

KAMARES OR NOT KAMARES? THIS IS [NOT] THE QUESTION. SOUTHEAST AEGEAN LIGHT-ON-DARK (LOD) AND DARK-ON-LIGHT (DOL) POTTERY: SYNCHRONISMS, PRODUCTION CENTRES, AND DISTRIBUTION¹

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News of discovery of “Kamares” pottery outside Crete always brings a certain excitement to Aegean and non-Aegean archaeologists alike for a number of reasons: this is one of the most easily recognizable prehistoric ceramics of the Mediterranean, it is aesthetically appealing, and it is relatively well defined in chronological terms. Thus, it provides useful evidence for synchronisms and interconnections in the Middle Bronze Age (MBA), as is well illustrated by finds at sites such as Kolonna on Aegina. In the past, the southeast Aegean LOD and DOL wares discussed in this paper, and especially the LOD version, have often been described as “Kamares” or “Kamares imitation”, a term that is, in fact, rather misleading, even if a “Kamares” connection does exist, as is explained below. Indeed, rather ironically, the reason why I have become involved in the study of these non-Cretan ceramics is precisely because of the fact that, in 1998, the late Clelia Laviosa invited me to publish the “Kamares” pottery from her and Doro Levi’s excavations at Iasos, in southwest Turkey, which turned out to belong to the southeast Aegean LOD and DOL class.²

At Iasos, southeast Aegean LOD and DOL wares

have been found in large quantities, but they were not manufactured locally. Seraglio on Kos, however, which has yielded probably the largest assemblage of these wares so far, was certainly one of the production centers, as is shown by the presence of kiln wasters, and as is suggested by other evidence discussed below.³ Thus, while this paper aims to present a brief but up-to-date summary of what is known of southeast Aegean LOD and DOL wares, I am aware that only a systematic restudy and publication of this material from the old and recent excavations at Seraglio (and, of course, from other sites discussed below) will provide a clearer picture of the chronology, production centers, and distribution of this relatively little-known class of Aegean ceramics.

This paper is divided into three sections: the first comprises a brief description of the main characteristics of southeast Aegean LOD and DOL wares; the second is a short discussion of the history of research and relative chronology (including a gazetteer of sites that have yielded examples of this pottery); the third offers some conclusions, and points to further avenues for research.

¹ Acknowledgments: first and foremost I should like to thank Walter Gauss, Rudolfine Smetana and Florens Felten for inviting me to a most enjoyable and interesting workshop in Salzburg, and Walter in particular for “gently persuading” me to write on this topic, clearly in revenge for my comments on his Aeginetan “Kamares tis maimou”. Carl Knappett kindly provided a work-in-progress report on the fabrics (see below). Ramazan and Christine Özgan, Ian Jenkins and Deniz Pastutmaz welcomed me at Cnidus and facilitated my search for I. C. Love’s “Kamares” pottery in the Bodrum Museum. I am most grateful to the Özgans for allowing me to illustrate some of this material. I thank very warmly Wolf and Barbara Niemeier and various members of their team at Miletus (especially N. Zenzen, Y. Kaiser, and A. Raymond). My warmest thanks also go to Prof. Hayat Erkanal and Vasif Şahoğlu (Çesme) for showing me ceramic finds from their sites. Marta Guzowska (Troy), Gerald Cadogan (Maroni) and Lindy Crewe (Enkomi) very generously provided information on the Troad and Cyprus. Sinclair Hood and the British School at Athens gave me permission to illustrate southeast Aegean sherds from Hood’s excavations at Knossos (MOMIGLIANO, 2005, pl. LVIIIc:b–c). Jack Davis and A.

Papagiannopoulou kindly gave me permission to reproduce illustrations from their articles in *Anatolian Studies*. I was able to see some of the southeast Aegean LOD and DOL pottery from Seraglio in Kos thanks to the kindness of Toula Marketou and Elpida Skerlou, but I should like to make clear that I have not seen the pottery published by Morricone (1975), and had therefore to rely on his descriptions and identifications. I am grateful to the Director of the Italian School at Athens, Prof. E. Greco, and to Dr. A. G. Benvenuti, for permission to reproduce some of Morricone’s illustrations published in the *Annuario*. Marika Zeimbeki and R.H.L. also helped with improving this paper. My research at Iasos and elsewhere would not have been possible without the financial support of the Institute for Aegean Prehistory, the British Institute at Ankara, the Istituto di Studi sulle Civiltà dell’Egeo e del Vicino Oriente (C.N.R., Rome), and the University of Bristol (Arts Faculty Research and Conference Funds).

² See, e.g., BENZI *et al.* 2000; MOMIGLIANO 2000, 2001; MOMIGLIANO *et al.* 2001; MOMIGLIANO, 2005, 219, 221–2.

³ MORRICONE 1975; see also MARTHARI *et al.* 1990, 171–83, esp. figs. 9, 10, for evidence of local production.

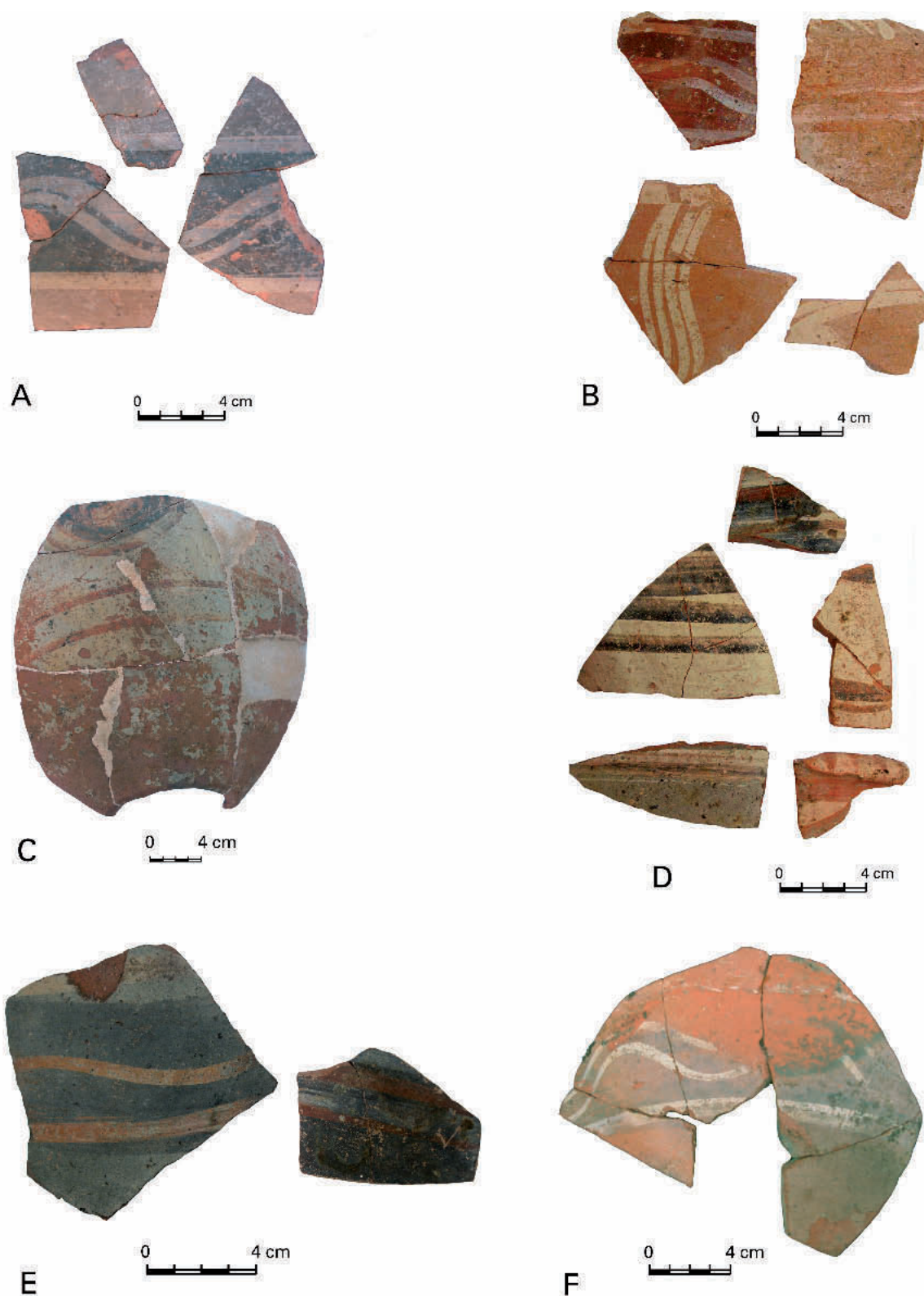


Fig. 1 Iasos: examples of SE Aegean LOD and DOL wares (from various locations and contexts)

1. SUMMARY DESCRIPTION OF SOUTHEAST AEGEAN LOD AND DOL WARES

These wares, as the name suggests, were produced in the southeast Aegean, i.e., in Kos and possibly in some other Dodecanesian and Anatolian sites, in a phase equivalent to the Neopalatial period in Crete (as explained in more detail in the following section). Perhaps this pottery could be seen as belonging to a much wider “family” of ceramics produced in many regions of the Aegean, from the western shores of Anatolia to mainland Greece, which imitate or at least take some inspiration from Minoan models. As such, they could be studied in the wider context of what was called the phenomenon of the “Minoan Thalassocracy” once upon a time, and is now more commonly referred to as the “Minoanization” of the Aegean, a term that can more easily embrace the variety of processes that contributed to it, i.e., to the presence of Minoan traits in the material culture of several Aegean sites outside Crete.⁴

The main characteristics of the southeast Aegean LOD and DOL wares can be briefly summarized as follows. The decoration is executed in LOD with a white or whitish paint over a matt dark-slipped surface (sometimes a bit thin and runny, and ranging in color from dark grayish to reddish) or in DOL with a brownish-reddish paint over a whitish-slipped surface (Figs. 1, 2). LOD decoration appears to be more common, and sometimes both LOD and DOL techniques coexist on the same vessel.⁵ The decorative elements (Fig. 2) tend to be linear and relatively simple: horizontal or diagonal lines, and especially the double wavy line motive, which seems to be the most popular.⁶ Spirals and floral/vegetal motives (such as foliate bands composed of crescent-shaped elements, ivy leaf, and stylized flowers) also occur, but more rarely. Sometimes the surface of the vase is divided into horizontal bands covered in

a dark blackish slip with white-painted decoration, alternating with horizontal bands covered with a grayish slip, the interface between the gray and black zones usually being marked by a white line (Fig. 1A). Most interestingly, a few sherds from Kos appear to imitate the “white-spotted ware” of Late Protopalatial/Early Neopalatial Crete, thus providing further evidence for the chronology and sources of inspiration of this pottery (Fig. 3).⁷ Also intriguing is the presence of some exceptional fragments with “polychrome” decoration, i.e., combining white and reddish pigments on a dark ground as in proper “Kamares” ware (Fig. 1E). Very rarely, however, does this polychrome decoration appear to be deliberate, as it seems to be in the case of an apparently unique fragment from Kos, described as being decorated with a daffodil-like motive, with white petals and orange center.⁸ At other times the polychrome effects seem to be more accidental.

The fabrics in which these wares occur tend to be fairly coarse, making them very suitable for petrographic analysis. At a macroscopic level, large flecks of golden mica and clear quartz inclusions are quite noticeable and characteristic of most examples I have seen at Iasos, Miletus, Kos, and Knossos, but there is enough variation in the clay “recipes” to suggest the presence of different workshops.⁹ The color of the fabrics can vary from terracotta-orange to pinkish and from reddish-brown to almost purplish-mauve. In the sections, the core is often dark gray, but there are also fragments showing that some vessels were oxidized throughout during firing.

In 1983, Jack Davis and other scholars working at Ayia Irini on Kea published petrographic analyses of two southeast Aegean LOD sherds, describing their fabric as being characterized by pieces of colorless volcanic glass, grains of quartz, and flecks of golden mica, and by smaller quantities of potash, plagioclase feldspar, volcanic rock, and limestone.¹⁰ The

⁴ See HAGG and MARINATOS 1984 and compare BROodbANK 2004.

⁵ See, e.g., BENZI 1993, pl. 35f.

⁶ MORRICONE 1975, 309–26.

⁷ MORRICONE 1975, 307 figs. 286 and 315 (“marmorizzazione”); PAPAGIANNPOULOU 1985, 87 fig. 1. For KNOSSIAN Middle Minoan (MM) II–III white-spotted ware see MACGILLIVRAY 1998, 33, 64–5; WARREN 1991, figs. 5f, 8j, 9b and f. For PHAISTIAN MM II–III white-spotted ware see LEVI 1976, pls. 105a, 118b, 123a, 127c, 132p, 138f, 178a, 179h (all from Fase Ib and II); see also LEVI 1976, pls. 198c, 201b and h, 210g–m (all from LEVI’s Fase III).

⁸ MORRICONE 1975, 308 fig. 288b, and 316 (“fiore di narciso”): *non vidi*.

⁹ MORRICONE (1975, 297) describes the fabric(s) as coarse,

porous, with white and black grits being most common, and micaceous inclusions being “very rare”. This remark on the rarity of micaceous inclusions is rather puzzling, for the examples from Kos that I was able to examine in the spring of 2004 seemed to me well provided with them. One of the examples found at Ayia Irini on Kea, however, seems to lack the flecks of golden mica (DAVIS *et al.* 1983), and the sherd from Cnidus that I examined macroscopically in September 2004 appears to be less micaceous but richer in grayish, blackish and reddish inclusions than the Koan, Iasian, Milesian and Knossian examples I have handled.
¹⁰ DAVIS *et al.* 1983, 362. Thin sections were obtained from two out of eight fragments assigned to this ware found at Ayia Irini.

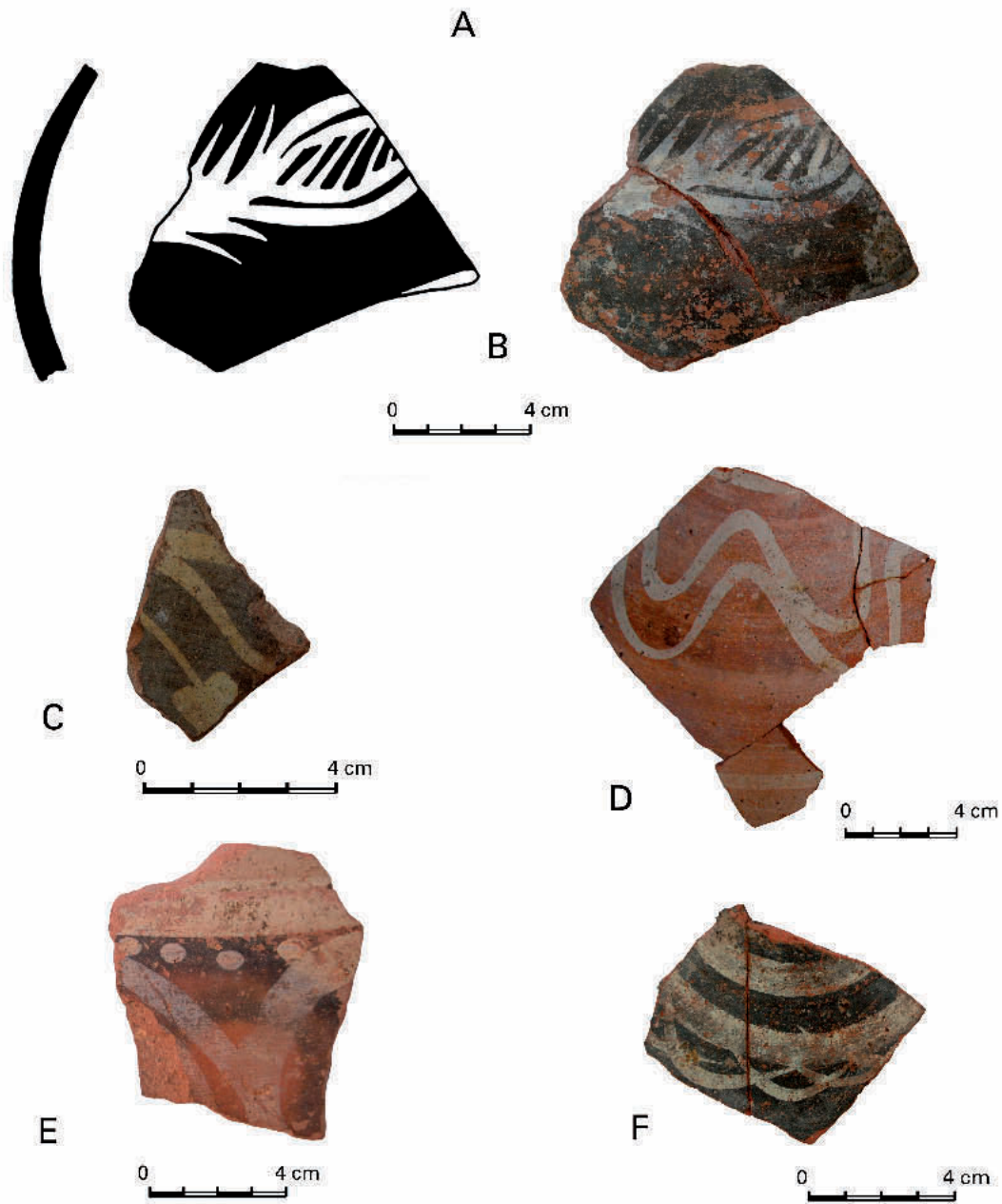
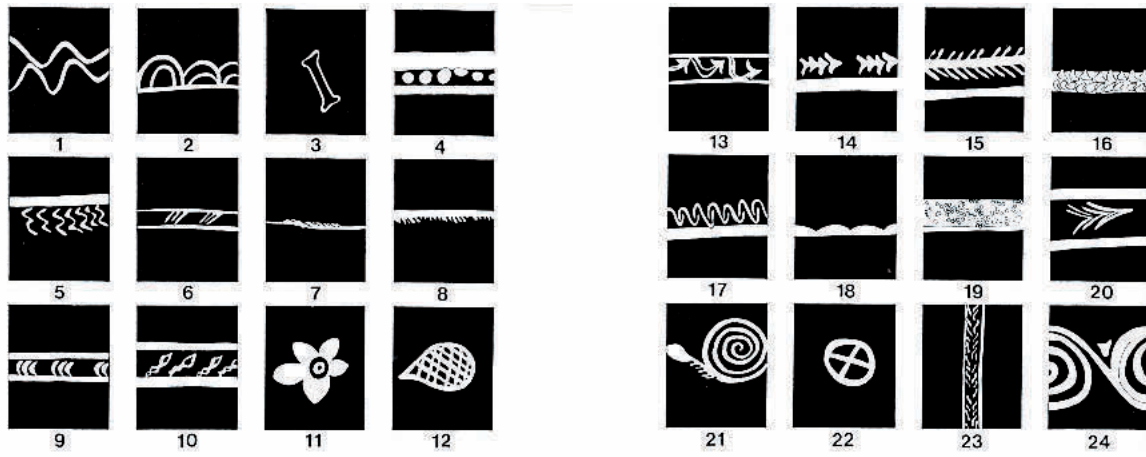


Fig. 2 Decorative motifs on SE Aegean LOD ware:
 A: from Seraglio (Kos), Trianda (Rhodes) and Miletus (after DAVIS 1982); B–F: from Iasos

presence of volcanic glass and other evidence suggests that the likely origin of these sherds was a volcanic area such as the region comprising the island of Kos and the Bodrum and Cnidus peninsulas. A few years later, Richard Jones carried out chemical analyses of southeast Aegean LOD/DOL sherds from Thera (Akrotiri), Rhodes (Trianda) and Kos (Seraglio) by atomic absorption spectrometry, reaching similar conclusions as to the likely provenance of these sherds.¹¹ More petrographic analyses of many samples from Iasos and Miletus are being carried out by Carl Knappett, and the preliminary results show similar conclusions. As Knappett reports: "In terms of minerals, quartz, golden mica (biotite) and plagioclase feldspar (some with zoning) are all common. The colourless volcanic glass highlighted by Davis *et al.* (1983) is also variably present in most samples; one might add that it tends to be vesicular, and in some instances exhibits a flow structure. There are also volcanic rock fragments, some of which are trachytic. These features are comparable to those observed by Whitbread in Koan transport amphorae, admittedly from much later periods (4th c. B.C. to 1st c. A.D.).¹² At present, Kos does seem to be the likeliest source for South-East Aegean ware, although the Bodrum and Datça peninsulas on the Turkish mainland cannot be entirely ruled out. It is worth noting Whitbread's comment that Knidian fabrics (i.e., from the Datça peninsula), while similar to those from Kos, appear to contain volcanic inclusions only rarely.¹³ However, the Bodrum peninsula, where the site of Myndus is located, is more volcanic in character (although, unfortunately, Whitbread does not analyze material from this area). Until a detailed program of clay sampling is undertaken, the provenance question cannot be fully resolved. Indeed, there may not be a single source, given that there is some variability in the Iasos South-East Aegean samples; this may relate to the presence of more than one workshop on Kos itself, or on both Kos and the Turkish mainland. This variability will be more fully documented in due course, when the petrographic analysis of the Bronze Age pottery from Iasos is fully published".

In terms of shapes, the repertoire seems to be largely restricted to medium- and large-sized containers and pouring vessels, i.e., jars and jugs of various dimensions and shapes. Small drinking vessels

seem quite rare. Morricone's publication of the material from Seraglio on Kos still provides the most extensive discussion and illustration of a large south-east Aegean LOD and DOL assemblage. He identified the following shapes: pithoi (Fig. 4A); vat-like jars; oval-mouthed amphorae; ewers with round spouts; jugs with cutaway spouts; large basins or bowls; and bridge-spouted jars.¹⁴ Iasos has yielded a similar repertoire, to which one may add fragments of carinated bowls/spouted jars (Fig. 4E) and a small lid (Fig. 4D), but (yet again) no small drinking vessels. All the published and unpublished material that I have seen up to now also repeats this pattern of almost exclusive production of medium-sized to large storage and pouring vessels, which were clearly employed also for transport. The only exceptions I

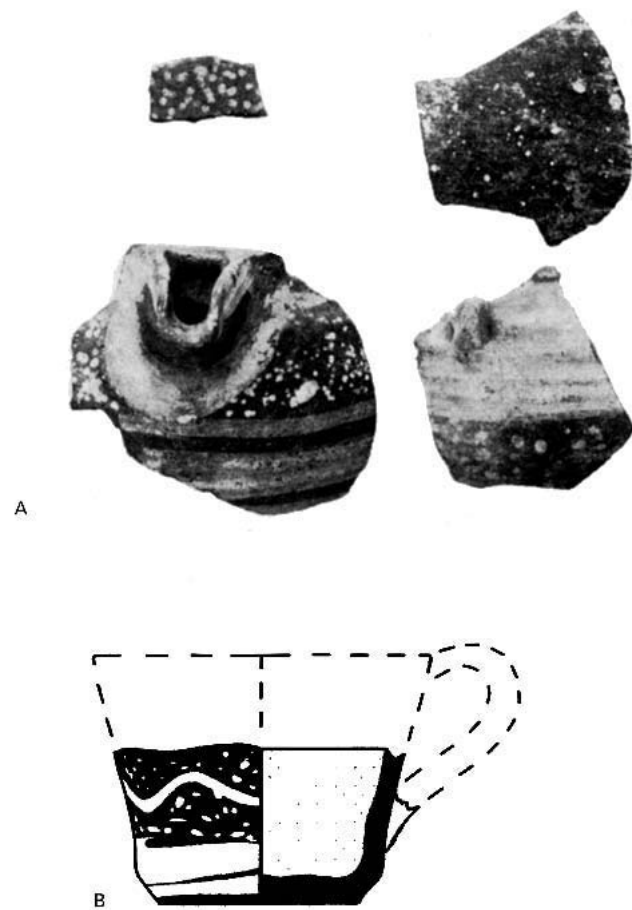


Fig. 3 Examples of SE Aegean LOD showing 'white-spotted' decoration; A: from Seraglio (Kos), after MORRICONE 1975); B: from Seraglio (Kos), after PAPAGIANNOPOULOU 1985

¹¹ MARTHARI *et al.* 1990, 178–82.

¹² WHITBREAD 1995, 81–106.

¹³ WHITBREAD 1995, 99.

¹⁴ MORRICONE 1975, 298–309.

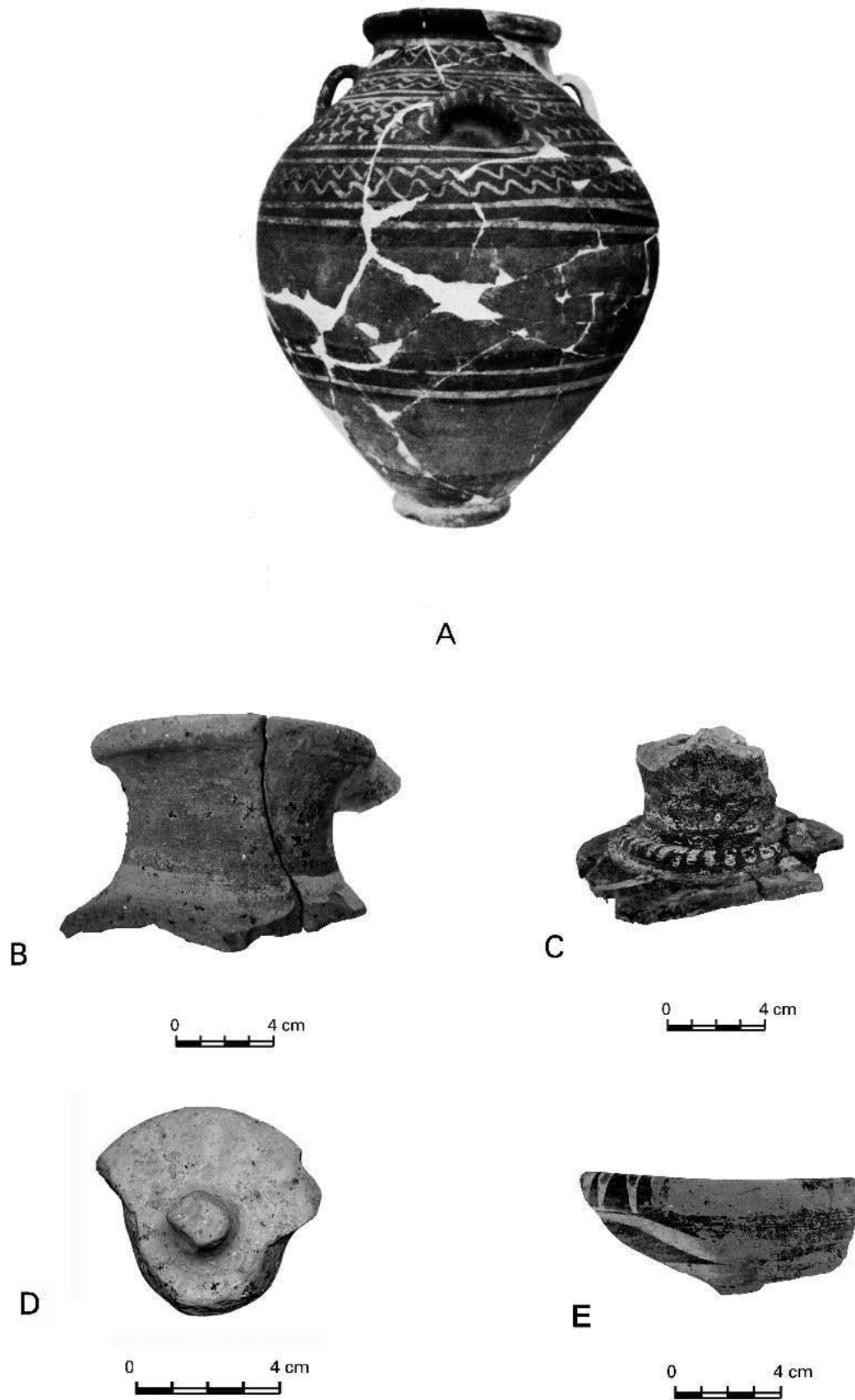


Fig. 4 Examples of forms occurring in SE Aegean LOD and DOL ware; A: pithos from Seraglio (Kos)(after MORRICONE 1957); B–E: ewer (B), jug with cutaway spout (C), lid (D), and carinated bowl (E) from Iasos

have come across so far are one small goblet-shaped vessel from Trianda on Rhodes and one straight-sided one-handled cup from Seraglio on Kos (the latter illustrated in Fig. 3B).¹⁵ Obviously, further studies and publication of large deposits may alter this picture, but on the basis of the evidence available at present, the southeast Aegean LOD and DOL wares appear to be associated essentially with the production and consumption of medium-sized to large vessels for storage and pouring.

As to manufacturing techniques, some examples of LOD and DOL pottery are handmade while others are wheel-thrown, but it is still unclear whether this has a chronological significance and/or indicates different workshops or individual potters.

2. HISTORY OF RESEARCH AND RELATIVE CHRONOLOGY

When and where were the first examples of this pottery found? I must confess that, so far, I have not been able to ascertain whether some late nineteenth- and early twentieth-century excavations in the Aegean have yielded any such material, although this seems most likely: I suspect that some sherds of southeast Aegean LOD and DOL wares may lurk in the boxes from Evans's excavations now kept in the Stratigraphical Museum at Knossos, but I have not been able to undertake a systematic search to confirm or disprove this. Substantial amounts of these wares, however, came to light during the excavations conducted in the 1920s, 1930s, and early 1940s on the islands of Kalymnos, Rhodes and Kos (especially in the latter) during the Italian occupation of the Dodecanese,¹⁶ while other excavations at several Aegean and western Anatolian sites since the 1930s have brought to light further examples, discussed below.

As mentioned at the beginning of this paper, at first the LOD decoration prompted various archaeologists, including the excavators of Iasos, Doro

Levi and Clelia Laviosa, to call this ware "Middle Minoan" or "Kamares" or "Kamares imitation".¹⁷ It is not too difficult to see why the excavators of Iasos and Phaistos, in particular, were reminded of "Kamares" ware, for this latter site, probably more than any other so far, has yielded pottery of the Old Palace period that shows some links with the southeast Aegean LOD ware, especially in the form of a few Protopalatial jugs decorated with wavy lines, even if these parallels are not close ones.¹⁸ This Kamares connection, however, is not a direct one. The southeast Aegean LOD ware reminds one of Kamares ware simply because it was largely inspired by the early Neopalatial pottery from Crete (MM III–LM I), which was characterized by the presence of ceramics decorated in light-on-dark and evolving from the pottery tradition of Protopalatial Crete.¹⁹ For these reasons, the term "Kamares" or "Kamares imitation" for the southeast Aegean LOD ware is misleading, because it suggests chronological synchronisms with the Old Palace period that are not supported by the archaeological contexts in which it is found (nor by the stylistic analysis of its decoration: see below).

After some initial identifications of this pottery as MM or Kamares,²⁰ Luigi Morricone came closer to a correct dating of this material in his 1975 publication of the 1935–1943 Italian excavations at Seraglio on Kos. In the absence of good stratigraphic evidence, he assigned all the Koan southeast Aegean LOD and DOL wares to "MM III" because of their resemblance to the Minoan pottery of that phase, and because they were found stratified beneath pottery that he dated to Late Minoan (LM) I.²¹ Morricone, however, seems to have overlooked the evidence provided by Monaco's 1941 publication of similar material from Trianda in Rhodes and by Furumark's seminal article of 1950 on this site.²² Although neither Monaco nor Furumark discussed this class of pottery in any detail, they both provid-

¹⁵ Rhodes: MONACO 1941, fig. 85.8; Kos: PAPAGIANNPOULOU 1985, 87 fig. 1.

¹⁶ MONACO 1941; MORRICONE 1975; MAIURI 1928.

¹⁷ See, e.g., for Kalymnos, MAIURI 1928, 115 (describing this pottery as "Camares"); cf. BENZI 1993, 277–9 fig. 1c, d and pl. 35a–f. For Iasos see, e.g., LAVIOSA 1973, esp. 183 and 187; see also LAVIOSA 1978. For Tigani (Samos), see HEIDENREICH 1936, 173 pl. 49.1, 2 (where likely fragments of southeast Aegean LOD are called "MM"). For Trianda, see MONACO 1941, 92 fig. 39 and n. 2: "Tecnica che riprende quella del Medio Minoico Cretese (Kamares)".

¹⁸ LEVI 1976, pls. 82a (F.549), 85c and d (792 and 1034), and 86c (1298), all from Phaistos "fase IB", corresponding roughly to EVANS's MM IIA.

¹⁹ See, e.g., BETANCOURT 1985, figs. 84, 85, and 99.

²⁰ See n. 17 *supra*.

²¹ MORRICONE 1975, 384–8.

²² MONACO 1941, 75 figs. 22.2 (from strato inferiore), 39 (from strato medio), 85.8 (from strato superiore); FURUMARK 1950; see also DAVIS 1982, 34, and PAPAZOGLU-MANOUDAKI 1990, 142.

ed excellent evidence for the dates of the archaeological contexts in which it was found. Most of the LOD pottery from the old excavations at Trianda is associated with Monaco's "strato medio", but there are also finds from Monaco's "strato inferiore" and "strato superiore" (see Table 1). Thus, Monaco's "strato inferiore", datable to LM IA, provided excellent chronological evidence, which was strangely disregarded by Morricone and other Italian archaeologists, such as the excavators of Iasos. How and why Italian archaeologists, in particular, could overlook the evidence provided by Trianda is rather puzzling. I can only offer a few general explanations, such as the observation that archaeologists, in general, show a burning desire to demonstrate the primary status or at least the greater antiquity of their finds (so that dating some features to, e.g., MM III somehow confers more prestige than dating them to LM IA). In the case of Levi and Laviosa, in particular, the overwhelming desire to show not only the great *antiquity* but also the *continuity* of the close relationship between the Aegean civilizations and Caria may have also played a part (for "continuity" is one of the leitmotifs in Levi's writing, especially continuity between Minoan and Early Iron Age Crete).²³ Finally, it is clear from the excavation records, and from the preliminary publications concerning Iasos, that neither Levi nor Laviosa had paid sufficiently close attention to the stratigraphy of the Bronze Age levels and their relative chronology.²⁴

Other scholars, however, did not ignore the evidence provided by Trianda and, indeed, by other southeast Aegean sites. Thus, in 1982 Jack Davis presented a reassessment of the archaeological contexts in which the southeast Aegean LOD and DOL wares were found at Trianda, Miletus, Seraglio, and Iasos.²⁵ This reassessment, combined with a stylistic analysis of the shapes and decorative motives, led Davis to suggest that there was, in fact, "little evidence that ...

[the southeast Aegean LOD and DOL wares were] ... produced prior to the beginning of the Late Minoan period",²⁶ although he did not exclude the possibility that manufacture could have started in the latest phases of the MBA. Three years later, A. Papagiannopoulou reexamined the evidence discussed by Davis and referred to newly discovered material from Kos and Trianda. Her conclusions were similar to Davis's, but she was also able to provide more data suggesting that the production of southeast Aegean LOD and DOL ware could have started in a period equivalent to MM III.²⁷

Since Davis's and Papagiannopoulou's publications, more evidence has been accumulating for the chronological synchronisms of this pottery. This evidence, which is discussed below and summarized in Table 1, confirms their general conclusions. The "gazetteer" presented here has no pretense to completeness, as undoubtedly further research will add more sites that have yielded southeast Aegean LOD and DOL to those listed here.

Dodecanese and Other Islands Adjacent Western Turkey

Seraglio, Kos. Morricone's study did not provide much stratigraphic evidence, largely because most of the material he published did not have a proper provenance; his report, however, provides enough information to suggest association of this material with LM I and, possibly, MM III contexts.²⁸ New excavations conducted by the Greek Archaeological Service found southeast Aegean LOD and DOL pottery (including kiln wasters) in well-stratified contexts dated to LM IA and LM IB.²⁹

Trianda, Rhodes. The evidence from the old excavations by the Italians and from more recent excavations by the Greek Archaeological Service suggests that the southeast Aegean LOD and DOL pottery is found in deposits assigned to three different strati-

²³ Cf. e.g., LA ROSA 1984, 39 ; 1990.

²⁴ For example, "Edificio B" was dated in preliminary reports to the "Mycenaean" period (LEVI 1972, 474), although its floor deposit, created by a burnt destruction, contained typical LM I conical cups (LEVI 1972, fig. 31) together with MBA Anatolian pottery (BENZI *et al.* 2000; MOMIGLIANO 2000 and 2001); "Edificio B" is also built directly upon a layer of volcanic ash from the Bronze Age eruption of Santorini, but neither LEVI nor his successors had realized this, for this layer was rediscovered and recognized for what it is only in August 2000.

²⁵ DAVIS 1982, 33–41.

²⁶ DAVIS 1982, 33.

²⁷ PAPAGIANNPOULOU 1985. Her conclusions are sometimes based on stylistic comparisons that are not always very convincing, but there is sufficient stratigraphical evidence from Knossos, Trianda, and Iasos to suggest that a MM III (possibly MM IIIB) date is quite possible (see also below).

²⁸ MORRICONE 1975, 139 ff.; PAPAGIANNPOULOU 1985, 87–8.

²⁹ MARTHARI *et al.* 1990, 175–6.

REGION/SITE	REFERENCES	CONTEXT	CLAY ANALYSIS	OTHER COMMENTS
DODECANESE AND OTHER ISLANDS ADJACENT WESTERN TURKEY				
Kos: Seraglio	MORRICONE 1975 MARTHARI <i>et al.</i> 1990, 175–6	Contextual information largely lost, but probably LM IA LM IA and LM IB		
Rhodes: Trianda	MONACO 1941 (+FURUMARK 1950) MARKETOU 1988, 1990 and 1998; MARTHARI <i>et al.</i> 1990, 177; PAPAZOGLOU–MANOUDAKI (1990)	Strato Inferiore = LM IA Strato Medio = LM IA/LM IB Strato Superiore = LM IB–LM IIIA1 MM IIIB/Early LB IA/ Early LM IAA Late LM IA LM IB		
Kalymnos: Vathy Cave	MAIURI (1928); BENZI (1993)	Unknown		
? Samos: Tigani	HEIDENREICH (1936) BUTTLER (1936)	LM IA		
WESTERN TURKEY				
? Troy	Guzowska (pers. comm.)	Troy VI		
Miletus	NIEMEIER and NIEMEIER 1997 (with earlier references)	LM I	Petrography	
Akbük–Teichiussa	VÖIGTLÄNDER 1986 and 1988	LM I		
Iasos	MOMIGLIANO (2005)	LM I (and possibly MM IIIB and LM IB)	Petrography	
Cnidus	MELLINK 1978; LOVE 1984	Not known		One sherd of LOD seen by author in Sept. 2004, possibly reported as ‘Kamares’ by I.C. Love here illustrated in Fig. 5B
CRETE				
Knossos Sherds from Hood’s excavations along the Royal Road (South) and by Hogarth’s Houses	MOMIGLIANO (2005)	RR/S B/C17 = MM IIIA–LM IB HH H 16 = MM IIIB (or early LM IA?) (Hood, pers. comm.)		

Table 1 Gazetteer of Sites with SE Aegean LOD/DOL wares

REGION/SITE	REFERENCES	CONTEXT	CLAY ANALYSIS	OTHER COMMENTS
CYCLADES				
Keos: Ayia Irini	DAVIS <i>et al.</i> 1983	Keos VI and VII (Late Cycladic I and II)	Petrography	
Thera: Akrotiri	MARTHARI <i>et al.</i> 1990	Late LM IA (Akrotiri Last Period, Phase B)	Chemical analysis by AAS	
? Naxos: Grotta	HADJIANASTASIOU 1989 and 1993	LM IB/LC II	Petrography	
GREEK MAINLAND AND ADJACENT ISLANDS				
? Tiryns	(W.-D. Niemeier (pers. comm.))			
Aegina: Kolonna	LH I–II W. Gauss (pers. comm.)			
CYPRUS				
? Maroni–Vournes	CADOGAN <i>et al.</i> 2001, 79 fig. 6	Vournes Ic (Late Cypriot I), roughly correlating to LM IA		
Enkomi	L. Crew (pers. comm.)	Late Cypriot Ia and Ib		

Table 1 continued Gazetteer of Sites with SE Aegean LOD/DOL wares

graphical horizons: 1) the earliest are deposits that have been labeled MM III or MM IIIB or MM IIIB/LM IA transition or Early LM IA by different archaeologists; 2) secondly, in deposits assignable to advanced LM IA and sealed by Santorini tephra; 3) and, finally, in deposits assignable to a phase equivalent to LM IB.³⁰

Obviously, it is well beyond the scope of this paper to discuss whether one should call the earliest deposits at Trianda “MM III” or “MM IIIB” or “MM IIIB/LM IA transition” or “Early LM IA”. Other contributors to this volume have tried to shed some light on this problem from a Cretan perspective (see especially the papers by E. Hatzaki and L. Girella). The present confusing situation, in which different scholars use different labels for a group of largely contemporary deposits, seems to have been caused by a slack employment and appreciation of

Evans’s terminology and definition of the Knossian ceramic sequence. Some scholars, in particular, seem to have employed the MM IIIB/ MM IIIB–LM IA/ Early LM IA labels merely as stylistic descriptors, without taking fully into account the chronological consequences, i.e., without properly evaluating the implications that a MM III or LM IA label has for the relative chronology of their deposits within the wider Aegean context. This terminological/chronological conundrum is quite revealing of other important methodological issues ingrained in the system that we inherited from Evans and Mackenzie.³¹ Perhaps Aegean archaeologists of the 21st century need to rethink their chronological frameworks and terminologies in a more systematic way, instead of merely tinkering with old schemes and labels that no longer reflect the mentalities and objectives of modern practitioners. What we need is a new pan-Aegean

³⁰ MONACO 1941; MARKETOU 1988, esp. 31; 1990, esp. 103; MARTHARI *et al.* 1990; PAPAZOGLU-MANIODAKI 1990, esp. 142–53: one sherd of LOD comes from a stratum dated by PAPAZOGLU-MANIODAKI to MM III, but most sherds, e.g., those on pl. 67, have been found in contexts spanning the

MM III–LH IIIA:1 phases. The MM III date is accepted by PAPAIOANOPOULOU (1985, 85), but it should be borne in mind that other archaeologists would call this level MM IIIB/LM IA or Early LM IA.

³¹ See MOMIGLIANO, in press.

chronological scheme, with purely chronological labels such as Early/Middle/Late Bronze Age, in which the deposits and stratigraphic sequences of individual sites might be correlated in a less confusing and more satisfactory way.

Vathy Cave, Kalymnos. This site, excavated in 1922, has yielded a large assemblage of southeast Aegean LOD and DOL pottery, but the surviving information on the excavations is not sufficient to shed any light on its chronological context(s).³²

Tigani, Samos. In the 1930s, German excavators claimed to have discovered MM or Middle Cycladic (MC) pottery, which could, in fact, belong to the southeast Aegean LOD and DOL class, given that it was found in “bothroi” in association with LM IA pottery.³³ Obviously, new macroscopic and petrographic analyses are needed to confirm or reject this plausible suggestion.

Western Turkey

Troy. Marta Guzowska kindly showed me photographs of three possible sherds of southeast Aegean LOD from contexts assignable to Troy VI.³⁴ One may be tentatively assigned to this ware, although better macroscopic and petrographic analyses are needed confirm this. The slightly polished/burnished surface and the decorative motives on the other two sherds, however, do not seem to conform to the usual southeast Aegean products, but resemble some ceramic fragments from Çesme illustrated by V. Şahoğlu, which might be Cycladic, or material from Samothrace.³⁵

Miletus. Plenty of examples of southeast Aegean LOD and DOL pottery have been found in the old and recent excavations at Miletus, in association with LM I pottery.³⁶ Nicolas Zenzen is now studying this class of

material, and Carl Knappett has worked on the petrography of a number of samples.³⁷ Interestingly, in August 2004, Zenzen kindly showed me a fragment of what could be a local production/imitation of southeast Aegean LOD ware, made in the unmistakable Milesian clay, which raises the intriguing possibility of Milesian potters imitating imitations of Minoan wares.

Akbük-Teichiussa (Kömüradasi). There is not much stratigraphy to speak of concerning the Bronze Age finds from the little island/promontory of Kömüradasi, largely because of erosion and change in the water table, but the published material suggests an association between southeast Aegean LOD pottery and LM IA.³⁸

Iasos. In spite of shortcomings in the excavation and recording techniques employed by Levi and Laviosa (e.g., digging by means of artificial “spits” and no recording of proper archaeological sections), I have been able to reconstruct some kind of stratigraphic sequence for the Bronze Age levels discovered in the area of the later Roman Agora. Starting from the top, we have:

- 1) level(s) associated with LH III pottery, largely removed and/or seriously damaged by later occupation/activities;
- 2) level stratified above the floor deposit of Building B (see level 3, below), datable to a phase possibly equivalent to LM IB;
- 3) floor deposit caused by a fire destruction in Building B, and stratified directly beneath level 2 and above level 4; the pottery from this floor deposit is not particularly diagnostic in chronological terms (for it consists mostly of conical cups), but can be generically assigned a to period equivalent to LM I (probably LM IB);
- 4) layer of Santorini tephra, mixed with pottery,

³² MAIURI 1928, 104–17, at 115 described as “Camares”; BENZI 1993, 277–9, fig. 1c, d and pl. 35a–f.

³³ Cf. DAVIS 1982, 38; HEIDENREICH 1936, 125–83, at 173 pl. 49.1, 2; BUTTLER 1936, esp. pls. 68–70.

³⁴ Marta Guzowska (pers. comm.), whom I thank very warmly for useful discussions on Trojan and Iasian “imports” and for showing me photographs of this material.

³⁵ As recently illustrated by D. MATSAS in a paper delivered at the *Minoan Seminar Colloquium: Minoans in the Central, Eastern and Northern Aegean* (Athens, 22–23 January 2005).

³⁶ For the southeast Aegean LOD and DOL wares from the

earlier excavations see DAVIS 1982, 34, with further references, and MEE 1978, 134; see also NIEMEIER and NIEMEIER 1997, esp. 193. For Minoan pottery associated with southeast Aegean wares see also NIEMEIER 1998a, 1998b; NIEMEIER and NIEMEIER 1999.

³⁷ For preliminary results of petrographic analyses of Milesian samples of southeast Aegean LOD/DOL wares and other classes of pottery see KNAPPETT 2003.

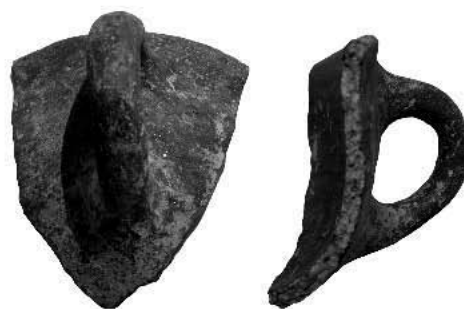
³⁸ VOIGTLÄNDER 1986, esp. 621 ff. and pls. 21, 28–31; 1988, esp. 603 ff. and pl. 607.2; 2004, esp. pl. 65.1, 2 and also pls. 66, 67.



A



B



C



Fig. 5 Cnidus (cape Krio). A: view of the two harbours; B: fragmentary jug/ewer in SE Aegean LOD ware from Love's excavations; C: fragmentary EBA red-polished (two-?) handled cup from Love's excavations

probably swept immediately after the deposition of wind-blown tephra from the LM IA eruption;³⁹

- 5) pure deposit of Santorini tephra (advanced LM IA);
- 6) fill deposits stratified beneath Santorini tephra in Building B and Saggio Gamma; material found above the latest floor of Building F (LM IA) and other fill deposits in other areas of the site with LM IA imported material;
- 7) layer sandwiched between the latest and middle floor of Building F (MM IIIB? LM IA?);

- 8) layer beneath the middle floor of Building F (MM IIIB? LM IA?);

- 9) Chalcolithic/Early Bronze Age strata.

With the exception of Level 9, southeast Aegean LOD and DOL pottery at Iasos has been found in all the contexts listed above, and even in much later ones. The uncertainty in the dating of levels 7 and 8 is due to the facts that the pottery is small in quantity and its study has not been completed (not to mention the terminological/chronological conundrum referred to above).

³⁹ On the mixed and pure tephra layers see HUBER *et al.* 2003, 83–105.

Cnidus (Cape Krio). In the late 1970s, Iris C. Love reported the discovery of Minoan pottery ranging in date from MM I–LM I in trial trenches to the north and east of the Trireme (or northern) harbor (Fig. 5A).⁴⁰ No further stratigraphic information was reported and, to my knowledge, no illustrations of this material have ever been published, although slides were shown at a conference in the mid 1980s. In the summer of 2004 I tried to locate and examine this pottery in the Italian Tower of the Bodrum Museum (where the finds from Love's excavations are kept) but was able to find only two sherds of prehistoric date: a sherd of southeast Aegean LOD ware (Fig. 5B) and a fragmentary EBA II/III red-polished cup (Fig. 5C).

Crete

Knossos. Sinclair Hood found a few sherds of southeast Aegean LOD during his excavations at Knossos along the Royal Road and by Hogarth's Houses. According to the excavator's records, the Royal Road context contained pottery datable from MM IIIA–LM IB, while the Hogarth's Houses context could be dated to MM IIIB.⁴¹

Cyclades

Ayia Irini, Keos. Eight sherds of southeast Aegean LOD and DOL have been illustrated by Jack Davis and his colleagues: these were found in contexts datable from Late Cycladic (LC) I to III, but mostly in Keos periods VI and VII (LC I and II).⁴²

Akrotiri, Thera. Several complete vases were found in the latest phase of Akrotiri, i.e., in advanced LM IA contexts; it is, of course, possible that finds of southeast Aegean LOD and DOL pottery may turn up in earlier strata, once these are studied more systematically.⁴³

Grotta, Naxos. The settlement of Grotta has produced a fragmentary jug that could belong to the southeast Aegean LOD class, but apparently the petrographic analyses were inconclusive.⁴⁴

Greek Mainland, Kythera, and Aegina

Tiryns. Unpublished sherds seen by Wolf Niemeier (pers. comm.).

Kolonna, Aegina. Walter Gauss's keen eye seems to have spotted at least one sherd of this ware in the excavations at Kolonna carried out under the aegis of the SCIEEM 2000 project, in a context dating to LH I–II (pers. comm.).

Cyprus and the Levant

To my knowledge, pottery of this class has not been reported from Syria, Palestine or Egypt, but one or possibly two sites in Cyprus have yielded a few fragments.

Maroni. The identification of one fragment as southeast Aegean LOD ware by Gerald Cadogan is most likely, but not certain; its context is dated to Late Cypriot I.⁴⁵

Enkomi. In the case of this site, the identification of a few sherds (even if only macroscopic) appears more secure, and the context in which these have been found (fills datable to Late Cypriot IA and IB) fits very well with the evidence reviewed so far.⁴⁶

3) CONCLUSIONS

I should like to sum up and conclude with a few remarks on the chronology, production centers and distribution of the southeast Aegean LOD and DOL wares.

As far as chronological synchronisms are concerned, it seems clear that most of the southeast Aegean LOD and DOL wares have been found in contexts datable to the LM IA and LM IB phases in Cretan terms. There is some stratigraphic evidence, however, from Knossos, Trianda, and perhaps Iasos suggesting that production may have started in a phase equivalent to what some scholars would call MM IIIB. There is also some stylistic evidence suggesting that production may have started before the end of the Bronze Age, namely sherds from Kos imi-

⁴⁰ MELLINK 1978, 321 (reporting IRIS LOVE's discovery of "Middle Minoan" sherds); LOVE 1984, 251.

⁴¹ MOMIGLIANO, 2005, pl. LVIIIC:b–c.

⁴² DAVIS *et al.* 1983.

⁴³ MARTHARI *et al.* 1990.

⁴⁴ HADJIANASTASIOU 1989, 211 no. 5, pl. 40a, from the Demetrokalli plot. See also HADJIANASTASIOU 1993, 259 and n. 12, for comments on petrographic analyses of this piece.

⁴⁵ CADOGAN *et al.* 2001, 79 fig. 6.

⁴⁶ Sherds from one or two vessels (Lindy Crewe, pers. comm.).

tating Minoan white-spotted ware, which is already fairly common in Crete in MM IIB but is more typical of the MM IIIA and IIIB ceramic phases.

As to production centers, Seraglio on Kos was undoubtedly one: it has yielded the largest assemblage discovered so far and kiln wasters; moreover, fabric analyses also support this conclusion. Stylistic, macroscopic, petrographic and chemical analyses, however, also suggest the presence of different clay “recipes”, which could be indicative of different workshops, although still located within the area of Kos, Bodrum and Cnidus because of the presence of volcanic glass inclusions.

As to the distribution of the southeast Aegean LOD and DOL wares, this covers quite a wide area, from Cyprus to Miletus and, perhaps, Troy, and from Miletus to Aegina, but at present it looks as if relatively small quantities reached sites outside the Dodecanese and the Carian-Ionian coast, where we find the largest assemblages. This in itself is an interesting piece of information, for it allows us to make inferences on patterns of trade and other issues. It is clear, however, that much more quantita-

tive and analytical work is still needed. Although more samples have been analyzed since the 1980s, mostly for provenance analyses, there is clearly scope for a more systematic study of the southeast Aegean LOD and DOL wares, which could combine contextual, stylistic and different types of clay analyses, not only to shed light on the origin and distribution of these wares, but also on their contents, which is probably what prompted their circulation in the first place. Such a study would help us to understand better not only the chronological synchronisms of the southeast Aegean LOD and DOL wares, but also networks and exchange patterns, trade routes, and the different roles played by certain settlements. In other words, it would help to elucidate existing models and interpretations, from “directional trade” to “small worlds”, and the apparent concentration of evidence for exchange and cultural contacts at particular Aegean sites.⁴⁷ Middle Helladic Kolonna on Aegina is clearly one of the focal points where certain routes seem to converge, but Seraglio on Kos may well turn out to be another, at least for the early Neopalatial period.

⁴⁷ DAVIS and GOROGIANNI, in press; SHERRATT and SHERRATT 1998, esp. 334 ff.; MOMIGLIANO, 2005, 223–4.

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