarit text.

²⁹ EA 148, 235+327, 314, 323, and 331 (Moran 1992). This is not to necessarily say that glass was manufactured in each of these cities.

Glass ingots were also exported from Amarna, according to EA 14, and were perhaps produced there as well. There is also now archaeological evidence for the manufacture of glass from Amarna itself, including cylindrical molds, which still bear traces of blue glass and are the same size as the Uluburun ingots.³⁰ Bass has resisted Amarna as the source of these ingots, since the pharaoh is shown requesting and importing glass, perhaps even blue glass.³¹ But this would not be the only example in the Amarna Letters of materials being traded in illogical directions, even away from areas where the resource is scarce and/or toward its geographical sources.

Possible Source of Mycenaean Glass

Chemical analyses may lead to better identification of regional types and specific sources. For example, Vandiver cited the consistent ratios of chemical composition among different-colored samples of Nuzi glass as suggesting the production using local materials with a high MgO content.³² Conversely, the different composition of samples of blue glass, especially the presence or absence of cobalt, may correlate to two geographical sources. Shortland has identified these two basic types among the glass works of Amarna and suggests that they may correlate with regional formulas and practices.³³ The cobalt present in some pieces has been linked with a specific source in the Dakleh oasis,³⁴ and

³⁰ Nicholson 1995: esp. 17-18.

³¹ Bass 1997: 162. In addition to the Amarna texts listed above (n. 29), EA 25 may refer specifically to blue glass among the goods sent from the Mitanni king, since it lists lapis lazuli and also *genuine* lapis lazuli). Nicholson (1995: 18) raises a more pertinent problem of the chronological gap between the short-lived city and the unfortunate ship.

³² Vandiver 1983: 243-44.

³³ A. Shortland, "Importations of colourants for glass and faience in the LBA Aegean," in the forthcoming *Trade and Production in Premonetary Greece VIII: Crossing Borders* (C. Gillis, C. Risberg, and B.L. Sjöberg, eds. *SIMA* Pocket-book).

³⁴ Based on the relative concentration of trace elements: e.g., manganese, nickel and zinc. Shortland suggests that perhaps alum was being mined at the Dakleh oasis; it was used as an ingredient in colored glass in the Nineveh texts (Oppenheim *et al.* 1970: 40-41).

A recently published photograph (from 1936/1937) records a rock-carved representation of an Aegean-type ship at the Dakleh oasis. Basch (1997: 17-29) identifies the crew as Libyan, but even so this has

found consistently with the use of natron, which both point towards Egyptian manufacture. A second group without cobalt, thus colored by copper, are associated with the use of plant ash and are chemically consistent with examples of Mesopotamian glass.³⁵

Rather than identify a single Mycenaean type, analyses over the years have pointed to the same two variants of blue glass. Though only a few with archaeological provenance have been tested, the two types are both present within the Argolid. Schliemann first described blue cylinders from the Shaft Graves as “cobalt glass,” after an analysis which found them similar to Egyptian glass.³⁶ And although Mycenaean glass has come to be regularly described as “cobalt blue,” there are samples which contain no cobalt, including objects from Dendra.³⁷ Higgins generalized that “the colouring agents for the dark blue were cobalt and copper; for the greenish blue, copper alone.”³⁸ Though it is not evident that a visual analysis would successfully distinguish between the two variants, Brill’s samples (from Amarna, Malkata, and the Uluburun cargo as well as the Mycenaean-style pieces) described as dark blue consistently have cobalt (CoO),³⁹ while it is generally absent from his samples that are described as light blue.

possible implications for traders (or pirates, as Basch argues) passing through this area, one possible agent behind the export of cobalt-rich material from the oasis.

³⁵ Similarly, Stern and Schlick-Nolte (1994: 19) generalize that most Mediterranean glass-makers employed sands containing lime and a “pure” alkali such as natron, while Mesopotamians used a pure silica (often river pebbles) and plant ashes containing lime.

³⁶ Schliemann 1880: 157-58. Sayre and Smith (1974: 51-54) found cobalt in an unprovenanced Mycenaean sample. Moreover, they point to further similarities with the New Kingdom glasses they tested as indicating the use of the same cobalt ore.

³⁷ No cobalt was detected in the analysis of Dendra material carried out by A. Fredga (Persson 1931: 136-38). Also, recent analysis of the Kakovatos bowl fragment (see fig. 6.5a) by the Chemistry Laboratory of the National Archaeological Museum found “that the blue color is due to the copper oxide, as it is 1.70%, and not to cobalt, which is present in negligible quantity (0.01%)” Weinberg and McClellan 1992: 79 n. 38.

³⁸ Higgins 1980: 40 n. 4, citing analyses by the British Museum Research Laboratory.

³⁹ Brill 1999 vol. 1: 35, 47-49; vol. 2: 27-30, 53-54, 57. The one exception is a cored vessel from Amarna (no. 3367) of dark blue transparent, yellow, and white opaque glass, and it is unclear which color(s) were included in the sample.

There was probably more than one source for the glass used by Mycenaeans, most likely one Egyptian and one Mesopotamian/Syrian. It is also possible—though no evidence currently exists—that one or both of these types of glass was manufactured in Greece. After all, prior to recent finds at Amarna, it was assumed that glass was not manufactured in Egypt, even though it was clearly worked with great skill.⁴⁰ This was the case at Jalame, a Late Roman settlement in the Levant, where the production of glass vessels is evidenced by a furnace, tools, deformed objects and lumps of glass waste.⁴¹ The actual manufacture of glass has been demonstrated at sites like Amarna and medieval Corinth by the frit preserved on the remains of heating installations, accompanied by unworked glass and/or raw materials.⁴² There is no such case of direct evidence for the Bronze Age Aegean. Nor have analyses of Mycenaean glass shown them to be chemically unique from other regions' glass, thus offering no evidence indicating Mycenaean use of their own materials.

For the cobalt-glass, at least, (the hypothetical) Mycenaean manufacture would depend on the import of a colorant from beyond the Aegean. Bass has argued that cobalt was not added as a separate ingredient to tint the glass, since it was not known as a separate substance until modern times.⁴³ It should be noted that no Bronze Age glass was without color, due to the unintentional presence of impurities in the raw materials.⁴⁴ But the particular color of a glass did depend on the composition of the ingredients, and the specific awareness of that component was not necessary for the material to be recognized and valued as a good ingredient. Rather, an ingredient which contained cobalt (or another colorant) may well have been intentionally used (indeed preferred), and perhaps imported.

⁴⁰ E.g., Newton and Davison 1989: 107; Stern and Schlick-Nolte 1994: 25. This could one day be the case with Mycenaean Greece as well.

⁴¹ Weinberg 1998.

⁴² Amarna, Nicholson 1995. For Corinth's South Central factory, where both the manufacture of glass and the production of vessels were carried out, see Davidson 1940: 297-308.

⁴³ Bass 1997: 161, with a reference to *Encyclopedia Britannica*.

⁴⁴ Brill 1963: 126. Translucent glass was eventually produced in the Roman period through the use of antimony in sufficient amounts and at a higher temperature (Newton and Davison 1989: 59).

Similarly, lime was apparently not added as a separate substance, as ancient recipes (e.g., from Nineveh) do not mention the addition of lime, but the choice of particular ingredients with lime would have enhanced the durability of the product.⁴⁵ Rather, sands from certain areas and the ashes of particular plants contained lime, and were thus chosen for glass manufacture. Thus, it is likely that some areas were better suited for the production of glass, and perhaps specialized in particular types (colors), which were then exported. Moreover, it is possible that particular ingredients were themselves transported, though again, direct evidence for this practice in the Bronze Age is lacking.

Development of Mycenaean Glass-working

As stated at the beginning of this chapter, glass was probably never manufactured in the Bronze Age Aegean, but it was certainly worked by local artisans. The earliest evidence for the casting of glass in the Aegean comes from a LM IB deposit in the Royal Road workshop at Knossos. This “glass waste” was originally described as “the first evidence for Aegean glass making,”⁴⁶ but the working of glass needs to be consciously separated from the manufacture of glass. Also, melted glass was found in a workshop context at Zakros, but the excavator himself has downplayed this evidence, noting that it “could have resulted from the fire that enveloped this area.”⁴⁷ Most of the evidence for glass-working on the mainland is equally ambiguous, especially for the industry’s beginnings which would have to be identified from finished objects rather than true workshop evidence.

The earliest examples of vitreous material were deposited in a few Argolid graves during the MH period: 36 beads from Lerna and 15 from a single burial at Zygouries,

⁴⁵ Oppenheim *et al.* 1970; Nicholson 1993: 42.

⁴⁶ Cadogan 1976: 18-19; cf. Wilkie 1992: 295 n. 204.

⁴⁷ Platon 1971: 218

which were described as “glass paste” in their original publications.⁴⁸ It is possible that these were faience, in which case they were probably imported from Crete, where such beads of these shapes (spherical, barrel, biconical, cylindrical, and amygdaloid) were common in the MBA.⁴⁹ Alternatively, these objects, combined with seven glass beads from Prosymna Grave XX, may have been the products of a nascent industry in the Argolid. The variety of shapes within such small amounts, however, would more likely indicate a foreign source. The low number of beads in each context also suggests that they were rare; the 36 Lerna beads, for example, were divided among nine different graves.

Some objects from the LH I period are more definitely glass, but their locale of manufacture is not so clear. In addition to the Nuzi spacer beads from Mesopotamia (discussed in Chapter 3, p. 70) are some products of Aegean crafting. Again, there are some beads of rather simple types, like the spherical beads from Shaft Grave Gamma, which were originally described as “glazed with fragments of lapis lazuli,” but identified by Dietz as glass.⁵⁰ Also found at Mycenae were a number of cylindrical beads and also a glass seal, which is the only one from the LH I Argolid.⁵¹ That some objects (probably not including the seal) were being locally produced is suggested by the amorphous piece of “glass paste” that was found with a number of simple glass bead-types in a Tiryns grave.⁵²

Even fewer glass finds can be dated to the LH II period. Grave I at Korakou included a necklace of over a hundred glass beads, almost all spherical.⁵³ The jewelry from a pit in Aidonia Chamber Tomb 7, however, includes much more sophisticated glass works. These include a group of ornaments of the type which would come to typify

⁴⁸ Banks 1967: 673-77; Blegen 1928: 201.

⁴⁹ Foster 1979: 115-17.

⁵⁰ NMA 9192 (Mylonas 1973: 78 Γ-444, pl. 62d; Dietz 1991: 108).

⁵¹ Wace 1932: 66, figs. 25-26.

⁵² Kilian *et al.* 1982: 420, fig. 38.

⁵³ Blegen 1921: 102, 106, fig. 130.

Mycenaean glass work: a dozen relief ornaments with a papyrus motif, all from the same mold.⁵⁴ The only other similar pieces from the LH II Argolid are four ornaments from the Prosymna Tholos, none of which are identical.⁵⁵

LH III: the Mycenaean Glass Industry

Mycenaean glass is best known in the form of ornaments with relief decoration in stylized motifs borrowed from other crafts. These ornaments were strung to be worn as jewelry, attached to clothing, and inlaid in furniture and other objects. For the most part, they were flat-backed ornaments, with decoration on one side only. A selection of common types are shown in Fig. 6.2, all of which could be made in open molds. A typical mold would have a number of matrices (negative impressions), so could be used for a number of objects. Twenty-five such molds are known from the Aegean, which could have been used for the production of glass ornaments or seals, which were more commonly made in LH II-III.⁵⁶

⁵⁴ Demakopoulou 1996: 56 no. 31.

⁵⁵ Wace 1921-23: 336-37: three different ivy designs and one floral ornament.

⁵⁶ Vermeule's (1967: 31 n. 4) list of the Aegean open molds was updated in part by Tournavitou's (1997b: 243-53) catalogue of (open and closed) molds from mainland contexts. References for the objects not discussed in this chapter are:

Athens:	Immerwahr 1971: 110, 231-232, pl. 55, 77)
Knossos:	Ashmolean 1910.522 (Vermeule 1967: 31 n. 4)
	Evans 1921: 488, fig. 349
	Evans 1928: 237, fig. 134; Kenna 1960: 77, fig. 170
	Heraklion 2450 (Vermeule 1967: 31 n. 4)
	Hutchinson 1956: 80, pl. 12e
	Hughes-Brock 1973: 121, fig. 26
Nichoria:	Hughes-Brock 1992: 627-28, 652 no. 2010, fig. 10:7, pls. 10: 37,38
Palaikastro:	Bosanquet and Dawkins 1923: fig. 134
Smyrna:	Furtwängler and Loeschke 1886: fig. 22
Teichos Dymaion:	Mastrokostas 1963: 93-98, pl. 66d
Thebes:	Demakopoulou 1974: 162-173
	<i>ArchDelt</i> 36 B1 (1981): 191, pl. 121
Volos:	Theocharis 1961: 45-54
No context:	Richter 1953: 17, pl. 8i
	Richter 1953: 17, pl. 9 (top right).

These molds were used to make faience and metal jewelry as well as glass, though the fact that glass contracts as it cools may have made it especially compatible with the deeply cut molds.⁵⁷ There are features that possibly indicate a particular matrix as intended for glass, such as deeper carving and channels for wire to form string hole.⁵⁸ For example, curled leaf matrices are deeply cut and regularly have channels, like that shown in Fig. 6.3.⁵⁹ Of course, the surviving ornaments reveal a considerable overlap between glass and gold ornaments: not only did they commonly share the same form, many were used in combination, and glass pieces were sometimes covered with gold foil. As for the other possible materials, silver was used much less often for Mycenaean jewelry, and whereas faience beads are very common, there are in fact few flat-backed faience ornaments from the Aegean. Also, the use of the molds as evidence for specific practices (i.e., glass, as opposed to gold-working) is complicated by the fact that many were subject to long periods of use. Often they were re-cut, with older designs obscured by newer ones, for example the octopus-matrix in the lower right of NMA 1018 (Fig. 6.3, Face A) overlaps those of the papyrus and pendant spiral. These pieces are made even more enigmatic by the fact that they sometimes outlived their use as molds, as has been suggested for the fragment of a LM I/LH II mold from Chios, which was found in an Late Mycenaean (IIIB/IIIC) context, pierced for suspension and perhaps worn as an ornament itself.⁶⁰

As the molds cannot be linked strictly to a glass industry, the evidence which might be sought from kilns is also elusive. Not only were these, too, used for a number of other crafts, it is possible that the production of glass objects would not require such permanent installations. Although heat is necessary to bring raw glass into a workable medium, the

⁵⁷ Wace 1921-23: 397; also see Vermeule 1967: 25; Evely and Runnels 1992: 29-31.

⁵⁸ Tournavitou 1997b: 216, 222.

⁵⁹ Tournavitou 1997b: esp. 216. Also, Higgins (1980: 80) notes that this form is rarely found in gold.

⁶⁰ Hood 1982: 654-55, fig. 293, pl. 137. The matrix is a butterfly motif, attractively centered in the mold.

material does not need to be in its molten state (1050°-1150° C). It is often assumed that glass was poured into the open molds, a process which involved manipulating a preheated mold as well as the molten glass. Experiments carried out by a number of scholars have revealed that it need only to be brought to its “softened” form (ca. 930° C) in order to be manipulated, whether drawn into a rod or cast in a mold.⁶¹ The simplest method is chip-casting, in which the matrix is filled with small pieces of glass and heated until they softened, fusing into a single mass of the desired shape.⁶² This method does not require the mold to be preheated, nor for such high heating temperatures to be reached. In fact, it is possible that this procedure would not require a kiln, but could be carried out over an open fire.⁶³ As the techniques behind production become further refined, it is evident that production depended less on especially designed equipment and more on the various skills of the glass-worker.

Other techniques for forming glass objects did not require a mold, including the bead types common in Mycenaean Greece shown in Fig. 6.4. There are molds with matrices for elliptical beads, such as a (now lost) fragment described by Tsountas which preserved no other motifs.⁶⁴ But most were made by rolling and pinching soft glass to form basic spherical and cylindrical types, which might be further embellished with flutes or shaping by hand. There are also more complicated pieces made by hand, which allowed variation within a set—e.g., the bird-shaped beads from Mycenae Chamber Tomb 103, eight of which are depicted with their heads forward and one with its head turned back.⁶⁵

⁶¹ Haevernick 1960: 50-53; Stern and Schlick-Nolte 1994: 21-23; see also Newton and Davison 1989: 12-13; Moorey 1994: 189.

⁶² Stern and Schlick-Nolte 1994: 48; Stern 1998: 184-85. Also see Küçükerman 1988: 30, fig. 15, where this method (described as “cold metal fusion”) is compared to modern bead-making techniques.

⁶³ cf. Rice 1987: 156-57, for the temperatures attained in the non-kiln firing of pottery.

⁶⁴ Tsountas 1897: 98.

⁶⁵ NMA 4936 (Xenaki-Sakellariou 1985: 288, pls. 142, II). The head-back bead is also slightly smaller (with a height of 1.0 cm, whereas the others are 1.2).

A variety of other objects were made of glass, from whorls and “buttons,” to a sword hilt from the Mycenae acropolis.⁶⁶ The one category of glass works *not* manufactured by Mycenaeans was the core-formed glass vessel. Like the raw material itself, the technology for such vessels was apparently never acquired. The five such pieces found in the Mycenaean Argolid (one of which is illustrated as Fig. 6.5a) were imported from the east and are strictly Egyptian in style.⁶⁷ The molded vessel found in Kakovatos tholos (B) is an interesting piece, may be an example of Mycenaean experimentation since its technique of manufacture is different from eastern vessels.⁶⁸

Mycenaean Values of Glass

It is commonly thought that Mycenaean vitreous materials were considered a substitute for semi-precious stones, especially lapis lazuli. This connection is based on parallels with Near Eastern terminology, where precious stones are often distinguished as “genuine” or “artificial.” For example, in Akkadian, lapis lazuli (*uqnû*) was generally described as “from the mountain” or “from the kiln.”⁶⁹ But it should not be assumed that this distinction between natural and artificial crossed with the material into the Aegean. After all, would the Mycenaean consumer, who had experience of neither the kiln nor the mountain, appreciate the difference?

⁶⁶ NMA 3026 (Tsountas 1897: 109, pl. 8:6). There has been some confusion over this piece: Evans (1936: 852 n. 2) wrongly described it as faience; Harden (1981: 166 n. 33) confirms its identification as glass. Foster (1979: 147) followed Evan’s identification as faience, and confused the situation further with incorrect illustrations: Her fig. 100, which is meant to be the hilt from the Mycenae acropolis, is actually made of agate and from Chamber Tomb 81 (NMA 3110.1, Tsountas 1897: 108, pl. 8:5; Xenaki-Sakellariou 1985: 230-31, pl. 107). The glass hilt, NMA 3026, is shown as her fig. 101, which she mistakenly identified as NMA 4908, a similar work that is of faience (Xenaki-Sakellariou 1985: 281, pl. 137).

⁶⁷ App. A: 95, 146, 147, 154, 164.

⁶⁸ Müller 1909: 296, fig. 13. Also from Kakovatos Tholos B is an unusual glass bull figurine of Egyptian style (278, pl. xii).

⁶⁹ Oppenheim *et al.* 1970: 9-15. These terms (*šadi*, “from the mountain” and *kūri*, “from the kiln”) were also used to distinguish other stones from similarly colored glass, including obsidian, possibly agate, and other stones which are not readily translated from their Akkadian terms.

Foster has shown that the Aegean use of faience for elaborate vessels, naturalistic figurines, and complicated (stenciled) designs demonstrates that the material was valued “for its own sake, and not because it could serve as a less expensive substitute for lapis or turquoise.”⁷⁰ With this argument, however, she finds glass, with its deeper color and luster, made “an even better artificial substitute for lapis lazuli,” and many others agree.⁷¹ In addition to these visual similarities, however, the equation depends on a more modern notion that the artificial product is less “genuine,” and consequently “cheaper.”⁷² This is obviously a cultural determination, and given the similar efforts necessary to acquire either material in Greece, there is no implicit reason for vitreous materials to be considered of less value than stone.

The distribution of these different commodities within each region suggests considerable variation in their consumption and thus their value. Appendix D lists the 38 objects of lapis lazuli found in the Late Bronze Age Argolid, including ambiguous cases, such as those pieces described only as “blue stone” or “lapis lazuli or glass.” Most are not as spectacular as the gold and lapis lazuli sword-handle from Shaft Grave IV, but are small beads and ornaments. This compares to more than 15,000 pieces of faience and glass, which demonstrates not so much that glass and faience are common, but rather that lapis lazuli *is* a rarity in much of the Mycenaean world.⁷³

There are significant finds of lapis lazuli from the Kadmeion at Thebes: not only the imported cylinder seals, but also Mycenaean ornaments produced in the palace workshop.⁷⁴ Glass ornaments were also found in the Kourtanzis plot workshop at

⁷⁰ Foster 1979: 153.

⁷¹ Foster 1979: 5; also Haevernick 1960: 41; Vermeule 1967: 16; Higgins 1980: 40,77; Harding 1984: 5; Dickinson 1994: 186; Sakellarakis and Sapouna-Sakellarakis 1997: 615; Sherratt and Sherratt 1998: 340.

⁷² For the “romantic bias, that ‘natural’ materials are more valuable than man-made ones,” and the value of glass compared to other commodities in monetary contexts, see Stern 1997: 192-97.

⁷³ cf. Evely and Runnels 1992: 28.

⁷⁴ Symeonoglou 1973: 66-69.

Thebes, and Tournavitou argues that the use of both materials here suggests that glass was not used only as a substitute.⁷⁵ In the Argolid, however, the virtual absence of lapis lazuli means that it could not have been the base for value, since glass could hardly have been used as a conscious substitute or imitation. Some scholars have reconsidered the “cheapness” of glass, realizing that as a foreign commodity it was exotic to Mycenaeans and difficult to acquire.⁷⁶ The remainder of this chapter will assess the value of glass in the Mycenaean Argolid, through moments and manners of consumption. For whether the raw glass came from Egypt, Syria or Mesopotamia, it became Mycenaean, as it was literally reshaped into a variety of forms and put to use in a new social context.

Consumption of Glass in the LH IIIA-B Argolid

The distribution of glass in the Argolid, shown in Table 6.1, is led by Mycenae, where over half the pieces were deposited. This is followed by Midea-Dendra, with approximately one fifth of the total count, and the remaining quarter divided between other sites, perhaps the seats of local elites. This spatial distribution has important implications for the control of a foreign commodity, but other aspects of consumption indicate the value of glass in the Mycenaean setting. With only the three citadel sites preserving glass in IIIA-B settlement contexts (see Table 6.1), it may be possible to identify connections with a palatial agenda. But the majority of glass finds are from burials, an association which suggests the personal nature of their significance.

In graves, these items were used predominantly for the adornment of the human body, contributing to the status of the deceased and the living. Not only were they worn as necklaces and bracelets, but as diadems too—as vividly demonstrated by an *in situ* example from the Kladeos cemetery near Olympia.⁷⁷ Such objects adorned men as well as women,

⁷⁵ Tournavitou 1997b: 236

⁷⁶ Haevernick 1963; Dickinson 1994: 186.

⁷⁷ Yalouris 1968.

	total	settlement	burial
Aidonia	31		31
Argos	172		172
Asine	517		517
Berbati	253		253
Kokla	47		47
Midea-Dendra	1895	12	1883
Mycenae	5393	403	4991
Panaritis	1		1
Priphitiani	4		4
Prosymna	1002		1002
Tiryns	62	13	62

Table 6.1 Number of glass objects found in LH IIIA-B contexts at Argolid sites.

perhaps most notably Persson's "king" of the Dendra tholos whose head was surrounded by the "helmet decoration" of curled leaf brackets.⁷⁸ The use of glass jewelry for men may also be demonstrated in Aegean frescoes, for example one of the "boxing boys" from Akrotiri wears blue beads, which might represent glass.⁷⁹ The majority of bead-wearing figures in Mycenaean representations, however, are women,⁸⁰ and it is likely that glass ornaments were more directly associated with female adornment.

There are other cases where the grouping of glass pieces is made clear because they were placed in a container rather than on the body. The most striking example are the hundreds of small beads, pendant spiral, and ivy ornaments that were found in a bronze jug in Asine Chamber Tomb I:5. That these were sewn together as a single piece—a "head ornament, diadem or tiara"—was evidenced by the preservation of threaded sections against

⁷⁸ Persson 1931: 36, 64-65, pl. XXV:1, fig. 41.

⁷⁹ As Younger (1992: 257) notes, fresco representations of jewelry in blue paint could indicate lapis lazuli, amethyst, or silver, as well as blue glass.

⁸⁰ Hughes-Brock 1998: 248-49.

the rusted interior of the vessel.⁸¹ The way the ornaments from a context were combined as a piece of jewelry, or as the decoration of a garment, is usually less obvious. Often, a group of identical pieces can reasonably be considered a single necklace, as argued for the 20 ivy ornaments from a single pit in Mycenae Chamber Tomb 520.⁸² But just as often, a few glass pieces were combined with other materials, like the beads found around the neck of skeleton XI in Mycenae Chamber Tomb 517. On the other extreme are cases like Mycenae Chamber Tomb 69, with over 500 glass pieces: 427 beads and 102 ornaments. Even if sorted into the 30 size/type groups in which they were catalogued, it is still difficult to imagine how these were combined.

The counts of Table 6.1 include each glass piece as a unit, without making distinctions of size or grouping, (i.e. a necklace of 50 beads is counted as 50). While this enables calculations to be as inclusive as possible, greater meaning may be found in comparisons of a more balanced nature. It is worthwhile, then, to separate certain classes of artifacts. I have chosen to concentrate on mold-made ornaments because they are generally of similar size, using roughly the same amount of raw material.⁸³ Also, these objects were used in a number of different ways, adorning objects as well as individuals. And, the relief decoration is generally of recognizable motifs that may suggest their meaning. Set forth in Table 6.2 are just over 2400 mold-made ornaments from LH IIIA-B contexts in the Argolid. With this class of glass objects, the concentration at Mycenae is more pronounced than the general glass-counts. With 75% of the ornaments, Mycenae provides the fullest variety of evidence.

⁸¹ Frödin and Persson 1938: 398-400, figs. 261-62.

⁸² Wace 1932: 26, 220, fig 12:42.

⁸³ At least there is considerably less variability than in the size of beads, for example, where the amount of glass in a large biconical bead could be used for dozens of tiny annular ones.

	total	settlement	IIIA-B burial
Aidonia	8		8
Argos	41		41
Asine	315		315
Midea-Dendra	136	6	130
Mycenae	1832	147	1685
Panaritis	1		1
Prosymna	75		75
Tiryns	11	10	1

Table 6.2 Number of glass objects with motif found in LH IIIA-B contexts at Argolid sites.

In Mycenae Chamber Tomb 28, to take one particularly rich example, 179 glass objects were found, 156 of which were ornaments.⁸⁴ Unfortunately, there is no information from the 1887-88 excavation records about how these items were found within the tomb. And even though the ornaments can be divided into 16 groups according to size and form, it cannot be said how they were combined and divided among different depositions. Overall, however, they suggest that the individuals buried here were regularly adorned with locally produced glass jewelry or, if this material was deposited in just a few cases, they were indeed ostentatious displays.

Only at Mycenae is there good evidence for glass in settlement contexts. For example, 27 glass ornaments, of 14 types, were found in the ritual contexts of the Tsountas' House Shrine (Fig. 6.6). Of these two were foreign-made: the star pendant and a fragment of a pendant in the form of a nude female.⁸⁵ A diverse group of ornaments was also found in the "pot group" from Temple Room 19 of the Citadel House area. Exactly how these ornaments were used in either of these votive contexts is not known, but one

⁸⁴ App. C: 287; Xenaki-Sakellariou 1985: 101-102, pls. 25-26.

⁸⁵ The fragmentary female ornament was never illustrated and is no longer known (Barag 1985: 38, 45), but cf. Grose 1989: 47, 58-59 nos. 1-3, 39 (color plate), 397 (drawings).

interesting suggestion is that the terra-cotta idols of Room 19 held a string of ornaments in their outstretched hands.⁸⁶

A large number also come from the West Room of the House of Shields. Aside from a couple curled leaf brackets, these pieces are all inlays that no doubt decorated the wood and ivory furniture whose remains are so plentiful.⁸⁷ The use of glass for furniture inlay is also attested in Linear B texts from Pylos (Ta 642, 714) and paralleled by later examples from Cyprus.⁸⁸ Another possible, though less often preserved, use of glass inlay is in the adornment of stone vessels. A fragment of a breccia bowl from the House of Shields had recesses drilled in its surface for the reception of decorative inlays.⁸⁹ Wace associated the vessel fragment with pieces of “inlay in crystal and variegated stone...found near it,”⁹⁰ but in fact glass inlays of the same trefoil shape and size come from the same area of the West Room.⁹¹

Iconography

Not only was this exotic material adapted to local methods of crafting, but the chosen imagery was mostly Aegean as well. A breakdown of the decorated pieces (Table 6.3) demonstrates that local marine and floral motifs dominate. For motif counts, each piece is counted individually, as each is a separate act of crafting. But the multiple repetition of motifs on a single object did not increase the count, since the crafting of these

⁸⁶ Taylour 1970: 277.

⁸⁷ Tournavitou 1995: 242.

⁸⁸ For the identification of *ku-wa-no* as glass, see Halleux 1969; glass inlays in the ivory furniture from the EIA tombs at Salamis (Cyprus), Karageorghis 1968.

⁸⁹ Nauplion 12360, Exc 53-65 (Tournavitou 1995: 220, 622, fig. 39a)

⁹⁰ Wace 1954: 237, pl. 36b.

⁹¹ Although Tournavitou mentions only the stone inlays (Exc 53-477, 54-63) in connection with this fragment (1995: 223-24, fig. 39b), her catalogue entries reveal glass among these same deposits: 53-477 includes glass, rock crystal, breccia and serpentine inlays (Tournavitou 1995: 637-39); 54-63 both glass and rock crystal (Tournavitou 1995: 704). The trefoil is also found among another group of glass inlays from this room, 54-463 (Tournavitou 1995: 707).

Aegean motifs		Eastern motifs	
ivy	460	papyrus	198
spiral	389	humans	56
rosette	281	genius	31
argonaut	174	waz-lily	29
tri-curved arch	129	lion	12
lily	128	palm tree	2
kalyx	96	duck	2
altar	68	sphinx	1
whorl-shell	56	griffin	1
cockle-shell	55		
chevron	47		
figure-eight shield	11		
bird	10		
animal	10		
bull	9		
helmet	1		
goat	1		

Table 6.3 Motifs preserved on glass ornaments found in LH IIIA-B Argolid contexts.

several motifs was accomplished by a single action (i.e. a plaque with four whorl-shells is created by one cast, not four).

Many of these motifs were discussed in the previous chapter, and the groupings as Aegean or Eastern are similarly subjective (p. 138-44). As with ivory motifs, the most common glass designs are thoroughly Aegean in concept: ivy, spiral, and rosette. More exotic images—for example, creatures such as the griffin or foreign plants such as the papyrus, do occur, but are in general less common and have been adapted to Aegean forms and settings. Thus, cultural adaptation was accomplished through the literal transformation of glass into objects of local style.

One motif which is not well preserved among the Argolid ivories,⁹² but which is found in several glass plaques, is the genius figure. As with many of the eastern motifs discussed in the previous chapter, the extent to which it should be considered foreign is a complicated matter. Although this composite creature originated from the Egyptian figure of Taweret (Thoueris, Fig. 6.8a), it underwent a significant evolution to become the “Minoan genius” (Fig. 6.8b).⁹³ Change or difference is most obvious in the figure’s bodily form, as Taweret’s swollen (pregnant) belly was streamlined into a cinched waist. This is sometimes interpreted as a transformation of the female divinity into a male cult figure, which would indeed represent a significant change from the eastern prototype. For example, Baurain interprets the Minoan genius as male, based not only on physical form but also the figure’s activities, which include the carrying of animal victims (presumably to sacrifice) and “cadrent mal avec le sexe féminin.”⁹⁴ And the particular details of the Aegean representation, again both physical features and the comportment of the genius figures, have been called upon not only to demonstrate the distance from Taweret,⁹⁵ but even to propose another specific identification, that of the Erinyes.⁹⁶

As already indicated, there is significant variation in the activities of the genius in Mycenaean representations (mostly glyptics). It is shown holding a vessel, carrying

⁹² The sole example is from the Dendra tholos (NMA 7359), see Rehak 1995: 227, fig. 9.

⁹³ Weingarten 1991 details the early transmission of the figure from Middle Kingdom Egypt to Minoan Crete. The changes which occur in Late Minoan depictions are most comprehensively assembled and discussed by Gill 1964. Supplements to this catalogue are found in Gill 1970, Sansone 1988, and Rehak 1995. See also Crowley 1989: 58-62 for further Egyptian examples.

⁹⁴ Baurain 1985: 110-11. But Gill (1970: 404) argues that the white skin of the genius in a later fresco fragment from Pylos indicates the female sex. And others contend that such questions are irrelevant to the nature of these creatures who “are both male and female, their sex being a matter of slight importance” (Nilsson 1950: 383).

⁹⁵ Baurain 1985.

⁹⁶ Sansone (1988, esp. 10-13) connects these figures to later descriptions of the Erinyes by interpreting the features of the Minoan genius (often described as leonine or asinine) as canine and the dorsal appendage as a snake-skin. Also, he cites the occurrence of *E-ri-nu* in the Knossos tablets (Ventris and Chadwick 1973: 306-307, 411, 476).

sacrificial victims, in hunting scenes, and attending human or divine figures.⁹⁷ The glass ornaments from the Argolid, however, all depict the genius holding forth a pitcher or jug, as illustrated in Fig. 6.8c. Thus, even motifs which are manifestly foreign became redefined in Aegean arts, and took on specific Mycenaean meaning.

Strategies in Glass

Production centers?

The concentration of glass ornaments at Mycenae makes sense, not only because of the extensive excavations of settlement and tombs, but also because the site was in all likelihood a center of production. The working of glass is recorded in Linear B tablets from Mycenae (MY Oi 701-705), which mention several *ku-wa-no-wo-koi* or glass-workers.⁹⁸ The possibility that the material *ku-wa-no* was actually faience has been raised by several scholars, but Halleux's analysis of the use of the word in Linear B and the Homeric instance of *kyanos* point to glass as more likely than faience or other blue possibilities, such as lapis lazuli.⁹⁹

Further evidence that it was glass being worked by these Mycenae craftsmen is found among the seven stone jewelry molds that have been found at the site, listed in Table 6.4. The most relevant of these is the steatite mold from Area 36 of the Citadel House area, very close to where the tablets were found. This area was originally thought to be a workshop space,¹⁰⁰ but this identification has been discounted in recent years on account of the lack of true debitage or equipment from any craft activities in situ.¹⁰¹ The

⁹⁷ Rehak 1995: 217-30; for the quantification of Minoan scenes, see Weingarten 1991: 10 n. 39.

⁹⁸ Chadwick 1962.

⁹⁹ Halleux 1969; cf. Ventris and Chadwick 1973: 506-507; K.P. Foster 1987: 287-92.

¹⁰⁰ Taylour 1981: 40.

¹⁰¹ Evely and Runnels 1992: 29-31; Krzyszkowska 1997.

	<i>Context</i>
<u>NMA 1018</u> ¹⁰² rectangular granite mold A: octopus plaque, two papyri, three pendant spirals, linear plaque, argonaut plaque B: papyrus, wallet, curled leaf bracket	<i>Acropolis</i>
<u>NMA 1019</u> ¹⁰³ cuboid steatite mold A: eagle B: conical, altar C: fragmentary curled leaf	<i>Acropolis</i> D: elliptical bead E: waz-lily F: two hemispheres
<u>NMA 2567</u> ¹⁰⁴ rectangular granite mold A: curled leaf bracket, argonaut plaque B: curled leaf bracket	<i>Building near the Lion Gate</i>
<u>Nauplion 2501</u> ¹⁰⁵ rectangular? steatite mold A: bee, papyrus, argonaut plaque, pendant spiral, (enigmatic design) B: curled leaf bracket Side I: curled leaf bracket	<i>Acropolis, 1932 excavations</i>
<u>Exc 66-1708</u> ¹⁰⁶ rectangular steatite mold A: genius libation plaque, two papyri, ivy plaque, two pendant spirals, wallet B: three papyri, two pendant spirals, argonaut plaque, floral-papyrus Side I: two argonaut plaques Side II: column, two shafts, wallet	<i>Citadel House Area 36</i> End I: column capital End II: two conical
<u>Boston MFA 66.194</u> ¹⁰⁷ rectangular steatite mold A: curled leaf bracket, rosette, two drop pendants, bee?, molded strip B: curled leaf bracket, cockle-shell, disc, drop pendant	<i>Unknown Context</i>
<u>(no inventory number)</u> ¹⁰⁸ small fragment of a stone mold A: two elliptical beads	<i>Acropolis</i>

Table 6.4 Motifs preserved on the stone molds found at Mycenae.

¹⁰² Schliemann 1880: 108, fig. 162.

¹⁰³ Schliemann 1880: 108, fig. 163; Tsountas 1897: 98, pl. 7.2.

¹⁰⁴ Tsountas 1897: 97, pl 7.1.

¹⁰⁵ Buchholz and Karageorghis 1973: 49 no. 462.

¹⁰⁶ Evely and Runnels 1992: 29-31, 169, pl. 4.

¹⁰⁷ Vermeule 1967: 19-31; fig. 1.

¹⁰⁸ Tsountas 1897: 98.

mold, for example, was found in the fill above the floor level and apparently fell into the area from elsewhere. The use of the mold for glass ornament is assured by the bits of material preserved in one of the matrices.¹⁰⁹ Also Hughes-Brock has identified a few warped glass pieces among the Citadel House finds, of which a lentoid seal is the only published item.¹¹⁰ Combined with the references in the Linear B tablets, it appears that glass was being worked somewhere within the Citadel, perhaps in the terrace above the Citadel House area.

Midea

Another stone mold was found in recent excavations at Midea, with motifs including a palm plaque with two seated female figures, pendant spiral, leaf-shaped pendants, and papyrus-ivy.¹¹¹ The mold was found in a storage room in the West Gate area, but neither the details of the context nor any associated finds have been published. This piece is not in itself sufficient evidence for the working of glass, especially given the numerous possible uses and long histories of such molds, as described above (p. 159).¹¹² The presence of a workshop in this area, however, may be suggested by the large number of glass finds from the nearby tombs of Dendra. Ostenso has suggested that this possibility is strengthened by the fact that one of the glass ornaments from new excavations at Midea is identical to pieces known from Dendra.¹¹³ While this demonstrates that the inhabitants of the lower terraces and the groups using the Dendra tombs shared the

¹⁰⁹ Evely and Runnels 1992: 169.

¹¹⁰ E.B. French, pers. com. The seal has been published (Tamvaki 1974: 261-264, pl. 42; *CMS V*: 598), but the possibility that it was a wasted piece has not yet been discussed in print. This will be addressed in the forthcoming Hughes-Brock fascicle, n. 3 above.

¹¹¹ Demakopoulou *et al.* 1994: 31, fig. 37.

¹¹² For a methodological discussion of the built and portable features of a workshop, and what might be expected archaeologically, see Tournavitou 1988.

¹¹³ A. Ostenso, pers. com.

connection to a single workshop, there is not sufficient evidence to know where that workshop was or how direct the connection.

That this source was other than the Mycenae workshop(s) might be suggested by the uncommon, if not unique, forms among the Dendra ornaments. Most intriguing is the material from the Dendra tholos, which includes two sets of plaque ornaments which Persson identified as narrative scenes from later Greek myth. The first is a figure sitting on the back of a bull whom he interpreted as Europa, and the other with a lion-like creature that was construed as a chimera, making the opposing human figure Bellerophon.¹¹⁴ Another unusual set is the group of inlays in the shape of lionesses, which include mirror-image figures that required the carving of two identical (but opposite) matrices. These pieces were produced in a particularly skilled workshop, but that is not reason enough to identify an independent producer in the immediate vicinity of Midea-Dendra.

Tiryns

The working of glass at Tiryns is suggested by numerous pieces of “unfinished glass,” now on display in the National Museum.¹¹⁵ They are similar in shape and size to the glass of the “alabaster frieze,” an architectural molding preserved in the ante-chamber to the Tiryns megaron (Fig. 6.7).¹¹⁶ The frieze includes round inlays (cuttings of 1.9 cm) and rectangular pieces of several sizes (1.57 x 0.62-0.78 cm; 1.8 x 0.69 cm; 1.35 x 0.82; 2.25 x 1.9)¹¹⁷ The National Museum pieces are also rectangular and circular different sizes, apparently very similar to the frieze inlays: including rectangular pieces of two sizes and a number of circular pieces. There are also longer rectangular strips, which could have been cut into smaller segments, or perhaps were inlay for the longer band in the triglyph

¹¹⁴ Persson 1931: 36, 65, figs. 41-44.

¹¹⁵ NMA 1615-1618. I was not able to inspect these items personally, as they are to be published by L. Rahmstorf (see n. 3).

¹¹⁶ Moser von Filseck 1986.

¹¹⁷ Moser von Filseck 1986: 8, 13.

portion of the frieze. I think it is very likely that these pieces should be associated with the glass inlay of the frieze, however, their identification as unfinished is less evident. Without any contextual information available (this material is from Schliemann's excavations at Tiryns), it seems that the appearance of the slightly misshapen pieces might be the result of an accidental firing, i.e. in the building's destruction.

Controlled Use

That the production of glass objects, like ivory-working, was limited to Mycenae might imply that the material's consumption was similarly restricted. Returning to the numbers of Table 6.1, however, it is clear that the distribution of glass was not as concentrated as that of ivory. For example, glass works are found in all seven tombs of Asine cemetery I and glass was also consumed at Berbati, where no ivory objects or foreign-made items were found. Further comparisons between the distributions of glass, ivory, and foreign-made objects will be carried out in the concluding chapter, but it is worth speculating on a regional use of glass here.

Even if Mycenae is not the only producer of glass objects in the Argolid, it is the likely source of those found at Berbati. The site was connected to Mycenae by a built road, indicating an interest in communication and exchange between the two.¹¹⁸ Perhaps the glass ornaments acquired by people at Berbati was related to site's specialized production of ceramics, including vessels in the pictorial style and perhaps an emphasis on the kylix.¹¹⁹ These two vessel types may have held special appeal to the trade- and power-focused elite of Mycenae, since pictorial pottery was an export product, and kylikes seem to have had special ritual use in palace feasting.¹²⁰ Such a direct exchange cannot be

¹¹⁸ There was also significant LH IIIA-B habitation between the two sites, Wells 1996.

¹¹⁹ Akerstrom 1968, 1987.

¹²⁰ Pictorial pottery, Karageorghis and Vermeule 1981; palatial interest in kylikes, Galaty 1999: 8-9.

proven, but it is interesting to note the type of interest that may have lead glass to Berbati, but not ivory.

There was a conscious choice made by Mycenaean glass-workers (and their palatial over-seers) to create locally familiar objects from this foreign material. Rather than evoke distant lands, glass represented a connection to local power. Since the possession of these symbols represents an attainment of prestige, it follows that the producers at Mycenae would seek to control the consumption of these items. To control, however, is not necessarily to restrict. The distribution of glass might be seen as the interest of Mycenae reaching across the region. In this light, the circulation of glass can be read as a commodity put to active use in the transmission of ideology.

CHAPTER 7

CONCLUSIONS

The first chapters of this dissertation began with an attempt to understand the social and economic effects of long-distance exchange on Mycenaean society. Import consumption was adopted as a more specific topic, with the notion that this behavior offered the most direct approach to the Aegean perspective on Mediterranean trade. The material itself (the imported items and materials) has been employed in previous studies of the Aegean's foreign relations—a necessary choice given the absence of explicit references to trade in the Linear B records. Scholarship on Mediterranean trade has regularly made use of the documentation and propaganda preserved in western Asia and Egypt, which has brought an implicitly eastern point of view to the subject.¹ And those studies which focus on the material evidence, often make use of the surviving artifacts as representative of acts of exchange or more valuable commodities, which are not archaeologically preserved.² Only recently have scholars begun to consider how this material was used and how these acts of consumption illustrate the motivations for and effects of exchange.³

In the preceding chapters, we have seen the transition in the consumption of imports from Mycenae's monopolization of foreign-made prestige items, almost by a single group, to a more complex use of imported materials and commodities for various means and by different groups across the Argolid. This final chapter coordinates the independent

¹ E.g., Bass 1997; Bernal 1987; 1991; Cline 1987; 1991a; 1991c; Hankey 1981; Helck 1979; Heltzer 1989; Knapp 1991; Mee 1998; Pulak 1997; Rehak and Younger 1998; Wiener 1991.

² For example, Sherratt and Sherratt (1991: 363) describe pottery as "a useful surrogate for more valuable but less easily traceable items of trade."

³ Watrous 1998; van Wijngaarden 1999b.

analyses of foreign-made items, ivory, and glass. The combined data provide better ground for review of this work's hypotheses and consideration of several questions that have arisen throughout the dissertation. I then offer some thoughts on subjects that could not be accommodated in this study, but that I hope will be pursued in future work.

Consumption and Social Agency

Production and exchange are the aspects of political economy most often approached by archaeological study, best treated as interrelated activities which help to determine one another, as well as social identities and structures.⁴ Consumption is also an integral part of this larger process, and it is sometimes the activity through which local agency is most visible in the archaeological record. This is the case for the Bronze Age Argolid, where the best preserved evidence is the contextual information for the use of trade goods. Other regions have better information, often textual, for the terms on which goods are produced by specialized craftspeople or exchanged by merchants, acting on behalf of the state or out of personal interest. Social actors such as these are not known by name in the Mycenaean Argolid, but trade-minded groups are represented by the contexts in which imports were used. Moreover, it is through their social use that the commodities of trade were incorporated into local systems and imbued with value and symbolic meaning.⁵

My study differs from previous considerations of the manipulation of trade, usually under the rubric of the prestige good model,⁶ in its attempt to understand the complexities of exotic items beyond their role in centralization of power. While I recognize the need of the ruling elite to control this source of social power, I am keen to include other notable groups vying for the same opportunities. And since these acts of consumption also

⁴ E.g., Knapp and Stech 1985; Zerner *et al.* 1993.

⁵ Lesure 1999; van Wijngaarden 1999a.

⁶ Schortman and Urban 1992; Blanton *et al.* 1996; Saitta 1999.

construct identity, each group can be partially defined in terms of its strategies of import use.

Import Consumption at Argolid Sites

The use of imported goods demonstrates the presence of certain types of social groups at each site, especially in the LH IIIA-B period when there is more complete evidence available. The quantities of the different imported goods (foreign-made items, ivory and glass objects) found at each site are listed in Table 7.1; Fig. 7.1 shows these counts expressed as the percentage of the total body of imports found in the LH IIIA-B Argolid. Each site's share of these goods demonstrates its participation in the activities enabled by trade, and also suggests the means by which they circulated within the Argolid.

The high numbers of imported goods, of all types, found at Mycenae is certainly a product of the intensive exploration of the site over the past 125 years. The overwhelming concentration of the present study's material at this one site may be thought to reflect atypical discoveries, such as the vast amounts of ivory from the buildings of the West House group more than a true monopolization by one site. Indeed these finds are perhaps better understood as the accumulation of imports by a particular group at Mycenae, but, as the previous chapters have demonstrated, the use of imported goods is well represented in a number of contexts. Further, these objects were involved in a number of different activities, including the storage of the West House group, votive use in the Citadel House area, and funerary deposition in many of the tombs surrounding the citadel.

The larger importance of the distribution within Mycenae is that the palatial administration did not hold a simple monopoly, at least not to the degree seen in the Shaft Grave period, when the material was restricted to a single group. The imported goods found in the various LH IIIA-B contexts could be the product of attempts to maintain (or create) an internal hierarchy of palatial administration, of the sort outlined in Chapter 2

	Imports	Ivory	Glass
Aidonia	-	1	31
Argos	1	19	172
Asine	4	32	517
Berbati	-	-	253
Iyrisa	1	-	-
Kokla	-	1	47
Midea-Dendra	10	34	1895
Mycenae	83	20223	5393
Nauplion	1	-	-
Panaritis	-	-	1
Priphthiani	-	-	4
Prosymna	3	58	1002
Tiryns	28	5	62
Tsougiza	1	-	-
Zygouries	-	1	-

Table 7.1 Number of imports, ivory, and glass items from LH IIIA-B contexts.

(p. 29-34). But whether the individuals represented by an single context received palatial products as payment for their administrative position or through their own means cannot be directly determined. The groups who had access to imported goods at Mycenae can only be judged by their archaeological identities.

Where these groups belong on an internal hierarchy is also difficult to determine, since the corresponding material of the hierarchy's top tier has not survived. In the case of funerary evidence, for example, it is clear that the Mycenae tholoi included many of the same types of items preserved in other contexts—at least, to judge from the material scattered on the floor of the Tomb of the Genii, for example, or the burial in the dromos of the Tomb of Clytemnestra.⁷ Among the Mycenae chamber tombs, however, the different

⁷ Wace 1921-23: 367-72, 379-86. That the tholoi originally contained greater amounts of the same goods found in chamber tombs rather than items of a completely different character is suggested by the Dendra

classes of imported goods do not conform a single distribution. Chamber Tomb 27, whose ivory objects were described in Chapter 5 (p. 136, App. B: 265), contained no glass objects and no foreign-made items. Yet in Chamber Tomb 28 (also located in the Panagia cemetery), whose many glass finds were reviewed in Chapter 6 (p. 166, App. C: 287), there were no foreign-made items and the only ivory found was a single button and some miscellaneous pieces.⁸ There are, of course, other contexts where these materials were found together and alongside extra-Aegean products, for example, Asine Chamber Tomb I:2 and Prosymna Chamber Tomb III. But an important point is made by the Mycenae material, which is also true on the regional scale: namely, that the distributions reflect actors' preferences and capabilities in acquisition and the different imports' roles in various social systems.

At Tiryns, the considerable number of imported items demonstrates the involvement of its inhabitants in trade, though it is perhaps a different dimension than seen at most other sites. The few pieces of ivory with published contexts at Tiryns are all from the Unterburg, where they were found in the same structures as the imported items. In these non-luxury and non-ritual contexts, the low number of ivory objects and the largely "utilitarian" nature of the foreign-made items correlates well with the larger fact that few prestige items have been found here. It should not be assumed that these imported items were goods of lesser value, unworthy of the further effort of over-land transport to other sites. After all, similarly "utilitarian" items were found at Tsoungiza, further from a port of trade than any site of the Argive plain.

Tiryns' slightly higher share of the Argolid's glass, in comparison to the site's ivory, is due mainly to finds from the Profitis Ilias chamber tombs, where they were put to

tholos material (Persson 1931: 27-42). But a wealthier tholos may have included other (more exotic?) prestige items, as perhaps suggested by the large numbers of lapis lazuli and onyx stones found in palace contexts at Thebes (Porada 1981: 4), but nowhere else in Boeotia.

⁸ NMA 2404, 2394.10 (Xenaki-Sakellariou 1985: 103, pl. 26).

use as part of funerary ritual and display. The discussion of Chapter 4 demonstrated how important such activities were for group identity and they are the most common form of consumption in which imports were involved. The practice is most evident in the wealthy burials of Argos, Asine and Dendra, where imported items were included with other symbols of prestige, including local works in ivory and glass. Asine and Argos were well situated to acquire imports directly from foreign or returning ships, but there is no evidence for the working of foreign materials at either site. Midea-Dendra's crafting its own glass ornaments seems only a remote possibility, given the present evidence (p. 172-73).

The overlap in the distribution of foreign-made and locally-processed imports is important in considering whether the imported items were acquired through internal (palatial?) circulation or more directly external connections. Individuals at coastal sites may be especially likely to acquire imported items directly from merchants (or transporters), but this cannot be demonstrated for any of the sites in question. I return to this question below, but it should be noted that there are extenuating factors for those sites with foreign-made items in LH IIIA-B contexts, but neither glass nor ivory. Almost nothing is known about Iyrisa, as the imported cylinder seal is the only item published from the excavated tombs. Nor have the finds from Nauplion been adequately published, especially considering the large number of chamber tombs reportedly excavated, but the displayed material (without context) in the National Museum in Athens demonstrate that the site's tombs included locally made prestige items, including glass and faience jewelry.⁹

The other sites in question have only locally-produced items in LH IIIA-B contexts. Berbati and Aidonia all preserve glass beads in burial contexts, while the Kokla tholos had a glass necklace and an ivory plaque.¹⁰ That glass circulated more freely than ivory is

⁹ Select finds from more recent excavations have been published (*ArchDelt* 28 [1973] B 90; 29 [1973-74] B). The displayed material not listed in Appendices A-D include various types of faience beads (NMA 3418, 3421, 3423, 3436, 3427, 3439, 3484, 3487) and a stone chalice (perhaps a Minoan product, if not locally made) from Tomb II (NMA 3522, Warren 1969: 37).

¹⁰ Demakopoulou (1997) suggests that the ivory plaque is a Minoan product.

again suggested by the fact that Zygouries is the only site where there was found an ivory object,¹¹ but no glass. The small quantities of glass and/or ivory at these four sites might stem from factors such as the few tombs excavated at Zygouries, or the fact that overall little wealth was invested in the Berbati tombs.¹² But the Aidonia material of the palatial period still includes some signs of the greater wealth displayed in LH II, such as works in carnelian and amethyst from Chamber Tombs 7 and 8.¹³

Trends in the Evidence

Import consumption offers the most direct evidence for how institutions and individuals benefited from extra-Aegean trade. Their active response is seen in the use of foreign-made items for status-building through display and deposition. More complex strategies are seen in the production of local objects from exotic materials and the restricted circulation of these new goods. In bringing together the evidence for these activities, I have identified three major aspects of how trade commodities functioned in the Mycenaean Argolid:

- 1) An archaeological approach demonstrates shifts in the Mycenaean values of imported items and commodities; imported prestige-items remain exotic, but there is a transition in terms on which their appeal is figured.
- 2) The use of imported prestige-items was not limited to the palatial elite, but included a number of potential rivals, such that their exotic style served to diffuse centralized power.
- 3) The different strategies visible within consumption of imported materials, and the circulation of objects crafted from them, offer further insight to the control of trade.

¹¹ And in this case it was a single (fairly modest) use of ivory—a bronze knife, with a wooden handle, which had a small ivory fitting at its end (Blegen 1928: 202-203, fig. 190:1).

¹² Zygouries, Blegen 1928; Berbati, Holmberg 1983; Santillo Frizell 1984.

¹³ Demakopoulou 1996: 64.

1) *Mycenaean Values and Staying Power*

The exotic appeal of imported goods is often short-lived due to increased quantities that stem from the growing regularity of exchange, as well as the inevitably diminishing novelty of such goods over time. Value might be maintained through limiting access to these objects or by removing them from circulation, often through deposition in ritual contexts, including burials.¹⁴ Often, the familiarity of symbols and the widespread use of formerly rare objects lead to the introduction of new classes of exotica, which are new and once again limited to the elite.

The exotic classes of the Shaft Grave period, however, continue to be imported in the Mycenaean palatial period—namely, seals, ornaments, and vessels, made of stone; faience; and the occasional ostrich egg. The newly imported items are not different types of prestige-goods, but more “utilitarian” objects such as pottery and stone mortars, which might suggest that trade commodities have now become less exceptional. Yet the original symbols (the same types of objects, the same materials) were able to maintain their status as “exotic” for several reasons. First of all, the source of these goods remained (conceptually) distant—especially in contrast to Crete, with which the people of the mainland became much more familiar. Minoan motifs and styles became fully incorporated, such that Cretan and mainland products are (in some cases) virtually indistinguishable. Also, the prestige-imports of the Early Mycenaean period were regularly deposited in burials, with only a few likely cases of items remaining in circulation as “heirlooms” which can be identified—for example the Nuzi ornaments from the Tsountas’ House Shrine (p. 92-93).

As the numbers of extra-Aegean imports increased, however, there was a shift in the nature of their “exotic” value, in that the distinguishing feature of their rarity was replaced by one of difference. In the palatial period, foreign-made items could no longer be distinguished by their material alone, since the raw materials were available for local

¹⁴ Frankenstein and Rowlands 1978: 76-77; Precourt 1984: 161-62.

productions. The fact that these imported materials were not used to make imitations of finished imports (as exemplified here by ivory and glass) helped to define the imports' value. Some foreign crafts were perhaps beyond Mycenaean technology, e.g. glass vessels, but surely mold-made ornaments could follow the form of imports such as the Nuzi star pendant, if desired. The value of local products was no doubt enhanced by the features of, for example, glass and ivory, but they functioned as indigenous symbols. It was in relation to this background of Mycenaean products then, that foreign items remained "exotic" throughout the LBA.

2) Imports as devices of (in)stability

As in many other societies, the beginning of long-distance exchange coincided with the emergence of an elite, and should be understood in connection with this group's need for prestige items. It has often been argued that this elite control of trade connections in a developmental period was followed by the palatial (state) control of foreign connections, wealth, and prestige items. In this model of the Mycenaean political economy, the palace-state mobilized resources and geared industries towards trade in order to acquire (exotic) raw materials. It then oversaw the crafting of prestige-items which were used (exchanged) in the maintenance of good relations with (i.e., power over) local and provincial leaders.¹⁵ This model has been well demonstrated by the evidence for Mycenae's production and circulation of glass and ivory objects. The role of foreign-made items, however, in relation to the products of a wealth finance system has not been included in previous discussions.

The imported items were not strictly palace tools of stability, but could also function as their competitors' devices for instability. While the production of some prestige-items was apparently monopolized by Mycenae, it is not clear that the palace administration held comparable control over the circulation of foreign-made items. Even if local elites did

¹⁵ Renfrew 1972: 483-85; Cherry 1984: 37-38; Morris 1986; Halstead 1992b: 73-74; Galaty and Parkinson 1999: 7; cf. D'Altroy and Earle 1985; Brumfiel and Earle 1987: 7.

acquire their imported items through the same system of wealth finance that was probably behind other prestige-goods, these goods did not share a common symbolic value. Because they were different from standardized palatial crafts (of local style, even those crafted from exotic materials), these objects carried a message of outside connections. Presumably, such symbols were valued by the central elites as well, as indicated by the high concentration of foreign prestige-goods at Thebes. But in the Argolid, Mycenae was not able to restrict others from acquiring these items, and so the palatial use of these symbols to maintain power was challenged by their destabilizing role in the hands of rivals.

3) *Multiple uses of imports*

A recurring pattern in the analyses of Chapters 3-6 is the exclusive concentration at Mycenae (and largely in the Shaft Graves) in LH I, leading to a more diffuse distribution in LH IIIA-B, but one that is still dominated by a high proportion at Mycenae. Yet there are differences in the distribution of imported, ivory, and glass objects. Even within a wealth finance system, prestige items can be targeted at specific needs, or used more effectively based on their relative worth or particular symbolic values. This is well demonstrated by the Argolid distributions of Table 7.1, but given the lack of (good) settlement remains at many of the Argolid sites, perhaps more accurate comparisons can be made with the funerary use of imports. Although this limits the analysis to a single form of import consumption, it is a selection of the data in which most sites are equitably represented. The number finds of imported, glass, and ivory objects in LH IIIA-B burial contexts at each site is presented in Table 7.2 and each site's percentage of the total count is shown in Fig. 7.2.

The distribution of glass among the Argolid sites is essentially the same in Tables 7.1 and 7.2, again demonstrating the prevalence of funerary finds. As expected, the percentages shift for ivory once the settlement finds (especially from the West House group) are removed, but Mycenae still produces the vast majority. A more substantial

	Imports	Ivory	Glass
Aidonia	-	1	31
Argos	1	19	172
Asine	4	32	517
Berbat	-	-	253
Iyrisa	1	-	-
Kokla	-	1	47
Midea-Dendra	8	31	1883
Mycenae	24	412	4991
Nauplion	1	-	-
Panaritis	-	-	1
Priphitiani	-	-	4
Prosymna	3	58	1002
Tiryns	1	-	62

Table 7.2 Number of imports, ivory, and glass items from LH IIIA-B burial contexts.

difference between Figs. 7.1 and 7.2 is seen in the percentages of imported items. The concentration on funerary finds does not affect Mycenae's primary position, so much as it greatly reduces Tiryns' standing and eliminates Tsoungiza altogether. Thus, the comparison of burial contexts is also affected by the disparity in the evidence from site to site. Nevertheless, the dissimilarity in the distributions of the three categories (imported items, ivory, and glass) should be evident in either case.

Mycenae's dominance over ivory consumption is most prominent. The tighter control exercised over its circulation, compared to that of glass, suggests that it was more highly valued. Its worth as finished objects, however, depended on the ivory-working that took place at Mycenae. This site apparently held a monopoly over the material and/or the artisans who transformed it into consumable goods. Glass may have been subject to the same dynamics of import and production, but was then allowed to circulate more freely. It is possible that the consumption of glass objects at sites other than Mycenae, especially in the Dendra tombs, was enabled by production at Midea.

Even though they were foreign materials, the social message expressed by the consumption of glass and ivory was one of local affiliation due to the source and style of these objects. The imported items, especially the prestige-items that were more easily recognized as foreign-made, spoke of an external connection. We have seen that particular sites or individual groups (as represented by tomb or settlement context) may have acquired one class of items but not another. For example, the people buried in the Berbati chamber tombs had glass, but no ivory or imports. Variations such as this, and others seen in Figs. 7.1 and 7.2, demonstrate the abilities and preferences of people at different sites to make symbolic connections with internal and external sources of power. And it was through these displays of identity and affiliation that imported goods were involved in power and competition.

Imports and Collapse

Since this study has linked trade to the development and maintenance of power in the Mycenaean Argolid, an inevitable question is: what was the role of trade in the collapse of states at the end of the LBA? The collapse of the Mycenaean states, and the destruction of the Argolid palaces and abandonment of other sites, was part of a larger series of transitions in the eastern Mediterranean.¹⁶ And some scholars have identified the wider “disruption of commerce” in the east as the catalyst for the downfall of the Mycenaean palace economies.¹⁷ Yet just as the rise of the Bronze Age states in the Aegean can be linked to, but not wholly explained by, foreign contact, the collapse of Mycenaean palatial

¹⁶ The end of the Bronze Age as a precarious and dynamic time for polities across the Mediterranean is well presented by the papers collected in Ward and Joukowsky 1992. For a review of other theories and the argument that “the Catastrophe” in the eastern Mediterranean was caused by invasion and “a new style of warfare,” see Drews 1993. For this period as a “contracting phase” in the cycle of the larger world system, Frank 1993: 397-99.

¹⁷ Vermeule 1960; Iakovidis 1977b: 139-40. This is indeed a natural conclusion to draw from the assertions that the palace economy was structured around the crafting of prestige-goods (above, p. 184).

administrations should not be attributed to external causes alone. There may, however, be an important connection between trade and collapse.

Over the years, various destructive forces, ranging from external invaders to natural disasters, have been blamed for the fall of the Mycenaean palaces.¹⁸ Rather than one isolated cause for state collapse, however, it is more likely that a combination of pressures (perhaps capped by a catastrophe) brought down the system which was unstable for some time.¹⁹ Close study of the archaeological evidence surrounding these events has shown not only that LH IIIC Greece was still a vital and productive society,²⁰ but also that many of the changes associated with the fall of the palaces actually began well before the destruction of the citadel sites. Rutter, for example, has shown that new ceramic and metal forms often identified with an intrusive element of the LH IIIC period, were actually introduced in the LH IIIB, and argues that the collapse of the palaces was “the culmination of an extended period of unrest.”²¹

Recognizing that palatial collapse was a gradual process, already begun in the palatial period also presents a better way of understanding the role of trade in the dissolution of the palaces as administrative and economic centers. As I have set forth throughout this study, the circulation of imported goods in the Argolid was related to the fragmentation of power, both as palatial tools to forge bonds with potential rivals and as symbols of external relations for the competitors. Trade affected centralized power by enabling expressions of dominance and autonomy in the LH IIIA-B Argolid long before any disruption of trade added to the difficulties maintaining the palatial system.

¹⁸ Suggested intruders have included Dorians (Stubblings 1975) as well as Sea Peoples (Sandars 1978); other proposed calamities are drought (Carpenter 1966), earthquake (Stiros and Jones 1996), and flood (Zangger 1994b).

¹⁹ Betancourt 1976; Sandars 1978: 197; Liverani 1987.

²⁰ For a review of the evidence for an active occupation of the post-palatial Peloponnese, see Eder 1998.

²¹ Rutter 1992: 70.

	Imports	Ivory	Glass
Argos	-	1	44
Asine	-	9	122
Midea-Dendra	-	1	1
Mycenae	4	1	48
Tiryns	10	2	393

Table 7.3 Number of imports, ivory, and glass items from LH IIIC contexts.

Of course, the use of imports continued in the LH IIIC period, as did other aspects of Mycenaean (material) culture, though to a lesser extent. The LH IIIA-B peak in import consumption that has been the focus of much of the present study was followed by significantly reduced quantities of imports in the Argolid. As shown in Table 7.3, imported goods have been found in the post-destruction levels of the three citadel sites, and a number of graves which continued into use in LH IIIC.²² Though foreign-made items have been found only at Mycenae and Tiryns, glass and ivory were still consumed at several sites. Whether these were products of the post-palatial activities (trade and/or crafting) or LH IIIB items kept in circulation after the collapse cannot be determined. Certainly some crafts, most notably ceramic production, continued in the LH IIIC Argolid and exchange beyond the region is evidenced by their exportation.²³

The distribution of the LH IIIC imports is dominated by Tiryns, where imported items were found mainly in two contexts. The first is the Unterburg settlement, where a series of houses and shrines were built over the area destroyed at the end of the LH IIIB period. This is the fullest example of the (apparently more egalitarian) post-palatial mode

²² It should be pointed out that these numbers are affected by the inclusion of nine funerary contexts as part of the post-palatial period, that in fact were used from LH IIIA-B into IIIC. If these were not included, Argos and Asine would not be represented in the LH IIIC period at all; Mycenae would have no glass; and Tiryns would have 249 glass objects.

²³ Sherratt 1982: 188-89; Mountjoy 1990: 270; Rutter 1992: 67.

of settlement that Kilian proposed as “late Mycenaean city life.”²⁴ The few foreign-made items from this area of the citadel are a few ceramic pieces, but also an ivory idol, which relate well to the domestic and ritual activities otherwise evidenced.²⁵ Imported items were also found among the material known as the “Tiryns Treasure.”²⁶ This cache of mixed valuables was deposited in the LH IIIc period or beginning of the Iron Age, but includes prestige items of the palatial period, among which imported items should probably be counted. The prestige items of the Tiryns Treasure, as well as the glass and ivory objects which are mainly from the Profitis Ilias chamber tombs, show that the residents of post-palatial Tiryns were still interested in acquiring markers of status. Even without the palatial forces structuring Argolid life, competition persisted.

Future Directions and Closing Thoughts

Mycenaeans Abroad

Interregional contact may also have contributed to the depopulation of Greece associated with the LH IIIc collapse, and the subsequent inability to rebuild the palaces, by providing a means of departure. The emigration of Mycenaean to other areas of the Mediterranean is often cited as an explanation for the massive decline in the number of settlements on the mainland.²⁷ The arrival of Mycenaean in the east Mediterranean is suggested not only by archaeological evidence, but also by historical accounts of the Sea Peoples as invaders from the Aegean. Indeed, there are newly found sites in the Levant, following upon the destructions of the 12th century, which include significant amounts of

²⁴ Kilian 1988c: 135.

²⁵ App. A: 250-52; Kilian 1981: 53-56; 1990.

²⁶ Karo 1930.

²⁷ Drews (1993: 48-72) reviews the history of scholarship.

Mycenaean pottery.²⁸ Yet as with other aspects of transition at this time, the movement of Mycenaeans to other regions most likely began before the moment of crisis.

The parties involved in interregional exchange during the LH IIIA-III B period, especially those working outside or against the palatial administration, are exactly the type of social leader with the motivations and connections to organize new settlements abroad. While I am hesitant to claim the Sea Peoples or the new residents of Ashkelon as the very same individuals who acquired imports in the Argolid, we might well think of them as the Aegean counterparts to Artzy's "nomads of the sea."²⁹ Rather than a single mass migration, however, it is more likely that this type of movement took place gradually, and probably in connection with the large quantities of Mycenaean ceramics exported to Cyprus and the Levant in the LH III B.³⁰ This is one of several topics that lay somewhat outside the main scope of the present study, but that I hope will be pursued in the future.

Intra-Aegean Exchange

The material of this dissertation was selected in order to answer questions concerning extra-Aegean contact in the Late Bronze Age. Aside from a few cases (including some dubious ones), the Early Mycenaean period is when ivory, glass, and foreign-made objects first reached mainland Greece. But it is also the period when Minoan Crete had its greatest influence on Mycenaean culture and emergent complexity, and the circulation and consumption of non-Aegean items was closely bound up with Minoan products. Defining imports as non-Aegean is, I believe, a fair assessment, given the much greater distance (both geographical and conceptual) between Greece and the Levant, for

²⁸ Dothan and Dothan 1992. Stager (1995) presents some of the more convincing evidence for Mycenaean populations at Ashkelon and other sites in the Philistine region, though Sherratt (1998) argues that a mass migration cannot be identified as precisely as Stager suggests, in terms of both chronology and ethnic/cultural identity.

²⁹ Artzy 1997.

³⁰ As argued by Niemeier 1998: 47-48.

example, than between points within the Aegean. As has been obvious at several points in the dissertation, these first cases of long-distance exchange cannot be fully separated from intra-Aegean interactions; nor probably should they be.

By the palatial period, however, there have been substantial shifts in relations between Crete and the mainland, and a fuller understanding of this exchange would help situate the role of extra-Aegean trade. Further study of the relations between the Argolid and Crete could include cases of Minoan imports in LH IIIB contexts, such as the Cretan stirrup jars found at Mycenae,³¹ and their implications for regional industries. Also, the Minoan influence on certain crafts should be tracked against more foreign impulses. The Minoan faience artifacts of the Shaft Graves, for example, are replaced by the objects of "International Style" in the palatial period.³²

Regional Comparisons

My study has concentrated on the Argolid, and it is important to maintain an awareness that the material and the results of this analysis are particular to the region. Although I have occasionally drawn comparisons with Boeotia, Crete, and Messenia (or sites within these regions), I have not been able to examine their use of imports, especially raw materials, in detail. Chapter 2 demonstrated the more frequent use of imported items in the Argolid, compared to the rest of mainland Greece, and I have connected this activity to the fragmentation of power in the region (p. 81-82). The distribution of glass and ivory objects has been interpreted as part of the assertion of palatial ties in the Argolid. I suspect that such a use is also more pronounced here than in other regions, where palatial dominance was more secure. Also, a wider perspective on the Argolid's use of imports might also be gained through more direct comparisons with LH IIIC Achaea and Euboea,

³¹ Catling *et al.* 1980; Haskell 1981.

³² Peltenburg 1991.

where the small number of imported items are evenly distributed, and there is no single power center.

Production sites

This work has been about Mycenae and its dominance over certain economic systems, especially the production and circulation of prestige items. This results from the attempt to understand the surviving trade material for what it was. It does not, however, represent the political economy of the LBA Argolid in its entirety. Putting import consumption in this more complete context would require a more thorough understanding of craft production in the Argolid. As we have seen, the evidence for the working of ivory and glass is partial at best (circumspect might be a better term), but at least there are vague indications of these palatial industries. What is truly missing is evidence for economic activities, especially household production, at other sites. Berbati is the best example currently known and, as discussed its production might be well integrated with the palatial economy. The (further) archaeological investigation of other sites in the Argolid will no doubt add important dimensions to discussions of production and circulation. Even efforts to understand the palatial economy could benefit from fieldwork at lesser sites, since its industries were likely dispersed throughout the region. The Linear B records of Pylos attest to individual craftsmen, such as smiths, and production centers, for example the collectives of textile-workers, in sites throughout Messenia. And even the working of precious materials was not necessarily restricted to the center, as demonstrated by Mesopotamian texts where single consignments of tusks were issued to individual carvers.³³

³³ Barnett 1982: 86 n. 12.

Final Thoughts

This dissertation has focused on one particular case study of how long-distance trade had effects which ranged far beyond the sphere of economy. Within the broad subject of interregional exchange, I have investigated one region, and within the trade material of that region, only select commodities. This somewhat narrow selection, however, has incorporated many dimensions of ancient trade. It has shown that Aegean - east Mediterranean relations were complex, not only in the multi-directional flow of commodities by means of co-existing mechanisms, but also in the various reactions they provoked. The human and material transactions enabled by this contact were continued to occur long after the initial exchange of goods. Even if a regional power center, like Mycenae, was bolstered by an act (or long-standing relationship) of exchange, it stood to benefit further through manipulating the its newly acquired goods. The acts of consumption with which the present study has been concerned carried the impact of exchange to other places and into later times.

FIGURES

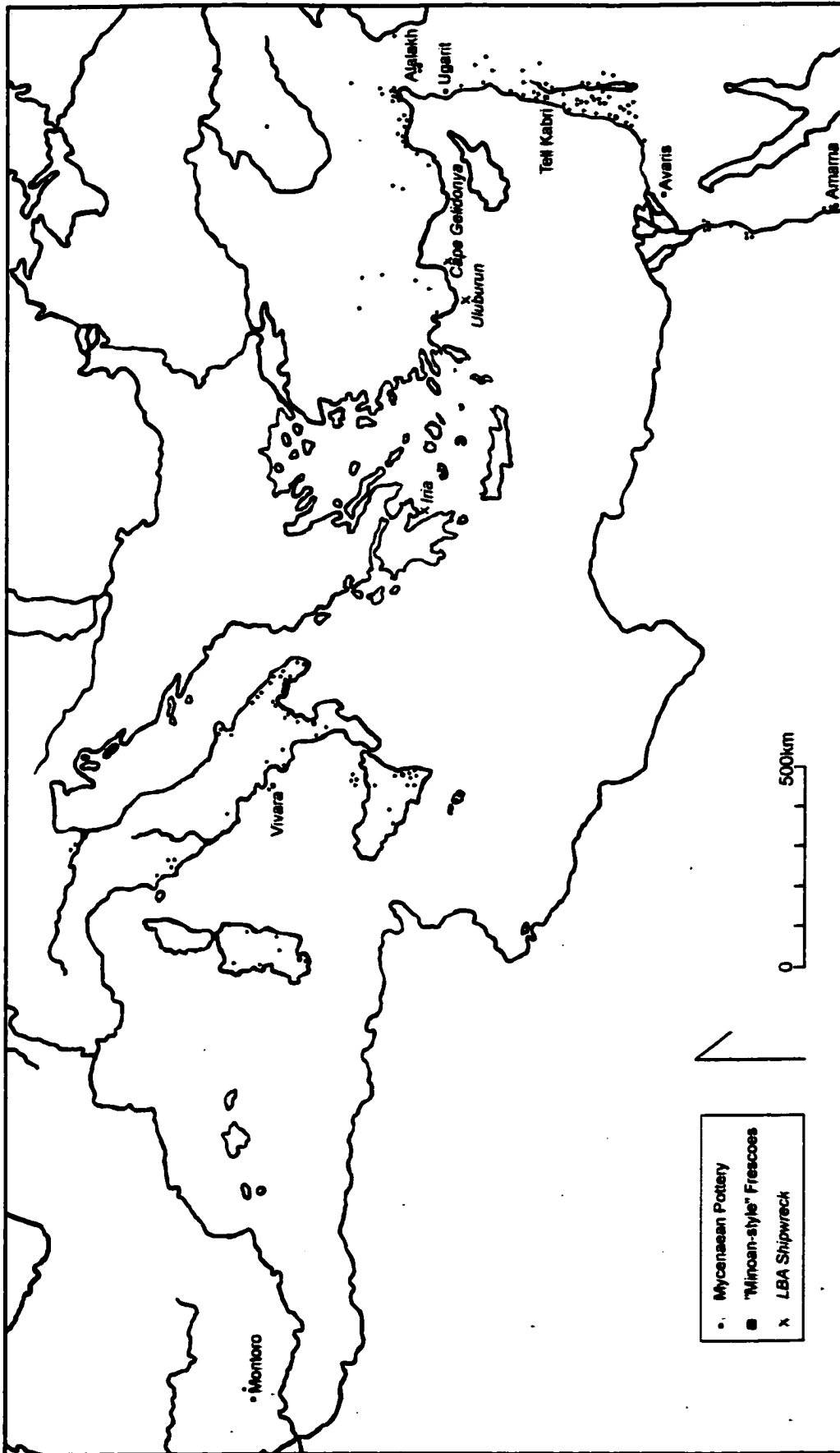


Fig. 1.1 Locations of Late Bronze Age Mediterranean shipwrecks and extra-Aegean finds of Mycenaean pottery and "Minoan-style" frescoes.

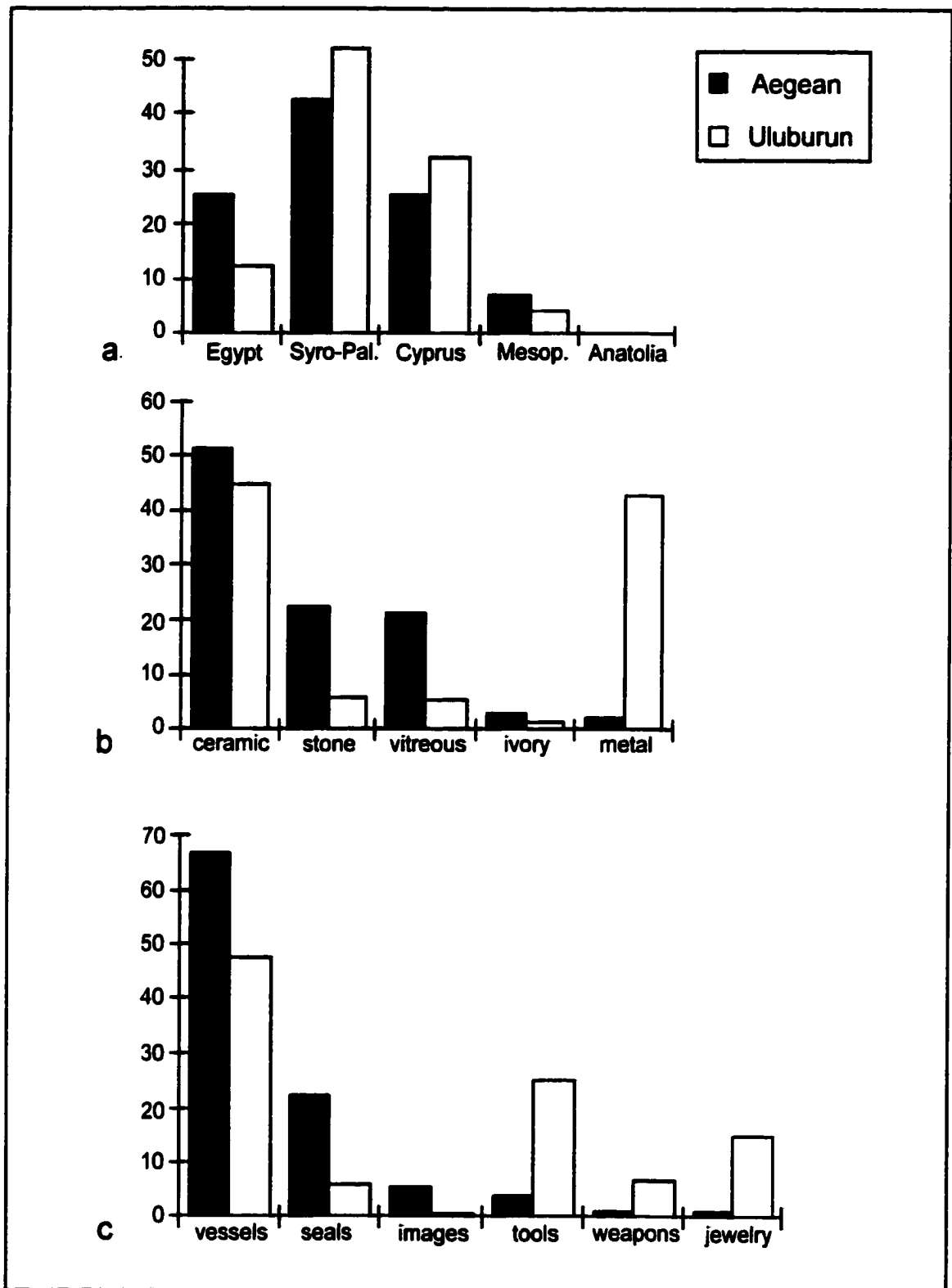


Fig. 1.2 *Orientalia* found in LH/LM IIIA-B Aegean contexts and the Uluburun shipwreck: a) percentage by country of origin (after Cline 1994: fig. 22); b) percentage by material; c) percentage by object-type.



2.1 Major settlements of the Late Bronze Age Aegean.

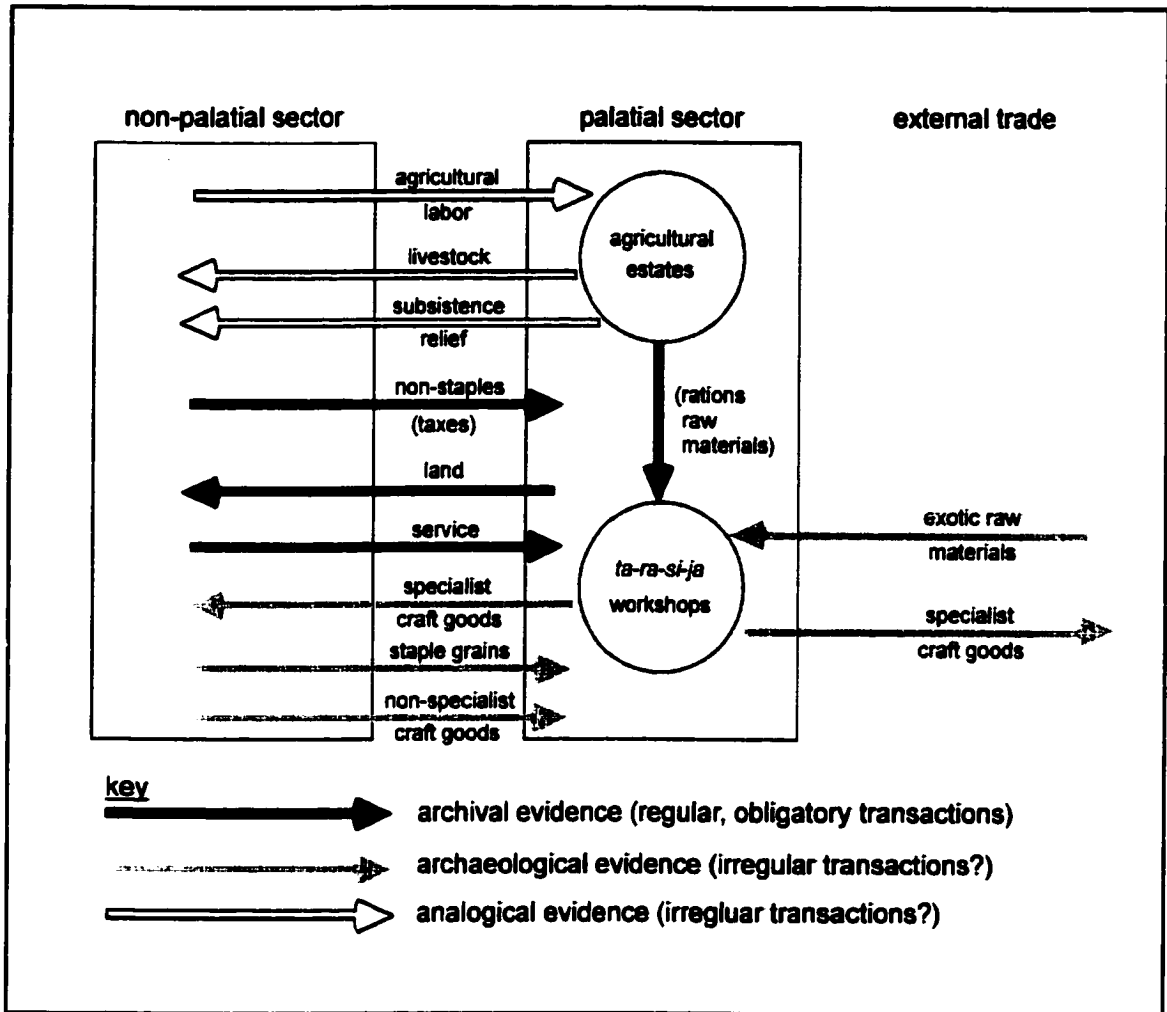


Fig. 2.2 Combined evidence for the Mycenaean palatial economy (after Halstead 1992b: fig. 4).

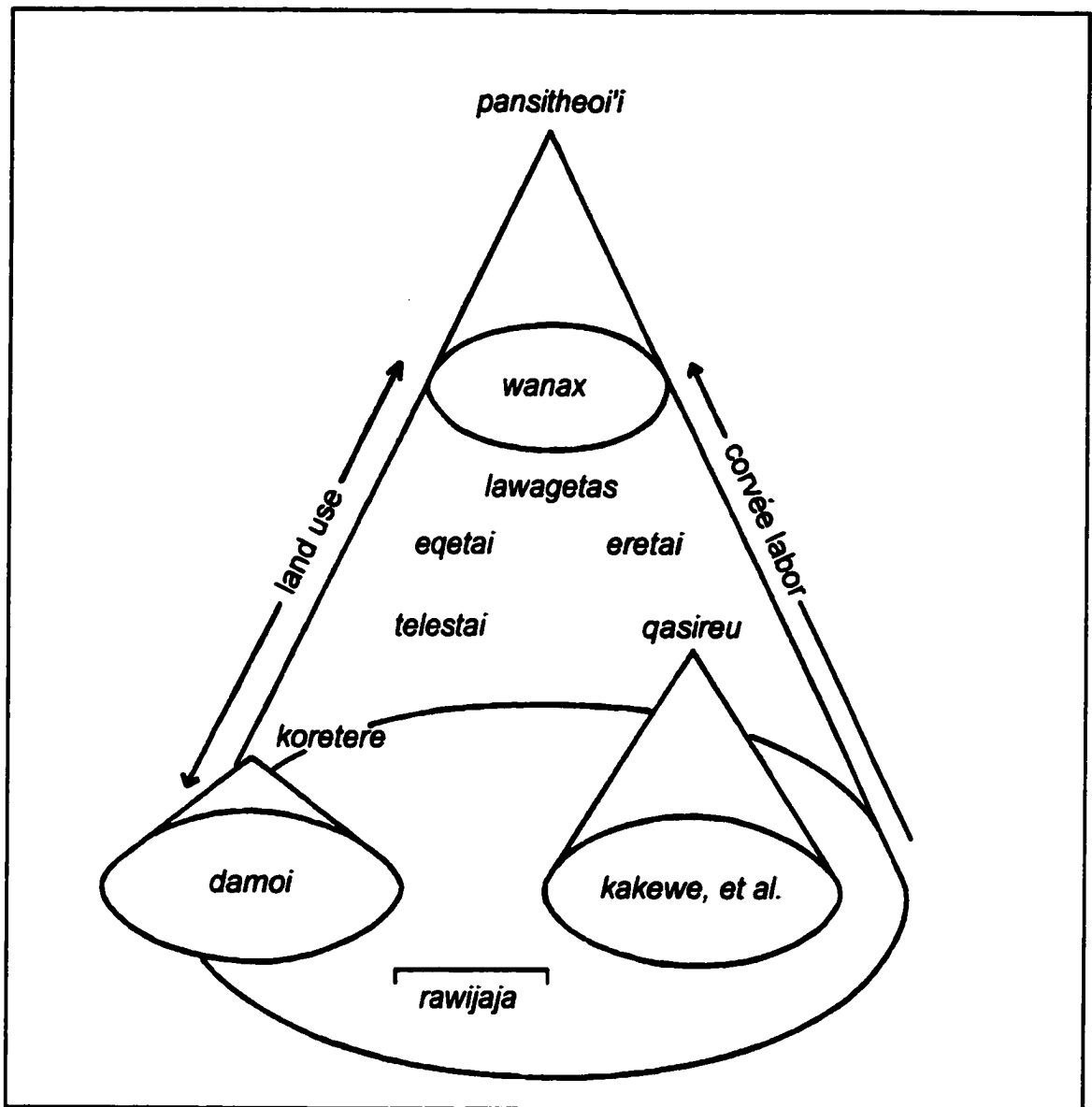
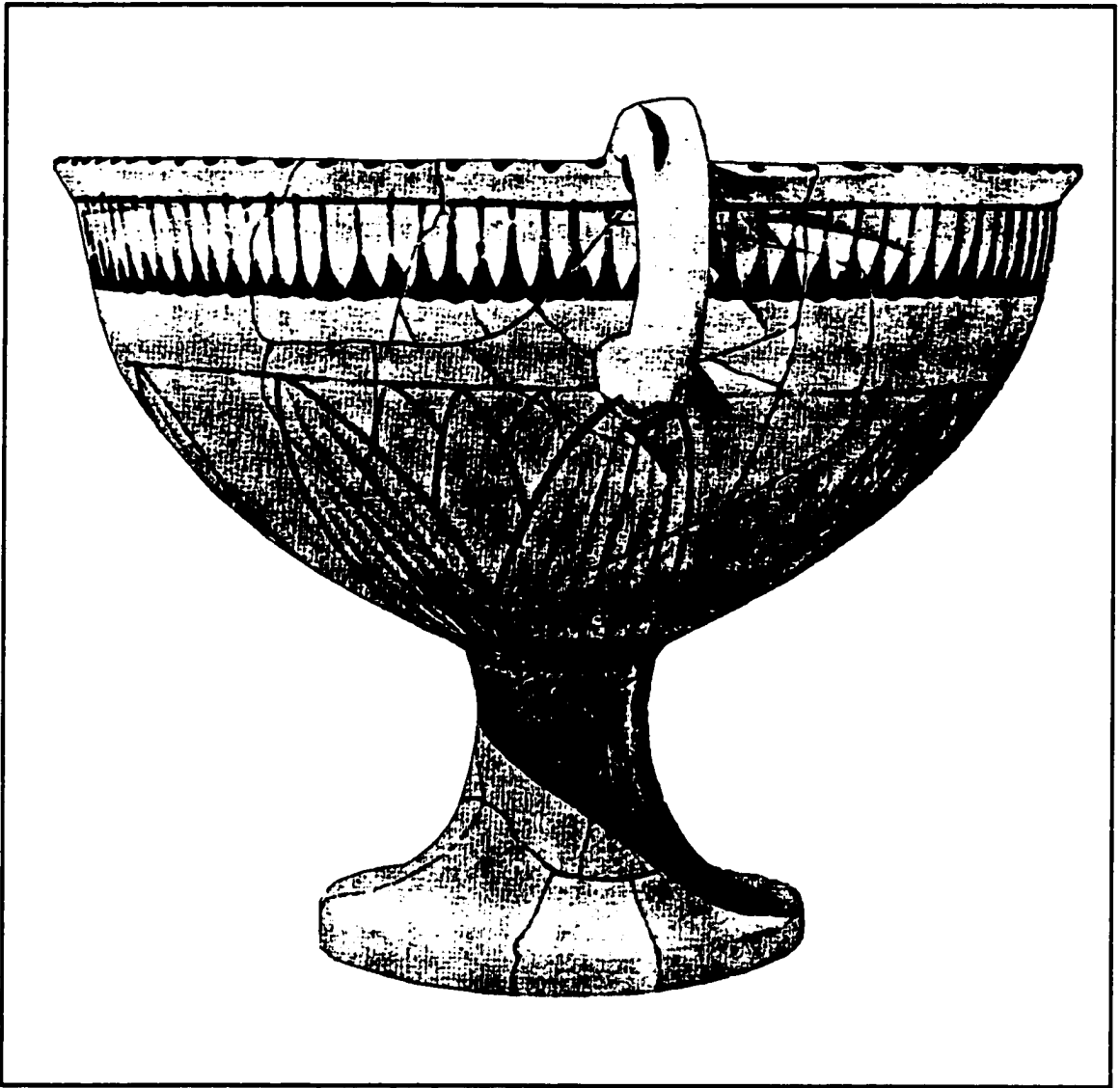
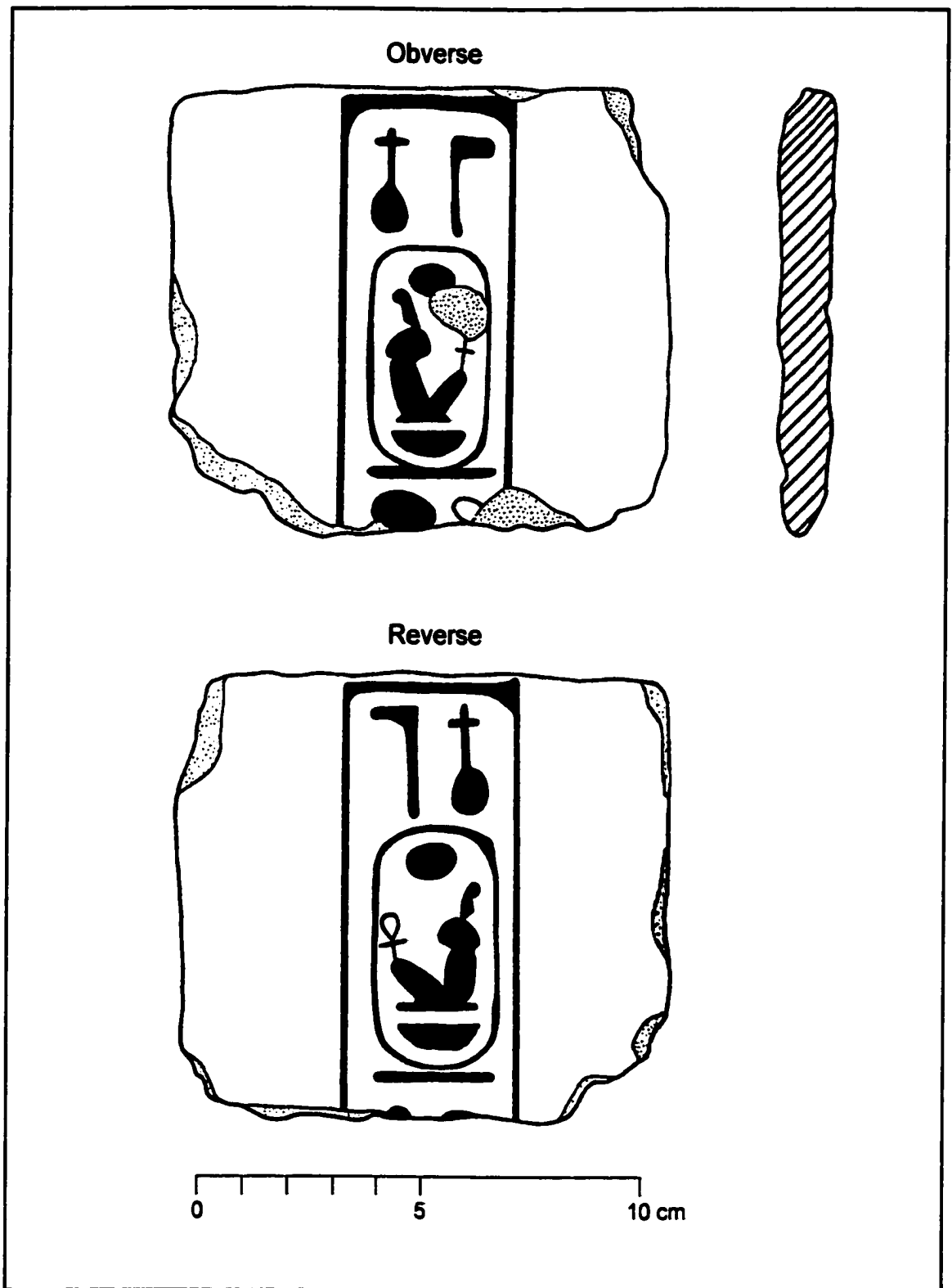


Fig. 2.3 Social hierarchy in the Linear B archives (after Kilian 1988b: fig. 1).



2.4 Monochrome faience kylix (after Wace 1954: pl. 19).



2.5 Amenhotep III faience plaque fragment, Myc Exc 68-1000 (after Cline 1990: fig. 1).

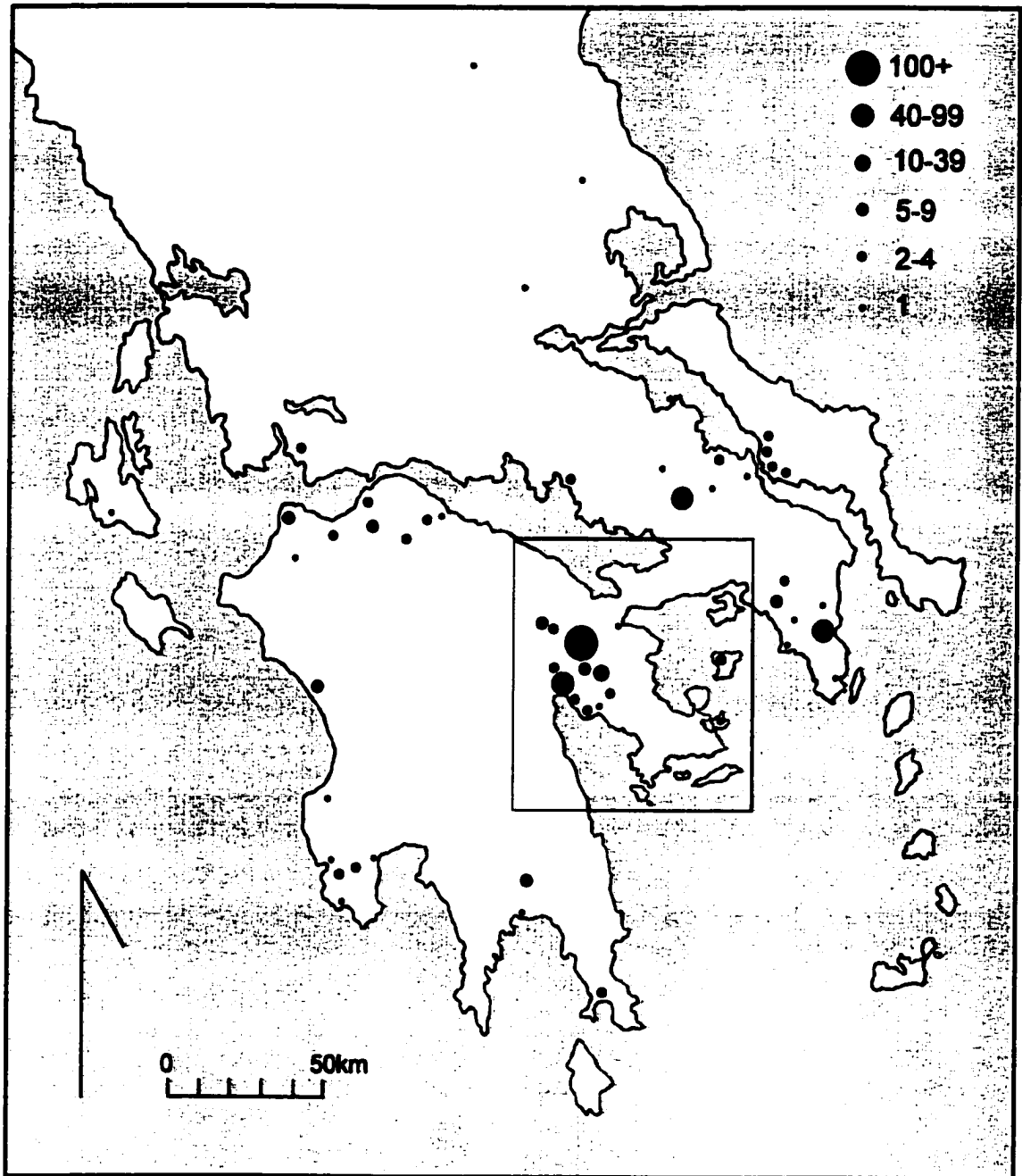


Fig. 2.6 Distribution of imported items in Late Helladic contexts.

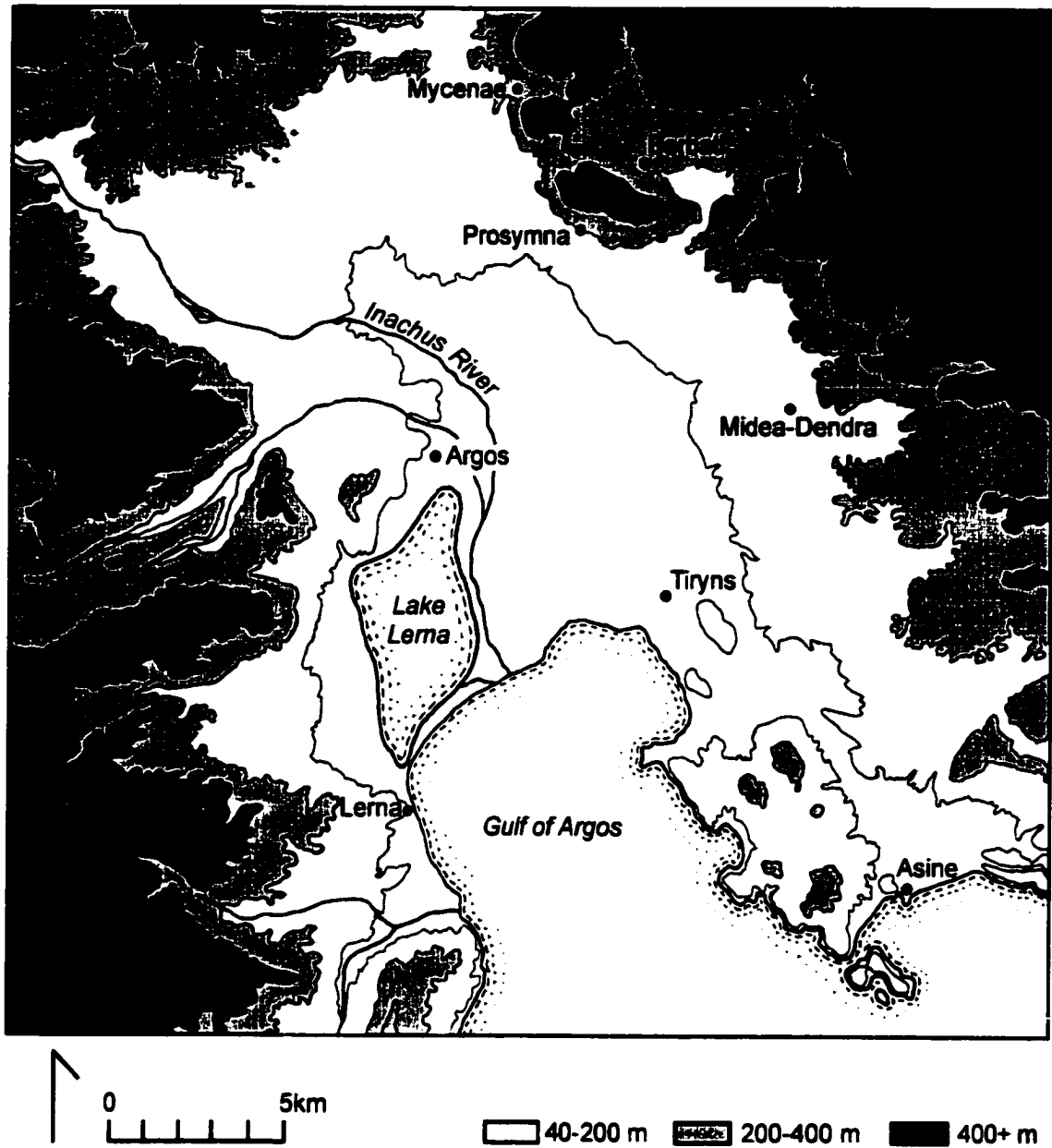


Fig 3.1 Reconstructed landscape of the Late Bronze Age Argolid (after Dietz 1991: fig. 83).

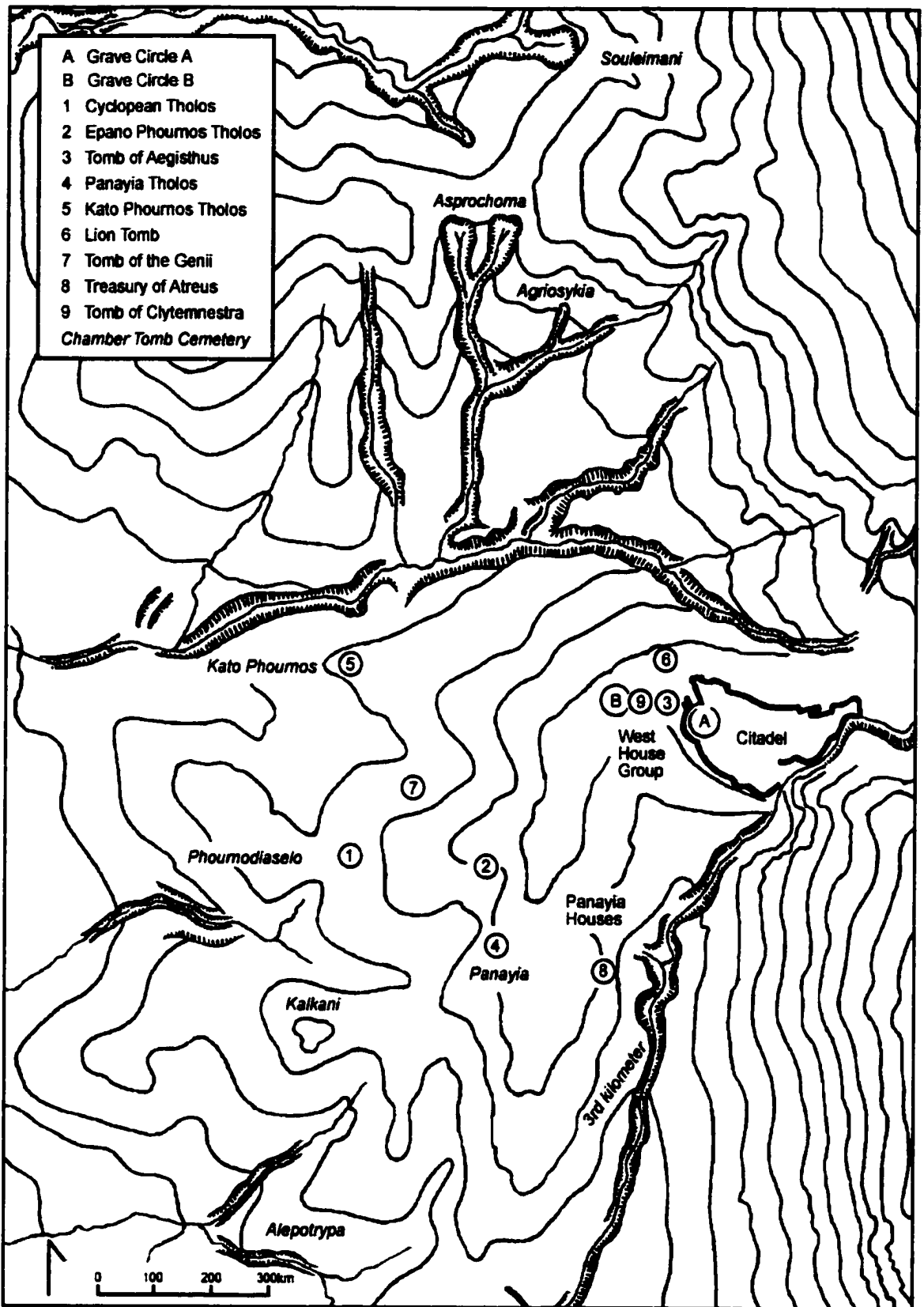


Fig. 3.2 Mycenae area (after Wace 1949: map 2).

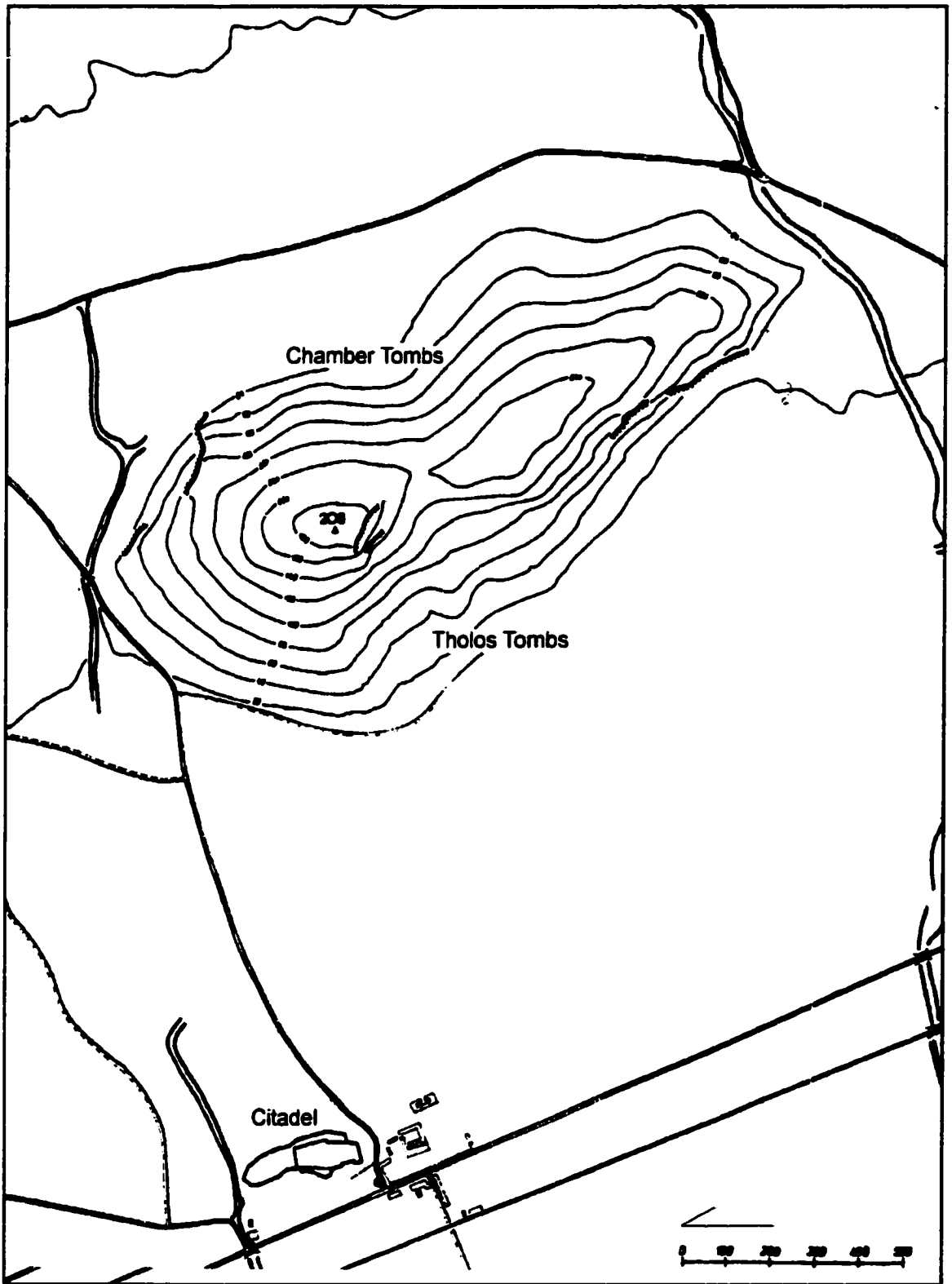


Fig. 3.3 Tiryns area (after Jantzen 1975: fig. 96).



Fig. 3.4 Excavated areas within the Midea citadel (after Walberg 1998: plan 3).

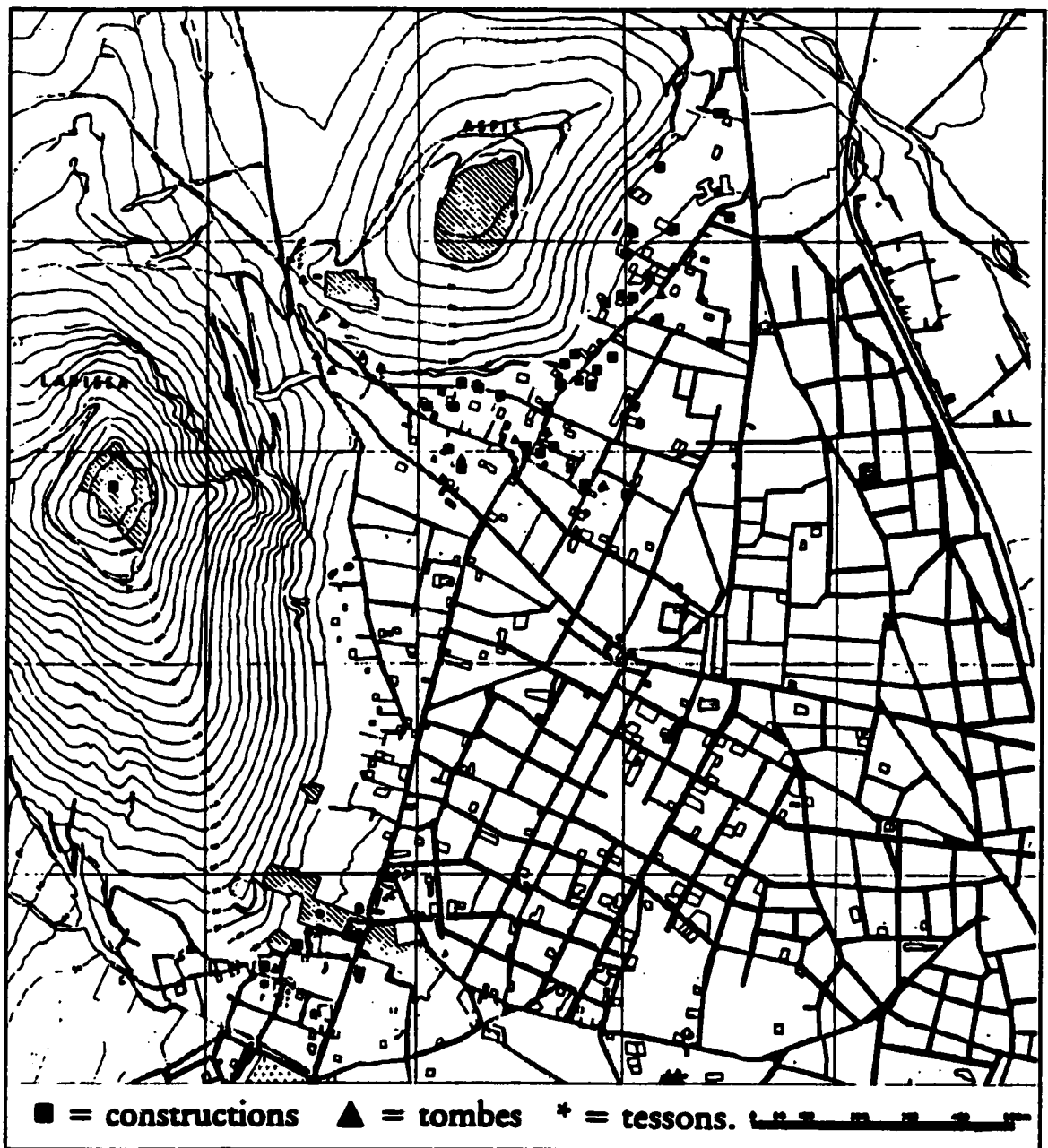


Fig. 3.5 Late Helladic finds in the city of Argos (after Touchais 1996: fig. 2).

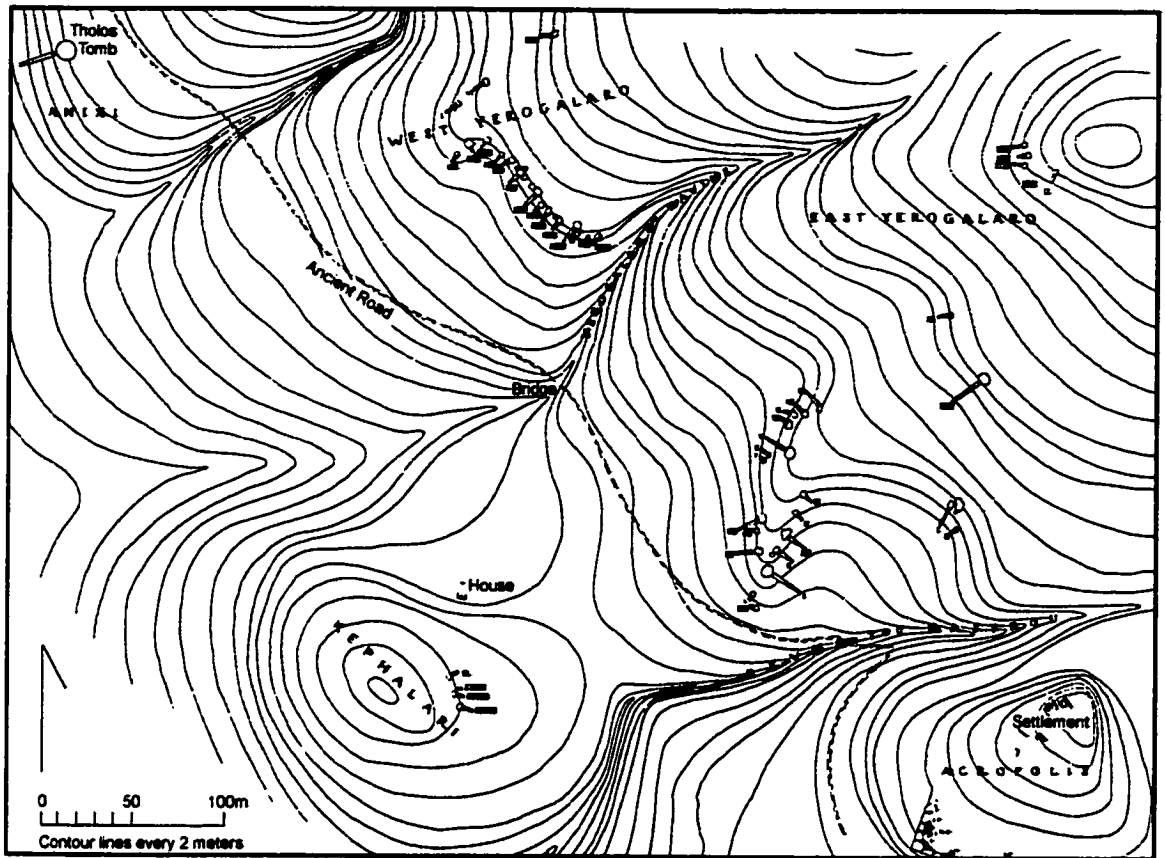


Fig. 3.6 Late Helladic settlement and tombs of Prosymna (after Blegen 1937: pl. 1).

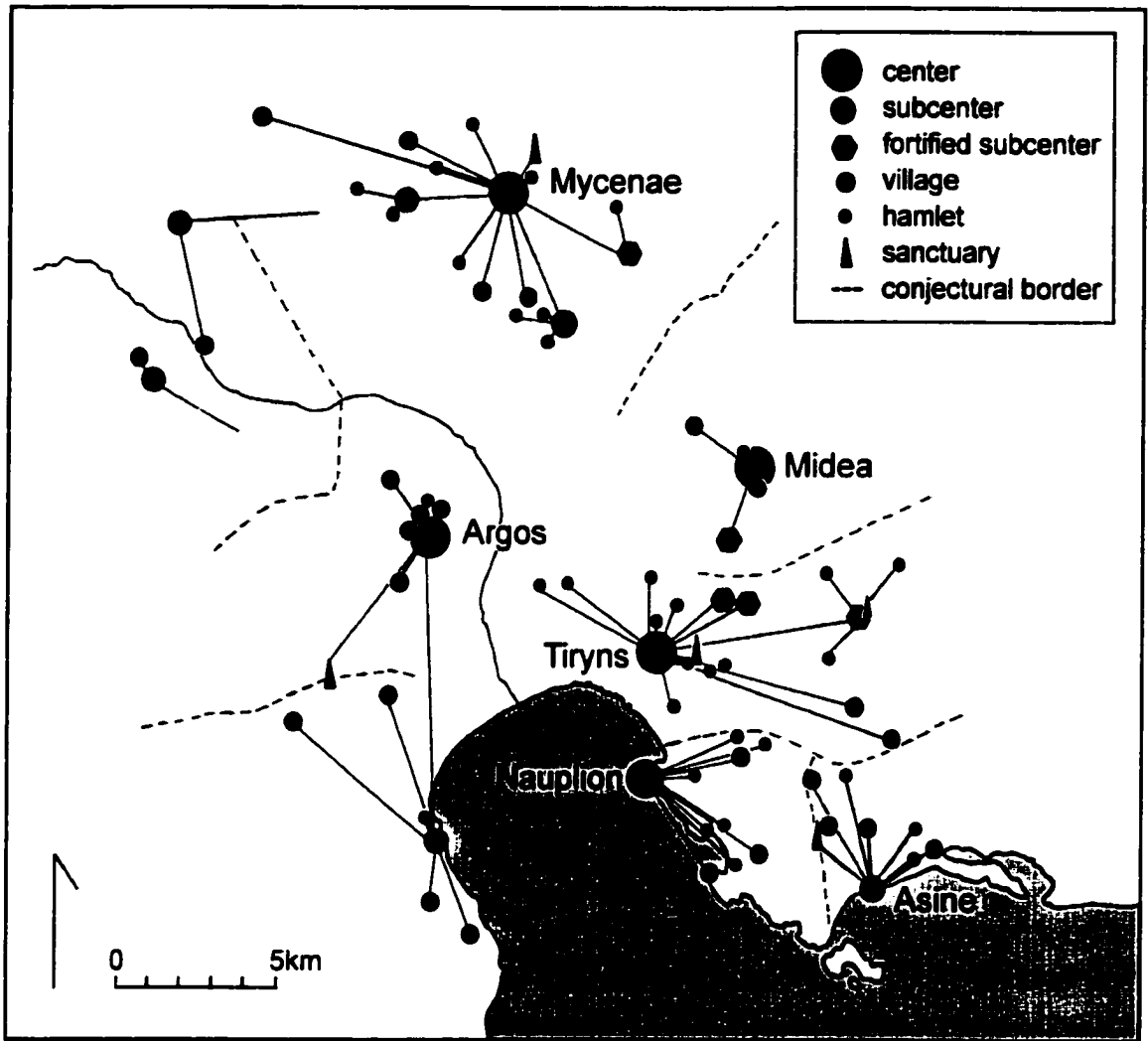


Fig. 3.7 Hierarchical map of the Mycenaean settlements in the Argolid (after Kilian 1988b: fig. 3).

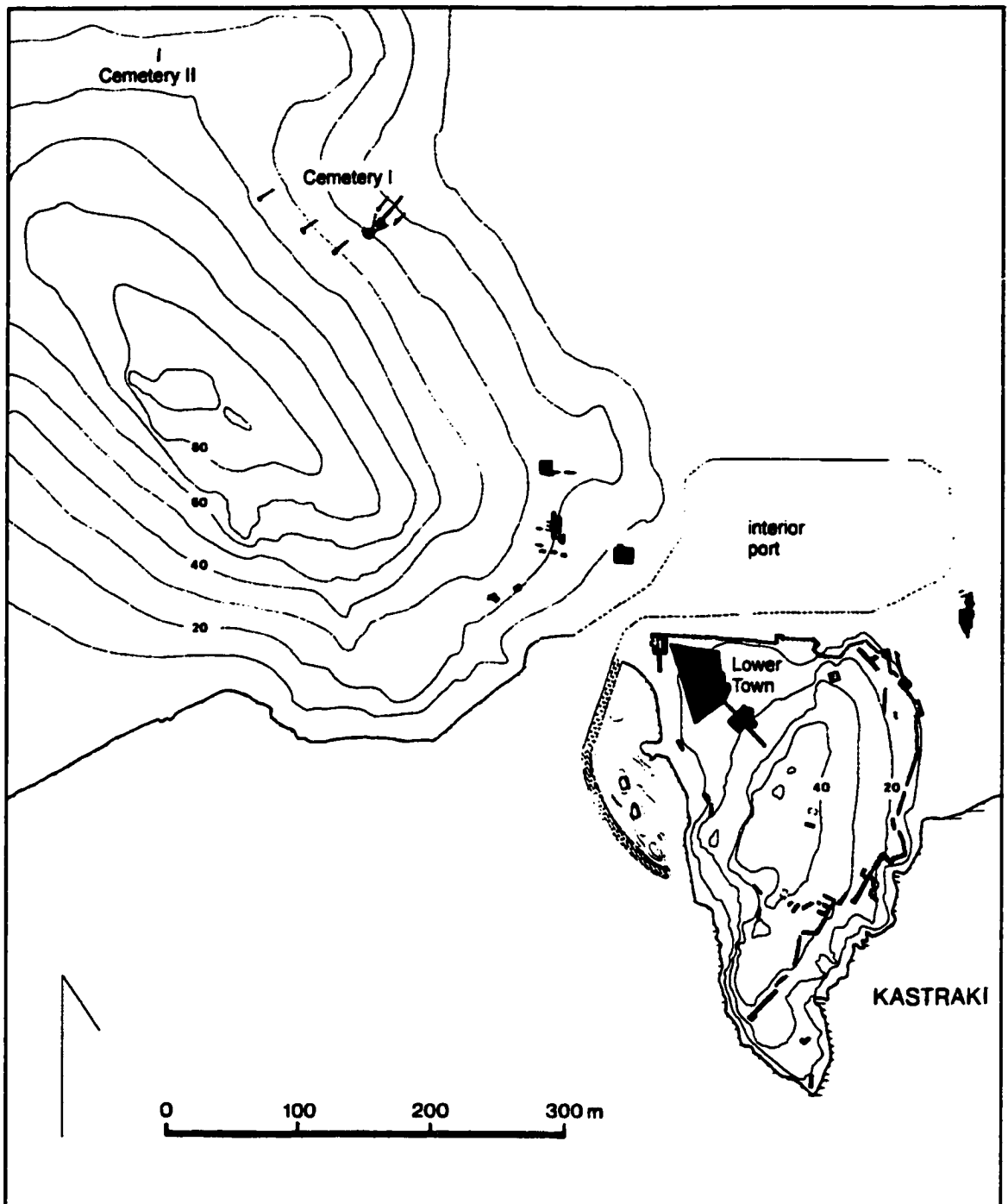


Fig 3.8 Excavated areas at the site of Asine, with restoration of the interior harbor (after Zangger 19994a: fig. 15).

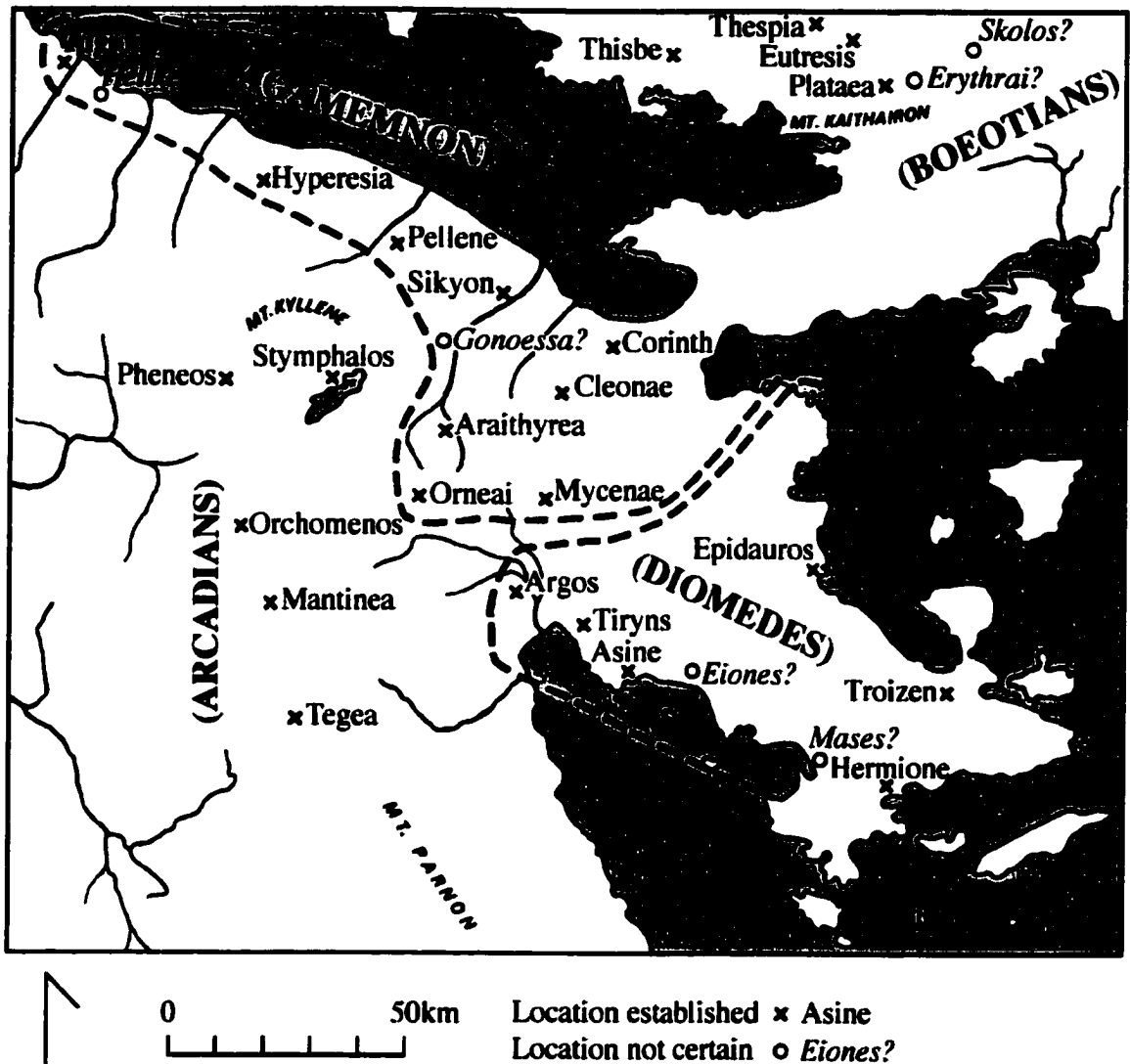


Fig. 3.9 The affiliation of sites according to the *Iliad's* Catalogue of the Ships (after Hope Simpson and Lazenby 1970: map 3).

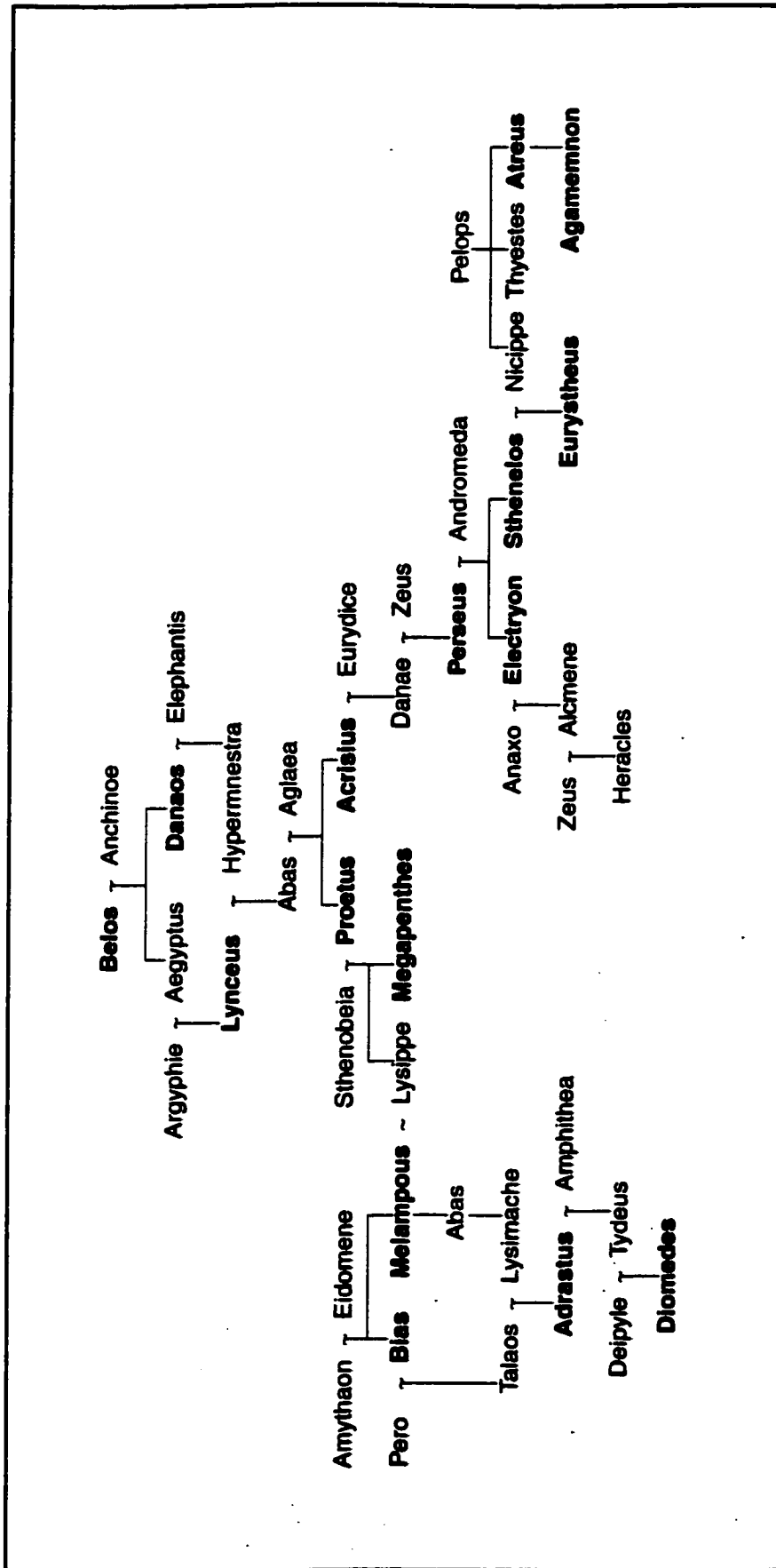


Fig. 3.10 Select genealogy of the Belid line according to pseudo-Apollodorus, with names of those who held political power in bold.

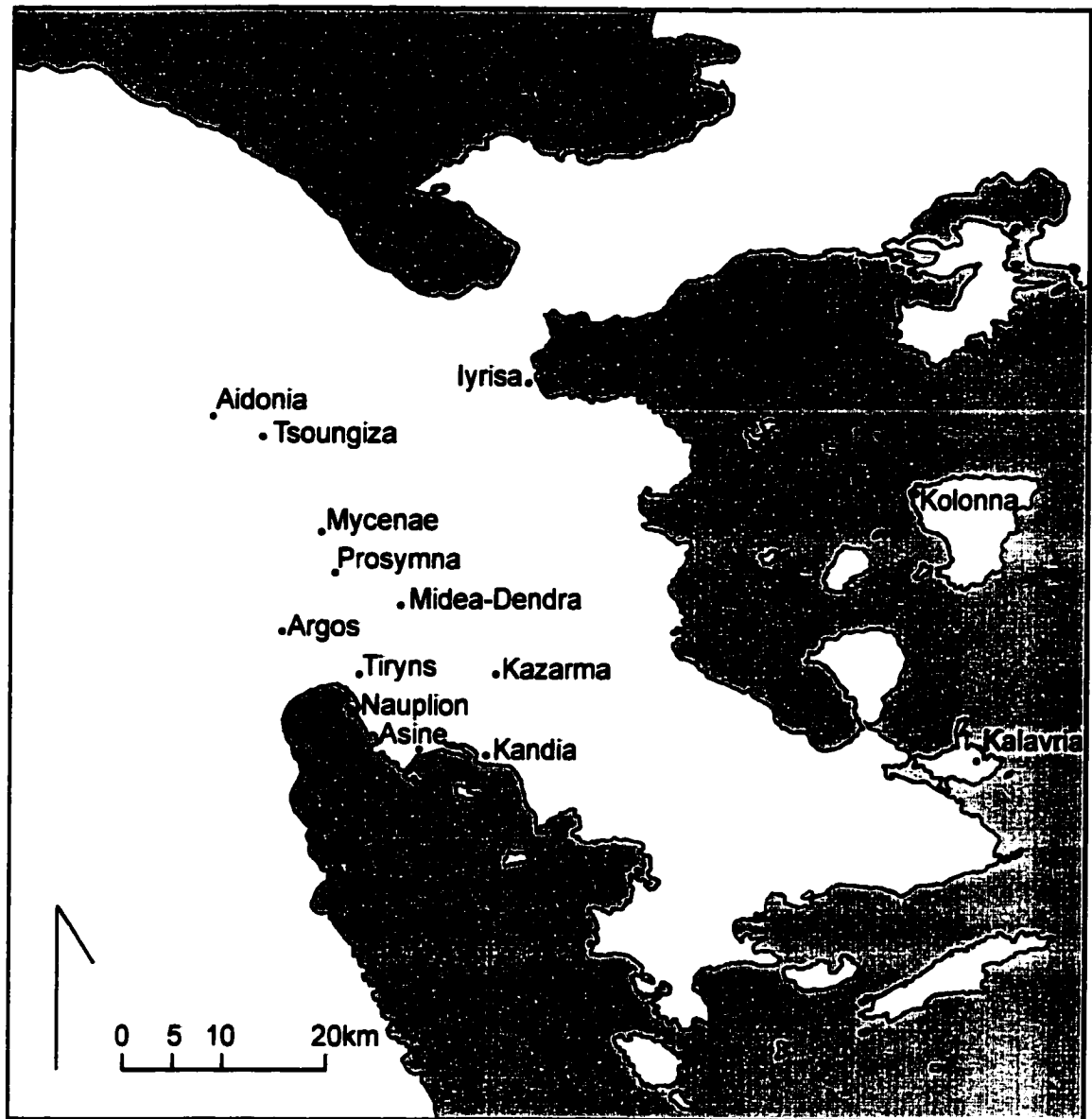


Fig. 3.11 Sites in the northeast Peloponnese where imported items have been found in Late Helladic contexts.

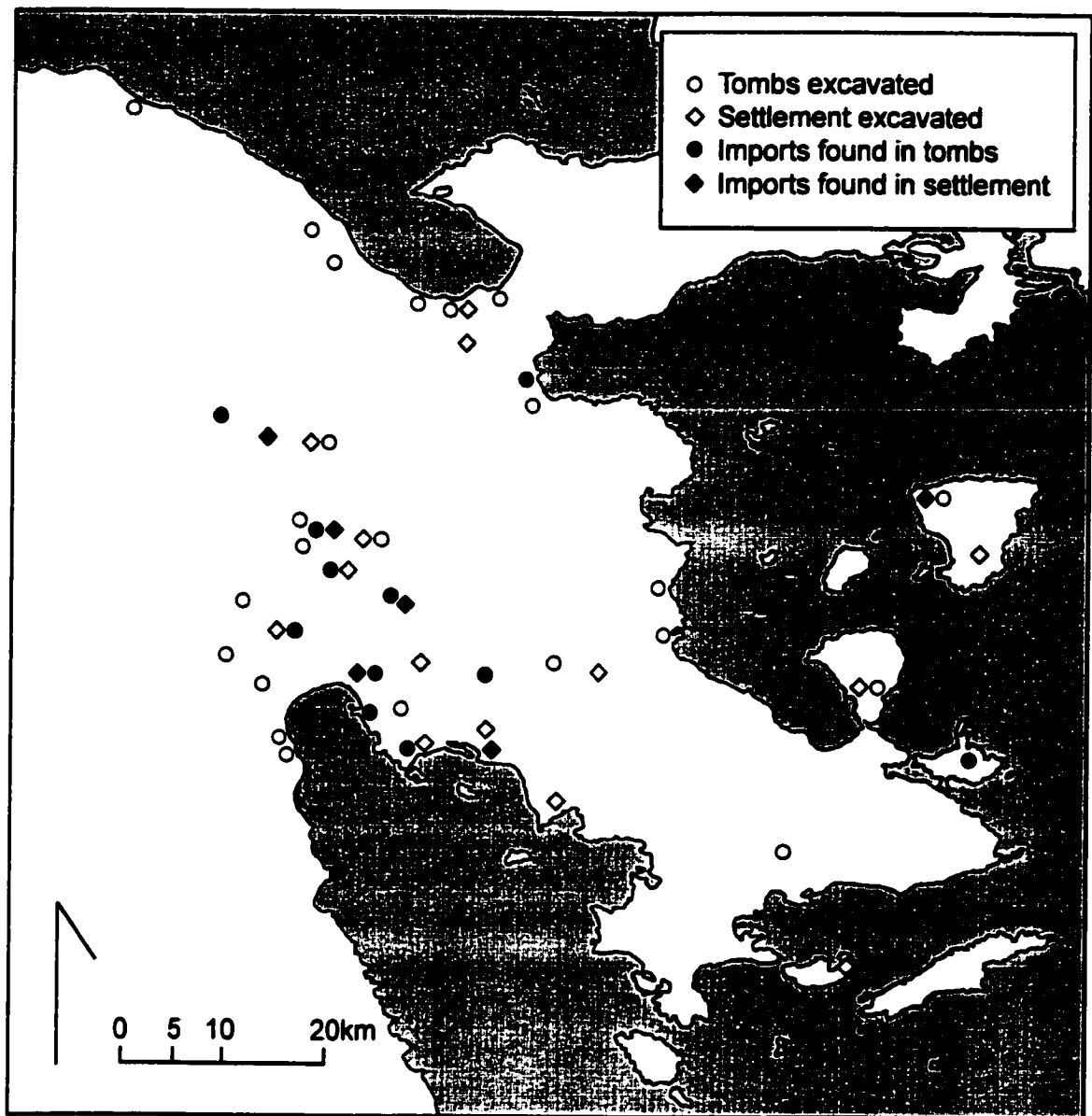


Fig 3.12 Distribution of sites where imported items have been found among excavated Late Helladic tombs and settlements in the northeast Peloponnese.

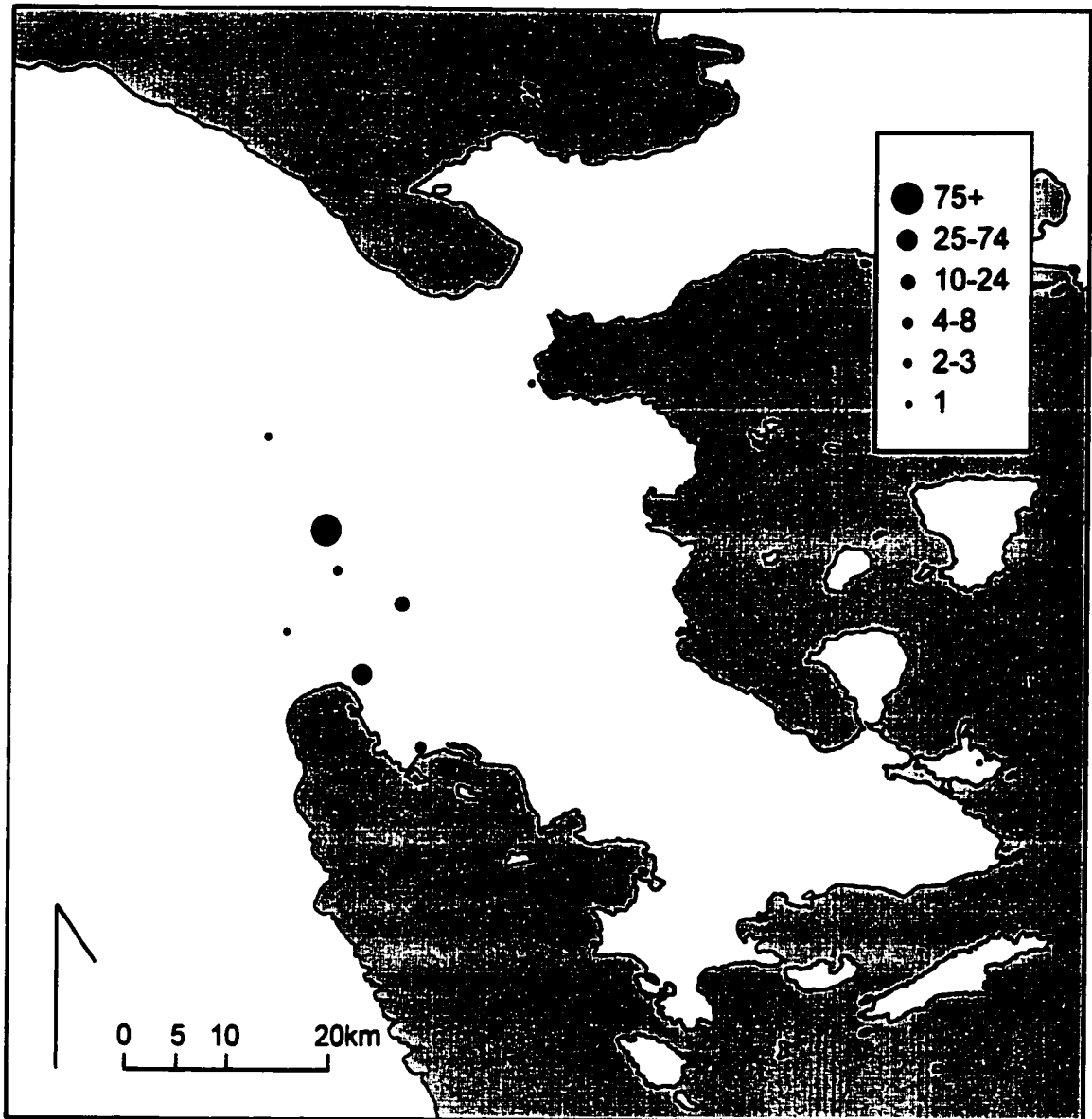


Fig. 3.13 Distribution of imported items in LH IIIA-B Argolid contexts.

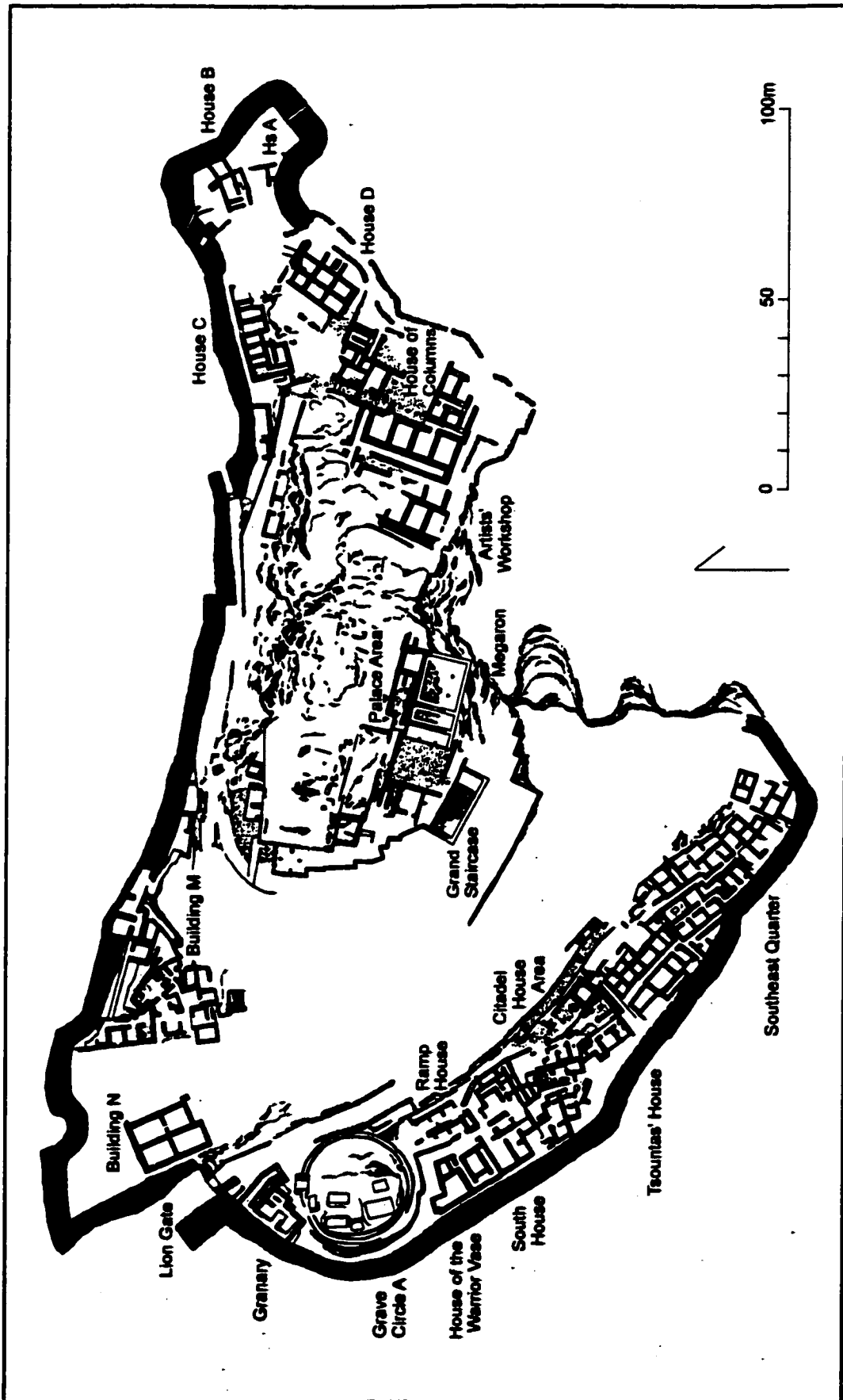


Fig. 4.1 Structures in the citadel of Mycenae (after Iakovides 1983: plan 4).

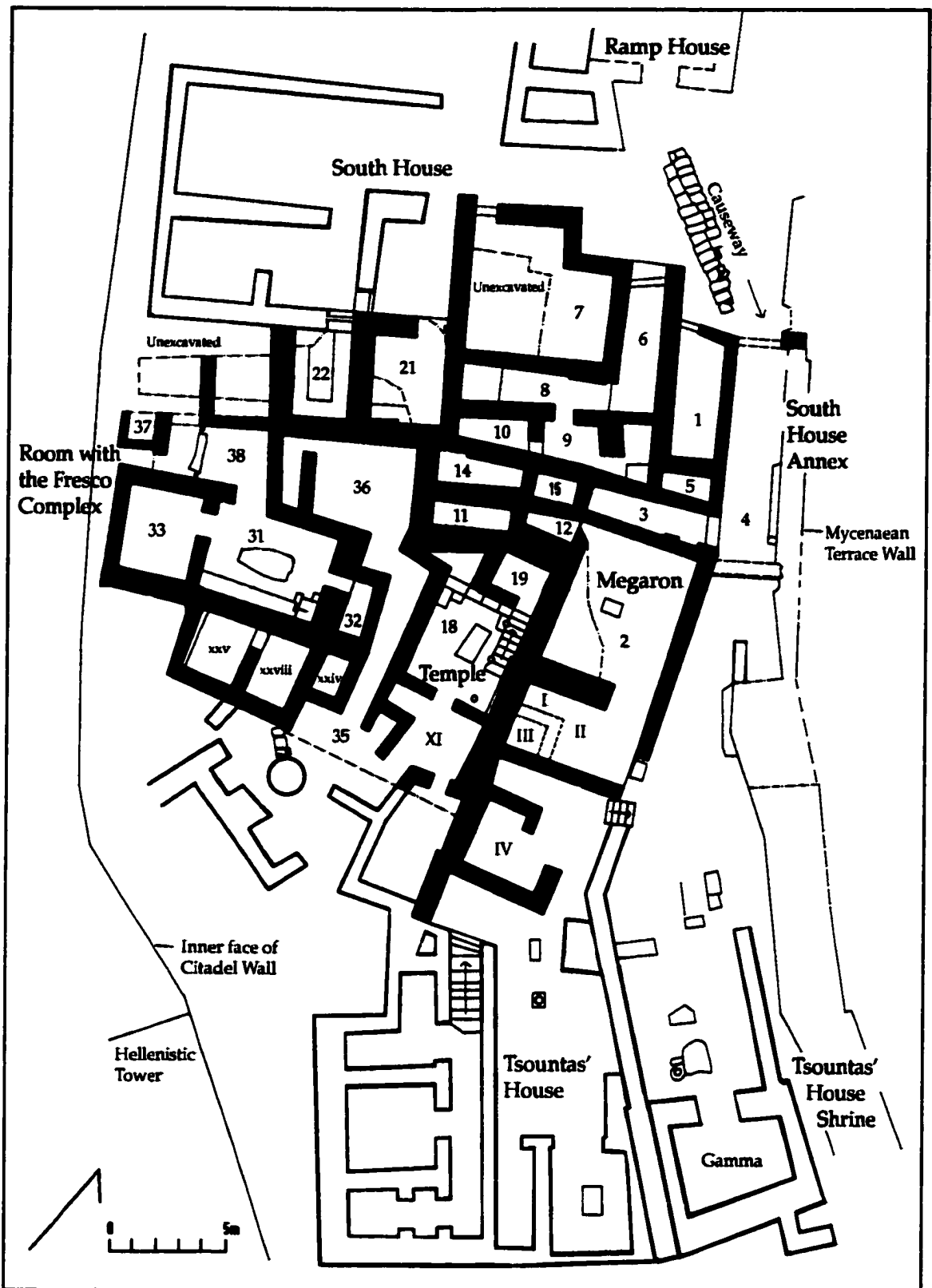


Fig. 4.2 The Citadel House Area at Mycenae (after French 1981a: fig. 1).

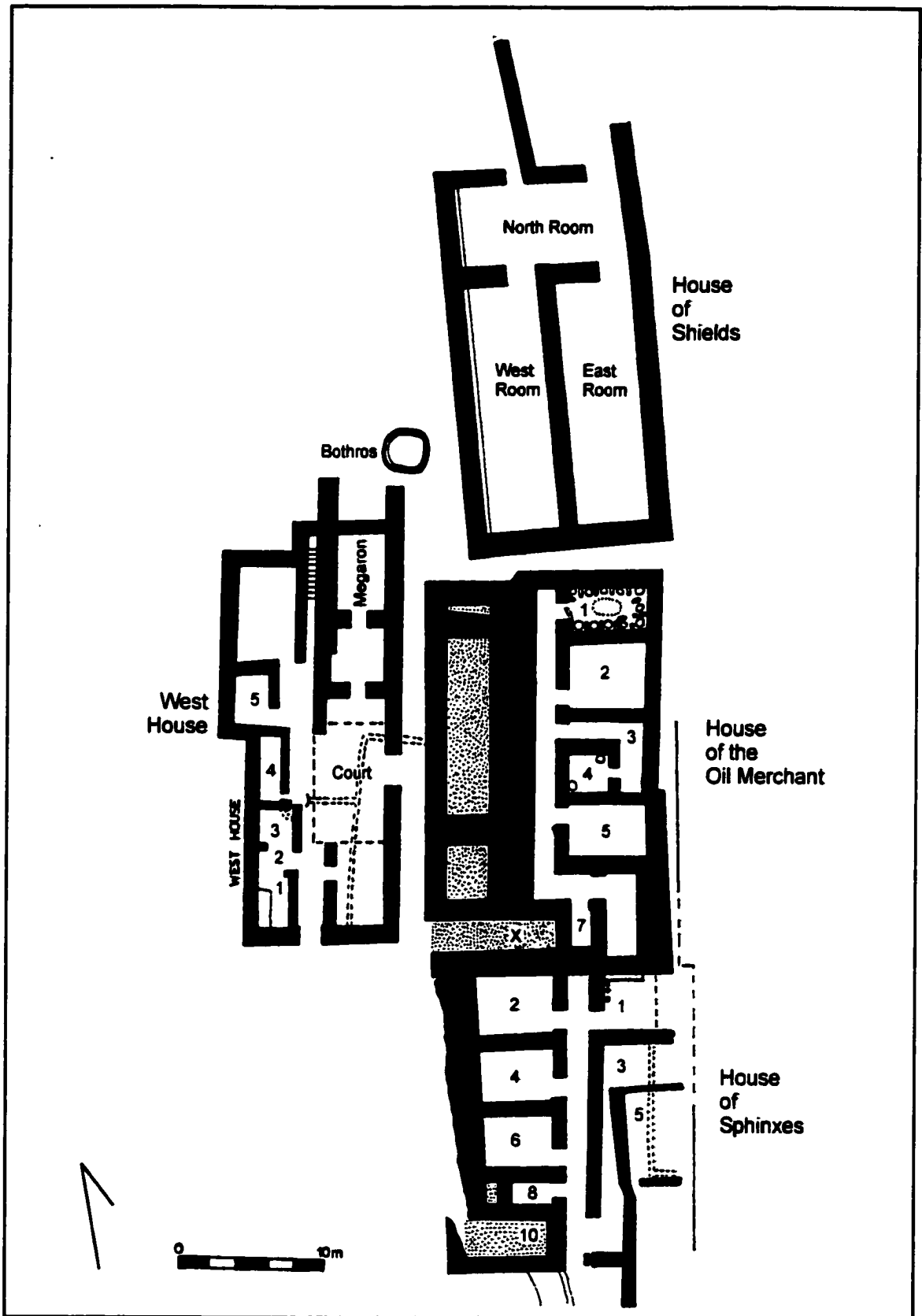


Fig. 4.3 The West House Group at Mycenae (after French 1967: fig. 1).

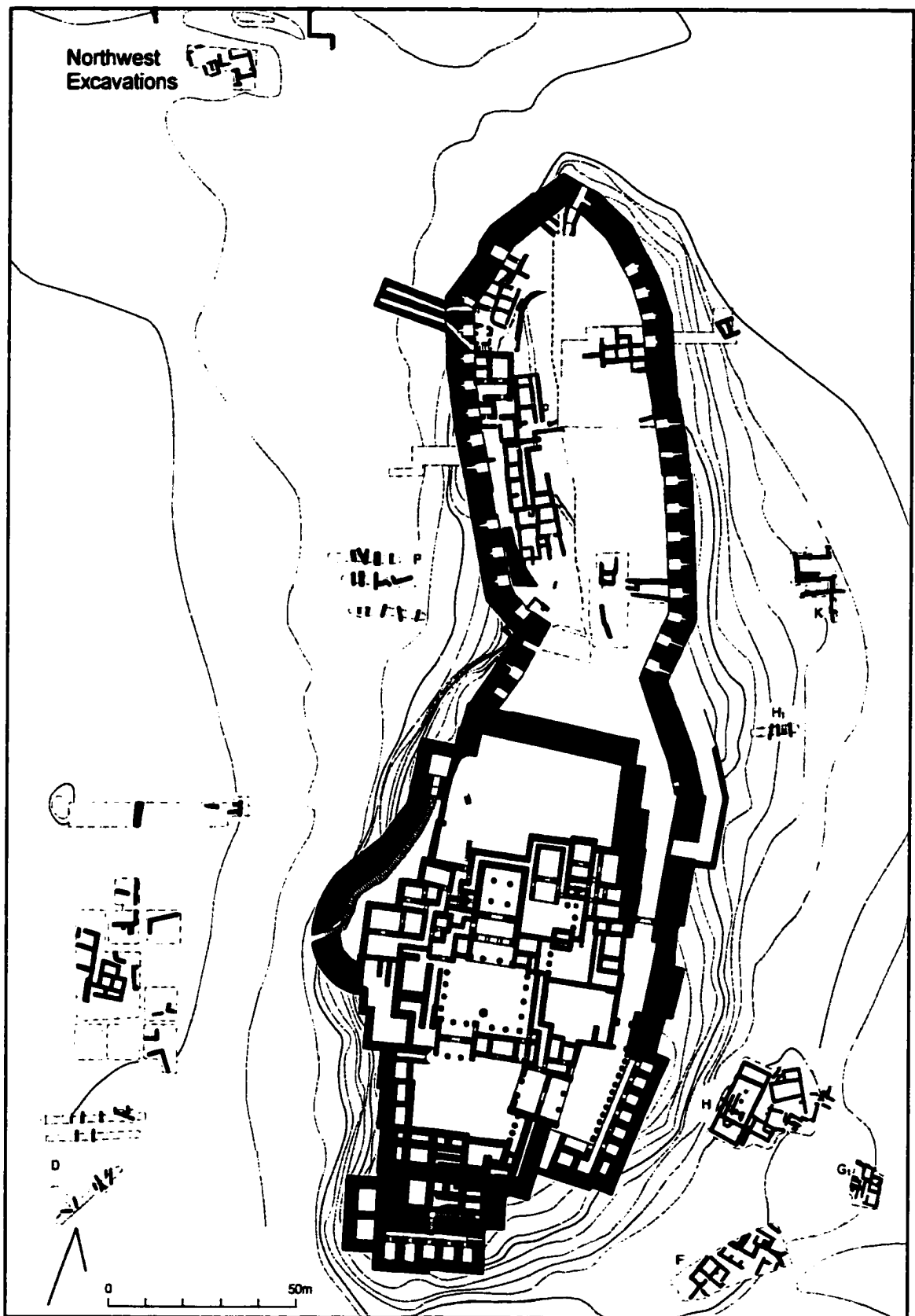


Fig. 4.4 Tiryns Citadel area (after Rieger and Böser 1990: plan 4).

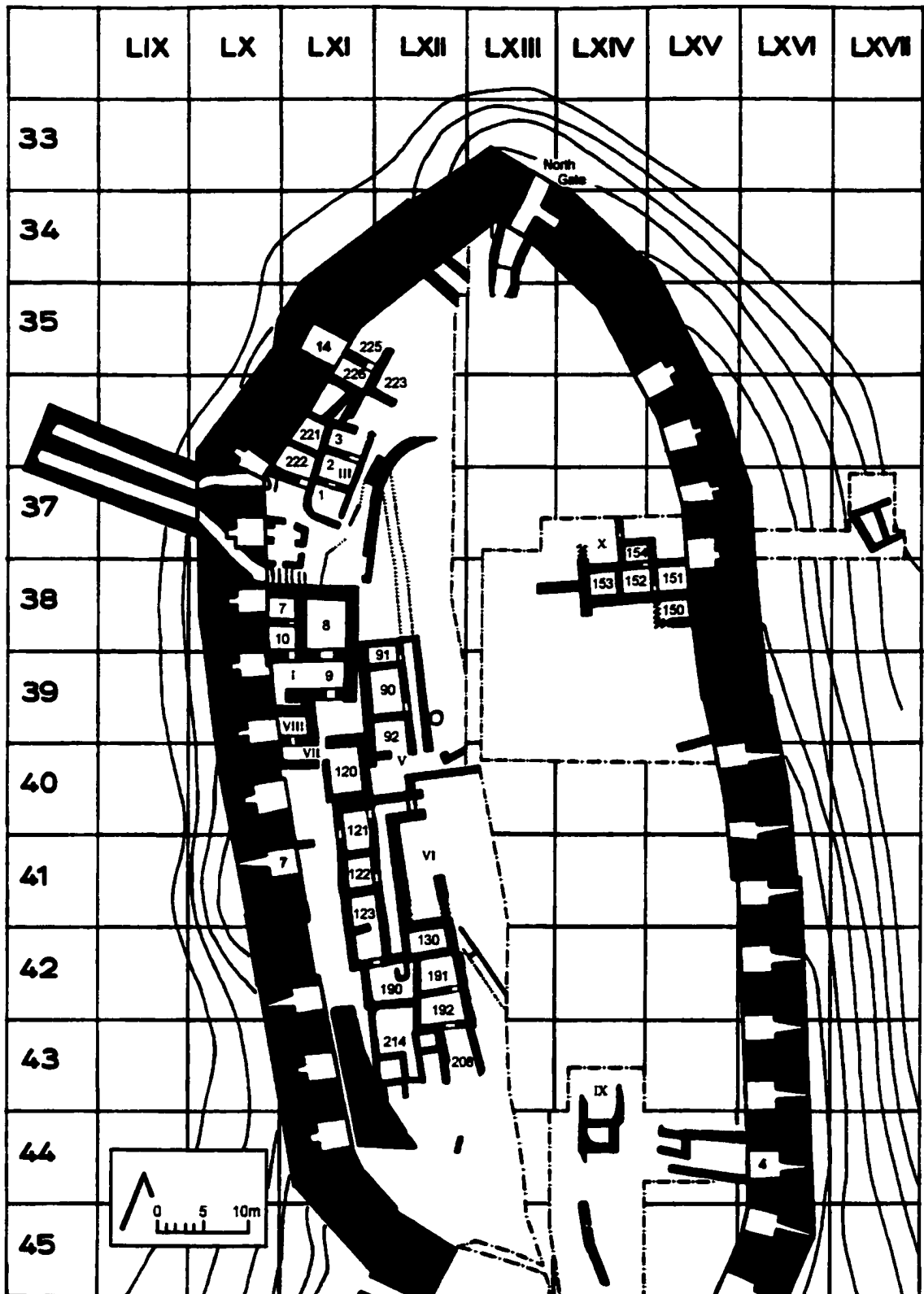


Fig 4.5 Tiryns Unterburg, LH IIIB phase (after Kilian *et al.* 1982: fig 23; Kilian 1988c: fig. 9).



Fig. 4.6 The "Presentation Scene" from the Ayia Triada sarcophagus, with restorations.

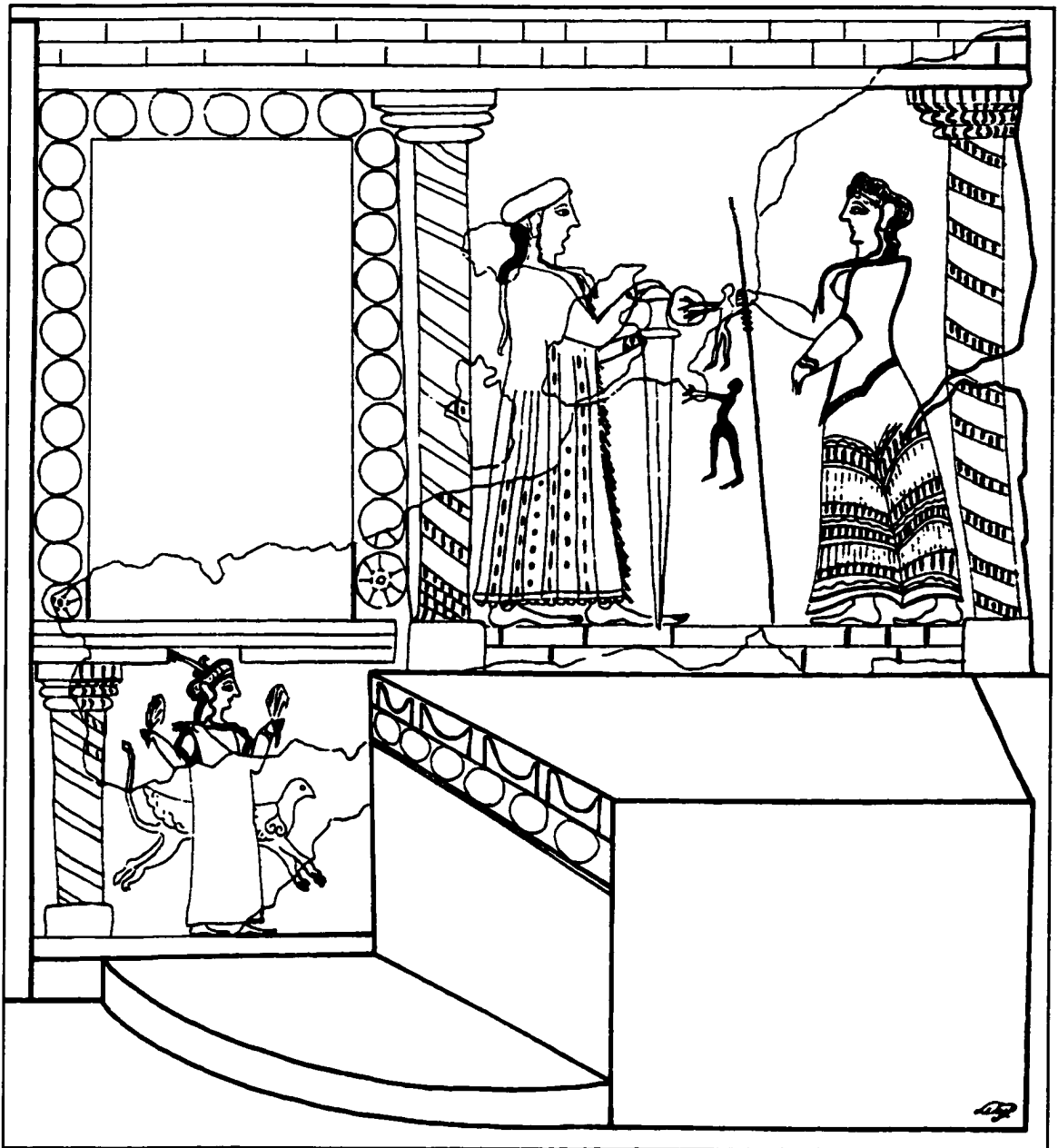


Fig. 4.7 Restoration of Citadel House Room 31 east wall with altar and fresco (after Marinatos 1988: fig. 3).

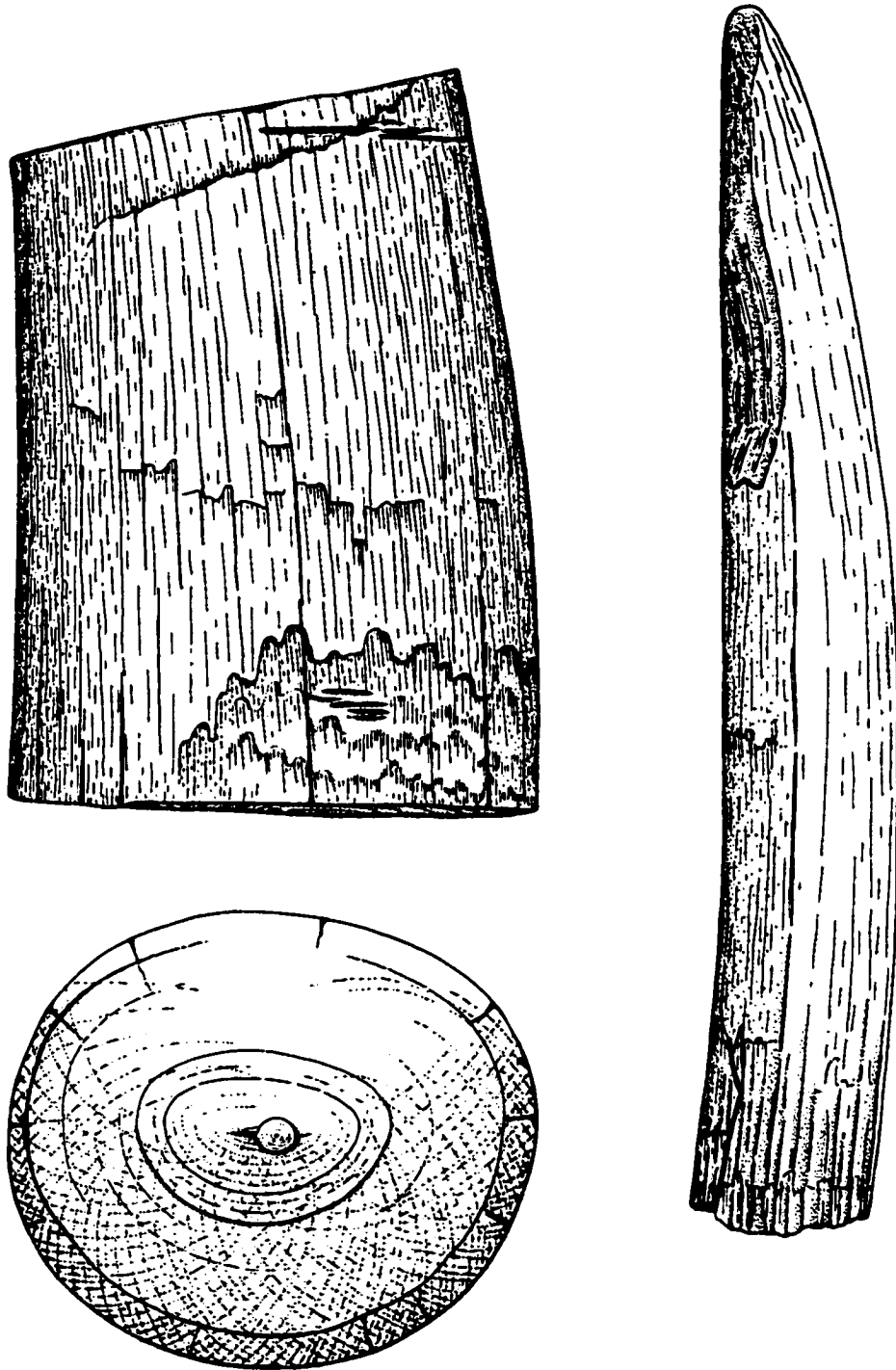


Fig. 5.1 Section of an elephant tusk (KW 162) and a hippopotamus incisor (KW 167) from the Uluburun shipwreck, scale 1:2 (after Bass 1986: figs. 18-19).

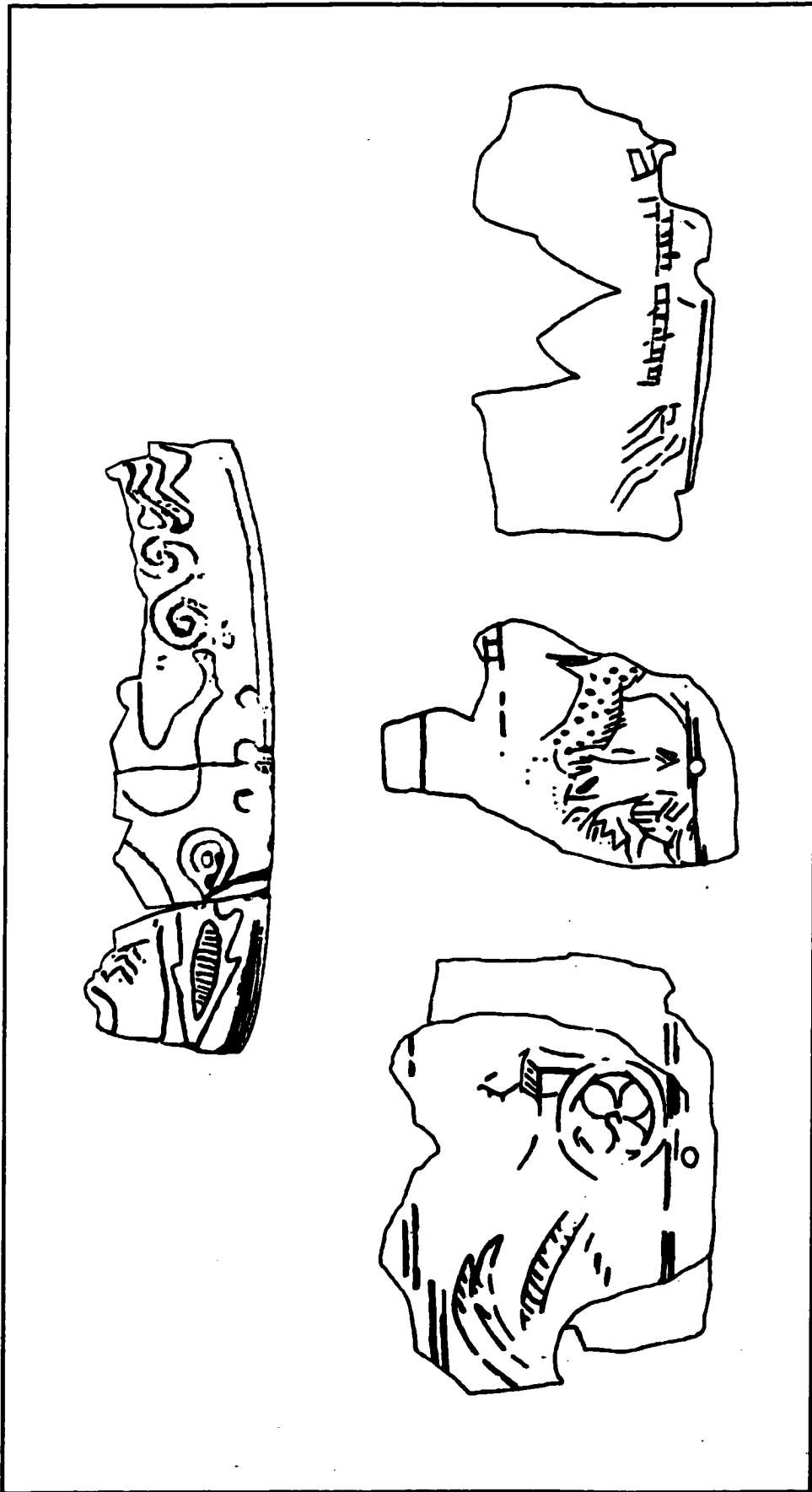


Fig. 5.2 NMA 210 ivory pyxides: a) joined fragments with spiral and curvilinear decoration (after Poursat 1977b: pl. XVIII); b) fragments depicting a chariot, a seated woman and animal, and the feet of an animal (after Patrianakou-Iliaki 1975: figs. 47, 49, 55).

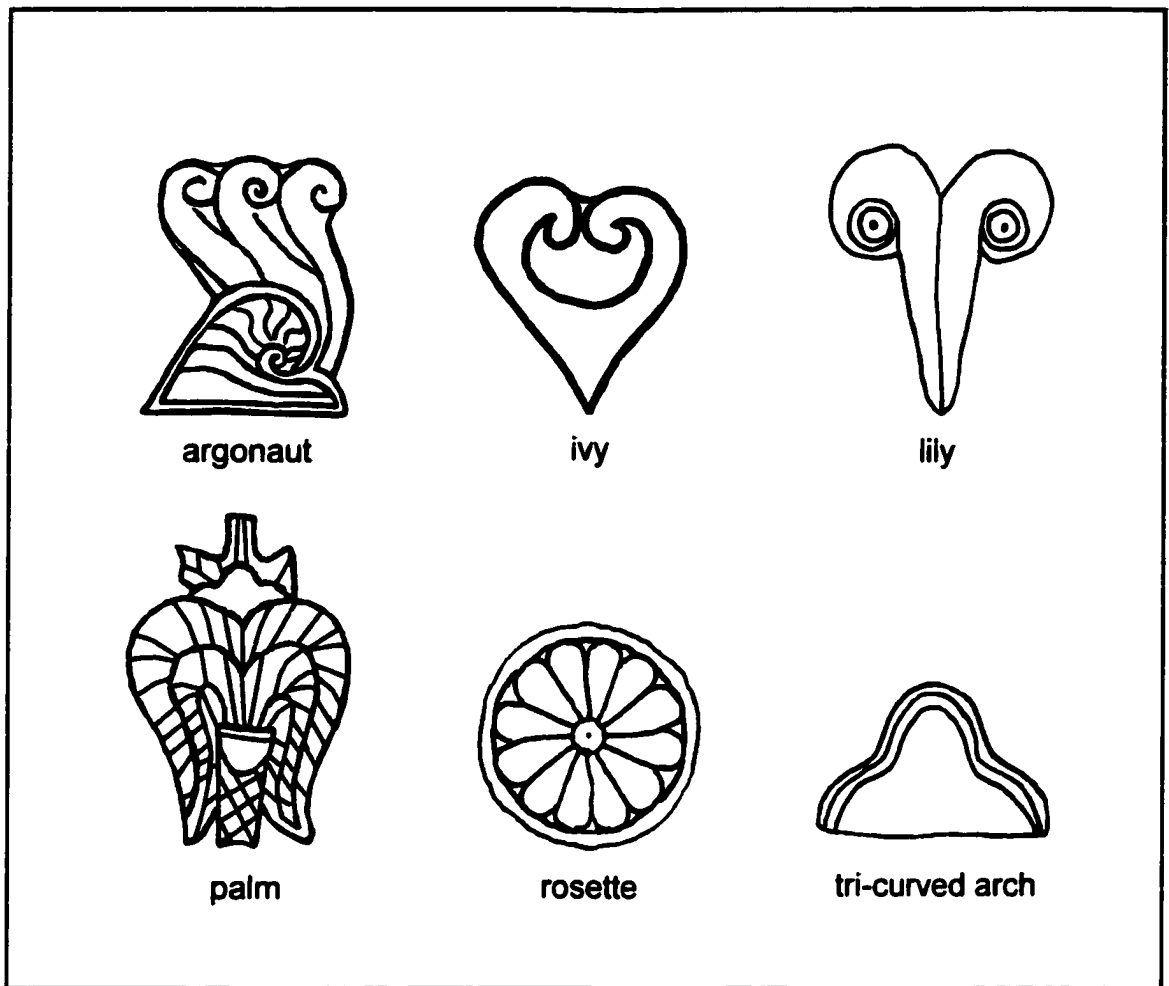


Fig. 5.3 Common motifs of ivory inlays found in LH IIIA-B chamber tomb.

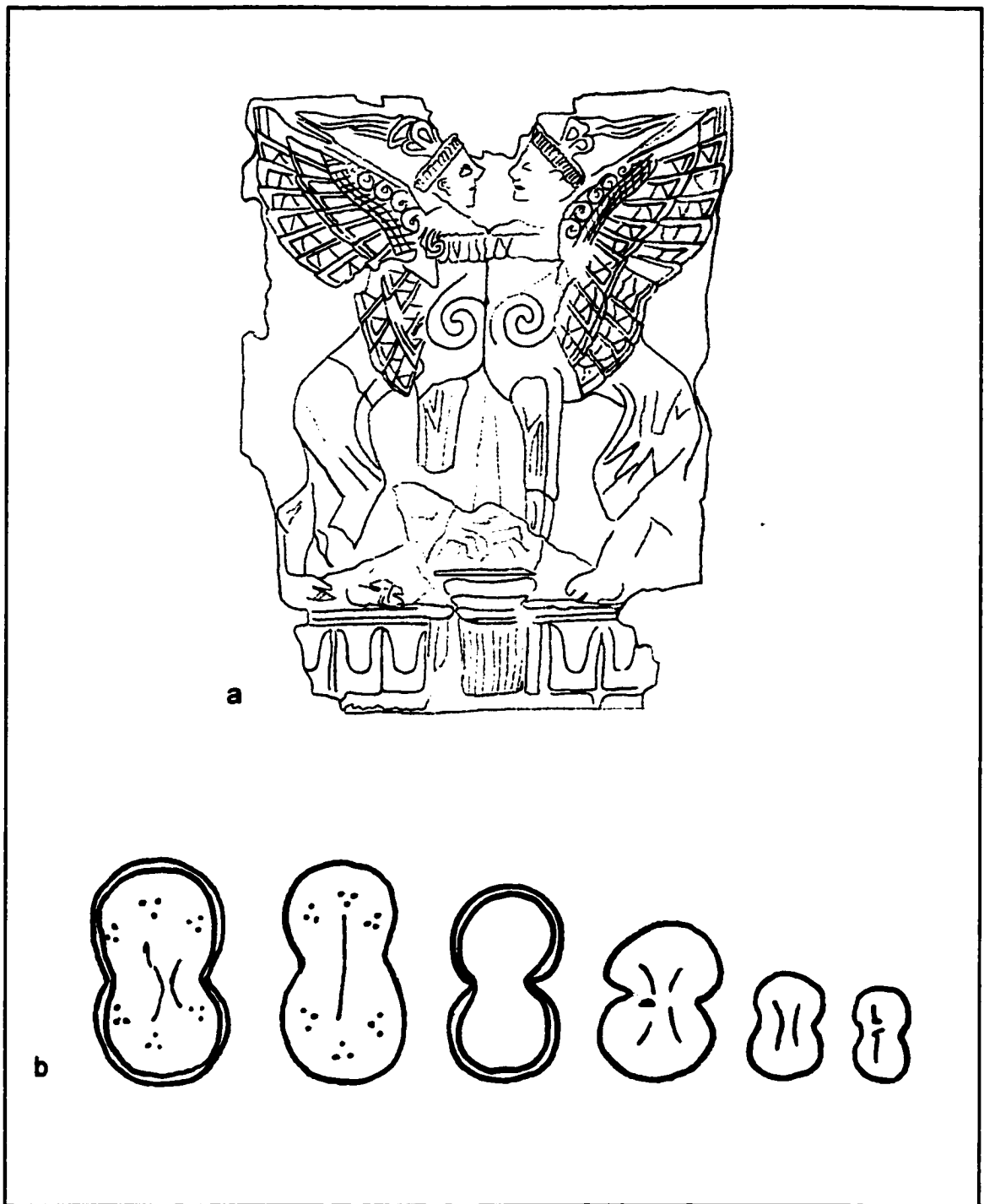


Fig. 5.4 Eponymous ivories from a) the House of Sphinxes; b) the House of Shields.

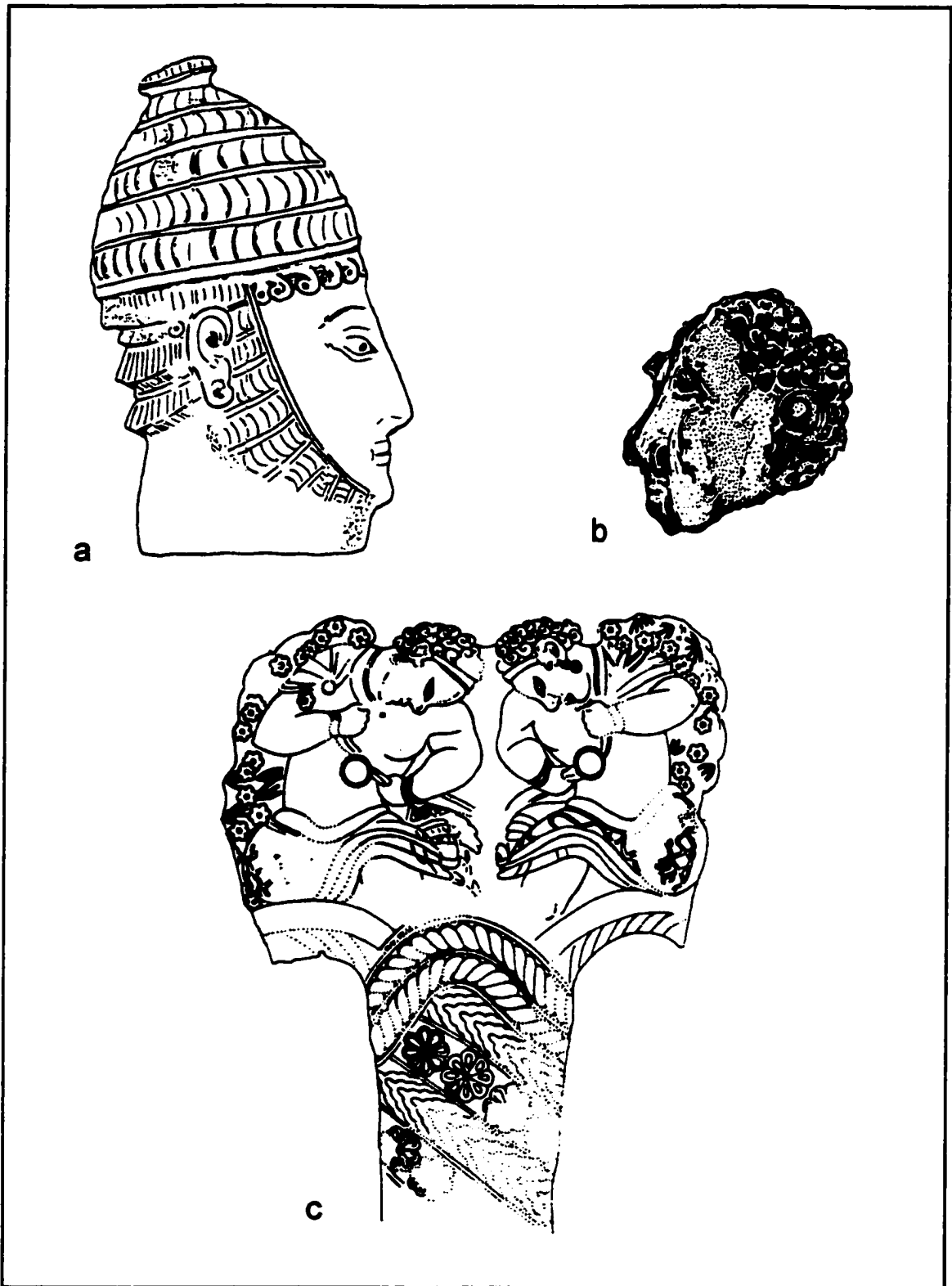


Fig. 5.5 Human figures in ivory: a) warrior head appliqué from Mycenae Chamber Tomb 27 (after Krzyszkowska 1991: fig. 3b); b) (enigmatic) relief head from the Dendra tholos (after Rehak and Younger 1998: pl. XXVI:h); c) Mirror handle from Mycenae Chamber Tomb 55 (after Poursat 1977b: pl. XXXII).

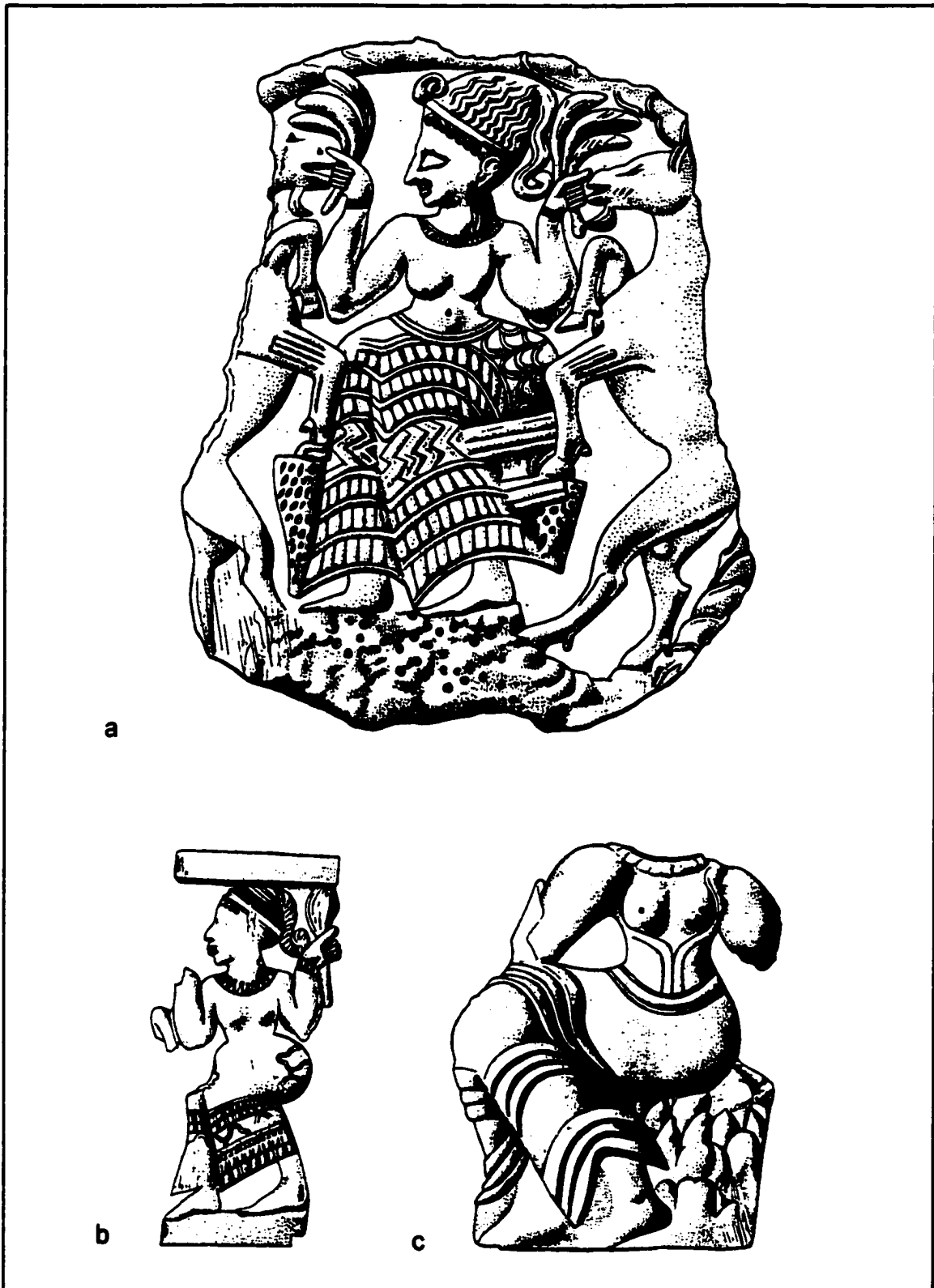


Fig. 5.6 Ivory relief figures: a) Minet el Beida pyxis lid, b) Mycenae NMA 2473, 2475, c) Mycenae NMA 5897 (after Kantor 1947: pl. XXII F,G, J).

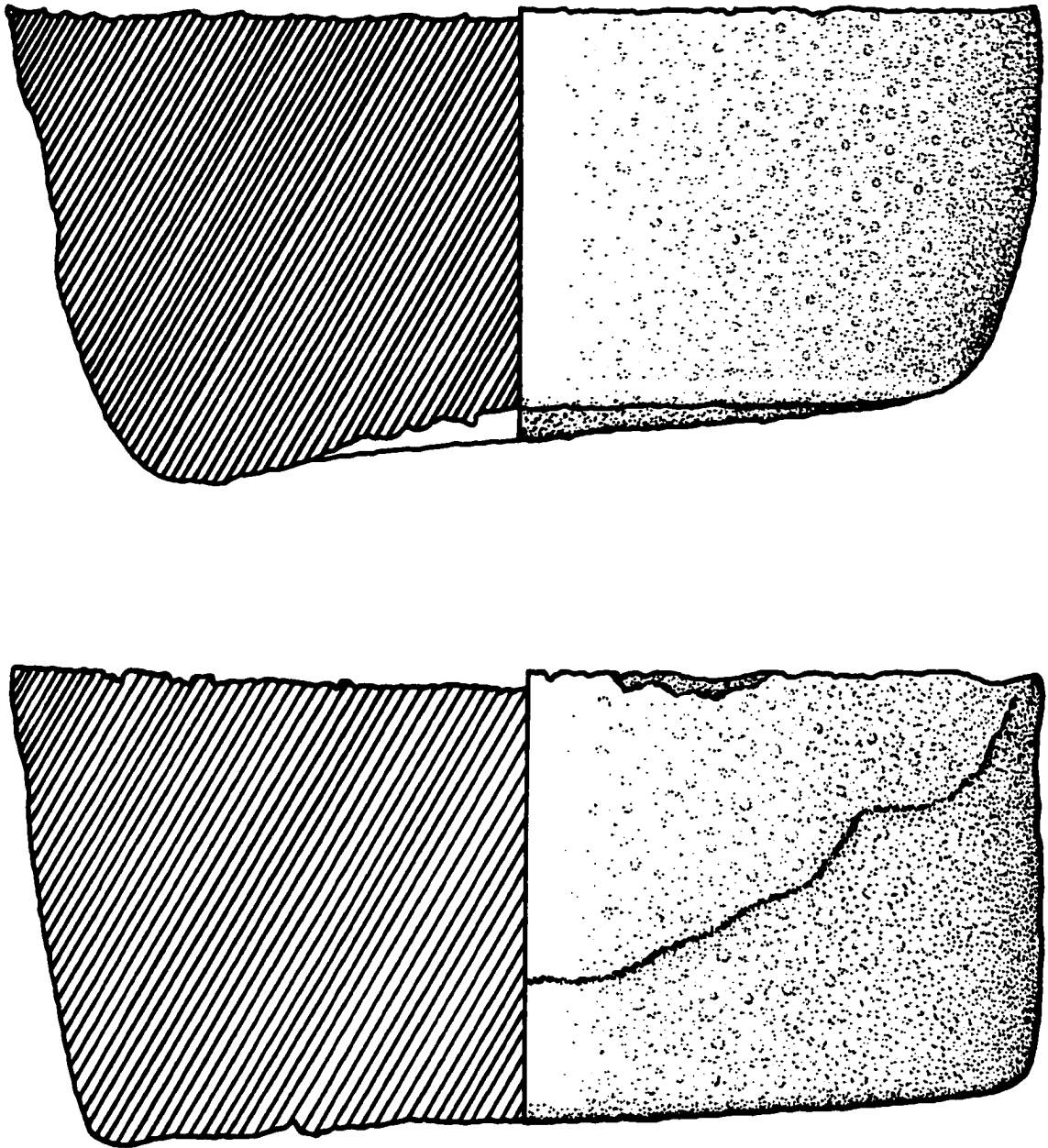


Fig. 6.1 Glass ingots (KW 3, KW 4) from the Uluburun shipwreck, scale 1:1 (after Bass 1986: figs. 15, 16).

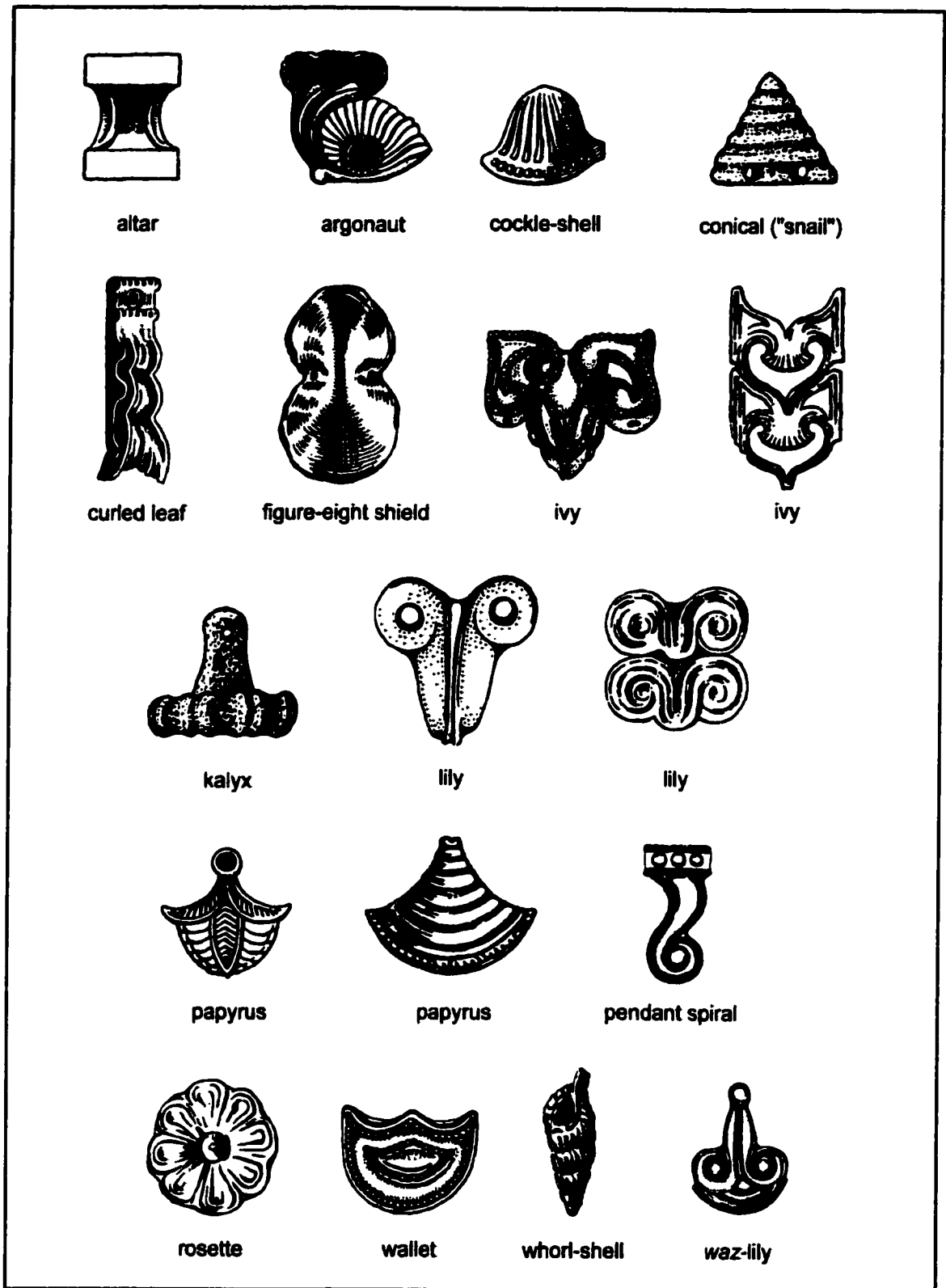


Fig. 6.2 Common types of glass ornaments (conical and kalyx ornaments after *Kilian et al.* 1979: fig. 53; whorl-shell after Tsountas 1888: pl. 9.7; all others after Higgins 1980: fig.13).

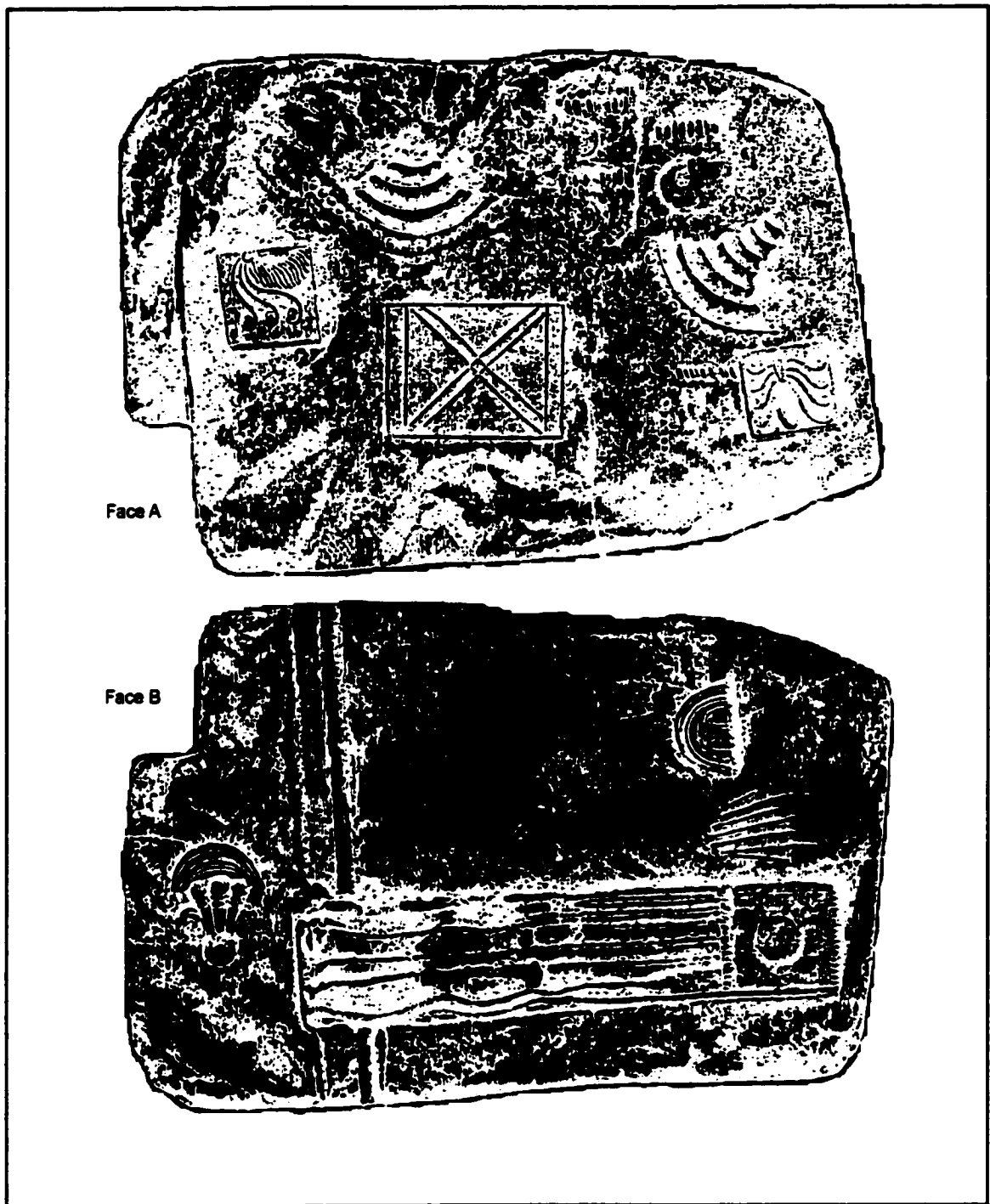


Fig. 6.3 Stone mold NMA 1018 from Mycenae (after Schliemann 1880: fig. 162).

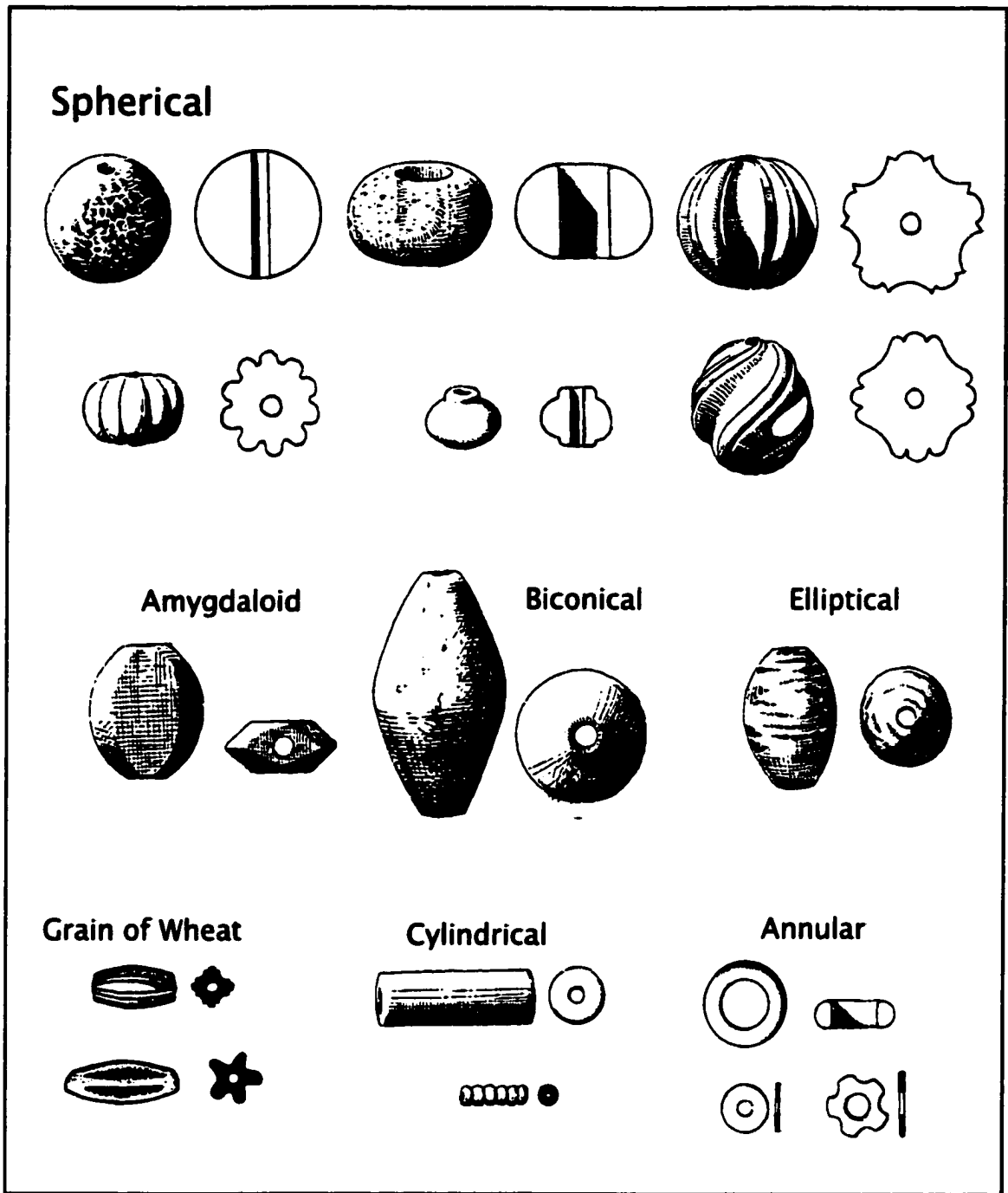


Fig. 6.4 Bead typology (after Pierce Blegen 1937: fig. 599).

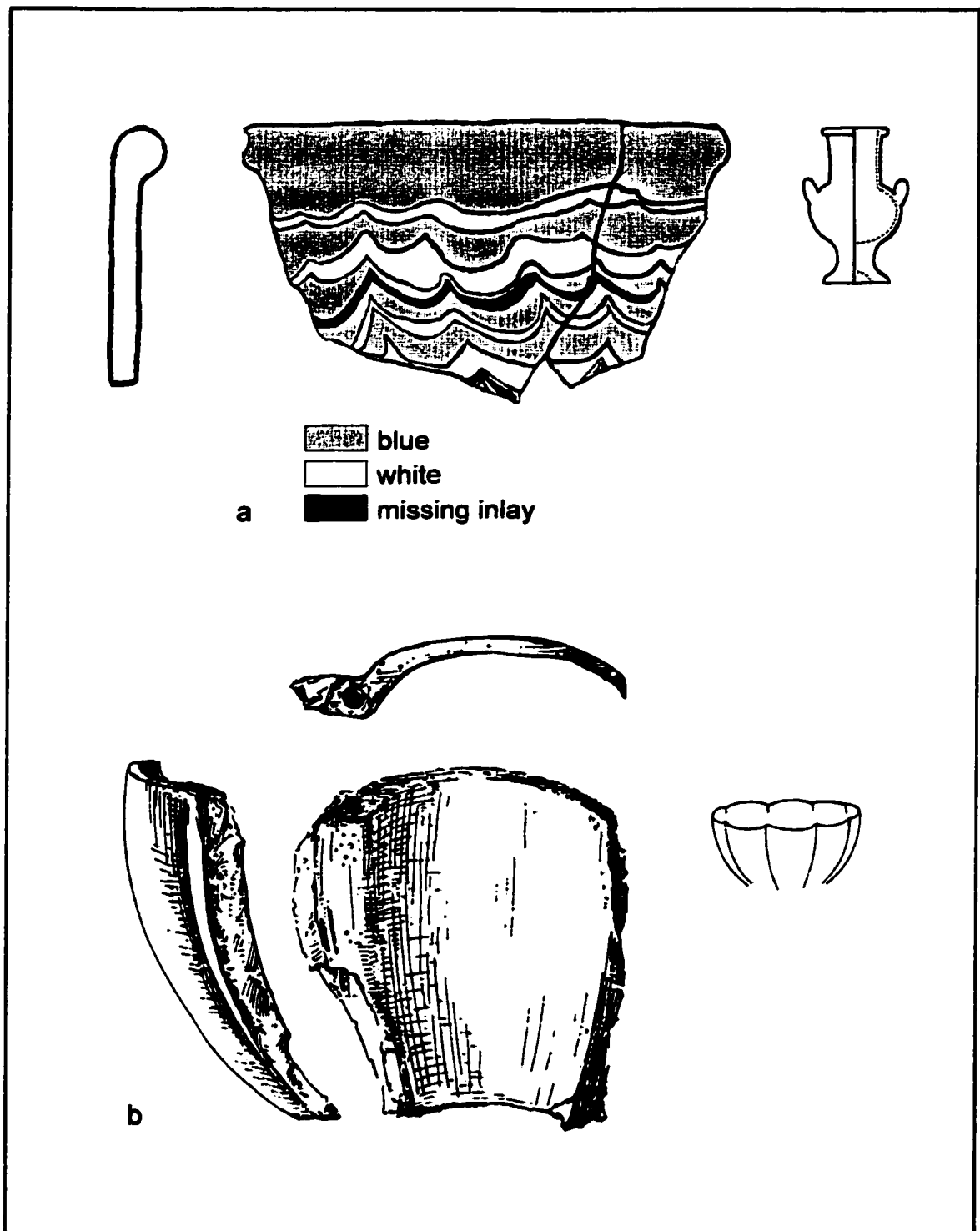


Fig. 6.5 Glass vessel fragments: a) krateriskos from Mycenae acropolis (NMA 4530); b) mold-made bowl from Kakovatos (after Muller 1909: fig. 13).

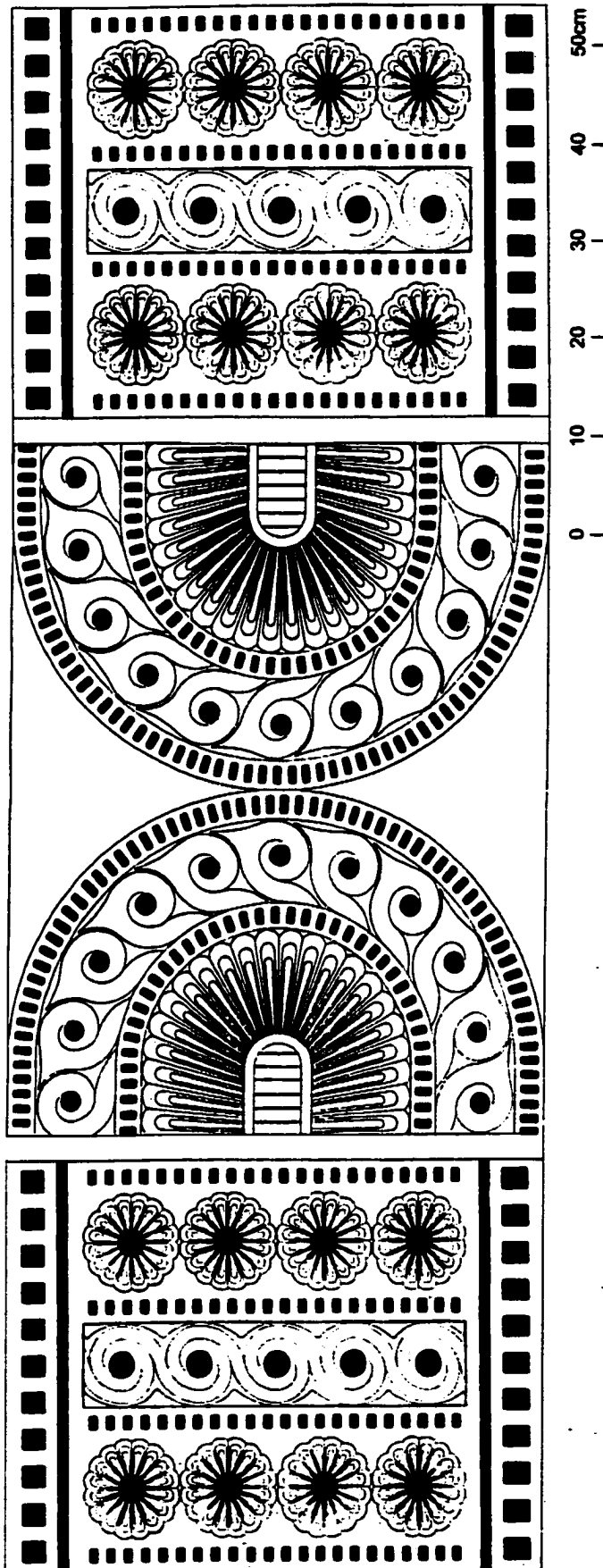


Fig. 6.6 Reconstruction of the alabaster frieze from the Tiryns megaron , with glass inlays indicated in solid black (after Moser von Filiseck 1986: figs. 1, 2).

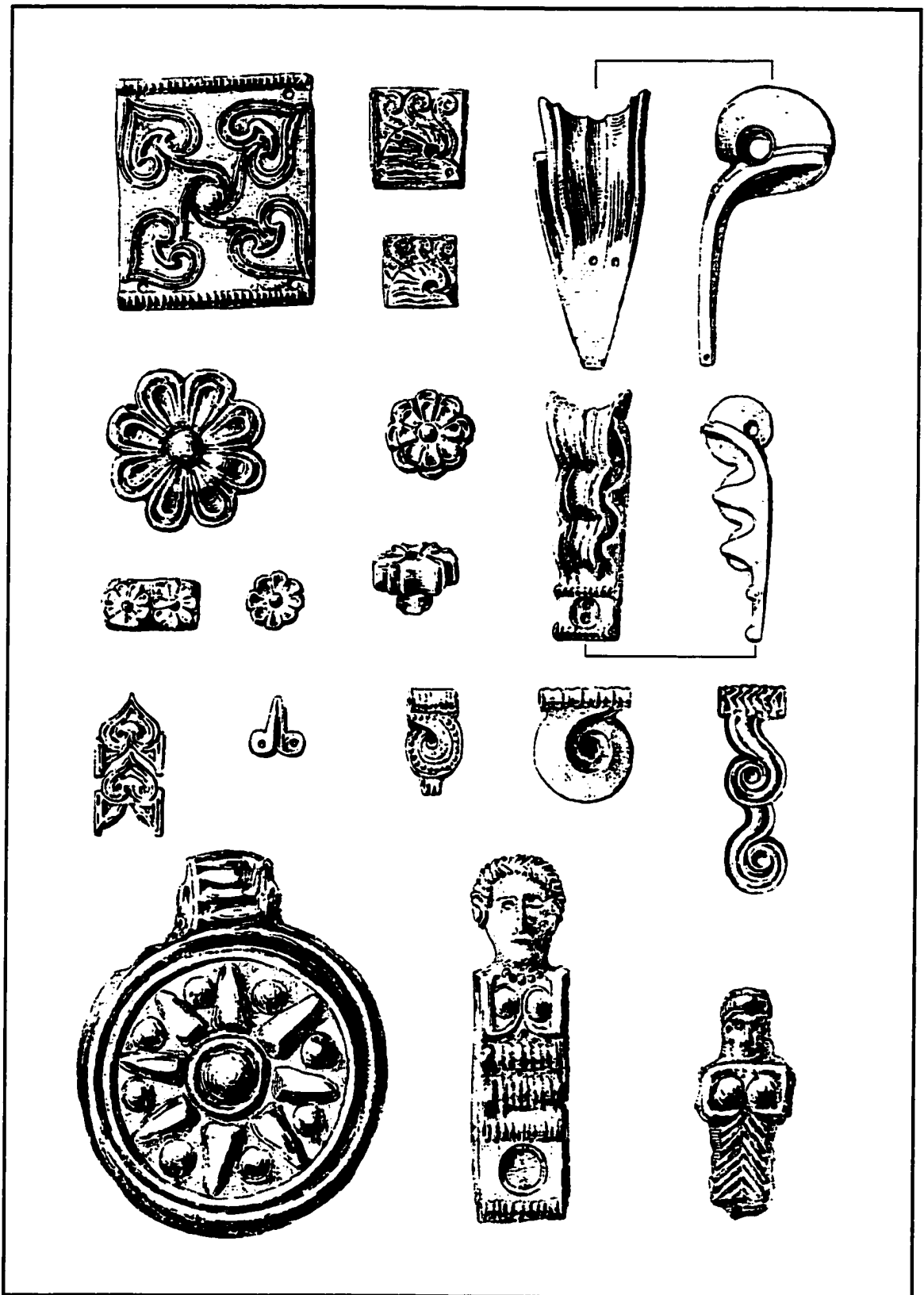


Fig. 6.7 Glass ornaments from Tsountas' House Shrine (after Tsountas 1887: pl. 13).

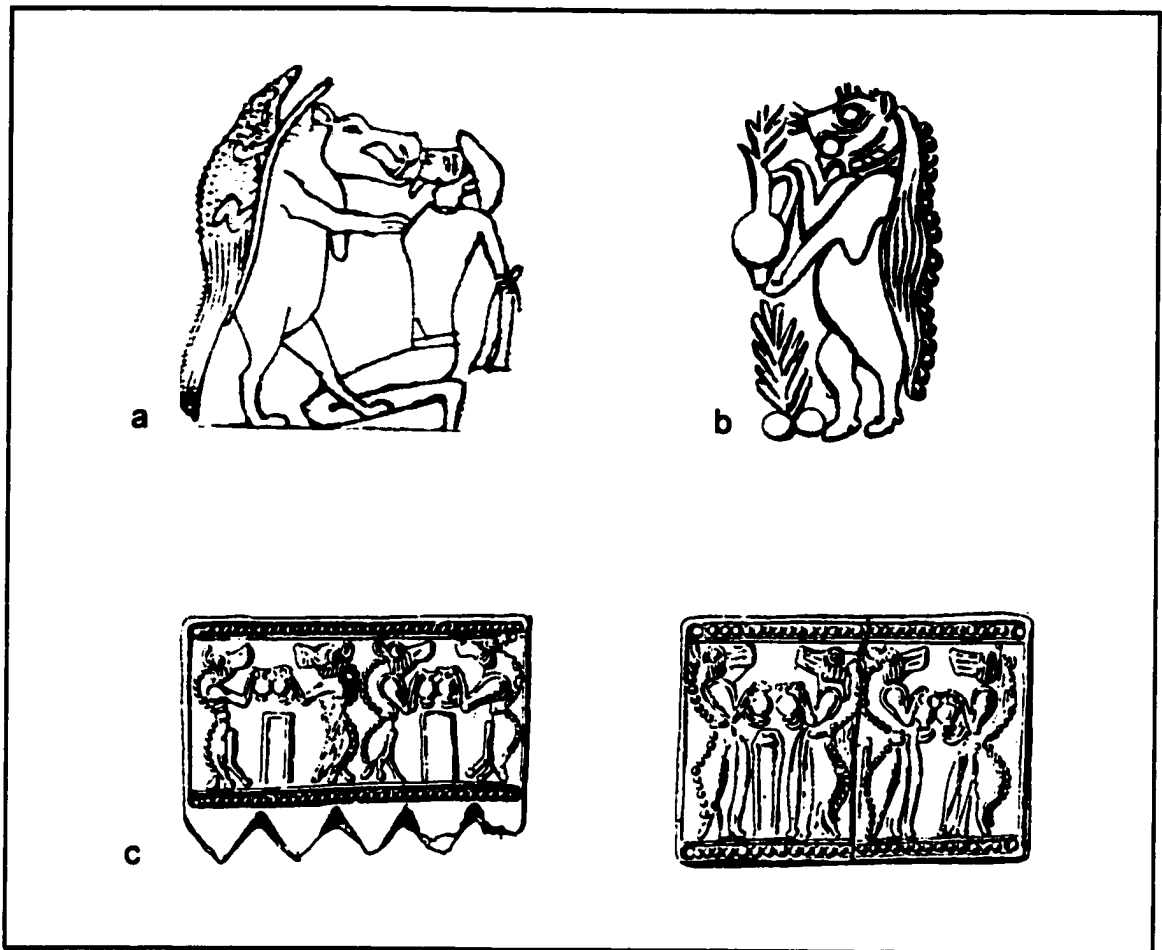


Fig. 6.8 The genius motif: a) Tawaret figure from a Middle Kingdom ivory knife (after Weingarten 1991: pl. 9a); b) Minoan genius on a Phaistos sealing (after Gill 1964: pl. 1:1); c) typical Mycenaean genii on glass libation plaques from the Tomb of the Genii (after Wace 1921-23: fig. 86).

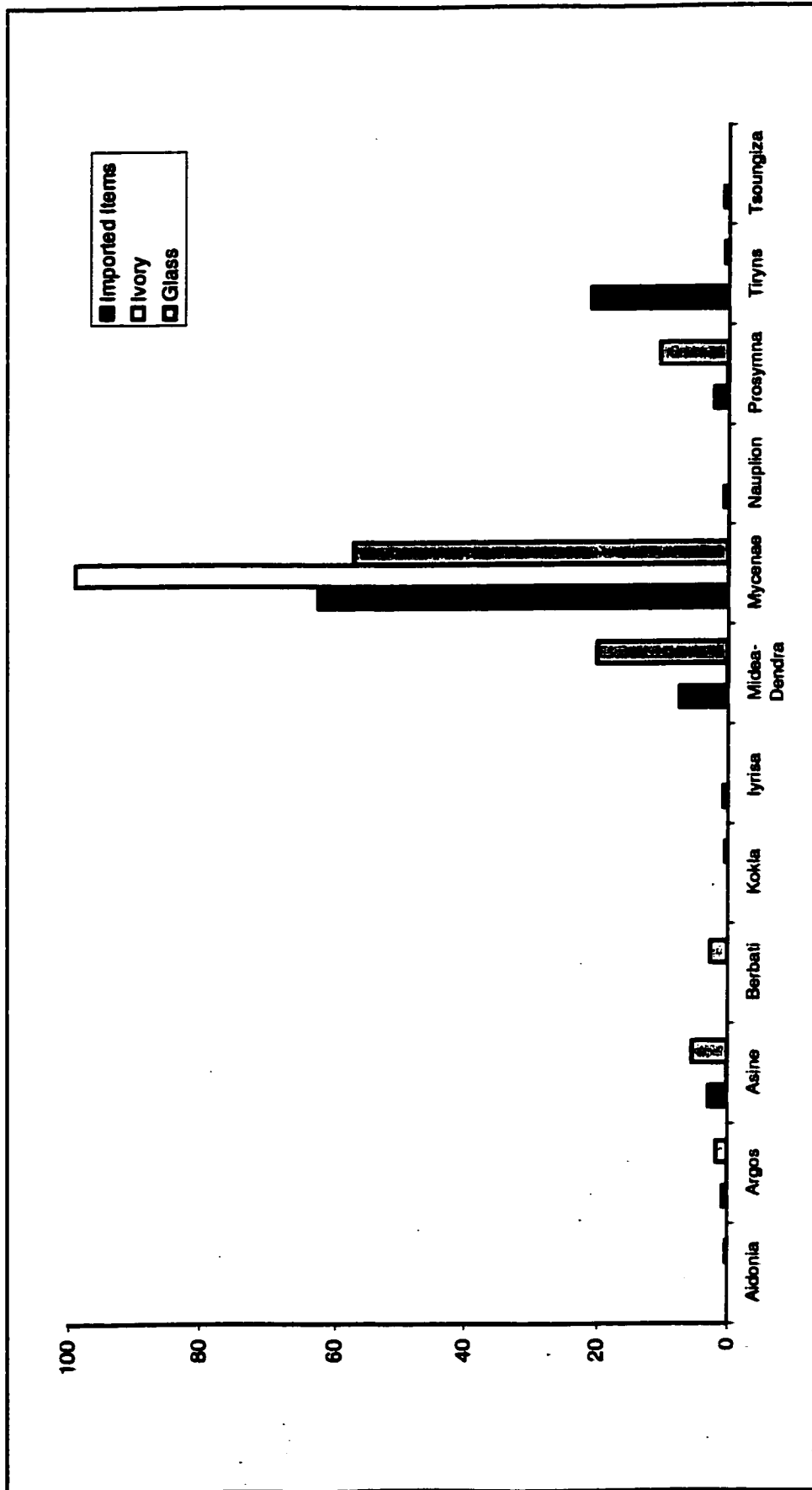


Fig. 7.1 Percentage of imported items, ivory, and glass found in all LH IIIA-B contexts at each site.

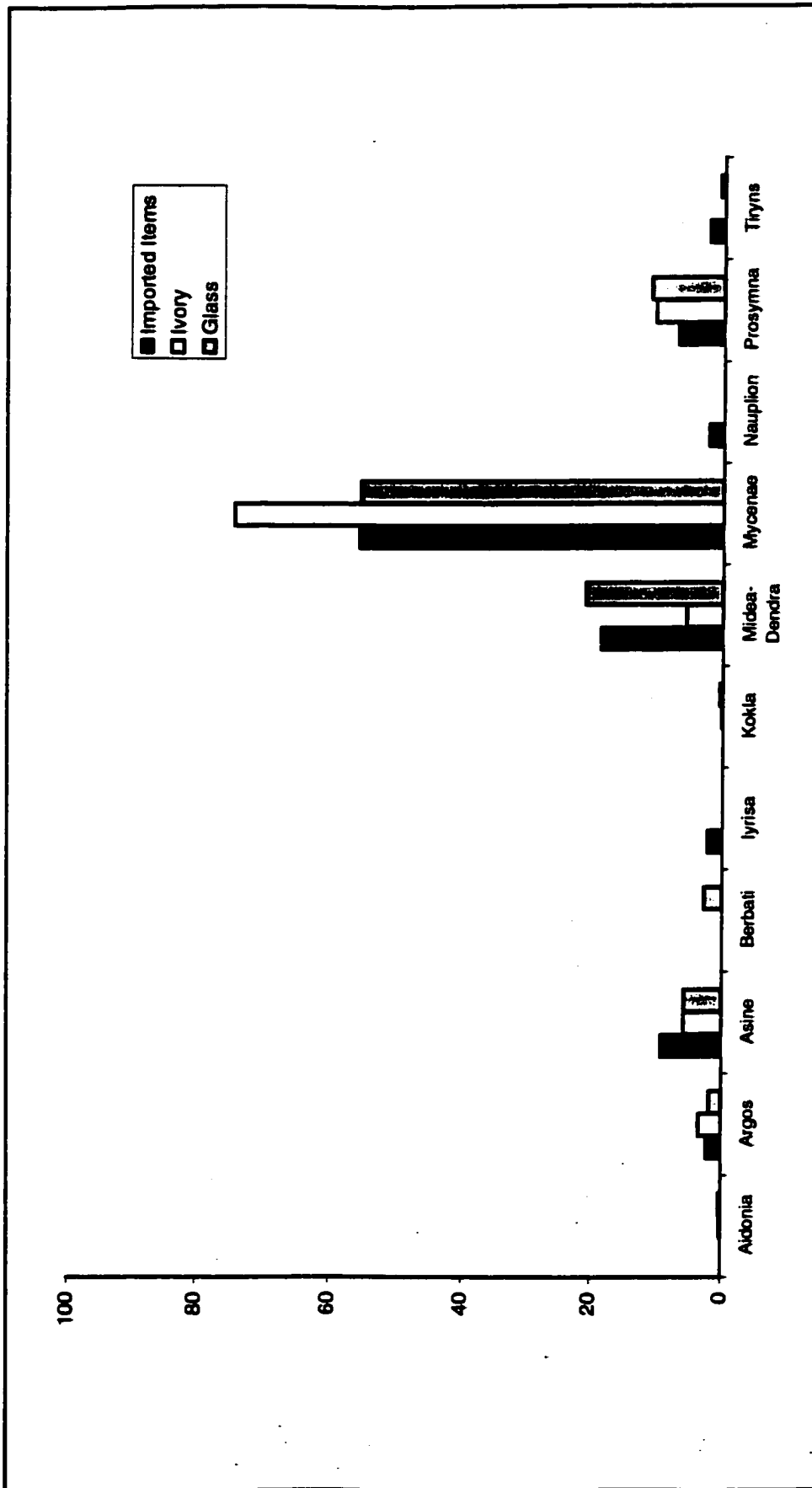


Fig. 7.2 Percentage of imported items, ivory, and glass found in LH IIIA-B burial contexts at each site.

APPENDICES

Explanatory Notes

The following appendices summarize the material evidence most pertinent to this dissertation. Appendix A combines and coordinates previous catalogues of imported items. Appendices B-D represent the attempt to collect all published (or displayed) artifacts of ivory, glass, and lapis lazuli from Argolid sites.

Each entry is identified by a brief description of the material and type of object. For Appendices B-D, the repeated listing of the material is omitted, except when there is doubt about this identification; for example, a few objects which may be bone rather than ivory begin with the parenthetical (bone?). And those objects crafted of more than one material are indicated by a + symbol; for example an object of ivory and gold is simply (+gold). For the specific identification of each piece, its number in a museum inventory or excavation, as available, is given under the heading **Inventory**. The **Reference** is either the original publication of the object, or a more recent one which more fully discusses the context of the item in question. In Appendix A, each entry is given a number under the headings of **Cl** and/or **L-Ph**, referring to its number in the catalogues of Cline 1994 and Lambrou-Phillipson 1990. Similarly, many of the items in Appendix B are given a number under **Poursat**, for their entry in his catalogue of ivory objects in the National Museum (1977b). Also, items in Appendices B-D, which are also listed in Appendix A (i.e., they are recognized as imported objects), are marked *Import*.

The entries are arranged by site and context (alphabetically), with settlement contexts preceding burials, followed by those which cannot be specifically categorized. The date given for each context is broad (e.g. LH II; LH IIIA - IIIB), fitting the nature of the analysis rather than the finer degree offered by some publications.

Much of the material from older excavations (e.g. Asine, Dendra and Prosymna) was lost, moved, or disassociated from contextual information during World War II, so it is not always possible to match items with inventory numbers. More recently found items

are often not yet inventoried in a museum collection, in which case the excavation or survey number is given here.

APPENDIX A
Imported Items Found in the Late Bronze Age Argolid

AIDHONIA	Inventory	Reference	CI	L-Ph
<i>Chamber Tomb 15, LH II</i>				
1-7. faience scarabs (7)	Nemea 644	CMS V Suppl. 1B: 118-25	395	401
8. faience cylinder seal	Nemea 645	CMS V Suppl. 1B: 126		402
ARGOS	Inventory	Reference	CI	L-Ph
<i>Deiras Chamber Tomb VI, LH IIIA</i>				
9. Canaanite amphora	NMA 5661	Vollgraaf 1904: 376	296	404
<i>Larissa Excavations (unknown context)</i>				
10. hematite cylinder seal		Roes 1937: 1-4, fig. 1-3	178	403
ASINE	Inventory	Reference	CI	L-Ph
<i>Chamber Tomb I:1, LH II - IIIA</i>				
11. carnelian amulet	Nauplion 3344	Frödin & Persson 1938: 374, fig. 242:5	31	407
<i>Chamber Tomb I:2, LH IIIA</i>				
12. ivory duck pyxis	NMA 10553	Krzyszowska 1996a: 89, fig. 1:1	701	408
13. porphyrite bowl	Nauplion 1307	Frödin & Persson 1938: 377, fig. 247	501	406
14. Canaanite amphora	Nauplion 2146	Frödin & Persson 1938: 386, fig. 250:2	297	409
IYRISA	Inventory	Reference	CI	L-Ph
<i>Tomb I, LH IIIA - IIIB</i>				
15. faience cylinder seal	Isthmia Museum	Pini 1983: 125-26, fig. 2:9	158	503
KALAVRIA	Inventory	Reference	CI	L-Ph
<i>Tomb Deposit (beneath Temple of Poseidon), LH</i>				
16. carnelian zoomorphic seal		Wide & Kjellberg 1895: 300-302, fig. 20	150	422
KANDIA	Inventory	Reference	CI	L-Ph
<i>Unknown Context</i>				
17. terracotta wall bracket		Cline 1994: 257	1118	
KAZARMA	Inventory	Reference	CI	L-Ph
<i>Tholos Tomb, LH II</i>				
18. faience cylinder seal	Nauplion 15024-38	CMS V: 583		423
19. amethyst cylinder seal	Nauplion 15024-38	CMS V: 584		424
MIDEA-DENDRA	Inventory	Reference	CI	L-Ph
<i>"Palace" North Wing, Northern Edge, LH III</i>				
20. stone (trachite?) mortar		Persson 1942: 10, fig. 8	985	426

App. A: Imported Items Found in the LBA Argolid

MIDEA-DENDRA (cont)	Inventory	Reference	CI	L-Ph
<i>Trench A (East Citadel), Room 2, LH IIIB</i>				
21.	ceramic vessel handle	Åström 1983: 26	1025	427
<i>Chamber Tomb 2, LH IIIA - IIIB</i>				
22.	glass/faience? bead garment	Persson 1931: 79, 106, pl. XXXIV	39	415
23.	baggy shaped alabastron	Persson 1931: 101, fig. 79	247	418
<i>Chamber Tomb 6 (long shaft), LH II</i>				
24.	amethyst biconical bead	Persson 1942: 29, fig. 30:2		413
<i>Chamber Tomb 6, LH II - IIIB</i>				
25.	baggy shaped alabastron ¹	Persson 1942: 24, 31, fig. 27	738	419-20
<i>Chamber Tomb 7, LH IIIA</i>				
26.	glass spherical beads (2)	Persson 1942: 36, fig. 36:2		416
<i>Chamber Tomb 8, LH II - IIIA</i>				
27.	amethyst spherical beads (16)	Persson 1942: 49, fig. 53.2		414
<i>Chamber Tomb 10, LH IIIA</i>				
28.	silver spoon	NMA 8760	Persson 1942: 90, 144, fig. 99:5, 101	243
<i>Tholos Tomb, LH IIIA</i>				
29.	ostrich-egg rhyton	NMA 7337	Persson 1931: 37, 54, fig. 14, pl. III	939
30.	ivory lion plaque	NMA 7365	Persson 1931: 41, 59, fig. 36	421
MYCENAE	Inventory	Reference	CI	L-Ph
<i>Building M, Room M-2,² LH IIIB</i>				
31.	faience plaque	Nauplion 13887-88	Mylonas 1963: 101, pl. 76b	96
<i>Buildings M-N (NE of Lion Gate), LH IIIB?</i>				
32-38.	faience plaques ³	NMA 2566, 2718, 12582	Tsountas 1891: 18, 23-24, pl. III: 3-4	98
39.	bronze smiting figure	NMA 2631	Tsountas 1891: 21-22, pl. II:4-4a	16
40.	faience bowl	NMA 2719	Tsountas 1891: 18, 23-24	483
<i>Citadel House Area, LH IIIC</i>				
41.	hematite weight	Exc 64-959	Cline 1994: 233	900
42.	alabastron fragment	Exc 64-774	Evely & Runnels 1992: 104	255
43.	bronze armor scale	Exc 68-323	Catling 1970: 441-49, fig. 1	808
<i>Citadel House Area, against Cyclopean Wall, LH IIIC</i>				
44.	Canaanite amphora	Exc 64-489	Cline 1994: 171	310

¹ Cline (1994: 216) explains that these fragments are from a single vessel, correcting an earlier impression that there were two (Brown 1974: 28 no. 5-6; Lambrou-Phillipson 336 no. 419-20).

² The plaque's context in a M-2 deposit is recorded in Mylonas' 1963 *Praktia* report. This is preferred over the account that places it in Room M-3 (*To Ergon tes Archaialogikes Etaireias* 1963: 67).

³ These fragments represent between four and seven original plaques (Cline 1990: 203-205).

App. A: Imported Items Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference	CI	L-Ph
<i>Citadel House, Area 36 ("workshop"), LH III B</i>				
45. Canaanite amphora	Exc 66-518	Cline 1994: 170	306	
46. trachite mortar	Exc 66-712	Evely & Runnels 1992: 129-31	976	
<i>Citadel House Area, "Causeway Deposit," LH III B</i>				
47. hematite weight	Exc 60-18	Wardle 1973: 340-42, fig. 22c	899	
48. ivory blank for a comb	Exc 60-108	Wardle 1973: 340, fig. 23, pl. 61d	908	
49. Canaanite amphora	Exc 60-214	Wardle 1973: 331 no. 194, fig. 18, pl. 59d	309	
<i>Citadel House, Corridor 4, LH III B</i>				
50. trachite mortar	Exc 68-30	Evely & Runnels 1992: 135-36	987	
<i>Citadel House, Room 1 ("storeroom"), LH III B</i>				
51. Canaanite amphora	Nauplion 5384	Wace 1955: 179, pl. 20b	308	475
<i>Citadel House, Room 6, LH III B</i>				
52. trachite mortar	Exc 62-20	Evely & Runnels 1992: 124-26	978	
<i>Citadel House, Room 19 pot group, LH III B</i>				
53. faience scarab	Exc 68-1521	Cline 1987: 9-10, fig. 4	119	439
54. faience lantern bead	Exc 68-1523	Cline 1994: 240	966	
<i>Citadel House, Room 31, LH III B</i>				
55. ivory figurine head	Nauplion 15022	Poursat 1977a: 52 no. 7, 233, pl. III		474
56. faience plaque	Exc 68-1000, 69-126	Cline 1990: 200-12, pl. 1-3	97	448
<i>Citadel House, Room 38, LH III</i>				
57. trachite mortar	Exc 66-373, 69-445	Evely & Runnels 1992: 132	977	
<i>Citadel House, Room II (below megaron), LH III B</i>				
58. alabastron fragment	Nauplion 14690	Evely & Runnels 1992: 103	254	
59. hippo lower canine	Exc 62-1058	Krzyszowska 1984: 124, pl. XIIIa	917	
60. trachite mortar	Exc 62-1341	Evely & Runnels 1992: 133-34	988	
61. ostrich-egg fragment	Exc 62-952	Reese 1985b: 373	945	
<i>Citadel House, Room XI, LH III B</i>				
62. trachite mortar	Exc 69-1002	Evely & Runnels 1992: 137-38	975	
<i>House of Shields, Further extension of East wall, surface, LH III B</i>				
63. baggy alabastron	Nauplion 12356	Tournavitou 1995: 221, 654, drawing	252	456
<i>House of Shields, North Room (Area I), LH III B</i>				
64. faience kylix	NMA 7515	Tournavitou 1995: 711, pl. 34a, 34b	657	463
<i>House of Shields, North Room (Area VIII), LH III B</i>				
65. faience rhyton	NMA 7514	Tournavitou 1995: 711, pl. 35b	709	
66. faience kylix	Nauplion 12839	Tournavitou 1995: 711	659	
67. faience kylix	Nauplion 12957	Tournavitou 1995: 712, photo	660	

App. A: Imported Items Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference	CI	L-Ph
<i>House of Shields, West Room (Central Part), LH IIIB</i>				
68. faience handle	Nauplion 12209	Tournavitou 1995: 699, photo	777	
<i>House of Shields, West Room (Ivory Area), LH IIIB</i>				
69. faience kylix	NMA 7505	Tournavitou 1995: 695, pl. 33a,b	652	
70. faience kylix handle	NMA 7506	Tournavitou 1995, 695, pl. 33a	653	
71. faience kylix	NMA 7507	Tournavitou 1995: 696	654	
72. faience vessel	NMA 7507	Tournavitou 1995: 696	771	
73. faience vessel fragments	NMA 7508	Tournavitou 1995: 696	772	
74. faience vessel	NMA 7508	Tournavitou 1995: 696	773	
75. faience vessel	NMA 7508	Tournavitou 1995: 697	774	
76. faience vessel	NMA 7509	Tournavitou 1995: 698, pl. 33a, 35c	775	
77. baggy alabastron	Nauplion 12359	Tournavitou 1995: 221, 629, pl. 31d	253	455
78. faience kylix	Exc 53-318	Tournavitou 1995: 697	658	
79. faience vessel	Exc 53-319	Tournavitou 1995: 697	776	
80. faience bowl	Exc 53-320	Tournavitou 1995: 697	484	
<i>House of Shields, West Room (Ivory Deposit, Northeast Area), LH IIIB</i>				
81. alabastron	Exc 54-565	Tournavitou 1995: 221, 683	251	
<i>House of Shields, West Room (Northeast Area), LH IIIB</i>				
82. faience rhyton	NMA 7510	Tournavitou 1995: 706, pl. 36a	707	
83. faience rhyton	NMA 7511	Tournavitou 1995: 706, pl. 35a	708	
84. faience kylix	NMA 7512	Tournavitou 1995: 709	655	
85. faience vessel fragments	NMA 7513	Tournavitou 1995: 709	656	
<i>House of Sphinxes, Room 10, LH IIIB</i>				
86. limestone bowl	Nauplion 11416	Tournavitou 1995: 231, 663, drawing		430
87. diorite/gabbro bowl	Nauplion 11505	Tournavitou 1995: 231, fig. 44, 685	493	429
<i>House of Sphinxes, Area south of Room 10, LH IIIB</i>				
88. limestone mortar	Nauplion 11503	Tournavitou 1995: 232, 690, photo	986	481
<i>House of the Oil Merchant, Corridor,⁴ LH IIIB</i>				
89. Canaanite amphora	Nauplion 5384	Åkerström 1975: 187	307	
<i>House of the Oil Merchant, Room 4, LH IIIB</i>				
90. stone ax mold	NMA 7644	Tournavitou 1995: 227, 615, pl. 31e	885	
<i>Prinaria/North Terrace deposit ("shrine"), LH IIIB</i>				
91. faience cylinder seal	NMA 7714	Wace & Porada 1957: 200-204, pl. 37-38	155	468
<i>Tsountas' House Shrine, Room Gamma, LH IIIB</i>				
92. glass female ornament	NMA 2511	Tsountas 1886: 78-79	100	
93. glass star ornament	NMA 2512	Tsountas 1887: 169, pl. 13:22	69	
94. faience scarab	NMA 2530	Tsountas 1887: 169, pl. 13:21-21a	120	438

⁴ Cline (1994: 170) describes the context as "among stirrup jars," which would most likely indicate the large number of vessels found in the basement corridor. The fragment is not included in Tournavitou 1995.

App. A: Imported Items Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference	C1	L-Ph
<i>Chamber Tomb 11, LH IIIA</i>				
95. glass vessel	NMA 2387.8	Xenaki-Sakellariou 1985: 73, pl. 11	1026	411
<i>Chamber Tomb 47, LH II - IIIA</i>				
96. hematite cylinder seal	NMA 2447	Xenaki-Sakellariou 1985: 125, pl. 34	179	482
<i>Chamber Tomb 49, LH IIIA</i>				
97. faience goblet	NMA 2372	Xenaki-Sakellariou 1985: 128, pl. 35	560	483
98. ivory female plaque	NMA 2473, 2475	Xenaki-Sakellariou 1985: 129, pl. 35		473
99. frit vase	NMA 2491	Xenaki-Sakellariou 1985: 128, pl. 35	734	449
<i>Chamber Tomb 52, LH IIIA - IIIB</i>				
100. bronze pin	NMA 2483	Xenaki-Sakellariou 1985: 131-32, pl. 36	85	
<i>Chamber Tomb 55, LH IIIA - IIIB</i>				
101. carved elephant tusk	NMA 2916	Xenaki-Sakellariou 1985: 174, pl. 73, XI	20	466
102. diorite jar	NMA 2919	Xenaki-Sakellariou 1985: 175, pl. 73	604	428
<i>Chamber Tomb 58, LH IIIA - IIIB</i>				
103. Canaanite amphora	NMA 2924	Xenaki-Sakellariou 1985: 184, pl. 78	303	478
104. Canaanite amphora	NMA 2925	Xenaki-Sakellariou 1985: 184	304	477
<i>Chamber Tomb 68, LH II - IIIB</i>				
105. agate cylindrical seal	NMA 2977	Xenaki-Sakellariou 1985: 196, pl. 83		470
106. alabaster jug	NMA 3080	Xenaki-Sakellariou 1985: 196, pl. 84	628	
<i>Chamber Tomb 81,⁵ LH III</i>				
107. alabastron	NMA 3252	Xenaki-Sakellariou 1985: 266, pl. 130	248	
<i>Chamber Tomb 88, LH II - IIIB</i>				
108. ivory duck pyxis	NMA 9506	Sakellarakis 1971: 188-233	702	
<i>Chamber Tomb 95,⁶ LH IIIA - IIIB</i>				
109. Canaanite amphora	NMA 4569	Xenaki-Sakellariou 1985: 273, pl. 134	305	476
<i>Chamber Tomb 102, LH II</i>				
110. stone jug	NMA 4923	Xenaki-Sakellariou 1985: 285-86, pl. 140	631	452
<i>Chamber Tomb 516 (pit in chamber), LH I</i>				
111. glass spacer bead	NMA 6534	Wace 1932: 64-66, 207, fig. 25:5c	40	
112. glass spacer bead	NMA 6534	Wace 1932: 64-66, 207, fig. 25:5b	41	
113. glass spacer bead	NMA 6535	Wace 1932: 64-66, 207, fig. 25:5b	42	
<i>Chamber Tomb 517 (pit in chamber), LH I - II</i>				
114. faience cylinder seal	NMA 9095	Wace 1932: 72, 197, fig. 28, pl. 35	154	469

⁵ Although listed among the material from Tsountas 1895 excavations, Xenaki-Sakellariou specifies that it is probably from Chamber Tomb 81.

⁶ Åkerström (1975: 191) reports confusion over the context: Chamber Tomb 95 according to the inventory (and so Grace 1956: 104), but Wace (1956: 131) has it as tomb 93. And on the jar itself is written "T 59."

App. A: Imported Items Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference	Cl	L-Ph
<i>Chamber Tomb 518, LH I - IIIB</i>				
115. porphyrite bowl	NMA 2278	Wace 1932: 84, 223	502	435
<i>Chamber Tomb 523, LH IIIA</i>				
116. steatite lentoid seal	NMA 6511	Wace 1932: 36-37, 203-204, pl. 20:16	237	485
<i>Chamber Tomb 526, LH IIIA</i>				
117. faience scarab	NMA 6495.1	Wace 1932: 93, 198, pl. IX: 1	116	450
118. faience scarab	NMA 6495.2	Wace 1932: 93, 198, pl. IX: 2	117	451
119. faience scarab	NMA 6495.3	Wace 1932: 93, 199, pl. IX: 3	118	
<i>Prehistoric Cemetery Grave 9, LH I - II</i>				
120. carnelian spherical bead		Wace 1950: 215		467
<i>Shaft Grave Omicron, MH III - LH I</i>				
121. rock crystal duck pyxis	NMA 8638	Mylonas 1973: 203 O-459, pl. 183, fig. 22		431
<i>Shaft Grave Circle B, NW side of Grave Rho, LH II</i>				
122. lapis lazuli scarab		Mylonas 1973: 255 P-466, pl. 199b	152	436
<i>Shaft Grave I, LH I</i>				
123-26. glass spacer beads (4)	NMA 209	Karo 1930-33: 69 no. 209b, pl. CL	43-46	467
<i>Shaft Grave II, LH I</i>				
127. faience miniature jar	NMA 223	Karo 1930-33: 71, pl. 170	730	461
<i>Shaft Grave III, LH I</i>				
128. gold diadem	NMA 1	Karo 1930-33: 43, pl. XI, XII	967	
129. gold diadem	NMA 7	Karo 1930-33: 45, pl. XV	968	
130. faience miniature jug	NMA 123-24	Karo 1930-33: 60-61, fig. 16, pl. XXIII	626	462
<i>Shaft Grave IV, LH I</i>				
131. gold pin	NMA 245	Karo 1930-33: 75, pl. XVIII	88	
132. silver stag rhyton	NMA 388	Karo 1930-33: 94, pl. 115-16	716	486
133. elephant tusk tip	NMA 491	Krzyszkowska 1988: 212, 231, pl. 24a	906	
134. ostrich-egg rhyton	NMA 552	Karo 1930-33: 114, 116, 239, pl. CXLI	940	464
135. ostrich-egg rhyton	NMA 552.1	Karo 1930-33: 239	941	
<i>Shaft Grave V, LH I</i>				
136. wood & ivory pyxis	NMA 812	Karo 1930-33: 144-45, pl. CXLV		433
137. ostrich-egg rhyton	NMA 828	Karo 1930-33: 146, 239, pl. CXLI	942	465
138. gold-plated alabaster jar	NMA 829	Karo 1930-33: 147, pl. 137	597	
139. ostrich-egg rhyton	NMA 832	Karo 1930-33: 146, 239, pl. CXLI	943	464
140. elephant tusk tip	NMA 899	Karo 1930-33: 155, fig. 73	907	
<i>Tomb of Clytemnestra, LH IIIA - IIIB</i>				
141. alabastron fragments		Wace 1921-23: 367	250	459
142. ivory mirror handle	NMA 2898	Wace 1921-23: 369, pl. LIX A		471
143. ivory mirror handle	NMA 2900	Wace 1921-23: 369, pl. LIX B,C		472

App. A: Imported Items Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference	CI	L-Ph
<i>Treasury of Atreus (before door), LH IIIA</i>				
144. alabastron fragments	NMA 95	Wace 1921-23: 356	249	458
<i>Unspecified Tombs in Asprochoma-Agriosykia necropolis (Palailogou excavations), LH IIIA</i>				
145. Canaanite amphora		Kilian 1988c: fig. 4	302	
146. glass vessel		Lambrou-Phillipson 1990: 333, pl. 77	1027	410
<i>Unrecorded Chamber Tombs (Tsountas excavations)</i>				
147. glass vessel	NMA 2984	Xenaki-Sakellariou 1985: 214, pl. 99	1111	411
148. alabaster amphora	NMA 3225	Xenaki-Sakellariou 1985: 266, pl. 131	1092	454
149. alabastron		Lambrou-Phillipson 1990: 333-34	1089	412
<i>Acropolis, LH I - III</i>				
150. lapis lazuli ax-shaped pendant	NMA 1381	Wace 1949: 108 n. 11		480
151. terracotta wall bracket	NMA 2633	Staïs 1926: 118	787	
152. ostrich-egg rhyta (2)	NMA 2667	Sakellarakis 1990: 289, fig. 41, 43	944	
153. diorite/gabbro bowl	NMA 2778	Warren 1969: 114	492	460
154. glass krateriskos	NMA 4530	Weinberg & McClellan 1992: 79 no. 1	736	
155. frit monkey figurine	NMA 4573	Cline 1991b: 30-33, pl. 1	5	437
156. alabaster monkey vessel	NMA 6250+2657	Lambrou-Phillipson 1990: 342, pl. 74	739	434
<i>Unknown Context</i>				
157. alabastron	NMA 6251	Warren 1969: 114	1088	521
158. stone jug	NMA 6252	Warren 1969: 115	1099	453
159. diorite bowl	NMA 9739	Sakellarakis 1976: 179, pl. IV:10	1109	432
160. ivory duck pyxis	Nauplion 1090	Krzyszowska 1988: 234	1106	
161. copper ingot(s?)	Numismatic Museum, Athens	Buchholz 1959: 36, pl. 5:1-2		484
NAUPLION	Inventory	Reference	CI	L-Ph
<i>Unspecified Tomb, LH III</i>				
162. alabastron	NMA 3523	Warren 1969: 114	256	488
<i>Unspecified Tomb, LH IIIA - IIIB</i>				
163. serpentine bowl	NMA 3524	Warren 1969: 35, 115	1096	487
<i>Unknown Context</i>				
164. glass krateriskos	NMA 3539	von Bissing 1912: 38	1103	
PROSYMNA	Inventory	Reference	CI	L-Ph
<i>Chamber Tomb III, LH II - IIIA</i>				
165. carnelian hippo. figurine	NMA 6427	Pierce Blegen 1937: 292, fig. 600	32	
<i>Chamber Tomb X, LH III</i>				
166. bronze arrow head		Blegen 1937: 200, fig. 512:1	1030	

App. A: Imported Items Found in the LBA Argolid

PROSYMNA (cont)	Inventory	Reference	CI	L-Ph
<i>Chamber Tomb XIV (sifting of floor material), LH I - IIIA</i>				
167. faience/steatite? scarab ⁷	NMA 8450	Pierce Blegen 1937: 281, fig. 597	121	490-91
<i>Chamber Tomb XXIV (Cist II), LH IIIA</i>				
168. faience cylinder seal		Pierce Blegen 1937: 280, fig. 596	156	495
<i>Chamber Tomb XXXVIII, LH IIIA - IIIB</i>				
169. faience cylinder seal		Pierce Blegen 1937: 280, fig. 596	157	496
<i>Various Chamber Tombs, LH I - III</i>				
170. stone & faience beads (241)		Pierce Blegen 1937: 292-95, 307-12		494
<i>Tholos Tomb, LH II</i>				
171. faience bowl	NMA 3335	Wace 1921-23: 336 no. 46, fig. 68g	482	492
172. baggy alabastron	NMA 3336	Wace 1921-23: 336 no. 59	246	493
<i>Uncertain Context (Tholos or below sanctuary), LH III?</i>				
173. faience scarab		Pierce Blegen 1937: 281 n. 5		489
TIRYNS	Inventory	Reference	CI	L-Ph
<i>Building I, LH IIIB</i>				
174. faience kylix	Tiryms apotheke 1843-50	Kilian <i>et al.</i> 1979: 443, fig. 54	661	
<i>Between Buildings I & II, LH IIIB</i>				
175. Canaanite amphora	Exc 1968 II PF, H2	Kilian 1988a: fig. 25:13	314	
<i>North of Building I (North Cistern Passage), LH IIIB</i>				
176. Canaanite amphora ⁸	Exc 27412 (NS Z4)	Olivier 1988: 259 no. 27, fig. 3, 5	315	
<i>Area of Buildings I & VIII (in debris), LH IIIB</i>				
177. ceramic vessel	Exc LXI 39/67 XV nr 50	Cline 1994: 217	746	
<i>East of Building III, LH IIIA</i>				
178. frit monkey figurine	Exc LXI 36/88 a.12.46	Cline 1991b: 34-48, pl. 2	6	
<i>Above Building III, LH IIIC</i>				
179. Canaanite amphora	Exc 65II/2MA	Olivier 1988: 259 no. 28, fig. 3, 5	320	
<i>Building VI, Room 123, LH IIIB</i>				
180. ceramic lid	Exc LXI 42/10 IXb	Cline 1994: 209	678	
<i>South of Building VI, Room 191, LH IIIB</i>				
181. White Shaved juglet	Exc LXII 42/48 VIIIa	Kilian 1983: 304, fig. 15:14	632	

⁷ Lambrou-Philipson includes the scarab catalogued by Pendlebury (1930: 59 no.105) separately, but it is in all likelihood the same one reported by Blegen.

⁸ Perhaps part of same vessel as 175, Tiryms Exc 1968 II PF, H2 (Olivier 1988: 259).

App. A: Imported Items Found in the LBA Argolid

TIRYNS (cont)	Inventory	Reference	CI	L-Ph
<i>South of Building VI, Room 208, LH IIIB</i>				
182. Canaanite amphora	Exc LXII 43/49 OfI XI nr 16	Olivier 1988: 260 no. 31, fig. 2, 5	312	
<i>South of Building VI (surface with IIIB material), LH IIIB</i>				
183. Canaanite amphora	Exc LXII 43/33 XV c 8/246	Olivier 1988: 256 no. 14, fig. 1	317	
<i>South of Building VI (wall between citadel wall & house), LH IIIB</i>				
184. terracotta wall bracket	Exc LXI 42/59 c.14.15 XI, LXI 42/69 XII	Kilian 1988a: 121, fig. 24:6	795	
185. terracotta wall bracket	Exc LXII 43/67 XV grau	Kilian 1988a: 121, fig. 24:3	796	
<i>South of Building VI (within fill), LH IIIC</i>				
186. Canaanite amphora	Exc LXII 42/45 V	Olivier 1988: 254 no. 7, fig. 1, 4	321	
<i>South of Building VI, LH IIIB</i>				
187. Canaanite amphora	Exc LXII 43/43 XIV	Kilian 1988a: fig. 25:12	311	
188. terracotta wall bracket	Exc LXII 43/46 X	Kilian 1988a: 121, fig. 24:9	790	
189. terracotta wall bracket	Exc LXII 43/46 Xb	Kilian 1988a: 121, fig. 24:10	788	
190. terracotta wall bracket	Exc LXII 43/69 OfI XV	Kilian 1988a: 121, fig. 24:4	792	
191. ceramic "milk bowl"	Exc LXII 43/81 XIVa grau	Kilian 1988a: fig. 25:11	399	
192. terracotta wall bracket	Exc LXII 43/92 OfI XV nr 20	Kilian 1988a: 121, fig. 24:8	791	
193. Canaanite amphora	Exc LXII 43/93 OfI XII nr 18	Kilian 1988c: 127, fig. 4	319	
<i>West of Building VI (open court West of Room 122), LH IIIB</i>				
194. ceramic "milk bowl"	Exc LXI 41/53 XIVa	Kilian <i>et al.</i> 1981: 170, fig. 40:5	400	501
<i>Northwest of Building VI, LH IIIB</i>				
195. Canaanite amphora	Exc LXI 40/93 XI a	Olivier 1988: 259 no. 29, fig. 2	318	
<i>Open area by Buildings VII & VIII, LH IIIB</i>				
196. terracotta wall bracket	Exc LXI 40/1 XIIIb	Kilian 1988a: fig. 24:5	789	
<i>North Gate (house debris to the south), LH IIIB</i>				
197. Canaanite amphora	Exc LXIII 35/25 V 13-27	Olivier 1988: 255 no. 13, fig. 2, 5	316	499
<i>North Gate, LH IIIB</i>				
198. terracotta wall bracket	Exc LXII 34/89 Ivb	Kilian 1988a: fig. 24:1	793	
199. terracotta wall bracket	Exc LXII 34/100 (or 36/100)	Kilian 1988a: fig. 24:2	794	
<i>Northwest Excavations (behind apotheke), LH IIIC</i>				
200. terracotta wall bracket	Exc LIV 30/61 VIa, LIV 30/43 VIa	Kilian <i>et al.</i> 1978: 452, fig. 7	1112	
<i>West Casemate 14, LH IIIB</i>				
201. faience vessel fragments	Exc LXI 35/63 XIV+KW14, LXII 35/10 Ivb, LXIII 34 Ivb	Cline 1994: 220	778	
<i>West Casemate 14, LH IIIC</i>				
202. ceramic vessel	Exc LXI 35/97 VI	Cline 1994: 217	747	

App. A: Imported Items Found in the LBA Argolid

TIRYNS (cont)	Inventory	Reference	Cl	L-Ph
<i>West Trench (material from casemate 7, possible shrine), LH III</i>				
203. ivory "idol"	Exc LIX 41/45 a.16.71 IXa	Kilian 1988a: 145, fig. 46	7	
<i>Unterburg, unspecified context, LH IIIB</i>				
204. Canaanite amphora	Exc LXIII 34/36-46 III	Kilian 1988c: fig. 24:7	313	
<i>Profitis Ilias Tomb 19, LH II - IIIA</i>				
205. frit cylinder seal	Nauplion 2497	Rudolph 1973: 120-23, pl. 52:4-5	174	497
<i>Tomb 28, LH IIIC late</i>				
206. iron dagger		Snodgrass 1971: 220, 229, fig. 76	1049	
207. iron dagger		Snodgrass 1971: 221, 229	1050	
<i>Acropolis: unrecorded find spot, LH III</i>				
208. bronze smiting figure	NMA 1582	Schliemann 1885: 166, fig. 97	17	500
<i>Medieval context, near surface</i>				
209. Canaanite amphora	Exc LXII 451B G4 1978	Olivier 1988: 260 no. 30, fig. 2, 5	1091	
<i>Middle City (?), LH IIIB (?)</i>				
210. terracotta wall bracket	Exc LX51	Kilian 1988c: 127	1113	
<i>Tiryns Treasure, mixed context (LH IIIC?)</i>				
211. gold earrings (2)	NMA 6212	Karo 1930: 125, fig. 1	68	502
212. hematite cylinder seal	NMA 6214	Karo 1930: 126, pl. 2:6	180	498
213. bronze tripod stand	NMA 6225	Karo 1930: 131-33, fig. 4	724	
214. iron sickle blade	NMA 6228b/11608	Karo 1930: 135-36, fig. 6	1067	
<i>Unknown context (surface find?)</i>				
215. terracotta wall bracket		Cline 1994: 256	1114	
216. terracotta wall bracket		Cline 1994: 256	1115	
217. terracotta wall bracket		Cline 1994: 257	1116	
218. terracotta wall bracket		Cline 1994: 257	1117	
TSOUNGIZA	Inventory	Reference	Cl	L-Ph
<i>UCB Trench DDD, EEE-22, 23 (disturbed fill), LH III</i>				
219. bronze dagger	Nemea Exc BR 17	Miller 1975: 151, pl. 34i	821	
<i>Stratigraphic Unit 384 (surface level), LH IIIB</i>				
220. Canaanite amphora	NVAP Exc 384-2-2	Cline 1994: 172	322	

APPENDIX B
Ivory Objects Found in the Bronze Age Argolid

AIDHONIA	Inventory	Reference	Poursat
<i>Chamber Tomb 7 (Pit I), LH II</i>			
rosette inlays (3)	Nemea 567, 643, 568	Demakopoulou 1996: 55	
<i>Chamber Tomb 8, LH II - IIIB</i>			
pomegranate pendant	Nemea 709	Demakopoulou 1996: 63	
<hr/>			
ARGOS	Inventory	Reference	Poursat
<i>Deiras Chamber Tomb VI, LH IIIA</i>			
sphinx & palm tree plaque	NMA 5575	Vollgraff 1904: 385, fig. 22	350
argonaut inlays (6)	NMA 5576	Vollgraff 1904: 385, fig. 20	351
palm tree inlays (3)	NMA 5577	Vollgraff 1904: 385, fig. 21	352
disc inlays (2)	NMA 5578	Vollgraff 1904: 386, fig. 10	353
comb fragments	NMA 5579	Vollgraff 1904: 386	354
<i>Deiras Chamber Tomb IX, LH II - LH IIIA</i>			
comb	NMA 5602	Vollgraff 1904: 388	356
rosette inlay	NMA 5603	Vollgraff 1904: 388	355
<i>Deiras Chamber Tomb XXIV, LH IIIA</i>			
mirror handle	Argos DB 15	Deshayes 1966: 202, pl. LXIX:1	
comb with rosette, animals	Argos DM 42-43	Deshayes 1966: 213, pl. XXIV:1, LXIX:10	
'hoof'	Argos DM 44	Deshayes 1966: 212, pl. LXIX:8	
spatula	Argos DM 45	Deshayes 1966: 213, pl. LXIX:9	
<i>Deiras Chamber Tomb XXX, LH IIIA - IIIC</i>			
plaque	Argos DM 92	Deshayes 1966: 212, pl. LXXXIX:5	
<hr/>			
ASINE	Inventory	Reference	
<i>Lower Town: House D, Room XVI, MH II - III</i>			
(ivory?) worked piece		Nordquist 1987: 39-40, 114 no. 75	
<i>Lower Town: North of House E, MH III?</i>			
(ivory?) knife		Nordquist 1987: 39-40, 114 no. 74	
<i>Barbouna Chamber Tomb I</i>			
mirror handle with butterflies		Patrianakou-Iliaki 1996: 1273-78, fig. 1-3	
<i>Chamber Tomb I:1, LH II - IIIA</i> ¹			
handle with animal		Hughes-Brock 1996: 77 no. 1	
column? appliqué		Hughes-Brock 1996: 77 no. 2	
rosette inlay		Hughes-Brock 1996: 77 no. 3	
triangular inlay		Hughes-Brock 1996: 77 no. 4	
misc. fragments (3)		Hughes-Brock 1996: 77 no. 10-12	

¹ The first four items here are illustrated in the original publication, Frödin & Persson 1938: 376, fig 244.

App. B: Ivory Objects Found in the LBA Argolid

ASINE (cont)	Inventory	Reference
<i>Chamber Tomb I:2, LH IIIA</i>		
discs (7)		Frödin & Persson 1938: 388
waz-lily ornaments (10)	NMA 10550, 10552, 10557	Krzyszkowska 1996a: 89, fig. 1:4, 2:5
duck pyxis [<i>Import</i>]	NMA 10553	Krzyszkowska 1996a: 89, fig. 1:1
rosette, crocodiles? plaque	NMA 10554	Krzyszkowska 1996a: 89, fig. 1:3
rod with tricurved arch	NMA 10556	Krzyszkowska 1996a: 89, fig. 1:2
misc. fragments (3)	NMA 10559, 10563, 10565	Krzyszkowska 1996a: 90, fig. 2:11
spiral plaque	NMA 10560	Krzyszkowska 1996a: 89, fig. 2:6
argonaut plaque	NMA 10561	Krzyszkowska 1996a: 89, fig. 2:7
<i>Chamber Tomb I:7, LH II - IIIC</i>		
combs (2)		Frödin & Persson 1938: 420
rosette ornaments (7)		Frödin & Persson 1938: 420
KAZARMA		
Inventory	Reference	
<i>Tholos Tomb A, LH II</i>		
comb	Nauplion 14549	Protonariou-Deilaki 1969: 4
KOKLA		
Inventory	Reference	
<i>Tholos Tomb, LH II - IIIA</i>		
argonaut, shell plaque		Demakopoulou 1997: 106, fig. 6
LERNA		
Inventory	Reference	
<i>Grave A-9, MH (Lerna V)</i>		
lid	Exc L4 779	Banks 1967: 480-82 no. 1216
<i>Mixed context: MH and later²</i>		
human figurine	Exc L3 237	Banks 1967: 479-82 no. 1215
<i>Unspecified context, MH (Lerna IV - V)</i>		
fragmentary pin	Exc L4 108	Banks 1967: 377 no. 933
fragmentary pin	Exc L4 155	Banks 1967: 377 no. 934
fragmentary pin	Exc L5 50	Banks 1967: 396 no. 1058
MIDEA-DENDRA		
Inventory	Reference	
<i>Megaron Building, niche, LH IIIC</i>		
pommel		Demakopoulou, <i>et al.</i> 1996: 30, fig. 66
<i>"Palace eisodos" East terrace, LH III?</i>		
"chessman"		Persson 1942: 11, fig. 6:3
plaque		Persson 1942: 11

² This figurine fragment probably dates to a later period and is to be published by K. Lapatin (E. Banks, pers. com.).

App. B: Ivory Objects Found in the LBA Argolid

MIDEA-DENDRA(cont)	Inventory	Reference	Poursat
<i>Trench A, Surface Level</i>			
Pin		Åström 1983: 38, fig. 133	
<i>Trench S, West Gate Area, LH III</i>			
ivy inlay		Demakopoulou, <i>et al.</i> 1996: 24, fig. 42	
<i>Chamber Tomb 2, LH IIIA - IIIB</i>			
rosette inlay		Persson 1931: 100, pl. XXXIII 6	
rosette plaques (2)		Persson 1931: 103	
mirror handle	NMA 7311	Persson 1931: 96, pl. XXXIII:3	
<i>Chamber Tomb 8, LH II - IIIA</i>			
footstool decoration:			
dog-tooth inlays (3)		Persson 1942: 47, pl. II	
segmented strips (2)		Persson 1942: 47, pl. II	
rosette inlays (4)		Persson 1942: 47, pl. II	
<i>Chamber Tomb 10 (shaft II), LH IIIA</i>			
(+gold) rod		Persson 1942: 86	
(+gold) bowl		Persson 1942: 91, fig. 102	
<i>Chamber Tomb 12, LH II - IIIA</i>			
(+gold) pommel		Åström 1977: 18, 55, pl. VII.3, VIII.3	
<i>Chamber Tomb 13, LH IIIA</i>			
misc. fragments		Åström 1977: 101	
<i>Tholos (pit I), LH IIIA</i>			
(+gold) pommel	NMA 7325	Persson 1931: 34-35, pl. XX	
(+gold) hilt plate	NMA 7362	Persson 1931: 35-36, pl. XXIII	
<i>Tholos (pit IV), LH IIIA</i>			
griffin & man plaque	NMA 7359	Persson 1931: 41, 59, fig. 36	359
human head plaque	NMA 7359	Persson 1931: 41, 59, fig. 36	360
genius & goat pyxis	NMA 7359	Persson 1931: 41, 59, fig. 36	358
comb with basket-work	NMA 7365	Persson 1931: pl. XXVI	357
lion plaque [<i>Import</i>]	NMA 7365	Persson 1931: 41, 59, fig. 36	361
box with bull		Persson 1931: 41, 59, fig. 36	
column appliqué		Persson 1931: 59	
dog-tooth inlay		Persson 1931: 59, fig. 36	
horse plaque		Persson 1931: 59	
plaque with female figure		Persson 1931: 41, 59, fig. 36	
rosette plaque		Persson 1931: 59, fig. 36	
tricurved arch plaque		Persson 1931: fig. 36	
<i>Unknown Location (Bertos excavations)</i>			
comb with tricurved arch	NMA 8762	Poursat 1977b: 117	362
comb with rosette	NMA 8763	Poursat 1977b: 117	363
rosette inlays (8)	NMA 8764	Poursat 1977b: 117	364

App. B: Ivory Objects Found in the LBA Argolid

MYCENAE	Inventory	Reference	Poursat
<i>Artisans' Quarter, LH IIIB</i>			
rosette plaque		Mylonas 1966a: 423	
offcuts and waste chips (778)		Mylonas 1966a: 425, pl. 96a	
"a number of small beads"		Mylonas 1966a: 426	
<i>Building M, Room M-3, LH IIIB</i>			
female figurine	Nauplion 13882	Mylonas 1963: 101, pl. 77b	
<i>Citadel House Area, LH IIIB?</i>			
knob	Exc 69-1337	Krzyszkowska 1992: 27	
offcut	Exc 66-113	Krzyszkowska 1992: 31 n. 14	
offcut	Exc 66-153	Krzyszkowska 1992: 31 n. 14	
<i>Citadel House, Area 36 ("workshop"), LH IIIB</i>			
tusk "bark"	Exc 66-1701	Krzyszkowska 1992: 26, pl. 1c	
<i>Citadel House Area, "Causeway Deposit", LH IIIB</i>			
rhyton(?) fragment	Nauplion 14707	Wardle 1973: 340, fig. 23, pl. 61d	
pommel	Exc 59-247	Wardle 1973: 339, pl. 61a,b	
blank for a comb [Import]	Exc 60-108	Wardle 1973: 340, fig. 23, pl. 61d	
figure-eight shield appliqué	Exc 60-208	Wardle 1973: 339-40, pl. 61a,c	
<i>Citadel House, Room 19, LH IIIB</i>			
cosmetic spatula		Krzyszkowska 1997: 147	
comb		Krzyszkowska 1997: 147	
figurine		Krzyszkowska 1997: 147	
<i>Citadel House, Room 31, LH IIIB</i>			
lion figure	Nauplion 14521	Poursat 1977a: 69 no. 17, pl. III:4	
male figurine head [Import]	Nauplion 15022	Poursat 1977a: 52 no. 7, 233, pl. III:1-3	
<i>Citadel House, Room 31-33, LH IIIB</i>			
tusk tip	Exc 69-1721	Krzyszkowska 1992: 26, pl. 2a	
lyre piece		Krzyszkowska 1997: 147	
"furniture attachments"		Krzyszkowska 1997: 147	
female figurine		BCH 98 (1974): 604, fig. 73-74	
<i>Citadel House, Room 32, LH IIIB</i>			
offcut	Exc 68-991	Krzyszkowska 1992: 26, pl. 1e	
hilt plate	Exc 68-994	Krzyszkowska 1997: 147, pl. LVIIIk	
hilt plate	Exc 68-1181	Krzyszkowska 1997: 147, pl. LVIIIk	
blank	Exc 68-1184	Krzyszkowska 1992: 27, pl. 3d right	
unfinished pieces (2)	Exc 68-1185	Krzyszkowska 1997: 147, pl. LVIII f-g	
tusk "bark"	Exc 68-1186	Krzyszkowska 1992: 26, pl. 1g right, 1h	
cube/block	Exc 68-1188	Krzyszkowska 1992: 26, pl. 1 a-b	
offcut	Exc 69-840	Krzyszkowska 1992: 26, pl. 2c	
inlay strips (2)		Krzyszkowska 1997: 147, pl. LVIIIi	
pommel		Krzyszkowska 1997: 147, pl. LVIIIj	
offcuts (2)		Krzyszkowska 1997: 147, pl. LVIIIb-c	
unfinished piece		Krzyszkowska 1997: 147, pl. LVIIIg	

App. B: Ivory Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference	Poursat
<i>Citadel House, Room I-II, LH IIIB</i>			
tusk "bark"	Exc 60-181	Krzyszkowska 1992: 26, pl. 1g left	
hippopotamus lower canine	Exc 62-1058	Krzyszkowska 1984: 124, pl. XIIIa	
blank	Exc 62-1643	Krzyszkowska 1992: 27, pl. 3d left	
blanks (2)	Exc 62-1658	Krzyszkowska 1992: 27, pl. 3b	
waz-lily inlay	Exc 62-1659	Krzyszkowska 1992: 27-28, pl. 3g	
lily inlays (6)	Exc 62-1659	Krzyszkowska 1992: 27-28, pl. 3g	
appliqué		Krzyszkowska 1997: 147, pl. LVIII	
blank		Krzyszkowska 1997: 146, pl. LVIIb	
strips (2)		Krzyszkowska 1997: 146, pl. LVIIj	
<i>House of Shields, North Room (Area I), LH IIIB</i>			
rosette inlays (2)	NMA 7795 ³	Tournavitou 1995: 401	108
waz-lily (cusp) inlays (3)	Exc 55-268	Tournavitou 1995: 438	
lily inlays (4)	Exc 55-269	Tournavitou 1995: 417	
strips (11)	Exc 55-270	Tournavitou 1995: 513, fig. 30a	
<i>House of Shields, North Room (Area II), LH IIIB</i>			
figure-eight shield appliqué	NMA 7993	Tournavitou 1995: 453, photo	70
rosette inlays (5)	NMA 7994	Tournavitou 1995: 401	
<i>House of Shields, North Room, LH IIIB</i>			
figure-eight shield appliqués (3)	NMA 7993	Tournavitou 1995: 454	70
disc: plain	Exc 55-169	Tournavitou 1995: 394	
<i>House of Shields, West Room (Ivory Area), LH IIIB</i>			
"hoofs" (6)	NMA 7393	Tournavitou 1995: 528, pl. 26b,c	128
hilt guards (10)	NMA 7394	Tournavitou 1995: 514, pl. 25a, fig. 31b	129
triglyph-rosette plaques (8)	NMA 7396	Tournavitou 1995: 498	62
warrior head appliqué	NMA 7397	Tournavitou 1995: 433, pl. 20a	63
rectangular blocks (9)	NMA 7398	Tournavitou 1995: 537, pl. 27h, fig. 33a	131
lion plaques (14)	NMA 7399	Tournavitou 1995: 499	53
lion, calf plaques (3)	NMA 7400	Tournavitou 1995: 500	51-52
figure-eight shields (4) plaque	NMA 7401	Tournavitou 1995: 443, pl. 20c	59
figure-eight shield appliqué	NMA 7404	Tournavitou 1995: 445, photo	66
strips (10)	NMA 7407	Tournavitou 1995: 500	121
circular lid	NMA 7408	Tournavitou 1995: 550, pl. 28e	98
waz-lily inlay	NMA 7408	Tournavitou 1995: 550, pl. 28f	98
misc. pieces with lion	NMA 7408	Tournavitou 1995: 550-51, pl. 28e,f	54
strips (114)	NMA 7409	Tournavitou 1995: 345-47	119
plume inlay	NMA 7410	Tournavitou 1995: 442	116
tricurved arch inlays (6)	NMA 7411	Tournavitou 1995: 425	103
strips (3)	NMA 7412	Tournavitou 1995: 520	124, 126
strips (23)	NMA 7413	Tournavitou 1995: 521	125
warrior head inlays (7)	NMA 7414	Tournavitou 1995: 433	84
figure-eight shield appliqués (27)	NMA 7415	Tournavitou 1995: 448-49, photo	68
dolphin inlays (26)	NMA 7416	Tournavitou 1995: 431	89, 90
animal inlay	NMA 7416	Tournavitou 1995: 431	88

³ listed incorrectly as NMA 7995 by Poursat (1977b: 37).

App. B: Ivory Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference	Poursat
<i>House of Shields, West Room (Ivory Area) (cont)</i>			
flame inlays (29)	NMA 7417	Tournavitou 1995: 440	93, 94
ivy inlays (131)	NMA 7418	Tournavitou 1995: 419-20	96
waz-lily inlays (21)	NMA 7419	Tournavitou 1995: 410-12	99
misc. fragments (11)	NMA 7419	Tournavitou 1995: 410-12	99
lily inlays (7)	NMA 7419	Tournavitou 1995: 410-12	99
whorl-shell appliqués (151)	NMA 7420	Tournavitou 1995: 430	92
argonaut inlays (265)	NMA 7421	Tournavitou 1995: 427-28, photo	91
curved strips (7) with circles	NMA 7422	Tournavitou 1995: 348, fig. 26c	130
waz-lily (cusp) inlays (50)	NMA 7423	Tournavitou 1995: 437	101-102
discs (401)	NMA 7424	Tournavitou 1995: 551-58	109
rosette discs (103)	NMA 7424	Tournavitou 1995: 551-58	106
waz-lily inlays (4)	NMA 7424	Tournavitou 1995: 557	
ivy inlays (6)	NMA 7424	Tournavitou 1995: 557	
argonaut plaques (4)	NMA 7424	Tournavitou 1995: 557	
lily inlays (22)	NMA 7424	Tournavitou 1995: 557	
triglyph-rosette plaques (17)	NMA 7425	Tournavitou 1995: 501-502	105
inlays (37)	NMA 7426	Tournavitou 1995: 360, photo	112-13
misc. pieces (ca. 5000)	NMA 7427	Tournavitou 1995: 559-64, pl. 28c,d	122
column appliqué	NMA 7428	Tournavitou 1995: 465, pl. 22c, fig. 29:1a	73
column appliqué	NMA 7429	Tournavitou 1995: 465, fig. 29:1b	71
column appliqué	NMA 7430	Tournavitou 1995: 465, fig. 29:1c	72
column appliqué	NMA 7431	Tournavitou 1995: 466, pl. 22c, fig. 29:1d	74
column appliqué	NMA 7432	Tournavitou 1995: 466, pl. 22c, fig. 29:1e	77
column appliqué	NMA 7433	Tournavitou 1995: 466, pl. 22c, fig. 29:1f	78
column appliqué	NMA 7433	Tournavitou 1995: 467, pl. 22c, fig. 29:2b	78
column appliqué	NMA 7436	Tournavitou 1995: 468, pl. 22a, fig. 29:2f	132
column appliqué	NMA 7437	Tournavitou 1995: 468, fig. 29:2g	
column appliqué	NMA 7438	Tournavitou 1995: 469, pl. 22c, fig. 29:2h	
column appliqué	NMA 7439	Tournavitou 1995: 469, fig. 29:2i	
column appliqué	NMA 7439	Tournavitou 1995: 469, pl. 22c, fig. 29:3a	
column appliqué	NMA 7439	Tournavitou 1995: 470, pl. 22c, fig. 29:3b	
column appliqué	NMA 7440	Tournavitou 1995: 470, fig. 29:3c	80
column appliqué	NMA 7441	Tournavitou 1995: 471, photo, fig. 29:3d	81
column appliqué	NMA 7441	Tournavitou 1995: 472, photo, fig. 29:3e	81
column appliqué	NMA 7441	Tournavitou 1995: 472, photo, fig. 29:3f	81
column appliqué	NMA 7441	Tournavitou 1995: 472, photo fig. 29:3g	81
column appliqué	NMA 7442	Tournavitou 1995: 473, pl. 22a, fig. 29:4a	82
column appliqué	NMA 7443	Tournavitou 1995: 474, pl. 22a, fig. 29:4b	
column appliqué	NMA 7444	Tournavitou 1995: 474, pl. 22a, fig. 29:4c	
column appliqué	NMA 7445	Tournavitou 1995: 474, pl. 22a, fig. 29:4d	
column appliqué	NMA 7446	Tournavitou 1995: 475, fig. 29:4g	
column appliqué	NMA 7446	Tournavitou 1995: 475, pl. 22a, fig. 29:4e	
column appliqué	NMA 7446	Tournavitou 1995: 477, fig. 29:4i	
column appliqué	NMA 7447	Tournavitou 1995: 475, fig. 29:4f	83
column appliqué	NMA 7448	Tournavitou 1995: 476, pl. 22c, fig. 29:4h	
column appliqué	NMA 7449	Tournavitou 1995: 477, fig. 29:4j	
"hoofs" (3)	NMA 7480	Tournavitou 1995: 529, pl. 26 a	128
figure-eight shield appliqué	NMA 7405	Tournavitou 1995: 443	67
column appliqué	NMA 7449	Tournavitou 1995: 478, pl. 22c, fig. 29:5b	

App. B: Ivory Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference	Poursat
<i>House of Shields, West Room (Ivory Area) (cont)</i>			
column appliqué	NMA 7450	Tournavitou 1995: 479, pl. 22c, fig. 29:5c	83
appliqué with rosette ⁴	NMA 7451	Tournavitou 1995: 525	118
animal (sphinx?) plaque	NMA 7452	Tournavitou 1995: 502	56
curved strips (8)	NMA 7453	Tournavitou 1995: 349	130
inlays (29)	NMA 7454	Tournavitou 1995: 362	114
fragments (16)	NMA 7457	Tournavitou 1995: 566	
rosette disc	NMA 7458	Tournavitou 1995: 384	109
discs (84) with circles	NMA 7458	Tournavitou 1995: 384	109
misc. fragments (125)	NMA 7459	Tournavitou 1995: 567-68	137
misc. fragments (159)	NMA 7460	Tournavitou 1995: 569-70	136
discs (4)	NMA 7493	Tournavitou 1995: 394	137
warrior head inlays	NMA 7991	Tournavitou 1995: 433	85
strips (4)	Nauplion 12289	Tournavitou 1995: 703	
<i>House of Shields, West Room (Northeast area), LH IIIB</i>			
helmet inlays (11)	NMA 7462	Tournavitou 1995: 434, pl. 28b	64
helmet inlays (21)	NMA 7463	Tournavitou 1995: 435	86
figure-eight shield appliqués (8)	NMA 7464	Tournavitou 1995: 451	69
lily (plain inlays (11)	NMA 7465	Tournavitou 1995: 416-17	100
waz-lily inlays (13)	NMA 7465	Tournavitou 1995: 416-17	100
ivy inlays (62)	NMA 7466	Tournavitou 1995: 422-23, pl. 19d	97
inlays (557)	NMA 7467	Tournavitou 1995: 372, pl. 15d	115
discs (358)	NMA 7468	Tournavitou 1995: 390, pl. 17a	109
rosette inlays (27)	NMA 7469	Tournavitou 1995: 399-400, 27d	107
discs (35)	NMA 7470	Tournavitou 1995: 391-92, pl. 27c	110-11
whorl-shell appliqués (53)	NMA 7472	Tournavitou 1995: 430	92
waz-lily (cusp) inlays (10)	NMA 7473	Tournavitou 1995: 438	
plaque	NMA 7477	Tournavitou 1995: 509	117
plaques (2)	NMA 7477	Tournavitou 1995: 509, fig. 30b	133
rings (2)	NMA 7479	Tournavitou 1995: 393	130
column appliqués (12)	NMA 7481	Tournavitou 1995: 482-83	76
lion plaque	NMA 7485	Tournavitou 1995: 509	55
tricurved arch inlays (5)	NMA 7489	Tournavitou 1995: 584	57
misc. pieces (111)	NMA 7490	Tournavitou 1995: 585-87	135
palm tree plaques (15)	NMA 7395	Tournavitou 1995: 498, pl. 23c	95
plaque	NMA 7491	Tournavitou 1995: 511, photo	134
strips (4)	NMA 7471	Tournavitou 1995: 354, fig. 26a	120
spiral strips (38)	NMA 7474	Tournavitou 1995: 355	119
figure-eight shield appliqués (5)	NMA 7475	Tournavitou 1995: 452, pl. 21d, fig. 28d	87
tricurved arch inlay	NMA 7476	Tournavitou 1995: 426	104
strips (13)	NMA 7482	Tournavitou 1995: 524	126
flame inlays (2)	NMA 7483	Tournavitou 1995: 441	93
festoon plaque	NMA 7484	Tournavitou 1995: 509	117
strips (8)	NMA 7486	Tournavitou 1995: 355-56, pl. 15b, fig. 26b	123
plaques (36)	NMA 7487-88	Tournavitou 1995: 510	135
"candlesticks" (3-4)	NMA 7493	Tournavitou 1995: 526, pl. 25c,d,e	127
triglyph-rosette plaques (9)	NMA 7494	Tournavitou 1995: 512	61

⁴ Tournavitou incorrectly gives the context as House of Sphinxes, West room (North side).

App. B: Ivory Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference	Poursat
<i>House of Shields, West Room, LH IIIB</i>			
column appliqué	NMA 7433	Tournavitou 1995: 467, pl. 22c, fig. 29:2a	78
column appliqué	NMA 7434	Tournavitou 1995: 467, pl. 22c, fig. 29:2c	79
column appliqués (2)	NMA 7435	Tournavitou 1995: 468, pl. 22c, fig. 29:2d	
wood, ivory fragments (3)	NMA 7499	Tournavitou 1995: 597, pl. 29c,d	
figure-eight shield appliqués (2)	NMA 7403	Tournavitou 1995: 445, photo	65
figure-eight shield appliqué	NMA 7402	Tournavitou 1995: 444, pl. 21a, 21b	58
figure-eight shields plaques (7)	NMA 7406	Tournavitou 1995: 447, pl. 21c	60
inlays (4)	NMA 7478	Tournavitou 1995: 363	114
inlays (42)	NMA 7456	Tournavitou 1995: 515-16	130
column appliqué	NMA 7455	Tournavitou 1995: 479, pl. 22c, fig. 29:5d	75
column appliqué	NMA 7449	Tournavitou 1995: 477, fig. 29:5a	
triglyph-rosette plaque	NMA 7494	Tournavitou 1995: 503	61
misc. fragments (ca. 800)	Exc 1954	Tournavitou 1995: 588-89	135
<i>House of Sphinxes, Room 1, LH IIIB</i>			
misc. fragments (720)	NMA 7463	Tournavitou 1995: 571-72, photo	204
misc. fragments (5544)	NMA 7463	Tournavitou 1995: 575-77, pl. 28g,h	204
sphinx plaque	NMA 7516	Tournavitou 1995: 488	139
spiral, papyrus (18) plaque	NMA 7550	Tournavitou 1995: 492, pl. 24a	145
argonaut inlays (25)	NMA 7551	Tournavitou 1995: 492	144
sphinx plaques (14)	NMA 7552	Tournavitou 1995: 493	140
combat: lion, bull plaque	NMA 7553	Tournavitou 1995: 494-95, pl. 23a	141
triglyph-rosette inlays (2)	NMA 7554	Tournavitou 1995: 496, pl. 24d	147
column appliqué	NMA 7555	Tournavitou 1995: 456, fig. 29:5i	151
column appliqué	NMA 7555	Tournavitou 1995: 456, fig. 29:6a	151
column appliqué	NMA 7555	Tournavitou 1995: 457, fig. 29:5j	151
column appliqué	NMA 7555	Tournavitou 1995: 458, fig. 29:6b	151
column appliqué	NMA 7555	Tournavitou 1995: 459, fig. 29:6c	151
column appliqué	NMA 7555	Tournavitou 1995: 459, fig. 29:6d	151
column appliqué	NMA 7555	Tournavitou 1995: 459, fig. 29:6e	151
column appliqué	NMA 7555	Tournavitou 1995: 460, fig. 29:6f	151
column appliqué	NMA 7555	Tournavitou 1995: 461, fig. 29:6g	151
column appliqué	NMA 7555	Tournavitou 1995: 461, fig. 29:6h	151
column appliqué	NMA 7555	Tournavitou 1995: 461, fig. 29:6i	151
column appliqué	NMA 7555	Tournavitou 1995: 462, fig. 29:6j	151
column appliqué	NMA 7555	Tournavitou 1995: 463, fig. 29:6k	151
column appliqué	NMA 7555	Tournavitou 1995: 463, fig. 29:6l	151
column appliqué	NMA 7555	Tournavitou 1995: 463, fig. 29:7a	151
"hoofs" (4)	NMA 7556	Tournavitou 1995: 527	194
strips (36)	NMA 7557	Tournavitou 1995: 341	185
strips (47) with circles	NMA 7558	Tournavitou 1995: 342, photo	188
argonaut plaques (9)	NMA 7559	Tournavitou 1995: 497, pl. 24d	158
foliate band strip	NMA 7560	Tournavitou 1995: 344	189
inlays (7)	NMA 7561	Tournavitou 1995: 358, photo	180
strips (4)	NMA 7562	Tournavitou 1995: 344, pl. 15a	191
strips (13)	NMA 7563	Tournavitou 1995: 519, photo	192
strips (22)	NMA 7564	Tournavitou 1995: 520, fig. 31c	173
lily inlays (10)	NMA 7565	Tournavitou 1995: 404-407	167
strip	Nauplion 11967	Tournavitou 1995: 517	

App. B: Ivory Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference	Poursat
<i>House of Sphinxes, Room 1 (cont)</i>			
prepared blanks (17)	NMA 7565	Tournavitou 1995: 404-407	
waz-lily inlays (55)	NMA 7565	Tournavitou 1995: 404-407, pl. 17e-f, 18a-b	167
pegs (7)	NMA 7567	Tournavitou 1995: 532, pl. 27d,e,f	205
discs (3)	NMA 7568	Tournavitou 1995: 379	177
horns of consecration inlay	NMA 7569	Tournavitou 1995: 442	182
waz-lily (cusp) inlays (6)	NMA 7570	Tournavitou 1995: 436	169
double ax inlays (2)	NMA 7571	Tournavitou 1995: 436, pl. 28c	204
figure-eight shield appliqué	NMA 7572	Tournavitou 1995: 443	149
tricurved arch inlay	NMA 7573	Tournavitou 1995: 424	170
flame inlays (2)	NMA 7574	Tournavitou 1995: 439	160
festoon plaques (5)	NMA 7576	Tournavitou 1995: 497, pl. 24d	183
pierced discs (76)	NMA 7577	Tournavitou 1995: 380, fig. 27a	178
rosette inlays (30)	NMA 7578	Tournavitou 1995: 397	174
rosette discs (4)	NMA 7579	Tournavitou 1995: 381-82	179
discs (17)	NMA 7579	Tournavitou 1995: 381-82	179
discs (177)	NMA 7580	Tournavitou 1995: 383	176
cubes (72)	NMA 7581	Tournavitou 1995: 535-36, photo, fig. 32b	196
strip	NMA 7582	Tournavitou 1995: 344	197
misc. pieces (73)	NMA 7584	Tournavitou 1995: 547-49	203
inlays (98)	NMA 7642	Tournavitou 1995: 349-50, fig. 26d	190
plume inlay	NMA 7642	Poursat 1977b: 54, pl. XV	184
discs (2)	Nauplion 11960	Tournavitou 1995: 376	
tricurved arch inlay	Nauplion 12424	Tournavitou 1995: 425	
discs (2)	Nauplion 11970	Tournavitou 1995: 376	
plaque	Exc 52-518	Tournavitou 1995: 488	
<i>House of Sphinxes, Room 1 (East sector), LH IIIB</i>			
cockle-shell appliqués (11)	NMA 7526	Tournavitou 1995: 486	155
ivy inlays (187)	NMA 7566	Tournavitou 1995: 418, pl. 19c	164
<i>House of Sphinxes, Room 2 (East sector), LH IIIB</i>			
cockle-shell appliqués (7)	NMA 7526	Tournavitou 1995: 485	155
bird inlays (5)	NMA 7519	Tournavitou 1995: 432	161
sphinx, column, horns plaque	NMA 7525	Tournavitou 1995: 489	138
"hoofs" (4)	NMA 7527	Tournavitou 1995: 527	194
triglyph-rosette inlay	NMA 7528	Tournavitou 1995: 489	146
animal plaque	NMA 7530	Tournavitou 1995: 490	143
plaques (5)	NMA 7531	Tournavitou 1995: 491, fig. 30c	202
tricurved arch inlays (4)	NMA 7532	Tournavitou 1995: 424	170
waz-lily (cusp) inlays (7)	NMA 7534	Tournavitou 1995: 436	169
inlays (16)	NMA 7535	Tournavitou 1995: 366	201
argonaut plaque	NMA 7536	Tournavitou 1995: 491	159
strip	NMA 7537	Tournavitou 1995: 517	173, 192
strip	NMA 7537	Tournavitou 1995: 518	173
rosette inlays (16)	NMA 7538	Tournavitou 1995: 396-97	174
discs (26)	NMA 7539	Tournavitou 1995: 378	176, 179
inlays (20)	NMA 7540	Tournavitou 1995: 338, pl. 15c	
strip	NMA 7541	Tournavitou 1995: 339	204
inlays (30)	NMA 7542	Tournavitou 1995: 367, photo	201

App. B: Ivory Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference	Poursat
<i>House of Sphinxes, Room 2 (East sector) (cont)</i>			
strips (39)	NMA 7543	Tournavitou 1995: 340	190, 203
pegs (72)	NMA 7544	Tournavitou 1995: 531, pl. 26d,e, 27g	205
column appliqué	NMA 7545	Tournavitou 1995: 543	204
lily inlays (6)	NMA 7545	Tournavitou 1995: 543	204
strips (22) with circles	NMA 7545	Tournavitou 1995: 543	204
rosette inlay	NMA 7545	Tournavitou 1995: 543	
misc. pieces (264)	NMA 7545	Tournavitou 1995: 543-44	204
pegs (12)	NMA 7545	Tournavitou 1995: 543-44, pl. 27a,b,c	204
rectangular strips (510)	NMA 7545	Tournavitou 1995: 543-44, photo	204
triangular strips (37)	NMA 7545	Tournavitou 1995: 543-44, photo	204
spiral, papyrus plaque	NMA 7550	Tournavitou 1995: 489	
ivy inlay	NMA 7566	Tournavitou 1995: 418	164
inlays (6)	NMA 7575	Tournavitou 1995: 369, pl. 16a	165
appliqués (6)	NMA 7583	Tournavitou 1995: 525, fig. 32a	195
cube	NMA 7583	Tournavitou 1995: 541, pl. 28a	195
<i>House of Sphinxes, Room 2 (Middle sector), LH IIIB</i>			
lion plaques (3)	NMA 7586	Tournavitou 1995: 503	142
cockle-shell appliqués (8)	NMA 7587	Tournavitou 1995: 486, pl. 22d	155
cockle-shell appliqués (10)	NMA 7588	Tournavitou 1995: 487, pl. 22d	156
palm tree plaque	NMA 7589	Tournavitou 1995: 503, pl. 24b	162
palm tree plaque	NMA 7590	Tournavitou 1995: 504, pl. 24c	163
discs (34)	NMA 7593	Tournavitou 1995: 386	179
rosette inlays (37)	NMA 7594	Tournavitou 1995: 398, pl. 17c, 17d	174
discs (8)	NMA 7595	Tournavitou 1995: 387	179
pierced discs (2)	NMA 7595	Tournavitou 1995: 388	179
discs (18) with circles	NMA 7596	Tournavitou 1995: 388, pl. 17b	176
strip	NMA 7598	Tournavitou 1995: 539, photo	198
plaques (14)	NMA 7599	Tournavitou 1995: 505	199
plaques (4)	NMA 7600	Tournavitou 1995: 506	199
strips (2)	NMA 7602	Tournavitou 1995: 522, pl. 25b	173
tricurved arch inlays (6)	NMA 7603	Tournavitou 1995: 426	170, 171
waz-lily (cusp) inlays (2)	NMA 7605	Tournavitou 1995: 438	
inlays (4)	NMA 7606	Tournavitou 1995: 362	180
plaques (4)	NMA 7608	Tournavitou 1995: 507	204
inlays (2)	NMA 7609	Tournavitou 1995: 581	181
strips (57)	NMA 7610	Tournavitou 1995: 351, pl. 16b	203
strips (54)	NMA 7610	Tournavitou 1995: 352, photo, pl. 16c	203
strips (100)	NMA 7611	Tournavitou 1995: 507-508, fig. 31a	202
fragments (27)	NMA 7612	Tournavitou 1995: 581	202
fragments (ca 400)	NMA 7612	Tournavitou 1995: 582	202
inlays (23)	NMA 7597	Tournavitou 1995: 370-71, pl. 16d	200
inlays (16)	NMA 7607	Tournavitou 1995: 372, fig. 26e	201
<i>House of Sphinxes, Room 2 (West sector), LH IIIB</i>			
discs (49)	NMA 7539	Tournavitou 1995: 377	176, 179
molding with circles	NMA 7996	Tournavitou 1995: 357	187
inlay	Exc 61-025	Tournavitou 1995: 373	

App. B: Ivory Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference	Poursat
<i>House of Sphinxes, Room 2, LH IIIB</i>			
column appliqué	NMA 7529	Tournavitou 1995: 456, fig. 29:5g	152
column appliqué	NMA 7529	Tournavitou 1995: 456, fig. 29:5h	152
waz-lily inlays (21)	NMA 7533	Tournavitou 1995: 402, pl. 18c-d, 19a-b	166
lily inlays (25)	NMA 7533	Tournavitou 1995: 402-403	166
misc. fragments (28)	NMA 7533	Tournavitou 1995: 402-403	
column appliqués (4)	NMA 7591	Tournavitou 1995: 480, fig. 29:7c	153
peg	NMA 7592	Tournavitou 1995: 481	
column appliqués (2)	NMA 7592	Tournavitou 1995: 481, pl. 22b, fig. 29:7d	154
ivy plaque	NMA 7601	Tournavitou 1995: 421	157
lily inlays (5)	NMA 7604	Tournavitou 1995: 414-15	168
waz-lily inlay	NMA 7604	Tournavitou 1995: 414-15, fig. 28a	168
triangular inlays (7)	Exc 61-051	Tournavitou 1995: 374, photo	
<i>House of Sphinxes, Room 4 (East sector), LH IIIB</i>			
rectangular blocks, pierced (3)	NMA 7517	Tournavitou 1995: 533, photo, fig. 33b	193
strips (3)	NMA 7518	Tournavitou 1995: 517	192
bird inlay	NMA 7519	Tournavitou 1995: 432	161
inlays (18)	NMA 7521	Tournavitou 1995: 364, photo	172
discs (10)	NMA 7522	Tournavitou 1995: 376-77	179
curved strip	NMA 7523	Tournavitou 1995: 337	159
rosette inlay	NMA 7523	Tournavitou 1995: 488	175
misc. fragments (60)	NMA 7524	Tournavitou 1995: 542	148
spiral strips (2)	NMA 7536	Tournavitou 1995: 337	186
discs, pierced	NMA 7548	Tournavitou 1995: 378	
<i>House of Sphinxes, Room 4 Middle sector, LH IIIB</i>			
discs (4)	NMA 7621	Tournavitou 1995: 389, pl. 27b	
strips (4)	NMA 7622	Tournavitou 1995: 354	203
strips (6)	NMA 7623	Tournavitou 1995: 523, photo	192
misc. fragments (50)	NMA 7624	Tournavitou 1995: 583	204
<i>House of Sphinxes, Room 4, LH IIIB</i>			
column appliqué	NMA 7520	Tournavitou 1995: 455, fig. 29:5f, photo	150
<i>House of Sphinxes, Room 8, LH IIIB</i>			
discs (2)	Nauplion 12596	Tournavitou 1995: 389	
<i>House of the Oil Merchant, corridor, LH IIIB</i>			
rosette inlay	NMA 8811	Tournavitou 1995: 395	
<i>House of the Oil Merchant, Room 2, LH IIIB</i>			
discs (10)	Nauplion 12449	Tournavitou 1995: 385	
comb	Nauplion 11757	Tournavitou 1995: 530	
<i>House of the Oil Merchant, Room 8, LH IIIB</i>			
cockle-shell appliqués (3)	Nauplion 12084-12085	Tournavitou 1995: 485	

App. B: Ivory Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference	Poursat
<i>House of the Oil Merchant, West terrace, LH IIIB</i>			
lily inlay	Nauplion 12426	Tournavitou 1995: 413	
disc	Nauplion 12443	Tournavitou 1995: 385	
<i>Prinaria/North Terrace deposit ("shrine"), LH IIIB</i>			
trio figures (2 female, 1 child)	NMA 7711	Wace 1939: fig. 1-22	49
<i>Panagia Houses, Room 9, LH IIIB</i>			
female figurine	Nauplion 13974	Shear 1987: 123-24 no. 204, pl. 38	
ring with spiral		Shear 1987: 117 no. 151, pl. 34	
<i>Room on the North Slope of Acropolis, LH IIIB</i>			
combs (2)		Mylonas 1968: 8, pl. 4b	344b-c
<i>South of Hellenistic tower, LH IIIB</i>			
tricurved arch plaque		BCH 96 (1972): 640, fig. 133	
<i>Rhyton Well, LH III</i>			
misc. fragments (2)		Wace 1919-21: 205	
<i>Tsountas' House Shrine, Room Gamma, LH IIIB</i>			
lily inlay	NMA 2737	Tsountas 1887: pl. 13:14	29
wing (sphinx?) appliqué	NMA 2726	Tsountas 1887: 170-71, pl. 13A	27
inlay	NMA 7103	Poursat 1977b: 14, pl. I	28
<i>Chamber Tomb 2, LH IIIA - IIIB</i>			
annular beads (33)	NMA 2283.7	Xenaki-Sakellariou 1985: 56	
mirror handle, female figures	NMA 2399 + 2413	Xenaki-Sakellariou 1985: 56, pl. 2	270
<i>Chamber Tomb 5, LH IIIA - IIIB</i>			
comb		Tsountas 1888: 138	
lion plaque	NMA 2400	Xenaki-Sakellariou 1985: 60, pl. 4	271a
sphinx figure	NMA 2402	Xenaki-Sakellariou 1985: 60, pl. 4	272
lion plaques (3) ⁵	NMA 10987	Xenaki-Sakellariou 1985: 60, pl. 4	271b
<i>Chamber Tomb 15, LH II - IIIB</i>			
fragment with rosette	NMA 2356.1-2	Xenaki-Sakellariou 1985: 78, pl. 15	
sphinx plaque	NMA 2408	Xenaki-Sakellariou 1985: 78, pl. 13	276
rosette plaque	NMA 2414.1	Xenaki-Sakellariou 1985: 79	
mirror handle (?) with spiral	NMA 2414.2	Xenaki-Sakellariou 1985: 79, pl. 13	273
plaque	NMA 2414.3	Xenaki-Sakellariou 1985: 79, pl. 14	275
amorphous fragment, spiral	NMA 2414.4	Xenaki-Sakellariou 1985: 79, pl. 13	274
mirror handle with rosette	NMA 2414.5	Xenaki-Sakellariou 1985: 79, pl. 14	273
amorphous fragments	NMA 2414.6-9	Xenaki-Sakellariou 1985: 79, pl. 13-15	

⁵ Poursat (1977b: 80-81) thinks these belong to the same object as NMA 2400, and are therefore from the same context. Xenaki-Sakellariou plainly states that there is no actual evidence for their context.

App. B: Ivory Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference	Poursat
<i>Chamber Tomb 24, LH IIIA - IIIB</i>			
pyxides (2) with tricurved arch	NMA 2465.1-2	Xenaki-Sakellariou 1985: 84, pl. 15	278
pyxis with human foot	NMA 2465.4	Xenaki-Sakellariou 1985: 85, pl. 15	
comb with lion, bull	NMA 2474	Xenaki-Sakellariou 1985: 85-86, pl. 16	277
<i>Chamber Tomb 27, LH II - IIIB</i>			
pommel?	NMA 2332	Xenaki-Sakellariou 1985: 94, pl. 19	294
rosette ornament	NMA 2410	Xenaki-Sakellariou 1985: 95	292
lily ornaments (6)	NMA 2416.1	Xenaki-Sakellariou 1985: 95, pl. 18	
waz-lily ornaments (7)	NMA 2416.2	Xenaki-Sakellariou 1985: 95, pl. 18	
ornaments (6) with circles	NMA 2416.3-4	Xenaki-Sakellariou 1985: 95, pl. 18	
plaque with circles	NMA 2416.5	Xenaki-Sakellariou 1985: 95, pl. 19	
fragments (3)	NMA 2416.6-8	Xenaki-Sakellariou 1985: 95, pl. 19	
disk	NMA 2416.9	Xenaki-Sakellariou 1985: 95, pl. 20	
altar ornament	NMA 2416.10	Xenaki-Sakellariou 1985: 96, pl. 19	
animal plaques (2)	NMA 2416.11	Xenaki-Sakellariou 1985: 96, pl. 18	
spiral plaque	NMA 2416.12	Xenaki-Sakellariou 1985: 96, pl. 20	
column appliqués (3)	NMA 2416.13-15	Xenaki-Sakellariou 1985: 96, pl. 20	
figure-eight shield appliqués (5)	NMA 2416.16-19	Xenaki-Sakellariou 1985: 96, pl. 20	258
inlays (2)	NMA 2416.20-21	Xenaki-Sakellariou 1985: 96, pl. 20-21	
ivy ornaments (40)	NMA 2416.22	Xenaki-Sakellariou 1985: 96, pl. 20	
plaque	NMA 2416.23	Xenaki-Sakellariou 1985: 97, pl. 21	
misc. fragments (2)	NMA 2416.24-25	Xenaki-Sakellariou 1985: 97, pl. 21	
triglyph-rosette plaque	NMA 2458	Xenaki-Sakellariou 1985: 97, pl. 21	280
triglyph-rosette plaque	NMA 2459.3	Xenaki-Sakellariou 1985: 153-54, pl. 53	282
griffin appliqué	NMA 2461	Xenaki-Sakellariou 1985: 97, pl. 24	285
combat: griffin, deer plaque	NMA 2463	Xenaki-Sakellariou 1985: 97, pl. 21	279
bovine appliqué	NMA 2466	Xenaki-Sakellariou 1985: 97-98, pl. 22	284
warrior head appliqué	NMA 2468	Xenaki-Sakellariou 1985: 98, pl. 22	288
warrior head appliqué	NMA 2469	Xenaki-Sakellariou 1985: 98, pl. 22	289
(frontal) warrior head appliqué	NMA 2470	Xenaki-Sakellariou 1985: 98, pl. 23	290
male figurine	NMA 2471	Xenaki-Sakellariou 1985: 98, pl. 23	286
female figurine	NMA 2472	Xenaki-Sakellariou 1985: 98-99, pl. 24	287
column appliqués (4)	NMA 2642.1-4	Xenaki-Sakellariou 1985: 99, pl. 19,21	291
<i>Chamber Tomb 28, LH II - IIIB</i>			
misc. pieces with grooves	NMA 2394.10	Xenaki-Sakellariou 1985: 103	
button	NMA 2404	Xenaki-Sakellariou 1985: 103, pl. 26	
<i>Chamber Tomb 29, LH II - IIIB</i>			
plaque with female figure	NMA 2641.1	Xenaki-Sakellariou 1985: 105, pl. 27	295
spiral plaque	NMA 2641.2	Xenaki-Sakellariou 1985: 105	
<i>Chamber Tomb 49, LH IIIA</i>			
sphinx plaque ⁶	NMA 2462	Xenaki-Sakellariou 1985: 154, pl. 53	298
female plaque [Import]	NMA 2473, 2475	Xenaki-Sakellariou 1985: 129, pl. 35	299
sphinxes, men, papyri pyxis	NMA 2476	Xenaki-Sakellariou 1985: 129, pl. 36	297
argonaut pyxis	NMA 2477	Xenaki-Sakellariou 1985: 129, pl. 36	296

⁶ Found in museum with material from Tsountas' 1887-88 excavations, but not necessarily from Tomb 49.

App. B: Ivory Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference	Poursat
<i>Chamber Tomb 55, LH IIIA - IIIB</i>			
lily ornament	NMA 2825.1	Xenaki-Sakellariou 1985: 174, pl. 73	
mirror handle women, papyri	NMA 2899	Xenaki-Sakellariou 1985: 174, pl. 72	300
tusk with man, lotus, goats	NMA 2916	Xenaki-Sakellariou 1985: 174, pl. 73, XI	301
<i>Chamber Tomb 60, LH II - IIIB</i>			
misc. fragments (3)	NMA 2811.18-19	Xenaki-Sakellariou 1985: 186	
<i>Chamber Tomb 69, LH II - IIIB</i>			
rosette discs (4)	NMA 2929.12	Xenaki-Sakellariou 1985: 201, pl. 88	
waz-lily ornament	NMA 2929.13	Xenaki-Sakellariou 1985: 201, pl. 86	
<i>Chamber Tomb 75, LH II - IIIB</i>			
bull plaque	NMA 2965	Xenaki-Sakellariou 1985: 210, pl. 93	303
rosette ornament	NMA 3018	Xenaki-Sakellariou 1985: 210, pl. 95	305
rosette discs (3)	NMA 3040.6	Xenaki-Sakellariou 1985: 210, pl. 93	
bull's head appliqués (11)	NMA 3046	Xenaki-Sakellariou 1985: 210, pl. 96	304
<i>Chamber Tomb 76, LH II - IIIB</i>			
plaques (2)	NMA 3042.7	Xenaki-Sakellariou 1985: 212, pl. 97	
<i>Chamber Tomb 81, LH II - IIIB</i>			
lyre piece	NMA 3114	Xenaki-Sakellariou 1985: 230, pl. 108	309
comb with rosette	NMA 3117.7	Xenaki-Sakellariou 1985: 230, pl. 107	310
figure-eight shield appliqués (2)	NMA 3117.8-9	Xenaki-Sakellariou 1985: 230, pl. 107	306
lyre fragments with spiral	NMA 3117.10	Xenaki-Sakellariou 1985: 230, pl. 107	307-308
plaque	NMA 3117.11	Xenaki-Sakellariou 1985: 230	
<i>Chamber Tomb 83, LH II - IIIB</i>			
discs (9) with circles	NMA 3141.14	Xenaki-Sakellariou 1985: 237, pl. 113	
ivy ornaments (3)	NMA 3141.15-16	Xenaki-Sakellariou 1985: 237, pl. 113	
figure-eight shield appliqué	NMA 3141.17	Xenaki-Sakellariou 1985: 237, pl. 113	
plaques (9)	NMA 3141.18	Xenaki-Sakellariou 1985: 238	
plaque	NMA 3141.19	Xenaki-Sakellariou 1985: 238, pl. 113	
<i>Chamber Tomb 84, LH II - IIIB</i>			
disc with circles	NMA 3146.17	Xenaki-Sakellariou 1985: 240	
<i>Chamber Tomb 88, LH II - IIIB</i>			
toggle	NMA 3213.11	Xenaki-Sakellariou 1985: 248, pl. 120	
plaque	NMA 3214.7	Xenaki-Sakellariou 1985: 248	
misc. pieces	NMA 3214.8	Xenaki-Sakellariou 1985: 248	
waz-lily ornaments (2)	NMA 3214.9	Xenaki-Sakellariou 1985: 248, pl. 120	315
plaque	NMA 3214.10	Xenaki-Sakellariou 1985: 248, pl. 119	314
comb with animal	NMA 3214.11	Xenaki-Sakellariou 1985: 248, pl. 119	311
griffin, papyrus plaque	NMA 3215	Xenaki-Sakellariou 1985: 249, pl. 120	312
spiral plaque	NMA 3216	Xenaki-Sakellariou 1985: 249, pl. 120	313
duck pyxis [Import]	NMA 9506	Sakellarakis 1971: 188-233	316

App. B: Ivory Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference	Poursat
<i>Chamber Tomb 92, LH II - IIIB</i> (+bronze) pommel	NMA 3212.7	Xenaki-Sakellariou 1985: 263, pl. 129	317
<i>Chamber Tomb 93, LH IIIA - IIIB (?)</i> ornaments (2) with circles	NMA 4550.14	Xenaki-Sakellariou 1985: 269, pl. 133	
<i>Chamber Tomb 102, LH II - IIIB</i> combat: lion, bull plaque	NMA 5407	Xenaki-Sakellariou 1985: 284, pl. 140	318
<i>Chamber Tomb 102 or 103, LH II - IIIB</i> misc. strips	NMA 5406	Xenaki-Sakellariou 1985: 291, pl. 144	
<i>Chamber Tomb 103, LH II - IIIB</i> animal disc	NMA 4931	Xenaki-Sakellariou 1985: 289, pl. 142	320
female figurine	NMA 4940	Xenaki-Sakellariou 1985: 289, pl. 142	319
<i>Chamber Tomb 513, LH IIIA - IIIB</i> rosette inlays (2)	NMA 6558	Wace 1932: 48, pl. XXV	321
<i>Chamber Tomb 515, LH II - IIIA</i> handle		Wace 1932: 61 no. 68, 211	
<i>Chamber Tomb 518, LH I - IIIA</i> comb	NMA 6444	Wace 1932: 84 no. 57, fig. 32	323a
comb	NMA 6444	Wace 1932: 84 no. 58	323b
pyxis fragments	NMA 6444	Wace 1932: 84 no. 56, fig. 31	324
pyxis fragments	NMA 6447	Wace 1932: 84 no. 55	325
footstool decoration: dog-tooth inlays (48) spiral inlays (2)	NMA 6443	Wace 1932: 84 no. 54, fig. 30	322
<i>Chamber Tomb 519, LH IIIA - IIIB</i> plaques (2)		Wace 1932: 89	
rosette discs (5)	NMA 6440	Wace 1932: 89	326
<i>Chamber Tomb 520, LH IIIA</i> rosette disc		Wace 1932: 28, fig. 12:45	
disc with rosettes, snails	NMA 6514	Wace 1932: 27-28, fig. 14	327
<i>Chamber Tomb 523, LH IIIA - IIIB</i> rosette discs (3)	NMA 6512	Wace 1932: 37, pl. XX	328
<i>Chamber Tomb 529, LH II - IIIA</i> knife handle with spiral		Wace 1932: 104-105	
rod	NMA 6549	Wace 1932: 105 no. 32	330
comb	NMA 6551	Wace 1932: 105 no. 33-34, fig. 42-43	329
<i>Chamber Tomb 530 (chamber), LH IIIA</i> rosette disc		Wace 1932: 109 no. 18	

App. B: Ivory Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference	Poursat
<i>Chamber Tombs, 1-52 (Tsountas), LH II - IIIB</i>			
comb	NMA 2326	Xenaki-Sakellariou 1985: 147-48	263
rosette discs (2)	NMA 2330.1	Xenaki-Sakellariou 1985: 148, pl. 47	260
rosette discs (4)	NMA 2330.2-4	Xenaki-Sakellariou 1985: 148, pl. 47	
discs (2) with circles	NMA 2330.5	Xenaki-Sakellariou 1985: 148, pl. 47	260
discs (8)	NMA 2330.6-7	Xenaki-Sakellariou 1985: 148	
buttons (3)	NMA 2330.8	Xenaki-Sakellariou 1985: 148	
tricurved arch inlay	NMA 2330.9	Xenaki-Sakellariou 1985: 148	260
strips (3)	NMA 2330.10	Xenaki-Sakellariou 1985: 148	
plaque	NMA 2330.11	Xenaki-Sakellariou 1985: 148, pl. 47	
astragal plaque	NMA 2330.12	Xenaki-Sakellariou 1985: 148, pl. 48	
lily ornaments (2)	NMA 2330.13	Xenaki-Sakellariou 1985: 148, pl. 47	260a
waz-lily ornaments (3)	NMA 2330.14, 17	Xenaki-Sakellariou 1985: 149, pl. 47-48	260b
plaque	NMA 2330.15	Xenaki-Sakellariou 1985: 149, pl. 48	
cylinder	NMA 2330.16	Xenaki-Sakellariou 1985: 149	
ivy ornament	NMA 2330.18	Xenaki-Sakellariou 1985: 149	260
figure-eight shield appliqués (11)	NMA 2331.1-6	Xenaki-Sakellariou 1985: 149-50, pl. 48-49	257
comb	NMA 2333	Xenaki-Sakellariou 1985: 150	264
triglyph-rosette plaque	NMA 2355	Xenaki-Sakellariou 1985: 153, pl. 52	283
"candlestick" with snails	NMA 2357.1	Xenaki-Sakellariou 1985: 150, pl. 50	261
cylinder	NMA 2378.20	Xenaki-Sakellariou 1985: 150	
column appliqués (4)	NMA 2398	Xenaki-Sakellariou 1985: 150, pl. 50	259
snail plaque	NMA 2401	Xenaki-Sakellariou 1985: 150, pl. 50	250
plaque with circles	NMA 2403.1	Xenaki-Sakellariou 1985: 150-51, pl. 50	293
tricurved arch plaque	NMA 2403.2	Xenaki-Sakellariou 1985: 151, pl. 50	
plaques (7) with circles	NMA 2403.3-4,6	Xenaki-Sakellariou 1985: 151, pl. 49-50	
plaques (7) with spirals	NMA 2403.5	Xenaki-Sakellariou 1985: 151, pl. 49	
misc. object	NMA 2405	Xenaki-Sakellariou 1985: 151, pl. 50	269
combat: griffin, bull plaque	NMA 2406	Xenaki-Sakellariou 1985: 151, pl. 51	253
misc. fragments (5)	NMA 2407	Xenaki-Sakellariou 1985: 151-52, pl. 51	268
comb	NMA 2409	Xenaki-Sakellariou 1985: 152	265
comb	NMA 2412	Xenaki-Sakellariou 1985: 152, pl. 51	266
animal plaque	NMA 2417	Poursat 1977b: 76-77, pl. XXII	255c
mirror handle with spiral	NMA 2417.1	Xenaki-Sakellariou 1985: 152, pl. 51	252
griffin plaque	NMA 2417.2	Xenaki-Sakellariou 1985: 152, pl. 51	255d
lion plaque	NMA 2417.3	Xenaki-Sakellariou 1985: 152, pl. 52	255a
bull plaque	NMA 2417.4	Xenaki-Sakellariou 1985: 153, pl. 52	255b
animal plaque	NMA 2417.5	Xenaki-Sakellariou 1985: 153, pl. 52	254
plaque	NMA 2417.6	Xenaki-Sakellariou 1985: 153, pl. 51	
triglyph-rosette plaques (2)	NMA 2459.1-2	Xenaki-Sakellariou 1985: 153, pl. 53	281
comb	NMA 2460	Xenaki-Sakellariou 1985: 154	267
griffin pyxis	NMA 2464	Xenaki-Sakellariou 1985: 154, pl. 54	247
bovine appliqué	NMA 2467	Xenaki-Sakellariou 1985: 154, pl. 54	284
bovine appliqué	NMA 2643	Xenaki-Sakellariou 1985: 154, pl. 54	284
comb with dog, goat	NMA 2644	Xenaki-Sakellariou 1985: 154-55, pl. 55	246
foliate band plaque	NMA 2645.1	Xenaki-Sakellariou 1985: 155, pl. 53	256
animal pyxis lid	NMA 2645.2	Xenaki-Sakellariou 1985: 155, pl. 54	248
misc. "wheel"	NMA 2646	Xenaki-Sakellariou 1985: 155, pl. 55	262
griffin pyxis	NMA 2647.1	Xenaki-Sakellariou 1985: 155-56, pl. 40	249
animal pyxis lid	NMA 2647.2	Xenaki-Sakellariou 1985: 156, pl. 52	248

App. B: Ivory Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference	Poursat
<i>Chamber Tombs, 1-52 (cont)</i>			
animal plaque	NMA 2647.3	Xenaki-Sakellariou 1985: 156, pl. 52	
scale pyxis	NMA 2647.4	Xenaki-Sakellariou 1985: 156, pl. 55	251
griffins (2) pyxis	NMA 2647.5	Xenaki-Sakellariou 1985: 156, pl. 54	249
misc. fragments	NMA 2647.6	Xenaki-Sakellariou 1985: 156	
<i>Cyclopean Tholos</i>			
(+gold) rod	NMA 2819	Wace 1921-23: 291	334
<i>Prehistoric Cemetery, LH II</i>			
griffin, animal plaque	NMA 7634	Wace 1953: 8, pl. 5	242
scepters (5)	NMA 7635-36	Wace 1953: 8, pl. 4a-b	244
<i>Prehistoric Cemetery, West of Tomb X, LH II</i>			
bull's head (5) plaque	NMA 7641	Poursat 1977b: 70, pl. XX	243
<i>Prehistoric Cemetery, LH IIIB</i>			
figure-eight shield appliqué	NMA 7102	Wace 1957: 208-209, pl. 40b	245
<i>Shaft Grave Alpha, MH III - LH I</i>			
inlays (4)	NMA 8560	Mylonas 1973: 32 A-500- 501b, pl. 22a,b	225a
plaques (2)	NMA 8560	Mylonas 1973: 32 A-503, pl. 22b	225b
pin	NMA 9579	Mylonas 1973: 33 A-507, pl. 22a	
<i>Shaft Grave Delta, MH III - LH I</i>			
pommel	NMA 8710	Mylonas 1973: 85-86 Δ-277, pl. 64a,67-68	231
knife handle	NMA 9567	Mylonas 1973: 89 Δ-512, pl. 71b, 72b	232
<i>Shaft Grave Gamma, MH III - LH I</i>			
comb	NMA 8702	Mylonas 1973: 78-79 Γ-510, pl. 62b	227
pommel	NMA 9185	Mylonas 1973: 78 Γ-508, pl. 61b-2	228
pommel	NMA 9186	Mylonas 1973: 78 Γ-509, pl. 61b-1	229
plaques (2)	NMA 9631	Mylonas 1973: 79 Γ-511, pl. 62g	
disc	NMA 9664	Mylonas 1973: 79 Γ-511, pl. 62	230
<i>Shaft Grave Iota, MH III</i>			
knife handle	NMA 8617	Mylonas 1973: 118-19 I-292, pl. 100a,b	
pommel	NMA 9187	Mylonas 1973: 118 I-514, pl. 99b	234
<i>Shaft Grave Lambda, MH III - LH I</i>			
knife handle	NMA 8610	Mylonas 1973: 139-40 Λ-297, pl. 122b-d	
pommel	NMA 9584	Mylonas 1973: 139 Λ-516, pl. 121g	235
<i>Shaft Grave Mu, LH I</i>			
pin fragment	NMA 8671	Mylonas 1973: 157 M-517-19, pl. 136b	
<i>Shaft Grave Nu, MH III - LH I</i>			
pommel	NMA 9600	Poursat 1977b: 67	236

App. B: Ivory Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference	Poursat
<i>Shaft Grave Omicron, LH I</i>			
spiral plaque	NMA 9570	Mylonas 1973: 207 O-520, pl. 188	237
pommel	NMA 9571	Mylonas 1973: 207 O-521, pl. 189a	238
<i>Shaft Grave Zeta, MH III</i>			
pommel	NMA 8666	Mylonas 1973: 105 Z-513	233
<i>Shaft Grave Circle B: between tombs Alpha, Delta, Rho, LH II ?</i>			
bull, man plaque	NMA 9562	Mylonas 1973: 23 no. 502, pl. 11a	240
<i>Shaft Grave Circle B: West of Grave R, LH II</i>			
rosette plaque	NMA 9188	Mylonas 1973: 225 P-522, pl. 200b	239
<i>Shaft Grave Circle B: unknown context, LH I</i>			
pommel	NMA 9561	Poursat 1977b: 68	241
<i>Shaft Grave I, LH I</i>			
spiral pyxis	NMA 210	Karo 1930-33: 69, 319, pl. CL	206a
chariot, female, animal pyxis	NMA 210	Karo 1930-33: 69, 319, pl. CL	206b
(+gold) comb with circles	NMA 310	Karo 1930-33: 84, pl. XLIII	211
<i>Shaft Grave II, LH I</i>			
knife handle	NMA 216a	Karo 1930-33: 70, pl. LXXII	
misc. (vase?) fragment	NMA 226	Karo 1930-33: 71, pl. LXXII	207
<i>Shaft Grave III, LH I</i>			
comb with lion, rosette	NMA 109	Karo 1930-33: 58, 187, pl. 32,33	
<i>Shaft Grave IV, LH I</i>			
pommel with lion	NMA 295b	Karo 1930-33: 83, pl. LXXV-LXXVII	208
(+gold) dagger handle, rosette	NMA 396	Karo 1930-33: 97, pl. LXXXIX	
(+gold) hilt plate, spiral	NMA 408	Karo 1930-33: 100, pl. XCIX	
razor handle	NMA 422	Karo 1930-33: 101-102, pl. XCVIII	
(+gold) hilt plate	NMA 435	Karo 1930-33: 103, pl. LXXIII, LXXXVII	
pommel	NMA 490	Karo 1930-33: 109, pl. LXXVI	212
knife handle	NMA 491	Karo 1930-33: 109	
unworked elephant tusk	NMA 491	Krzyszkowska 1988: 212, 231, pl. 24a	
discs (8)	NMA 507	Karo 1930-33: 110, pl. CI	213
pommel with spiral	NMA 550a	Karo 1930-33: 114, fig. 41	209
handle with lilies, flowers	NMA 550b	Karo 1930-33: 114, 200, fig. 90	210
molding strip	NMA 575	Karo 1930-33: 116, 244, fig. 101	213
dagger handle	NMA 779	Karo 1930-33: 142, pl. XCIX	
<i>Shaft Grave V, LH I</i>			
razor handle	NMA 467	Karo 1930-33: 142, 319 n. 3, pl. XCIX	
comb	NMA 654	Karo 1930-33: 125, 187	
(+gold) comb	NMA 654	Karo 1930-33: 125	
dagger handle	NMA 737	Karo 1930-33: 134, fig. 57	
dagger handle	NMA 753	Karo 1930-33: 137, pl. XCI	
pommel	NMA 775	Karo 1930-33: 139	216

App. B: Ivory Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference	Poursat
<i>Shaft Grave V (cont)</i>			
pommel	NMA 776	Karo 1930-33: 139, fig. 57	217
pommel	NMA 777	Karo 1930-33: 139, fig. 57	218
mirror handle with lion	NMA 785	Karo 1930-33: 142, pl. CXXXVI, fig. 58-59	214
(+wood) dog pyxis [<i>Import</i>]	NMA 812	Karo 1930-33: 144-45, pl. CXLV	215
strips (7)	NMA 819	Karo 1930-33: 145, pl. CXLVI	222
(bone?) weaving implement	NMA 824	Karo 1930-33: 145-46, fig. 62, pl. CXXXVI	
(bone?) spoon handle	NMA 825	Karo 1930-33: 145-46, fig. 62, pl. CXXXVI	
pommel	NMA 834	Karo 1930-33: 147	219
pommel	NMA 837	Karo 1930-33: 147	219
rectangular plaques (5)	NMA 893	Karo 1930-33: 154, pl. LXXI	
boar's tusk-shaped appliqué (3)	NMA 894	Krzyszkowska 1988: 222-23, pl. 28c	
boar's tusk-shaped appliqué (2)	NMA 895	Krzyszkowska 1988: 222-23, pl. 28d	
rectangular strips (4)	NMA 896	Karo 1930-33: 154, pl. LXXI	
unworked elephant tusk	NMA 899	Karo 1930-33: 155, fig. 73	
<i>Shaft Grave VI, Circle A, LH I</i>			
(+alabaster) dagger handle	NMA 908	Karo 1930-33: 161	
dagger handle	NMA 927	Karo 1930-33: 162, pl. XCV	
pommel	NMA 936	Karo 1930-33: 163	223
handle	NMA 937	Karo 1930-33: 163	
<i>Tomb of Aegisthus, LH II?</i>			
lion plaque	NMA 2819	Wace 1921-23: 303, fig. 58	
<i>Tomb of Clytemnestra (grave pit in dromos), LH IIIA</i>			
(+glass) wing, sphinx?	NMA 2869	Wace 1921-23: 370, fig. 81a	333
mirror handle, women [<i>Import</i>]	NMA 2898	Wace 1921-23: 369, pl. LIX A	331
mirror handle, women [<i>Import</i>]	NMA 2900	Wace 1921-23: 369, pl. LIX B,C	332
<i>Tomb of the Genii, LH IIIA</i>			
handle	NMA 4546	Wace 1921-23: 385	
button	NMA 4546	Wace 1921-23: 386	
plaque fragment	NMA 4546	Wace 1921-23: 386	
<i>Unrecorded Chamber Tombs, Tsountas</i>			
discs (42) with circles	NMA 2956.1	Xenaki-Sakellariou 1985: 215, pl. 99	
rosette discs (3)	NMA 2956.2	Xenaki-Sakellariou 1985: 215	
goat plaque	NMA 2985	Xenaki-Sakellariou 1985: 215, pl. 98	302
papyrus plaque	NMA 3258.14	Xenaki-Sakellariou 1985: 265, pl. 131	
<i>Acropolis, Schliemann</i>			
(+gold) "button"	NMA 1001	Schliemann 1880: 162, fig. 235	9
spiral plaque	NMA 1002	Schliemann 1880: fig. 222	3
cube	NMA 1022	Krzyszkowska 1992: 26, fig. 1d	19
offcuts (2)	NMA 1022	Krzyszkowska 1992: 26, fig. 1f	19
offcuts (4)	NMA 1022	Krzyszkowska 1992: 26, fig. 2e	19
misc. pieces (3)	NMA 1022	Poursat 1977b: 12, pl. III	19
comb	NMA 1024	Schliemann 1880: 78, fig. 130	12
figure-eight shield appliqué	NMA 1026	Poursat 1977b: 8, pl. II	5

App. B: Ivory Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference	Poursat
<i>Acropolis, Schliemann (cont)</i>			
figure-eight shield appliqué	NMA 1027	Poursat 1977b: 8, pl. XXII	6
comb	NMA 1028	Poursat 1977b: 11, pl. II	13
pommel with circle	NMA 1030	Schliemann 1880: 77-78, fig. 128	11
spiral plaque	NMA 1032	Poursat 1977b: 8, pl. I	4
deer plaque	NMA 1034	Poursat 1977b: 7, pl. I	1
dolphin inlay	NMA 1035	Schliemann 1880: 129, fig. 211	7
misc. object	NMA 1038	Poursat 1977b: 11, pl. II	14
buttons (3)	NMA 1040	Schliemann 1880: 79, fig. 139	10
rosette inlay	NMA 1042	Poursat 1977b: 9, pl. II	8
deer, animal plaque	NMA 1046	Poursat 1977b: 7-8, pl. I	2
toggle	NMA 1048	Poursat 1977b: 11, pl. II	15
toggle	NMA 1049	Poursat 1977b: 11, pl. II	16
cylinder	NMA 1050	Schliemann 1880: 78, fig. 130a	17
<i>Acropolis, Tsountas</i>			
pommel	NMA 2528	Poursat 1977b: 13, pl. II	23a
pommel	NMA 2528	Poursat 1977b: 13, pl. II	23b
lyre piece	NMA 2528	Poursat 1977b: 13, pl. II	24
female appliqué	NMA 2578	Poursat 1977b: 16, pl. I	36
comb	NMA 2579	Poursat 1977b: 16-17, pl. III	38a
comb	NMA 2579	Poursat 1977b: 16-17, pl. III	38b
bone, ivory needles (26)	NMA 2590	Poursat 1977b: 16	34
spoon	NMA 2598	Poursat 1977b: 15, pl. II	33
shell appliqué	NMA 2671	Poursat 1977b: 12, pl. II	20
rosette inlays (2)	NMA 2671	Poursat 1977b: 12-13, pl. II	21
disc with incised circles	NMA 2671	Poursat 1977b: 13	21 <i>bis</i>
"chessman"	NMA 2671	Poursat 1977b: 13, pl. II	25
comb	NMA 2632	Poursat 1977b: 15, pl. III	31
spiral plaque	NMA 2634	Poursat 1977b: 15, pl. II	30
male appliqué	NMA 2620	Poursat 1977b: 16, pl. II	37
tricurved arch plaque	NMA 2699	Poursat 1977b: 15, pl. I	32
comb	NMA 2700	Poursat 1977b: 13, pl. III	22
ivory, silver molding	NMA 2717	Poursat 1977b: 14, pl. II	26
cockle-shell pyxis	NMA 2881	Poursat 1977b: 17, pl. I	41
rosette inlay	NMA 2894	Poursat 1977b: 17, pl. I	40
cockle-shell appliqué	NMA 2966	Poursat 1977b: 18, pl. II	43
waz-lily inlay	NMA 3024	Poursat 1977b: 18, pl. I	44
comb	NMA 4532	Poursat 1977b: 18, pl. III	46
female figurine	NMA 5897	Poursat 1977b: 19, pl. IV	48
<i>Acropolis, Mylonas</i>			
comb	Nauplion 13967	Poursat 1977a: 39 no. 2	
plaque with figure-eight shields	Nauplion 13969	Mylonas 1966b: fig. 142	
lyre piece	Nauplion 13977	Poursat 1977a: 37 no. 4	
plaque		<i>BCH</i> 89 (1965): 709, fig. 5	
combs (2)		<i>BCH</i> 94 (1970): 964, fig. 165	
spiral plaque		Poursat 1977a: 124 no. 9	

App. B: Ivory Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference	Poursat
<i>Unknown Context</i>			
female figurine	NMA 8418	Poursat 1977b: 109, pl. XXXVI	335
rosettes plaques (4)	NMA 8419	Poursat 1977b: 110, pl. XXXVI	336a-b
spiral plaque	NMA 8419	Poursat 1977b: 110, pl. XXXVI	336c
offcuts	NMA 10778	Sakellarakis 1979: 40, fig. 48	
duck pyxis [<i>Import</i>]	Nauplion 1090	Krzyszkowska 1988: 234	
fragment with fingers		Poursat 1977b: 110, pl. XXXVI	337
combat: lions pyxis		Poursat 1977b: 110, pl. XXXVI	338
goat plaque		Poursat 1977b: 111, pl. XXXVI	339
animal plaque		Poursat 1977b: 111	340
lion plaque		Poursat 1977b: 111	341
waz-lily plaque		Poursat 1977b: 111	342
figure-eight shield pyxis		Poursat 1977b: 111, pl. XXXVII	343
comb		Poursat 1977b: 111, pl. XXXVII	344a
pommel		Poursat 1977b: 111, pl. XXXVII	345
palette-shaped object		Poursat 1977b: 112, pl. XXXVII	346
combat: griffin, lion pyxis		Poursat 1977b: 112, pl. XXXVII	347
mirror handle		Poursat 1977b: 112, pl. XXXVII	348
ivy plaque		Poursat 1977b: 112, pl. XXXVII	349
hippopotamus tusk		Krzyszkowska 1997: n. 9	

NAUPLION

Reference

Evangelistrias Necropolis Tomb IΘ, LH I - IIIB
scepter with pomegranate head

ArchDelt 1973-74B: 203, pl. 145

PROSYMNA	Inventory	Reference	Poursat
<i>Chamber Tomb II, LH II - IIIA</i>			
plaque	NMA 6303	Blegen 1937: 283, fig. 466:17,23-25	367
dog-tooth inlays (8)	NMA 6303	Blegen 1937: 283, fig. 446:19-23,26-29	368
rosette inlay	NMA 6303	Blegen 1937: 284, fig. 446:14	369
comb	NMA 6303	Blegen 1937: 283, fig. 446:13	365
mirror handle	NMA 6410	Blegen 1937: 283, fig. 445:1,6,9,10,15	366
plaque	NMA 6410	Blegen 1937: 283, fig. 445:3-5	367
knife handle		Blegen 1937: 283, fig. 445:7,12, 446:15-16	
misc. fragment with spiral		Blegen 1937: 283, fig. 445:13, 446:13	
sphinx figurine		Blegen 1937: 283, fig. 445:8,11,14,2	
buttons (9)		Blegen 1937: 284, fig. 446:1-4,6-10	
disc with circles		Blegen 1937: 284, fig. 446:5	
pommel		Blegen 1937: 461, fig. 441:4	
<i>Chamber Tomb III, LH II - IIIA</i>			
triangular inlays (2)		Blegen 1937: 284, fig. 463:14,15	
curvilinear inlays (6)		Blegen 1937: 284, fig. 463:17-19,21-23	
rectangular inlays (3)		Blegen 1937: 284, fig. 463:20,24, 25	
<i>Chamber Tomb XI, LH IIIA</i>			
pyxis		Blegen 1937: 203, 284, fig. 517:28	

App. B: Ivory Objects Found in the LBA Argolid

PROSYMNA (cont)	Inventory	Reference	Poursat
Chamber Tomb XII, LH IIIB cylindrical bead		Blegen 1937: 285, fig. 522:1	
Chamber Tomb XIII, LH II - IIIB button		Blegen 1937: 284	
Chamber Tomb XIV, LH I - IIIA comb with rosette, basketry	NMA 8447	Blegen 1937: 282, fig. 598 a-d	370
comb		Blegen 1937: 282, fig. 417:9	372
rosette inlays (2)		Blegen 1937: 284, fig. 417:8	371
Chamber Tomb XXVI, LH I - IIIB vessel	NMA 6649	Blegen 1937: 461, fig. 217	
pyxis	NMA 6659	Blegen 1937: 94, 284 n. 1, fig. 213:3	
Chamber Tomb XXIX, LH II - IIIB comb		Blegen 1937: 283, fig. 160:1	
rosette disc		Blegen 1937: 284	
Chamber Tomb XXXIII, LH IIIA - IIIB rosette inlays (3)	NMA 6303	Blegen 1937: 284, fig. 242:10-12	
Chamber Tomb XXXVIII, LH IIIA - IIIB figure-eight shield appliqué		Blegen 1937: 285, fig. 310:14	
Chamber Tomb XLI, LH IIIB comb	NMA 6600	Blegen 1937: 282, fig. 361:8	374
comb with sphinx	NMA 6601	Blegen 1937: fig. 361:7	373
Chamber Tomb XLII, LH IIIA - IIIB rosette disc		Blegen 1937: 284, fig. 488:5	
Chamber Tomb XLIV, LH II - IIIB (+bronze) lentoid bead		Blegen 1937: 285, fig. 542:9	
Chamber Tomb LI, LH IIIB female figurine	NMA 6580	Blegen 1937: 461-63, fig. 729-31	375
Tholos Tomb, LH II misc. fragments	NMA 3332	Wace 1921-23: 337	
Unknown Context amygdaloid seal	NMA 11061	CMS I Suppl: 31	
TIRYNS	Inventory	Reference	
Building I, LH IIIB lily inlay	Exc LX 39/10 a 13.61 R9	Kilian <i>et al.</i> 1981: fig. 31a	

App. B: Ivory Objects Found in the LBA Argolid

TIRYNS (cont)	Inventory	Reference	Poursat
<i>Building II, Room 221a, LH IIIB</i>			
figure-eight shield appliqué	Exc LXI 36/53 X 11.72	Kilian 1988a: 117, fig. 18:3	
<i>Building VI, LH IIIB</i>			
"hoof"?	Exc LX II 40/64 VIIIb	Kilian <i>et al.</i> 1981: 180, fig. 33a	
column appliqué	Exc LXII 42/52 a 13.66 XIc	Kilian 1983: 311, fig. 24:1	
<i>North of Building VII, LH IIIB</i>			
comb	Exc LXI 40/16 a 1320 XIX	Kilian 1988a: 120, fig. 18:2	
<i>Sector H, House M (outside citadel), LH II</i>			
spiral plaque		Gercke & Hiesel 1971: 16-17, pl. 22:1-2	
combat: lion, griffin plaque		Gercke & Hiesel 1971: 17-19, pl. 21:1-4	
<i>West Trench (material from casemate 7), LH IIIC</i>			
idol [Import]	Exc LIX 41/45 a.16.71 IXa	Kilian 1988a: 145, fig. 46	
<i>Unterbург, Room 112?, LH IIIC</i>			
plaque	Exc LXI 41/35, XIIa G 55	Kilian <i>et al.</i> 1981: 180, fig. 33b	
plaque	Exc LXI 41/34, X	Kilian <i>et al.</i> 1981: 180, fig. 33b	
<i>Unterbург, specific context unpublished</i>			
comb	Exc LXI 43/80 b11.89 XXd	Kilian 1988a: fig. 18:1	
rosette inlay	Exc LXI 42/49 a14.19 X	Kilian 1988a: fig. 18:6	
<i>Unknown Context</i>			
offcut		Krzyszkowska 1992: 26, pl. 2b	
reworked segment		Krzyszkowska 1992: 27, pl. 2h	
pommels (2)		Krzyszkowska 1992: 27, pl. 3e	
waz-lily inlay		Krzyszkowska 1992: 27, pl. 3f	
tusk "bark"		Krzyszkowska 1992: 31 n. 11	
offcut		Krzyszkowska 1992: 31 n. 13, pl. 2b	
blank		Krzyszkowska 1992: 32 n. 20	
comb		Schliemann 1885: 176	
ZYGOURIES		Reference	
<i>West of Potter's Shop Room 30, LH IIIB</i>			
knife handle		Blegen 1928: 202-203, fig. 190:1	

APPENDIX C
Glass Objects Found in the Bronze Age Argolid

AIDHONIA	Inventory	Reference
<i>Chamber Tomb 7, LH II - IIIB</i>		
spherical beads (8)	Nemea 702/840	Demakopoulou 1996: 66, fig. 55
grain of wheat bead	Nemea 702/840	Demakopoulou 1996: 66, fig. 55
<i>Chamber Tomb 7 (pit I), LH II</i>		
lentoid seal with lion	Nemea 626	Demakopoulou 1996: 52, fig. 22
(+gold) argonaut ornaments (58)	Nemea 627-28, 630, 632	Demakopoulou 1996: 52, fig. 23-24
duck beads (2)	Nemea 637	Demakopoulou 1996: 57, fig. 33b
spherical beads (109)	Nemea 646-47	Demakopoulou 1996: 56, fig. 32
spherical beads (250)	Nemea 689	Demakopoulou 1996: 58, fig. 34
papyrus ornaments (12)	Nemea 797, 808	Demakopoulou 1996: 56, fig. 31
drop beads (25)	Nemea 798, 809	Demakopoulou 1996: 58, fig. 35
<i>"Mycenaean Cemetery," LH II - IIIB</i>		
triangular beads (14)	Nemea 806	Demakopoulou 1996: 65, fig. 53
ivy ornaments (8)	Nemea 807	Demakopoulou 1996: 65, fig. 54
<i>"Repatriated Treasure"</i>		
(+gold) inlaid spherical bead	NMA BE 1996/11.11	Demakopoulou 1996: 78, fig. 13
(+gold) inlaid ring	NMA BE 1996/11.11	Demakopoulou 1996: 78, fig. 15
beads (22)	NMA BE 1996/11.15	Demakopoulou 1996: 79, fig. 19
cylindrical beads (2)	NMA BE 1996/11.22	Demakopoulou 1996: 80, fig. 24
spherical beads (4)	NMA BE 1996/11.22	Demakopoulou 1996: 80, fig. 24
ARGOS		
Inventory	Reference	
<i>Deiras Chamber Tomb VI, LH IIIA</i>		
spiral ornaments (6)		Vollgraff 1904: 386, fig. 23
curled leaf ornaments (3)		Vollgraff 1904: 387
"beads of diverse types"		Vollgraff 1904: 387, fig. 25
ivy ornament		Vollgraff 1904: fig. 24
<i>Deiras Chamber Tomb VII, LH IIIA</i>		
(+gold) pin head mounted in gold		Vollgraff 1904: 389
spherical beads (29)		Vollgraff 1904: 389, fig. 34
<i>Deiras Chamber Tomb XI, LH IIIA</i>		
lentoid seal with cow	Exc DM 5	Deshayes 1966: 213-14, pl. XLII:3-4
<i>Deiras Chamber Tomb XII, LH IIIA - IIIB</i>		
calyx ornaments (3)	Exc DM 14	Deshayes 1966: 211, XLVIII:8
papyrus ornaments (18)	Exc DM 14	Deshayes 1966: 211, XLVIII:8
grain of wheat beads (16)	Exc DM 14	Deshayes 1966: 211, XLVIII:8
curled leaf ornaments (2)	Exc DM 14	Deshayes 1966: 211, XLVIII:8
spiral plaque	Exc DM 14	Deshayes 1966: 211, XLVIII:8
ivy plaques (2)	Exc DM 14	Deshayes 1966: 211, XLVIII:8
argonaut plaques (2)	Exc DM 14	Deshayes 1966: 211, XLVIII:8

App. C: Glass Objects Found in the LBA Argolid

ARGOS (cont)	Inventory	Reference
<i>Deiras Chamber Tomb XXI, LH IIIA - IIIB</i>		
conical beads (7)	Exc DM 29	Deshayes 1966: 210, LXII:7
spherical bead	Exc DM 29	Deshayes 1966: 210, LXII:7
annular beads (6)	Exc DM 29	Deshayes 1966: 210, LXII:7
<i>Deiras Chamber Tomb XXVIII, LH IIIB</i>		
conical beads (2)	Exc DM 80	Deshayes 1966: 212, pl. LXXXV:5
rhomboidal bead	Exc DM 80	Deshayes 1966: 212, pl. LXXXV:5
spherical bead	Exc DM 80	Deshayes 1966: 212, pl. LXXXV:5
<i>Deiras Chamber Tomb XXX, LH IIIA - IIIC</i>		
spherical beads (44)	Exc DM 97	Deshayes 1966: 210, pl. LXXXIX:9
<i>Deiras Tomb 11, LH IIIA</i>		
spherical beads (18)	Exc DM 39	Deshayes 1966: 210, pl. LXX:9
elliptical beads (4)	Exc DM 39	Deshayes 1966: 210, pl. LXX:9
annular beads (17)	Exc DM 39	Deshayes 1966: 210, pl. LXX:9
biconical bead	Exc DM 39	Deshayes 1966: 210, pl. LXX:9
cylindrical beads (4)	Exc DM 39	Deshayes 1966: 210, pl. LXX:9
<i>Deiras Tomb 23, LH IIIA</i>		
spherical beads (no count given)	Exc DM 74	Deshayes 1966: 210, pl. LXXIII:7
<i>Jannaki plot: Cist grave 4, LH IIIA</i>		
prismatic seal with lion		CMS V Suppl. 1A: 66
<i>Kapetanou plot: unspecified grave</i>		
lentoid seal with cow		CMS V Suppl. 1A: 67
<i>Said to be from Argos (acquired 1906), LH II</i>		
lentoid seal with cow	Brussels A 1343	CMS XI: 4
ASINE	Inventory	Reference
<i>Lower Town: Wall 46b,¹ LH</i>		
spherical beads (50)	Nauplion 3341	Frödin & Persson 1938: 310, fig. 215
<i>Chamber Tomb I:1, LH II - IIIA</i>		
papyrus ornament		Hughes-Brock 1996: 76
lily ornaments (2)		Hughes-Brock 1996: 77
spherical bead		Hughes-Brock 1996: 77
(faience?) cylindrical bead		Hughes-Brock 1996: 77
(faience?) lentoid bead		Hughes-Brock 1996: 77
(faience?) fragmentary bead		Hughes-Brock 1996: 77
(faience?) grain of wheat bead		Hughes-Brock 1996: 77
(faience?) spherical bead		Hughes-Brock 1996: 77

¹ The beads were embedded in the mortar of this wall, which (along with walls 46, 46a, and 46c) are the only remains of a structure built over MH remains (Frödin and Persson 1938: 63, fig 49).

App. C: Glass Objects Found in the LBA Argolid

ASINE (cont)	Inventory	Reference
<i>Chamber Tomb I:2, LH IIIA</i>		
altar ornaments (7)		Frödin & Persson 1938: 389, fig. 252
argonaut ornaments (8)		Frödin & Persson 1938: 389, fig. 252
curled leaf ornaments (3)		Frödin & Persson 1938: 389, fig. 252
rosette ornaments (2)		Frödin & Persson 1938: 389, fig. 252
annular beads (39)		Frödin & Persson 1938: 390, fig. 252
conical ornament		Frödin & Persson 1938: 390, fig. 252
conical ornaments (5)		Frödin & Persson 1938: 390, fig. 252
cylindrical bead		Frödin & Persson 1938: 390, fig. 252
drop bead		Frödin & Persson 1938: 390, fig. 252
flower ornaments (3)		Frödin & Persson 1938: 390, fig. 252
grain of wheat beads (2)		Frödin & Persson 1938: 390, fig. 252
lily ornaments (2)		Frödin & Persson 1938: 390, fig. 252
spherical beads (28)		Frödin & Persson 1938: 390, fig. 252
<i>Chamber Tomb I:3, LH IIIA</i>		
spherical bead		Frödin & Persson 1938: 392
<i>Chamber Tomb I:5, LH IIIA</i>		
curled leaf ornaments (2)		Frödin & Persson 1938: 400
cylindrical bead		Frödin & Persson 1938: 400
spherical beads (40)		Frödin & Persson 1938: 399, fig. 262, pl. III
grain of wheat beads (41)		Frödin & Persson 1938: 399, fig. 262, pl. III
head piece (in bronze jar):		
ivy ornaments (235)		Frödin & Persson 1938: 400, fig. 262, pl. III
pendant spiral ornaments (44)		Frödin & Persson 1938: 400, fig. 262, pl. III
spherical beads (42)		Frödin & Persson 1938: 400, fig. 262, pl. III
<i>Chamber Tomb I:6, LH IIIA - IIIC</i>		
lily ornaments (2)	Nauplion 3342	Frödin & Persson 1938: 406
amygdaloid beads (3)		Frödin & Persson 1938: 406
spherical beads (31)		Frödin & Persson 1938: 406
rosette ornaments (4)		Frödin & Persson 1938: 406
<i>Chamber Tomb I:7, LH II - IIIC</i>		
spherical beads (82)		Frödin & Persson 1938: 420
BERBATI		Reference
<i>Chamber Tomb I, LH IIIA - IIIB</i>		
spherical beads (4)		Säflund 1965: 27
<i>Chamber Tomb II, LH IIIA</i>		
annular beads (ca. 100)		Säflund 1965: 34
spherical beads (2)		Säflund 1965: 34
<i>Chamber Tomb X, LH IIIA</i>		
cylindrical bead		Säflund 1965: 55
spherical beads (73)		Säflund 1965: 55

App. C: Glass Objects Found in the LBA Argolid

BERBATI (cont)		Reference
<i>Chamber Tomb XI, LH II - IIIA</i>		
spherical bead		Säflund 1965: 67
whorl (conical bead?)		Säflund 1965: 67
<i>Chamber Tomb XII, LH IIIA</i>		
spherical beads (19)		Säflund 1965: 81
whorl (conical bead?)		Säflund 1965: 81
<i>Tholos Tomb, LH IIIA</i>		
spherical beads (51)		Santillo Frizell 1984: 31, fig. 26
KAZARMA		Reference
	Inventory	
<i>Tholos Tomb A, LH II</i>		
lenticular seal		CMS V: 586
KOKLA		Reference
<i>Tholos Tomb, LH II - IIIA</i>		
spherical beads (47)		Demakopoulou 1990: 119
KORAKOU		Reference
<i>Grave I, LH II</i>		
spherical beads (ca. 120)		Blegen 1921: 102, 106, fig. 130
drop bead		Blegen 1921: 102, 106, fig. 130
cylindrical bead		Blegen 1921: 102, 106, fig. 130
LERNA²		Reference
	Inventory	
<i>DCI, Grave 3, MH - LH</i>		
spherical beads (4)		Caskey 1957: 145
<i>Grave BA-3, MH (Lerna V)</i>		
spherical bead	Exc L4 123	Banks 1967: 675 no. 1787
<i>Grave BE-10, MH (Lerna V)</i>		
biconical bead	Exc L6 181	Banks 1967: 676 no. 1790
barrel bead	Exc L6 182	Banks 1967: 676 no. 1791
biconical bead	Exc L6 183	Banks 1967: 676 no. 1792
spherical bead	Exc L6 184	Banks 1967: 676 no. 1793
<i>Grave D-14, MH (Lerna V)</i>		
cylindrical bead	Exc L4 121	Banks 1967: 675 no. 1786
biconical bead	Exc L4 629	Banks 1967: 675 no. 1788

² All these beads from Lerna were originally described as "glass paste" by Banks, but she now expresses doubt about this identification (pers. com.).

App. C: Glass Objects Found in the LBA Argolid

LERNA (cont)	Inventory	Reference
<i>Grave DE-10, MH (Lerna V)</i> barrel beads (7)	Exc L6 395-401	Banks 1967: 676 no. 1794-1800
<i>Grave DE-21, MH (Lerna Ve)</i> spherical bead	Exc L6 406	Banks 1967: 673 no. 1772
barrel bead	Exc L6 407	Banks 1967: 673-74 no. 1773
spherical bead	Exc L6 408	Banks 1967: 674 no. 1774
barrel beads (2)	Exc L6 409-10	Banks 1967: 674 no. 1775-76
spherical beads (3)	Exc L6 411-13	Banks 1967: 674 no. 1777-79
barrel bead	Exc L6 414	Banks 1967: 674 no. 1780
barrel bead	Exc L6 415	Banks 1967: 674 no. 1781
spherical bead	Exc L6 416	Banks 1967: 674-75 no. 1782
spherical bead	Exc L6 416	Banks 1967: 675 no. 1783
<i>Grave DE-42, MH (Lerna V)</i> cylindrical beads (3)	Exc L6 439-441	Banks 1967: 677 no. 1806-1808
spherical bead	Exc L6 442	Banks 1967: 677 no. 1809
<i>Grave H-1, MH (Lerna V)</i> barrel bead	Exc L3 117	Caskey 1954: 21
<i>Grave J-2, MH (Lerna V)</i> cylindrical bead	Exc L5 904	Caskey 1956: 155
MIDEA-DENDRA	Inventory	Reference
<i>Terrace 9, Room II (Trench Mb), LH IIIB</i> figure-eight shield ornament	Exc M90Mb9-342b	Ostense 1998: 26-27, 247, pl. 111
drop bead	Exc M90Mb9-342c	Ostense 1998: 26-27, 246, pl. 111
ivy ornament	Exc M90Mb9-342d	Ostense 1998: 26-27, 246, pl. 111
tricurved arch ornament	Exc M90Mb9-342e	Ostense 1998: 26-27, 247, pl. 111
lentoid bead	Exc M90Mb9-366	Ostense 1998: 26-27, 247, pl. 111
<i>Terrace 9, Room IX (Trench Va), LH IIIB</i> spherical bead	Exc M91Va11N-223	Ostense 1998: 34, 247, pl. 111
spherical bead	Exc M91Va11S-226	Ostense 1998: 34, 247, pl. 111
<i>Terrace 10, Room IV (Trench Xw), LH IIIC</i> spherical bead	Exc M92Xw5-041	Ostense 1998: 48-49, 247, pl. 111
<i>Terrace 10, Trench Na, LH IIIB</i> conical ornament	Exc M90Na6N-341	Ostense 1998: 45, 247, pl. 111
<i>Terrace 10, Trench Zw, LH IIIB</i> spherical bead	Exc M91Zw3N-022	Ostense 1998: 51, 247, pl. 111
<i>Trench R, West Gate Area, LH III</i> genius ornaments (2)		Demakopoulou <i>et al.</i> 1994: 31, fig. 35

App. C: Glass Objects Found in the LBA Argolid

MIDEA-DENDRA (cont)	Inventory	Reference
<i>Chamber Tomb 1, LH IIIA - IIIB</i>		
annular beads (64)		Persson 1931: 85, fig. 58
curled leaf ornament		Persson 1931: 85
<i>Chamber Tomb 2, LH IIIA - IIIB</i>		
(faience?) bead garment [<i>Import</i>]		Persson 1931: 79, 106, pl. XXXIV, XXXV
ivy ornaments (46)		Persson 1931: 103-104, fig. 80, pl. XXXV
argonaut ornaments (2)		Persson 1931: 104, fig. 80
curled leaf ornaments (4)		Persson 1931: 104, fig. 80
human ornament		Persson 1931: 104 no. 36
pendant spiral ornaments (2)		Persson 1931: 104, fig. 80
rosette ornament		Persson 1931: 104
triangle ornaments (10)		Persson 1931: 104, fig. 80
triangle ornaments (2)		Persson 1931: 104, fig. 80
triton-shell ornament		Persson 1931: 104
(faience?) ³ spherical beads (60)		Persson 1931: 105, 136-39
calyx ornaments (12)		Persson 1931: 105, fig. 80
lentoid beads (4)		Persson 1931: 105, fig. 80
biconical beads (30)		Persson 1931: 105, fig. 80
ivy ornament		Persson 1931: 105
lily ornament		Persson 1931: 105, fig. 80
papyrus ornaments (2)		Persson 1931: 105, fig. 85
plant ornament		Persson 1931: 105
amygdaloid beads (303)		Persson 1931: 106
(faience ?) annular beads (750)		Persson 1931: 106
(+gold foil) drop beads (105)		Persson 1931: 106
grain of wheat beads (37)		Persson 1931: 106
<i>Chamber Tomb 3, LH IIIB</i>		
annular beads (138)		Persson 1931: 90
<i>Chamber Tomb 6, long shaft, LH II</i>		
cylindrical bead		Persson 1942: 29, fig. 30:5
spherical beads (21)		Persson 1942: 29, fig. 30:6
lentoid seal with figure-eight shield	Nauplion 8839	Persson 1942: 29, fig. 30:1, 31
<i>Chamber Tomb 7, LH IIIA</i>		
spherical beads (2) [<i>Import</i>]		Persson 1942: 36, fig. 36:2
<i>Chamber Tomb 8, LH II - IIIA</i>		
spherical beads (18)		Persson 1942: 50, fig. 53:3
lentoid beads (2)		Persson 1942: 50, fig. 53:3

³ Chemical analysis was carried out on two beads selected from this group, one of which was found to be glass, and the other was consistent with faience (Person 1931: 136-39).

App. C: Glass Objects Found in the LBA Argolid

MIDEA-DENDRA (cont)	Inventory	Reference
<i>Chamber Tomb 10 (shaft I), LH IIIA</i>		
spherical beads (92)	Nauplion 8880	Persson 1942: 86, fig. 95:3
elliptical beads (2)	Nauplion 8881	Persson 1942: 86, fig. 95:4
lentoid beads (4)	Nauplion 8881	Persson 1942: 86, fig. 95:4
spherical beads (124)	Nauplion 8881	Persson 1942: 86, fig. 95:4
conical bead		Persson 1942: 87
cylindrical beads (8)		Persson 1942: 86
<i>Chamber Tomb 11, LH IIIA - IIIB</i>		
annular beads (3)		Persson 1942: 101, fig. 108:3
spherical beads (3)		Persson 1942: fig. 101, 108: 3
<i>Tholos Tomb, LH IIIA</i>		
lioness ornament	NMA 7366	Persson 1931: 30, 59-60, pl. XXVI
(+gold) ostrich egg rhyton	NMA 7337	Persson 1931: 37, 54, fig. 14, pl. III, VIII
ivy ornaments (2)	NMA 7370	Persson 1931: 30, 40, pl. XXVI
plant ornament		Persson 1931: 38, pl. XVIII:2
<i>Tholos Tomb, pit I, LH IIIA</i>		
(+gold) inlaid rivets on sword hilt	NMA 7316	Persson 1931: 34, pl. XX.1:IV
animal, human plaques (8)	NMA 7367	Persson 1931: 36, 65, fig. 43, 41
lion (chimera?) plaques (3)	NMA 7368	Persson 1931: 36, 65, fig. 44, 41
curled leaf ornaments (20)	NMA 7369	Persson 1931: 36, 64, pl. XXV, fig. 41
<i>Tholos Tomb, pit IV, LH IIIA</i>		
curled leaf ornaments (2)		Persson 1931: 41
lioness ornaments (2)	NMA 7366	Persson 1931: 41, 59-60, pl. XXVI
ivy ornaments (2)	NMA 7370	Persson 1931: 41, pl. XXVI
MYCENAE	Inventory	Reference
<i>Artisans' Quarter, LH IIIB</i>		
"a number of small beads"		Mylonas 1966a: 426
<i>Building M, LH IIIB</i>		
genius ornament		Mylonas 1963: 101
<i>Citadel House 1968 excavations</i>		
biconical bead	Exc 68-25	Mycenae inventory
spherical bead	Exc 68-77	Mycenae inventory
spherical bead	Exc 68-397	Mycenae inventory
helmet ornament	Exc 68-400	Mycenae inventory
(+gold foil) spiral inlays (7)	Exc 68-624a	Mycenae inventory
(+gold foil) tricurved arch inlays (41)	Exc 68-624b	Mycenae inventory
ivy plaque	Exc 68-628	Mycenae inventory
palm tree, griffin plaque	Exc 68-722	Mycenae inventory
spherical bead	Exc 68-884	Mycenae inventory
rosette ornament	Exc 68-1003	Mycenae inventory
disc	Exc 68-1004	Mycenae inventory
curled leaf ornament	Exc 68-1005	Mycenae inventory

App. C: Glass Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference
<i>Citadel House 1968 excavations (cont)</i>		
cylindrical bead	Exc 68-1561	Mycenae inventory
cylindrical bead	Exc 68-1562	Mycenae inventory
cylindrical beads (7)	Exc 68-1563	Mycenae inventory
spiral plaque	Exc 68-1566	Mycenae inventory
spherical bead	Exc 68-1567	Mycenae inventory
rosette plaque	Exc 68-1568	Mycenae inventory
lentoid bead	Exc 68-1569	Mycenae inventory
spherical bead	Exc 68-1579	Mycenae inventory
spherical bead	Exc 68-1597	Mycenae inventory
cylindrical bead	Exc 68-1597	Mycenae inventory
spherical bead	Exc 68-1600	Mycenae inventory
cylindrical bead	Exc 68-1601	Mycenae inventory
lentoid beads (5)	Exc 68-1602	Mycenae inventory
spherical bead	Exc 68-1612	Mycenae inventory
lantern bead	Exc 68-1615	Mycenae inventory
segmented bead	Exc 68-1616	Mycenae inventory
spherical bead	Exc 68-1626	Mycenae inventory
melon bead	Exc 68-1629	Mycenae inventory
coiled bead	Exc 68-1630	Mycenae inventory
elliptical bead	Exc 68-1631	Mycenae inventory
palm tree inlay	Exc 68-1633	Mycenae inventory
quatrefoil bead	Exc 68-1640	Mycenae inventory
spiral plaque	Exc 68-1641	Mycenae inventory
ivy plaque	Exc 68-1642	Mycenae inventory
papyrus ornaments (2)	Exc 68-1643	Mycenae inventory
papyrus ornament	Exc 68-1644	Mycenae inventory
papyrus ornament	Exc 68-1645	Mycenae inventory
rosette plaque	Exc 68-1646	Mycenae inventory
rosette plaque	Exc 68-1647	Mycenae inventory
spiral plaque	Exc 68-1648	Mycenae inventory
pendant spiral plaque	Exc 68-1649	Mycenae inventory
fragmentary beads (2) with spirals	Exc 68-1650	Mycenae inventory
lentoid bead	Exc 68-1654	Mycenae inventory
<i>Citadel House, Room 19, Pot group, LH IIIB</i>		
conical bead (?)	Exc 68-1513	Mycenae inventory
(+bone?) eye bead	Exc 68-1520	Mycenae inventory
(faience?) conical ornaments (15)	Exc 68-1524	Mycenae inventory
cylindrical beads (6)	Exc 68-1525	Mycenae inventory
diamond beads (5)	Exc 68-1526	Mycenae inventory
barrel beads (2)	Exc 68-1527	Mycenae inventory
grain of wheat bead	Exc 68-1527	Mycenae inventory
spherical beads (27)	Exc 68-1529	Mycenae inventory
spherical beads (6)	Exc 68-1530	Mycenae inventory
spherical bead	Exc 68-1531	Mycenae inventory
cylindrical beads (2)	Exc 68-1532	Mycenae inventory
spherical bead	Exc 68-1533	Mycenae inventory
spherical bead	Exc 68-1534	Mycenae inventory
lentoid bead	Exc 68-1535	Mycenae inventory

App. C: Glass Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference
<i>Citadel House, Room 19, Pot group (cont)</i>		
spherical bead	Exc 68-1536	Mycenae inventory
quatrefoil bead	Exc 68-1537	Mycenae inventory
tubular/cylindrical? bead	Exc 68-1538	Mycenae inventory
grain of wheat bead	Exc 68-1539	Mycenae inventory
lentoid beads (18)	Exc 68-1545	Mycenae inventory
lentoid seal with goat(?), tree	Exc 68-1545	Tamvaki 1974: 261-64, pl. 42b-e
spiral plaques (2)	Exc 68-1546	Mycenae inventory
argonauts (2) plaque	Exc 68-1547	Mycenae inventory
human plaque	Exc 68-1548	Mycenae inventory
human (female) plaques (3)	Exc 68-1549	Mycenae inventory
figure-eight shield plaque	Exc 68-1550	Mycenae inventory
ivy plaques (3)	Exc 68-1551	Mycenae inventory
ivy plaque	Exc 68-1552	Mycenae inventory
lily plaque	Exc 68-1553	Mycenae inventory
argonaut plaque	Exc 68-1554	Mycenae inventory
rosette plaques (2)	Exc 68-1555	Mycenae inventory
"saddle" ornament	Exc 68-1556	Mycenae inventory
papyrus ornaments (3)	Exc 68-1557	Mycenae inventory
ivy plaque	Exc 68-1558	Mycenae inventory
circle plaque	Exc 68-1559	Mycenae inventory
 <i>Granary, East Basement (from floor), LH IIIB</i>		
spherical beads (9)		Wace 1921-23: 55
curled leaf ornament		Wace 1921-23: 55
ornament		Wace 1921-23: 55
 <i>Granary, East Basement ("fill from robbed shaft grave"), LH IIIB</i>		
spirally wound beads (5)	NMA 6249	Wace 1921-23: 56, fig. 14e
drop bead	NMA 6249	Wace 1921-23: 56, fig. 14f
 <i>Granary, West Basement (from floor), LH IIIB</i>		
rosette ornament		Wace 1921-23: 48
drop bead?		Wace 1921-23: 48
amygdaloid bead		Wace 1921-23: 48
 <i>House of Shields, West Room (Ivory Area), LH IIIB</i>		
argonaut inlay	Nauplion 12196	Tournavitou 1995: 701
plaque with human figure?	Nauplion 12196	Tournavitou 1995: 701
plain plaques (35)	Nauplion 12196	Tournavitou 1995: 701
conical ornaments (8)	Nauplion 12196	Tournavitou 1995: 701
spiral, snails (2) plaque	Nauplion 12196	Tournavitou 1995: 701
waz-lily inlay	Nauplion 12196	Tournavitou 1995: 701
spherical beads (2)	Nauplion 12289	Tournavitou 1995: 703
trefoil inlay	Nauplion 12289	Tournavitou 1995: 703
conical inlay	Nauplion 12353	Tournavitou 1995: 637
trefoil inlay (3)	Nauplion 12353	Tournavitou 1995: 637

App. C: Glass Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference
<i>House of Shields, West Room (Northeast area), LH III B</i>		
trefoil inlay	Nauplion 12425	Tournavitou 1995: 704
diamond-shaped inlays (2)	Nauplion 12600	Tournavitou 1995: 707
conical inlay	Nauplion 12600	Tournavitou 1995: 707
plain inlay strips (4)	Nauplion 12600	Tournavitou 1995: 707
trefoil inlays (3)	Nauplion 12600	Tournavitou 1995: 707
cockle-shell inlays (2)	Nauplion 12600	Tournavitou 1995: 707, photo
curled leaf ornaments (3)	Nauplion 12600	Tournavitou 1995: 707, photo
<i>House of Sphinxes, Room 1 (ivory deposit), LH III B</i>		
cockle-shell ornament	Nauplion 12204	Tournavitou 1995: 703
rectangular strip	Nauplion 12205	Tournavitou 1995: 704
<i>House of Sphinxes, Room 2, LH III B</i>		
curled leaf ornaments (2)	NMA 7614	Tournavitou 1995: 705, photo
<i>Lion Gate (West Wing), LH III</i>		
spherical beads (3)		Wace 1921-23: 26
<i>Prinaria /North Terrace deposit ("shrine"), LH III B</i>		
lentoid beads (8)	Exc 39-176	Wace & Porada 1957: 199
spherical beads (19)	Exc 39-176	Wace & Porada 1957: 199
spherical beads (27)	Exc 39-178	Wace & Porada 1957: 199
<i>Panagia Houses, Room 9, LH III B</i>		
bracket ornament		Shear 1987: 118 no. 164, pl. 34
<i>Panagia Houses, Room 15, LH III B</i>		
heart-shaped ornament		Shear 1987: 118 no. 163, pl. 34
<i>Panagia Houses, Room 18, LH III B</i>		
rosette ornament		Shear 1987: 118 no. 165, pl. 34
<i>Panagia Houses, Room 20, LH III B</i>		
ornament		Shear 1987: 117 no. 153, pl. 34
<i>Panagia Houses, Room 23, LH III B</i>		
figure-eight shield ornament		Shear 1987: 118 no. 166, pl. 34
ornament		Shear 1987: 119 no. 167, pl. 34
<i>Panagia Houses, Room 36, LH III B</i>		
spiral ornament	Nauplion 13902	Shear 1987: 117 no. 152, pl. 34
<i>Ramp House (drain), LH III</i>		
fragmentary bead		Wace 1921-23: 80
<i>Rhyton Well, LH III</i>		
spherical beads (2)		Wace 1921-23: 1

App. C: Glass Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference
<i>Tsountas' House Shrine, Room Gamma, LH IIIB</i>		
female ornament [<i>Import</i>]	NMA 2511	Tsountas 1886: 78-79
star pendant [<i>Import</i>]	NMA 2512	Tsountas 1887: 169, pl. 13:22
curled leaf ornaments (3)	NMA 2513	Tsountas 1887: pl. 13:18
ivy ornaments (2)	NMA 2514	Tsountas 1887: pl. 13:1,4
argonaut plaques (3)	NMA 2514	Tsountas 1887: pl. 13:2-3
pendant spiral ornaments (2)	NMA 2514	Tsountas 1887: pl. 13:5
rosette ornaments (2)	NMA 2514	Tsountas 1887: pl. 13:7-8
rosette ornaments (2)	NMA 2514	Tsountas 1887: pl. 13:10
spiral ornaments (2)	NMA 2514	Tsountas 1887: pl. 13:17
spiral ornaments (2)	NMA 2514	Tsountas 1887: pl. 13:20
rosette ornaments (2)		Tsountas 1887: pl. 13:9,11
curled leaf ornament		Tsountas 1887: pl. 13:12
spiral ornaments (2)		Tsountas 1887: pl. 13:16
female ornaments (2)		Tsountas 1887: pl. 13:23,24
<i>Chamber Tomb 2, LH IIIA - IIIB</i>		
spherical beads	NMA 2283.1-4	Xenaki-Sakellariou 1985: 55
human (female) ornaments (20)	NMA 2286	Xenaki-Sakellariou 1985: 55-56, pl. 1
<i>Chamber Tomb 8, LH IIIA - IIIB (?)</i>		
spherical beads (53)	NMA 2395.1-2	Xenaki-Sakellariou 1985: 64
disc	NMA 2395.3	Xenaki-Sakellariou 1985: 64, pl. 5
ring of grains beads (2)	NMA 2395.4	Xenaki-Sakellariou 1985: 64, pl. 5
triangular beads (13)	NMA 2395.5	Xenaki-Sakellariou 1985: 64, pl. 5
drop beads (41)	NMA 2395.6-7	Xenaki-Sakellariou 1985: 64, pl. 6
spiral ornament	NMA 2395.8	Xenaki-Sakellariou 1985: 64, pl. 5
papyrus ornaments (4)	NMA 2395.9	Xenaki-Sakellariou 1985: 64, pl. 5
plain plaques (3)	NMA 2395.10	Xenaki-Sakellariou 1985: 64, pl. 5
ivy ornaments (8)	NMA 2395.11-12	Xenaki-Sakellariou 1985: 64, pl. 5-6
lily ornament	NMA 2395.13	Xenaki-Sakellariou 1985: 64, pl. 5
<i>Chamber Tomb 9, LH IIIA - IIIB (?)</i>		
lentoid seal with bull	NMA 2324	Xenaki-Sakellariou 1985: 68, pl. 8
<i>Chamber Tomb 10, LH IIIA - IIIB (?)</i>		
rosette ornaments (21)	NMA 2277	Xenaki-Sakellariou 1985: 69, pl. 9
<i>Chamber Tomb 11, LH IIIA</i>		
rosette ornaments (18)	NMA 2281	Xenaki-Sakellariou 1985: 72
spherical beads (14)	NMA 2387.1-2	Xenaki-Sakellariou 1985: 72
spiral ornaments (120)	NMA 2387.3	Xenaki-Sakellariou 1985: 72
papyrus ornaments (3)	NMA 2387.4	Xenaki-Sakellariou 1985: 73, pl. 11
plain bracket plaque	NMA 2387.5	Xenaki-Sakellariou 1985: 73
lily ornaments (26)	NMA 2387.6-7	Xenaki-Sakellariou 1985: 73
vessel [<i>Import</i>]	NMA 2387.8	Xenaki-Sakellariou 1985: 73, pl. 11
<i>Chamber Tomb 15, LH II - IIIB</i>		
"buttons" (81)	NMA 2272.1-2	Xenaki-Sakellariou 1985: 77, pl. 12

App. C: Glass Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference
<i>Chamber Tomb 24, LH IIIA - IIIB</i>		
curled leaf ornament	NMA 2309.1	Xenaki-Sakellariou 1985: 84, pl. 16
<i>Chamber Tomb 26, LH IIIA</i>		
cylindrical beads (200)	NMA 2278.1	Xenaki-Sakellariou 1985: 90, pl. 17
cylindrical beads (19)	NMA 2278.2	Xenaki-Sakellariou 1985: 90, pl. 17
<i>Chamber Tomb 27, LH II - IIIB</i>		
human (female) ornaments (5)	NMA 2450	Xenaki-Sakellariou 1985: 94, pl. 18, II
<i>Chamber Tomb 28, LH II - IIIB</i>		
octopus plaques (29)	NMA 2273	Xenaki-Sakellariou 1985: 101, pl. 25
argonaut plaques (12)	NMA 2280.1	Xenaki-Sakellariou 1985: 101, pl. 25
curled leaf ornaments (6)	NMA 2280.2	Xenaki-Sakellariou 1985: 101
plain discs (2)	NMA 2280.3	Xenaki-Sakellariou 1985: 101
argonaut plaques (35)	NMA 2294	Xenaki-Sakellariou 1985: 101, pl. 25
spherical beads (6)	NMA 2373.1-2	Xenaki-Sakellariou 1985: 101
discs (2)	NMA 2373.3	Xenaki-Sakellariou 1985: 101
elliptical beads (4)	NMA 2373.4	Xenaki-Sakellariou 1985: 101-102, pl. 26
rhomboidal beads (2)	NMA 2373.5	Xenaki-Sakellariou 1985: 102, pl. 26
spiral ornaments (7)	NMA 2373.6	Xenaki-Sakellariou 1985: 102
papyrus ornaments (8)	NMA 2373.7-8	Xenaki-Sakellariou 1985: 102, pl. 25
spiral plaque	NMA 2373.9	Xenaki-Sakellariou 1985: 102, pl. 26
rosette ornaments (2)	NMA 2373.10	Xenaki-Sakellariou 1985: 102, pl. 26
ivy ornaments (11)	NMA 2373.11	Xenaki-Sakellariou 1985: 102
tricurved arch ornaments (40)	NMA 2373.12	Xenaki-Sakellariou 1985: 102, pl. 25
buttons (4)	NMA 2373.13	Xenaki-Sakellariou 1985: 102
lentoid seal with bull?	NMA 2394	CMS I Suppl: 2
rhomboidal bead	NMA 2394.1	Xenaki-Sakellariou 1985: 102
rosette plaques (2)	NMA 2394.2	Xenaki-Sakellariou 1985: 102, pl. 25
disc	NMA 2394.3	Xenaki-Sakellariou 1985: 102
tricurved arch ornament	NMA 2394.4	Xenaki-Sakellariou 1985: 102
argonaut ornament	NMA 2394.4	Xenaki-Sakellariou 1985: 102
curled leaf ornament	NMA 2394.4	Xenaki-Sakellariou 1985: 102
<i>Chamber Tomb 30, LH IIIA - IIIB</i>		
spherical beads (9)	NMA 2271.1	Xenaki-Sakellariou 1985: 107
conical ornaments (10)	NMA 2271.2	Xenaki-Sakellariou 1985: 107, pl. 27
annular beads (2)	NMA 2271.3	Xenaki-Sakellariou 1985: 107
rosette ornament	NMA 2271.4	Xenaki-Sakellariou 1985: 107
<i>Chamber Tomb 33, LH IIIA - IIIB (?)</i>		
lentoid seal with goat?	NMA 2445	Xenaki-Sakellariou 1985: 110, pl. 28
<i>Chamber Tomb 36, LH IIIA - IIIC (?)</i>		
rosette ornaments (26)	NMA 2396	Xenaki-Sakellariou 1985: 112, pl. 28
<i>Chamber Tomb 42 and 43, LH IIIA - IIIB</i>		
lentoid seal with lion	NMA 2444	Xenaki-Sakellariou 1985: 116, pl. 30

App. C: Glass Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference
<i>Chamber Tomb 47, LH II - IIIB</i>		
spherical beads (2)	NMA 2300.1	Xenaki-Sakellariou 1985: 121, pl. 31
(+gold foil) papyrus ornaments (3)	NMA 2300.2	Xenaki-Sakellariou 1985: 121-22, pl. 31
<i>Chamber Tomb 55, LH IIIA - IIIB</i>		
ivy ornament	NMA 2793	Xenaki-Sakellariou 1985: 170, pl. 69
calyx ornaments (3)	NMA 2816.1	Xenaki-Sakellariou 1985: 170, pl. 68
papyrus ornaments (22)	NMA 2816.2	Xenaki-Sakellariou 1985: 170, pl. 68
rosette ornaments (9)	NMA 2816.3	Xenaki-Sakellariou 1985: 170, pl. 68
whorl-shell plaque	NMA 2816.4	Xenaki-Sakellariou 1985: 170, pl. 68
rosette ornament	NMA 2816.5	Xenaki-Sakellariou 1985: 170
papyrus ornament	NMA 2816.5	Xenaki-Sakellariou 1985: 170, pl. 68
whorl-shell ornament	NMA 2816.5	Xenaki-Sakellariou 1985: 170
elliptical beads (20)	NMA 2821	Xenaki-Sakellariou 1985: 170
rhomboidal beads (3)	NMA 2822.1	Xenaki-Sakellariou 1985: 170, pl. 69
curled leaf ornaments (3)	NMA 2829	Xenaki-Sakellariou 1985: 170, pl. 68
spherical beads (20)	NMA 2831.1	Xenaki-Sakellariou 1985: 170
waz-lily plaque	NMA 2896.1	Xenaki-Sakellariou 1985: 170-71, pl. 68
whorl-shell plaques (2)	NMA 2896.2	Xenaki-Sakellariou 1985: 171, pl. 68
cruciform ornament	NMA 2896.3	Xenaki-Sakellariou 1985: 171, pl. 68
discs (3)	NMA 2896.4	Xenaki-Sakellariou 1985: 171
ornament fragments	NMA 2896.5	Xenaki-Sakellariou 1985: 171
<i>Chamber Tomb 56, LH II - IIIB</i>		
button	NMA 2832.1	Xenaki-Sakellariou 1985: 176, pl. 74
whorl-shell plaque	NMA 2832.2	Xenaki-Sakellariou 1985: 176, pl. 74
tricurved arch ornaments (10)	NMA 2832.3	Xenaki-Sakellariou 1985: 176, pl. 74
papyrus ornaments (2)	NMA 2833.1	Xenaki-Sakellariou 1985: 176
<i>Chamber Tomb 57, LH II - IIIB</i>		
drop bead	NMA 2872.1	Xenaki-Sakellariou 1985: 177
spherical bead	NMA 2872.1	Xenaki-Sakellariou 1985: 177, pl. 74
ivy ornament	NMA 2872.3	Xenaki-Sakellariou 1985: 177
argonaut ornaments (2)	NMA 2872.4	Xenaki-Sakellariou 1985: 177, pl. 74
<i>Chamber Tomb 58, LH IIIA - IIIB</i>		
waz-lily plaques (11)	NMA 2817.1	Xenaki-Sakellariou 1985: 179, pl. 75
whorl- & cockle-shell plaques (19)	NMA 2817.2	Xenaki-Sakellariou 1985: 179, pl. 74
whorl-shell plaques (15)	NMA 2817.2	Xenaki-Sakellariou 1985: 179, pl. 74
elliptical beads (150)	NMA 2839	Xenaki-Sakellariou 1985: 179
lentoid seal with animal	NMA 2864B	Xenaki-Sakellariou 1985: 180
spiral ornament	NMA 2884.1	Xenaki-Sakellariou 1985: 179, pl. 74
calyx ornaments (32)	NMA 2884.2	Xenaki-Sakellariou 1985: 179, pl. 76
lily ornament	NMA 2884.3	Xenaki-Sakellariou 1985: 179
waz-lily plaques (3)	NMA 2884.4	Xenaki-Sakellariou 1985: 179
whorl-shell plaques (2)	NMA 2884.5	Xenaki-Sakellariou 1985: 179, pl. 74
ornament	NMA 2884.6	Xenaki-Sakellariou 1985: 179, pl. 75
cruciform ornaments (10)	NMA 2884.7	Xenaki-Sakellariou 1985: 179, pl. 75
curled leaf ornaments (5)	NMA 2884.8-9	Xenaki-Sakellariou 1985: 179-80, pl. 75
linear ornament	NMA 2884.10	Xenaki-Sakellariou 1985: 180, pl. 74

App. C: Glass Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference
<i>Chamber Tomb 60, LH II - III B</i>		
lentoid beads (11)	NMA 2811.1	Xenaki-Sakellariou 1985: 184, pl. 79
elliptical beads (4)	NMA 2811.2	Xenaki-Sakellariou 1985: 184
rhomboidal beads (2)	NMA 2811.3	Xenaki-Sakellariou 1985: 185, pl. 79
drop beads (9)	NMA 2811.4-5	Xenaki-Sakellariou 1985: 185, pl. 79
spiral ornaments (9)	NMA 2811.6	Xenaki-Sakellariou 1985: 185, pl. 79
altar ornaments (4)	NMA 2811.7	Xenaki-Sakellariou 1985: 185, pl. 79
ivy plaques (2)	NMA 2811.8	Xenaki-Sakellariou 1985: 185, pl. 79
ivy ornaments (3)	NMA 2811.9-10	Xenaki-Sakellariou 1985: 185, pl. 79
waz-lily plaque	NMA 2811.11	Xenaki-Sakellariou 1985: 185, pl. 79
cockle-shell ornaments (5)	NMA 2811.12	Xenaki-Sakellariou 1985: 185, pl. 79
curled leaf ornament	NMA 2811.13	Xenaki-Sakellariou 1985: 185
<i>Chamber Tomb 65, LH II - III B</i>		
lentoid seal with lion, dog	NMA 2978	Xenaki-Sakellariou 1985: 190, pl. 81
<i>Chamber Tomb 68, LH II - III B</i>		
curled leaf ornament	NMA 2936.1	Xenaki-Sakellariou 1985: 193
<i>Chamber Tomb 69, LH II - III B</i>		
spherical bead (ca. 100)	NMA 2928.1-2	Xenaki-Sakellariou 1985: 198
calyx ornaments (14)	NMA 2928.3-4	Xenaki-Sakellariou 1985: 198
curled leaf ornaments (3)	NMA 2928.5	Xenaki-Sakellariou 1985: 198
elliptical beads (ca. 100)	NMA 2929.1	Xenaki-Sakellariou 1985: 198
spiral ornaments (8)	NMA 2929.2	Xenaki-Sakellariou 1985: 198, pl. 86
ivy ornaments (2)	NMA 2929.3	Xenaki-Sakellariou 1985: 198, pl. 86
ivy plaques (4)	NMA 2929.4	Xenaki-Sakellariou 1985: 198, pl. 88
argonaut plaques (6)	NMA 2929.5-6	Xenaki-Sakellariou 1985: 198, pl. 86
spiral ornaments (5)	NMA 2929.7-8	Xenaki-Sakellariou 1985: 198, pl. 88
curled leaf ornaments (3)	NMA 2929.9	Xenaki-Sakellariou 1985: 198, pl. 86
grooved plaques (8)	NMA 2929.10	Xenaki-Sakellariou 1985: 198, pl. 86
papyrus ornaments (6)	NMA 2935	Xenaki-Sakellariou 1985: 198, pl. 87
drop beads (150)	NMA 2957	Xenaki-Sakellariou 1985: 199, pl. 87
calyx ornaments (2)	NMA 2959	Xenaki-Sakellariou 1985: 199, pl. 87
ivy plaques (8)	NMA 2961.1	Xenaki-Sakellariou 1985: 199, pl. 88
cockle-shell ornament	NMA 2961.2	Xenaki-Sakellariou 1985: 199
spherical beads (2)	NMA 2982.1	Xenaki-Sakellariou 1985: 199
elliptical beads (13)	NMA 2982.2	Xenaki-Sakellariou 1985: 199, pl. 87
figure-eight shield ornaments (2)	NMA 2982.3	Xenaki-Sakellariou 1985: 199, pl. 86
ivy ornaments (2)	NMA 2982.4	Xenaki-Sakellariou 1985: 199, pl. 86
(+gold) ivy plaques (20)	NMA 2992	Xenaki-Sakellariou 1985: 199, pl. 88
cockle-shell ornaments (12)	NMA 2994	Xenaki-Sakellariou 1985: 199, pl. 87
calyx ornaments (3)	NMA 2995	Xenaki-Sakellariou 1985: 199, pl. 86
amygdaloid beads (54)	NMA 2996	Xenaki-Sakellariou 1985: 199, pl. 86
spherical beads (8)	NMA 2997.1	Xenaki-Sakellariou 1985: 199

App. C: Glass Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference
<i>Chamber Tomb 70, LH IIIA - IIIB</i>		
cockle-shell ornament	NMA 3020	Xenaki-Sakellariou 1985: 199
lily ornaments (2)	NMA 2945.1	Xenaki-Sakellariou 1985: 205, pl. 92
curled leaf ornaments (5)	NMA 2953	Xenaki-Sakellariou 1985: 205, pl. 92
rosette ornaments (27)	NMA 2962.1-2	Xenaki-Sakellariou 1985: 202, pl. 90
conical ornaments (16)	NMA 2963.1-2	Xenaki-Sakellariou 1985: 205, pl. 92
spherical beads (2)	NMA 3012.1	Xenaki-Sakellariou 1985: 202
spherical beads (50)	NMA 3035	Xenaki-Sakellariou 1985: 205
elliptical beads (12)	NMA 3036.1	Xenaki-Sakellariou 1985: 205
grain of wheat beads (78)	NMA 3036.2	Xenaki-Sakellariou 1985: 205, pl. 92
triangular ornaments (2)	NMA 3038.1	Xenaki-Sakellariou 1985: 205, pl. 92
rosette ornaments (2)	NMA 3038.2	Xenaki-Sakellariou 1985: 205, pl. 91
discs (3)	NMA 3038.3	Xenaki-Sakellariou 1985: 205, pl. 91
<i>Chamber Tomb 75, LH II - IIIB</i>		
buttons (35)	NMA 3006	Xenaki-Sakellariou 1985: 208
papyrus ornaments (5)	NMA 3017.1	Xenaki-Sakellariou 1985: 208, pl. 94
cylindrical bead	NMA 3040.1	Xenaki-Sakellariou 1985: 208, pl. 94
waz-lily ornaments (2)	NMA 3040.2	Xenaki-Sakellariou 1985: 208, pl. 94
amygdaloid beads (2)	NMA 3040.3	Xenaki-Sakellariou 1985: 208, pl. 94
triangular beads (7)	NMA 3040.4	Xenaki-Sakellariou 1985: 208
<i>Chamber Tomb 76, LH II - IIIB</i>		
lentoid beads (6)	NMA 3042.1	Xenaki-Sakellariou 1985: 211
calyx ornaments (4)	NMA 3042.2	Xenaki-Sakellariou 1985: 211, pl. 97
papyrus ornaments (3)	NMA 3042.3	Xenaki-Sakellariou 1985: 211
plain plaques (2)	NMA 3042.4	Xenaki-Sakellariou 1985: 211, pl. 97
rosette ornament	NMA 3042.5	Xenaki-Sakellariou 1985: 211
amygdaloid bead	NMA 3042.6	Xenaki-Sakellariou 1985: 211
altar ornament	NMA 3042.6	Xenaki-Sakellariou 1985: 211
argonaut ornament	NMA 3042.6	Xenaki-Sakellariou 1985: 211
ivy ornament	NMA 3042.6	Xenaki-Sakellariou 1985: 211
<i>Chamber Tomb 78, LH II - IIB</i>		
(+gold) inlaid ring	NMA 3082.2	Xenaki-Sakellariou 1985: 217, pl. 101
lentoid seal with bull	NMA 3090	Xenaki-Sakellariou 1985: 217, pl. 102
<i>Chamber Tomb 79, LH IIIA - IIIB</i>		
spherical beads (4)	NMA 3097.1	Xenaki-Sakellariou 1985: 220, pl. 103
lentoid bead	NMA 3097.2	Xenaki-Sakellariou 1985: 220, pl. 103
rhomboidal beads (4)	NMA 3097.3	Xenaki-Sakellariou 1985: 220, pl. 103
amygdaloid bead	NMA 3097.4	Xenaki-Sakellariou 1985: 220, pl. 103
<i>Chamber Tomb 81, LH II - IIIB</i>		
figure-eight shield ornament	NMA 3117.1	Xenaki-Sakellariou 1985: 226, pl. 108
button	NMA 3117.2	Xenaki-Sakellariou 1985: 226
discs (4)	NMA 3117.3-4	Xenaki-Sakellariou 1985: 226
triangular bead	NMA 3217.1	Xenaki-Sakellariou 1985: 226, pl. 108
ivy ornaments (3)	NMA 3217.2	Xenaki-Sakellariou 1985: 226, pl. 108
buttons (2)	NMA 3217.3	Xenaki-Sakellariou 1985: 226, pl. 108

App. C: Glass Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference
<i>Chamber Tomb 82, LH II - IIIB</i>		
spherical beads (4)	NMA 3123.1	Xenaki-Sakellariou 1985: 232
ivy ornaments (10)	NMA 3123.10-11	Xenaki-Sakellariou 1985: 232-33, pl. 110
cockle-shell ornament	NMA 3123.12	Xenaki-Sakellariou 1985: 233
argonaut ornament	NMA 3123.13	Xenaki-Sakellariou 1985: 233
whorl-shell ornament	NMA 3123.14	Xenaki-Sakellariou 1985: 233, pl. 110
whorl-shell plaques (4)	NMA 3123.15	Xenaki-Sakellariou 1985: 233
lily ornaments (13)	NMA 3123.16	Xenaki-Sakellariou 1985: 232, pl. 110
octopus plaques (5)	NMA 3123.16	Xenaki-Sakellariou 1985: 233, pl. 110
curled leaf ornaments (2)	NMA 3123.17	Xenaki-Sakellariou 1985: 233
calyx ornaments (5)	NMA 3123.2-4	Xenaki-Sakellariou 1985: 232, pl. 110
papyrus ornaments (4)	NMA 3123.5	Xenaki-Sakellariou 1985: 232
rosette ornaments (6)	NMA 3123.7	Xenaki-Sakellariou 1985: 232
rosette ornaments (2)	NMA 3123.8-9	Xenaki-Sakellariou 1985: 232
drop beads (3)	NMA 3222.1	Xenaki-Sakellariou 1985: 233
lily ornaments (3)	NMA 3222.2	Xenaki-Sakellariou 1985: 233, pl. 110
<i>Chamber Tomb 83, LH II - IIIB</i>		
lentoid seal with animal	NMA 3139	Xenaki-Sakellariou 1985: 237
spherical beads (8)	NMA 3141.1	Xenaki-Sakellariou 1985: 236
cylindrical bead	NMA 3141.2	Xenaki-Sakellariou 1985: 236
elliptical beads (2)	NMA 3141.3	Xenaki-Sakellariou 1985: 236
drop beads (15)	NMA 3141.4-5	Xenaki-Sakellariou 1985: 236-37 pl. 113
papyrus ornaments (3)	NMA 3141.6-7	Xenaki-Sakellariou 1985: 237, pl. 113
<i>Chamber Tomb 84, LH II - IIIB</i>		
spherical beads (6)	NMA 3146.1	Xenaki-Sakellariou 1985: 239
rectangular bead	NMA 3146.2	Xenaki-Sakellariou 1985: 239, pl. 114
spiral ornament	NMA 3146.3	Xenaki-Sakellariou 1985: 239, pl. 114
waz-lily ornaments (3)	NMA 3146.4	Xenaki-Sakellariou 1985: 239, pl. 114
cockle-shell ornaments (5)	NMA 3146.5	Xenaki-Sakellariou 1985: 239, pl. 114
<i>Chamber Tomb 85, LH II - IIIB</i>		
drop beads (16)	NMA 3218.1	Xenaki-Sakellariou 1985: 242, pl. 116
papyrus ornaments (3)	NMA 3218.2	Xenaki-Sakellariou 1985: 242
ivy plaque	NMA 3218.3	Xenaki-Sakellariou 1985: 242, pl. 116
<i>Chamber Tomb 88, LH II - IIIB</i>		
(+gold) argonaut inlaid ornament	NMA 3153.13	Xenaki-Sakellariou 1985: 246, pl. 117
(+gold) ivy inlaid ornaments (3)	NMA 3153.7	Xenaki-Sakellariou 1985: 246, pl. 117
(+gold) ivy inlaid ornament	NMA 3153.9	Xenaki-Sakellariou 1985: 246, pl. 117
spherical beads (2)	NMA 3157.1	Xenaki-Sakellariou 1985: 245
rosette ornaments (2)	NMA 3214.1	Xenaki-Sakellariou 1985: 245, pl. 118
buttons (25)	NMA 3214.2-3	Xenaki-Sakellariou 1985: 245
plain plaque	NMA 3214.4	Xenaki-Sakellariou 1985: 245, pl. 118
<i>Chamber Tomb 91, LH IIIA - IIIB</i>		
pitcher ornament	NMA 3195.1	Xenaki-Sakellariou 1985: 256, pl. 126

App. C: Glass Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference
<i>Chamber Tomb 93, LH IIIA - IIIB (?)</i>		
spherical bead	NMA 4547.1-3	Xenaki-Sakellariou 1985: 267, pl. 132
drop bead	NMA 4547.2	Xenaki-Sakellariou 1985: 267, pl. 132
papyrus ornament	NMA 4547.3	Xenaki-Sakellariou 1985: 267, pl. 132
drop beads (13)	NMA 4550.1	Xenaki-Sakellariou 1985: 267
argonaut plaques (2)	NMA 4550.10	Xenaki-Sakellariou 1985: 268, pl. 132
cruciform ornaments (5)	NMA 4550.11	Xenaki-Sakellariou 1985: 268, pl. 132
curled leaf ornaments (7)	NMA 4550.12	Xenaki-Sakellariou 1985: 268, pl. 132
"saddle" ornament	NMA 4550.13	Xenaki-Sakellariou 1985: 268, pl. 132
spiral ornaments (6)	NMA 4550.2	Xenaki-Sakellariou 1985: 267, pl. 132
chevron plaques (7)	NMA 4550.3-4	Xenaki-Sakellariou 1985: 267, pl. 132
altar ornaments (16)	NMA 4550.5	Xenaki-Sakellariou 1985: 267, pl. 132
rosette ornament	NMA 4550.6	Xenaki-Sakellariou 1985: 268
ivy plaques (6)	NMA 4550.7-8	Xenaki-Sakellariou 1985: 268, pl. 133
waz-lily ornaments (2)	NMA 4550.9	Xenaki-Sakellariou 1985: 268, pl. 132
genius ornaments (24)	NMA 4551	Xenaki-Sakellariou 1985: 268, pl. 133
<i>Chamber Tomb 94, LH II - IIIB</i>		
drop bead	NMA 4554.1	Xenaki-Sakellariou 1985: 270, pl. 133
<i>Chamber Tomb 95, LH II - IIIB</i>		
spherical beads (17)	NMA 4561.1	Xenaki-Sakellariou 1985: 271
biconvex beads (5)	NMA 4561.2	Xenaki-Sakellariou 1985: 271, pl. 134
cylindrical bead	NMA 4561.3	Xenaki-Sakellariou 1985: 271
rhomboidal beads (4)	NMA 4561.4	Xenaki-Sakellariou 1985: 271, pl. 134
amygdaloid beads (4)	NMA 4561.5	Xenaki-Sakellariou 1985: 272, pl. 134
drop beads (2)	NMA 4561.6	Xenaki-Sakellariou 1985: 272, pl. 134
ivy ornaments (3)	NMA 4561.7	Xenaki-Sakellariou 1985: 272, pl. 134
<i>Chamber Tomb 100, LH II - IIIB</i>		
plain plaque	NMA 5413.1	Xenaki-Sakellariou 1985: 277
button	NMA 5413.10	Xenaki-Sakellariou 1985: 278
argonaut ornaments (5)	NMA 5413.2	Xenaki-Sakellariou 1985: 277, pl. 136
calyx plaque	NMA 5413.3	Xenaki-Sakellariou 1985: 277, pl. 136
ivy plaques (16)	NMA 5413.4-5	Xenaki-Sakellariou 1985: 277, pl. 136
cockle-shell plaques (2)	NMA 5413.6	Xenaki-Sakellariou 1985: 277, pl. 136
triangular ornaments (19)	NMA 5413.7	Xenaki-Sakellariou 1985: 277, pl. 136
spiral plaques (3)	NMA 5413.8	Xenaki-Sakellariou 1985: 277-78, pl. 136
rosette ornament	NMA 5413.9	Xenaki-Sakellariou 1985: 278, pl. 136
lentoid beads (9)	NMA 5414.1	Xenaki-Sakellariou 1985: 278, pl. 136
amygdaloid beads (11)	NMA 5414.2	Xenaki-Sakellariou 1985: 278, pl. 136
papyrus ornaments (2)	NMA 5414.3	Xenaki-Sakellariou 1985: 278, pl. 136
human ornaments (2)	NMA 5415	Xenaki-Sakellariou 1985: 278, pl. 136, II
<i>Chamber Tomb 102, LH II - IIIB</i>		
spherical beads (10)	NMA 4910.1	Xenaki-Sakellariou 1985: 280
drop beads (3)	NMA 4910.1-5	Xenaki-Sakellariou 1985: 281
cylindrical beads (25)	NMA 4910.2	Xenaki-Sakellariou 1985: 280, pl. 137
lily ornament	NMA 4910.4	Xenaki-Sakellariou 1985: 281, pl. 137
cockle-shell ornament	NMA 4910.5	Xenaki-Sakellariou 1985: 281, pl. 137

App. C: Glass Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference
<i>Chamber Tomb 102 (cont)</i>		
discs (2)	NMA 4910.6	Xenaki-Sakellariou 1985: 281, pl. 137
buttons (4)	NMA 4910.7	Xenaki-Sakellariou 1985: 281, pl. 137
handle	NMA 4914.1-2	Xenaki-Sakellariou 1985: 281, pl. 140
<i>Chamber Tomb 102 or 103, LH II - IIIB</i>		
annular beads (25)	NMA 5404.1	Xenaki-Sakellariou 1985: 290
buttons (5)	NMA 5404.2	Xenaki-Sakellariou 1985: 290
<i>Chamber Tomb 103, LH II - IIIB</i>		
(+gold) ivy inlaid ornaments (2)	NMA 4932.6	Xenaki-Sakellariou 1985: 288, pl. 143
(+gold) discs (2)	NMA 4932.9	Xenaki-Sakellariou 1985: 288, pl. 142
(+gold) rosette inlaid ornament	NMA 4933.3	Xenaki-Sakellariou 1985: 289, pl. 142
bird beads (9)	NMA 4936	Xenaki-Sakellariou 1985: 288, pl. 142, II
<i>Chamber Tomb 502, LH IIIA - IIIC</i>		
annular beads (4)		Wace 1932: 10, pl. XIII: 29i
cylindrical bead		Wace 1932: 10, pl. XIII: 29i
lentoid beads (2)		Wace 1932: 10, pl. XIII: 29m
spherical beads (9)		Wace 1932: 9-10, pl. XIII: 29f-h,j
curl ornaments (6)		Wace 1932: 10 (k), pl. XIII
<i>Chamber Tomb 513, LH IIIA - IIIB</i>		
(faience?) spherical beads (87)		Wace 1932: 48, pl. XXV:a,b
<i>Chamber Tomb 514 (pit in chamber), LH IIIB</i>		
spherical beads (29)		Wace 1932: 50
<i>Chamber Tomb 515, LH II - IIIA</i>		
spherical beads (8)		Wace 1932: 60-61
spherical beads (11)		Wace 1932: 59
argonaut ornament		Wace 1932: 62
curled leaf ornaments (2)		Wace 1932: 62
<i>Chamber Tomb 516 (pit in chamber), LH I</i>		
cylindrical beads (12)	NMA 6534	Wace 1932: 66, fig. 25
spacer bead [<i>Import</i>]	NMA 6534	Wace 1932: 64-66, 207, fig. 25:5b
spacer bead [<i>Import</i>]	NMA 6534	Wace 1932: 64-66, 207, fig. 25:5c
spacer bead [<i>Import</i>]	NMA 6535	Wace 1932: 64-66, 207, fig. 25:5b
amygdaloid seal with bird	NMA 6536	Wace 1932: 66, fig. 26
<i>Chamber Tomb 517 (pit in chamber), LH I - II</i>		
cylindrical bead		Wace 1932: 73, pl. XXXV:34b
conical ornament		Wace 1932: 73, pl. XXXV:34e
lentoid bead		Wace 1932: 73, pl. XXXV:34h
spherical beads (21)	NMA 6527	Wace 1932: 73, pl. XXXV:34c,d,f,g,i
<i>Chamber Tomb 517 (with skeleton XI in chamber), LH IIIA</i>		
spherical beads (14)		Wace 1932: 74, pl. XXXVI:47b-d
cylindrical bead		Wace 1932: 74, pl. XXXVI:47e

App. C: Glass Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference
<i>Chamber Tomb 518, LH I - IIIA</i>		
spherical beads (9)		Wace 1932: 86, pl. VIII
(+gold) inlaid ring	NMA 6490	Wace 1932: 87, pl. 38:74
<i>Chamber Tomb 520, LH IIIA</i>		
spherical beads (23)		Wace 1932: 26, fig. 12:41a
spherical beads (3)		Wace 1932: 26, fig. 12:41b-c
annular beads (20)		Wace 1932: 26, fig. 12:41d
lily ornaments (4)		Wace 1932: 26, fig. 12:40
ivy ornaments (20)	NMA 6515	Wace 1932: 26, fig. 12:42
spherical beads (13)		Wace 1932: 25, fig. 11:36
<i>Chamber Tomb 521, LH IIIA</i>		
lily ornament		Wace 1932: 30-31
spherical beads (2)		Wace 1932: 31
cylindrical bead		Wace 1932: 31
<i>Chamber Tomb 523, LH IIIA - IIIB</i>		
grain of wheat beads (11)		Wace 1932: 37, pl. XX:1
spherical beads (4)		Wace 1932: 37, pl. XX:11,13
drop bead		Wace 1932: 37, pl. XX:14
papyrus ornaments (4)		Wace 1932: 37, pl. XX:12
<i>Chamber Tomb 524, LH IIIA - IIIB</i>		
ivy ornament		Wace 1932: 43
pendant spiral ornament		Wace 1932: 43
spherical beads (112)		Wace 1932: 43
<i>Chamber Tomb 526, LH IIIA</i>		
cylindrical bead		Wace 1932: 94
eye beads (19)		Wace 1932: 94, pl. IX:7b
spherical beads (12)		Wace 1932: 94, pl. IX (a,c,d,f,i)
<i>Chamber Tomb 529, LH II - IIIA</i>		
spherical beads (7)		Wace 1932: 106
<i>Chamber Tomb 530, LH IIIA</i>		
drop bead		Wace 1932: 109
<i>Chamber Tomb 533, LH II - IIIB</i>		
amygdaloid seal with bird	NMA 6474	CMS I Suppl: 7
<i>Chamber Tombs, 1-52 (Tsountas excavations), LH II - IIIB</i>		
conical ornament	NMA 2270.1	Xenaki-Sakellariou 1985: 136, pl. 37
amygdaloid beads (2)	NMA 2270.2	Xenaki-Sakellariou 1985: 136, pl. 37
ivy plaques (3)	NMA 2270.3	Xenaki-Sakellariou 1985: 136, pl. 37
curled leaf ornaments (4)	NMA 2270.4	Xenaki-Sakellariou 1985: 136, pl. 37
altar ornaments (8)	NMA 2274.1	Xenaki-Sakellariou 1985: 136
argonaut ornaments (9)	NMA 2274.2	Xenaki-Sakellariou 1985: 136
argonaut ornaments (44)	NMA 2275.1-2	Xenaki-Sakellariou 1985: 136, pl. 37

App. C: Glass Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference
<i>Chamber Tombs, 1-52 (cont)</i>		
rosette ornaments (12)	NMA 2276.1	Xenaki-Sakellariou 1985: 136, pl. 37
human (female) ornament	NMA 2276.2	Xenaki-Sakellariou 1985: 136, pl. II
spherical beads (7)	NMA 2279.1	Xenaki-Sakellariou 1985: 136, pl. 38
disc	NMA 2279.2	Xenaki-Sakellariou 1985: 136
elliptical beads (12)	NMA 2279.3	Xenaki-Sakellariou 1985: 136, pl. 38
amygdaloid beads (5)	NMA 2279.4	Xenaki-Sakellariou 1985: 137, pl. 38
engraved? drop bead	NMA 2279.5	Xenaki-Sakellariou 1985: 137, pl. 38
spiral ornaments (3)	NMA 2279.6	Xenaki-Sakellariou 1985: 137, pl. 37
papyrus ornament	NMA 2279.7	Xenaki-Sakellariou 1985: 137, pl. 37
rosette ornaments (11)	NMA 2279.8-9	Xenaki-Sakellariou 1985: 137, pl. 37
calyx ornaments (3)	NMA 2279.10	Xenaki-Sakellariou 1985: 137, pl. 38
ivy plaques (2)	NMA 2279.11	Xenaki-Sakellariou 1985: 137, pl. 37
lily ornaments (2)	NMA 2279.12	Xenaki-Sakellariou 1985: 137, pl. 37
whorl-shell ornament	NMA 2279.13	Xenaki-Sakellariou 1985: 137, pl. 37
tricurved arch ornaments (2)	NMA 2279.14	Xenaki-Sakellariou 1985: 137, pl. 38
diamond-shaped ornaments (8)	NMA 2279.15	Xenaki-Sakellariou 1985: 137, pl. 38
tricurved ornaments (15)	NMA 2279.16	Xenaki-Sakellariou 1985: 137, pl. 38
curled leaf ornaments (3)	NMA 2279.17	Xenaki-Sakellariou 1985: 137, pl. 38
molded strips (12)	NMA 2279.18	Xenaki-Sakellariou 1985: 137, pl. 38
buttons (2)	NMA 2279.19	Xenaki-Sakellariou 1985: 137, pl. II
human (female) ornament	NMA 2285	Xenaki-Sakellariou 1985: 137-38, pl. 40
(+gold) spherical bead with collar	NMA 2287	Xenaki-Sakellariou 1985: 138, pl. 38
papyrus ornaments (2)	NMA 2292.1	Xenaki-Sakellariou 1985: 138, pl. 38
cockle-shell ornament	NMA 2292.1-6	Xenaki-Sakellariou 1985: 138, pl. 38
rosette ornaments (4)	NMA 2292.2-3	Xenaki-Sakellariou 1985: 138, pl. 38
lily ornaments (4)	NMA 2292.5	Xenaki-Sakellariou 1985: 138, pl. 38
tricurved arch ornaments (3)	NMA 2292.6	Xenaki-Sakellariou 1985: 138, pl. 38
(+gold) spiral ornaments (3)	NMA 2293.1	Xenaki-Sakellariou 1985: 138, pl. 39
spiral ornaments (2)	NMA 2293.2	Xenaki-Sakellariou 1985: 138, pl. 39
(+gold) curled leaf ornaments (2)	NMA 2293.3	Xenaki-Sakellariou 1985: 138, pl. 39
human (female) ornament	NMA 2293.4	Xenaki-Sakellariou 1985: 138, pl. 39
argonaut ornament	NMA 2293.5	Xenaki-Sakellariou 1985: 138, pl. 39
cockle-shell ornament	NMA 2293.5	Xenaki-Sakellariou 1985: 138, pl. 39
ivy ornament	NMA 2293.5	Xenaki-Sakellariou 1985: 138, pl. 39
spiral plaque	NMA 2293.5	Xenaki-Sakellariou 1985: 138, pl. 39
tricurved arch ornament	NMA 2293.5	Xenaki-Sakellariou 1985: 138, pl. 39
curled leaf ornament	NMA 2297.1	Xenaki-Sakellariou 1985: 138
(+gold) discs with gold chains	NMA 2297.2	Xenaki-Sakellariou 1985: 138, pl. 39
papyrus ornament	NMA 2349.1	Xenaki-Sakellariou 1985: 139
altar ornament	NMA 2349.1	Xenaki-Sakellariou 1985: 139
lily ornament	NMA 2349.2	Xenaki-Sakellariou 1985: 139
spherical bead	NMA 2374.1	Xenaki-Sakellariou 1985: 139
conical ornaments (4)	NMA 2374.2	Xenaki-Sakellariou 1985: 139
calyx ornament	NMA 2374.3	Xenaki-Sakellariou 1985: 139
figure-eight shield ornaments (2)	NMA 2374.4	Xenaki-Sakellariou 1985: 139, pl. II
misc. handle?	NMA 2374.5,8	Xenaki-Sakellariou 1985: 139, pl. 39
buttons (7)	NMA 2374.6-7	Xenaki-Sakellariou 1985: 139
rosette ornaments (60)	NMA 2375.1-2	Xenaki-Sakellariou 1985: 139, pl. 37
spherical beads (21)	NMA 2378.1	Xenaki-Sakellariou 1985: 139

App. C: Glass Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference
<i>Chamber Tombs 1-52 (cont)</i>		
eye bead	NMA 2378.2	Xenaki-Sakellariou 1985: 139, pl. 40
annular beads (40)	NMA 2378.3	Xenaki-Sakellariou 1985: 139
spherical beads (2)	NMA 2378.4	Xenaki-Sakellariou 1985: 139, pl. 40
biconical bead	NMA 2378.5	Xenaki-Sakellariou 1985: 139, pl. 44
discs (2)	NMA 2378.6	Xenaki-Sakellariou 1985: 139
cylindrical bead	NMA 2378.7	Xenaki-Sakellariou 1985: 139
elliptical beads (11)	NMA 2378.8-10	Xenaki-Sakellariou 1985: 139-40, pl. 38
rhomboidal bead	NMA 2378.11	Xenaki-Sakellariou 1985: 140
drop bead	NMA 2378.12	Xenaki-Sakellariou 1985: 140
amygdaloid bead	NMA 2378.12	Xenaki-Sakellariou 1985: 140
spherical beads (ca. 150)	NMA 2495.1-2	Xenaki-Sakellariou 1985: 140, pl. 39
ring of grains beads (6)	NMA 2495.3	Xenaki-Sakellariou 1985: 140, pl. 42
elliptical beads (3)	NMA 2495.4	Xenaki-Sakellariou 1985: 140
rhomboidal beads (30)	NMA 2495.5	Xenaki-Sakellariou 1985: 140
drop beads (75)	NMA 2495.6	Xenaki-Sakellariou 1985: 140
spiral ornaments (120)	NMA 2495.7-8	Xenaki-Sakellariou 1985: 140, pl. 41
papyrus ornaments (56)	NMA 2495.9-10	Xenaki-Sakellariou 1985: 140
papyrus ornaments (3)	NMA 2495.11	Xenaki-Sakellariou 1985: 140, pl. 41
chevron plaques (40)	NMA 2495.12	Xenaki-Sakellariou 1985: 140, pl. 42
altar ornaments (31)	NMA 2495.13	Xenaki-Sakellariou 1985: 140, pl. 41
"wallet" shield ornaments (4)	NMA 2495.14	Xenaki-Sakellariou 1985: 140, pl. 42
calyx ornaments (13)	NMA 2495.15-16	Xenaki-Sakellariou 1985: 140, pl. 42
ivy ornaments (14)	NMA 2495.17	Xenaki-Sakellariou 1985: 140, pl. 41
lily ornaments (51)	NMA 2495.18-20	Xenaki-Sakellariou 1985: 141, pl. 41
whorl-shell plaques (5)	NMA 2495.21	Xenaki-Sakellariou 1985: 141, pl. 42
tricurved arch ornaments (30)	NMA 2495.22	Xenaki-Sakellariou 1985: 141
bucranium ornaments (7)	NMA 2495.23	Xenaki-Sakellariou 1985: 141, pl. 41
tricurved ornaments (7)	NMA 2495.24	Xenaki-Sakellariou 1985: 141
hemi-circle ornament	NMA 2495.25	Xenaki-Sakellariou 1985: 141, pl. 42
discs (3)	NMA 2495.26	Xenaki-Sakellariou 1985: 141, pl. 42
<i>Chamber Tombs, (Tsountas 1892)</i>		
waz-lily plaques (3)	NMA 2827.1	Xenaki-Sakellariou 1985: 187
curled leaf ornament	NMA 2827.2	Xenaki-Sakellariou 1985: 187
<i>Unrecorded Chamber Tombs (Tsountas)</i>		
plaques (8)	NMA 2932.1	Xenaki-Sakellariou 1985: 214, pl. 98
(+gold) molded strip	NMA 2944.1	Xenaki-Sakellariou 1985: 214, pl. 99
(+gold) spherical beads (80)	NMA 2944.2	Xenaki-Sakellariou 1985: 214, pl. 99
calyx ornaments (10)	NMA 2952	Xenaki-Sakellariou 1985: 214, pl. 99
spiral ornaments (35)	NMA 2955	Xenaki-Sakellariou 1985: 214, pl. 99
rosette ornaments (15)	NMA 2960	Xenaki-Sakellariou 1985: 214, pl. 99
vessel [<i>Import</i>]	NMA 2984	Xenaki-Sakellariou 1985: 214-15, pl. 99
triangular ornaments (2)	NMA 3220.1	Xenaki-Sakellariou 1985: 264, pl. 131
papyrus ornaments (2)	NMA 3220.2	Xenaki-Sakellariou 1985: 264, pl. 131
tricurved arch plaques (2)	NMA 3220.3	Xenaki-Sakellariou 1985: 264, pl. 131
altar ornaments (6)	NMA 3220.4	Xenaki-Sakellariou 1985: 264, pl. 131
rosette ornament	NMA 3220.5	Xenaki-Sakellariou 1985: 264, pl. 131
ivy ornaments (4)	NMA 3220.6	Xenaki-Sakellariou 1985: 264, pl. 131

App. C: Glass Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference
<i>Unrecorded Chamber Tombs (cont)</i>		
waz-lily ornament	NMA 3220.7	Xenaki-Sakellariou 1985: 264, pl. 131
grooved plaques (2)	NMA 3220.8	Xenaki-Sakellariou 1985: 264, pl. 131
parallelogram plaque	NMA 3220.9	Xenaki-Sakellariou 1985: 264
spherical beads (28)	NMA 3223	Xenaki-Sakellariou 1985: 264
spherical beads (2)	NMA 3258.1	Xenaki-Sakellariou 1985: 264, pl. 130
drop beads (3)	NMA 3258.2	Xenaki-Sakellariou 1985: 264, pl. 130
spiral ornament	NMA 3258.3	Xenaki-Sakellariou 1985: 264, pl. 130
altar ornament	NMA 3258.4	Xenaki-Sakellariou 1985: 264, pl. 130
pitcher ornament	NMA 3258.5	Xenaki-Sakellariou 1985: 265, pl. 130
ivy ornament	NMA 3258.6	Xenaki-Sakellariou 1985: 265, pl. 130
ivy plaque	NMA 3258.7	Xenaki-Sakellariou 1985: 265, pl. 130
button	NMA 3258.8	Xenaki-Sakellariou 1985: 265, pl. 130
<i>Phytia Grave (purchased 1905), LH III</i>		
rosette ornaments (13)	BM 1905.6-10.11	Harden 1981: 41 no. 28
rosette ornament	BM 1905.6-10.11	Harden 1981: 41 no. 31, fig. 2
rosette ornaments (9)	BM 1905.6-10.11	Harden 1981: 42 no. 35, pl. II, fig. 2
ivy ornaments (3)	BM 1905.6-10.11	Harden 1981: 43 no. 44, fig. 2
cockle-shell ornament	BM 1905.6-10.11	Harden 1981: 45 no. 49
ornaments (15)	BM 1905.6-10.11	Harden 1981: 46 no. 55
plaques (3)	BM 1905.6-10.11	Harden 1981: 48 no. 66, pl. VI, fig. 3
papyrus ornaments (32)	BM 1905.6-10.11	Harden 1981: 49 no. 73, pl. VI
<i>Prehistoric Cemetery Grave XXVIII</i>		
spherical beads (2)		Wace 1953: 7
<i>Shaft Grave Gamma, MH III - LH I</i>		
spherical beads (6)	NMA 9192	Dietz 1991: 108
<i>Shaft Grave I, LH I</i>		
cylindrical beads (26)	NMA 209	Karo 1930-33: 69 no. 209a, pl. CL
spacer bead [<i>Import</i>]	NMA 209.1	Karo 1930-33: 69 no. 209b, pl. CL
spacer bead [<i>Import</i>]	NMA 209.2	Karo 1930-33: 69 no. 209b, pl. CL
spacer bead [<i>Import</i>]	NMA 209.3	Karo 1930-33: 69 no. 209b, pl. CL
spacer bead [<i>Import</i>]	NMA 209.4	Karo 1930-33: 69 no. 209b, pl. CL
<i>Tomb of Clytemnestra, LH IIIA - IIIB</i>		
spherical beads (2)	NMA 1421	Wace 1921-23: 363, fig. 78b,d
biconical beads (2)	NMA 2835	Wace 1921-23: 371, fig. 81b
spherical beads (43)	NMA 2835	Wace 1921-23: 371, fig. 81c
spherical beads (4)	NMA 2835	Wace 1921-23: 372, fig. 81d, j
segmented beads (19)	NMA 2835	Wace 1921-23: 372, fig. 81e
spherical beads (139)	NMA 2835	Wace 1921-23: 372, fig. 81h
cylindrical bead	NMA 2835	Wace 1921-23: 372, fig. 81i
lily ornament	NMA 2835	Wace 1921-23: 372, fig. 81k
(+ivory) inlaid wing (sphinx?)	NMA 2869	Wace 1921-23: 370, fig. 81a
(+gold) inlaid rivets	NMA 2900	Wace 1921-23: 369, pl. LIX B,C

App. C: Glass Objects Found in the LBA Argolid

MYCENAE (cont)	Inventory	Reference
<i>Tomb of the Genii, LH IIIA</i>		
genius ornaments (4)	NMA 4535	Wace 1921-23: 379, fig. 86a-b
(+gold foil) grain of wheat bead	NMA 4537	Wace 1921-23: 380, fig. 88o
(+gold foil) spherical beads (2)	NMA 4537	Wace 1921-23: 380, fig. 88p
amygdaloid beads (138)	NMA 4538	Wace 1921-23: 382, fig. 88b
grain of wheat beads (60)	NMA 4539	Wace 1921-23: 382, fig. 88a
melon beads (36)	NMA 4540	Wace 1921-23: 382, fig. 88d-h
spherical beads (353)	NMA 4541	Wace 1921-23: 382-83, fig. 88c
amygdaloid beads (2)	NMA 4542	Wace 1921-23: 383, fig. 89d,e
argonaut ornaments (9)	NMA 4542	Wace 1921-23: 383, fig. 89a,f
curled leaf ornaments (4)	NMA 4542	Wace 1921-23: 384, fig. 98k
cylindrical beads (3)	NMA 4542	Wace 1921-23: 384, fig. 89p
drop beads (2)	NMA 4542	Wace 1921-23: 384, fig. 89p
ivy ornament	NMA 4542	Wace 1921-23: 383, fig. 89b
lentoid bead	NMA 4542	Wace 1921-23: 384, fig. 89h
lily ornaments (3)	NMA 4542	Wace 1921-23: 384, fig. 89i,j,n
ornaments (7)	NMA 4542	Wace 1921-23: 384, fig. 89i-m
rosette ornament	NMA 4542	Wace 1921-23: 383, fig. 89g
spacer beads (8)	NMA 4542	Wace 1921-23: 384, fig. 89o
whorl-shell ornaments (4)	NMA 4542	Wace 1921-23: 383, fig. 89c
<i>Treasury of Atreus, LH IIIA</i>		
conical ornaments (4)	NMA 1202	Wace 1921-23: 354, fig. 75 a-d
rosette ornaments (2)	NMA 1202	Wace 1921-23: 354-55, fig. 75i,l
cockle-shell ornament	NMA 1202	Wace 1921-23: 354-55, fig. 75h
waz-lily ornament	NMA 1202	Wace 1921-23: 354-55, fig. 75m
biconical beads (3)	NMA 1202	Wace 1921-23: 354-55, fig. 75e-g
flower pendant	NMA 1202	Wace 1921-23: 355, fig. 75k
spherical beads (20)		Wace 1921-23: 355
cockle-shell ornament	NMA 6564	Wace 1921-23: 356, fig. 76f
biconical beads (2)	NMA 6656	Wace 1921-23: 356, 76e
<i>Asprochoma-Agriosykia Tomb, Unspecified (Palailogou excavations), LH IIIA</i>		
vessel [<i>Import</i>]		Lambrou-Philipson 1990: 333, pl. 77
<i>Acropolis</i>		
figure-eight shield ornaments (2)	NMA 1374	on display
altar ornament	NMA 2601	on display
spiral ornaments (2)	NMA 2711	on display
drop beads (2)	NMA 2711	on display
figure-eight shield ornament	NMA 2711	on display
spherical beads (3)	NMA 2969	on display
sword-hilt	NMA 3026	Tsountas 1897: 109, pl. 8:6
vessel [<i>Import</i>]	NMA 4530	Weinberg & McClellan 1992: 79 no. 1
(glass?) cockle-shell ornaments (2)	NMA 4534	on display
jug ornaments (2)	NMA 4563	on display
(faience?) female ornaments (11)		Tsountas 1888: pl. VIII, 9

App. C: Glass Objects Found in the LBA Argolid

NAUPLION	Inventory	Reference
<i>Unknown Context</i>		
palm tree ornament	NMA 3418	Vollgraff 1904: 385
spiral ornament	NMA 3427	on display
vessel, krateriskos [<i>Import</i>]	NMA 3539	von Bissing 1912: 38
PANARITIS	Inventory	Reference
<i>Nissi Field, Chamber Tomb 1, LH IIIA - IIIB</i>		
lentoid seal with lion	Nauplion	CMS V Suppl. 1B: 85
PRIPHTIANI	Inventory	Reference
<i>Chamber Tomb 2, LH IIIA - IIIB</i>		
elliptical beads (4)		Charitonidou 1952: 24
PROSYMNA	Inventory	Reference
<i>Chamber Tomb I, LH IIIB</i>		
annular bead		Pierce Blegen 1937: 301, fig. 142:3
annular beads (4)		Pierce Blegen 1937: 304, fig. 142:4, 143:19
elliptical beads (3)		Pierce Blegen 1937: 302, fig. 142:5
spherical beads (4)		Pierce Blegen 1937: 298, fig. 143:12
spherical beads (7)		Pierce Blegen 1937: 300, fig. 143:5-7, 13-15, 17
spherical beads (8)		Pierce Blegen 1937: 298, fig. 142:1
spherical beads (15)		Pierce Blegen 1937: 300, fig. 142:2
<i>Chamber Tomb II, LH II - IIIA</i>		
spherical beads (3)		Pierce Blegen 1937: 300, fig. 447:1-3
<i>Chamber Tomb III, LH II - IIIB</i>		
elliptical beads (3)		Pierce Blegen 1937: 302, fig. 464:7
lentoid bead		Pierce Blegen 1937: 303, fig. 464:2
spacer bead		Pierce Blegen 1937: 303, fig. 464:1
spherical beads (54)		Pierce Blegen 1937: 298, fig. 464:6
<i>Chamber Tomb IV, LH IIIA - IIIB</i>		
spherical beads (10)		Pierce Blegen 1937: 300, fig. 492:2, 7
<i>Chamber Tomb VI, LH IIIB</i>		
grain of wheat bead		Pierce Blegen 1937: 304, fig. 389:2
<i>Chamber Tomb VIII, LH IIIA - IIIB</i>		
spherical beads (72)		Pierce Blegen 1937: 298, fig. 406:1
spherical beads (2)		Pierce Blegen 1937: 300, fig. 408:11
elliptical beads (110)		Pierce Blegen 1937: 302, fig. 406:2, 408:8
<i>Chamber Tomb IX, LH IIIA</i>		
spherical beads (2)		Pierce Blegen 1937: 298, fig. 413:1,2

App. C: Glass Objects Found in the LBA Argolid

PROSYMNA (cont)	Inventory	Reference
<i>Chamber Tomb XI, LH IIIA</i>		
spherical beads (15)		Pierce Blegen 1937: 298, 301, fig. 517:19-22, 24, 25
elliptical bead		Pierce Blegen 1937: 302, fig. 517:21
<i>Chamber Tomb XIII, LH II - IIIB</i>		
lentoid seal with ibex	NMA 8469	Pierce Blegen 1937: 279, 303, fig. 464:1, 594
flattened cylindrical seal	NMA 8470	Pierce Blegen 1937: 279, 302, fig. 503:5, 593
<i>Chamber Tomb XIV, LH I - IIIA</i>		
spherical bead		Pierce Blegen 1937: 298
elliptical beads (3)		Pierce Blegen 1937: 302, fig. 116:5a
spherical beads (99)		Pierce Blegen 1937: 298, fig. 116:3,5
conical ornaments (2)		Pierce Blegen 1937: 304, fig. 116: 11
spherical beads (2)		Pierce Blegen 1937: 304, fig. 116:2,4
button		Pierce Blegen 1937: 304-305, fig. 116: 6
spiral ornament		Pierce Blegen 1937: 305, fig. 116:12
<i>Chamber Tomb XVII, LH II - IIIA</i>		
spherical beads (3)		Pierce Blegen 1937: 298, fig. 107:1
grain of wheat beads (2)		Pierce Blegen 1937: 304, fig. 107:10
<i>Chamber Tomb XVIII, LH II - IIIA</i>		
spherical beads (25)		Pierce Blegen 1937: 298, fig. 112:16
spherical beads (26)		Pierce Blegen 1937: 301, fig. 112:17
<i>Chamber Tomb XX, LH IIIB</i>		
figure-eight shield plaques (2)		Pierce Blegen 1937: 305, 121:2
<i>Chamber Tomb XXI, LH IIIA-IIIIB</i>		
spherical beads (6)		Pierce Blegen 1937: 298, fig. 128:1
<i>Chamber Tomb XXII, LH IIIA - IIIIB</i>		
spiral ornament		Pierce Blegen 1937: 305, fig. 135:1
<i>Chamber Tomb XXIX, LH II - IIIIB</i>		
spherical beads (15)		Pierce Blegen 1937: 299, fig. 162:13,14,16
spherical beads (13)		Pierce Blegen 1937: 299, fig. 161:11,14,22
spherical beads (6)		Pierce Blegen 1937: 301, fig. 161:1,2,19,20
annular bead		Pierce Blegen 1937: 301, fig. 162:3
<i>Chamber Tomb XXV, LH I - IIIA</i>		
spherical beads (2)		Pierce Blegen 1937: 299, fig. 199:8,9
<i>Chamber Tomb XXVIII, LH II - IIIIB</i>		
spherical beads (7)		Pierce Blegen 1937: 299, fig. 169:5,9
<i>Chamber Tomb XXX, LH II</i>		
spherical beads (2)		Pierce Blegen 1937: 299, fig. 146:15
annular beads (15)		Pierce Blegen 1937: 301, fig. 146:7,16
finger ring		Pierce Blegen 1937: 306, fig. 146: 8

App. C: Glass Objects Found in the LBA Argolid

PROSYMNA (cont)	Inventory	Reference
<i>Chamber Tomb XXXIII, LH IIIA - IIIB</i>		
spherical beads (2)		Pierce Blegen 1937: 299, fig. 242:2
papyrus ornaments (2)		Pierce Blegen 1937: 305, fig. 242:3
lily ornaments (5)		Pierce Blegen 1937: 305, fig. 242:4
<i>Chamber Tomb XXXIV, LH I - IIIA</i>		
spherical beads (39)		Pierce Blegen 1937: 299, fig. 264:10,11, 265:4
spherical beads (2)		Pierce Blegen 1937: 301, fig. 264: 8,9
cylindrical bead		Pierce Blegen 1937: 302
drop beads (3)		Pierce Blegen 1937: 306, fig. 264:7
<i>Chamber Tomb XXXVI, LH II - IIIA</i>		
spherical beads (12)		Pierce Blegen 1937: 299, fig. 284:1-3, 286:2,3
annular beads (8)		Pierce Blegen 1937: 301, fig. 284:4
cylindrical bead		Pierce Blegen 1937: 302, fig. 284:5
elliptical beads (15)		Pierce Blegen 1937: 303, fig. 284:6
spacer beads (2)		Pierce Blegen 1937: 303, fig. 284:7
drop beads (10)		Pierce Blegen 1937: 306, fig. 285:11
flattened cylindrical seal	NMA 11059	Pierce Blegen 1937: 302, fig. 285:10
<i>Chamber Tomb XXXVII, LH IIIA - IIIB</i>		
spherical beads (3)		Pierce Blegen 1937: 299, fig. 300:4-6
elliptical bead		Pierce Blegen 1937: 303, fig. 300:7
pendant spiral ornaments (15)		Pierce Blegen 1937: 305, fig. 300:8
<i>Chamber Tomb XXXVIII, LH IIIA - IIIB</i>		
annular beads (3)		Pierce Blegen 1937: 302, fig. 310:1
elliptical beads (2)		Pierce Blegen 1937: 303, fig. 310:3
lily ornament		Pierce Blegen 1937: 306, fig. 310:15
drop beads (3)		Pierce Blegen 1937: 306, fig. 310:4
spherical beads (5)		Pierce Blegen 1937: fig. 310:2
<i>Chamber Tomb XLI, LH IIIB</i>		
annular beads (5)		Pierce Blegen 1937: 304, fig. 142:4, 143:19
rosette ornaments (10)		Pierce Blegen 1937: 304, fig. 362:14
pendant spiral bracket		Pierce Blegen 1937: 305
<i>Chamber Tomb XLII, LH IIIA - IIIB</i>		
argonaut plaques (26)	NMA 6592	Pierce Blegen 1937: 306, fig. 379:1
annular beads (4)		Pierce Blegen 1937: 302, fig. 379:5
elliptical beads (7)		Pierce Blegen 1937: 303, fig. 380:6
spherical beads (18)		Pierce Blegen 1937: 301, fig. 379:6
spherical beads (118)		Pierce Blegen 1937: 299, fig. 379:2-3, 380:1
<i>Chamber Tomb XLIII, LH IIIA - IIIB</i>		
elliptical beads (2)		Pierce Blegen 1937: 303, fig. 488:8
spherical beads (4)		Pierce Blegen 1937: 301, fig. 488:9
spherical beads (31)		Pierce Blegen 1937: 300, fig. 488:7

App. C: Glass Objects Found in the LBA Argolid

PROSYMNA (cont)	Inventory	Reference
<i>Chamber Tomb XLIV, LH II - IIIB</i>		
spherical bead	NMA 6612	Pierce Blegen 1937: 302, fig. 542:5
(+gold) inlaid spherical bead	NMA 8456	Pierce Blegen 1937: 270, fig. 541:11
rosette ornaments (10)		Pierce Blegen 1937: 304, fig. 542:18
spherical beads (7)		Pierce Blegen 1937: 300, fig. 540:3, 542:17
<i>Chamber Tomb XLIX, LH II - IIIB</i>		
annular beads (2)		Pierce Blegen 1937: 302, fig. 334:1
elliptical beads (6)		Pierce Blegen 1937: 303, fig. 339:13
spherical bead		Pierce Blegen 1937: 302, fig. 334:3
<i>Chamber Tomb XLIX (cist VIII), LH II</i>		
cylindrical bead		Pierce Blegen 1937: 302, fig. 338:2
spherical beads (19)		Pierce Blegen 1937: 301, fig. 339:1
spherical beads (40)		Pierce Blegen 1937: 300, fig. 338:1,4, 339:2
triangular bead		Pierce Blegen 1937: 303, fig. 338:3
<i>Chamber Tomb LI, LH IIIA - IIIB</i>		
spherical beads (14)	NMA 6574	Pierce Blegen 1937: 300, fig. 575:7,11
<i>Grave XX, MH (III)</i>		
elliptical beads (7)		Pierce Blegen 1937: 265, fig. 42
<i>Tholos Tomb, LH II</i>		
ivy ornaments (3)	NMA 3330	Wace 1921-23: 336
ornament	NMA 3331	Wace 1921-23: 337
segmented bead	NMA 3332	Wace 1921-23: 337
TIRYNS	Inventory	Reference
<i>Building VI, Room 121, LH IIIB</i>		
spherical bead	LXI 41/99 a 14.39 XI	Kilian <i>et al.</i> 1979: 440, fig. 53:2
<i>Building VI, Room 122, LH IIIB</i>		
spherical bead	LXI 41/48 a 14.19 XI	Kilian <i>et al.</i> 1979: 440, fig. 53:1
<i>Building VI, Room 122, LH IIIC</i>		
eye bead	LXI 41/57 a 14.75 Xb G 42	Kilian <i>et al.</i> 1979: 443, fig. 53:26
<i>Megaron, Vestibule, LH IIIB</i>		
(+alabaster) inlaid frieze	NMA 1744	Moser von Filseck 1986: 1-32
<i>Unterburg Room 115, LH IIIC</i>		
elliptical bead	LXI 40/52 a 15.34 VIa	Kilian <i>et al.</i> 1979: 443, fig. 53:27
<i>Unterburg Room 117, LH IIIC</i>		
spherical bead	LXI 40/83 c 14.92	Kilian <i>et al.</i> 1979: 440, fig. 53:9

App. C: Glass Objects Found in the LBA Argolid

TIRYNS (cont)	Inventory	Reference
<i>Unterburg, under Room 11, LH IIIB</i>		
curled leaf ornaments (9)		Kilian <i>et al.</i> 1979: 394, fig. 18
spiral ornament		Kilian <i>et al.</i> 1979: 394, fig. 18
<i>Unterburg, Schliemann's Trench (unspecified context)</i>		
amygdaloid bead	NMA 1566	Schliemann 1885: 82-83, fig. 17
<i>Unterburg (unspecified context), LH IIIC</i>		
conical ornament	LXI 42/70 a 15.83 G 28 V	Kilian <i>et al.</i> 1979: 442, fig. 30, 53:24
annular bead	LXII 39/80 a 15.06 G 2 VIIb	Kilian <i>et al.</i> 1979: 442, fig. 53:11
spherical bead	LXII 40/68 a 15.54 V	Kilian <i>et al.</i> 1979: 440, fig. 53:5a
spherical bead	LXI 39/59 a 14.53 VIIb	Kilian <i>et al.</i> 1979: 442, fig. 53:13
ornament	LXI 39/69 a 15.46	Kilian <i>et al.</i> 1979: 442, fig. 53:22
spherical bead	LXI 41/3 c 15.06 III	Kilian <i>et al.</i> 1979: 440, fig. 53:4a
conical ornament	LXI 42/97 a 15.57 Va	Kilian <i>et al.</i> 1979: 442, fig. 30, 53:23
figure-eight shield ornament	LXII 40/52 a 15.33	Kilian <i>et al.</i> 1979: 442, 30, fig. 53:21
spherical bead	LXI 39/84 a 14.02 Nr. 50	Kilian <i>et al.</i> 1979: 440, fig. 53:3
spherical bead	LXI 40/28 a 15.06 VIII	Kilian <i>et al.</i> 1979: 440, fig. 53:5
spherical bead	LXI 40/92 a 14.92 IX	Kilian <i>et al.</i> 1979: 440, fig. 53:6
spherical bead	LXI 41/23 a 14.76 Xa	Kilian <i>et al.</i> 1979: 440, fig. 53:4
spherical bead	LXI 41/34 XIa	Kilian <i>et al.</i> 1979: 442, fig. 53:15
spherical bead	LXI 41/36 a 14.92 IX	Kilian <i>et al.</i> 1979: 440, fig. 53:10
spherical bead	LX 39/80 a 15.06 G 2 VIIb	Kilian <i>et al.</i> 1979: 442, fig. 53:12
<i>Child-grave (LXV 38/62), LH I</i>		
amygdaloid bead		Kilian <i>et al.</i> 1982: 420, fig. 38:3
annular bead		Kilian <i>et al.</i> 1982: 420, fig. 38:5
spherical beads (4)		Kilian <i>et al.</i> 1982: 420, fig. 38:6c-7
"piece of glass paste"		Kilian <i>et al.</i> 1982: 420, fig. 38:9
<i>Profitis Ilias Tomb 3, LH IIIA</i>		
spherical beads (33)	Tiryas Apotheke 2275	Rudolph 1973: 32, pl. 14:3
<i>Profitis Ilias Tomb 6, LH IIIA - IIIC</i>		
spherical beads (7)	Tiryas Apotheke 2339	Rudolph 1973: 48, pl. 25:3
spherical beads (26)	Tiryas Apotheke 2340	Rudolph 1973: 48, pl. 25:3
cylindrical bead	Tiryas Apotheke 2340	Rudolph 1973: 48, pl. 25:3
spherical beads (3)	Tiryas Apotheke 2344	Rudolph 1973: 49, pl. 25:3
(faience?) spherical beads (39)	Tiryas Apotheke 2345	Rudolph 1973: 49, pl. 25:3
<i>Profitis Ilias Tomb 7, LH II - IIIA</i>		
spherical beads (10)	Tiryas Apotheke 2369	Rudolph 1973: 54, pl. 29:2
spherical beads (11)	Tiryas Apotheke 2370	Rudolph 1973: 54, pl. 29:2
<i>Profitis Ilias Tomb 8, LH IIIA - IIIC</i>		
cylindrical beads (8)	Tiryas Apotheke 2385	Rudolph 1973: 59, pl. 32
spherical bead	Tiryas Apotheke 2385	Rudolph 1973: 59, pl. 32
cylindrical beads (16)	Tiryas Apotheke 2390	Rudolph 1973: 59, pl. 32
spherical beads (5)	Tiryas Apotheke 2390	Rudolph 1973: 59, pl. 32

App. C: Glass Objects Found in the LBA Argolid

TIRYNS (cont)	Inventory	Reference
<i>Profitis Ilias Tomb 15, LH IIIA - IIIC</i>		
spherical beads (12)	Tiryns Apotheke 2418	Rudolph 1973: 67, pl. 35:4
annular beads (27)	Tiryns Apotheke 2418	Rudolph 1973: 67, pl. 35:4
cylindrical beads (2)	Tiryns Apotheke 2418	Rudolph 1973: 67, pl. 35:4
<i>Profitis Ilias Tomb 16, LH II - IIIC</i>		
conch shell ornament	Tiryns Apotheke 2468	Rudolph 1973: 77, pl. 46:3
<i>Profitis Ilias Tomb 18, LH II - IIIB</i>		
cylindrical beads (2)	Tiryns Apotheke 2479	Rudolph 1973: 81, pl. 49:3
spherical beads (2)	Tiryns Apotheke 2479	Rudolph 1973: 81, pl. 49:3
annular beads (4)	Tiryns Apotheke 2479	Rudolph 1973: 81, pl. 49:3
<i>Outside Citadel (unspecified context), LH III</i>		
spherical bead	LIII 30/58 a 3.59 IIa	Kilian <i>et al.</i> 1979: 442, fig. 53:17
spherical bead	LIV 30/42 a 3.11 VIIa	Kilian <i>et al.</i> 1979: 442, fig. 53:18
cylindrical bead	LIV 30/80 a 3.37 III	Kilian <i>et al.</i> 1979: 442, fig. 53:20
spherical bead	LIV 30/87 a 3.41	Kilian <i>et al.</i> 1979: 442, fig. 53:19
<i>Tiryns Treasure, LH IIIC</i>		
cylindrical beads (5)	NMA 6212	Karo 1930: 124-125
spherical beads (ca. 200)	NMA 6223	Karo 1930: 129, fig. 2
elliptical beads (2)	NMA 6223	Karo 1930: 129, fig. 2
cylindrical beads (20)	NMA 6223	Karo 1930: 129-130, fig. 2
<i>Unknown Context (Schliemann Excavations)</i>		
spherical beads (2)	NMA 1599	on display
unfinished pieces	NMA 1615 - 1618	on display
ZYGOURIES⁴		
<i>Tomb 1, MH</i>		
amygdaloid beads (7)		Blegen 1928: 201, fig. 189
conical bead		Blegen 1928: 201, fig. 189
spherical beads (7)		Blegen 1928: 201, fig. 189

⁴ Blegen describes these as "glass paste."

APPENDIX D
Lapis Lazuli Objects Found in the Bronze Age Argolid

MIDEA-DENDRA	Inventory	Reference
<i>Tholos Tomb, LH IIIA</i> deer-shaped pendant	NMA 7330	Persson 1931: 29, 58, pl. XXV-2
<hr/>		
MYCENAE	Inventory	Reference
<i>Citadel House, Room 17, LH IIIB</i> petal-shaped inlay		Evely and Runnels 1992: 28, 165 no. 45
<i>Citadel House, Room 19, LH IIIB</i> lentoid seal		Tamvaki 1974: 264-66, pl. 43a-c,e
<i>Citadel House, Room 19 pot group, LH IIIB</i> lentoid bead	Exc 68-1517	Mycenae inventory
<i>Citadel House, outside Room 38, LH IIIB</i> inlay		Evely and Runnels 1992: 28, 166 no. 46
<i>Granary, East Basement (floor), LH IIIB</i> rosette ornament		Wace 1921-23: 54
<i>Tsountas' House, LH IIIB</i> (blue stone) ornament	NMA 2516	NMA Inventory
<i>Chamber Tomb 8, LH IIIA - IIIB (?)</i> (+gold) ornament	NMA 2325.12	Xenaki-Sakellariou 1985: 66, pl. 7
<i>Chamber Tomb 26, LH IIIA</i> cylindrical bead	NMA 2278.3	Xenaki-Sakellariou 1985: 91, pl. 17
<i>Chamber Tomb 28, LH II - IIIB</i> ring of grains bead	NMA 2373.18	Xenaki-Sakellariou 1985: 104
<i>Chamber Tomb 88, LH II - IIIB</i> sheep pendant	NMA 3158	Xenaki-Sakellariou 1985: 249, pl. 118, III
<i>Chamber Tomb 91, LH IIIA - IIIB</i> lentoid bead	NMA 3203.6	Xenaki-Sakellariou 1985: 261
<i>Chamber Tomb 102, LH II - IIIB</i> spherical bead	NMA 4910.11	Xenaki-Sakellariou 1985: 284
lily ornament	NMA 4910.13	Xenaki-Sakellariou 1985: 284, pl. 137
disc	NMA 4910.14	Xenaki-Sakellariou 1985: 284
zoomorphic pendants (3)	NMA 4911	Xenaki-Sakellariou 1985: 285, pl. 138, III

App. D: Lapis Lazuli Objects Found in the LBA Argolid

MYCENAE (continued)	Inventory	Reference
<i>Chamber Tombs, 1-52 (Tsountas 1887-88)</i>		
lentoid beads (2)	NMA 2279.21	Xenaki-Sakellariou 1985: 157
rectangular plaque	NMA 2279.22	Xenaki-Sakellariou 1985: 157
prismatic bead	NMA 2279.23	Xenaki-Sakellariou 1985: 157
papyrus ornament	NMA 2292.8	Xenaki-Sakellariou 1985: 157, pl. 44
ornament with feathers?	NMA 2293.8	Xenaki-Sakellariou 1985: 158, pl. III
<i>Unrecorded Chamber Tombs (Tsountas)</i>		
lily ornaments (2)	NMA 2827.3	Xenaki-Sakellariou 1985: 188
amygdaloid seal with bull	NMA 3223	CMS I Suppl: 5
<i>Shaft Grave Iota, MH III</i>		
(blue stone) spherical bead	NMA 8622	Mylonas 1973: 121 I-449, pl. 102b:2
<i>Shaft Grave Circle B: NW side of Grave Rho</i>		
scaraboid seal [<i>Import</i>]		Mylonas 1973: 225 P-466, pl. 199b
<i>Shaft Grave IV, LH I</i>		
(+gold) sword hilt	NMA 294	Karo 1930-33: 82, 198, pl. LXXXVII
<i>Tomb of Clytemnestra (grave pit in dromos), LH IIIB</i>		
lily pendant	NMA 2835	Wace 1921-23: 372, fig. 81g
(+gold) nail head on mirror handle	NMA 2898	Wace 1921-23: 369, pl. LIX A
<i>Tomb of the Genii (floor of tomb), LH IIIB</i>		
(+gold) nail head	NMA 4537	Wace 1921-23: 382, fig. 88m
<i>Treasury of Atreus (under threshold), LH IIIB</i>		
(blue stone) lentoid bead	NMA 6566	Wace 1921-23: 357, fig. 76i
<i>Acropolis</i>		
ax-shaped pendant [<i>Import</i>]	NMA 1381	Wace 1949: 108 n. 11
papyrus ornament	NMA 2523	Wace 1921-23: 385
eye-shaped inlay?	NMA 2698	NMA Inventory
(blue stone) ornament	NMA 4563	NMA Inventory
PROSYMNA	Inventory	Reference
<i>Chamber Tomb XLIX, LH II - IIIB</i>		
amygdaloid bead		Pierce Blegen 1937: 294, fig. 339:12
<i>Chamber Tomb XXXVIII, LH II - IIIB</i>		
flattened spherical bead		Pierce Blegen 1937: 294, fig. 310:9
<i>Tholos Tomb, LH II</i>		
amygdaloid bead	NMA 3332	Wace 1921-23: 337
Unknown Provenance	Inventory	Reference
<i>Thermodjannis collection</i>		
lentoid seal with griffin	Nauplion 9884	CMS V Suppl. 1B: 101

REFERENCES

REFERENCES

Adams, R.M.

1974 Anthropological perspectives on ancient trade, *Current Anthropology* 15: 239-58.

Åkerström, Å.

1968 A Mycenaean potter's factory at Berbati near Mycenae, in *Atti e memorie del primo congresso internazionale di micenologia* (Incunabula Graeca 25). Rome: Edizioni dell'Ateneo. 48-53.

1975 More Canaanite jars from Greece, *OpAth* 11: 185-92.

1987 *Berbati 2: The Pictorial Pottery*. Stockholm: P. Åströms Förlag.

Alcock, S.E.

1991 Tomb cult and the post-classical polis, *AJA* 95: 447-67.

Alden, J.M.

1981 *Bronze Age Population Fluctuation in the Argolid from the Evidence of Mycenaean Tombs* (SIMA Pocket-book 15). Göteborg: P. Åströms Förlag.

Almagro-Gorbea, M., and F. Fontes

1997 The introduction of wheel-made pottery in the Iberian peninsula: Mycenaean or pre-orientalizing contacts? *OJA* 16: 345-61.

Andreapoulou-Mangou, E.

1988 Chemical analysis of faience objects in the National Archaeological Museum, in *New Aspects of Archaeological Science in Greece* (Fitch Laboratory Occasional Paper 3). R.E. Jones and H.W. Catling, eds. Athens: British School at Athens. 15-18.

Antonelli, C.

1995 I santuari micenei ed il mondo dell'economia, in *POLITEIA: Society and State in the Aegean Bronze Age* (*Aegaeum* 12). R. Laffineur and W.-D. Niemeier, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 415-21.

Appadurai, A.

1986 Introduction: commodities and the politics of value, in *The Social Life of Things: Commodities in Cultural Perspective*. Cambridge: Cambridge University Press. 3-63.

Aravantinos, V.L.

1984 The use of sealings in the administration of Mycenaean palaces, in *Pylos Comes Alive: Industry and Administration in a Mycenaean Palace*. C.W. Shelmerdine and T.G. Palaima, eds. New York: Archaeological Institute of America. 41-48.

1995 Old and new evidence for the palatial society of Mycenaean Thebes: an outline, in *POLITEIA: Society and State in the Aegean Bronze Age* (*Aegaeum* 12). R. Laffineur and W.-D. Niemeier, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 613-22.

Archi, A., ed.

- 1984 *Circulation of Goods in Non-palatial Context in the Ancient Near East* (Incunabula Graeca 82). Rome: Edizioni dell'Ateneo.

Artzy, M.

- 1985 Supply and demand: a study of second millennium Cypriot pottery in the Levant, in *Prehistoric Production and Exchange: The Aegean and Eastern Mediterranean* (UCLA Institute of Archaeology Monograph 25). A.B Knapp and T. Stech, eds. Los Angeles: University of California, Institute of Archaeology. 93-99.
- 1997 Nomads of the Sea, in *Res Maritimae: Cyprus and the Eastern Mediterranean from Prehistory to Late Antiquity* (Cyprus American Archaeological Research Institute Monograph Series 1). S. Swiny, R.L. Hohlfelder, and H.W. Swiny, eds. Atlanta: Scholars Press. 1-16.

Aruz, J.

- 1995 Syrian seals and the evidence for cultural interaction between the Levant and Crete, in *Sceaux minoens et mycéniens* (CMS Beiheft 5). W. Müller, ed. Berlin: Gebr. Mann Verlag. 1-21.

Åström, P.

- 1977 *The Cuirass Tomb and Other Finds at Dendra Part 1: The Chamber Tombs* (SIMA 4:1). Göteborg: P. Åströms Förlag.
- 1983 *The Cuirass Tomb and Other Finds at Dendra Part 2: Excavations in the Cemeteries, the Lower Town and the Citadel* (SIMA 4:2). Göteborg: P. Åströms Förlag.

Åström, P., and B. Blomé

- 1964 A reconstruction of the lion relief at Mycenae, *OpAth* 5: 159-91.

Aura Jorro, F.

- 1985-93 *Diccionario Micénico* 1-2 (*Diccionario Griego-Español* Suppl. 1). F.R. Adrados, ed. Madrid: Consejo Superior de Investigaciones Científicas.

Banks, E.C.

- 1967 *The Early and Middle Helladic Small Objects from Lerna*. Ph.D. Dissertation, University of Cincinnati.

Barag, D.

- 1985 *Catalogue of Western Asiatic Glass in the British Museum I*. London: British Museum.

Barber, E.J.W.

- 1991 *Prehistoric Textiles: The Development of Cloth in the Neolithic and Bronze Ages with Special Reference to the Aegean*. Princeton: Princeton University Press.

Barnet, P., ed.

- 1997 *Images in Ivory: Precious Objects of the Gothic Age*. Detroit: Detroit Institute of Arts; Princeton: Princeton University Press

Barnett, R.D.

- 1982 *Ancient Ivories in the Middle East and Adjacent Countries* (Monographs of the Institute of Archaeology 14). Jerusalem: Institute of Archaeology, Hebrew University of Jerusalem.

Barrett, J.C.

- 1990 The monumentality of death: the character of Early Bronze Age mortuary mounds in Southern Britain, *World Archaeology* 22: 179-89.

Basch, L.

- 1997 Une représentation de navire de type égéen dans l'oasis de Dakhleh (Égypte) vers 1200 av. J.-C., in *Res Maritimae: Cyprus and the Eastern Mediterranean from Prehistory to Late Antiquity* (Cyprus American Archaeological Research Institute Monograph Series 1). S. Swiny, R.L. Hohlfelder, and H.W. Swiny, eds. Atlanta: Scholars Press. 17-29.

Bass, G.F.

- 1986 A Bronze Age shipwreck at Ulu Burun (Kaş): 1984 campaign, *AJA* 90: 269-96.
- 1987 Oldest known shipwreck reveals splendors of the Bronze Age, *National Geographic* 172 (December): 692-733.
- 1997 Prolegomena to a study of maritime traffic in raw materials to the Aegean during the fourteenth and thirteenth centuries B.C., in *TEXNH: Craftsmen, Craftswomen and Craftsmanship in the Aegean Bronze Age* (Aegaeum 16). R. Laffineur and P.P. Betancourt, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 153-70.
- 1998 Sailing between the Aegean and the Orient in the second millennium BC, in *The Aegean and the Orient in the Second Millennium: Proceedings of the 50th Anniversary Symposium* (Aegaeum 18). E.H. Cline and D. Harris-Cline, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 183-91.

Bass, G.F., ed.

- 1967 *Cape Gelidonya: A Bronze Age Shipwreck* (Transactions of the American Philosophical Society 57, Part 8). Philadelphia: American Philosophical Society.

Bass, G.F., C. Pulak, D. Collon, and J. Weinstein

- 1989 The Bronze Age shipwreck at Ulu Burun: 1986 campaign, *AJA* 93: 17-29.

Baurain, C.

- 1985 Pour une autre interprétation des génies minoens, in *L'iconographie minoenne* (BCH Suppl. 11). P. Darcque and J.-C. Poursat, eds. Athens: École française d'Athènes. 95-118.

Beck, H.C.

- 1934 Glass before 1500 BC, *Ancient Egypt and the East*: 7-21.

Bennet, J.

- 1988a Approaches to the problem of combining Linear B textual data and archaeological data in the Late Bronze Age Aegean, in *Problems in Greek Prehistory*. E.B. French and K.A. Wardle, eds. Bristol: Bristol Classical Press. 509-18.

- 1988b "Outside in the distance": problems in understanding the economic geography of Mycenaean palatial territories, in *Texts, Tablets and Scribes: Studies in Mycenaean Epigraphy and Economy Offered to Emmett L. Bennett, Jr. (Minos Suppl. 10)*. J.-P. Olivier and T.G. Palaima, eds. Salamanca: Ediciones Universidad de Salamanca. 19-41.
- 1989 The structure of the Linear B administration at Knossos, *AJA* 85: 231-49.
- 1992 "Collectors" or "owners"? An examination of their possible functions within the palatial economy of LM III Crete, in *Mykenaiika (BCH Suppl. 25)*. J.-P. Olivier, ed. Athens: École française d'Athènes. 65-101.
- 1997 Homer and the Bronze Age, in *A New Companion to Homer*. I. Morris and B. Powell, eds. Leiden: Brill. 511-33.
- Bennett, E.L.
- 1955 *The Pylos Tablets: Texts of the Inscriptions Found 1939-1954*. Princeton: Princeton University Press; University of Cincinnati.
- Bennett, E.L., and J.-P. Olivier
- 1973 *The Pylos Tablets Transcribed (Incunabula Graeca 51)*. Rome: Edizioni dell'Ateneo.
- Berdan, F.F.
- 1989 Trade and markets in precapitalist states, in *Economic Anthropology*. S. Plattner, ed. Stanford: Stanford University Press. 78-107.
- Berlinerblau, J.
- 1999 *Heresy in the University: the Black Athena Controversy and the Responsibilities of American Intellectuals*. New Brunswick, NJ: Rutgers University Press.
- Bernal, M.
- 1987 *Black Athena: The Afroasiatic Roots of Classical Civilisation I: The Fabrication of Ancient Greece, 1785-1985*. London: Free Association Books.
- 1991 *Black Athena: The Afroasiatic Roots of Classical Civilisation II: The Archaeological and Documentary Evidence*. London: Free Association Books.
- Betancourt, P.P.
- 1976 The end of the Greek Bronze Age, *Antiquity* 50: 40-47.
- Bietak, M.
- 1996 *Avaris, the Capital of the Hyksos: Recent Excavations at Tell el-Dab'a*. London: British Museum Press.
- Bietak, M., and N. Marinatos
- 1995 The Minoan wall paintings from Avaris, *Ägypten und Levante* 5: 49-62.
- Bietti Sestieri, A.M.
- 1988 The "Mycenaean connection" and its impact on the Central Mediterranean societies, *Dialoghi di Archeologia* 6: 23-51.
- Billigmeier, J.-C., and J.A. Turner
- 1981 The socio-economic roles of women in Mycenaean Greece: a brief survey from evidence of the Linear B tablets, in *Reflections of Women in Antiquity*. H.P. Foley, ed. New York: Gordon and Breach Science Publishers. 1-18.

Binford, L.R.

- 1962 *Archaeology as anthropology, American Antiquity* 28: 217-25.
 1971 *Mortuary practices: their study and potential*, in *Approaches to the Social Dimensions of Mortuary Practices* (Memoirs of the Society for American Archaeology 25). J.A. Brown, ed. Menasha, WI: Society for American Archaeology. 6-29.

Bintliff, J.L.

- 1977 *Natural Environment and Human Settlement in Prehistoric Greece Based on Original Fieldwork* (BAR Supplementary Series 28). Oxford: British Archaeological Reports.

Blanton, R., G. Feinman, S. Kowalewski, and P. Peregrine

- 1996 *A dual-processual theory for the evolution of Mesoamerican civilization, Current Anthropology* 37: 1-14.

Blegen, C.W.

- 1921 *Korakou: A Prehistoric Settlement near Corinth*. Boston: American School of Classical Studies at Athens.
 1928 *Zygouries: A Prehistoric Settlement in the Valley of Cleonae*. Cambridge: Harvard University Press.
 1937 *Prosymna: The Helladic Settlement Preceding the Argive Heraeum*. Cambridge: Cambridge University Press.
 1955 *The Palace of Nestor: excavations of 1954, AJA*: 31-37.

Blegen, C.W., and M. Rawson

- 1966 *The Palace of Nestor at Pylos in Western Messenia I: The Buildings and their Contents*. Princeton: Princeton University Press.

Blegen, C.W., M. Rawson, W. Taylour, and W.P. Donovan

- 1973 *The Palace of Nestor at Pylos in Western Messenia III: Acropolis and Lower Town; Tholoi, Grave Circle, and Chamber Tombs; Discoveries Outside the Citadel*. Princeton: Princeton University Press.

Bloch, M., and J. Parry

- 1982 *Introduction: death and the regeneration of life*, in *Death and the Regeneration of Life*. M. Bloch and J. Parry, eds. Cambridge: Cambridge University Press. 1-44.

Bosanquet, R.C., and R.M. Dawkins.

- 1923 *The Unpublished Objects from the Palaikastro Excavations, 1902-1906* (British School at Athens Suppl. 1). London: MacMillan and Co.

Brill, R.H.

- 1963 *Ancient glass, Scientific American* 209 (November): 120-30.
 1999 *Chemical Analyses of Early Glasses 1: Catalogue of Samples, 2: Tables of Analyses*. Corning, NY: Corning Museum of Glass Press.

Brinkman, J.A.

- 1968 *A Political History of Post-Kassite Babylonia, 1158-722 a.c.* (Analecta Orientalia 43). Rome: Pontificium Institutum Biblicum.

Broodbank, C.

- 1993 Ulysses without sails: trade, distance, knowledge and power in the early Cyclades, *World Archaeology* 24: 315-31.

Brown, J.A.

- 1995 On mortuary analysis—with special reference to the Saxe-Binford research program, in *Regional Approaches to Mortuary Analysis*. L.A. Beck, ed. New York: Plenum Press. 1-26.

Brown, R.B.

- 1974 *A Provisional Catalogue of and Commentary on Egyptian and Egyptianizing Artifacts Found on Greek Sites*. Ph.D. Dissertation, University of Minnesota.

Brumfiel, E.M.

- 1994 Factional competition and political development in the New World: an introduction, in *Factional Competition and Political Development in the New World*. E.M. Brumfiel and J.W. Fox, eds. Cambridge: Cambridge University Press. 1-13.

Brumfiel, E.M., and T.K. Earle

- 1987 Specialization, exchange, and complex societies: an introduction, in *Specialization, Exchange, and Complex Societies*. E.M. Brumfiel and T.K. Earle, eds. Cambridge: Cambridge University Press. 1-9.

Buchholz, H.-G.

- 1959 Keftiubarren und Erzhandel in zweiten vorchristlichen Jahrtausend, *PZ* 37: 1-40.
 1974 Ägäische Funde und Kultureinflüsse in den Randgebieten des Mittelmeers: Forschungsbericht über Ausgrabungen und Neufunde, 1960-1970, *AA*: 325-462.

Buchholz, H.G., and V. Karageorghis

- 1973 *Prehistoric Greece and Cyprus*. London: Phaidon.

Burke, R.B.

- 1998 *From Minos to Midas: The Organization of Textile Production in the Aegean and in Anatolia*. Ph.D. Dissertation, University of California-Los Angeles.

Cadogan, G.

- 1976 Some faience, blue frit and glass from fifteenth century Knossos, in *Temple University Aegean Symposium I*. P.P. Betancourt, ed. Philadelphia: Department of Art History, Temple University. 18-19.

Carlier, P.

- 1984 *La Royauté en Grèce avant Alexandre* (Études et travaux publiés par le Groupe de recherche d'histoire romaine de l'Université des sciences humaines de Strasbourg 6). Strasbourg: AECR.
 1990 La double face du pouvoir royal dans le monde mycénien, in *Du pouvoir dans l'antiquité: mots et réalités*. C. Nicolet, ed. Geneva: Librairie Droz. 37-52.
 1992 Les collecteurs sont-ils des fermiers? in *Mykenaiika* (BCH Suppl. 25). J.-P. Olivier, ed. Athens: École française d'Athènes. 159-66.

- 1995 *Qa-si-re-u et qa-si-re-wi-ja*, in *POLITEIA: Society and State in the Aegean Bronze Age (Aegaeum 12)*. R. Laffineur and W.-D. Niemeier, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 355-64.
- 1996 A propos des artisans *wa-na-ka-te-ro*, in *Atti e memorie del secondo congresso internazionale de micenologia (Incunabula Graeca 98)*. E. De Miro, L. Godart, and A. Sacconi, eds. Rome: Gruppo editoriale internazionale. 569-80.
- Carpenter, R.
- 1966 *Discontinuity in Greek Civilization* (University of Cambridge, J.H. Gray Lectures 1965). Cambridge: Cambridge University Press.
- Caskey, J.L.
- 1954 Excavations at Lerna, 1952-53, *Hesperia* 23: 3-30.
- 1956 Excavations at Lerna, 1955, *Hesperia* 25: 147-73.
- 1957 Excavations at Lerna, 1956, *Hesperia* 26: 142-62.
- Catling, H.W.
- 1970 A bronze plate from a scale-corslet found at Mycenae, *AA*: 441-49.
- Catling, H.W., J.F. Cherry, R.E. Jones, and J.T. Killen
- 1980 The inscribed stirrup jars and West Crete, *BSA* 75: 49-113.
- Caubet, A., and F. Poplin
- 1987 *Matières dures animales: étude du matériau*, in *Ras Shamra-Ougarit III: Le centre de la ville*. M. Yon, ed. Paris: Editions Recherche sur les Civilisations. 273-306.
- 1992 La place des ivoires d'Ougarit dans la production du Proche Orient ancien, in *Ivory in Greece and the Eastern Mediterranean from the Bronze Age to the Hellenistic Period* (British Museum Occasional Paper 85). J.L. Fitton, ed. London: British Museum. 91-100.
- Cavanagh, W.G.
- 1987 Cluster analysis of Mycenaean chamber tombs, in *Thanatos: Les coutumes funéraires en Égée à l'âge du Bronze (Aegaeum 1)*. R. Laffineur, ed. Liège: Université de Liège. 161-69.
- Cavanagh, W.G., and C. Mee
- 1984 Mycenaean tombs as evidence for social and political organisation, *OJA* 3: 45-64.
- 1990 The location of Mycenaean chamber tombs in the Argolid, in *Celebrations of Death and Divinity in the Bronze Age Argolid* (Skrifter utgivna av Svenska institutet i Athen, 4° 40). R. Hägg and G.C. Nordquist, eds. Stockholm: Svenska institutet i Athen. 55-64.
- 1995 Mourning before and after the Dark Age, in *KLADOS: Essays in Honour of J.N. Coldstream (BICS Suppl. 63)*. C. Morris, ed. London: Institute of Classical Studies, University of London. 45-61.
- 1998 *A Private Place: Death in Prehistoric Greece (SIMA 125)*. Jonsered: P. Åströms Förlag.
- Chadwick, J.
- 1958 *The Decipherment of Linear B*. Cambridge: Cambridge University Press.

- 1972 The Mycenaean documents, in *The Minnesota Messenia Expedition: Reconstructing a Bronze Age Regional Environment*. W.A. McDonald and G.R. Rapp, eds. Minneapolis: University of Minnesota Press. 100-16.
- 1976 *The Mycenaean World*. Cambridge: Cambridge University Press.
- 1985 What do we know about Mycenaean religion? in *Linear B: A 1984 Survey*. A. Morpurgo Davies and Y. Duhoux, eds. Cabay, Louvain-la-Neuve: Bibliothèque des Cahiers de l'Institut de Linguistique de Louvain. 191-202.
- 1988 Women of Pylos, in *Texts, Tablets and Scribes: Studies in Mycenaean Epigraphy and Economy Offered to Emmett L. Bennett, Jr. (Minos Suppl. 10)*. J.-P. Olivier and T.G. Palaima, eds. Salamanca: Ediciones Universidad de Salamanca. 43-95.
- Chadwick, J., ed.
- 1962 *The Mycenaean Tablets III* (Transactions of the American Philological Society 52, Part 7). Philadelphia: American Philological Society.
- Chadwick, J., L. Godart, J.T. Killen. J.-P. Olivier, A. Sacconi, and J.A. Sakellarakis, eds.
- 1986-99 *Corpus of Mycenaean Inscriptions from Knossos I-IV* (Incunabula Graeca 88). Cambridge: Cambridge University Press; Rome: Edizioni dell'Ateneo.
- Champion, S.
- 1982 Exchange and ranking: the case of coral, in *Ranking, Resource and Exchange: Aspects of the Archaeology of Early European Society*. C. Renfrew and S. Shennan, eds. Cambridge: Cambridge University Press. 67-72.
- Chapman, R.W.
- 1981 Archaeological theory and communal burial in prehistoric Europe, in *Pattern of the Past: Studies in Honour of David Clarke*. N. Hammond, G. Isaac, and I. Hodder, eds. Cambridge: Cambridge University Press. 387-411.
- Chapman, R.W., and K. Randsborg
- 1981 Approaches to the archaeology of death, in *The Archaeology of Death*. R.W. Chapman, I. Kinnes, and K. Randsborg, eds. Cambridge: Cambridge University Press. 1-24.
- Charitonidou, S.I.
- 1952 Dyo Mykenaïkoi taphoi en to chorio Priptiani para tas Mykenas, *ArchEph*: 19-33.
- Chase-Dunn, C., and T.D. Hall
- 1991 Conceptualizing core/periphery hierarchies for comparative study, in *Core/Periphery Relations in Precapitalist Worlds*. C. Chase-Dunn and T.D. Hall, eds. Boulder: Westview Press. 5-44.
- Cherry, J.F.
- 1977 Investigating the political geography of an early state by multidimensional scaling of Linear B tablet data, in *Mycenaean Geography*. J. Bintliff, ed. Cambridge: British Association for Mycenaean Studies. 76-83.
- 1984 The emergence of the state in the prehistoric Aegean, *PCPS* 30: 18-48.

- 1986 **Politics and palaces: some problems in Minoan state formation, in *Peer Polity Interaction and Socio-political Change*. A.C. Renfrew and J.F. Cherry, eds. Cambridge: Cambridge University Press. 19-45.**
- 1990 **The first colonization of the Mediterranean islands: a review of recent research, *JMA* 3: 145-221.**
- (1999) **After Aidonia: further reflections on attribution in the Aegean Bronze Age, in *Festschrift for Malcolm Wiener (Aegaeum series)*. P.P. Betancourt, R. Laffineur, and W.-D. Niemeier, eds. Liège: Université de Liège. (in press).**
- Childe, V.G.**
- 1957 ***The Dawn of European Civilisation*. 6th edn. London: Routledge and Paul.**
- Clark, G.**
- 1986 ***Symbols of Excellence: Precious Materials as Expressions of Status*. Cambridge: Cambridge University Press.**
- Cline, E.H.**
- 1987 **Amenhotep III and the Aegean: a reassessment of Egypto-Aegean relations in the 14th century B.C., *Orientalia* 56: 1-36.**
- 1990 **An unpublished Amenhotep III faience plaque from Mycenae, *Journal of the American Oriental Society* 110: 200-12.**
- 1991a **Contact and trade or colonization? Egypt and the Aegean in the 14th-13th centuries B.C., *Minos*: 7-36.**
- 1991b **Monkey business in the Bronze Age Aegean, *BSA* 86: 29-42.**
- 1991c **A possible Hittite embargo against the Mycenaeans, *Historia* 40: 1-9.**
- 1994 ***Sailing the Wine-Dark Sea: International Trade and the Late Bronze Age Aegean (BAR International Series 591)*. Oxford: British Archaeological Reports.**
- 1995 **Egyptian and Near Eastern imports at Late Bronze Age Mycenae, in *Egypt, the Aegean and the Levant* W.V. Davies and L. Schofield, eds. London: British Museum. 91-115.**
- (1999) **Coals to Newcastle, wall brackets to Tiryns: irrationality, gift exchange, and distant value, in *Festschrift for Malcolm Wiener (Aegaeum series)*. P.P. Betancourt, R. Laffineur, and W.-D. Niemeier, eds. Liège: Université de Liège. (in press).**
- Cline, E.H., and D. Harris-Cline, eds.**
- 1998 ***The Aegean and the Orient in the Second Millennium: Proceedings of the 50th Anniversary Symposium (Aegaeum 18)*. Liège: Université de Liège; Austin: University of Texas at Austin.**
- Crowley, J.L.**
- 1989 ***The Aegean and the East: An Investigation into the Transference of Artistic Motifs between the Aegean, Egypt, and the Near East in the Bronze Age (SIMA Pocket-book 51)*. Jonsered: P. Åströms Förlag.**
- 1995 **Images of power in the Bronze Age Aegean, in *POLITEIA: Society and State in the Aegean Bronze Age (Aegaeum 12)*. R. Laffineur and W.-D. Niemeier, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 475-91.**

Crumley, C.

- 1995 Heterarchy and the analysis of complex societies, in *Heterarchy and the Analysis of Complex Societies* (Archaeological Papers of the American Anthropological Association 6). R. Ehrenreich, C. Crumley, and J. Levy, eds. Arlington: American Anthropological Association. 1-6.

Cutler, A.

- 1985 *The Craft of Ivory: Sources, Techniques, and Uses in the Mediterranean World, A.D. 200-1400* (Dumbarton Oaks Byzantine Collection 8). Washington, DC: Dumbarton Oaks Research Library and Collection.

D'Altroy, T., and T.K. Earle

- 1985 State finance, wealth finance, and storage in the Inka political economy, *Current Anthropology* 26: 187-206.

Dabney, M.K.

- 1997 Craft product consumption as an economic indicator of site status in regional studies, in *TEXNH: Craftsmen, Craftswomen and Craftsmanship in the Aegean Bronze Age (Aegaeum 16)*. R. Laffineur and P.P. Betancourt, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 467-71.

Dabney, M.K., and J.C. Wright

- 1990 Mortuary customs, palatial society and state formation in the Aegean area: a comparative study, in *Celebrations of Death and Divinity in the Bronze Age Argolid* (Skrifter utgivna av Svenska institutet i Athen, 4° 40). R. Hägg and G.C. Nordquist, eds. Stockholm: Svenska institutet i Athen. 45-53.

Dalton, G.

- 1975 Karl Polanyi's analysis of long-distance trade and his wider paradigm, in *Ancient Civilization and Trade*. J.A. Sabloff and C.C. Lamberg-Karlovsky, eds. Albuquerque: University of New Mexico Press. 63-131.

Darcque, P.

- 1998 Argos et la plaine argienne à l'époque mycénienne, in *Argos et l'Argolide: topographie et urbanisme*. A. Pariente and G. Touchais, eds. Athens: École française d'Athènes. 103-15.

Davidson (Weinberg), G.R.

- 1940 A mediaeval glass-factory at Corinth, *AJA* 44: 297-327.

Davies, N. de G.

- 1973 *The Tomb of Rekh-mi-re at Thebes* (Egyptian Expedition 11). New York: Metropolitan Museum of Art.

Davis, E.N.

- 1977 *The Vapheio Cups and Aegean Gold and Silver Ware*. New York: Garland.
- 1995 Art and politics in the Aegean: the missing ruler, in *The Role of the Ruler in the Prehistoric Aegean (Aegaeum 11)*. P. Rehak, ed. Liège: Université de Liège; Austin: University of Texas at Austin. 11-22.

Dawid, M., and P.G. Dawid

1972-75 Restaurierungsarbeiten von 1965-1970, *Jahreshefte des Österreichischen Archäologischen Institutes in Wien* 50: 525-58.

Day, P.L.

1992 Anat: Ugarit's "Mistress of Animals," *Journal of Near Eastern Studies* 51: 181-90.

De Hoff, S.L.

1988 *The Ivory Trade in the Eastern Mediterranean Bronze Age: Background and Preliminary Investigation*. Ph.D. Dissertation, University of Minnesota.

Deger-Jalkotzy, S.

1988 Landbesitz und Sozialstruktur im mykenischen Staat von Pylos, in *Society and Economy in the Eastern Mediterranean c. 1500-1000 B.C.* (Orientalia Lovaniensia Analecta 23). M. Heltzer and E. Lipinski, eds. Leuven: Uitgeverij Peeters. 31-52.

Demakopoulou, K.D.

1974 Mycenaean jewellery workshop in Thebes, *AAA* 7: 162-73.

1990 The burial ritual in the tholos tomb at Kokla, Argolis, in *Celebrations of Death and Divinity in the Bronze Age Argolid* (Skrifter utgivna av Svenska institutet i Athen, 4° 40). R. Hägg and G.C. Nordquist, eds. Stockholm: Svenska institutet i Athen. 113-23.

1995 Mycenaean citadels: recent excavations on the acropolis of Midea in the Argolid, *BICS* 40: 151-61.

1997 Crete and the Argolid in the LM II/LH IIB to IIIA1 periods: evidence from Kokla, in *La Crète Mycénienne* (BCH Suppl. 30). J. Driessen and A. Farnoux, eds. Athens: École française d'Athènes. 101-12.

1998 Stone vases from Midea, in *The Aegean and the Orient in the Second Millennium: Proceedings of the 50th Anniversary Symposium* (Aegaeum 18). E.H. Cline and D. Harris-Cline, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 221-27.

Demakopoulou, K.D., ed.

1996 *The Aidonia Treasure: Seals and Jewellery of the Aegean Late Bronze Age*. Athens: Ministry of Culture.

Demakopoulou, K.D., and N. Divari-Valakou

1994-95 New finds with Linear B inscriptions from Midea (MI Z2, Wv3, Z4), *Minos* 29-30: 323-28.

Demakopoulou, K.D., N. Divari-Valakou, P. Åström, and G. Walberg

1996 Excavations in Midea 1994, *OpAth* 21: 13-32.

Demargne, P. (S. Gilbert and J. Emmons, trans.)

1964 *Aegean Art: The Origins of Greek Art*. London: Thames and Hudson.

DeMarrais, E., L.J. Casillo, and T.K. Earle

1996 Ideology, materialization, and power strategies, *Current Anthropology* 37: 15-31.

Deshayes, J.

- 1966 *Argos: Les Fouilles de la Deiras* (École française d'Athènes Études Peloponésiennes 4). Paris: J. Vrin.

Diakonoff, I.M.

- 1969 The rise of the despotic state in ancient Mesopotamia, in *Ancient Mesopotamia: Socio-economic History*. I.M. Diakonoff, ed. Moscow: Nauka Pub. House, Central Dept. of Oriental Literature. 173-203.

Dickinson, O.T.P.K.

- 1977 *The Origins of Mycenaean Civilisation* (SIMA 49). Göteborg: P. Åströms Förlag.
- 1982 Parallels and contrasts in the Bronze Age of the Peloponnese, *OJA* 1: 125-38.
- 1994 *The Aegean Bronze Age*. Cambridge: Cambridge University Press.
- 1997 Arts and artefacts in the Shaft Graves: some observations, in *TEXNH: Craftsmen, Craftswomen and Craftsmanship in the Aegean Bronze Age* (Aegaeum 16). R. Laffineur and P.P. Betancourt, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 45-49.

Dietz, S.

- 1991 *The Argolid at the Transition to the Mycenaean Age: Studies in the Chronology and Cultural Development in the Shaft Grave Period*. Copenhagen: National Museum of Denmark.

Dothan, T., and M. Dothan

- 1992 *People of the Sea: The Search for the Philistines*. New York: Macmillan.

Douglas, M., and B. Isherwood

- 1979 *The World of Goods: Towards an Anthropology of Consumption*. New York: Basic Books.

Drews, R.

- 1983 *Basileus: The Evidence for Kingship in Geometric Greece*. New Haven: Yale University Press.
- 1988 *The Coming of the Greeks Indo-European Conquests in the Aegean and the Near East*. Princeton: Princeton University Press.
- 1993 *The End of the Bronze Age: Changes in Warfare and the Catastrophe ca. 1200 B.C.* Princeton: Princeton University Press.

Driessen, J.M.

- 1985 La "grande tablette" (As 1516) de Cnossos, *Minos* 19: 169-93.
- 1996 Architectural context, administration and political architecture in Mycenaean Greece, in *Atti e memorie del secondo congresso internazionale di micenologia* (Incunabula Graeca 98). E. De Miro, L. Godart, and A. Sacconi, eds. Rome: Gruppo editoriale internazionale. 1013-28.
- 1997 Le palais de Cnossos au MR II-III: combien de destructions? in *La Crète mycénienne* (BCH Suppl. 30). J. Driessen, and A. Farnoux, eds. Athens: École française d'Athènes. 113-34.

Driessen, J.M., and C.F. Macdonald

- 1984 Some military aspects of the Aegean in the late fifteenth and early fourteenth centuries B.C., *BSA* 79: 49-74.

Dussaud, R., and C.F.-A. Schaeffer

- 1930 Ivoires d'époque mycénienne, *Gazette des Beaux-Arts* 72: 1-9.

Edel, E.

- 1966 *Die Ortsnamenlisten aus dem Totentempel Amenophis III.* Bonn: Hanstein.

Edens, C.M., and P.L. Kohl

- 1993 Trade and world systems in Early Bronze Age Western Asia, in *Trade and Exchange in Prehistoric Europe*. C. Scarre and F. Healey, eds. Oxford: Oxbow Books. 17-34.

Eder, B.

- 1998 *Argolis, Lakonien, Messenien: vom Ende der mykenischen Palastzeit bis zur Einwanderung der Dorier* (Veröffentlichungen der Mykenischen Kommission 17). Vienna: Verlag der Österreichischen Akademie der Wissenschaften.

Erlenmeyer, M.-L., and H. Erlenmeyer

- 1965 Kassitische Goldarbeiten aus dem Schachtgrab III in Mykene? *Kadmos* 3: 177-78.

Evans, A.

- 1921 *The Palace of Minos at Knossos I.* London: MacMillan and Co.
 1928 *The Palace of Minos at Knossos II.* London: MacMillan and Co.
 1930 *The Palace of Minos at Knossos III.* London: MacMillan and Co.
 1936 *The Palace of Minos at Knossos IV.* London: MacMillan and Co.

Evans, J.D.

- 1956 Bossed bone plaques of the second millennium, *Antiquity* 56: 80-93.

Evely, R.D.G., and C. Runnels

- 1992 *Well Built Mycenae 27: Ground Stone.* Warminster: Aris and Phillips.

Finley, M.I.

- 1957 The Mycenaean tablets and economic history, *Economic History Review* 10: 128-41.
 1973 *The Ancient Economy* (Sather Classical Lectures 43). Berkeley: University of California Press.

Flannery, K.V.

- 1968 The Olmec and the Valley of Oaxaca: a model for interregional interaction in formative times, in *Dumbarton Oaks Conference on the Olmec*. E. Benton, ed. Washington, DC: Dumbarton Oaks Library. 79-110.

Flemming, N.C., N. Czartoryska, and P. Hunter

- 1973 Archaeological evidence for eustatic and tectonic components of relative sea level in the south Aegean, in *Marine Archaeology* (Colston Papers 23). D.J. Blackman, ed. London: Buttersworth. 1-24.

Foley, A.

- 1995 Idle speculation about Argos? Some thoughts on the present state of eighth and seventh century Argive studies, in *KLADOS: Essays in Honour of J.N. Coldstream (BICS Suppl. 63)*. C. Morris, ed. London: Institute of Classical Studies, University of London. 79-86.

Foster, B.R.

- 1987 The Late Bronze Age palace economy: a view from the East, in *The Function of the Minoan Palaces* (Skrifter utgivna av Svenska institutet i Athen, 4° 35). R. Hägg and N. Marinatos, eds. Stockholm: Svenska institutet i Athen. 11-16.

Foster, K.P.

- 1979 *Aegean Faience of the Bronze Age*. New Haven: Yale University Press.
- 1981 Faience from the Shaft Graves, in *Temple University Aegean Symposium VI*. P.P. Betancourt, ed. Philadelphia: Department of Art History, Temple University. 9-16.
- 1987 Reconstructing Minoan Palatial Faience Workshops, in *The Function of the Minoan Palaces* (Skrifter utgivna av Svenska institutet i Athen, 4° 35). R. Hägg and N. Marinatos, eds. Stockholm: Svenska institutet i Athen. 287-92.

Fotiadis, M.

- 1999 Comparability, equivalency, and contestation, in *Material Symbols: Culture and Economy in Prehistory* (Center for Archaeological Investigations Occasional Paper 26). J.E. Robb, ed. Carbondale: Southern Illinois University, Center for Archaeological Investigations. 385-98.

Foxhall, L., and J.K. Davies, eds.

- 1984 *The Trojan War: Its Historicity and Context*. Bristol: Bristol Classical Press.

Frank, A.G.

- 1993 Bronze Age world system cycles, *Current Anthropology* 34: 383-429.

Frankfort, H.

- 1954 *The Art and Architecture of the Ancient Orient*. New York: Penguin Books.

Frankenstein, S., and M.J. Rowlands

- 1978 The internal structure and regional context of Early Iron Age society in south-western Germany, *University of London Institute of Archaeology Bulletin* 15: 74-112.

French, E.B.

- 1967 Pottery from Late Helladic III B1 destruction contexts at Mycenae, *BSA* 62: 149-93.
- 1981a Cult places at Mycenae, in *Sanctuaries and Cults in the Bronze Age Aegean* (Skrifter utgivna av Svenska institutet i Athen, 4° 28). R. Hägg and N. Marinatos, eds. Stockholm: Svenska institutet i Athen. 41-48.
- 1981b Mycenaean figures and figurines, their typology and function, in *Sanctuaries and Cults in the Bronze Age Aegean* (Skrifter utgivna av Svenska institutet i Athen, 4° 28). R. Hägg and N. Marinatos, eds. Stockholm: Svenska institutet i Athen. 173-77.

Friedman, F.D., ed.

1998 *Gifts of the Nile: Ancient Egyptian Faience*. New York: Thames and Hudson.

Frödin, O., and A.W. Persson

1938 *Asine I: Results of the Swedish Excavations 1922-1930*. Stockholm: Generalstabens litografiska anstalts forlag i distribution.

Furtwängler, A., and G. Loeschcke

1886 *Mykenische Vasen: Vorhellenische Thongefasse aus dem Gebiete des Mittelmeeres*. Berlin: Asher, 1886.

Furumark, A.

1941 *The Mycenaean Pottery: Analysis and Classification*. Stockholm: Kungl. Vitterhets Historie och Antikvitets Akademien.

Gachet, J.

1992 Ugarit ivories: typology and distribution, in *Ivory in Greece and the Eastern Mediterranean from the Bronze Age to the Hellenistic Period* (British Museum Occasional Paper 85). J.L. Fitton, ed. London: British Museum. 67-89.

Galaty, M.L.

1999 *Nestor's Wine Cups: Investigating Ceramic Manufacture and Exchange in a Late Bronze Age "Mycenaean" State* (BAR International Series 766). Oxford: British Archaeological Reports.

Galaty, M.L., and W.A. Parkinson

(1999) Putting Mycenaean palaces in their place, in *Rethinking Mycenaean Palaces: New Interpretations of an Old Idea* (UCLA Institute of Archaeology Monograph 41). Los Angeles: University of California, Institute of Archaeology. 1-8. (in press)

Gardiner, E.

1893 Palladia from Mycenae, *JHS* 13: 21-24.

Gates, M.-H.

1992 Mycenaean art for a Levantine market? The ivory lid from Minet el Beidha/Ugarit, in *EIKON: Aegean Bronze Age Iconography: Shaping a Methodology* (*Aegaeum* 8). R. Laffineur and J.L. Crowley, eds. Université de Liège. 77-84.

Gaughan, J.P., and L.A. Ferman

1987 Toward an understanding of the informal economy, in *The Informal Economy* (The Annals of the American Academy of Political and Social Science 493). L.A. Ferman, S. Henry, and M. Hoyman, eds. Philadelphia: American Academy of Political and Social Science. 15-25.

Gelb, I.J.

1969 On the alleged temple and state economies in ancient Mesopotamia, in *Studi in Onore di Edoardo Volterra* 6 (Universita di Roma, Facolta di giurisprudenza Pubblicazioni 45). Milan: A. Giuffr'e. 137-54.

Gercke, P., and G. Hiesel

1971 Grabungen in der Unterstadt von Tiryns von 1884 bis 1929, in *Tiryns: Forschungen und Berichte* V. U. Jantzen, ed. Mainz: Philipp von Zabern. 1-19.

Giddens, A.

- 1979 *Central Problems in Social Theory: Action, Structure, and Contradiction in Social Analysis*. Berkeley: University of California Press.

Gill, M.A.V.

- 1964 The Minoan 'Genius', *AthMitt* 79: 1-21.
 1970 Apropos the Minoan 'Genius', *AJA* 74: 404-406.

Gillis, C.

- 1995 Trade in the Late Bronze Age, in *International Workshop on Trade and Production in Premonetary Greece: Aspects of Trade (SIMA Pocket-book 134)*. C. Gillis, C. Risberg, and B.L. Sjöberg, eds. Jonsered: P. Åströms Förlag. 61-86.
 1996 The Asine chamber tombs—graves of kings? in *Atti e memorie del secondo congresso internazionale di micenologia (Incunabula Graeca 98)*. E. DeMiro, L. Godart, and A. Sacconi, eds. Rome: Gruppo editoriale internazionale. 1193-1203.
 1997 The smith in the Late Bronze Age—state employee, independent artisan, or both? in *TEXNH: Craftsmen, Craftswomen and Craftsmanship in the Aegean Bronze Age (Aegaeum 16)*. R. Laffineur and P.P. Betancourt, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 503-13.

Godart, L.

- 1988 Autour des textes en Linéaire B de Tirynthe: Ausgrabungen in Tiryns 1982/83, *AA*: 245-51.

Godart, L., J.T. Killen, and J.-P. Olivier

- 1983 Eighteen more fragments of Linear B tablet from Tiryns: Ausgrabungen in Tiryns 1981, *AA*: 413-26.

Godart, L., and A. Sacconi

- 1978 *Les tablettes en linéaire B de Thèbes (Incunabula Graeca 71)*. Rome: Edizioni dell'Ateneo & Bizzarri.

Graziadio, G.

- 1988 The chronology of the graves of Circle B: a new hypothesis, *AJA* 92: 343-72.
 1991 The process of social stratification at Mycenae in the Shaft Grave period: a comparative examination of the evidence, *AJA* 95: 403-40.

Grose, D.F.

- 1989 *Early Ancient Glass: The Toledo Museum of Art: Core-formed, Rod-formed, and Cast Vessels and Objects from the Late Bronze Age to the Early Roman Empire, 1600 B.C. to A.D. 50*. New York: Hudson Hills Press.

Güterbock, H.G.

- 1971 Ivory in Hittite texts, *Anadolu* 15: 1-7.

Haevernick, T.E.

- 1960 Mykenisches Glas, *Jahrbuch des Römisch-Germanisches Zentralmuseums Mainz* 7: 36-53.
 1963 Mycenaean Glass, *Archaeology* 16: 190-93.

Hägg, R.

- 1981 The house sanctuary at Asine revisited, in *Sanctuaries and Cults in the Bronze Age Aegean* (Skrifter utgivna av Svenska institutet i Athen, 4° 28). R. Hägg and N. Marinatos, eds. Stockholm: Svenska institutet i Athen. 91-94.
- 1982 On the nature of the Minoan influence in Early Mycenaean Messenia, *OpAth* 14: 27-37.
- 1990 The role of libations in Mycenaean ceremony and cult, in *Celebrations of Death and Divinity in the Bronze Age Argolid* (Skrifter utgivna av Svenska institutet i Athen, 4° 40). R. Hägg and G.C. Nordquist, eds. Stockholm: Svenska institutet i Athen. 177-84.
- 1996 The religion of the Mycenaeans twenty-four years after the 1967 Mycenological Congress in Rome, in *Atti e memorie del secondo congresso internazionale de micenologia* (Incunabula Graeca 98). E. De Miro, L. Godart, and A. Sacconi, eds. Rome: Gruppo editoriale internazionale. 599-612.

Haldane, C.

- 1993 Direct evidence for organic cargoes in the Late Bronze Age, *World Archaeology* 24: 348-60.

Hall, H.R.

- 1901-02 Keftiu and the Peoples of the Sea, *BSA* 8: 157-89.

Hall, J.M.

- 1995 How Argive was the Argive Heraion? The political and cultic geography of the Argive Plain, 900-400 B.C., *AJA* 99: 577-613.
- 1997 *Ethnic Identity in Greek Antiquity*. Cambridge: Cambridge University Press.

Hallager, E., M. Vlasakis, and B.P. Hallager

- 1992 New Linear B tablets from Khania, *Kadmos* 31: 61-87.

Halleux, R.

- 1969 Lapis-lazuli, azurite ou pâte du verre? A propos de *kuwano* et *kuwanowoko* dans les tablettes mycéniennes, *SMEA* 39: 47-66.

Halperin, R.H.

- 1996 Rethinking the informal economy: implications for regional analysis, *Research in Economic Anthropology* 17: 43-79.

Halstead, P.

- 1981 From determinism to uncertainty: social storage and the rise of the Minoan palace, in *Economic Archaeology: Towards an Integration of Ecological and Social Approaches* (BAR International Series 96). A. Sheridan and G. Bailey, eds. Oxford: British Archaeological Reports. 187-213.
- 1992a Agriculture in the Bronze Age Aegean: towards a model of palatial economy, in *Agriculture in Ancient Greece* (Skrifter utgivna av Svenska institutet i Athen, 4° 42). B. Wells, ed. Stockholm: Svenska institutet i Athen. 105-17.
- 1992b The Mycenaean palatial economy: making the most of the gaps in the evidence, *PCPS* 38: 57-86.

- 1994 The north-south divide: regional paths to complexity in prehistoric Greece, in *Development and Decline in the Mediterranean Bronze Age*. C. Mathers and S. Stoddart, eds. Sheffield: J.R. Collis Publications. 195-219.
- Halstead, P., and J. O'Shea
- 1982 A friend in need is a friend indeed: social storage and the origins of social ranking, in *Ranking, Resource and Exchange: Aspects of the Archaeology of Early European Society*. A.C. Renfrew and S. Shennan, eds. Cambridge: Cambridge University Press. 92-99.
- Hamilakis, Y.
- 1998 Eating the dead: mortuary feasting and the politics of memory in the Aegean Bronze Age societies, in *Cemetery and Society in the Aegean Bronze Age* (Sheffield Studies in Aegean Archaeology 1). K. Branigan, ed. Sheffield: Sheffield Academic Press. 115-32.
- Hammond, N.G.L.
- 1976 *Migrations and Invasions in Greece and Adjacent Areas*. Park Ridge, NJ: Noyes Press.
- Hankey, V.
- 1973 The Aegean deposit at el Amarna, in *Acts of the International Archaeological Symposium 'The Mycenaeans in the Eastern Mediterranean'*. Nicosia: Department of Antiquities. 128-36.
- 1981 The Aegean interest in el Amarna, *Journal of Mediterranean Anthropology and Archaeology* 1: 38-49.
- 1993 Egypt, the Aegean and the Levant, *Egyptian Archaeology* 3: 27-29.
- Hankey, V., and P. Warren
- 1974 The absolute chronology of the Aegean Late Bronze Age, *BICS*: 142-52.
- Hansen, O.
- 1994 A Mycenaean sword from Boğazköy-Hattusa found in 1991, *BSA* 89: 213-15.
- Harden, D.B.
- 1968 Ancient glass I: pre-Roman, *The Archaeological Journal* 25: 46-53.
- 1981 *Catalogue of Greek and Roman Glass in the British Museum I: Core- and Rod-formed Vessels and Pendants and Mycenaean Art Objects*. London: British Museum.
- Harding, A.F.
- 1971-72 The earliest glass in Europe, *Archeologické Rozhledy* 23: 188-200.
- 1984 *The Mycenaeans and Europe*. London: Academic Press.
- Harding, A.F., and H. Hughes-Brock
- 1974 Amber in the Mycenaean world, *BSA* 69: 145-70.
- Haskell, H.W.
- 1981 Course-ware stirrup-jars at Mycenae, *BSA* 76: 225-38.

Hayward, L.G.

- 1990 The origin of the raw elephant ivory used in Greece and the Aegean during the Late Bronze Age, *Antiquity* 64: 103-109.

Helck, W.

- 1979 *Die Beziehungen Ägyptens und Vorderasiens zur Ägäis bis in 7. Jahrhundert v. Chr.* Darmstadt: Wissenschaftliche Buchgesellschaft.

Helms, M.W.

- 1988 *Ulysses' Sail: An Ethnographic Odyssey of Power, Knowledge and Geographical Distance.* Princeton: Princeton University Press.
- 1993 *Craft and the Kingly Ideal: Art, Trade, and Power.* Austin: University of Texas Press.

Heltzer, M.

- 1978 *Goods, Prices and the Organization of Trade in Ugarit.* Weisbaden: Reichert.
- 1989 The trade of Crete and Cyprus with Syria and Mesopotamia and their eastern tin-sources in the XVIII-XVII centuries B.C., *Minos* 24: 7-28.

Hermann, G.

- 1968 Lapis lazuli: the early phases of its trade, *Iraq* 30: 21-57.

Hiesel, G.

- 1990 *Späthelladische Hausarchitektur: Studien zur Architekturgeschichte des griechischen Festlandes in der späten Bronzezeit.* Mainz: Philipp von Zabern.

Higgins, R.A.

- 1980 *Greek and Roman Jewellery.* 2nd edn. Berkeley: University of California Press.

Higgins, R.A., R. Hope Simpson, and S.E. Ellis

- 1968 The façade of the Treasury of Atreus, *BSA* 63: 331-36.

Hiller, S.

- 1988 Dependent personnel in Mycenaean texts, in *Society and Economy in the Eastern Mediterranean c. 1500-1000 B.C.* (Orientalia Lovaniensia Analecta 23). M. Heltzer and E. Lipinski, eds. Leuven: Uitgeverij Peeters. 53-68.
- 1991 The Mycenaeans and the Black Sea, in *Thalassa: L'Égée préhistorique et la mer (Aegaeum 7)*. R. Laffineur and L. Basch, eds. Liège: Université de Liège. 207-16.

Hirschfeld, N.

- 1996 Cypriots in the Mycenaean Aegean, in *Atti e memorie del secondo congresso internazionale di micenologia* (Incunabula Graeca 98). E. DeMiro, L. Godart, and A. Sacconi, eds. Rome: Gruppo editoriale internazionale. 289-97.

Hirth, K.G.

- 1978 Interregional trade and the formation of prehistoric gateway communities, *American Antiquity* 43: 25-45.

Hodder, I.

- 1982a The identification and interpretation of ranking in prehistory: a contextual perspective, in *Ranking, Resource and Exchange: Aspects of the Archaeology of Early European Society*. A.C. Renfrew and S. Shennan, eds. Cambridge: Cambridge University Press. 150-54.
- 1982b *Symbols in Action: Ethnoarchaeological Studies of Material Culture*. Cambridge: Cambridge University Press.
- 1987 The contextual analysis of symbolic meanings, in *The Archaeology of Contextual Meanings*. I. Hodder, ed. Cambridge: Cambridge University Press. 1-10.

Hodges, R.

- 1988 *Primitive and Peasant Markets*. Oxford: Basil Blackwell.

Hoffman, G.L.

- 1997 *Imports and Immigrants: Near Eastern Contacts with Iron Age Crete*. Ann Arbor: University of Michigan Press.

Holmberg, E.J.

- 1983 *A Mycenaean Chamber Tomb Near Berbati in Argolis* (Acta Regiae Societatis Scientiarum et Litterarum Gothoburgensis, Humaniora 21). Göteborg: Kungl. Vetenskaps och Vitterhets Samhället.

Hood, S.

- 1978 *The Arts in Prehistoric Greece*. New York: Penguin Books.
- 1982 *Excavations at Chios, 1938-1955: Prehistoric Emporio and Ayio Gala II* (BSA Suppl. 16). London: British School at Athens; Thames and Hudson.

Hooker, J.T.

- 1987 Titles and functions in the Pylian state, in *Studies in Mycenaean and Classical Greek Presented to John Chadwick (Minos 20-22)*. J.T. Killen, J.L. Melena, and J.-P. Olivier, eds. Salamanca: Universidad de Salamanca. 257-67.

Hope Simpson, R.

- 1981 *Mycenaean Greece*. Park Ridge, NJ: Noyes Press.

Hope Simpson, R., and J.F. Lazenby

- 1970 *The Catalogue of the Ships in Homer's Iliad*. Oxford: Clarendon Press.

Howland, R.H., ed.

- 1997 *Mycenaean Treasures of the Aegean Bronze Age Repatriated*. Washington, DC: The Society for the Preservation of the Greek Heritage.

Hughes-Brock, H.

- 1973 The beads, loomweights, etc., in *Knossos: The Sanctuary of Demeter* (BSA Suppl. 8). J.N. Coldstream, ed. London: British School at Athens. 114-23.
- 1992 Terracotta and miscellaneous small finds, in *Excavations at Nichoria in Southwest Greece II: The Bronze Age Occupation*. W.A. McDonald and N.C. Wilkie, eds. Minneapolis: University of Minnesota Press. 625-73.

- 1996 **Asine Chamber Tomb I:1: the small finds, in *Asine III: Supplementary Studies on the Swedish Excavations 1922-1930*. R. Hägg, G.C. Nordquist, and B. Wells, eds. Stockholm: P. Åströms Förlag. 69-80.**
- 1998 **Greek beads of the Mycenaean Period (ca 1650-1100 BC): the age of heroines of Greek tradition and mythology, in *Beads and Bead Makers: Gender, Material Culture and Meaning*. L.D. Sciama and J.B. Eicher, eds. Oxford: Berg. 247-71.**
- Hutchinson, J.S.
- 1977 **Mycenaean kingdoms and mediaeval estates (an analogical approach to the history of LH III), *Historia* 26: 1-23.**
- Hutchinson, R.W.
- 1956 **A tholos tomb on the Kephala, *BSA* 51: 74-80.**
- Iakovides, S.E.
- 1969 ***Perate: To Nekrotapheion A: Oi Taphoi kai ta Euremata* (Vivliotheke tes en Athenais Archaialogikes Etaireias 67). Athens: E en Athenais Archaialogikes Etaireia.**
- 1970 ***Perate: To Nekrotapheion B: Genikai Paratiriseis* (Vivliotheke tes en Athenais Archaialogikes Etaireias 67). Athens: E en Athenais Archaialogikes Etaireia.**
- 1977a **On the use of Mycenaean "buttons," *BSA* 72: 113-19.**
- 1977b **The present state of research at the citadel of Mycenae, *University of London Institute of Archaeology Bulletin* 14: 99-141.**
- 1981 **Royal shaft graves outside Mycenae, in *Temple University Aegean Symposium VI*. P.P. Betancourt, ed. Philadelphia: Department of Art History, Temple University. 17-28.**
- 1983 ***Late Helladic Citadels on Mainland Greece* (Monumenta Graeca et Romana 4). Leiden: E.J. Brill.**
- 1987 **E archaiologike etaireia stis Mykenes, *ArchEph* 126: 337-59.**
- Immerwahr, S.A.
- 1971 ***The Athenian Agora 13: The Neolithic and Bronze Ages*. Princeton: American School of Classical Studies at Athens.**
- 1990 ***Aegean Painting in the Bronze Age*. University Park: Pennsylvania State University Press.**
- Jameson, M.H., C.N. Runnels, and Tj.H. van Andel
- 1994 ***A Greek Countryside: The Southern Argolid from Prehistory to the Present Day*. Stanford: Stanford University Press.**
- Jansen, A.G.
- 1997 **Bronze Age highways at Mycenae, *Echos du Monde Classique* 16: 1-16.**
- Jantzen, U.
- 1975 ***Führer durch Tiryns: von den Mitarbeitern der Grabung*. Athens: Deutsches Archäologisches Institut.**

Jones, R.E.

- 1986 *Greek and Cypriot Pottery: A Review of Scientific Studies*. Athens: British School at Athens.
- 1994 Chemical analysis of the Aegean painted and unpainted wares from Vivara, in *Vivara: Centro commerciale mediterraneo dell'età del bronzo II: Le tracce dei contatti con il mondo egeo (scavi 1976-1982)* (Ricerche di storia, epigrafia e archeologia mediterranea 3). M. Marazzi and S. Tusa, eds. Rome: Bagatto Libri. 303-14.

Kantor, H.J.

- 1947 *The Aegean and the Orient in the Second Millennium B.C.* (Archaeological Institute of America Monograph 1). New York: Archaeological Institute of America.
- 1960 Ivory carving in the Mycenaean period, *Archaeology* 13: 14-25.

Karageorghis, V.

- 1968 Homeric furniture from Cyprus, in *Atti e memorie del primo congresso internazionale de micenologia* (Incunabula Graeca 25). Rome: Ateneo. 216-21.

Karageorghis, V., and E. Vermeule

- 1981 *Mycenaean Pictorial Vase Painting*. Cambridge: Harvard University Press.

Karali-Yannacopoulos, L.

- 1992 Sources of ivory in the Aegean Bronze Age: an environmental approach, in *Ivory in Greece and the Eastern Mediterranean from the Bronze Age to the Hellenistic Period* (British Museum Occasional Paper 85). J.L. Fitton, ed. London: British Museum. 57-59.

Kardulias, P.N.

- 1999 Multiple levels in the Aegean Bronze Age world-system, in *World-Systems Theory in Practice*. P.N. Kardulias, ed. Lanham, MD: Rowman and Littlefield. 179-201.

Karo, G.

- 1930 Schatz von Tiryns, *AthMitt* 55: 119-40.
- 1930-33 *Die Schachtgräber von Mykenai*. Munich: F. Bruckmann.

Karytinis, A.

- 1998 Sealstones in cemeteries: a display of social status? in *Cemetery and Society in the Aegean Bronze Age* (Sheffield Studies in Aegean Archaeology 1). K. Branigan, ed. Sheffield: Sheffield Academic Press. 78-86.

Kaza-Papageorgiou, D.

- 1985 An Early Mycenaean cist grave from Argos, *AthMitt* 100: 1-21.

Kemp, B.J., and R.S. Merrillees

- 1980 *Minoan Pottery in Second Millennium Egypt*. Mainz: Philipp von Zabern.

Kenna, V E.G.

- 1960 *Cretan Seals: With a Catalogue of the Minoan Gems in the Ashmolean Museum*. Oxford: Clarendon Press.

Keswani, P.F.S.

- 1989a Dimensions of social hierarchy in Late Bronze Age Cyprus: an analysis of the mortuary data from Enkomi, *JMA* 2: 49-86.
- 1989b *Mortuary Ritual and Social Hierarchy in Bronze Age Cyprus*. Ph.D. Dissertation, University of Michigan.
- 1993 Models of local exchange in Late Bronze Age Cyprus, *Bulletin of the American Schools of Oriental Research* 292: 73-83.

Kilian, K.

- 1981 Zeugnisse Mykenischer Kultausübung in Tiryns, in *Sanctuaries and Cults in the Bronze Age Aegean* (Skrifter utgivna av Svenska institutet i Athen, 4° 28). R. Hägg and N. Marinatos, eds. Stockholm: Svenska institutet i Athen. 49-58.
- 1983 Ausgrabungen in Tiryns 1981, *AA*: 277-328.
- 1987 Zur Funktion der mykenischen Residenzen auf dem griechischen Festland, in *The Function of the Minoan Palaces* (Skrifter utgivna av Svenska institutet i Athen, 4° 35). R. Hägg and N. Marinatos, eds. Stockholm: Svenska institutet i Athen. 21-38.
- 1988a Ausgrabungen in Tiryns 1982/83, *AA*: 105-51.
- 1988b The emergence of *wanax* ideology in the Mycenaean palaces, *OJA* 7: 291-302.
- 1988c Mycenaeans up to date, trends and changes in recent research, in *Problems in Greek Prehistory*. E.B. French and K.A. Wardle, eds. Bristol: Bristol Classical Press. 115-52.
- 1990 Patterns in the cult activity in the Mycenaean Argolid: Haghia Triada (Klenies), the Profitis Elias Cave (Haghios Hadrianos) and the citadel of Tiryns, in *Celebrations of Death and Divinity in the Bronze Age Argolid* (Skrifter utgivna av Svenska institutet i Athen, 4° 40). R. Hägg and G.C. Nordquist, eds. Stockholm: Svenska institutet i Athen. 185-97.

Kilian, K., G. Hiesel, and H.-J. Weisshaar

- 1982 Ausgrabungen in Tiryns 1980, *AA*: 393-466.

Kilian, K., and C. Podzuweit

- 1978 Ausgrabungen in Tiryns 1976, *AA*: 449-98.

Kilian, K., C. Podzuweit, and T.E. Haevernick

- 1979 Ausgrabungen in Tiryns 1977, *AA*: 379-449.

Kilian, K., C. Podzuweit, and H.-J. Weisshaar

- 1981 Ausgrabungen in Tiryns 1978, 1979, *AA*: 149-256.

Kilian-Dirlmeier, I.

- 1988 Jewellery in Mycenaean and Minoan 'Warrior Graves', in *Problems in Greek Prehistory*. E.B. French and K.A. Wardle, eds. Bristol: Bristol Classical Press. 161-71.
- 1997 *Alt-Ägina IV, 3: Das mittelbronzezeitliche Schachtgrab von Ägina*. Mainz: Philipp von Zabern.

Killen, G.

- 1980 *Ancient Egyptian Furniture I: 4000-1300 B.C.* Warminster: Aris and Phillips.

Killen, J.T.

- 1977 The Knossos texts and the geography of Mycenaean Crete, in *Mycenaean Geography*. J. Bintliff, ed. Cambridge: British Association for Mycenaean Studies. 40-47.
- 1985 The Linear B tablets and the Mycenaean economy, in *Linear B: A 1984 Survey*. A. Morpurgo-Davies and Y. Duhoux, eds. Cabay, Louvain-la-Neuve: Bibliothèque des Cahiers de l'Institut de Linguistique de Louvain. 241-305.
- 1994 Thebes sealings, Knossos tablets, and Mycenaean state banquets, *BICS* 39: 67-84.
- 1995 Some further thoughts on 'collectors', in *POLITEIA: Society and State in the Aegean Bronze Age* 12). R. Laffineur and W.-D. Niemeier, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 213-21.

Kipp, R., and E. Schortman.

- 1989 Political impact of trade in chiefdoms, *American Anthropologist*: 91: 370-85.

Klein, N.L.

- 1997 Excavation of the Greek temples at Mycenae by the British School at Athens, *BSA* 92: 247-322.

Knapp, A.B.

- 1986 *Copper Production and Divine Protection: Archaeology, Ideology and Social Complexity on Bronze Age Cyprus* (SIMA Pocket-book 42). Göteborg: P. Åströms Förlag.
- 1991 Spice, drugs, grain and grog: organic goods in Bronze Age Eastern Mediterranean trade, in *Bronze Age Trade in the Mediterranean* (SIMA 90). N.H. Gale, ed. Jonsered: P. Åströms Förlag. 19-66.
- 1998 Mediterranean Bronze Age trade: distance, power and place, in *The Aegean and the Orient in the Second Millennium: Proceedings of the 50th Anniversary Symposium* (Aegaeum 18). E.H. Cline and D. Harris-Cline, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 193-205.

Knapp, A.B., and J.F. Cherry

- 1994 *Provenience Studies and Bronze Age Cyprus: Production, Exchange and Politico-Economic Change* (Monographs in World Archaeology 21). Madison: Prehistory Press.

Knapp, A.B., and T. Stech, eds.

- 1985 *Prehistoric Production and Exchange: The Aegean and Eastern Mediterranean* (UCLA Institute of Archaeology Monograph 25). Los Angeles: University of California, Institute of Archaeology.

Kohl, P.L.

- 1981 Materialist approaches in prehistory, *Annual Review of Anthropology* 10: 89-118.
- 1989 The use and abuse of world systems theory: the case of the "pristine" west Asian state, in *Archaeological Thought in America*. Lamberg-Karlovsky, ed. Cambridge: Cambridge University Press. 218-40.

Konsolaki, E.

1995 The Mycenaean sanctuary on Methana (abstract), *BICS* 40: 242.

Kontorli-Papadopoulou, L.

1987 Local peculiarities of the Mycenaean chamber tombs, in *Thanatos: Les coutumes funéraires en Égée à l'âge du Bronze (Aegaeum 1)*. R. Laffineur, ed. Liège: Université de Liège. 145-60.

1995 Mycenaean tholos tombs: some thoughts on burial customs and rites, in *KLADOS: Essays in Honour of J.N. Coldstream (BICS Suppl. 63)*. C. Morris, ed. London: Institute of Archaeology, University of London. 111-22.

1996 *Aegean Frescoes of Religious Character (SIMA 117)*. Göteborg: P. Åströms Förlag.

Kopcke, G.

1997 Mycenaean ivories, in *TEXNH: Craftsmen, Craftswomen and Craftsmanship in the Aegean Bronze Age (Aegaeum 16)*. R. Laffineur and P.P. Betancourt, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 141-43.

Korres, G.S.

1983 Burial customs in Tholos Tomb 2 at Routsí (Myrsinochori), in *Concilium Eirene XVI 3*. O. Pavel and A. Frolíková, eds. Prague: Kabinet pro studia rečká, římská a latinská CSAV. 91-97.

Krzyszowska, O.H.

1984 Ivory from hippopotamus tusk in the Aegean Bronze Age, *Antiquity* 58: 123-25.

1988 Ivory in the Aegean Bronze Age: elephant tusk or hippopotamus ivory? *BSA* 83: 209-34.

1989 Early Cretan seals, new evidence for the use of bone, ivory and boar's tusk, in *Fragen und Probleme der Bronzezeitlichen Ägäischen Glyptik (CMS Beiheft 3)*. I. Pini, ed. Berlin: Gebr. Mann Verlag. 111-26.

1990 *Ivory and Related Materials: An Illustrated Guide (BICS Supplement 59)*. London: Institute of Classical Studies, University of London.

1991 The Enkomi warrior head reconsidered, *BSA* 86: 107-20.

1992 Aegean ivory carving: towards an evaluation of Late Bronze Age workshop material, in *Ivory in Greece and the Eastern Mediterranean from the Bronze Age to the Hellenistic Period (British Museum Occasional Paper 85)*. J.L. Fitton, ed. London: British Museum. 25-35.

1996a Asine Chamber Tomb I:2: the ivories, in *Asine III: Supplementary Studies on the Swedish Excavations 1922-1930*. R. Hägg, G.C. Nordquist, and B. Wells, eds. Stockholm: P. Åströms Förlag. 81-90.

1996b Furniture in the Aegean Bronze Age, in *The Furniture of Western Asia: Ancient and Traditional*. G. Herrmann, ed. Mainz: Philipp von Zabern. 85-103.

1997 Cult and craft: ivories from the Citadel House area, Mycenae, in *TEXNH: Craftsmen, Craftswomen and Craftsmanship in the Aegean Bronze Age (Aegaeum 16)*. R. Laffineur and P.P. Betancourt, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 145-50.

Küçükerman, Ö. (M.Q. Pinar, trans.)

- 1988 *Glass Beads: Anatolian Glass Bead Making: The Final Traces of Three Millennia of Glass Making in the Mediterranean Region*. Istanbul: Turkish Touring and Automobile Association.

Laffineur, R.

- 1990-91 Material and craftsmanship in the Mycenae Shaft Graves: imports vs local production, *Minos* 25-26: 245-95.

- 1995 Metal supply and metal trade in Bronze Age eastern Mediterranean, in *Materials Issues in Art and Archaeology IV* (Materials Research Society Symposium Proceedings 352). P. Vandiver, J. Druzik, J. Madrid, I. Freestone, and G. Wheeler, eds. Pittsburgh: Material Research Society. 631-640.

Laffineur, R., and W.-D. Niemeier, eds.

- 1995 *POLITEIA: Society and State in the Aegean Bronze Age (Aegaeum 12)*. Liège: Université de Liège; Austin: University of Texas at Austin.

Lambrinudakis, V.

- 1981 Remains of the Mycenaean period in the sanctuary of Apollon Maleatas, in *Sanctuaries and Cults in the Bronze Age Aegean* (Skrifter utgivna av Svenska institutet i Athen, 4° 28). R. Hägg and N. Marinatos, eds. Stockholm: Svenska institutet i Athen.

Lambrou-Phillipson, C.

- 1990 *Hellenorientalia: The Near Eastern Presence in the Bronze Age Aegean, ca. 3000-1100 B.C. (SIMA Pocket-book 95)*. Göteborg: P. Åströms Förlag.

Lang, M.L.

- 1969 *The Palace of Nestor at Pylos in Western Messenia II: The Frescoes*. Princeton: Princeton University Press.

Lefkowitz, M.R., and G.M. Rogers, eds.

- 1996 *Black Athena Revisited*. Chapel Hill: University of North Carolina Press.

Leonard, A.

- 1994 *An Index to the Late Bronze Age Aegean Pottery from Syria-Palestine (SIMA 114)*. Jonsered: P. Åströms Förlag.

- 1996 Mycindex: Late Helladic trade in its Mediterranean setting, in *Atti e memorie del secondo congresso internazionale di micenologia (Incunabula Graeca 98)*. E. De Miro, L. Godart, and A. Sacconi, eds. Rome: Gruppo editoriale internazionale. 741-48.

Lesure, R.

- 1999 On the genesis of value in early hierarchical societies, in *Material Symbols: Culture and Economy in Prehistory* (Center for Archaeological Investigations Occasional Paper 26). J.E. Robb, ed. Carbondale: Southern Illinois University, Center for Archaeological Investigations. 23-55.

Lewartowski, K.

- 1995 Mycenaean social structure: a view from simple graves, in *POLITEIA: Society and State in the Aegean Bronze Age (Aegaeum 12)*. R. Laffineur and W.-D. Niemeier, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 103-11.
- 1996 Mycenaean burials in dromoi, in *Atti e memorie del secondo congresso internazionale de micenologia (Incunabula Graeca 98)*. E. De Miro, L. Godart, and A. Sacconi, eds. Rome: Gruppo editoriale internazionale. 749-64.

Lindgren, M.

- 1973 *The People of Pylos: Prosopographical and Methodological Studies in the Pylos Archives Part II: The Use of Personal Designations and Their Interpretation (Boreas 3:II)*. Uppsala: Universitet Uppsala.

Lipinski, E., ed.

- 1979 *State and Temple Economy in the Ancient Near East (Orientalia Lovaniensia Analecta 5-6)*. Leuven: Department Oriëntalistiek.

Liverani, M.

- 1987 The collapse of the Near Eastern regional system at the end of the Bronze Age: the case of Syria, in *Centre and Periphery in the Ancient World*. M. Rowlands, M. Larsen, and K. Kristiansen, eds. Cambridge: Cambridge University Press. 67-73.
- 1990 *Prestige and Interest: International Relations in the Near East ca. 1600-1100 BC*. Padova: Sargon.

Long, C.R.

- 1974 *The Ayia Triadha Sarcophagus: A Study of Late Minoan and Mycenaean Funerary Practices and Beliefs (SIMA 41)*. Göteborg: P. Åströms Förlag.

Loud, G.

- 1939 *The Megiddo Ivories*. Chicago: The University of Chicago Press

Lucas, A., and J.R. Harris

- 1989 *Ancient Egyptian Materials and Industries*. 4th edn. London: Histories and Mysteries of Man.

Lupack, S.

- (1999) Palaces, sanctuaries, and workshops: the role of the religious sector in Mycenaean economics, in *Rethinking Mycenaean Palaces: New Interpretations of an Old Idea (UCLA Institute of Archaeology Monograph 41)*. Los Angeles: University of California, Institute of Archaeology. 25-36. (in press)

MacGillivray, J.A., L.H. Sackett, J.M. Driessen, A. Farnoux, and D. Smyth

- 1991 Excavations at Palaikastro, 1990, *BSA* 86: 121-47.

Mallowan, M.E.L.

- 1966 *Nimrud and its Remains*. New York: Dodd, Mead and Company.

Mann, M.

- 1986 *The Sources of Social Power I: A History of Power from the Beginning to A.D. 1760*. Cambridge: Cambridge University Press.

Manning, S.W.

- 1994 The emergence of divergence: development and decline on Bronze Age Crete and the Cyclades, in *Development and Decline in the Mediterranean Bronze Age*. C. Mathers and S. Stoddart, eds. Sheffield: J.R. Collis Publications. 221-70.
- 1998 From process to people: longue durée to history, in *The Aegean and the Orient in the Second Millennium: Proceedings of the 50th Anniversary Symposium (Aegaeum 18)*. E.H. Cline and D. Harris-Cline, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 311-25.

Marazzi, M., S. Tusa, and L. Vagnetti, eds.

- 1986 *Traffici micenei nel Mediterraneo: problemi storici e documentazione archeologica*. Taranto: Istituto per la storia e l'archeologia della Magna Grecia.

Marinatos, N.

- 1988 The fresco from Room 31 at Mycenae: problems of method and interpretation, in *Problems in Greek Prehistory*. E.B. French and K.A. Wardle, eds. Bristol: Bristol Classical Press. 245-48.

Marinatos, S.

- 1968a A libation ceremony, *AAA* 1: 60.
- 1968b Mycenaean culture within the frame of Mediterranean anthropology and archaeology, in *Atti e memorie del primo congresso internazionale di micenologia (Incunabula Graeca 25)*. C. Gallavotti, ed. Rome: Edizioni dell'Ateneo. 259-76.

Marinatos, S., and M. Hirmer

- 1960 *Crete and Mycenae*. New York: H.N. Abrams.

Martín de la Cruz, J.

- 1990 Die erste mykenische Keramik von der iberischen Halbinsel, *PZ* 65: 49-52.

Mastrokostas, E.

- 1963 Anaskaphi tou Teichous Dymaion, *Praktika*: 93-98.

Mee, C.B.

- 1998 Anatolia and the Aegean in the Late Bronze Age, in *The Aegean and the Orient in the Second Millennium: Proceedings of the 50th Anniversary Symposium (Aegaeum 18)*. E.H. Cline and D. Harris-Cline, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 137-48.

Mee, C.B., and W.G. Cavanagh

- 1990 The spatial distribution of Mycenaean tombs, *BSA* 85: 225-44.

Mee, C.B., and H. Forbes, eds.

- 1997 *A Rough and Rocky Place: The Landscape and Settlement History of the Methana Peninsula, Greece*. Liverpool: Liverpool University Press.

Melena, J.L.

- 1983 Olive oil and other sorts of oil in the Mycenaean tablets, *Minos* 18: 89-123.

Melena, J.L., and J.-P. Olivier

- 1991 *Tithemy: The Tablets and Nodules in Linear B from Tiryns, Thebes and Mycenae* (Minos Suppl. 12). Salamanca: Ediciones Universidad de Salamanca.

Mellink, M.J., ed.

- 1986 *Troy and the Trojan War*. Bryn Mawr: Bryn Mawr College.

Merkelbach, R., and M.L. West

- 1967 *Fragmenta Hesiodica*. Oxford: Clarendon Press.

Meskill, L.

- 1998 Intimate archaeologies: the case of Kha and Merit, *World Archaeology* 29: 363-79.

Miller, D.

- 1987 *Material Culture and Mass Consumption*. Oxford: Basil Blackwell.

- 1995 *Acknowledging Consumption: A Review of New Studies*. London: Routledge.

Miller, D., and C. Tilley, eds.

- 1984 *Ideology, Power and Prehistory*. Cambridge: Cambridge University Press.

Miller, S.G.

- 1975 Excavations at Nemea 1973-74, *Hesperia* 44: 143-72.

Mol, D., J. de Vos, G.D. van den Bergh, and P.Y. Sondaar

- 1996 The taxonomy and ancestry of the fossil elephants of Crete: faunal turnover and a comparison with proboscidean faunas of Indonesian islands, in *Pleistocene and Holocene Fauna of Crete and its First Settlers* (Monographs in World Archaeology 28). D.S. Reese, ed. Madison: Prehistory Press. 81-98.

Mommsen, H., T. Beier, U. Diehl, and C. Podzuweit

- 1992 Provenance determination of the Mycenaean sherds in Tell el Amarna by NAA, *Journal of Archaeological Science* 19: 295-302.

Mommsen, H., U. Diehl, D. Lambrecht, F.J. Pantenburg, and R. Weber

- 1990 Eine mykenische Scherbe in Spanien: Bestätigung ihrer Herkunft mit der Neutronenaktivierungsanalyse (NAA), *PZ* 65: 59-61.

Moore, A.D.

- 1988 The large monochrome terracotta figures from Mycenae: the problem of interpretation, in *Problems in Greek Prehistory*. E.B. French and K.A. Wardle, eds. Bristol: Bristol Classical Press. 219-28.

Moorey, P.R.S.

- 1994 *Ancient Mesopotamian Materials and Industries: The Archaeological Evidence*. Oxford: Clarendon Press.

Moran, W.L.

- 1992 *The Amarna Letters*. Baltimore: Johns Hopkins University Press.

Morgan, C., and T. Whitelaw

- 1991 Pots and politics: ceramic evidence for the rise of the Argive state, *AJA* 95: 79-108.

Morgan, L.

- 1988 *The Miniature Wall Paintings of Thera: A Study in Aegean Culture and Iconography*. Cambridge: Cambridge University Press.
- 1995 Minoan painting and Egypt: the case of Tell el-Dab'a, in *Egypt, the Aegean and the Levant: Interconnections in the Second Millennium*. W.V. Davies and L. Schofield, eds. London: British Museum. 29-53.

Morpurgo Davies, A.

- 1979 Terminology of power and terminology of work in Greek and Linear B, in *Colloquium Mycenaeanum*. E. Risch and H. Mühlestein, eds. Geneva: Université de Neuchâtel. 87-108.

Morris, C.E.

- 1990 In pursuit of the white tusked boar: aspects of hunting in Mycenaean society, in *Celebrations of Death and Divinity in the Bronze Age Argolid* (Skrifter utgivna av Svenska institutet i Athen, 4° 40). R. Hägg and G.C. Nordquist, eds. Stockholm: Svenska institutet i Athen. 149-156.

Morris, H.J.

- 1986 *An Economic Model of the Late Mycenaean Kingdom of Pylos*. Ph.D. Dissertation, University of Minnesota.

Morris, I.

- 1986 The use and abuse of Homer, *Classical Antiquity* 5: 81-138.
- 1988 Tomb cult and the "Greek Renaissance": the past in the present in the eighth century B.C., *Antiquity* 62: 750-61.
- 1992 *Death-Ritual and Social Structure in Classical Antiquity*. Cambridge: Cambridge University Press.

Morris, S.P.

- 1989 A tale of two cities: the miniature frescoes from Thera and the origins of Greek poetry, *AJA* 93: 511-35
- 1992 *Daidalos and the Origins of Greek Art*. Princeton: Princeton University Press.

Moser von Filseck, K.

- 1986 Der Alabasterfries von Tiryns, *AA* 1-32.

Mountjoy, P.A.

- 1990 Regional Mycenaean pottery, *BSA* 85: 245-70.

Müller, K.

- 1909 Alt-Pylos II: Die Funde aus den Kuppelgräbern von Kakovatos, *AthMitt* 34: 269-328.
- 1930 *Tiryns: Die Ergebnisse der Ausgrabungen des Instituts III: Die Architektur der Burg und des Palastes*. Augsburg: B. Filser.

- 1975 Das Kuppelgrab von Tiryns, in *Tiryns: Forschungen und Berichte VIII*. Mainz: Philipp von Zabern. 1-6.
- Müller, S.
- 1989 Les tumuli helladiques: où? quand? comment? *BCH* 113: 1-42.
- Musgrave, J.H.
- 1992 The anatomy of a Minoan masterpiece, in *Ivory in Greece and the Eastern Mediterranean from the Bronze Age to the Hellenistic Period* (British Museum Occasional Paper 85). J.L. Fitton, ed. London: British Museum. 17-23.
- Mylonas, G.E.
- 1963 Anaskaphe Mykenon, *Praktika*: 99-106.
- 1966a The east wing of the palace of Mycenae, *Hesperia* 35: 419-26.
- 1966b *Mycenae and the Mycenaean Age*. Princeton: Princeton University Press.
- 1968 Anaskaphe Mykenon, *Praktika*: 5-11.
- 1973 *O Taphikos Kyklos B ton Mykenon* (Vivliotheke tes en Athenais Archaialogikes Etaireias 73) Athens: E en Athenais Archaialogikes Etaireia.
- 1981 The Cult Centre of Mycenae, *Proceedings of the British Academy* 67: 307-20.
- Negbi, O.
- 1994 The 'Libyan Landscape' from Thera: a review of Aegean enterprises overseas in the Late Minoan IA period, *JMA* 7: 73-112.
- Newton, R.G., and S. Davison
- 1989 *Conservation of Glass*. London: Butterworths.
- Nicholson, P.T.
- 1993 *Egyptian Faience and Glass* (Shire Egyptology Series 18). Aylesbury: Shire.
- 1995 Glassmaking and glassworking at Amarna: some new work, *Journal of Glass Studies* 37: 11-19.
- Niemeier, W.-D.
- 1998 The Mycenaean in Western Anatolia and the problem of the origins of the Sea Peoples, in *Mediterranean Peoples in Transition: Thirteenth to Early Tenth Centuries BCE*. S. Gitin, A. Mazar, and E. Stern, eds. Jerusalem: Israel Exploration Society. 17-65.
- Niemeier, W.-D., and B. Niemeier
- 1998 Minoan frescoes in the eastern Mediterranean, in *The Aegean and the Orient in the Second Millennium: Proceedings of the 50th Anniversary Symposium (Aegaeum 18)*. E.H. Cline and D. Harris-Cline, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 69-98.
- Nightingale, G.
- 1998 Glass and the Mycenaean palaces of the Mediterranean, in *The Prehistory and History of Glassmaking Technology* (Ceramic and Civilization 8). P. McCray, ed. Westerville, OH: American Ceramic Society. 205-26.

Nilsson, M.P.

- 1932 *The Mycenaean Origin of Greek Mythology*. Berkeley: University of California Press.
- 1950 *The Minoan-Mycenaean Religion and its Survival in Greek Religion*. 2nd edn. Lund: C.W.K. Gleerup.

Nordquist, G.C.

- 1987 *A Middle Helladic Village: Asine in the Argolid (Boreas 16)*. Uppsala: Universitet Uppsala.

O'Shea, J.M.

- 1981 Social configurations and the archaeological study of mortuary practices: a case study, in *The Archaeology of Death*. R. Chapman, I. Kinnes, and K. Randsborg, eds. Cambridge: Cambridge University Press. 39-52.
- 1984 *Mortuary Variability: An Archaeological Investigation*. Orlando: Academic Press.

Olivier, J.-P.

- 1984 Administrations at Knossos and Pylos: what differences? in *Pylos Comes Alive: Industry and Administration in a Mycenaean Palace*. C.W. Shelmerdine and T.G. Palaima, eds. New York: Archaeological Institute of America. 19-29.
- 1988 Tyrrhian Graffiti: Ausgrabungen in Tiryns 1982/83, *AA*: 253-68.

Oppenheim, A.L.

- 1973 Toward a history of glass in the Ancient Near East, *Journal of the American Oriental Society* 93: 259-66.

Oppenheim, A.L., R.H. Brill, D. Barag, and A. von Saldern

- 1970 *Glass and Glassmaking in Ancient Mesopotamia* (Corning Museum of Glass Monographs 3). Corning, NY: Corning Museum of Glass Press.

Ostenso, A.

- 1998 The small finds, in *Excavations on the Acropolis of Midea I: The Excavations on the Lower Terraces 1985-1991* (Skrifter utgivna av Svenska institutet i Athen, 4^o 49). G. Walberg, primary author. Stockholm: Svenska institutet i Athen. 150-67.

Page, D.L.

- 1959 *History and the Homeric Iliad*. Berkeley: University of California Press.

Païdoussis, M., and C.N. Sbarounis

- 1975 A study of cremated bones from the cemetery of Perati, *OpAth* 11: 129-60.

Palaima, T.G.

- 1987 Mycenaean seals and sealings in the economic and administrative contexts, in *Tractata Mycenaea*. P.H. Ilievski and L. Crepajac, eds. Skopje: Macedonian Academy of Sciences and Arts. 249-66.
- 1990 Origin, development, transition and transformation: the purposes and techniques of administration in Minoan and Mycenaean society, in *Aegean Seals, Sealings and Administration (Aegaeum 5)*. T.G. Palaima, ed. Liège: Université de Liège. 83-104.

- 1991 Maritime matters in the Linear B tablets, in *Thalassa: L'Égée préhistorique et la mer (Aegaeum 7)*. R. Laffineur and L. Basch, eds. Liège: Université de Liège. 273-310.
- 1995 The nature of the Mycenaean *wanax*: non-Indo-European origins and priestly functions, in *The Role of the Ruler in the Prehistoric Aegean (Aegaeum 11)*. P. Rehak, ed. Liège: Université de Liège; Austin: University of Texas at Austin. 119-39.
- 1997 Potter and fuller: the royal craftsmen, in *TEXNH: Craftsmen, Craftswomen and Craftsmanship in the Aegean Bronze Age (Aegaeum 16)*. R. Laffineur and P.P. Betancourt, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 407-12.
- Palmer, L.R.
- 1957 A Mycenaean tomb inventory. *Minos* 5: 58-92.
- 1960 Tomb or reception room? *BICS* 7: 57-63.
- 1963 *The Interpretation of Mycenaean Greek Texts*. Oxford: Clarendon Press.
- Palmer, L.R., and J. Boardman
- 1963 *On the Knossos Tablets*. Oxford: Clarendon Press.
- Palmer, R.
- 1989 Subsistence rations at Pylos and Knossos, *Minos* 24: 89-124.
- Papathanassopoulos, G., Y. Vichos, and Y.G. Lolos
- 1991 Dokos: anaskaphike periodos 1991, *Enalia* 3: 26-28.
- Parker Pearson, M.
- 1982 Mortuary practices, society and ideology: an ethnoarchaeological study, in *Symbolic and Structural Archaeology*. I. Hodder, ed. Cambridge: Cambridge University Press. 99-113.
- Parkinson, W.A.
- (1999) Chipping away at a Mycenaean economy: obsidian exchange, Linear B, and palatial control in Late Bronze Age Messenia, in *Rethinking Mycenaean Palaces: New Interpretations of an Old Idea* (UCLA Institute of Archaeology Monograph 41). Los Angeles: University of California, Institute of Archaeology. 75-88. (in press)
- Patrianakou-Iliaki, A.
- 1975 *Mycenaean Ivories: A Study of Three Classes of Objects: Combs, Pyxides and Mirror Handles*. Ph.D. Dissertation, Bryn Mawr College.
- 1996 An ivory mirror handle from Asine, in *Atti e memorie del secondo congresso internazionale de micenologia* (Incunabula Graeca 98). E. De Miro, L. Godart, and A. Sacconi, eds. Rome: Gruppo editoriale internazionale. 1273-80.
- Pelon, O.
- 1985 L'acrobate de Malia et l'art de l'époque protopalatiale en Crète, in *L'iconographie minoenne (BCH Suppl. 11)*. P. Darcque and J.-C. Poursat, eds. Athens: École française d'Athènes. 35-40.

- 1990 **Les tombes à tholos d'Argolide: architecture et rituel funéraire**, in *Celebrations of Death and Divinity in the Bronze Age Argolid* (Skrifter utgivna av Svenska institutet i Athen, 4° 40). R. Hägg and G.C. Nordquist, eds. Stockholm: Svenska institutet i Athen. 107-12.
- Peltenburg, E.J.**
- 1974 **Glazed vases**, in *Excavations at Kition I: The Tombs*. V. Karageorghis, ed. Nicosia: Department of Antiquities, Cyprus.
- 1991 **Greeting gifts and luxury faience: a context for Orientalising trends in Late Mycenaean Greece**. in *Bronze Age Trade in the Mediterranean (SIMA 90)*. N.H. Gale, ed. Jonsered: P. Åströms Förlag. 162-79.
- Pendlebury, J.D.S.**
- 1930 *Aegyptiaca: A Catalogue of Egyptian Objects in the Aegean Area*. Cambridge: Cambridge University Press.
- Penniman, T.K.**
- 1952 *Pictures of Ivory and Other Animal Teeth, Bone and Antler* (Pitt Rivers Occasional Paper on Technology 5). Oxford: Oxford University Press.
- Penttinen, A.**
- 1996 **Excavations on the acropolis of Asine in 1990**, *OpAth* 21: 149-67.
- Persson, A.W.**
- 1931 *The Royal Tombs at Dendra Near Midea* (Acta Regiae Societatis Humaniorum Litterarum Lundensis 15). Lund: C.W.K. Gleerup.
- 1942 *New Tombs at Dendra Near Midea* (Acta Regiae Societatis Humaniorum Litterarum Lundensis 34). Lund: C.W.K. Gleerup.
- Petrie, W.M.F.**
- 1925 *Buttons and Design Scarabs, Illustrated by the Egyptian Collection in University College, London* (British School of Archaeology in Egypt Publications 38). London: British School of Archaeology in Egypt.
- Pierce Blegen, E.**
- 1937 **Jewellery and ornaments**, in *Prosymna: The Helladic Settlement Preceding the Argive Heraeum*. C.W. Blegen, primary author. Cambridge: Cambridge University Press. 264-327.
- Pini, I.**
- 1981 **Spätbronzezeitliche ägäische Glassiegel**, *Jahrbuch des Römisch-Germanisches Zentralmuseums Mainz* 28: 48-81.
- 1983 **Mitanni-Rollsigel des Common Style aus Griechenland**, *PZ* 58: 114-26.
- Platon, N.**
- 1971 *Zakros: The Discovery of a Lost Palace of Ancient Crete*. New York: Scribner.
- Polanyi, K.**
- 1957 **The economy as instituted process**, in *Trade and Market in the Early Empires: Economies in History and Theory*. K. Polanyi, C. Arensburg, and H.W. Pearson, eds. New York: Free Press. 243-70.

- 1960 On the comparative treatment of economic institutions in antiquity, with illustrations from Athens, Mycenae and Alalakh, in *City Invincible: A Symposium on Urbanization and Cultural Development in the Ancient Near East*. C.H. Kraeling and R.M. Adams, eds. Chicago: University of Chicago. 329-50.
- 1971 *Primitive, Archaic, and Modern Economics*. Boston: Beacon Press.
- Porada, E.
- 1981 The cylinder seals found at Thebes in Boeotia, *Archiv für Orientforschung* 28: 1-70.
- Poursat, J.-C.
- 1977a *Les Ivoires Mycéniens* (Bibliothèque des écoles françaises d'Athènes et de Rome 230). Athens: École française d'Athènes.
- 1977b *Catalogue des Ivoires Mycéniens du Musée National d'Athènes* (Bibliothèque des écoles françaises d'Athènes et de Rome 230 bis). Athens: École française d'Athènes.
- 1992 Ivory relief carving in Minoan Crete (2000-1450 BC), in *Ivory in Greece and the Eastern Mediterranean from the Bronze Age to the Hellenistic Period* (British Museum Occasional Paper 85). J.L. Fitton, ed. London: British Museum. 3-5.
- Precourt, W.E.
- 1984 Mortuary practices and economic transaction: a hologeistic study, *Research in Economic Anthropology* 6: 161-70.
- Priese, K.-H., ed.
- 1991 *Ägyptisches Museum, Staatlich Museen zu Berlin*. Berlin: Philipp von Zabern.
- Protonariou-Deilaki, E.
- 1969 Tholotos taphos Kazarmas, *AAA* 2: 3-6.
- 1990a Burial customs and funerary rites in the prehistoric Argolid, in *Celebrations of Death and Divinity in the Bronze Age Argolid* (Skrifter utgivna av Svenska institutet i Athen, 4° 40). R. Hägg and G.C. Nordquist, eds. Stockholm: Svenska institutet i Athen. 69-83.
- 1990b The tumuli of Mycenae and Dendra, in *Celebrations of Death and Divinity in the Bronze Age Argolid* (Skrifter utgivna av Svenska institutet i Athen, 4° 40). R. Hägg and G.C. Nordquist, eds. Stockholm: Svenska institutet i Athen. 85-102.
- Pulak, C.
- 1988 The Bronze Age shipwreck at Ulu Burun, Turkey: 1985 Campaign, *AJA* 92: 1-37.
- 1997 The Uluburun shipwreck, in *Res Maritimae: Cyprus and the Eastern Mediterranean from Prehistory to Late Antiquity* (Cyprus American Archaeological Research Institute Monograph Series 1). S. Swiny, R.L. Hohlfelder, and H.W. Swiny, eds. Atlanta: Scholars Press. 233-62.
- Rathje, W.L.
- 1973 Models for mobile Maya: a variety of constraints, in *The Explanation of Culture Change: Models in Prehistory*. A.C. Renfrew, ed. London: Duckworth. 731-60.

Reese, D.S.

- 1985a Hippopotamus and elephant teeth from Kition, in *Excavations at Kition V Part 2*. V. Karageorghis, ed. Nicosia: 391-409.
- 1985b The Kition ostrich eggshells, in *Excavations at Kition V Part 2*. V. Karageorghis, ed. Nicosia: 371-382.
- 1998 A hippopotamus tooth from Hala Sultan Tekke, Cyprus, in *Hala Sultan Tekke 10: The Wells (SIMA XLV: 10)*. P. Åström, ed. Jonsered: P. Åströms Förlag. 140-46.

Reese, D.S., and O.H. Krzyszkowska

- 1996 Elephant ivory at Minoan Kommos, in *Kommos: An Excavation on the South Coast of Crete I: The Kommos Region and the Houses of the Minoan Town Part 2*. J.W. Shaw and M.C. Shaw, eds. Princeton: Princeton University Press. 324-326.

Rehak, P.

- 1984 New observations on the Mycenaean 'Warrior Goddess', *AA*: 535-45
- 1992 Tradition and innovation in the fresco from Room 31 in the "Cult Center" at Mycenae, in *EIKON: Aegean Bronze Age Iconography: Shaping a Methodology (Aegaeum 8)*. Liège: Université de Liège; Austin: University of Texas at Austin. 39-62.
- 1995 The "genius" in Late Bronze age glyptic: the later evolution of an Aegean cult figure, in *Sceaux minoens et mycéniens (CMS Beiheft 5:)*. W. Müller, ed. Berlin: Gebr. Mann Verlag. 215-31.

Rehak, P., and J.G. Younger

- 1998 International styles in ivory carving in the Bronze Age, in *The Aegean and the Orient in the Second Millennium: Proceedings of the 50th Anniversary Symposium (Aegaeum 18)*. E.H. Cline and D. Harris-Cline, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 229-54.

Reiger, A., and W. Böser

- 1990 Das neue Kartenwerk von Tiryns, in *Tiryns: Forschungen und Berichte XI*. Mainz: Philipp von Zabern. 165-71.

Renfrew, A.C.

- 1972 *The Emergence of Civilisation: The Cyclades and the Aegean in the Third Millennium B.C.* London: Methuen.
- 1975 Trade as action at a distance: questions of integration and communication, in *Ancient Civilization and Trade*. J.A. Sabloff and C.C. Lamberg-Karlovsky, eds. Albuquerque: University of New Mexico Press. 3-59.
- 1977a Alternative models for exchange and spatial distribution, in *Exchange Systems in Prehistory*. T.K. Earle and J.E. Ericson, eds. New York: Academic Press. 71-90.
- 1977b Retrospect and prospect, in *Mycenaean Geography*. J. Bintliff, ed. Cambridge: British Association for Mycenaean Studies. 108-19.
- 1993 Trade beyond the material, in *Trade and Exchange in Prehistoric Europe*. C. Scarre and F. Healey, eds. Oxford: Oxbow Books. 5-16.

Renfrew, A.C., and J.F. Cherry, eds.

1986 *Peer Polity Interaction and Socio-Political Change*. Cambridge: Cambridge University Press.

Rice, P.M.

1987 *Pottery Analysis: A Sourcebook*. Chicago: University of Chicago Press.

Richards, J.E.

1997 Ancient Egyptian mortuary practice and the study of socioeconomic differentiation, in *Anthropology and Egyptology: A Developing Dialogue* (Monographs in Mediterranean Archaeology 8). J. Lustig, ed. Sheffield: Sheffield Academic Press. 33-42.

Richter, G.M.A.

1953 *Metropolitan Museum of Art: Handbook of the Greek Collection*. Cambridge: Harvard University Press.

Ritchie, C.I.A.

1969 *Ivory Carving*. London: Barker.

Robb, J.E.

1999 Secret agents: culture, economy, and social reproduction, in *Material Symbols: Culture and Economy in Prehistory* (Center for Archaeological Investigations Occasional Paper 26). J.E. Robb, ed. Carbondale: Southern Illinois University, Center for Archaeological Investigations. 3-15.

Rodenwaldt, G.

1912 *Tiryns: Die Ergebnisse der Ausgrabungen des Instituts II: Die Fresken des Palastes*. Athens: Eleutheroudakis und Barth.

Roes, A.

1937 Une pierre gravée Syro-Hittite trouvée à Argos, *BCH* 61: 1-4.

Rudolph, W.

1973 Die Nekropole am Prophitis Elias bei Tiryns, in *Tiryns: Forschungen und Berichte* VI. Mainz: Philipp von Zabern. 23-126.

Runciman, W.G.

1982 Origins of states: the case of Archaic Greece, *Comparative Studies in Society and History* 24: 351-77.

Rutter, J.B.

1979 Stone vases and Minyan ware: a facet of Minoan influence on Middle Helladic Laconia, *AJA* 83: 464-69.

1992 Cultural novelties in the post-palatial Aegean world: indices of vitality or decline? in *The Crisis years: The 12th century B.C.: From Beyond the Danube to the Tigris*. W.A. Ward and M.S. Joukowsky, eds. Dubuque, IO: Kendall/Hunt Pub. 61-78.

Rutter, J.B., and C.W. Zerner

1984 Early Hellado-Minoan Contacts, in *Minoan Thalassocracy: Myth and Reality* (Skrifter utgivna av Svenska institutet i Athen, 4° 32). R. Hägg and N. Marinatos, eds. Stockholm: Svenska institutet i Athen. 75-83.

Sacconi, A.

1960 Il mito nel mondo miceneo, *Parola del Passato* 15: 161-87.

1974 *Corpus delle Iscrizioni in Lineare B di Micene* (Incunabula Graeca 58). Rome: Edizioni dell'Ateneo.

Säflund, G.

1965 *Excavations at Berbati, 1936-1937*. Stockholm: Almqvist and Wiksell.

Saitta, D.J.

1999 Prestige, agency, and change in middle-range societies, in *Material Symbols: Culture and Economy in Prehistory* (Center for Archaeological Investigations Occasional Paper 26). J.E. Robb, ed. Carbondale: Southern Illinois University, Center for Archaeological Investigations. 135-49.

Sakellarakis, J.A.

1971 Elephantinon ploion ek Mykenon, *ArchEph*: 188-233.

1976 Mycenaean stone vases, *SMEA* 17: 173-87.

1979 *To Elephantodonto kai e Katergasia tou sta Mykenaika Chronia* (Vivliotheke tes en Athenais Archaialogikes Etaireias 93). Athens: E en Athenais Archaialogikes Etaireia.

1990 The fashioning of ostrich-egg rhyta in the Creto-Mycenaean Aegean, in *Thera and the Aegean World III*. D.A. Hardy and A.C. Renfrew, eds. London: Thera Foundation. 285-308.

1996 Mycenaean Footstools, in *The Furniture of Western Asia: Ancient and Traditional*. G. Herrmann, ed. Mainz: Philipp von Zabern. 105-10.

Sakellarakis, J.A., and E. Sapouna-Sakellarakis

1997 *Archanes: Minoan Crete in a New Light* 1-2. Athens: Ammos.

Salje, B.

1990 *Der "Common Style" der Mitanni-Glyptik und die Glyptik der Levante und Zyperns in der späten Bronzezeit* (Baghdader Forschungen 11). Mainz: Philipp von Zabern.

Sambin, L.

1989 Génie minoen et génie égyptien: un emprunt raisonné, *BCH* 113: 77-96.

Samson, J.

1972 *Amarna, City of Akhenaten and Nefertiti: Key Pieces from the Petrie Collection*. London: Aris and Phillips.

Sandars, N.K.

1978 *The Sea Peoples: Warriors of the Ancient Mediterranean, 1250-1150 B.C.* London: Thames and Hudson.

Sangren, P.S.

1995 "Power" against Ideology: a critique of Foucaultian usage, *Cultural Anthropology* 10: 3-40.

Sansone, D.

1988 The survival of the Bronze-Age demon, *Illinois Classical Studies* 13: 1-17.

Santillo Frizell, B.

1984 The tholos tomb at Berbati, *OpAth* 15: 30.

1998 Giants or geniuses? Monumental building at Mycenae, *Current Swedish Archaeology* 6: 167-84.

Sarianidi, V.I.

1971 The lapis lazuli route in the ancient East, *Archaeology* 24: 12-15.

Säve-Söderbergh, T.

1953 *On Egyptian Representations of Hippopotamus Hunting as a Religious Motive* (Horae Soederblomianae 3). Uppsala: Soci t  Nathan S derblom.

Sayre, E.V., and R.W. Smith

1974 Analytical studies of ancient Egyptian glass, in *Recent Advances in Science and Technology of Materials*. New York: Plenum Press. 47-71.

Sbonias, K.

1995 Fr hkretische Siegel: Ans tze f r eine Interpretation der sozial-politischen Entwicklung auf Kreta w hrend der Fr hbronzezeit (BAR International Series 620). Oxford: Tempvs Reparatum.

Schaeffer, C.F.-A.

1929 Les fouilles de Minet-el-Beidha et de Ras Shamra, *Syria* 10: 285-310.

Schliemann, H.

1880 *Mycenae: A Narrative of Researches and Discoveries at Mycenae and Tiryns*. New York: Blom.

1885 *Tiryns: The Prehistoric Palace of the Kings of Tiryns*. New York: C. Scribner's Sons.

Schneider, J.

1977 Was there a precapitalist world-system?, *Peasant Studies* 6: 20-29.

Schortman, E.M., and P.A. Urban

1987 Modeling interregional interaction in prehistory, *Advances in Archaeological Method and Theory* 11: 37-95.

1992 The political value of imports, in *Resources, Power, and Interregional Interaction*. E.M. Schortman and P.A. Urban, eds. New York: Plenum Press 153-56.

Schuler, F.

1959 Ancient glassmaking techniques: the moulding process, *Archaeology* 12: 47-52.

Service, E.

1971 *Primitive Social Organization: An Evolutionary Perspective*. 2nd edn. Random House.

Shaw, M.

1995 Bull leaping frescoes at Knossos and their influence on the Tell el-Dab'a murals, * gypten und Levante* 5: 91-120.

Shear, I.M.

1987 *The Panagia Houses at Mycenae*. Philadelphia: University of Pennsylvania.

Shelmerdine, C.W.

1985 *The Perfume Industry of Mycenaean Pylos (SIMA Pocket-book 34)*. Göteborg: P. Åströms Förlag.

1996 From Mycenae to Homer: the next generation, in *Atti e memorie del secondo congresso internazionale de micenologia (Incunabula Graeca 98)*. E. De Miro, L. Godart, and A. Sacconi, eds. Rome: Gruppo editoriale internazionale. 467-92.

1997 Workshops and record keeping in the Mycenaean world, in *TEXNH: Craftsmen, Craftswomen and Craftsmanship in the Aegean Bronze Age (Aegaeum 16)*. R. Laffineur and P.P. Betancourt, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 387-96.

Shelton, K.S.

1993 Tsountas' chamber tombs at Mycenae, *ArchEph* 132: 187-210.

1996 *The Late Helladic Pottery from Prosymna (SIMA Pocket-book 138)*. Jonsered: P. Åströms Förlag.

Sherratt, A., and S.E. Sherratt

1991 From luxuries to commodities: the nature of Mediterranean Bronze Age trading systems, in *Bronze Age Trade in the Mediterranean (SIMA 90)*. N.H. Gale, ed. Jonsered: P. Åströms Förlag. 351-86.

1998 Small worlds: interaction and identity in the ancient Mediterranean, in *The Aegean and the Orient in the Second Millennium: Proceedings of the 50th Anniversary Symposium (Aegaeum 18)*. E.H. Cline and D. Harris-Cline, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 329-42.

Sherratt, S.E.

1982 Patterns of contact: manufacture and distribution of Mycenaean pottery: 1400-1100, in *Interaction and Acculturation in the Mediterranean (Publications of the Henri Frankfort Foundation 6-7)*. J.G.P. Best and N.M.W. de Vries, eds. Amsterdam: Gruner. 179-95.

1998 "Sea Peoples" and the economic structure of the late second millennium in the eastern Mediterranean, in *Mediterranean Peoples in Transition: Thirteenth to Early Tenth Centuries BCE*. S. Gitin, A. Mazar, and E. Stern, eds. Jerusalem: Israel Exploration Society. 292-313.

1999 *E pur si muove: pots markets and values in the second millennium Mediterranean, in The Complex Past of Pottery: Production, Circulation and Consumption of Mycenaean and Greek Pottery (Sixteenth to Early Fifth Centuries BC)*. J.P. Crielaard, V. Stissi, and G.-J. van Wijngaarden, eds. Amsterdam: J.C. Gieben. 163-211.

Simmons, A.H.

1989 Preliminary report on the 1988 test excavations at Akrotiri-Aetokremnos, *Report of the Department of Antiquities, Cyprus*: 1-5.

Sjöberg, B.L.

- 1997 Two possible Late Helladic kilns at Asine: a research note, in *Trade and Production in Premonetary Greece: Production and the Craftsman* (SIMA Pocket-book 143). C. Gillis, C. Risberg, and B.L. Sjöberg, eds. Jonsered: P. Åströms Förlag. 89-100.

Smith, M.E.

- 1989 The informal economy, in *Economic Anthropology*. S. Plattner, ed. Stanford: Stanford University Press. 292-317.

Smith, T.R.

- 1987 *Mycenaean Trade and Interaction in the West Central Mediterranean, 1600-1000 B.C.* (BAR International Series 371). Oxford: British Archaeological Reports.

Snodgrass, A.M.

- 1971 *The Dark Age of Greece: An Archaeological Survey of the Eleventh to the Eighth Centuries*. Edinburgh: University Press.

Sourvinou-Inwood, C.

- 1987 Myth as history: the previous owners of the Delphic oracle, in *Interpretations of Greek Mythology*. J. Bremmer, ed. London: Croom Helm. 215-41.

Spann, A.

- 1996 *Hippopotamus creutzburgi*: the case of the Cretan hippopotamus, in *Pleistocene and Holocene Fauna of Crete and its First Settlers* (Monographs in World Archaeology 28). D.S. Reese, ed. Madison: Prehistory Press. 99-110.

Stager, L.E.

- 1995 The impact of the Sea Peoples in Canaan (1185-1150 BCE) in *The Archaeology of Society in the Holy Land*. T.E. Levy, ed. New York: Facts on File. 332-48.

Staïs, V.

- 1926 *Mycenaean Collection of the National Museum*. 2nd edn. Athens: Hestia.

Stamatakis, P.

- 1878 Peri tou papa to Iraion Katharisthentos Taphou, *AthMitt* 3: 271-86.

Starr, C.G.

- 1961 *The Origins of Greek Civilization*. New York: Knopf.

Steffen, B.

- 1884 *Karten von Mykenai*. Berlin: D. Reimer.

Stein, G.J.

- 1999 Rethinking world-systems: power, distance, and diasporas in the dynamics of interregional interaction, in *World-Systems Theory in Practice*. P.N. Kardulias, ed. Lanham, MD: Rowman and Littlefield. 153-77.

Stern, E.M.

- 1997 Glass and rock crystal: a multifaceted relationship, *Journal of Roman Archaeology* 10: 192-206.

- 1998 Interaction between glassworkers and ceramicists, in *The Prehistory and History of Glassmaking Technology* (Ceramics and Civilization 8). P. McCray, ed. Westerville, OH: American Ceramic Society. 183-204.
- Stern, E.M., and B. Schlick-Nolte
- 1994 *Early Glass of the Ancient World: 1600 B.C. - A.D. 50*. Ostfildern, Germany: Verlag G. Hatje.
- Stevenson Smith, W.
- 1965 *Interconnections in the Ancient Near East: A Study of the Relationships between the Arts of Egypt, the Aegean, and Western Asia*. New Haven: Yale University Press.
- Stiros, S., and R.E. Jones, eds.
- 1996 *Archaeoseismology* (Fitch Laboratory Occasional Paper 7). Athens: Institute of Geology and Mineral Exploration; British School at Athens.
- Stos-Gale, Z.A., and C.F. Macdonald
- 1991 Sources of metals and trade in the Bronze Age Aegean, in *Bronze Age Trade in the Mediterranean* (SIMA 90). N.H. Gale, ed. Jonsered: P. Åströms Förlag. 249-88.
- Stubbings, F.H.
- 1973 The rise of Mycenaean civilization, in *The Cambridge Ancient History II Part 1*. 3rd edn. I.E.S. Edwards, C.J. Gadd, N.G.L. Hammond, and E. Sollberger, eds. Cambridge: Cambridge University Press. 627-58.
- 1975 Recession of Mycenaean civilization, in *The Cambridge Ancient History II Part 2*. 3rd edn. I.E.S. Edwards, C.J. Gadd, N.G.L. Hammond, and E. Sollberger, eds. Cambridge: Cambridge University Press. 350-58.
- Symeonides, N.K.
- 1988 Nanoi elephantes sten neso Telo (Dodekanesa), *Anthropologika Analekta* 49: 77-83.
- Symeonoglou, S.
- 1973 *Kadmeia I: Mycenaean Finds from Thebes, Greece* (SIMA 35). Göteborg: P. Åströms Förlag.
- 1985 *The Topography of Thebes*. Princeton: Princeton University Press.
- Tamvaki, A.
- 1974 The seals and sealings from the Citadel House Area: a study in Mycenaean glyptic and iconography, *BSA* 69: 259-93.
- Taylor, W.D.
- 1958 *Mycenaean Pottery in Italy, and Adjacent Areas*. Cambridge: Cambridge University Press.
- 1969 Mycenae, 1968, *Antiquity* 43: 91-97.
- 1970 New light on Mycenaean religion, *Antiquity* 44: 270-80.
- 1981 *Well Built Mycenae I: The Excavations*. Warminster: Aris and Phillips.

Theocharis, D.R.

1961 Anaskafai en Iolko, *Praktika*: 45-54.

Thomas, C.G.

1970 A Mycenaean hegemony? a reconsideration, *JHS* 90: 184-92.

1976 The nature of Mycenaean kingship, *SMEA* 7: 93-116.

1993 *Myth Becomes History: Pre-Classical Greece* (Publications of the Association of Ancient Historians 4). Claremont, CA: Regina Books.

1995 The components of political identity in Mycenaean Greece, in *POLITEIA: Society and State in the Aegean Bronze Age (Aegaeum 12)*. R. Laffineur and W.-D. Niemeier, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 349-54.

Tomlinson, R.A.

1972 *Argos and the Argolid: From the End of the Bronze Age to the Roman Occupation*. Ithaca: Cornell University Press.

Touchais, G.

1996 Argos à l'âge du Bronze: état présent des recherches, in *Atti e memorie del secondo congresso internazionale di micenologia* (Incunabula Graeca 98). E. De Miro, L. Godart, and A. Sacconi, eds. Rome: Gruppo editoriale internazionale. 1319-26.

Tournavitou, I.

1988 Towards an identification of a workshop space, in *Problems in Greek Prehistory*. E.B. French and K.A. Wardle, eds. Bristol: Bristol Classical Press. 447-67.

1995 *The "Ivory Houses" at Mycenae*. London: British School at Athens.

1997a Arts and crafts: contrasts and comparisons between Neo-palatial and "Mycenaean" Crete: the case of ivory, in *La Crète mycénienne (BCH Suppl. 30)*. J. Driessen and A. Farnoux, eds. Athens: École française d'Athènes. 445-54.

1997b Jewellers' moulds and jewellers' workshops in Mycenaean Greece: an archaeological utopia, in *Trade and Production in Premonetary Greece: Production and the Craftsman (SIMA Pocket-book 143)*. C. Gillis, C. Risberg, and B.L. Sjöberg, eds. Jonsered: P. Åströms Förlag. 209-56.

Trail, D.A.

1995 *Schliemann of Troy: Treasure and Deceit*. London: John Murray.

Tsountas, C.

1886 Anaskaphai Mykenon tou 1886, *Praktika*: 59-79.

1887 Archaïotites ek Mykenon, *ArchEph*: 155-72.

1888 Anaskaphai taphon ek Mykenon, *ArchEph*: 119-80.

1891 Ek Mykenon, *ArchEph*: 1-44.

1897 Metrai kai ziphe ek Mykenon, *ArchEph*: 99-127.

Tsountas, C., and J.I. Manatt

1897 *The Mycenaean Age: A Study of the Monuments and Culture of Pre-Homeric Greece*. Boston: Houghton Mifflin.

Uchitel, A.

- 1988 **The archives of Mycenaean Greece and the ancient Near East, in *Society and Economy in the Eastern Mediterranean c. 1500-1000 B.C.* (Orientalia Lovaniensia Analecta 23). M. Heltzer and E. Lipinski, eds. Leuven: Uitgeverij Peeters. 19-30.**

Ucko, P.J.

- 1969 **Ethnography and archaeological interpretation of funerary remains, *World Archaeology* 1: 262-80.**

Ünal, A., A. Keterkin, and I. Ediz

- 1991 **The Hittite sword from Boğazköy-Hattusa, found 1991, and its Akkadian inscription, *Müze* 4: 46-52.**

van Binsbergen, W.M.J.

- 1997 ***Black Athena: Ten Years After.* Hoofddorp: Dutch Archaeological and Historical Society.**

Van de Mierop, M.

- 1992 ***Society and Enterprise in Old Babylonian Ur* (Berliner Beiträge zum Vorderen Orient 12). Berlin: D. Reimer Verlag.**

van Leuven, J.

- 1996 **The Nilssonian origin of Mycenaean mythology, in *Atti e memorie del secondo congresso internazionale de micenologia* (Incunabula Graeca 98). E. De Miro, L. Godart, and A. Sacconi, eds. Rome: Gruppo editoriale internazionale. 923-38.**

van Wijngaarden, G.-J.

- 1999a **An archaeological approach to the concept of value: Mycenaean pottery at Ugarit (Syria), *Archaeological Dialogues* 6: 2-46.**
- 1999b **Production, circulation and consumption of Mycenaean pottery (sixteenth to twelfth centuries BC), in *The Complex Past of Pottery: Production, Circulation and Consumption of Mycenaean and Greek Pottery (Sixteenth to Early Fifth Centuries BC)*. J.P. Crielaard, V. Stissi, and G.-J. van Wijngaarden, eds. Amsterdam: J.C. Gieben. 21-47.**

Vandiver, P.

- 1983 **Glass technology at the mid-second millennium BC Hurrian site of Nuzi, *Journal of Glass Studies* 25: 239-47.**

Ventris, M., and J. Chadwick

- 1973 ***Documents in Mycenaean Greek.* 2nd edn. Cambridge: Cambridge University Press.**

Vermeule, E.T.

- 1960 **The fall of the Mycenaean Empire, *Archaeology* 13: 66-75.**
- 1964 ***Greece in the Bronze Age.* Chicago: University of Chicago Press.**
- 1965 **Painted Mycenaean larnakes, *JHS* 85: 123-48.**
- 1967 **A Mycenaean jeweler's mold, *Bulletin of the Museum of Fine Arts, Boston* 65: 19-31.**

- 1975 *The Art of the Shaft Graves of Mycenae* (Lectures in Memory of Louise Taft Semple 3rd Series, No. 1). Cincinnati: University of Cincinnati.
- 1987 Baby Aigisthos and the Bronze Age, *PCPS* 213: 122-52.
- Vichos, Y., and Y. Lolos
- 1997 The Cypro-Mycenaean wreck at Point Iria in the Argolid Gulf: first thoughts on the origin and the nature of the vessel, in *Res Maritima: Cyprus and the Eastern Mediterranean from Prehistory to Late Antiquity* (Cyprus American Archaeological Research Institute Monograph Series 1). S. Swiny, R.L. Hohlfelder, and H.W. Swiny, eds. Atlanta: Scholars Press. 321-37.
- Vollgraff, W.
- 1904 Fouilles d'Argos: La nécropole mycénienne de la Deiras, *BCH* 28: 364-99.
- von Bissing, W.
- 1912 *Der Anteil der ägyptischen Kunst am Kunstleben der Völker*. Munich: Akademie der Wissenschaften.
- Voutsaki, S.
- 1995a Social and political processes in the Mycenaean Argolid: the evidence from the mortuary practices, in *POLITEIA: Society and State in the Aegean Bronze Age (Aegaeum 12)*. R. Laffineur and W.-D. Niemeier, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 55-66.
- 1995b Value and exchange in pre-monetary societies: anthropological debates and Aegean archaeology, in *International Workshop on Trade and Production in Premonetary Greece: Aspects of Trade (SIMA Pocket-book 134)*. C. Gillis, C. Risberg, and B.L. Sjöberg, eds. Jonsered: P. Åströms Förlag. 7-17.
- 1998 Mortuary evidence, symbolic meanings and social change: a comparison between Messenia and the Argolid in the Mycenaean period, in *Cemetery and Society in the Aegean Bronze Age* (Sheffield Studies in Aegean Archaeology 1). K. Branigan, ed. Sheffield: Sheffield Academic Press. 41-58.
- Wace, A.J.B.
- 1919-21 Mycenae: the rhyton well, *BSA* 24: 200-209.
- 1921-23 Excavations at Mycenae, *BSA* 25: 1-504.
- 1932 *Chamber Tombs at Mycenae* (Archaeologia 82). Oxford: Society of Antiquaries.
- 1949 *Mycenae: An Archaeological History and Guide*. Princeton: Princeton University Press.
- 1950 Excavations at Mycenae, 1939, *BSA* 45: 203-28.
- 1953 Mycenae 1939-1952: preliminary report of the excavations of 1952, *BSA* 48: 3-18.
- 1954 Mycenae 1939-1953: preliminary report of the excavations of 1953, *BSA* 49: 231-43.
- 1955 Mycenae, 1939-1954: preliminary report on the excavations of 1954, *BSA* 50: 175-89.
- 1956 Mycenae, 1939-1955: preliminary report on the excavations of 1955, *BSA* 51: 103-22.

- 1957 Mycenae, 1939-1956, 1957: prehistoric cemetery: a deposit of L.H. III pottery, *BSA* 52: 207-19.
- Wace, A.J.B., and E. Porada
- 1957 Mycenae, 1939-1956, 1957: a faience cylinder, *BSA* 52: 197-204.
- Wace, H.
- 1939 *The Ivory Trio* (Ivories from Mycenae I). [Athens?]: no publisher.
- Walberg, G.
- 1976 *Kamares: A Study of the Character of Palatial Middle Minoan Pottery*. Uppsala: Universitet Uppsala.
- 1992 Excavations on the lower terraces at Midea, *OpAth* 19: 23-39.
- 1996 Excavations on the lower terraces at Midea in the Argolid, in *Atti e memorie del secondo congresso internazionale de micenologia* (Incunabula Graeca 98). E. De Miro, L. Godart, and A. Sacconi, eds. Rome: Gruppo editoriale internazionale. 1327-32.
- 1998 *Excavations on the Acropolis of Midea I: The Excavations on the Lower Terraces 1985-1991* (Skrifter utgivna av Svenska institutet i Athen, 4° 49). Stockholm: Svenska institutet i Athen.
- Waldstein, C.
- 1902 *The Argive Heraeum*. Boston: Houghton Mifflin.
- Wallerstein, I.
- 1974 *The Modern World-System: Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century* I. New York: Academic Press.
- Ward, W.A., and M.S. Joukowsky, eds.
- 1992 *The Crisis years: The 12th century B.C.: From Beyond the Danube to the Tigris*. Dubuque, IO: Kendall/Hunt Pub.
- Wardle, K.A.
- 1973 A group of Late Helladic IIIB2 pottery from within the citadel at Mycenae, *BSA* 68: 297-348.
- Warren, P.M.
- 1969 *Minoan Stone Vases*. Cambridge: Cambridge University Press.
- 1987 The Genesis of the Minoan Palace, in *The Function of the Minoan Palaces* (Skrifter utgivna av Svenska institutet i Athen, 4° 35). R. Hägg, and N. Marinatos, ed. Stockholm: 47-56.
- 1997 The lapidary art - Minoan adaptations of Egyptian stone vessels, in *TEXNH: Craftsmen, Craftswomen and Craftsmanship in the Aegean Bronze Age* (Aegaeum 16). R. Laffineur and P.P. Betancourt, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 209-23.

Wathelet, P.

- 1992 Argos et l'Argolide dans l'épopée, spécialement dans *le catalogue des vaisseaux*, in *Polydipsion Argos: Argos de la fin des palais mycéniens à la constitution de l'État classique* (BCH Suppl. 22). M. Piérart, ed. Athens: École française d'Athènes. 99-118.

Watrous, L.V.

- 1992 *Kommos: An Excavation on the South Coast of Crete III: The Late Bronze Age Pottery*. Princeton: Princeton University Press.
- 1998 Egypt and Crete in the early Middle Bronze Age: a case of trade and cultural diffusion, in *The Aegean and the Orient in the Second Millennium: Proceedings of the 50th Anniversary Symposium (Aegaeum 18)*. E.H. Cline and D. Harris-Cline, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 19-28.

Wattenmaker, P.

- 1998 *Household and State in Upper Mesopotamia: Specialized Economy and the Social Uses of Goods in an Early Complex Society*. Washington, DC: Smithsonian Institution Press.

Weinberg, G.D.

- 1998 The glass factory and manufacturing processes, in *Excavations at Jalame: Site of a Glass Factory in Late Roman Palestine*. G.D. Weinberg, ed. Columbia: University of Missouri Press. 24-37

Weinberg, G.D., and M.C. McClellan

- 1992 *Glass Vessels in Ancient Greece: Their History Illustrated from the Collection of the National Archaeological Museum, Athens* (Demosieumata tou Archaialogikou Deltiou 47). Athens: Archaeological Receipts Fund.

Weingarten, J.

- 1991 *The Transformation of Egyptian Taweret into the Minoan Genius: A Study of Cultural Transmission in the Middle Bronze Age* (SIMA 88). Göteborg: P. Åströms Förlag.

Weinstein, J.M., E.H. Cline, K.A. Kitchen, and D. O'Connor

- 1998 The world abroad, in *Amenhotep III: Perspectives on His Reign*. D. O'Connor and E.H. Cline, eds. Ann Arbor: University of Michigan Press. 223-70.

Wells, B.

- 1990 Death at Dendra: on mortuary practices in a Mycenaean community, in *Celebrations of Death and Divinity in the Bronze Age Argolid* (Skrifter utgivna av Svenska institutet i Athen, 4° 40). R. Hägg and G.C. Nordquist, eds. Stockholm: Svenska institutet i Athen. 125-40.

Wells, B., ed. in collaboration with C.N. Runnels

- 1996 *The Berbati-Limnes Archaeological Survey 1988-1990* (Skrifter utgivna av Svenska institutet i Athen, 4° 44). Stockholm: Svenska institutet i Athen.

Wells, P.S.

- 1980 *Culture Contact and Culture Change: Early Iron Age Central Europe and the Mediterranean World*. Cambridge: Cambridge University Press.

West, M.L.

1988 The rise of the Greek epic, *JHS* 108: 151-72.

Whitley, J.

1988 Early states and hero cults: a re-appraisal, *JHS* 108: 173-82.

Wide, S., and Kjellberg, L.

1895 Ausgrabungen auf Kalaureia, *AthMitt* 20: 267-326.

Wiener, J.S.

1983 *Glass Finds and Glass-Making in Mycenaean Greece: An Archaeological Study*. Ph.D. Dissertation, Universität Tübingen.

Wiener, M.H.

1991 The nature and control of Minoan foreign trade, in *Bronze Age Trade in the Mediterranean (SIMA 90)*. N.H. Gale, ed. Jonsered: P. Åströms Förlag. 325-50.

Wiessner, P.

1989 Style and changing relations between the individual and society, in *The Meanings of Things: Material Culture and Symbolic Expression*. I. Hodder, ed. London: Unwin Hyman. 56-63.

Wilkie, N.C.

1992 The MME Tholos Tomb, in *Excavations at Nichoria in Southwest Greece II: The Bronze Age Occupation*. W.A. McDonald and N.C. Wilkie, eds. Minneapolis: University of Minnesota Press. 231-344.

Wilkinson, D.

1991 Cores, peripheries, and civilizations, in *Core/Periphery Relations in Precapitalist Worlds*. C. Chase-Dunn and T.D. Hall, eds. Boulder: Westview Press. 113-66.

Wiseman, J.

1978 *The Land of the Ancient Corinthians (SIMA 50)*. Göteborg: P. Åströms Förlag.

Wobst, H.M.

1977 Stylistic behavior and information exchange, in *For the Director: Research Essays in Honor of James B. Griffin (Anthropological Papers 61)*. C.E. Cleland, ed. Ann Arbor: Museum of Anthropology, University of Michigan. 317-42.

Woodard, R.D.

1997 *Greek Writing from Knossos to Homer: A Linguistic Interpretation of the Origin of the Greek Alphabet and the Continuity of Ancient Greek Literacy*. Oxford: Oxford University Press.

Woolley, L.

1953 *A Forgotten Kingdom: Being a Record of the Results Obtained from the Excavation of Two Mounds, Atchana and Al Mina, in the Turkish Hatay*. Baltimore: Penguin Books.

Wright, J.C.

- 1984 Umpiring the Mycenaean Empire, in *Temple University Aegean Symposium IX*. P.P. Betancourt, ed. Philadelphia: Department of Art History, Temple University. 58-70.
- 1987 Death and power at Mycenae: changing symbols in mortuary practice, in *Thanatos: Les coutumes funéraires en Égée à l'âge du Bronze (Aegaeum 1)*. R. Laffineur, ed. Liège: Université de Liège; Austin: University of Texas at Austin. 171-84.
- 1990 An Early Mycenaean hamlet on Tsoungiza at ancient Nemea, in *L'habitat égéen préhistorique (BCH Suppl. 19)*. P. Darcque and R. Treuil, eds. Athens: École française d'Athènes. 347-57.
- 1994 The spatial configuration of belief: the archaeology of Mycenaean religion, in *Placing the Gods: Sanctuaries and Sacred Space in Ancient Greece*. S.E. Alcock and R. Osborne, eds. Oxford: Clarendon Press. 37-78.
- 1995a The archaeological correlates of religion: case studies in the Aegean, in *POLITEIA: Society and State in the Aegean Bronze Age (Aegaeum 12)*. R. Laffineur and W.-D. Niemeier, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 341-48.
- 1995b From chief to king in Mycenaean society, in *The Role of the Ruler in the Prehistoric Aegean (Aegaeum 11)*. P. Rehak, ed. Liège: Université de Liège; Austin: University of Texas at Austin. 63-80.

Wright, J.C., J.F. Cherry, J.L. Davis, E. Mantzourani, S.B. Sutton and R.F. Sutton, Jr.

- 1990 The Nemea Valley Archaeological Project: a preliminary report, *Hesperia* 59: 579-659.

Xenaki-Sakellariou, A.

- 1985 *Oi Thalamotoi Taphoi ton Mykenon: Anaskaphes Chr. Tsounta, 1887-1898*. Paris: Diffusion de Boccard.

Yalouris, N.

- 1968 An unreported use for some Mycenaean glass paste beads, *Journal of Glass Studies* 10: 9-16.

Yoffee, N.

- 1981 *Explaining Trade in Ancient Western Asia* (Monographs on the Ancient Near East 2.2). Malibu: Undena Publications.
- 1995 Political economy in early Mesopotamian states, *Annual Review of Anthropology* 24: 281-311.

Younger, J.G.

- 1992 Representations of Minoan-Mycenaean jewelry, in *EIKON: Aegean Bronze Age Iconography: Shaping a Methodology (Aegaeum 8)*. R. Laffineur and J.L. Crowley, eds. Liège: Université de Liège; Austin: University of Texas at Austin. 257-93.

Zaccagnini, C.

- 1983 Patterns of mobility among ancient Near Eastern craftsmen, *Journal of Near Eastern Studies* 42: 245-64.

Zangger, E.

1991 Prehistoric coastal environments in Greece: the vanished landscapes of Dimini Bay and Lake Lerna, *Journal of Field Archaeology* 18: 1-15.

1994a The island of Asine: a palaeogeographical reconstruction, *OpAth* 20: 221-39.

1994b Landscape changes around Tiryns during the Bronze Age, *AJA* 98: 189-212.

Zeitlin, F.I.

1990 Thebes: theater of self and society in Athenian drama, in *Nothing to Do with Dionysos? Athenian Drama in its Social Context*. J.J. Winkler and F.I. Zeitlin, eds. Princeton: Princeton University Press. 130-67.

Zerner, C., P. Zerner, and J. Winder, eds.

1993 *Wace and Blegen: Pottery as Evidence for Trade in the Aegean Bronze Age, 1939-1989*. Amsterdam: J.C. Gieben.