

AEGEAN ART BEFORE AND AFTER THE LM IB CRETAN DESTRUCTIONS *

Introduction

At the end of the LM IB pottery phase on Crete, a number of Aegean sites show evidence of significant destructions (Pl. XXa).¹ On Crete, the major palaces and villas were destroyed; the Knossos palace survived, but other buildings in the immediate area were damaged. Roughly contemporary destructions occurred at Ayia Irini on Kea, Phylakopi on Melos, Kastri on Kythera, Seraglio on Kos, Trianda on Rhodes, and Miletos in Anatolia. The causes of the destructions on Crete and in the surrounding Aegean have not been determined to the satisfaction of all scholars, and they probably never will be. Some scholars view the destructions as indicating a Knossian takeover of the other centers on Crete.² Other scholars would see the destructions as evidence for a Mycenaean invasion of Crete and their expansion elsewhere in the Aegean.³ Additional interpretations are possible as well.⁴ For the purposes of this paper, and the subject of this conference on *techné*, I would like to examine the technical changes in Aegean art that resulted from the LM IB destructions, not the political processes or the events themselves. Since the Minoan palaces and villas were important centers for the storage of raw materials and for craft production, we can expect that the sudden disappearance of many of them would have had profound effects.⁵

Three major technical changes can be observed after the Cretan destructions. First, a number of neopalatial crafts and forms of artistic expression become extinct. Second, some

* I am grateful to J.G. Younger for his criticisms and helpful comments on this text. An expanded version with more detailed documentation is available on request. The following abbreviations have been used in addition to those in the *American Journal of Archaeology* 95 (1991) 1-16:

Aegean Painting S. IMMERWAHR, *Aegean Painting in the Bronze Age* (1990).
CM S. MARINATOS and M. HIRMER, *Crete and Mycenae* (1960).
HM Archaeological Museum, Heraklion.
NMA National Archaeological Museum at Athens.

1 According to the traditional low chronology, the absolute date of the LM IB destructions is ca. 1450, and ca. 1490 according to the new high chronology. An increasing number of Minoan sites show evidence for major LM IA destructions: e.g., Khania, Palaikastro, Petras, and Pseira (*AR* 41 [1995] 69-70, 72). I focus here on the LM IB destructions because they are more widespread and because they seem to signal a major interruption of Minoan culture, which the earlier destructions do not.

2 W.-D. NIEMEIER, "The Character of the Knossian Palace Society in the Second Half of the Fifteenth Century B.C.," in O. KRZYSZKOWSKA and L. NIXON, eds., *Minoan Society* (1983) 217-236.

3 For hypotheses, see: S. HOOD, "Warlike Destruction in Crete c. 1450 B.C.," *Πεπραγμένα τοῦ Ε' Διεθνoῦς Κρητολογικοῦ Συνεδρίου Ἁγίου Νικόλαος 25 Σεπτ.-10 Οκτ. 1981* (1985) 170-178.

4 E.g., a revolt by a Minoan underclass against the palatial élite. Another possibility is that the destructions are the result of scattered seismic disturbances, perhaps occurring over several years or even decades. Possibly we should consider a combination of factors or a complex historical scenario as well.

5 The bibliography on the Cretan centers as producers of art is now immense: see various authors in R. HÄGG and N. MARINATOS, eds., *The Function of the Minoan Palaces. Proceedings of the 4th International Symposium at the Swedish Institute in Athens, 10-16 June, 1984* (1987). See also C.L. COSTIN, "Craft Specialization: Issues in Defining, Documenting, and Explaining the Origin of Production," in M.B. SCHIFFER, ed., *Archaeological Method and Theory* 3 (1991) 1-56; E. MARCELIS, "Quelques réflexions à propos de l'organisation de l'artisanat minoen à l'époque des premiers et des seconds palais," *Aegaeum* 3 (1989) 29-34; L. PLATON, "Ateliers palatiaux minoens: une nouvelle image," *BCH* 117 (1993) 103-122; G. CLARKE, *Symbols of Excellence. Precious Materials as Expressions of Status* (1986).

crafts survive, but decline. Third, a small number of crafts come into being for the first time, or flourish in new ways, though these are relatively few.

Faience

Neopalatial faience production, a technique imported from Syria or Egypt, demands a high level of technical expertise and skillful control of firing temperatures; it was used to create quartz-glazed objects in subtle, glowing colors, along with three-dimensional figurines like the three "Snake Handlers" from the Knossos Temple Repositories.⁶ The skirt and hand of another such figure were found in the Zakros palace.⁷ Faience was also used to create imitations of seashells and plaques like the animals nursing their young and model robes decorated with crocus plants from Knossos.

Following the Cretan destructions, there is no more production of moderately large anthropomorphic faience figurines, three-dimensional shells, and figural plaques. Later faience production is mostly limited to jewelry and small ornaments. Even on the mainland, the manufacture of faience may have ceased before the end of LH IIIB: 1: the pieces found in a destruction context in the House of Shields at Mycenae have all been convincingly identified as eastern imports.⁸

Ivory Carving

Ivory carving has a long history in the Aegean, and elephant and hippopotamus ivory was imported from Syria or Egypt as part of international exchange networks. Whole elephant tusks were preserved in the destruction levels of the Zakros palace, and both hippo and elephant ivory were present on the late 14th c. B.C. Ulu Burun shipwreck.⁹

Large-scale figurines of ivory combined with other materials are a feature almost exclusive to neopalatial Crete. Evans found several fragmentary figures in the Knossos palace which he identified as parts of bull-leapers.¹⁰ Some of these figurines may have been used in combination to create vignettes of ritual activities.

The impressive ivory youth, discovered recently at Palaikastro, was pegged together from four large pieces of hippopotamus incisor and had crystal eyes, gold clothing and perhaps skin, and a "wig" of black steatite.¹¹ The figure was destroyed in the violent conflagration of Building 1 at Palaikastro, but the fragments were found strewn mostly outside the structure in the adjacent plateia.

It is doubtful that many ivory figurines were carved later. Several figurines, generally of women, have been found in mainland contexts later than LM IB, but most of these are small and crudely carved in comparison to the Minoan pieces, or so worn that stylistic analysis is difficult.¹²

6 K.P. FOSTER, *Aegean Faience of the Bronze Age* (1979); M. PANAGIOTAKI, "The Temple Repositories of Knossos: New Information from the Unpublished Notes of Sir Arthur Evans," *BSA* 88 (1993) 49-91.

7 N. PLATON, *Zakros. The Discovery of a Lost Palace of Ancient Crete* (1971) 218.

8 I. TOURNAVITOU, *The 'Ivory Houses' at Mycenae* (*BSA Suppl.* 24: 1995) esp. ch. 6; E. PELTENBERG, "Greeting Gifts and Luxury Faience: A Context for Orientalising Trends in Late Mycenaean Greece," in N.H. GALE, ed., *Bronze Age Trade in the Mediterranean* (*SIMA* 90: 1991) 162-179.

9 O. KRZYSZKOWSKA, "Ivory in the Aegean Bronze Age: Elephant Tusk or Hippopotamus Ivory?," *BSA* 83 (1988) 209-234; *Ivory and Related Materials*, University of London Classical Handbook 3, *Bull. Suppl.* 59 (1990). For the Zakros tusks, see PLATON (*supra* n. 7) 61 fig.

10 *CM* pls. 96, 97. Cf. the figurines of young boys from Palaikastro: *CM* pl. 109 (below).

11 Siteia Museum, on display: J. WEINGARTEN, "Measure for Measure: What the Palaikastro Kouros Can Tell Us About Minoan Society," in R. LAFFINEUR and W.-D. NIEMEIER, eds., *Politeia. Society and State in the Bronze Age Aegean* (*Aegaeum* 12: 1995) 249-26 (with earlier bibliography).

12 J.-C. POURSAT, *Les ivoires mycéniens* (1977) pl. III.5-8.

Some ivories from LH IIIB contexts may have been manufactured much earlier, like the Ivory Triad from Mycenae with two women and a child.¹³ One pair of ivories from the Mycenae Cult Center, a unique male head and a couchant lion, may be mainland works of LH IIIA-B date.¹⁴ A LH IIIB:1 deposit in the House of Shields outside the walls includes ivories that were being assembled or repaired for furniture, but there is almost no evidence there for the contemporary carving of raw ivory.¹⁵

Stone Carving

Minoan stone vases have been studied by P. Warren.¹⁶ During the neopalatial period, Minoan artisans employed an unparalleled range of ornamental stones from a variety of sources. For example, green speckled black *lapis lacedaemonius* and red marble or jasper (*antico rosso*) were imported from Lakonia in the southern Peloponnese into Crete, probably through the Minoan colony on Kythera.¹⁷ From the eastern Aegean, white-spotted obsidian was imported from the island of Giali off the coast of Anatolia.¹⁸

Egyptian or Syrian stone vases were imported as well, and these were occasionally modified by Minoan artisans once they had reached Crete.¹⁹ One Egyptian stone bowl found at Zakros had been "minoanized" through the addition of a typical Cretan beaked spout of local limestone and its original horizontal lug handles were cut away.²⁰ Another vessel, an alabastron, was inverted and given new handles and a spout on Crete and sent on to Mycenae, where it was deposited in SG IV.²¹ While the import of Egyptian vases does not cease at the end of LM IB,²² I know of no modified vessels that were deposited in later contexts.

Mycenaean stone vase production never equals that of the Minoans. The LM II-III A gypsum throneroom alabastra from Knossos imitate a mainland pottery shape but are surely of Minoan manufacture.²³ On the mainland, only Mycenae seems to develop a tradition of stone vases, and even there it does not continue beyond the end of LH IIIB:1.²⁴ One major function of these vessels may have been for funerary ritual, since a number were found in tombs at Mycenae.²⁵

Many varieties of stone were used on Crete to make rhyta for holding and pouring liquids. Some stone rhyta of soft black steatite or green chlorite were carved in low relief with human figures of men but not women, perhaps indicating that only men made and used them.²⁶ Other stone rhyta were shaped into bull's heads,²⁷ lion's heads,²⁸ and triton shells.²⁹ Because most of the relief rhyta and bull's heads have been found in small fragments, in contrast to other complete stone vessels, I have hypothesized that they were deliberately

13 NMA 7711: J.-C. POURSAT, *Catalogue des ivoires mycéniens du Musée national d'Athènes* (1977) 20-21 no. 49, pl. IV. At the TEXNH conference, E. Barber informed me that on the basis of textile patterns, she would not date the Triad after LH II.

14 POURSAT (*supra* n. 12) pl. III.1-4.

15 TOURNAVITOU (*supra* n. 8).

16 P. WARREN, *Minoan Stone Vases* (1969).

17 P. WARREN, "Lapis Lacedaemonius," J.M. SANDARS, ed., *ΦΙΛΟΛΑΚΩΝ. Lakonian Studies in Honour of H. Catling* (1992) 285-296.

18 P.P. BETANCOURT, this volume.

19 P. WARREN, this volume; cf. comments by C. LILYQUIST, this volume, on a possible Syrian origin for some of these vases.

20 HM 2695: for illustration, see PLATON (*supra* n. 7) 138 col. fig. (above).

21 NMA 389: CM pl. 213.

22 E. CLINE, *Sailing the Wine-Dark Sea. International Trade and the Bronze Age Aegean*, BAR International Series 591 (1994).

23 PM IV 2 fig. 877 (between pgs. 902 and 903) 939 fig. 910.

24 TOURNAVITOU (*supra* n. 8).

25 A.J.B. WACE, "Mycenae, 1939-1953," *BSA* 49 (1954) 238, on stone vases from the Clytemnestra tholos.

26 B. KAISER, *Untersuchungen zum minoischen Relief* (1976).

27 Little Palace example: CM pl. 98; P. REHAK, "The Use and Destruction of Minoan Stone Bull's Head Rhyta," in LAFFINEUR and NIEMEIER (*supra* n. 11) 435-460.

28 CM pl. 99.

29 C. BAURAIN and P. DARCQUE, "Un triton en pierre à Malia," *BCH* 103 (1983) 3-73, with catalogue.

destroyed after display or use as part of a ceremony with religious and social value.³⁰ Several fragments are from contexts datable to LM IA, indicating that at least some of the rhyta had been reduced to pieces before the end of the neopalatial period. Few datable examples come from later contexts.

Minoan artisans were capable of working hard varieties of stone (up to Mohs scale 7). An outstanding example is the rock crystal rhyton found at Zakro.³¹ A worked amethyst fragment, found at Midea on the mainland where it had been secreted in a LH IIIB:2 wall, was probably produced by a neopalatial artist on Crete, and may have been part of a triton shell rhyton.³²

One distinctive neopalatial stone vessel shape is the chalice. Numerous examples were found in LM IB destruction contexts in the Zakros palace,³³ House A at Ayia Irini on Kea,³⁴ and Makriyalos on Crete.³⁵ Other examples from the Shaft Graves of Circle A at Mycenae³⁶ and Akrotiri on Thera³⁷ had passed out of circulation before the end of LM IA. A fragmentary chalice was found in a probable LH IIIB context in the Rhyton Well at Mycenae, but other LM/LH I material from the deposit indicates that the chalice may have been an heirloom at the time it was discarded.³⁸ A gold ring from the Tiryns Treasure, probably manufactured about the time of the Cretan destructions, shows an enthroned woman holding such a chalice and attended by a line of *genii* holding beaked jugs.³⁹ None of the stone chalices seems to have been made after the Cretan destructions, though a yellow (gold?) vessel of this shape appears in the LM II-III A Campstool Fresco.⁴⁰

Stone offering tables and ladles, a few of them inscribed in Linear A, have been found in neopalatial contexts on Crete,⁴¹ Kea,⁴² and Kythera.⁴³ These vessels do not seem to have been manufactured after the Cretan destructions, and only a few examples come from mainland contexts, mainly at Mycenae.

Ornamental stone "mace" heads are found on Crete and at a few other Aegean sites.⁴⁴ Because a sealstone from Mallia shows a robed figure apparently holding such a mace,⁴⁵ these objects may be signs of status or insignia of office, as similar objects were in Syria and Egypt.⁴⁶ Only one of the Cretan examples comes from a datable context later than LM IB, and it is of a shape different from the others.⁴⁷ Again, it is unlikely that any maces were made after the Cretan destructions.

30 P. REHAK, "The Ritual Destruction of Minoan Art?," *Archaeological News* 19 (June 1994) [1995], 1-6.

31 PLATON (*supra* n. 7) 139 col. fig. (upper right).

32 K. DEMAKOPOULOU, N. DIVARI-VALAKOU, and G. WALBERG, "Excavations and Restoration Work in Midea 1990-1992," *OpAth* 20 (1994) 19-41, esp. 32, 34 and fig. 45.

33 WARREN (*supra* n. 16) 36-37.

34 W. CUMMER and E. SCHOFIELD, *Keos III: Ayia Irini: House A* (1984) 122 nos. 1499, 1500, pl. 42.

35 Ayios Nikolaos Museum 7349: C. DAVARAS, *Hagios Nikolaos Museum* (n.d.).

36 NMA 600, 854.

37 NMA 3964.

38 A.J.B. WACE, "The Rhyton Well," *BSA* 24 (1921) 200-209; 25 (1921-23) 1-2.

39 NMA 6208: *CMS* I no. 179.

40 *Aegean Painting* 176 Kn. No. 26.

41 E.g., an example from Archanes: J. and E. SAKELLARAKIS, *Archanes* (1991) 52 col. fig. 30.

42 J.L. CASKEY, "Investigations in Keos. Part I: Excavations and Explorations, 1966-1970," *Hesperia* 40 (1971) 394, pl. 84.

43 J. SAKELLARAKIS and J.-P. OLIVIER, "Un vase en pierre avec inscription en linéaire A du sanctuaire de sommet minoen de Cythère," *BCH* 118 (1994) 343-351.

44 E.g., two examples from the Knossos Temple Repositories, and three from the Zakros palace, catalogued and discussed by N. MANTE-PLATONOS, "Τελετουργικές σφίρες και ρόπαλα στο μινωικό κόσμο," *AE* (1981) [1983], 74-83. For an unstratified example from Aigina, see C. REINHOLD, "Ein minoischer Steinhammer in Ägina," *ArchKorrBlatt* 22 (1992) 57-62. Another example, of Argolid provenience, is in the Nauplion Museum: B. KAISER, "Mykenische Steingefässe und verwandtes im Magazin zu Nauplia," *AM* 95 (1980) 16 no. 40, 17 fig. 4, pl. 7.4.

45 HM 1456: *CMS* II 3 no. 147.

46 H. WEISS, ed., *Ebla to Damascus* (1985) 239 no. 112, 240 fig.: ornamental stone mace of pharaoh Hornedjehutyotef (13th dynasty) found at Ebla in the "Tomb of the Lord of Goats."

47 Tomb of the Mace Bearer at Knossos (LM II-III A): A.J. EVANS, "The 'Tomb of the Double Axes'," *Archaeologia* 65 (1913) 18 fig. 25.

An offshoot of stone vase manufacture was the creation of lamps in a variety of stones and a variety of shapes.⁴⁸ Most lamps contain a shallow bowl for oil and have one, two, or four depressions on the lip for the wick. But some lamps have short pedestals,⁴⁹ while others were attached to columnar supports, the latter occasionally carved in relief.⁵⁰ Only a few examples have been found in mainland contexts, most of them at Mycenae, and a few at other locations like Vapheio and Pylos.

In contrast to Egypt and Anatolia, no Bronze Age Aegean culture ever developed a strong tradition of large scale stone relief sculpture. The gypsum Elgin plaques with bulls are probably knossian neopalatial works taken later to Mycenae and reused as spolia on the facade of the Atreus tholos.⁵¹ At Mycenae, there is also a local production of inscribed and low relief grave stelai, culminating in the creation of the Lion Gate, probably in LH IIA.⁵²

Stone carvers were employed, however, in the creation of stone relief dadoes with rosettes or the triglyph-half rosette motif at Knossos.⁵³ These fragments have proved hard to date, but their patterns recur on early neopalatial frescoes depicting architectural facades.⁵⁴ If, like the paintings, the Knossos relief dadoes are MM III-LM I, then there seems to be a chronological hiatus before similar stone dadoes appear on the mainland in LH IIIA-B for the decoration of the facades of the Atreus and Clytemnestra tholoi,⁵⁵ the Tiryns throne base,⁵⁶ the roof of a side chamber in the Orchomenos tholos,⁵⁷ and architectural elements in the palaces at Mycenae, Tiryns, and Thebes.⁵⁸ This is one craft which the Mycenaean may have imbued with new life.

Nevertheless, following the Cretan destructions, the production ceases of stone relief rhyta with scenes of human activity, the spectacular bull and lion-headed rhyta, chalices, maces, and lamps, but the carving of plainer stone vases continues for a time. Some neopalatial stone vases obviously survived. For example, the LM IIIA Ayia Triadha sarcophagus shows a polychrome (limestone or marble?) double-beaked jug of a shape not generally found after LM IB.⁵⁹ Even on the mainland, however, stone vase manufacture had ended by LH IIIB:1.⁶⁰

Metallurgy

Neopalatial artisans also manufactured small solid-cast figurines of lead and bronze using the *cire perdue* or lost wax technique.⁶¹ Many of the figurines are identifiable as men or women on the basis of anatomy, but a large number are of indeterminate sex. Metal figurines had a specific function, as dedications at peak sanctuaries or in caves. Although more work remains to be done on these figurines, it is clear that their poses and costumes were sophisticated and detailed enough to communicate important social information.

48 A. Blasingham concurs that few of the elaborate stone lamps were manufactured after LM I B (paper at the present Conference, not submitted for publication).

49 J. and E. SAKELLARAKIS (*supra* n. 41) 35 col. fig. 18.

50 Examples include two from the Knossos palace: CM pl. 114 (below, left and right).

51 PM III 192-202, figs. 133, 136; J.G. YOUNGER, "The Elgin Plaques from the Treasury of Atreus: Evidence for a New Reconstruction of the Facade," in W. SCHIERING, ed., *Kolloquium zur Ägäischen Vorgeschichte. Mannheim, 20-22.2.1986* (1987) 138-150.

52 J.G. YOUNGER, this volume. For an early date for the Lion Gate relief, see J.G. YOUNGER, "Interactions Between Aegean Seals and Other Minoan-Mycenaean Art Forms," *CMS Beiheft* 5 (1995) 331-348, esp. 346.

53 PM II 2 591 fig. 368, 598 fig. 372, 694 fig. 436.

54 PM II 2 604 fig. 377; PM III col. pl. XVI.

55 YOUNGER (*supra* n. 51).

56 NMA 1737-1743; K. KILIAN, "Die 'Thronfolge' in Tiryns," *AM* 103 (1988) 1-9; T. SCHULTZ, "Die Rekonstruktion des Thronpodestes im ersten grossen Megaron von Tiryns," *AM* 103 (1988) 11-23.

57 R. HAMPE and E. SIMON, *The Birth of Greek Art* (1981) fig. 51.

58 H. PLOMMER, "A Carved Block from the Megaron at Mycenae," *BSA* 60 (1965) 207-211; K. MOSER VON FILSECK, "Der Alabasterfries von Tiryns," *AA* (1986) 1-32.

59 CM col. pl. XXVIII.

60 TOURNAVITOU (*supra* n. 8).

61 C. VERLINDEN, *Les statuettes anthropomorphes crétoises en bronze et en plomb du IIIe millénaire au VIIe siècle av. J.-C.* (1984).

Metal figurines continue on Crete after the LM IB destructions, but they no longer have the highly detailed costumes, hair, or anatomical renderings characteristic of the best neopalatial pieces. Metal figurines never become popular in the Mycenaean world, which prefers instead the use of terracotta and comes to excel in it.⁶² The main metal figurines in Late Mycenaean contexts are the bronze or silver representations of Reshef, a Syrian weather god whose images in the Aegean are probably all imports, indicating continuing contacts with the Levant.⁶³

While many of the Cretan metal figurines may have been produced locally throughout the island, Minoan metalsmiths at a few major palace centers reached a high level of technical competence. During the neopalatial era, Type A (Minoan) and B (Mycenaean) swords were the best produced in the Aegean, and these served as the ancestors to subsequent sword types.⁶⁴

A tradition of decorated weapons began on Crete in MM II under Syrian influence, with several spectacular examples found at Mallia in Quartier Mu and in two locations within the palace.⁶⁵ The decoration of weapons becomes even more elaborate in the neopalatial period, with some of the most ornate examples found in the Shaft Graves at Mycenae.

The most celebrated and problematic neopalatial weapons are the niello daggers which have been found at a number of sites, almost all of them on the mainland and none from Crete.⁶⁶ Although the inlaid blades are much finer than most contemporary metalwork in the Shaft Graves at Mycenae, the lions on several of the daggers have the distinctive "cheek-flaps" which are a stylistic peculiarity of the Mycenae-Vapheio Lion workshop on the mainland, but rare on Crete.⁶⁷ The Minoan origin of this workshop, and the Cretan palatial sources of almost all the pictorial motifs on the daggers, suggests that the experts in *Metalmalerei* – whatever their ethnicity or the location of their workshops – had direct acquaintance with the art of Knossos but were working almost exclusively for mainland patrons.

After the Cretan destructions, sophisticated bronze metallurgy continues, but the niello technique probably declines, and far fewer decorated weapons are made in the years afterward. The decorated type Ci and Di swords found in Warrior Graves represent the continuing existence of a tradition of master swordsmiths at Knossos.⁶⁸ One sword, with a gold hilt incised with lions, agrimia, rockwork, and a crocus blossom, was found in the LM II-III A Chieftain's Grave (no. 36) near Knossos, but the scene recalls neopalatial fresco and glyptic compositions.⁶⁹ In general, however, there is a falling off in the number and complexity of decorated weapons.

Neopalatial metalsmiths also made a variety of copper and sheet bronze vessels, many with handles and rims decorated in relief with shells, abstract designs, even friezes of double

62 E. FRENCH, "The Development of Mycenaean Terracotta Figurines," *BSA* 66 (1971) 101-108.

63 H. GALLET DE SANTERRE, "Les statuettes de bronze mycénienne du type dit du 'dieu Reshef' dans leur contexte égéen," *BCH* 111 (1987) 7-29.

64 N.K. SANDARS, "The First Aegean Swords and Their Ancestry," *AJA* 65 (1961) 17-29; and "Later Aegean Bronze Swords," *AJA* 67 (1963) 117-153.

65 O. PELON, "L'acrobate de Malia et l'art de l'époque protopalatiale en Crète," in J.-C. POURSAT and P. DARCQUE, eds., *L'iconographie minoenne* (1985) 35-39.

66 R. LAFFINEUR, "L'incrustation à l'époque mycénienne," *AC* 43 (1974) 5-37; A. SAKELLARIOU and C. CHATZILIOU, *Peinture en métal à l'époque mycénienne* (1989); E.N. DAVIS, "Metal Inlaying in Minoan and Mycenaean Art," *TUAS* 11 (1976) 3-6; M. BOSS and R. LAFFINEUR, this volume.

67 J.G. YOUNGER, "The Mycenae-Vapheio Lion Group," *AJA* 82 (1978) 285-299. Before the end of the neopalatial period, there is evidence for artistic reflux in the direction of Crete: lions with "cheek-flaps" are painted on one of the ships in the Miniature Fresco from the West House at Akrotiri on Thera, and lion's head rhyta with "cheek-flaps" occur on Thera and at Knossos.

68 H. CATLING in M. POPHAM, "Sellopoulo Tombs 3 and 4, Two Late Minoan Tombs Near Knossos," *BSA* 69 (1974) 242-244.

69 *PM* IV 2 863-866, fig. 851; *CM* pls. 112, 113 (above).

axes.⁷⁰ Large, low open basins with upswung handles found at Knossos and Mokhlos probably originated from a single Knossian workshop.⁷¹ Sheet bronze vessels continue to be made at Knossos after the Cretan destructions, but the decoration of rims and handles with elaborate relief designs becomes much rarer. Some earlier pieces remained in circulation for a time as heirlooms before being deposited in Warrior Graves of LM/LH II-III A date on Crete and the mainland.

Sheets of gold, silver, and bronze were also used for non-functional double axes: examples in gold and silver, some with Linear A inscriptions, were found at Arkalokhori,⁷² and several huge bronze examples were found in the villa at Nirou Khani and a smaller one at Zakros, most elaborately incised but too flimsy for practical use.⁷³ These large, emblematic objects are not found after the Cretan destructions, though on the LM III A Ayia Triadha sarcophagus a pair mounted on poles are represented in the offering scene, and another appears in the bull-sacrifice scene.⁷⁴

Although much of the gold and silver plate in the Aegean has been found on the mainland, neopalatial Crete is the likely origin for many of the surviving pieces.⁷⁵ The well-known pair of gold Vapheio cups are both decorated with scenes of bull-capture which come straight out of Knossian iconography.⁷⁶

The production of gold and silver ware declines sharply after the Cretan destructions as well: nearly 75% of surviving Aegean metal plate comes from contexts dating before the end of LM IB (see Appendix). Silver in appreciable quantities is surprisingly rare in Aegean contexts after LM II-III A:1, though the Knossos Procession Fresco shows a Cupbearer carrying an enormous blue (silver?) rhyton.⁷⁷ By LM/LH III A, the general dearth of silver vessels may contribute to the funerary use of tin-coated pottery vessels.⁷⁸ When gold vessels are attested on Linear B tablet Tn 316 from Pylos, the shapes of the vessel ideograms used suggest that these vessels are heirlooms,⁷⁹ perhaps conserved for generations in the palaces or rediscovered by the Mycenaeans themselves in local tombs.

Jewelry

The crafts of the metalsmith, gem engraver, and glass-caster converge in the creation of jewelry, and it is possible that some artisans were trained in, and worked with, more than one medium.⁸⁰ Relatively few neopalatial pieces survive, but these seem to be mostly individual works, unlike jewelry after the destructions, which increasingly was mass-produced. It is instructive to compare the elaborate jewelry of the women in the LM IA frescoes from Akrotiri on Thera with the later (LH III A-B) frescoes from the mainland. The most elaborate neopalatial jewelry is worn by the seated Thera goddess in a LM IA fresco from Xeste 3 at Akrotiri.⁸¹ Her parure includes hair beads, a beaded forehead band, an earring, three

70 H. MATTHÄUS, *Die Bronzegefäße der Kretisch-mykenischen Kultur* (1980).

71 PM II 2 637-647.

72 CM pl. 110 (above): gold axe decorated with foliate bands.

73 PLATON (*supra* n. 7) 146 figs.

74 CM col. pls. XXVII, XXVIII, XXIX A.

75 E.N. DAVIS, *The Vapheio Cups and Aegean Gold and Silver Ware* (1977).

76 NMA 1758, 1759: DAVIS (*supra* n. 75) 1-50.

77 PM II col. pl. XII; *Aegean Painting* 174-175 Kn. No. 22.

78 S. IMMERWAHR, "The Use of Tin on Mycenaean Vases," *Hesperia* 35 (1966) 381-396; C. GILLIS, "Binding Evidence. Tin Foil and Organic Binders on Late Bronze Age Pottery," *OpAth* 20 (1994) 57-61.

79 A. SACCONI, "La tavoletta di Pilo Tn 316. Una registrazione di carattere eccezionale?," *Minos* 20-22 (1987) 551-555; T. PALAIMA, "Pylos Tn 316 and the Relationship between Vase Offerings and Divinities in Linear B Documents," *AJA* 100 (1996) 403-404 (abstract).

80 For background, see e.g., R. HIGGINS, *Greek and Roman Jewelry* (1961); J.G. YOUNGER, "Representations of Minoan-Mycenaean Jewelry," in R. LAFFINEUR and J.L. CROWLEY, *EIKΩN. Aegean Bronze Age Iconography: Shaping a Methodology* (*Aegaeum* 8: 1992) 257-293.

81 C. DOUMAS, *The Wall-Paintings of Thera* (1992) pl. 125-126.

necklaces, and several bracelets. The Mycenaean women generally wear very simple jewelry consisting of repetitive strands of small blue, red, or yellow beads.⁸²

The manufacture of raw glass in the Mediterranean during the Bronze Age was probably a Levantine monopoly.⁸³ Ingots of glass, like the examples found on the Ulu Burun shipwreck, were sent to neighboring regions, including the Aegean, where they were reworked into ornaments. Glass jewelry seems to have been in fashion by LM IA: one of the two Boxing Boys from Akrotiri wears strings of blue beads which are probably glass, if not lapis lazuli.⁸⁴ In LM/LH II-III A Warrior Graves and chamber tombs, mould-made glass ornaments gradually supplant gold and silver jewelry. Glass was still being worked in the LH IIIB period, as the mention of *kuwanowokoi* on a Linear B tablet from Mycenae attests.⁸⁵

Two jewelry techniques were probably learned in Syria by the Minoans as early as protopalatial times (MM II): cloisonné and granulation. The Aegean examples of these techniques deserve a more detailed study. But there is little evidence that either technique survived long in the Aegean after the Cretan destructions, and the examples in later contexts may simply be heirlooms or pieces produced in the eastern Mediterranean, where the techniques survived until the end of the Bronze Age.⁸⁶

A gold cloisonné brooch with blue glass inserts, from the LH IIIB destruction debris of the Pylos palace, is surely much earlier work since it is shaped like a Minoan beak-spouted jug of neopalatial date – a shape which is absent from the later pottery repertory.⁸⁷

Jewelry is sometimes attached to neopalatial clothing in the form of tassels, as on the gold ring from Isopata Tomb 1⁸⁸ and the Thera frescoes from Xeste 3,⁸⁹ both of LM I date. After the Cretan destructions, such tassels become rare on women's clothes, though some of the men in the LM II-III A Knossos Procession Fresco wear kilts with pendant tassels.⁹⁰ On a LH IIIB fresco from the Cult Center at Mycenae, an important woman with a sword wears a garment with a row of gray dress-weights along its hem, probably simple steatite buttons.⁹¹

Fresco

In terms of wall painting, Knossos was surely the most important neopalatial center in Crete and a leader in artistic production.⁹² It is the only palace which had large-scale and miniature frescoes depicting the human form, and the large-scale figures are sometimes modeled first in low plaster relief. The Knossos paintings and relief frescoes emphasize important women, gatherings of women and men, physical combats among athletic youths, scenes of bull-leaping with adolescent youths and maidens as participants, and architectural representations of palatial buildings and peak sanctuaries.⁹³ Natural landscapes, sometimes without human figures, are also important settings.⁹⁴ Several of these *topoi* were also carved

82 E.g., the painted plaster "sphinx" head from Mycenae: *CM* col. pls. XLI, XLII. Cf. also the "Mykenaiia": *Aegean Painting* 191 My no. 3.

83 G. BASS, "Oldest Known Shipwreck Reveals Splendors of the Bronze Age," *National Geographic* (1987) 693-732, esp. 716-718.

84 DOUMAS (*supra* n. 81) pls. 78, 80-81.

85 J.-P. OLIVIER, *The Mycenae Tablets*, IV (1969).

86 I. PINI, this volume.

87 C.W. BLEGEN and M. RAWSON, *The Palace of Nestor at Pylos in Western Messenia I* (1966) fig. 273 no. 20.

88 HM 424: *CMS* II 3 no. 51.

89 DOUMAS (*supra* n. 81) col. pls. 116-120.

90 *Aegean Painting* 174-175 Kn no. 22; P. REHAK, "Aegean Breechcloths, Kilts, and the Keftiu Paintings," *AJA* 100 (1996) 35-51, esp. 44-45, 44 fig. 6.

91 S. IAKOVIDES, "On the Use of Mycenaean 'Buttons,'" *BSA* 72 (1977) 113-119.

92 W.-D. NIEMEIER, "Knossos in the New Palace Period (MM III-LM IB)," in D. EVELY, H. HUGHES BROCK, and N. MOMIGLIANO, eds., *Knossos. A Labyrinth of History* (1994) 71-88; J. SOLES, "The Functions of a Cosmological Center: Knossos in Palatial Crete," in LAFFINEUR and NIEMEIER (*supra* n. 11) 405-414.

93 M.A.S. CAMERON, "The 'Palatial' Thematic System in the Knossos Murals. Last Notes on Knossos Frescoes," in HÄGG and MARINATOS (*supra* n. 5) 321-327; K. KRATTENMAKER, "Architecture in Glyptic Cult Scenes: The Minoan Examples," *CMS Beiheft* 5 (1995) 117-133.

94 M. SHAW, "The Aegean Garden," *AJA* 97 (1993) 661-685.

on gold look-alike rings carried by top administrators and on the stone relief rhyta mentioned earlier. Clearly, these images were ones that the neopalatial élite selected to project to the rest of the population.

Relief fresco is an important technique because it treats painting as sculpture. Minoan relief frescoes emphasized the anatomy and musculature of the human body; faces by contrast were painted on the flat wall surface. Surviving relief fragments show a meticulous observation of detail: veins may be indicated on hands and wrists, or tendons outlined in the legs – traits which we see in contemporary ivory carving, as on the Palaikastro youth.

Images of bulls and bull-leapers in relief dominated the North Entrance Passage of the Knossos palace,⁹⁵ and perhaps other entrances to the complex as well. But the most sophisticated relief frescoes adorned the Great East Hall located on the edge of the Central Court opposite the Throne Room.⁹⁶ The pictorial program included bulls, athletic youths (bull-leapers or combatants) and important women. Relief frescoes had also appeared at a number of sites on and off Crete that had evidence of strong connections with Knossos.⁹⁷

Fresco painting continues after the Cretan destructions, but no more relief frescoes with human figures are produced, and there are no more large-scale nature scenes. In two cases, the Knossos Procession Fresco and Throne Room decoration, the LM II-IIIa paintings probably reproduce earlier schemes.

Pottery

Given the weath of experimentation in exotic materials in neopalatial Crete, it is understandable that contemporary pottery appears to follow, rather than to lead, the new artistic developments. Special Palatial Tradition pottery develops within LM IB, and includes the much admired Floral Style and Marine Style pieces, as well as an Abstract-Geometric Style that avoids naturalistic motifs, and the Alternating Style which employs recognizable motifs in paratactic arrangements.⁹⁸ Marine Style pottery is often found in contexts which suggest that much of it was designed for ritual usage.⁹⁹

Already before the end of LM IB, we can see an increasing formalism in the painted designs on pottery, a trend which increases in LM/LH II-IIIa. With the disappearance of so many media where the human figure was represented in neopalatial times, it is perhaps not surprising that pictorial vase painting becomes more common after the Cretan destructions. One early example is the figure of a man with a spear on a LM II jug from the Knossos Unexplored Mansion.¹⁰⁰ In LH IIIa-C there develops a lively set of abstracted and abbreviated figures that includes charioteers and perhaps even narrative scenes.¹⁰¹

Along with the painted pots, we should consider the terracotta larnakes which are manufactured and decorated in a similar manner. The use of plain larnakes as burial chests is a Minoan custom as far back as the protopalatial period, but after the Cretan destructions we begin to find examples painted with motifs that recall the scenes on vases, wall-frescoes, and perhaps textiles.¹⁰²

95 PM III 160-176; *Aegean Painting* 174 Kn No. 21.

96 PM III 481-509; *Aegean Painting* 171 Kn No. 8.

97 E.g., Psaira, Zakros, and Akrotiri.

98 P.P. BETANCOURT, *The History of Minoan Pottery* (1985).

99 P. MOUNTJOY, "Ritual Associations for LM IB Marine Style Vases," in POURSAT and DARCQUE (*supra* n. 65) 231-242.

100 M. POPHAM, *The Minoan Unexplored Mansion at Knossos* (BSA Suppl. 17: 1984) pl. 153.7.

101 E. VERMEULE and V. KARAGEORGHIS, *Mycenaean Pictorial Vase-Painting* (1982).

102 L.V. WATROUS, "The Origin and Iconography of the Late Minoan Painted Larnax," *Hesperia* 60 (1991) 285-307.

Architecture

The severity of the disruption of Minoan crafts at the end of LM IB can also be traced in architecture.¹⁰³ After the Cretan destructions, no more court-centered buildings like palaces are constructed on Crete (although occupation continues in several buildings at Knossos, and not just the palace) and there are no new villas though some existing ones were reoccupied eventually. Fewer buildings are constructed of ashlar masonry, and those that are often cannibalize blocks from the fallen neopalatial structures.

Four major architectural forms characteristic of neopalatial society vanish after LM IB: Minoan Halls, Pillar Crypts, Lustral Basins, and *polythyra* with pier and door partitions. Significantly, none of these architectural forms is adopted by the Mycenaeans.

Mason's marks engraved on poros, sandstone, and gypsum ashlar blocks are a feature of Minoan architecture during the protopalatial and neopalatial periods.¹⁰⁴ The few mason's marks found on the mainland generally come from early Mycenaean buildings, like the double axe incised on a block from a wall under the LH IIIB Pylos palace.¹⁰⁵

One prominent Minoan architectural symbol, the horns of consecration, continues after the end of LM IB but undergoes transformation. During the neopalatial era, stone examples marked a number of buildings on Crete, and one has been found at Akrotiri on Thera.¹⁰⁶ After the Cretan destructions, three-dimensional stone examples seldom occur, and the motif passes into the realm of vase painting and fresco.¹⁰⁷ Only two stone examples have been found on the mainland: a set of horns of uncertain date, reused as building material in the IIIB Pylos palace,¹⁰⁸ and a poros set from Gla, destroyed in LH IIIB:1.¹⁰⁹

Linear A Administration

The archival use of Linear A also disappears about the time of the Cretan destructions. While many LM IB destruction levels have tablets and other documents, none has been discovered in a datable later context. Some vessels inscribed in Linear A survive, but these may have been manufactured before the destructions. One LM II-III A terracotta figurine with a painted inscription has been discovered recently at Poros-Heraklion, perhaps indicating that Linear A lingered for a short time for religious purposes.¹¹⁰

While the burnt destructions at many Cretan sites at the end of LM IB preserved many sealings, these bear eloquent testimony to the widespread loss of the permanent records of papyrus and leather to which many of them were attached. This loss of stored records may have been a more severe blow to the Minoans than we now realize.

The Linear B writing system was probably developed about the time of the Cretan destructions. Roundels and *noduli*, two types of clay document used extensively on Crete, were not adopted on the mainland.

103 J. SHAW, "Minoan Architecture: Materials and Techniques," *ASatene* 49 (1971); J. DRIESSEN and I. SCHOEP, "The Architect and the Scribe. Political Implications of Architectural and Administrative Changes on MM II-LM III A Crete," in LAFFINEUR and NIEMEIER (*supra* n. 11) 649-664.

104 S. HOOD, "Mason's Marks in the Palaces," in HÄGG and MARINATOS (*supra* n. 5) 205-212.

105 BLEGEN and RAWSON (*supra* n. 87) 94, fig. 16.

106 A.L. D'AGATA, "Late Minoan Crete and Horns of Consecration: A Symbol in Action," in LAFFINEUR and CROWLEY (*supra* n. 80) 247-256.

107 AR 41 (1995) 69, for stone example discarded at the end of the neopalatial period and thrown into a well at Palaikastro.

108 Chora Museum, on display. BLEGEN and RAWSON (*supra* n. 87) figs. 238, 239.

109 Thebes Museum, on display.

110 N. DIMOPOULOU, J.-P. OLIVIER, and G. RETHEMIOTAKIS, "Une statuette en argile MR IIIA de Poros/Irakliou avec inscription en linéaire A," *BCH* 117 (1993) 501-521; RETHEMIOTAKIS, this volume.

Sealstones

The carving of seals in hard stones and the creation of gold rings with cult scenes seems less affected by the Cretan destructions than were the other media. In LH I, a Minoan trained workshop, the Mycenaean-Vapheio Lion Group, established itself on the mainland, presumably to meet the growing Mycenaean need for glyptic products and metalware. Even after the destructions, in LM IIIA:1, Knossos continued to be a major center for the production of seals, but in IIIA:2 it is difficult to tell where seals were being made. After the end of LM/LH IIIA:2, hard stone seals are no longer being carved in the Aegean.¹¹¹ This disappearance of the technology for manufacturing hard stone seals may begin with the Cretan destructions, but the decline is more gradual than the one we observe in other crafts.

Many existing neopalatial seals and rings continued in use after the Cretan destructions. Earlier Aegean seals and rings were still being used for administrative purposes at Pylos when the palace was destroyed (LH IIIB:2-C:1). But Mycenaean administration depended less on seals and sealings than Minoan administration had.

Conclusion

This brief overview suggests that whatever *political* interpretations we put on them, the LM IB Cretan destructions mark the cessation of a number of crafts that had flourished during the neopalatial period (Pl. XXb). These include the manufacture of stone relief rhyta, stone lion's and bull's head rhyta, stone sea-shells, inscribed stone offering tables and ladles, stone chalices and maces, decorated stone lamps, three-dimensional anthropomorphic figures of faience and ivory, relief fresco, niello daggers, detailed bronze figurines, and sheet metal emblems.

Other crafts survive, but we can document an immediate loss of decorative detail and a gradual decline in quality. These include the manufacture of decorated weapons, sheet bronze vessels, gold and silver plate, ivory carving for furniture and toilet implements, and simpler stone vases. In hard stone seals, the decline occurs gradually over several generations.

These media are all "palatial" crafts that were made possible through the acquisition and control of raw materials, many of them imported, and of the labor of the artisans. The Minoan craft centers focused on the creation of rich, mostly miniature, portable art objects which could be stored in closets or cists under floors when they were not in use and brought out on special occasions. Many of the finished products were used in palaces and villas or dedicated at peak sanctuaries and caves. Some objects were inscribed in Linear A, again suggesting a direct link between the palaces and the administration of religion.

The Cretan destructions are accompanied by a loss not just of classes of artifacts along with their relevant technical expertise, but also by the disappearance of significant iconographic *topoi*: marine motifs, enthroned women, the world of nature, images of palaces and peak sanctuaries, and individual male combat scenes.

It cannot be a coincidence, I think, that these categories include most of the major art forms and iconography that the Minoan neopalatial elite used to project their system of symbols and to enhance their own status.¹¹² The loss of this "symbolic language" should imply the substitution of a different one.

We should also note that the specific art forms that disappeared at the end of LM IB are precisely those for which Mycenaean civilization subsequently had no compelling need. For example, Mycenaean religion did not make use of peak sanctuaries or caves, and so there was no need for the types of palatial objects dedicated at peaks and caves on Crete: metal figurines, sheet metal double axes, inscribed offering tables, stone ladles. Nor was there a

111 J.G. YOUNGER, "A Large Stylistic Group of the Late XVth Century," *CMS Beiheft* 3 (1989) 339-352; I. PINI, *BICS* 29 (1982) 130.

112 P. PEREGRINE, "Some Political Aspects of Craft Specialization," *World Archaeology* 23 (1991) 1-11.

need for stone relief rhyta that depicted activities at peak sanctuaries, which should explain why so few fragments of these vessels have been found on the mainland.

The Mycenaeans instead focused on crafts that suited the different needs of their society and culture: terracotta figurines, pictorial pottery, mass-produced jewelry, wall painting, and the use of cyclopean masonry and massive decorated tombs to express political power and affirm their connection with the past.¹¹³ We cannot help but notice a general impoverishment in the media they used, in contrast to the wide range of metals, imported materials, and highly specialized techniques that characterized the neopalatial period. The relative poverty of the late Mycenaean age is illustrated by the general dearth of precious materials in palatial and domestic contexts, tombs, and shrines like the Cult Center at Mycenae, the temple on Kea, and the sanctuary at Phylakopi.

Most significant of all from an artistic point of view, the Cretan destructions seem virtually to end experimentation in the representation and iconography of the human figure: instead, we will see progressively more tired repetitions and variations on existing themes. With the LM IB destructions the technical acme of Aegean art has come and gone, and the glorious experimentation of Aegean art has ended.

Paul REHAK

113 J. WRIGHT, "Death and Power at Mycenae. Changing Symbols in Mortuary Practice," in R. LAFFINEUR, ed., *Thanatos (Aegaeum 1: 1987)* 171-184; E. FRENCH, "'Dynamis' in the Archaeological Record at Mycenae," in M.M. MACKENZIE and C. ROUECHÉ, eds., *Images of Authority. Papers Presented to Joyce Reynolds on the Occasion of Her 70th Birthday. The Cambridge Philological Society*, Suppl. vol. 16 (1989) 121-130.

LIST OF ILLUSTRATIONS

- Pl. XXa Map of sites with LM IB destructions (author).
Pl. XXb Chart of art forms (author).

APPENDIX

Aegean gold and silver vessels in Late Bronze Age Aegean contexts

(Catalogue numbers in parentheses are from E.N. Davis, *The Vapheio Cups and Aegean Gold and Silver Ware* [1977]. KN = Knossos. MY = Mycenae).

Cat. #	Description	Findspot	Context date:
GROUP I: LM I B or earlier			73% (88 of 120)
1 (13)	silver ewer+gold, electrum	Zakros palace	LM I B
2 (14)	silver ewer	KN South House	LM I B
3 (15)	silver bowl	KN South House	LM I B
4 (16)	silver bowl	KN South House	LM I B
5 (17)	silver bowl	KN South House	LM I B
6 (25)	gold cup	MY Circle B, Nu	LH I
7 (26)	gold cup	MY Circle B, Gamma	LH I
8 (27)	gold cup	MY Circle B, Gamma	LH I
9 (28)	silver cup, gold rim	MY Circle B, Iota	LH I
10 (29)	silver ewer, gold overlay	MY Circle B, Alpha	LH I
11 (30)	silver cup	MY Circle B, Delta	LH I
12 (31)	gold cup	MY Circle A, VI	LH I
13 (32)	gold cup	MY Circle A, II	LH I
14 (33)	gold cup	MY Circle A, V	LH I
15 (34)	gold cup	MY Circle A, V	LH I
16 (35)	gold cup	MY Circle A, V	LH I
17 (36)	silver cup	MY Circle A, V	LH I
18 (37)	silver cup	MY Circle A, V	LH I
19 (38)	gold cup	MY Circle A, V	LH I
20 (39)	silver cup	MY Circle A, V	LH I
21 (40)	silver cup	MY Circle A, V	LH I
22 (41)	silver cup	MY Circle A, V	LH I
23 (42)	silver cup	MY Circle A, V	LH I
24 (43)	silver ewer+gilding	MY Circle A, V	LH I
25 (44)	silver cup	MY Circle A, V	LH I
26 (45)	silver cup	MY Circle A, V	LH I
27 (46)	silver cup+gold rim	MY Circle A, V	LH I
28 (47)	silver situla	MY Circle A, V	LH I
29 (48)	silver cup	MY Circle A, V	LH I
30 (49)	silver plated copper ewer	MY Circle A, V	LH I
31 (50)	gold rim of silver vessel	MY Circle A, V	LH I
32 (51)	silver cup	MY Circle A, V	LH I
33 (52)	gold cup w. lions	MY Circle A, V	LH I
34 (53)	silver handle	MY Circle A, V	LH I
35 (54)	silver plated rim	MY Circle A, V	LH I
36 (55)	gold cup	MY Circle A, IV	LH I
37 (56)	gold cup	MY Circle A, IV	LH I
38 (57)	gold cup	MY Circle A, IV	LH I
39 (58)	gold cup	MY Circle A, IV	LH I
40 (59)	gold cup	MY Circle A, IV	LH I
41 (60)	gold kantharos	MY Circle A, IV	LH I
42 (61)	gold lidded vessel	MY Circle A, IV	LH I
43 (62)	gold lion-head rhyton	MY Circle A, IV	LH I
44 (63)	gold Nestor cup	MY Circle A, IV	LH I
45 (64)	silver bull-head rhyton	MY Circle A, IV	LH I
46 (65)	silver ewer	MY Circle A, IV	LH I
47 (66)	silver ewer+gold overlay	MY Circle A, IV	LH I
48 (67)	silver cup	MY Circle A, IV	LH I
49 (68)	silver cup	MY Circle A, IV	LH I
50 (69)	silver cup	MY Circle A, IV	LH I
51 (70)	silver Vapheio cup	MY Circle A, IV	LH I
52 (71)	silver Vapheio cup	MY Circle A, IV	LH I
53 (72)	silver vessel	MY Circle A, IV	LH I
54 (73)	silver vessel, miniature	MY Circle A, IV	LH I
55 (74)	silver plated copper vessel	MY Circle A, IV	LH I
56 (75)	silver handle	MY Circle A, IV	LH I
57 (76)	silver vessel	MY Circle A, IV	LH I
58 (77)	silver handle	MY Circle A, IV	LH I
59 (78)	silver handle	MY Circle A, IV	LH I
60 (79)	silver handle	MY Circle A, IV	LH I
61 (80)	silver handle	MY Circle A, IV	LH I

62 (81)	silver handle	MY Circle A, IV	LH I
63 (82)	gold goblet	MY Circle A, IV	LH I
64 (83)	electrum goblet	MY Circle A, IV	LH I
65 (84)	gold goblet	MY Circle A, IV	LH I
66 (85)	silver goblet	MY Circle A, IV	LH I
67 (86)	silver Battle Krater	MY Circle A, IV	LH I
68 (87)	silver Siege Rhyton	MY Circle A, IV	LH I
69 (88)	silver figure-8 rhyton	MY Circle A, IV	LH I
70 (89)	gold cup	MY Circle A, III	LH I
71 (90)	silver cup	MY Circle A, III	LH I
72 (91)	gold ewer	MY Circle A, III	LH I
73 (92)	silver goblet	MY Circle A, III	LH I
74 (93)	gold lidded box	MY Circle A, III	LH I
75 (94)	gold lidded box, miniature	MY Circle A, III	LH I
76 (95)	gold lidded vessel, miniature	MY Circle A, III	LH I
77 (96)	gold lidded vessel, miniature	MY Circle A, III	LH I
78 (97)	silver cup+gold overlay	MY Circle A, I	LH I
79 (98)	silver cup	MY Circle A, I	LH I
80 (103)	gold Vapheio cup	Vapheio cist	LH II A
81 (104)	gold Vapheio cup	Vapheio cist	LH II A
82 (105)	silver Vapheio cup	Vapheio cist	LH II A
83 (106)	silver Vapheio cup	Vapheio cist	LH II A
84 (107)	gold+silver plated copper cup	Vapheio cist	LH II A
85 (108)	silver ewer	Vapheio cist	LH II A
86 (137)	silver cup+gold rim	Kazarma tholos	LH I-II
87 (138)	silver cup	Kythera	MM III-LM I A
88 (139)	silver bowl	Kythera	MM III-LM I A

GROUP II: LM/LH II-III A

25% (30 of 120)

89 (19)	gold cup	KN, Ayios Ioannis tomb	LM II-III A
90 (20)	silver cup	Archanes burial	LM II
91 (21)	silver goblet	KN tomb	LM II-III A
92 (22)	silver goblet	KN, Isopata Royal Tomb	LM II-III A
93 (23)	silver cup	KN, Isopata Royal Tomb	LM II-III A
94 (99)	gold cup	Peristeria tholos III	LH II
95 (100)	gold cup	Peristeria tholos III	LH II
96 (101)	gold cup	Peristeria tholos III	LH II
97 (102)	silver Vapheio cup	Routsi II, shaft 2?	LH II-III A
98 (109)	silver Vapheio cup	Dendra chamber tomb 12	LH II-III A
99 (110)	gold cup	Dendra chamber tomb 10, shaft I	LH II-III A
100 (111)	silver goblet	Dendra chamber tomb 10; shaft II	LH II-III A
101 (112)	silver cup	Dendra chamber tomb 10, shaft II	LH II-III A
102 (113)	silver goblet	Dendra chamber tomb 10, shaft II	LH II-III A
103 (114)	silver goblet	Dendra chamber tomb 10, shaft II	LH II-III A
104 (115)	silver krater	Dendra Ch T 10, shaft II	LH II-III A
105 (116)	gold octopus cup	Dendra tholos, "king"	LH II-III A
106 (117)	silver cup+gold lining	Dendra tholos, "king"	LH II-III A
107 (118)	silver goblet	Dendra tholos, "king"	LH II-III A
108 (119)	silver cup	Dendra tholos, "king"	LH II-III A
109 (120)	silver wishbone goblet	Dendra tholos, "queen"	LH II-III A
110 (-)	silver kylix	Kokla tholos	LH II-III A
111 (-)	silver kylix	Kokla tholos	LH II-III A
112 (-)	silver kylix	Kokla tholos	LH II-III A
113 (-)	silver kylix	Kokla tholos	LH II-III A
114 (-)	silver conical cup	Kokla tholos	LH II-III A
115 (-)	silver conical cup	Kokla tholos	LH II-III A
116 (-)	silver conical cup	Kokla tholos	LH II-III A
117 (-)	gold cup	Kokla tholos	LH II-III A
118 (-)	gold rim	Kokla tholos	LH II-III A

GROUP III: LM/LH III B-C

(less than) 2% (2 of 120)

119 (135)	silver goblet	Pharai, Achaia	LH III B
120 (136)	silver cup+inlaid male heads	Pylos palace	LH III B:2-C:1

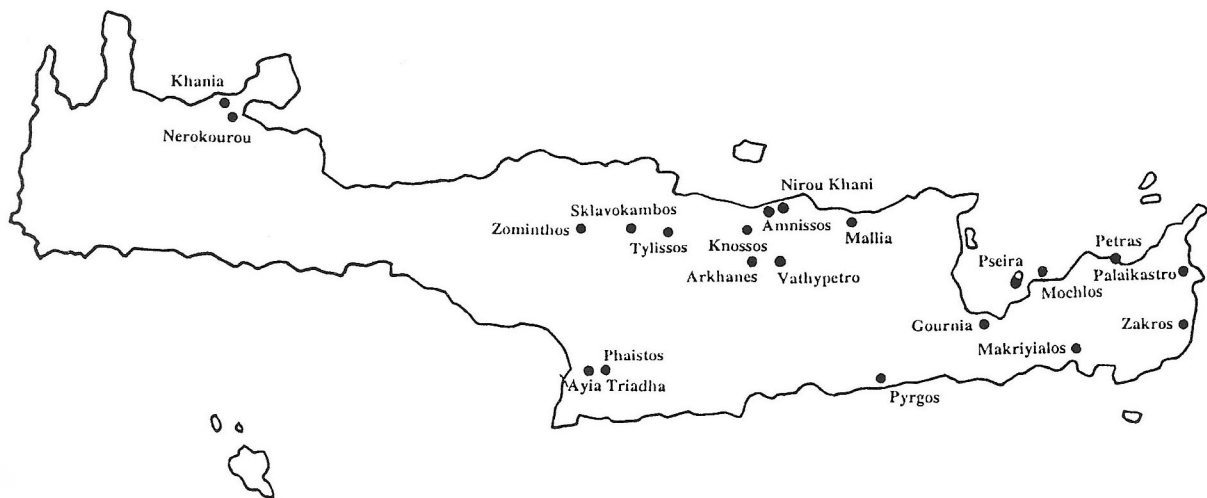
The following (nos. 121-147) are excluded from tabulation here because their context date is unknown or because they were found outside the Aegean proper:

GROUP IV: context not dated

121 (18)	silver cup	Heraklion	?
122 (24)	copper cup+gold, silver	Crete? [London, private]	?
123 (121)	silver cup+gold overlay	Dendra chamber tomb 2	?
124 (122)	silver handle+electrum overlay	Dendra chamber tomb	?
125 (123)	gold goblet+ dog handles	MY Akropolis Treasure	?
126 (124)	gold goblet+ dog handles	MY Akropolis Treasure	?
127 (125)	gold goblet+ dog handles	MY Akropolis Treasure	?
128 (126)	gold goblet+ dog handles	MY Akropolis Treasure	?
129 (127)	gold cup	MY Akropolis Treasure	?
130 (128)	silver cup	MY Akropolis Treasure	?
131 (129)	silver cup	MY chamber tomb	?
132 (130)	silver cup+inlaid male heads	MY chamber tomb 24	?
133 (131)	copper cup+gold	MY	?
134 (132)	silver Vapheio cup	MY	?
135 (133)	gold cup	Marathon	?
136 (134)	gold kantharos	Kalamata	?
137 (145)	gold cup	Aigina Treasure	?
138 (146)	gold goblet	?	?
139 (147)	gold kantharos	?	?
140 (148)	silver kantharos	?	?
141 (149)	gold cup	?	?

GROUP V: CYPRUS

142 (140)	silver cup+wishbone handles	Enkomi Tomb 2	Late Cypriot II
143 (—)	silver cup+wishbone handles	Enkomi Tomb 2	Late Cypriot II
144 (141)	silver cup+wishbone handles	Enkomi Tomb 66	?
145 (142)	silver Vapheio cup	Enkomi Tomb 92	?
146 (143)	gold bowl	Enkomi Tomb 17	LH III B (associated pottery)
147 (144)	silver bowl	Kouklia Tomb 8	?



a Cretan Sites with LM I B Destructions

	LM I A LH I	LM I B LH II A	LM II LH II B	LM/LH III A	LM/LH III B	LM/LH III C
lustral basins	—————> (some filled in)					
court centered buildings	—————>					
polythyra	—————>					
pillar crypts	—————>					
3-D faience figurines	—————>					
detailed ivory figurines	—————>					
stone relief rhyta	—————>					
stone bull's heads	—————>					
stone lion's heads	—————>					
stone tritons	—————>					
stone chalices	—————>					
stone offering tables	—————>					
stone ladles	—————>					
stone maces	—————>					
stone lamps	—————>					
stone stands	—————>					
mason's marks on stone	—————>					
figural stone reliefs	—————>					
detailed metal figurines	—————>					
niello daggers	—————>					
figural relief frescoes	—————>					
stone ornamental reliefs	—————>					
decorated bronze vessels	—————>					
gold/silver plate	—————>					
hard stone seals	—————>					
decorated metal weapons	—————?					
faience ornaments	—————?					
ivory plaques	—————?					
ivory toiletries	—————?					
stone vases	—————>					
soft stone seals	—————>					
figural frescoes	—————>					
metal or glass jewelry	—————(increasingly mould made)—————?					
pictorial pottery	----->					
	LM I A LH I	LM I B LH II A	LM II LH II B	LM/LH III A	LM/LH III B	LM/LH III C

b