

THE MYCENAEAN CONQUEST OF MINOAN CRETE

MALCOLM H. WIENER

INTRODUCTION

The longstanding belief in a Mycenaean mainland conquest of Minoan Crete at the beginning of Late Minoan II has been questioned in recent years. This paper restates the traditional view in light of recent evidence within a wide geographic frame and considers possible scenarios with respect to the conquest.

I. THE LINGUISTIC EVIDENCE

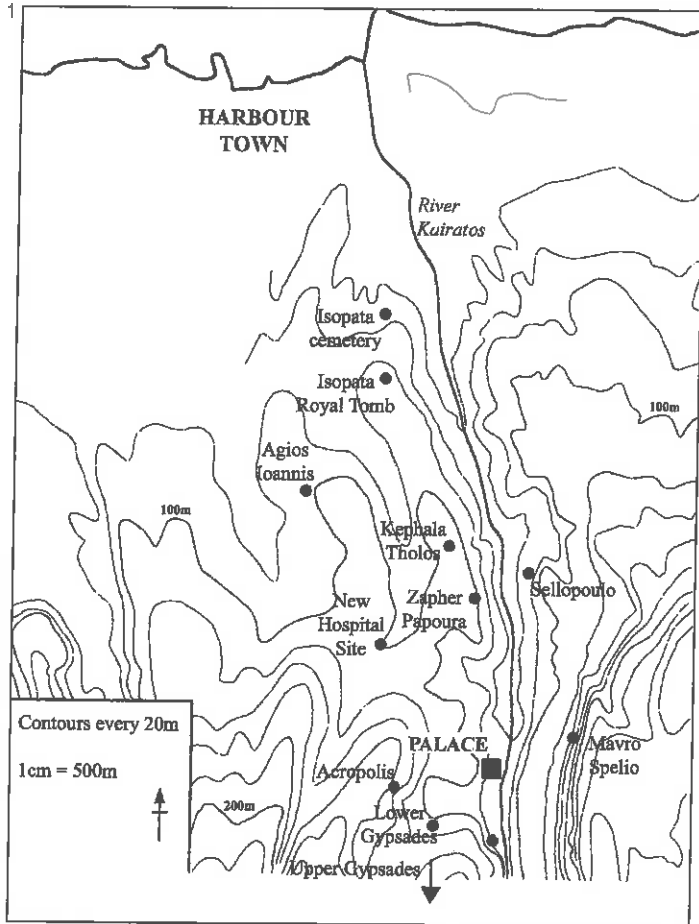
A principal reason traditionally asserted for belief in a Mycenaean conquest of Crete lies in the replacement of the Linear A by the Linear B script. From the Middle Bronze Age through LM IB, Linear A is in use in Crete and appears in a few inscriptions from the Peloponnese, on the islands of Thera, Samothrace, Melos, Kythera, and Kea, and at Miletus in Anatolia and Tel Haror in the Levant; Linear B is thus far confined to Crete and the Greek mainland (Palaima and Bibee 2014). While Linear B clearly represents an early form of the Greek language, Linear A, still undeciphered, does not. The measurement and fractional systems of the two scripts differ, for example (Bennet 1999: 161–63). (Driessen and Langohr [2007] do not accept that the linguistic change indicates the arrival of a new population element, instead preferring to believe that an indigenous Minoan elite adopted Greek as more efficient for administration than Linear A.) The nature of the language recorded in the Linear A script has long been a subject of debate. Finkelberg (2001) proposed that Linear A could be related to Lycian, an Anatolian Indo-European language, but Duhoux (2004: 214–20) and Melchert (2001) have offered vigorous rebuttals. In all likelihood the adaption of Linear B from Linear A was accomplished by Minoan scribes at Knossos beginning with the Mycenaean presence in LM II (or possibly at Mycenae in LM IB/LH IIA,

perhaps even by Minoan Thera émigrés. The “Kafkania pebble” which surfaced near Patras on the mainland in what was deemed to be a much earlier context is surely a forgery intended as a jest—see Palaima 2002–2003). The Linear B tablets excavated at Knossos show a mix of Mycenaean Greek and clearly non-Greek names indicative of a mixed population, but the tablets from the Room of the Chariot Tablets, dealing at least in part with military matters, contain a majority of Mycenaean names, including especially individuals in positions of administrative authority.

The Mycenaean pattern of administration differs unmistakably from the Minoan. In Minoan Crete prior to the LM IB Final destructions, writing appears at 63 sites, 24 with Hieroglyphic script, 31 with Linear A and 8 with both (CHIC; Younger n.d.). Furthermore, there is widespread evidence of literate administration via seal impressions placed on parchment, with approximately 1070 impressions stamped by at least 214 separate seals on 554 objects (490 flat-based sealed document nodules, 59 hanging container or open document nodules, 5 dockets or tokens, 1 roundel, and 1 tablet) found in House A at Kato Zakros alone (Wiener 1999: 415, citing Weingarten 1983 and Hallager 1996). In addition, Minoan administrators make use of clay roundels by affixing to their rims seal impressions which were subsequently sometimes erased, perhaps signifying the deposit and withdrawal of goods (Krzyszowska 2005: 163). One hundred and twenty-two such roundels (Tsipopoulou 2003) were found in the LM IB destruction deposit at Chania alone. Impressions made by magnificent Knossian gold rings have been found at six sites on Crete and on Thera. In marked contrast, Mycenaeans did not employ seals in administration, and clay tablets bearing the Mycenaean Linear B script have been found on Crete only at the

1. Map of Final Palatial cemeteries at Knossos, after Preston 2007: 294 fig. 27. Courtesy British School at Athens.

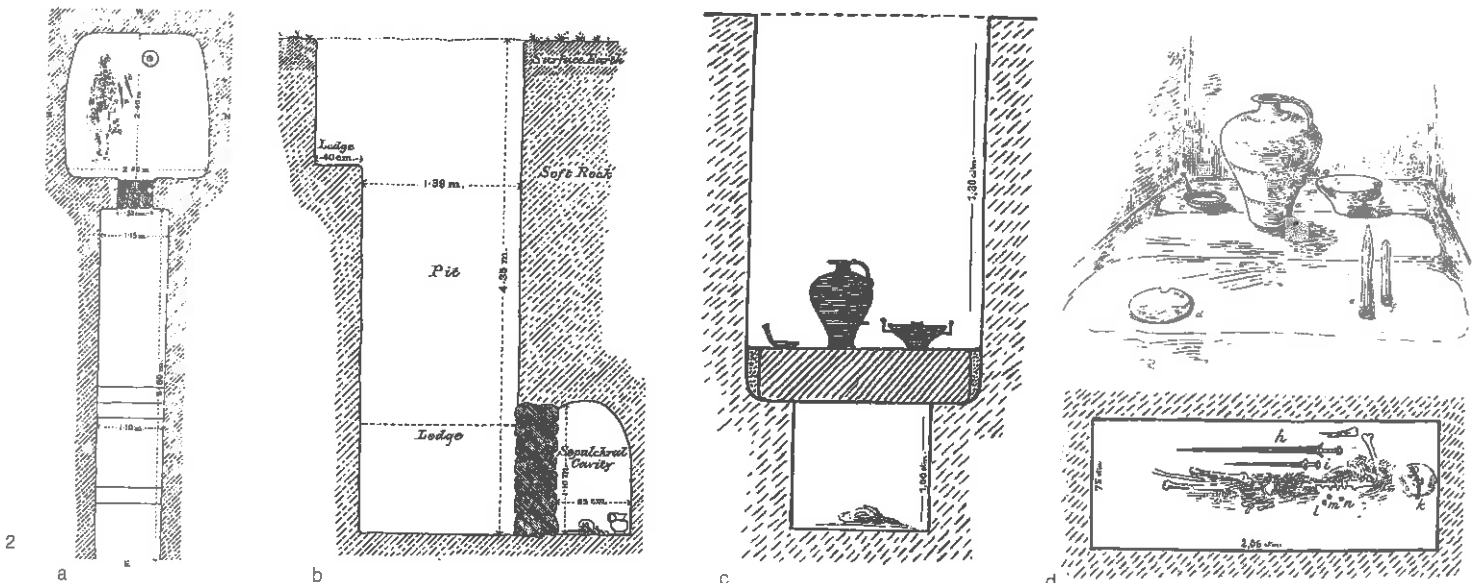
2. Zapher Papoura, Knossos: a, Chamber Tomb 92; b, Pit Cave 66; c-d, Chieftain's Grave or Shaft Grave 36.



two major LM III centers of Knossos and Chania. The epigraphical evidence is consistent with the striking pattern of abandonment of sites and depopulation during LM II described below.

II. THE MORTUARY EVIDENCE

Crete undergoes a dramatic change in burial customs in LM II. At Knossos (FIG. 1) new burial grounds are created north of the palace, set apart from the traditional Minoan burial areas at Mavro Spelio and Ailias on the hillside to the east and Gypsades to the south. At Zapher Papoura 800 m north of the palace and Sellopoulo 700 m northeast of Zapher Papoura, burial grounds were created containing chamber tombs with single chambers and dromoi dug deep into the earth (FIG. 2a), unlike the typical Minoan multiple chamber tomb with units separated by built walls, as well as pit caves (FIG. 2b) and mainland-type shaft graves (FIG. 2c–d, see Miller 2011 for a recent discussion). Farther north are two grand burial chambers, the Royal Tomb at Isopata and the Kephala Tholos. Miller Bonney (2012) has noted that the embedding of the chamber at a far greater depth than any Minoan tomb and the creation of a long dromos, with no relation to any community or natural features, is indicative of mainland rather than Minoan ways of conceiving the relationship between the dead and the community. The numbers of

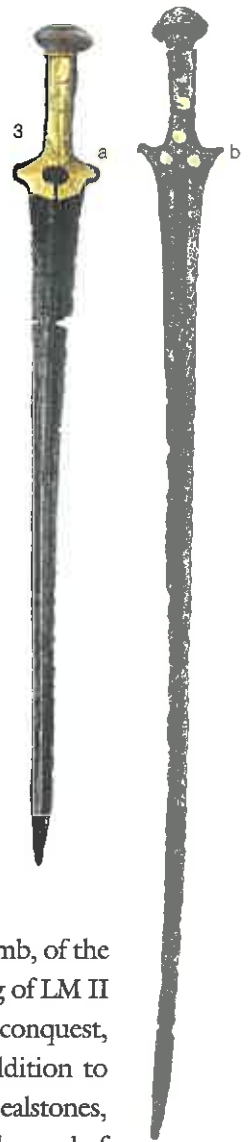




3. Zapher Papoura, Knossos: a horned sword (Type Ci: L. 0.955 m) and a cruciform sword (Type Di: L. 0.61 m) from the Chieftain's Grave or Shaft Grave 36. Photo: I. Papadakis.

4. Chania, cemetery east of the Church of Peter and Paul ('Kouklaki' excavation): LM IIIA1 Shaft Grave 46, warrior burial in situ.

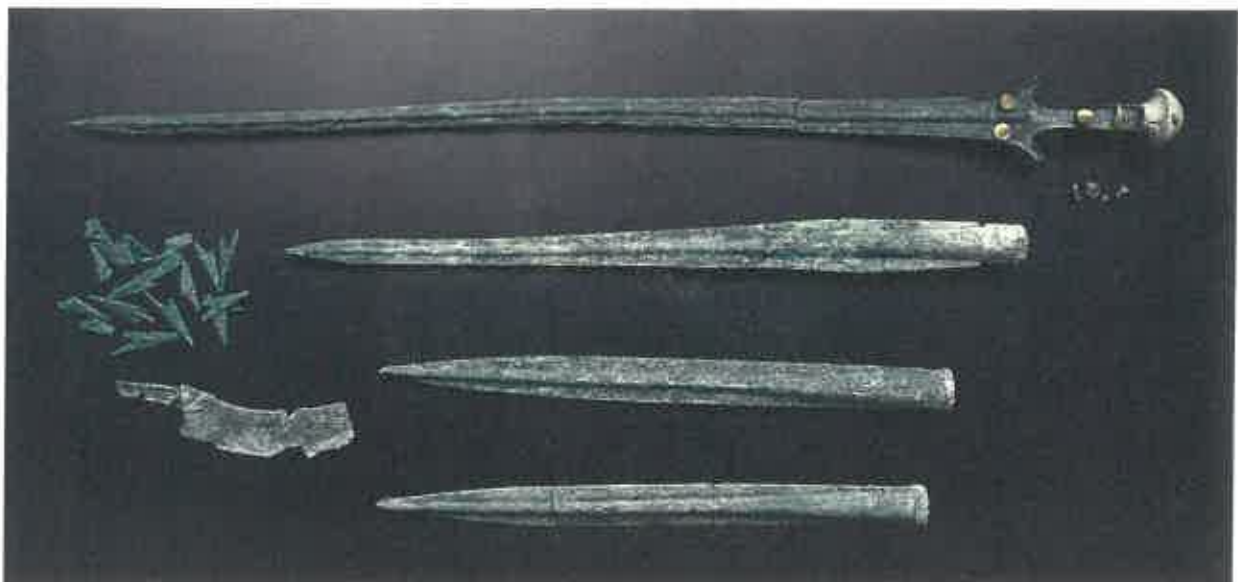
5. Chania, cemetery east of the Church of Peter and Paul ('Kouklaki' excavation): Type Ci horned sword (L. 0.80 m) with bone pommel, a gold ring on the haft and gold-covered rivets from Shaft Grave 46.



weapons (e.g. FIG. 3, the type Ci, horned, and Di, cruciform, swords from the Chieftain's Grave, Zapher Papoura Tomb 36) found in these tombs and others at Zapher Papoura and at the Venizeleion (New Hospital) site have resulted in their description as 'Warrior Tombs'. All 11 of the LM II Knossos tombs with weapons and armour come from the new cemeteries. (An LM IB Minoan tomb at Poros, part of the port area north of Knossos, contained numerous weapons.)

Two tombs excavated in Chania, West Crete, by M. Andreadaki-Vlazaki in the cemetery south of the Dikastiria and east of the Church of Peter and Paul ("Kouklaki" excavation) are of particular interest in this regard (Andreadaki-Vlazaki 2009, 152–65; 2010: 524–27 from which this account is largely taken). The first is a LM IIIA1 shaft grave of Mycenaean type with stone walls on four sides to support a cover of very thick, heavy stone slabs which protected the tomb

from plunder (FIG. 4). The tomb contained an intact male body surrounded by bronze weapons together with a bronze bowl and a three-handled jar from Peloponnese. An 80 cm long sword of the horned (Ci) type with an ivory pommel, a gold ring and gold rivets were found alongside (FIG. 5). A number of pit-cave burials of a less common mainland type were found as well (FIG. 6). The second tomb, of the above pit-cave type, dated to the beginning of LM II at the moment of the putative Mycenaean conquest, held another high-ranking warrior. In addition to many precious objects including three fine sealstones, his burial included an excellent long horned sword of Ci type known also from the Argolid and Knossos (like FIGS. 5 and 3), 2 bronze knives, and 22 arrowheads (FIG. 7). Andreadaki-Vlazaki notes that "this



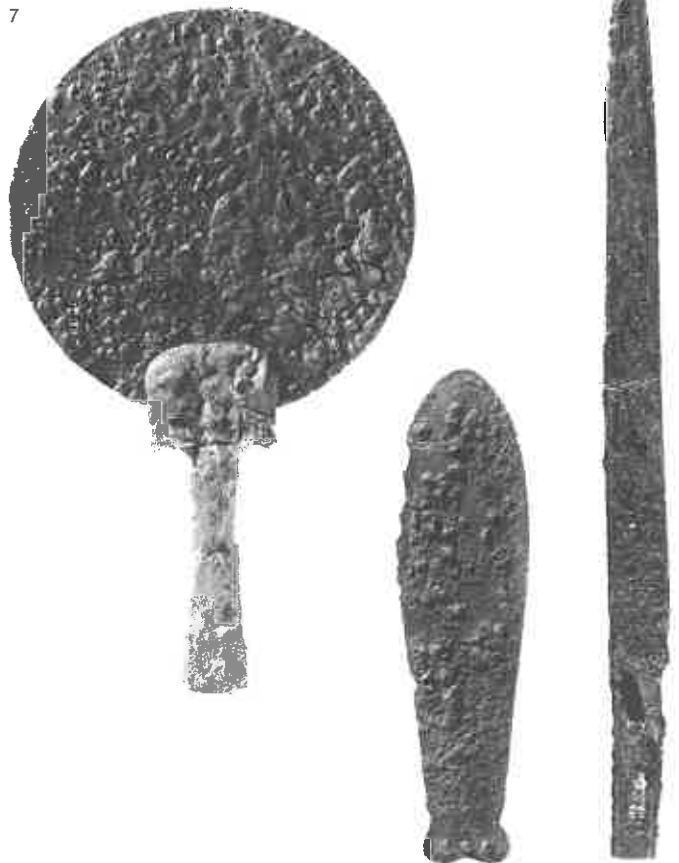
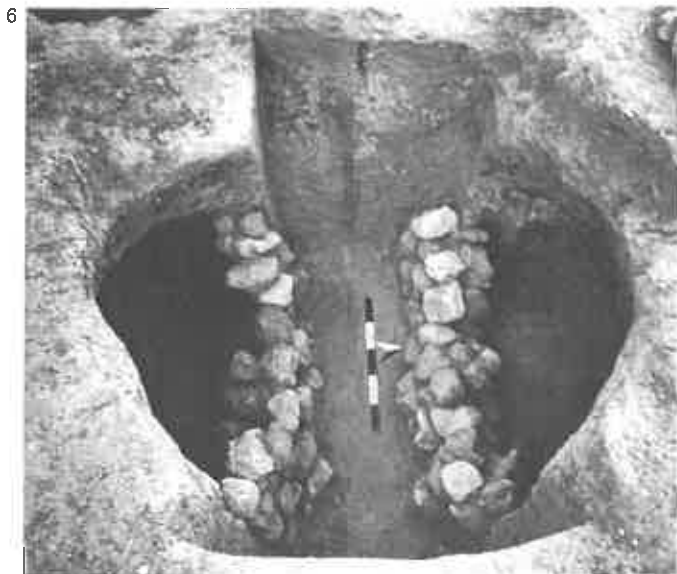
part of the burial ground has clear links with the mainland, particularly the Argolid”, and that it “looks very similar to the Zapher Papoura cemetery of Knossos, with its well-known warrior graves. We are able to say that the similarities between mainland, Knossian, and Kydonian cemeteries are undeniably close” (Andreadaki-Vlazaki 2010: 525–6). In total at least 60 tombs described as Mycenaean have been excavated to date. In contrast, at Knossos, more typically Minoan burials continue in the traditional Minoan burial grounds at Mavro Spelio, with a possible hiatus in LM II. Traditional Minoan habits including burials accompanied by masses of conical cups (Kanta 1980: 268) continue in some rural areas long after the Mycenaean takeover, however (Hakulin 2013: 87, citing also D’Agata 2005: 109–10).

Some have argued that the tombs described represent a merger of Minoan and Mycenaean customs developed through intense contact, rather than the appearance in Crete of mainlanders (see, e.g., Kilian-Dirlmeier 1985, Niemeier 1985, Preston 2004,

Nafplioti 2008). Of course Minoan architects and masons would have been employed in the construction of the tombs of mainland type at Chania and Knossos, where Minoan mason’s marks appear on the Isopata Royal Tomb, Isopata Tomb I, and the Kephala Tomb (Preston 2004: 327). Interactions between Minoan Crete and the mainland, first with Messenia and Laconia and then with Mycenae, had increased greatly from MM/MH III through LM IB, as witnessed, for example, by the intensive Minoan influence on the construction of the chamber tombs of Messenia (Shaw 2009: 66–9), the putative LH I Minoan-influenced structure under the LH III palace at Pylos, the Minoanising nature of the construction and the LM I finds at Ayios Stephanos in Laconia, the Linear A mason’s mark at the grand tomb at Peristeria in Messenia, and the grand Minoan objects in the Shaft Graves at Mycenae. While Minoan architects and masons may have adopted certain mainland traits in the process, that cannot explain the clear mainland nature of the burials discussed above.

6. Chania, cemetery east of the Church of Peter and Paul (‘Kouklaki’ excavation): Double Pit Cave tomb—2 cavernous chambers on either side of a vertical shaft.

7. Chania, cemetery east of the Church of Peter and Paul (‘Kouklaki’ excavation): Finds from the LM II warrior burial in Pit Cave 40, including 2 knives and a bronze mirror; a type C1 sword like that from Tomb 46, an ivory comb, 3 seals, and 22 bronze arrowheads were among the other grave gifts.



III. REBUTTAL OF PURPORTED ISOTOPIC EVIDENCE CONCERNING THE ORIGIN OF INDIVIDUALS BURIED IN TOMBS OF MYCENAEAN TYPE IN NEW LOCATIONS

Papers by A. Nafplioti question Mycenaean presence at Knossos on the basis of strontium isotope ratio analysis (2008; 2011). The articles make two critical assertions: first, that the strontium isotope ratios of the mainlanders invading Crete can be determined by examining the ratios of present-day land snails from Mycenae inasmuch as snails move very little in their brief lifetimes and that human beings from the Pindos zone in which Mycenae lies would have exhibited ratios similar to the snails; second, that the ratios thus obtained are inconsistent with ratios obtained from the teeth of eight individuals buried at Knossos in six Mycenaean-type tombs, who accordingly could not have been raised within the Pindos zone.

The argument fails on several grounds. First, the eight individuals whose teeth were examined may have been raised in the Gavrovo zone which includes Pylos and its surroundings and Laconia, as well as the Knossos area of Crete itself (Nafplioti 2011: 1567), in which case the strontium isotope ratios would be identical. It is perhaps worth noting in this connection that the palace at Ayios Vassilios near Sparta in Laconia now under excavation has produced 19 Minoan Type A swords in a later ritual (shrine) context (for a preliminary account, see Cavanagh 2011: 23; A. Vassilogamvrou, pers. comm. of 10 January 2015, for which I am most grateful). The nearby Vapheio Tholos in Laconia contained 41 Minoan seals and a funerary assemblage very similar to Sellopoulo Tomb 4 at Knossos (Wiener forthcoming). Individuals from Laconia or Messenia are indistinguishable isotopically from Cretans. Second, none of the eight burials examined comes from a LM II burial. Rather the burials come from six tombs, four from Sellopoulo and two from *KSP* (Knossos South of the Palace). As the author notes, no skeletons were available from the Isopata, Kephala, Zapher Papoura or Ayios Ioannis burials, where potential LM II early tombs are located. Needless to say, descendants of the initial arrivals raised in Crete will exhibit local Cretan strontium isotope ratios. (Immediate interbreeding with the Minoan population

seems likely, rendering any attempt at morphological skeletal analysis highly problematic as well.)

Nafplioti notes that the Mycenaean conquest hypothesis would seem to imply continuing Mycenaean arrivals in LM IIIA₁, thus suggesting the possibility if not the likelihood that one of the eight later burials from the six tombs might have been expected to yield a Mycenae-Tiryns Pindos zone strontium isotope ratio. In LH IIIA₁ (LM IIIA₁), however, Mycenaean expansion turned toward the remainder of Crete, the Cyclades, Dodecanese, and the Anatolian coast as described below. Accordingly, it remains doubtful that any of the eight teeth examined from LM IIIA burials at Knossos came from an individual raised within the Mycenae-Tiryns Pindos zone.

IV. THE ARCHAEOLOGICAL EVIDENCE FROM THE CYCLADES, DODECANESE, ANATOLIAN COAST, AND EGYPT

In the decades following the Mycenaean conquest of Crete, Mycenaean outposts replace Minoan settlements in the Cyclades, the Dodecanese, and along the coast of Asia Minor, accompanied by a major shift in relations between Egypt and the Aegean in favour of Mycenae. The pattern is particularly clear at Miletus on the Anatolian coast (Niemeier 2005). In the earlier Minoan phase through LM IB, the pottery is more than 90 percent locally made Minoan plus some Minoan imports, including many fragments of Minoan tripod cooking pots and what were described as unbelievable numbers of Minoan conical cups (Kaiser 2009: 159–60, 163, citing also Weickert 1940: 328). Other Late Minoan I finds include six Linear A inscriptions, five of them on local clay, six Minoan-style kilns, Minoan discoid loom weights supplanting earlier Anatolian types, a marble weight fitting the Minoan system, a seal impression from a Minoan seal, and what appears to be a Minoan sanctuary with a sequence of mudbrick altars, pieces of a stuccoed offering table, votives, part of a stone ritual chalice of Minoan type, and fragments of wall painting in the Minoan technique depicting a miniature landscape with river and white lilies on a red ground. Starting in LM/LH IIIA, the picture changes dramatically, with Mycenaean elements predominant (Niemeier 2005). Miletus (Millawanda in the Hittite

texts) becomes the main centre of a Helladic region called Ahhiyawa in Hittite texts and described as capable of fielding a large chariot force. Knidos, Ephesos, Musgebi, and Iasos also appear to receive substantial immigration from mainland Greece in LH IIB–IIIA₁ (Doxey 1987: 307 and citations therein). In the Dodecanese, chamber tombs of mainland type containing Argive pottery appear at Ialysos on Rhodes (Mee 1982). Much of the Mycenaean pottery found abroad, including the Amarna deposits noted below, has been sourced to the Argolid. (The argument in favour of Mycenae rather than Thebes or a site in the Dodecanese as the capital of Ahhiyawa is presented in Dickinson 2009: 283 and Wiener 2009: 713–15).

The reordering of relations between Egypt and the Aegean world in the direction of Mycenae beginning in LM II/LH IIB is plain. For approximately 700 years between c. 2140 and 1440 BC, Crete had been the principal point of Aegean contact. The influence of Egypt in the evolution of Minoan civilisation is manifest in various areas (Wiener 2011; 2013). In LH IIB–IIIA₁ (LM II–IIIA₁) Mycenae replaces Crete as the main Aegean interlocutor, with Knossos, now reduced in size from c. 75 to c. 40 ha—but at 40 still in all likelihood the largest site in the Aegean world—continuing to play a leading role under mainland dominance (as indicated by the contents of Sellopoulo Tomb 4 which included the scarab of Amenophis III). Tomb paintings of high officials early in the reign of Thutmose III (1479–1427 BC) show what appear to be clean-shaven Minoans in traditional Minoan garb bringing precious LM I objects to the Theban court. A palace of Thutmose III at Tell el-Dab'a in the Nile Delta displayed wall paintings of Minoan scenes and technique of execution (Bietak 2010). By regnal year 42 (1437 BC), however, the Annals of Thutmose III report an embassy from Tanaya, generally thought to refer to the mainland Danaoi, bringing Keftiote (Minoan) objects, and in the first regnal year of Amenhotep II (1427 BC), the Aegeans depicted in Vizier Rekhmire's tomb are repainted to show the visitors dressed in what some believe to be Mycenaean-style kilts (Rehak 1998: 40–1; Cline 1994:

109–11). By the reign of Amenophis III beginning in 1390 BC, there is much evidence of direct contact between Egypt and Mycenae, including the appearance at Mycenae of 13 faience wall plaque fragments bearing the cartouche of Amenophis III, plus the appearance of a scarab of Amenophis III in Tomb 4 of the Mycenaean-appearing cemetery at Sellopoulo north of the palace of Knossos discussed above, and one more in the Mycenaean centre of Khania. Hankey (1981) thought the evidence sufficient to establish the likelihood of an Egyptian royal embassy to Mycenae in the reign of Amenhotep III (see also Cline 1990; Phillips and Cline 2005). In LH IIIA₁ Mycenaean pottery appears in Egypt, increasing in amount in the Amarna LH IIIA₂ deposits.

V. THE TIMING AND NATURE OF THE LM IB DESTRUCTIONS

The great LM IB construction projects, including the new palaces at Phaistos and Kato Zakros, the major new buildings at Gournia, Mochlos, and elsewhere, the construction of a major system of dams at Choiromandres near Zakros (Chryssoulaki 2010) and on Pseira (Betancourt 2012), the creation of new country house (villa) estates at Sklavokampos, Nirou Chani, and Kamilari, in LM IB, together with new one-period sites such as Makrygiolos (Warren 2012: 265), and the realisation that the palace at Knossos takes its most elaborate and monumental form in LM IB (Macdonald 2005: 171–94), all suggest that the major wave of destructions came only toward or at the end of LM IB. Destruction deposits contain impressions made by Knossian palatial gold rings, some on clay which looks central Cretan and some, made by so-called replica rings, on clay which appears to be local, suggesting that Knossian island-wide administration continued until the end, or near the end, of LM IB. Fifty-five such impressions are known from six sites on Crete and Akrotiri on Thera (Wiener 1999, 413–4 and citations therein).

At some point late in LM IB, evidence from a number of sites suggests possible preparations against attack by blocking of entrances, erection of walls, addition of towers, perhaps defensive in nature, to major buildings, digging and enclosure of

intramural wells, transformation of fine living quarters into workshops and storage areas (Rehak and Younger 1998: 101; Andreadaki-Vlazaki 2011: 73–4; Watrous 2012b), and the stockpiling at Pseira of 1,000 stones, each a little larger than an egg, most likely for use in slingshots against invaders (Betancourt and Frangakis 1998). Kastri on Kythera, an obvious way-station for an invading force coming from the Peloponnese, is destroyed late in LM IB, as indicated by the presence of Alternating Style pottery, and shows little or no evidence of occupation in LM II (Broodbank et al. 2005). At Knossos, a spectacular group of silver vases was hidden, probably at the end of LM IB. Either none was left who knew their location, or no-one dared claim them (Hood 1986: 176). The observation applies equally to the great hoard of metals hidden in the Arkhalochori Cave in east-central Crete, the precious works and goods in the Zakros palace, the many LM IB metal hoards (Georgiou 1979), and the impressive items deliberately buried beneath the floors at Mochlos (Brogan and Smith 2011: 151). The pattern is difficult to reconcile with earthquake destruction (contra Warren 2011), although earthquakes could, of course, have preceded and facilitated, physically and/or ideationally, the Mycenaean conquest. The excavators of Mochlos believe that soon after “man-made destruction” at the end of LM IB, Mochlos was struck by a major earthquake observable in the remains preceding a reoccupation with mainland features in LM IIIA₁ (Soles et al. in press 2015; Soles and Brogan 2008; Soles 1999).

At Knossos, which suffers widespread destruction at the end of LM IB, the Unexplored Mansion–Little Palace complex loses its former ritual character and is converted into a metallurgical workshop (Catling and Catling 1984; Hatzaki 2005 [E. Hatzaki now holds the Minoan post at the University of Cincinnati once held by Gerald Cadogan]). At Myrtos–Pyrgos the house of the local ruler was destroyed by fire while the remainder of the site was spared, the result of deliberate human action in the opinion of our honorand (Cadogan 1978: 81). The principal ritual/rulers’ buildings at Palaikastro and Mochlos also appear to have been deliberately demolished (Soles

1999: 58; MacGillivray et al. 1991: 127–32). The LM IB settlement on the island of Chryssi off the south coast of Crete was suddenly abandoned. The wave of destructions covered the whole of Crete from Palaikastro, Zakros, and Petras in the east, to Malia, Gournia, Pseira, Mochlos, Vasiliki, Papadiokampos, Galatas, and Archanes in north-central Crete, to Phaistos, Ayia Triada, Kommos, and Myrtos–Pyrgos in south-central Crete, to Chania in the west. The Minoan site of Kastri on Kythera, located between the Peloponnese and Crete, is destroyed at the end of LM IB/LH IIA. On Crete the elaborate villas or country houses (actually centres of small settlements) disappear (Hood 1986: 177–78). The manufacture and deposit at peak sanctuaries of small votive bronzes ceases. A system of administration heavily dependent on sealings (as seen, for example, in the multiple-sealing system of House A at Kato Zakros and in the Knossian replica seals) disappears, replaced by the mainland system dependent entirely on Linear B script. The following LM II period sees a massive reduction in the number and size of occupied sites (Driessen and Macdonald 1997: 35–9; Watrous 2012a). The LM II population decline is striking. Part of the pre-existing LM IB population may have been carried off as captives, while a few occupied the mountain refuge site of Katalimata, barely accessible even to trained mountain climbers (Nowicki 2008). The splendour of Neopalatial Crete was forever gone.

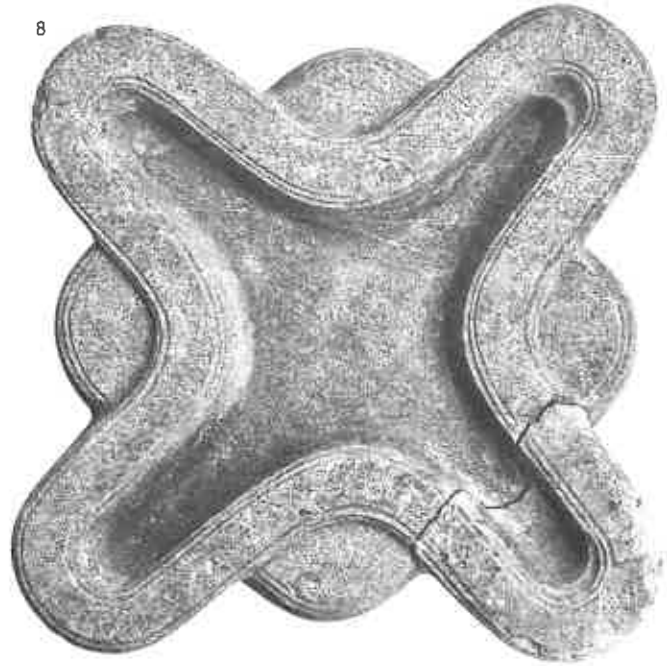
Knossos under Mycenaean rule continues as the centre of production of the most advanced weapons of the era, the Ci and Cii horned swords (FIG. 3 and 5). The evidence to date suggests that in LM II Chania in West Crete became a second centre of mainland control. At Mochlos in LM IIIA₁ a new group of settlers occupied 2–3 room dwellings built by clearing sections of LM IB streets or parts of the ruined LM IB houses. The preceding LM IB houses measured 150–250 m on two or three levels, whereas only one LM II–III A₁ house at Mochlos exceeded 40 m (T. Brogan, pers. comm. of 12 March 2014, for which I am most grateful). The LM IIIA pottery throughout much of Crete becomes standardised in shape and decoration on Knossian prototypes until

the destruction of Knossos early in LM IIIA2 (Doxey 1987: 303; Popham 1980: 166).

VI. ONE OR TWO WAVES OF DESTRUCTION?

LM IB pottery has been subdivided into LM IB Late and LM IB Final (Brogan and Hallager 2011), with destructions observed in both horizons. That a number of massive destructions occurred at the end of LM IB Final is clear, with an earlier destruction proposed, either instead or in addition, at Gournia, Pseira, Kommos, Plakes and Chania (Brogan and Hallager 2011; regarding Gournia, L.V. Watrous, pers. comm. of 11 March 2014). Of course pottery does not change at the same rate and moment everywhere, not necessarily even within one site; accordingly the extent to which it is possible to distinguish two time horizons is unclear. Whether the putative earlier LM IB Late destructions were the result of local uprisings against Knossian rule, Knossian suppression of such uprisings, a first wave of Mycenaean sea raids, or earthquake damage, perhaps massive, is a matter of conjecture. Evidence for earthquake appears convincing in south-central Crete at Ayia Triada, Phaistos, and Kommos, and in north-central Crete at Archanes–Tourkogetonia and Knossos.

A small number of poor locally made pots of Knossian LM II mainland-derived type have been noted in the LM IB Final destruction deposit at Mochlos (Soles 1999), leading to the suggestion that the great destruction there may have occurred after the establishment of Mycenaean control at Knossos. It should be noted, however, that clay vessels may have a mixed parentage. Minoan pot painters were surely active at Mycenae and other mainland sites in LM IB. Indeed, LH IIA pots of Minoan shape, decoration, and syntax (hence in all likelihood painted by Minoans or those Minoan-trained) were manufactured on the mainland (as shown by neutron activation analysis as described in Mountjoy et al. 1978). A reciprocal flow of influences between Crete and the mainland during LM IB/LH IIA with respect to both shape and decoration before the LM IB Final destructions would be expected and hence need not necessarily bear large chronological significance. We may note in this regard the immediate rebuilding at



8. LM IB lamp from Mochlos stone vase workshop (seen from above). The lamp was finished and sitting on the floor of a workshop room when the tip of one spout was struck with a hammer stone, broken off, and thrown to the opposite side of room while the building was still standing. (Soles and Davaras 2010: fig. 3).

Knossos following the LM IB Final destructions, with the reuse of LM I ashlar blocks and retention of certain Minoan features such as a polythyron (Macdonald 2011: 456; re: Knossos in LM II, see also Popham 1975; 1980). House HE at Gournia is similar in this regard (L. V. Watrous, pers. comm. of 11 March 2014).

VII. AGENTS OF DESTRUCTION AND THE MYCENAEAN ROLE

The mode of arrival of the Mycenaean warriors and settlers in Crete is a matter of spirited debate (and in some quarters, of denial). A number of scenarios require consideration, singly or in unison. Let us consider first the enormous workforce requirement to build the great structures of Minoan cult and state and the roadways connecting them. The LM I Minoan construction of the Unexplored Mansion, a small part of the overall Knossian landscape, is estimated to have required 43,525 man-hours (Devolder 2013: 116). Every Mediterranean civilisation known

prior to modern times utilised captive labour. Classical Greece and Rome provide plentiful examples. During the Renaissance the competition between the Genoese and Venetian naval empires to acquire eastern European slaves along the Black Sea, ship them via the Crimea, and resell them at a profit in Egypt was notorious. Mycenaean use of captive women from the Anatolian coast, the Dodecanese, and the Aegean at the end of LH IIIB is indicated by the Linear B tablets from Pylos, which indicate that groups of women worked every day on minimal rations (Palaima 1991: 279–80). It seems highly likely that Neopalatial Crete at the height of its military power in LM IA (see Molloy 2012) also made use of captives, who may have been eager to revolt. Of course the native non-captive population may also have become alienated by the exactions required to build new palaces at Zakros and Phaistos and fine elite structures at Palaikastro, Mochlos, Gournia, Galatas, and Ayia Triada, among other locations, following the eruption of Thera late in the preceding LM IA period. Additional efforts were required to construct the major dam systems above Zakros and at Pseira, designed to capture every piece of potentially arable land to feed a population perhaps enlarged by absorbing refugees from Thera. Arable land in Crete is limited (Chaniotis 1995: 53). Cretan LM IA gives the impression of a state in which a cult-centred ruling elite was able to command a huge proportion of the resources of society, employing belief to justify and mystify the requirement of *corvée* labour, as in Egypt. Repeated destructive earthquakes throughout MM III, LM IA, and LM IB (Macdonald, in press 2015), together with the Theran eruption and resulting tsunami toward the end of LM IA may have played a major role in delegitimising, causing conflicts within, and/or otherwise weakening cult-centred elite rule. Invading Mycenaeans may have joined rebellious Minoans. (Cultic destabilisation may even have preceded the Theran eruption, signalled by the infilling of lustral basins and the creation of a ground-level room in their place, always in connection with Minoan Halls/ [Andreadaki-Vlazaki 1988; 2011: 56–7])

The proposed wilful destruction of major works

of art with likely cultic significance, such as the Palaikastro Kouros (apparently thrown from an upper storey with its gold attachment abandoned); the smashing of bull's head rhyta carved from valued stone (Rehak 1995), the deposit of parts of a bull's head rhyton in various parts of the Tomb of the Double Axes in the Isopata Cemetery north of the palace (Preston 2007: 266); the smashing of a stone lamp and elaborate clay vases at Pseira, scattering contents over various rooms (Hood 1986: 173); and the deliberate destruction at Mochlos of the temenos shrine (Soles and Davaras 2013: 16) all suggest revolt against symbols of cultic/state authority. (Warren, *contra*, believes that the smashing of objects was caused by earthquakes and the collapse of buildings rather than by human action [pers. comms. of 12 March and 31 March 2014].) Of course it is possible that attacking Mycenaeans also detested Minoan cult, particularly if the tale of Mycenaean Athenian children required for sacrifice to the Minotaur reflects any aspect of reality. It is worth noting that non-cult/state objects were deliberately destroyed or looted as well, like the Mochlos lamp (FIG. 8).

At Kato Zakros, a palatial rebuilding utilising huge bronze saws was underway at the moment of final destruction. Great treasures were abandoned and never recovered (Platon 2011). The abandoned treasures may have been covered by collapsing upper floors, with the attackers moving on, perhaps seeking food supplies and with captives in tow. Many Minoan precious objects from various sites were doubtless seized and taken to the mainland (e.g., the Vapheio Tholos Tomb material and the Minoan Type A swords found in a much later shrine deposit at Ayios Vassilios in Laconia) or recycled to Egypt as noted above. The end of LM IB/beginning of LM II destructions appear to be the consequence of “human agency, unexpected and massive” (Brogan, comments in Brogan and Hallager 2011: 643). Cohesive, coherent societies recover even from the most devastating earthquakes. Minoan Crete was able to undertake a dramatic building program including grand palaces and impressive dams after what must have been disruptive destruction in the wake of the ash fall and tsunami following the Theran eruption.

The cohesion of Minoan Crete came to a dramatic terminus, however, at the end of LM IB. Whether the Mycenaeans arrived in a Crete weakened by massive earthquakes, by plague, and/or by crop failures that resulted in the collapse of a social and cosmological compact which required the palatial rulers to maintain adequate food supplies by acting at least as redistributor of last resort; and whether the mainland forces arrived initially by invitation from Cretans rebelling from Knossian rule, or alternatively as a relief force requested by Cretan rulers to restore order (perhaps even as a praetorian guard to protect the Knossian members of the putative Knossos-Mycenae “special relationship” [Dickinson 1996: 70]), or as a highly organised military force capable of conquest without internal assistance or rebellion, there can be little doubt as to the dominant Mycenaean presence in Crete, centred at Knossos and Chania, beginning in LM II.

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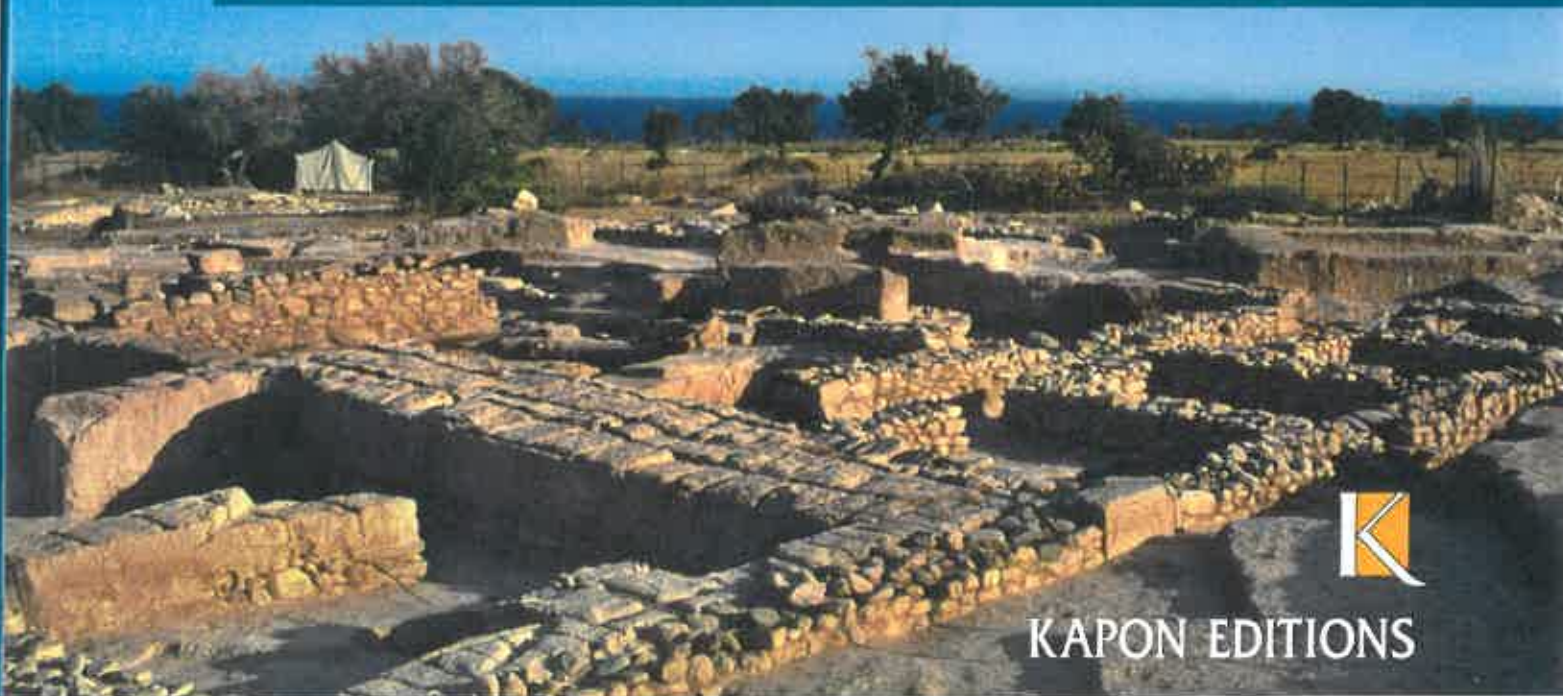
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The Great Islands

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