THE CAMBRIDGE COMPANION TO

THE AEGEAN BRONZE AGE

Edited by

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The University of Texas at Austin

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This book is a comprehensive, up-to-date survey of the Aegean Bronze Age, from its beginnings to the period following the collapse of the Mycenaean palace system. In essays by leading authorities commissioned especially for this volume, it covers the history and the material culture of Crete, Greece, and the Aegean Islands from ca. 3000 to 1100 BCE, as well as topics such as trade, religions, and economic administration. Intended as a reliable, readable introduction for university students, it will also be useful to scholars in related fields within and outside classics. The contents of this book are arranged chronologically and geographically, facilitating comparison between the different cultures. Within this framework, the cultures of the Aegean Bronze Age are assessed thematically and combine both material culture and social history.

Cynthia W. Shelmerdine is the Robert M. Armstrong Centennial Professor of Classics at The University of Texas, Austin. A scholar of Aegean Bronze Age archaeology and Mycenaean Greek language, history, and society, she has worked in the field with the University of Minnesota Messenia Expedition, the Pylos Regional Archaeological Project, and currently the Iklaina Archaeological Project. She is the author of many publications on Mycenaean culture.

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This book is dedicated to

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FIGURES

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10: Early Mycenaean Greece

James Clinton Wright

Chronological Phases

When the interregional culture of the Early Bronze Age in the Aegean collapsed, a period on the mainland of Greece followed that archaeologists term Middle Helladic (MH; Ch. 1, p. 3; Fig. 1.1). During much of this time the countryside was largely depopulated and there is very little evidence of trade and craft production. Because of the paucity of settlements discovered through excavation, only a few places have good stratified deposits: Lerna (level V), Kolonna on the island of Aegina (City VII–X), and Pefkakia in Thessaly.[1]

Scholars during much of the twentieth century CE argued for a break between the Early and Middle Bronze Ages, theorizing in particular the arrival of Indo-European speaking peoples at this time. Research in the past thirty years, though, shows that despite destruction and abandonment of some settlements after EH II and EH III, the transition between these periods shows many signs of continuity (Ch. 2, pp. 36–7). Furthermore, the succeeding transition between EH III and MH I seems to have been less abrupt than previously thought, with evidence of continuity in some of the ceramics and lithic traditions at Lerna (Ch. 2, p. 41). Likewise, it was thought through the 1970s that the shaft graves at Mycenae announced a dramatic cultural change beginning in LH I (with some scholars even arguing that Indo-European Greek speakers arrived at this time), but this view no longer prevails. We often cannot distinguish MH III from LH I, and frequently refer to assemblages as MH III/LH I, because the society that was developing into what we commonly refer to as Mycenaean civilization had deep roots in the indigenous Middle Helladic cultural forms (Ch. 1, p. 3). Yet the problem is also one of trying to force uniformity over a phenomenon

that in fact is heterogeneous, taking different directions in different areas. LH I is, however, characterized by its close association with the Neopalatial period in Crete and with such places as Akrotiri on Thera (Chs. 6; 7; 8, pp. 189–93). It is a closely defined period in terms of ceramic production and marks the rise of a distinctive and increasingly uniform Mycenaean pottery style that drew much inspiration from the shapes and decoration of Minoan pottery. During the following period (LH II), Mycenaean pottery began to influence that made on Crete. This relationship continued throughout LH III, when Mycenaeans were among those dominating at Knossos, because administrators there began to keep their records in Mycenaean Greek. During LH IIIA the Early Mycenaean period ended on the mainland, and the palaces emerged (Chs. 11, pp. 261–2; 12, p. 290).

Stylistic Subdivisions of Pottery

When speaking about sociopolitical developments in terms of the phases of our relative chronology, we should not forget that these phases are of different lengths of time in absolute terms (Ch. 1, pp. 3–7). Dickinson has subdivided the MH pottery into characteristic stylistic phases: "Early Minyan," "Decorated Minyan," and "Late Phase."[2] They contain a variety of fabrics, shapes, and decorative conventions that are conventionally referred to as Gray Minyan, Matt-Painted, Lustrous Painted, Red Slipped, and Polychrome, although recent analytical research on fabrics has much refined the classification.[3] These phases are useful typologically, even though they are not congruent with the chronological phases MH I, II, and III.

Minyan and matt-painted wares are diagnostic; that is, their presence identifies a closed archaeological stratum or context as MH in date. Minyan ware (named by the excavator Heinrich Schliemann after the legendary king Minyas of Orchomenos) is wheel-made, highly burnished, and incompletely fired. It ranges in color from jet black to gray and also appears in tan and red. Characteristic shapes are two-handled kantharoi and pedestaled goblets, often with incised or grooved rings around the pedestal (Fig. 10.1). Matt-painted wares are recognized by the flat dark (dark red, brown, and black) paints applied to vessels, either in thick bands or in geometric and later in curvilinear motifs (Pl. 10.1). Matt-painted decoration appears on bowls, kantharoi, jugs, and large storage jars, and the fabric varies from a greenish tan to yellow-brown and light brown. Matt-painted vessels are often large

and made of medium-coarse- to coarse-tempered clay. There are many other varieties of MH pottery too, and during MH III a proliferation of fine wares appears, often influenced by Minoan and Cycladic pottery. Minoan, Cycladic, and Aeginetan pottery are notable imports in MH contexts, especially in the later phases.

THE STATE OF AFFAIRS AT THE BEGINNING OF THE MIDDLE BRONZE AGE

There are several theories of the collapse of the cultures of the Early Bronze Age (Chs. 2, pp. 36, 38–41; 3, pp. 68–70; 4, pp. 97–8; 5, p. 109). It was first explained as the result of invasion by Indo-European-speaking peoples who were thought to have come from the north out of the Balkans or across the Aegean from Anatolia (modern Turkey).[4] More recently the collapse has been attributed to competition, especially for raw metals, between two loosely linked networks of interaction and exchange – one in central and southern Greece, the Aegean islands, and western Anatolia, the other along the Adriatic coast and through western Greece.[5] In this case violence resulting from conflict over the distribution of needed resources may be a cause. Another theory that must now be entertained involves palaeoclimatic evidence, notably from the study of ice cores on Mt. Kilimanjaro and dust deposits in Oman. Findings indicate a 300-year-long drought in sub-Saharan and Saharan Africa that affected the Mediterranean and the Near East.[6] Obviously this climatic variable could be a major contributor to the Early Bronze Age collapse, and indeed could have caused either of the scenarios suggested above.

Future research will no doubt settle this issue, but we know absolutely that the effect of the collapse on the mainland of Greece was destruction of settlements during EH II and EH III, and in some cases their subsequent abandonment. Many sites were not resettled, if at all, until the end of MH or the beginning of LH. Both coastal and inland areas were depopulated, but inland regions seem to have been affected most strongly. The abandonment is readily observable in graphs of the distribution of sites, both from general information gathered over the years and from systematic, intensive archaeological surface surveys of delimited study areas. Figure 10.2 shows these distributions for the Peloponnese. Many of the settlements that persisted throughout this period are situated on or near the coast. Only toward the end of MH

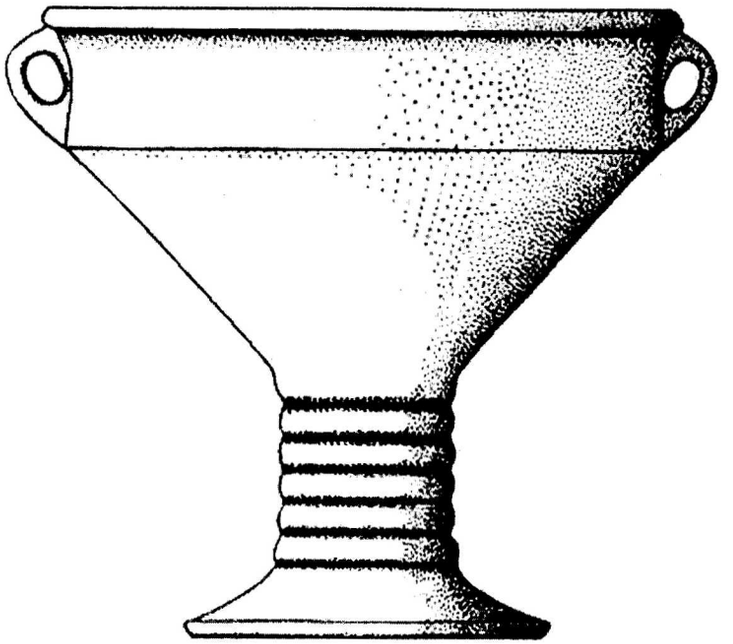

FIGURE 10.1. Gray Minyan pedestalled goblet, Mature Minyan. After O. T. P. K. Dickinson, *The Origins of Mycenaean Civilisation*. SIMA 49. Göteborg: Paul Åströms Förlag 1977, fig. 2. Courtesy of the author.

did settlements begin again to spread inland, a phenomenon referred to as the "colonization of the interior."[7]

THE MIDDLE BRONZE AGE: SETTLEMENT ORGANIZATION AND ARCHITECTURE

The material assemblage of this period is primarily a phenomenon of southern and central Greece. The islands of Aegina and Kythera are strongly involved also, and MH pottery appears at excavated settlements in the Cyclades. Some MH settlement is recognized in western central Greece as well as in Thessaly, but there is not good evidence of MH material in northern Greece.

Both intensive survey and the less systematic identification of settlements, cemeteries, and other sites of human activity in southern and

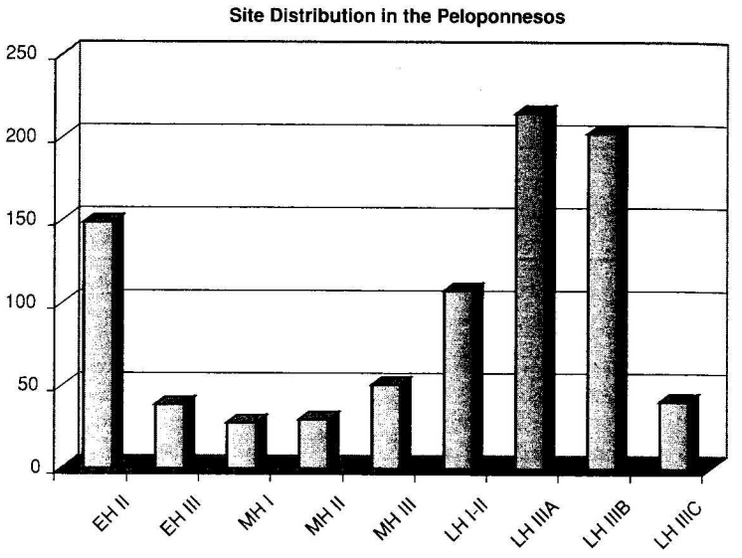

FIGURE 10.2. Graph of site distributions for NE Peloponnesos, Lakonia, and SW Messenia. Graph by the author.

central Greece provide an increasingly detailed picture of settlement and land use. During the Early Bronze Age, settlements were widely distributed over the landscape, whereas during the MH, there was a tendency toward nucleation. It appears, for example, that this is the time when the focus of settlement was on and around the citadels that later became the centers of Mycenaean civilization. Although some settlements grew in MH II, only beginning in MH III were existing settlements expanded considerably and new ones founded; these flourished throughout the Mycenaean period.

Excavation of a number of these sites in all regions gives us a fairly reliable picture of settlement form and organization. Because the exposure of architecture and of plans of settlements is limited and complicated by problems of stratigraphy, we have to rely often on the evidence from burials. For this reason it is difficult to calculate settlement size. Clearly the early settlements were small – no more than 1–2 **hectares** (a hectare is 10,000 sq. m or about 2.5 acres) at a maximum. By the end of MH, when the major settlements can be identified, they were considerably larger, but still did not approach the size of contemporary urban centers in Crete, not to mention the Near East.[8] Many of these settlements, either hamlets or villages, are

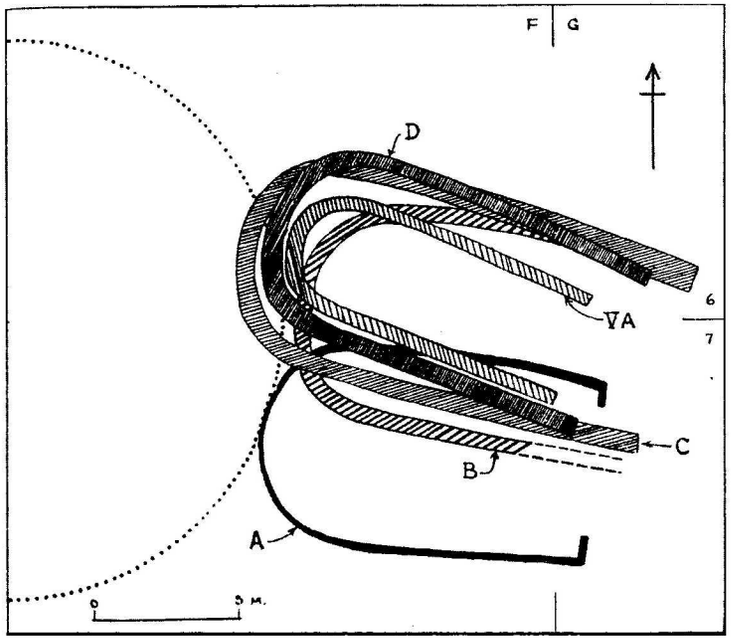

FIGURE 10.3. House continuity at Lerna, periods IV–VA. After J. L. Caskey, "Houses of the Fourth Settlement at Lerna." In *Charistērion eis Anastasion K. Orlandon*. Vivliothēkē tēs en Athēnais Archaiologikēs Hetaireias 54. Athens: Hē en Athēnais Archaiologikē Hetaireia 1966, III, 150 fig. 5. Courtesy of the author.

located near good agricultural land and sources of water. They are usually situated on eminences that are naturally defensible or command controlling views of the landscape.

The few excavated settlements, such as Lerna, Asine, and Eutresis, show loosely arranged groups of buildings. In general the primary principle of organization seems to be residential location. The pattern is seen very clearly at Lerna and Asine, where continuity in the placement of houses (Fig. 10.3) throughout much of the MH permits us to argue that these were long-term family residences.[9] Another indication is that burials of the earlier phases of MH are scattered throughout the settlement area and were primarily pits dug into the earth or cists lined and covered with stones. In the later phases (MH II and especially MH III), the arrangement of buildings was more organized, as at Asine and Malthi (Fig. 10.4), and individual burials were grouped in plots or in cemeteries, sometimes within but more often outside the

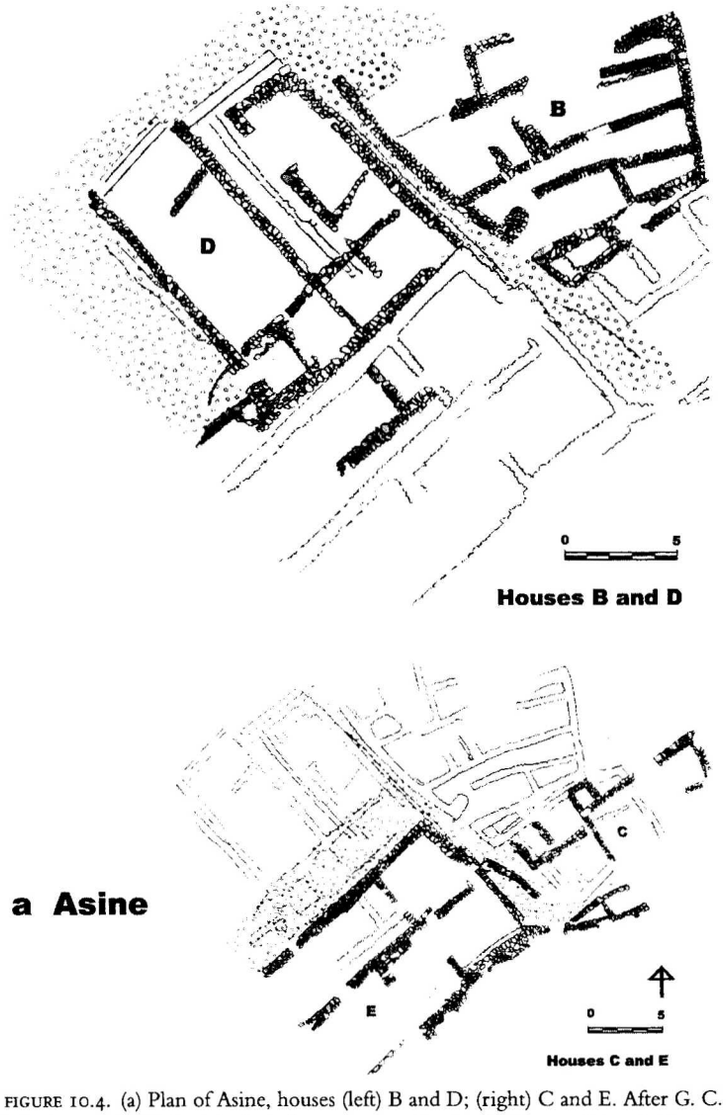

FIGURE 10.4. (a) Plan of Asine, houses (left) B and D; (right) C and E. After G. C. Nordquist, *A Middle Helladic Village: Asine in the Argolid*. Boreas. Uppsala Studies in Mediterranean and Near Eastern Civilizations 16. Uppsala and Stockholm: Academia Upsaliensis 1987, figs. 14, 15. Courtesy of the author. (b) Plan of Malthi settlement, levels III–IV. After N. Valmin, *The Swedish Messenia Expedition*. Lund: C. W. K. Gleerup 1938, plan III.

b Malthi

FIGURE 10.4. (*continued*)

settlement (Argos, Prosymna, Ancient Corinth, Asine, Peristeria, Marathon, Aphidna).

By MH III and continuing into LH I, new settlements were founded and old ones enlarged. The new were usually located in the interior regions of the mainland, on slopes of the coastal plains and upland valleys, and they took the form of hamlets or villages. As existing settlements grew they consolidated their form, and defensive outworks were built (as at Kiapha Thiti, Argos, Malthi, Pylos, and Peristeria, and possibly at Brauron and Mycenae). The interior of the settlement was sometimes divided into different areas both functionally and socially (Malthi, Argos, Tiryns), and this may mean that economic, political, social, and religious activities were beginning to be centralized. Well-defined cemeteries are frequent, and formal reserved burial areas within cemeteries are common (Pylos, Peristeria, Koukounaries, Samikon, Lefkas, Thebes, Aphidna, Marathon-Vrana, Eleusis, Ancient Corinth, Mycenae, Dendra, Asine, Argos, and Lerna).[10]

Whereas buildings of the early half of MH tended to be **apsidal** (with one rounded end) axially oriented structures set without any consistent pattern of orientation or relation to each other, during the latter half of the period rectangular axial buildings predominated. The rectangular buildings could stand alone (Eutresis, Korakou), be grouped into pairs, or be elaborated into multiroom structures (Asine, Malthi, Tsoungiza). This development probably reflects residence for more than merely a nuclear family and is also likely a consequence of the growth of communities and their need for more organization. These houses had front porches, sometimes with a post (Pl. 10.2). They were divided into two or three rooms and the central room frequently had a central hearth, sometimes with a post next to it. Doorways were centered. The

walls were normally of mud brick with rubble socles. Thatched roofs were laid over rafters with a gable at the front and, in the case of apsidal plans, with a hipped roof at the rear. Bins, ovens, and benches are also sometime found outfitting the rooms. Rear rooms may have been used for storage, and some were entered from outside.

SOCIAL STRUCTURE, ECONOMY, POPULATION, AND SETTLEMENT

The combined evidence of residential architecture and burials at many settlements, but especially at Lerna, Argos, and Asine, permits a qualified assessment of social structure at the beginning of MH.[11] Presumably the houses were for individual families, probably no more than five or seven persons. Sometimes families buried their dead within the settlement, sometimes under house floors and in abandoned residential areas, but over the course of time they preferred cemeteries outside the residential areas. The stability of patterns of residence (as at Lerna IV–V and Asine, Fig. 10.3, 4a) allows us to postulate permanent settlement over generations. Equally, the establishment by MH II of **tumuli** (burial mounds) and cemeteries with burials mixing age grades and sexes indicates the importance of family and lineage. As settlements began to be consolidated during MH III and LH I, burial practice became highly differentiated: first in the widespread appearance of cemeteries; second in the frequency of burial in well-demarcated mounds (often within cemeteries); third with the appearance of built, large cist graves, deep shaft graves in the Argolid (sometimes with stone markers carved with scenes in relief), and in Messenia **tholos** tombs (tombs with round domed chambers; Ch. 11, pp. 259, 268; 13, pp. 328–9; Fig. 13.2). This progression, though not uniform throughout the mainland, reflects a social structure evolving toward a lineage-based society. By LH II, the stratification of the society was complete. The ruling elite constructed monumental tholos tombs and large and highly elaborate chamber tombs (Fig. 13.1); by LH IIIA, the rest of the populace buried their dead in simpler chamber tombs and occasionally in the old traditions of burial mounds and pit and cist graves.

Grave goods also demonstrate increasing social differentiation as elites included luxury and prestige items in their burials. From at least the beginning of the Middle Bronze Age, we find two varieties of prestige objects: those acquired abroad (primarily Minoan and Cycladic pottery) and curated items of the hunt (notably boars' tusks). Occasional

metal items appear both in domestic contexts and especially in tombs. This phenomenon is recognized throughout the mainland: Lerna, Asine, and Argos in the northeast Peloponnese; Kolonna on the island of Aegina; Thebes and Dramesi in Boeotia; Ayia Irini on the island of Keos; Thorikos, Marathon, and Aphidna in Attica; Kephalovryson Ayios Ioannes, Papoulia, and Voïdokoilia in Messenia, and on the island of Lefkas.[12] Notably, only a few of these places developed into primary centers in the Mycenaean period.

Beginning in MH II, and increasingly during MH III–LH I in progressively richer burials, boars' tusks, obsidian points, and imported pottery sometimes occur with other prestige objects of gold, silver, and bronze that come in the form of jewelry, weapons, and vessels. This display of wealth and power demonstrated the emergence of leaders within these fledging communities. At first these leaders were probably heads of factions within their communities who competed with each other for prestige, influence, and power. They are often referred to as Big Men – a term coined by anthropologists to describe tribal leaders of communities in Melanesia.[13] In MH Greece their reputation may have been based on their prowess as hunters and as leaders of hunting parties, or on their ability to participate in maritime trading or perhaps raiding expeditions. Coastal communities such as Lerna provided access to such maritime ventures. Renown for hunting may be more associated with inland settlements, although these activities are by no means exclusive.

The economy of MH settlements was based on subsistence crop production and animal husbandry. It is significant that the successful settlements are those with access to the well-watered and naturally drained soils of Neogene marl that characterize the slopes bordering the plain of Argos, the uplands of Laconia, the drainages of southwestern Messenia and the Corinthia, and the inland basins and plains of Attica and Boeotia.[14] Cultivation of grains, olives, and grapes took place, but nothing indicates large-scale production of surplus. The architectural remains at most settlements do not reveal special areas or buildings for storage other than back or side rooms in houses. There are few examples of large storage jars for most of the MH period. Nor is there much evidence for the transformation of foodstuffs other than ovens and hearths within houses (as at Eutresis, Buildings G, Q, R).[15] At Argos, it has been suggested that the rooms built along the inside of the fortification wall were for storage, and finds collected from similar rooms at Malthi support this interpretation.[16] Examination of animal bones from Tiryns, Lerna, and Tsoungiza indicates the raising of sheep and goats, pigs, cattle, and some equids and the hunting of red deer

and boar.[17] Domestic herds, whatever their size, would have been put out to graze and forage in the surrounding landscape. Before being slaughtered, the animals probably would have been corralled near the settlement and fed surplus from gardens to fatten them.

The enduring settlements, especially the coastal ones, were early involved in pottery production, as well as the acquisition of pottery and other items from the Cyclades and Crete. No doubt other craft activities and opportunities for exchange also existed, for which there is little evidence. There was always a means of exchange between the Aegean archipelago and the mainland, and it is equally likely that goods were trafficked back and forth from offshore and coastal entrepôts. The islands of Keos, Aegina, and Kythera were major players in this activity, in contact respectively with central Greece, the northeastern Peloponnese and Saronic Gulf, and the southern Peloponnese. Coastal settlements such as Pefkakia on the coast in Thessaly, Lefkandi on Euboea, Lerna in the Argolid, and Pavlopetri and Ayios Stephanos in Laconia were also much involved. Particularly indicative is the distribution of Aeginetan wares, which during MH III appear in large numbers at many sites, notably at Asine and Lerna in the Argolid and at Korakou in the Corinthia.[18] Aegina was a major producer of pottery and a source of andesite, which was used for grinding stones. From the Neolithic period, andesite was widely distributed throughout the Aegean and the Greek mainland.[19] No doubt for this reason and by virtue of its dominant position in the Saronic Gulf, Aegina was a major node in any network to the Cyclades and became a maritime power to be reckoned with, if we properly understand the early depictions of boats and probable armed mariners on its pottery.[20] By MM I, Kythera was a well-established Minoan settlement, which since the Early Bronze Age had exerted influence on the southern Greek mainland (Chs. 4, p. 92; 9, p. 217).[21] A good example of this is the settlement of Ayios Stephanos near the southern coast of Laconia; it was founded during MH II and grew in MH III and LH I, when Kytheran and Minoan influence on the mainland became especially apparent. Good indications are the appearance of a Linear A sign there, the introduction of the Vapheio cup, and Kythera's role as a major producer and distributor of large-scale storage vessels.[22] Kythera may have influenced early Mycenaean settlement in Messenia also. Ayia Irini on Keos had long had strong connections with Attica, notably the mineral-rich district of Laurion, and during this time was also in contact with Boeotia.[23] The importance of these three islands in the development of the Mycenaean centers on the mainland cannot be overestimated. Other

islands also played a role in this interaction, as the appearance of Melian and Theran pottery in high-status graves on the mainland indicates.[24]

The overall increase in site numbers begins in MH II and dramatically expands during MH III, which correlates with a wider distribution throughout the mainland, though it does not achieve the network-like distribution that existed during the Early Bronze Age. These developments imply an increase in both land use and population. Estimates of population can be ventured through study of the number of burials made from phase to phase, as well as by measuring the increasing area of the settlement. Given the patchy record, such estimates can only be hazarded in a few instances, but they are instructive as rough measures of the magnitude of change from the beginning of MH into early LH. Populations were small throughout most of the MH period; villages would not have had more than seven to twenty families, rarely exceeding a population of about 100. Malthi, with over 150 rooms within an area about 9,900 sq. m, may have held as many as twenty-five households, giving perhaps a population density of between 125 and 175 persons per hectare. Asine has been calculated at between 1.5 and 2 hectares with a population as low as about 300 or as high as about 530.[25] At Pylos a recent surface survey has estimated for the late MH through early LH periods an inhabited area from 5.5 to 7 hectares.[26]

Population must have increased dramatically by LH I, but it is nearly impossible to measure at this time because of the disturbance caused by later occupation, especially at the palace sites. Furthermore, the increasing diversity in types of mortuary facilities (pit, cist, shaft, mound) and locations means that we do not know the full extent of cemeteries (Ch. 13, pp. 328–30). Our difficulty is even greater in LH II, when the tholos and chamber tombs became widespread. At Argos the settlement on the Aspis hill, contained within a circular fortification, offers one indication of what a late MH settlement looked like, and it is similar to Malthi in Messenia (Fig. 10.4b). The consolidation of the Lower Town at Asine and the expansion of that settlement onto the facing Barbouna Hill in MH III–LH I seem to correspond to an expansion of the cemeteries, and these may indicate the creation of separate neighborhoods within the settlement. This period also witnesses a consolidation of the immediately surrounding territory of Asine. The appearance of fortified settlements at Argos and Mycenae in the northeast Peloponnese, at Pylos, Peristeria, and Malthi in Messenia, and at Kiapha Thiti and Brauron (and possibly Thorikos) in Attica likely means that with the emergence of nucleated centers of population there developed

concern for defense against other competing settlements or raiders. Another way to study population is through archaeological survey. The intensive surveys conducted throughout much of the Peloponnese and central Greece clearly demonstrate an increase of population tied to an increase in settlements and human activity throughout the regional landscape. Population growth is uniformly evident by LH I, but individual areas and settlements had different trajectories. The Berbati Valley adjacent to Mycenae and the much more distant southern Argolid differ greatly, for example, whereas the Argolid in general throughout the Bronze Age has a different history and form of settlement and land use than Laconia or Messenia.[27]

DIFFERENTIAL TRAJECTORIES AND THE EMERGENCE OF LEADERSHIP

The process of the formation of a distinct "Mycenaean" material culture was neither uniform nor concurrent throughout southern and central Greece. Some scholars argue that some settlements manifested social stratification by MH II, well ahead of the "explosion" of settlement and nucleation that followed during MH III and LH I. A clear case is the MH II "shaft grave" at Kolonna on Aegina, which displays a magnitude of wealth unparalleled until the shaft graves of Circle B at Mycenae in MH III.[28] High-status burials in Boeotia show that the phenomenon was not restricted to coastal regions, and this is an important indication that the formation of Mycenaean culture resulted from various causes. Focused fieldwork will be needed to determine precisely what the differences were, but we can propose a sociopolitical model that accounts for the evidence we have.

Although some settlements seem to have been in contact with the islands and Crete during the heyday of the first palaces on Crete, MM I–II (Ch. 5), the impact of this interaction was not widely felt, nor did it have any substantive impact on settlement form and organization. The rise of major settlements was unpredictable, dependent upon the vagaries of social interaction and opportunism as much as (if not more than) upon proximity to exploitable resources. Thus the material evidence for elites in these early communities, mostly found in high-status burials, is characterized by its diversity, whether one is studying the architecture of the tombs or the grave goods. This was a time when the fledgling communities on the mainland were primarily organized according to family and kin relations and where lineages represented the

highest organizing and integrative element of society (above, pp. 238–9). In such a situation the leaders were just beginning to gain political prowess, perhaps by capitalizing on their reputations as hunters, warriors, adventurers, and providers.

These manifestations of status and rank differentiation within communities also signal increasing regional interaction among communities as they began to compete for resources and labor. The intensive survey in western Messenia by the Pylos Regional Archaeological Project has shown very clearly how competition among these communities led to the nucleated settlements of the late MH period, many of which also constructed elaborate burial facilities. Burial mounds and the first tholos tombs both attest to strong lineages with Big Men leading them.[29] Similar developments took place in the Argive plain (Argos, Asine, Lerna, Mycenae, Dendra), in Attica (Marathon, Aphidna, Thorikos), and in Boeotia. We do not know what kind of interactions led to these developments, but it seems likely that a man's reputation as a hunter was a primary attribute, because many of the later and richer burials (of MH III and LH I–II) have caches of boars' tusks, and even helmets made of boars' tusks, as well as daggers and swords, and representations of hunting.

At the same time, some of these men were also making their way on vessels to island ports and the palaces of Crete. They may originally have participated in raiding parties, but probably soon came to offer their services as warriors, either to control piracy or to provide security in and around the palaces. In these capacities such adventurers were able to amass items of durable wealth and luxury, which they used to exalt their status in relation to their peer elites and over their communities. By virtue of their access to the craft products of the superior societies of the Aegean islands and Crete, they set themselves up as exclusive brokers for all things foreign and exotic. Such a situation must be understood as dynamic, highly competitive, and ever-changing, as different elites developed and exploited relations with different places. Besides the island connections already noted (with Aegina, Kythera, Keos, Naxos, Melos, and Thera), important contacts developed with the various palace settlements and their dependencies throughout Crete, as well as probably the western coastal settlement of Turkey and possibly even farther abroad in Italy and Sicily. It is important to remember that as the mainland elites were engaged in such competitive interaction, those who controlled the palaces of Crete and the major settlements on the Aegean islands were themselves no doubt active and eager to exploit resources and opportunities on the mainland.

THE EMERGENCE OF CENTRALIZED SETTLEMENTS

In classic discussions of the rise of political complexity, the appearance of chiefdoms signals a centralization of power and authority, often by a predominant lineage, replacing the factional and unstable leadership of Big Men (above, pp. 238–9; Ch. 5, pp. 107–8).[30] The developments on the mainland of Greece from the end of MH through the early phases of LH are a good archaeological case study of this process. Chiefdoms, however, do not necessarily follow upon tribal or transegalitarian societies led by Big Men.[31] It is probable that in some instances several Big Men who led factions within a community or region could have come together in an oligarchy and founded early states at some of the citadel centers. In general the leaders of these emerging communities would have faced several problems in extending and consolidating their positions. Insofar as they were successful in establishing their status and reputation as warriors or through other roles, they would have had to acquire political prowess and translate this into social and economic power. Not least among their problems would be passing on their authority to designated heirs and ensuring that they also would possess the necessary power to secure their positions. Ethnographic examples inform us that the translation of sociopolitical reputation into durable power and authority is accomplished through alliances and coalitions, which are created and maintained through marriage and descent (matrilineal and patrilineal), through feasting and its accompanying display and gift-giving, through manipulation of rituals and control of religion, and through force. For these transformations to happen, some form of control over the agricultural and pastoral economy would be necessary. The geographic consequences of these changes should be apparent in evidence of differential access to resources, which may have led to the formation of a community territory with notional boundaries. Disputes over boundaries would create opportunities for leaders to enhance their status, and warfare would result in the capture of slaves and the annexation of new territory. Maintenance and extension of boundaries is therefore an aspect of community stability and growth, and in economic terms the leaders who were able to extend control over territory and other populations were in a position to enlarge both the labor force they commanded and its productive capacity.

On the Greek mainland during the Middle Helladic period, many of the areas inland from the coast and in the uplands of the interior were either abandoned or at least only loosely inhabited and exploited. Many of these were colonized beginning in MH III,[32] but we do not yet know

whether these new habitations were made by independent pioneers or by settlers who were planted by or in some way acting on behalf of emerging centers. Nonetheless, the rise and spread of settlement during MH III and LH I probably point to a rise in population and an increase in agricultural production over a wider landscape than before. From this time forward the competition among different communities for territories was heightened. The resulting conflict is no doubt reflected in the widespread appearance of high-status burials in the shaft graves and cist and tumulus burials that contained daggers, swords, knives, boar's tusks, obsidian points, and various exotic craft items. Equally, many of these burials demonstrate wealth in terms of increasing inclusion of pottery for storage or consumption, presumably of commodities that signify control over specialized agricultural production, such as wine and olive oil.[33]

The archaeological evidence for this process is quite variable over southern and central Greece, and particularly important is the appearance of reserved burial areas within cemeteries or separate from them. Grave Circles A and B at Mycenae are the most famous examples of this phenomenon, but other examples are known at Asine, and especially among the tumulus cemeteries in the Argolid, in Attica, and throughout southwestern Messenia. By LH I the tholos tomb was introduced. All these high-status tombs are larger in size, often specially constructed and contain luxury goods, such as gold diadems, weapons, jewelry, and imported pottery (Chs. 11, pp. 259–61; 13, pp. 337–8; Fig. 13.2).[34]

In this dynamic situation successful elites began to consolidate power over their communities and their regions, and may have extended that control to wider regions by incorporating other communities through conquest or alliance. Asine appears to have become a small town controlling a definable territory by LH I, on the basis of the appearance of settlements in its immediate environs at this time. The same development also took place in southwestern Messenia.[35] Settlements proliferated during the later MH, and the coherence of their social structure is demonstrated by the number of formalized burial areas: mounds with cist and jar burials, grave circles, and then built tholos tombs, as at Papoulia, Kato Englianos, and Voïdokoilia. Both survey evidence and the spread of large tholoi signal local consolidation by the beginning of LH IIA, perhaps by strong lineage groups headed by chiefs or Big Men. At Malthi, Peristeria, and Pylos this process resulted in fortified **polities** (politically organized societies; Fig. 10.4b). In the core area around the Bay of Navarino it appears that many of the MH settlements reached their acme by LH II; thereafter they lost their

autonomy and fell under the power of the community on the ridge of Ano Englianos (Pylos). A monumental palace was constructed here, probably as early as LH I (Fig. 12.1), and the extension of territory over a wide area encompassed most of the region to the north and west and that to the southwest around the Bay of Navarino. By LH IIIA2 the Messenian Valley to the east (on the other side of the Aigaleon mountain range and containing the Messenian Gulf) was consolidated into the State of Pylos, including the establishment of secondary administrative centers with their associated villages and hamlets (Ch. 12, pp. 299–300, 303; Fig. 12.2).[36]

Although the process of establishing territories under the control of a central authority is not as readily observable elsewhere, several parallel situations exist. In coastal Laconia the settlement of Ayios Stephanos continued to be active through LH III although it never attained a size larger than a village, perhaps because of the strong control exercised by Kythera (above, p. 240). In the upper Eurotas plain the settlement at the Menelaion was established in MH II and continued to grow in size throughout the LH period. A formally planned structure known as Mansion I was built in LH II and is often singled out as a predecessor to the later palaces (Fig. 10.5; below, p. 250); it was succeeded in LH III by larger structures that elaborated upon the original plan. In the northeast reaches of the Eurotas Valley a significant cemetery of chamber tombs at Pellana bespeaks a substantial settlement, and to the south, down in the plain below Sparta, the tholos at Vapheio was constructed in LH II, surely a strong sign of a controlling authority emerging there, and is perhaps to be associated with the nearby site of Palaiopyrgos. Despite the evidence from these sites, no single palace center on the scale of the others in the Peloponnese and central Greece ever developed in Laconia.[37] In striking contrast, conditions in the Plain of Argos favored the emergence of a number of strong local settlements, of which a few became dominant citadel-centered polities during LH III. Thus the chamber tomb cemeteries and tholoi mark out Kokla, Argos, Mycenae, Berbati, Prosymna, Dendra-Midea, Tiryns, and Nauplion; just beyond to the southeast lies Asine; farther east are Kazarma and Palaia Epidauros. This distribution may be similar to that of Messenia in the early Mycenaean phase; certainly the distribution of tholos tombs during LH II is widespread: Mycenae (6), Prosymna (1), Berbati (1), Tiryns (2), and Kazarma (1). Dendra produces a tholos of LH IIIA1 date.

The wealth represented by these monumental tombs probably reflects domination by leading lineages, in contrast to settlements that had only chamber tomb cemeteries. Of the sites with tholoi, only

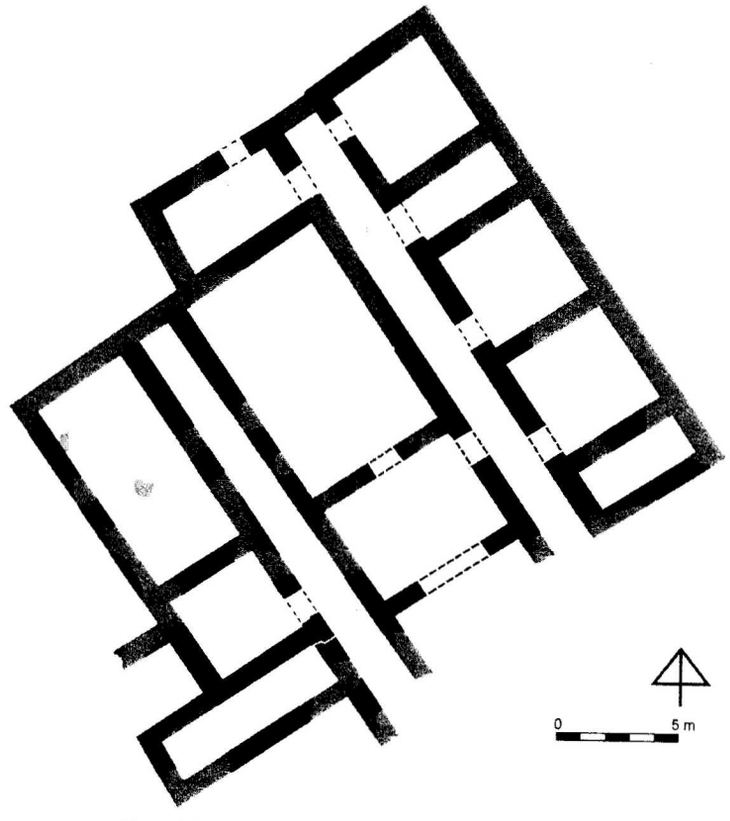

FIGURE 10.5. Plan of the Menelaion. Mansion I, LH IIB. After G. Hiesel, *Späthelladische Hausarchitektur: Studien zur Architekturgeschichte des griechischen Festlandes in der späten Bronzezeit*. Mainz: Philipp von Zabern 1990, fig. 101. Courtesy of the author.

Mycenae and Tiryns developed monumental and architecturally diverse palace complexes in LH III. Yet it is unclear if these polities achieved the kind of unified territorial hegemony that is witnessed in Messenia.[38] A continuing problem of interest is how and when any of these palace centers extended their reach beyond the Plain of Argos, but at present this question has been investigated only for Mycenae. Survey of the Berbati–Limnes valleys behind Mycenae demonstrates that this expansion happened early in LH III. Apparently it also included the northwestern upland hinterlands at this time, as Tsoungiza and Zygouries,

dominating the Nemea and Longopotamos valleys to the northwest and north, seem to have been incorporated within LH IIIA.[39] The same may be true for the region to the west, apparently dominated by a major settlement at Aidonia (with over twenty-one chamber tombs) that commands the large plain of the Asopos River. This extension of Mycenae's power may be the reason that on the coastal plains of the Corinthia there never developed a central Mycenaean settlement.

We remain less well informed about the evolution of settlement and the process of centralization during the early Mycenaean period in central Greece. Eleusis was at this time a substantial settlement, to judge from the architectural assemblage of building B and from its cemetery.[40] In Attica, Athens seems to have been a center; although late MH–LH II material is scarce, there are numerous chamber tombs in the area of the Agora. Kiapha Thiti in central Attica was fortified, as may have been Thorikos on the southeastern coast. The latter was a substantial settlement with a very early tholos tomb (MH III–LH I) and another of LH II date, and may have had, as the source of its wealth, control over the lead and silver in the Laurion district. At Vrana, in the plain of Marathon, several tumuli were in use from MH III into LH III (Pl. 13.1), and nearby a tholos with two horses buried in the **dromos** (entrance passage) dates to LH II (Ch. 13, pp. 330–31). In Boeotia the evidence for the early Mycenaean period is scarce, and for the early phase is limited to mortuary remains of MH II–III date (at Dramesi and Thebes) and the important settlement remains from Eutresis (MH III–LH III). A series of elaborate chamber tombs at Thebes, mostly LH III in date, demonstrates the growth of an important settlement, as do the similarly dated well-known painted terracotta **larnakes** (clay coffins) from chamber tombs at Tanagra (Fig. 12.4 shows a Cretan example). Similar developments were no doubt taking place at Orchomenos, for which we have scanty evidence, but the evidence from research at Gla and in the fertile but swampy Kopaic Basin makes it clear that the exploitation of its territory by Orchomenos likely did not occur much before LH IIIB. At Dimini, in Thessaly, a substantial Mycenaean center was being organized during the early Mycenaean period and resulted in the foundation of what may be the northernmost Mycenaean palace by LH III (Ch. 11, pp. 261–2).[41]

In this manner the population was focused primarily around citadels or primary dominant settlements; and, as intensive surveys have shown, there were also villages and hamlets in the outlying territories. The growth of territory and the expanding needs of the citadel centers during LH II and IIIA increasingly required centralized and

specialized management. The ruling elites controlled craftsmen and craft production and were able therefore to centralize and store staples and convert them into durable wealth for themselves, for display, and for gift-giving. They established or controlled centers of worship by interposing themselves (and their ancestors) between the community and the gods. An early example of a sanctuary is at Epidauros in the later Apollo Maleatas sanctuary, where Minoan elements were introduced into a Mycenaean center of religious worship during LH I. In general, however, there is little evidence of formalized religion until the founding of the palaces in LH IIIA – just when Mycenaean figurines, thought to represent female deities, began to be produced. The most successful polities became stratified sociopolitical entities characterized by the emergence of a functionary order of specialists who managed the administrative, economic, and religious activities of the community. This marks the formation of the formal structure of a state.

At most of the palace sites, special structures were constructed, perhaps as early as LH II. At Mycenae, Wace found sufficient pottery and strata under the main court to indicate a substantial occupation there, and more recently, excavations have unearthed under the main palace building at Tiryns the remains of early Mycenaean buildings (MH III–LH I, LH II–IIIA, and LH IIIA; below, p. 250). Substantial rectangular LH II buildings are known from the lower town at Tiryns (buildings D1, F2, F3) and from Eleusis (building H).[42] At Kakovatos in Elis are remains of two substantial LH II structures and two well-built tholos tombs. A major apsidal building and accompanying rectangular ones were constructed at Thermon in Aetolia.

Not all early centers developed monumental palace complexes. They were, instead, a response to the need to centralize authority and the economy and to administer community activities. In them leaders met and resided, ritual and cult were performed, and craft production and storage could be concentrated. Because there is a difference between the organizational and administrative needs of a village-centered society and those of a state, there are consequent differences in scale and magnitude that in the state find their material expression in the architecture of palaces, although it must be stated that as symbolic displays, palaces may be highly elaborated edifices independent of the material functions they may perform.

It is traditionally assumed that the palaces evolved uniformly throughout the core area of Mycenaean society, because this development seems to explain the resultant plan of an axially aligned rectangular structure (dubbed **megaron** after the Homeric term)

consisting of porch, anteroom, central room with hearth and surrounding colonnade, and emplacement for a throne at the center of the right-hand wall (Ch. 11, p. 262; Fig. 11.1; Pl. 11.4).[43] The LH II "mansion" at the Menelaion in Laconia has often been cited as the intermediate stage in the formation of the palaces (Fig. 10.5). It is built of rubble masonry, but may have had some half-timbering and a second storey. At the core of this plan is the linear and axially arranged house, to which have been added flanking corridors with secondary rooms for storage and craft production. Unfortunately the floors and interior furnishings of this building are not preserved, so it is impossible to know how such important elements as hearths and posts/columns were disposed. There is, however, no evidence to suggest that this plan was adopted at every emerging center. Recent restudy of the remains at Pylos shows that an arrangement of buildings dated to LH I used limestone **ashlar** masonry (smoothed rectangular cut blocks) and was grouped around a court; this ensemble apparently bore no resemblance to the plan at the Menelaion. In fact, in its use of ashlar it is more closely related to the Minoan palaces (Ch. 6, pp. 146–7).[44] At Tiryns, a cluster of rubble-built structures dates to MH III–LH I;[45] they display neither an organized plan nor an enlargement or formalization of the freestanding axial buildings so common during the Middle Bronze Age. This group is succeeded by a more formal building with a stepped entrance dating to LH IIB–IIIA1 and seems to preserve a formal stepped entrance into a building oriented N–S.[46] No evidence of the use of such specialized elements as ashlar masonry or half-timbering is preserved. Fragments of painted stucco may belong to an early fresco, again dated to the period LH IIB/IIIA1.

The familiar plan of the palaces (Fig. 11.1) resulted from the process of peer polity interaction, as outlined by Renfrew.[47] It is first seen in LH IIIA1 at Tiryns in the Argolid, but is not integrated into the complex and characteristic plan consisting of a megaron flanked by corridors and ancillary rooms until LH IIIB (Fig. 11.4). At Pylos, the plan commonly represented as typical of the Mycenaean palace in fact only was built at the beginning of LH IIIB (Fig. 12.1).[48] As a unique form the Mycenaean palace demonstrates how indigenous "Helladic" social structure and cultural forms were expressed in architecture, taking features eclectically from the existing Minoan and island architectural traditions, and also from the Hittites. Thus the formalization of the hearth, throne, and interior columns of the central room represents the Helladic architectural tradition, whereas Minoan masonry practices governed the production of **orthostats** (upright stone slabs) and ashlar

masonry, and Minoan fresco painting provided an iconography adapted for Mycenaean purposes. Elements shared with the Hittites include **corbelled** vaults (constructed of overlapping courses of blocks) and the use of hard stones for column bases, thresholds, and anta bases (the thickened projections of long walls) and a form of wall construction using timber forms.

INTERACTION BETWEEN EARLY MYCENAEAN SETTLEMENTS AND THE AEGEAN

Minoan dominance made the Middle Bronze Age interaction between the mainland and Cretan and island settlements one-sided, but during LH/LM I and II the rulers of the mainland centers began to assert themselves. The evidence for this is circumstantial and has been much debated. At Akrotiri on Thera the miniature frescoes from the West House (Ch. 8, pp. 191–2) depict warriors, who many scholars think were intended to represent Mycenaeans. They are clearly organized into troops; they march in order and are outfitted with standard armaments: long sword and scabbard, pikes or lances, tower shields, and helmets, probably of boar's tusks. Given the long history (beginning in MH I at least) of the valuation of boar's tusks and the evidence of status symbolized through militaristic items (from obsidian points to gold- and silver-bedecked weapons; Ch. 11, pp. 259–61), it is difficult to avoid the conclusion that these troops were mainlanders, and that during the Neopalatial period they were important formal participants in Aegean affairs, lending or allying themselves to island polities and to palace centers on Crete. Their intimate involvement in the life of these communities is demonstrated by their appropriation of craft items for a variety of uses in their mainland communities. Thus we find in the Mycenae shaft graves jewelry that was in use in the islands, Minoan seals and seals carved in Minoan style especially for "Mycenaean" tastes, "scepters" likely used as symbols of authority, economically useful items such as standardized weights and weighing scales with pans, and pottery imported from the islands and from Crete (Chs. 9, p. 217; 11, pp. 260–61). Some items directly link Mycenae to special deposits in the palaces at Knossos (the "Temple Repositories," the Little Palace) and at Zakros (the Treasure Room). Many of these seem to have been used in rituals performed in the courts of the Minoan nobility and also in religious practice, as at peak sanctuaries (Ch. 7, pp. 165–70). Items from the early Mycenaean cult center at the Maleatas Sanctuary at

Epidauros reflect Mycenaean borrowings from Minoan religious practice.[49] In addition, some items such as amber from the Baltic and a lead–tin stag of Anatolian type bespeak contacts much further afield.[50]

Mycenaean influence on Crete is not well documented for LH/LM I–II. There are LM I burials from the port of Herakleion (Poros–Katsambas) that contain militaristic items (Ch. 7, p. 172), and from Archanes the so-called "shaft graves," whereas during LM II the "Royal" tombs at Knossos were built. Soon after, LM II-IIIA1 Warrior Graves proliferated around Knossos, at Archanes, at Phaistos, and at Khania (Ch. 12, p. 315). Even though these are tombs of types characteristic of the mainland (chamber, shaft, and tholos tombs), and include depositions of grave goods also typical of mainland tombs, they need not have been only tombs of conquering mainlanders. There are good reasons to think that some of these were burials of local elites adjusting to a new political and economic reality.[51]

We may conclude that through their interaction in the central and western Aegean islands and in the Cretan palaces, the emerging leaders of mainland centers were able to gain much wealth and to learn and adapt customs, technology, and administrative systems for use at home. These interactions are of fundamental importance for the formation of the Mycenaean palatial system of administration. The Mycenaean Greek script we call Linear B was developed from Minoan Linear A, probably around LH II (Ch. 1, p. 14).[52] In the realm of religion the Mycenaeans adapted much for their own use,[53] just as they appropriated the iconography of Minoan art to employ in their own frescoes, on pottery, and in other forms of symbolic expression (Chs. 11, pp. 259–61; 13, pp. 346–7, 352–3).[54] Once they established themselves at Knossos they probably were able to extend their control over other areas of Crete, as the Linear B documents indicate (Ch. 12, pp. 310–16).[55] It is not coincidence that this expansion is simultaneous with the founding of the palatial polities of the mainland of Greece and the extension of control over the Aegean islands and especially Rhodes. From this point on, Mycenaean society operated as an assemblage of autonomous polities that sometimes allied with one another for political and economic gain, while often competing and engaging in interstate warfare.

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II: Mycenaean Art and Architecture

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Introduction

The culture of the Mycenaean Greeks can best be accessed through the tangible record they have left of their life and death in the four centuries from their emergence as a power at the end of the Middle Helladic period to the destruction of their palaces at the end of Late Helladic IIIB. Schliemann's first great archaeological discoveries at Mycenae in 1876 named both the civilization and the age of its supremacy. The great amount of gold in the deeply buried shaft graves immediately captured the world's attention, particularly the gold face masks. In one of these Schliemann thought he had looked upon the face of Agamemnon.[1] Archaeologists now know that the early date of the graves precludes such an identification and we no longer equate these finds with things mentioned in Greek legends and the epics of Homer. We realize that oral tradition and subsequent literature have many components, only some of which may carry memories or preserve details of the Mycenaean world – after all, the time span between the shaft graves and the Parthenon exceeds a thousand years. The decipherment of the Linear B texts as Greek in 1952 (Ch. 1, pp. 11–12) opened another window into the culture but, because of their limited subject matter, we are left without discussion of some of the most important aspects one would wish to know about a society. So the material remains provided by archaeological endeavors since 1876 are the primary source for our understanding of Mycenaean culture.

Early Mycenaean: Rich Life, Rich Death

Grave goods are the key art assemblages available for the Early Mycenaean period, LH I and LH II, as the buildings have mostly been obliterated by later structures (Ch. 10, pp. 245–8). Grave Circle B is the earlier of the two Circles at Mycenae, dating from the end of MH into LH I, and lies outside the citadel walls.[2] The finds comprise an electrum face mask, items in gold and silver, seals, bronze weapons and vessels, and pottery. Two exquisite pieces are an amethyst seal with the head of a bearded man (CMS I 5) and a rock crystal bowl in the shape of a duck with its head turned back.[3] Grave Circle A, just inside the main gate of the citadel, was in use throughout LH I, and held yet richer grave goods.[4] Even today the sheer amount of gold amazes visitors to the great Mycenaean Room in the National Museum at Athens. There are five gold face masks and a wondrous collection of gold diadems and jewelry. The many weapons are finely wrought. Sword blades carry chased designs of griffins and horses speeding along in a flying gallop,[5] and the grips are of gold and ivory or gold cloisonné set with rock crystal and blue glass.[6] **Niello** (a black metal sulfide adhesive) daggers are masterpieces of the minor arts. One shows a vibrant rendition of the animal attack theme: two cats catching birds in a river setting reminiscent of scenes set along the Nile in Egyptian art (Pl. 11.1).[7] Other daggers from Circle A show a lion hunt, lions running, a lion attacking deer, lilies, and interlocking spirals. These intricate designs, worked in gold and silver against the black niello background, have been described as "painting in metal," and only recently has technical analysis been able to show the level of metallurgical expertise needed for their manufacture.[8] The fine seals also, with their motifs worked in gold or carved intaglio in semiprecious stones, are pieces of consummate skill. The war duel on the gold cushion-shaped seal and the hunt duel with a lion on its pair seal (Pls. 11.2, 11.3) are powerful examples of the themes of warfare and the hunt which, together with the animal attack theme, will remain important in art throughout the Bronze Age and beyond. Choosing to focus the war and hunt themes on the duel of two great warriors or a great warrior and a lion of equal stature emphasizes the importance of personal bravery, the physical danger of the combat, and the need for powerful bodies.[9] All these are brilliantly conveyed by the climactic point of the action (the delivery of the death blow), the taut muscling of the bodies, and the play on the diagonals of the square seal face. Ostrich egg **rhyta** (ceremonial vessels) and