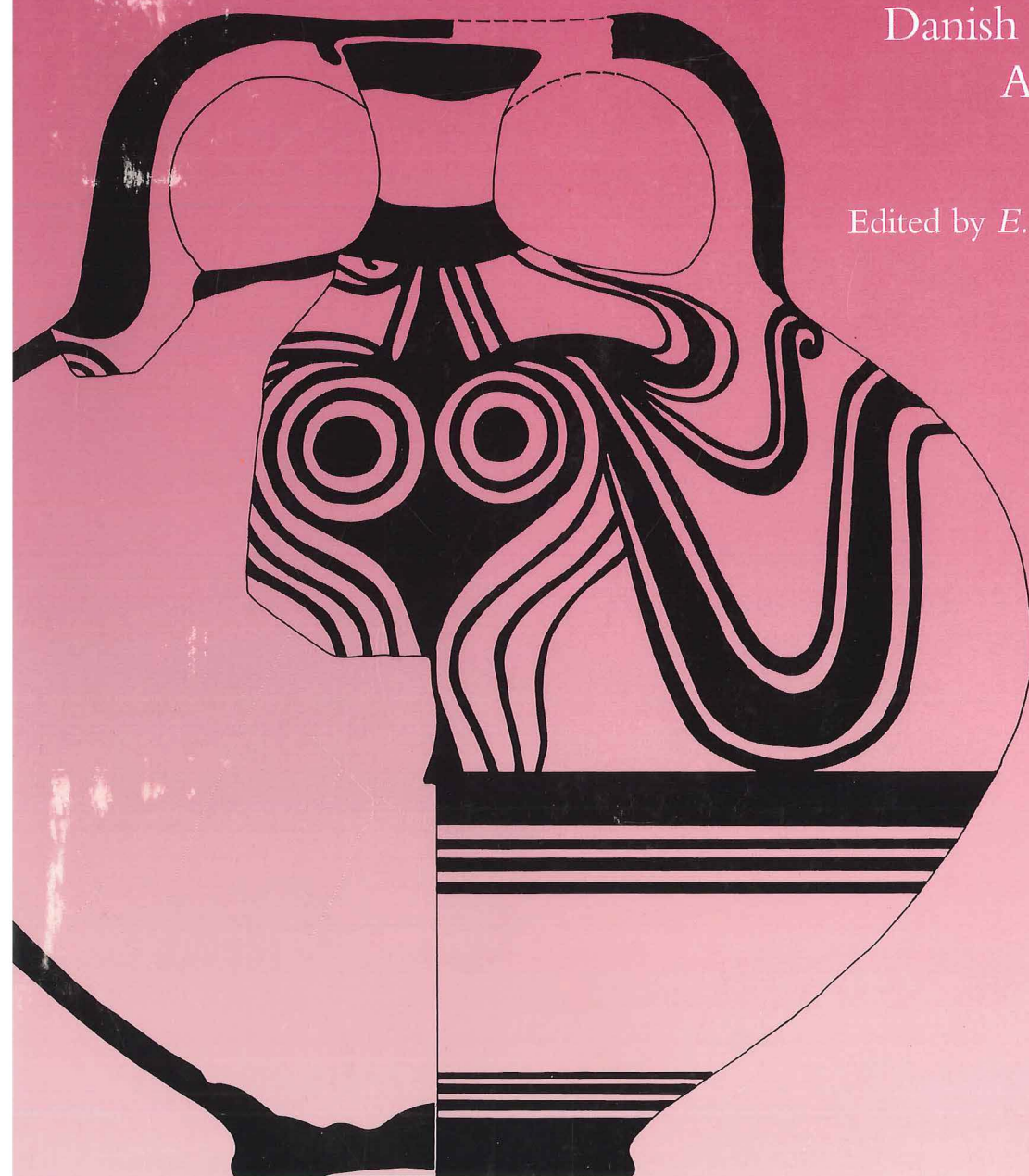


# Late Minoan III Pottery

## Chronology and Terminology

Acts of a Meeting held at the  
Danish Institute at Athens  
August 12-14, 1994

Edited by *E. Hallager* and *B.P. Hallager*



Athens







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Volume 1



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The cover illustration depicts a small globular stirrup jar. LM IIIB:1.  
Local Kydonian Workshop.  
Drawing: Birgitta P. Hallager.

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# Preface

The meeting concerning “Late Minoan III Pottery – Chronology and Terminology” at the Danish Institute at Athens in August 1994 was the first archaeological conference arranged at and by the Institute established only two years earlier. The topic of the conference was suggested to the present Director by colleagues Birgitta and Erik Hallager from the University of Aarhus – both for some decades involved in the Greek-Swedish Excavations at Khania in Western Crete.

Expenses connected with the accomplishment of the meeting itself were defrayed by the Danish Institute and Consul General Gösta Enboms foundation while the Danish Research Council for the Humanities, the Institute for Aegean Prehistory, New York and the Danish Institute covered the expenses for printing the contributions. Dr. Colin Macdonald has reviewed the English of participants of not English tongue. Dr. Michael Wedde finished the chapters of discussions and finally Birgitta and Erik Hallager invested an immense energy in chasing missing and delayed contributions and do the editorial work. On behalf of the Danish Institute at Athens I would like to express my warm gratitude to all of them. The gratitude should, of course, be extended also to the participants who made it all possible.

Athens, February 1996

*Søren Dietz*



# Introduction

The Late Bronze Age III period on the mainland has been the focus of scholarly research for more than a century, while in Crete the exploration of the same period is relatively new. One factor which was a starting point for the research of LM III Crete was the heated debate during the 1960s over the date of the Linear B tablets from the palace at Knossos. This resulted in many different studies of which Mervyn Popham's pioneer works on LM III pottery may be mentioned in this connection. At the same time Yannis Tzedakis had started settlement excavations in Khania in West Crete and identified the important local Kydonian pottery workshop of the LM III period. Important contributions to a further understanding of LM III pottery were presented with the books of Athanasia Kanta and Philip Betancourt and the excavation publications from Khania, Kastelli 1966 by Y. Tzedakis and A. Kanta, the Unexplored Mansion by M. Popham, and Kommos by L. Vance Watrous – five books which are continuously quoted throughout this volume.

With the increase in published material and the numerous – still unpublished – excavations in LM III settlements and tombs the awareness of many unsolved problems increased. The need for an informal meeting where these problems could be discussed was perceived by many scholars. As most of the problems were basic and confined exclusively to the development of *Minoan* pottery, it was considered necessary that scholars of Cretan archaeology should be given an opportunity to define their own problems, before they started the indispensable exchange of ideas and experiences with their mainland colleagues. At this point we approached the director of the new Danish Institute in Athens, Søren Dietz, and suggested that he should be the host to an informal meeting on LM III pottery – a suggestion he immediately accepted. We are most grateful to the Institute and Dr. Dietz for organising the meeting and finding the funds without which it would not have been possible to carry it through.

The meeting was thus organised within the limited physical frame of the Danish Institute. As speakers were invited archaeologists who were in the process of studying and publishing LM III pottery, preferably from stratified excavations, and representing all the different parts of Crete, while as respondents the meeting could furthermore benefit from scholars who had already published their excavations.

Unfortunately not all scholars who had agreed to participate were finally able to attend. Two of those, however, have contributed to the Acts, and in this connection we are grateful to Mervyn Popham for providing the response to the paper on terminology and to Alexandre Farnoux for presenting the result of his research in this book. We suspected that the limited number of participants should provoke lively debates, and

so it did. In this connection we are most grateful to Dr. Michael Wedde who undertook the task of typing out the twelve hours of discussion which was recorded during the three days of the meeting. We also wish to thank Colin Macdonald who has corrected the English text in the contributions of the non English speaking participants. Our thanks are equally due the Danish Research Council for the Humanities, to the Institute for Aegean Prehistory, New York, and to the Danish Institute for their generous financial support which made the publication of the meeting possible.

All line drawings of pottery published in this volume are reproduced in scale 1:3 with the exception of those given in the first paper on terminology which are based on evidence already published, and the appendix where the pottery is reproduced in scale 1:4. In Denmark we have a proverb that a "beloved child has many names" and we have realized that the LM III pottery shapes are like beloved children to the participants. To avoid too much confusion we have provided the book with an index of shapes with references to the simple line drawings given in the appendix, and through which it should always be possible to find out which child is spoken of. Finally it should be mentioned that the editors are responsible for the spelling of sites names throughout the volume.

Khania, 15 September 1995

*Erik Hallager*

*Birgitta P. Hallager*

# List of participants

Maria Andreadaki-Vlasaki, the Archaeological Museum, Khania

Philip P. Betancourt, Temple University, Philadelphia

Elisabetta Borgna, the Italian Archaeological School, Athens

William Coulson, the American School of Classical Studies, Athens

Søren Dietz, the Danish Institute at Athens, Athens

Geraldine Gesell, University of Tennessee, Knoxville

Birgitta P. Hallager, Greek-Swedish Excavations, Khania, Crete

Erik Hallager, Århus

Sinclair Hood, Oxford

Athanasia Kanta, University of Crete, Rethymnon

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J. Alexander MacGillivray, Columbia University, New York

Magaret Mook, Iowa State University, Ames

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Niki Prokopiou, National Archaeological Museum, Athens

Georgos Rethemiotakis, the Archaeological Museum, Heraklion

Metaxia Tsipopoulou, the Archaeological Museum, Ag. Nikolaos

Despina Vallianou, the Archaeological Institute of Crete, Heraklion

Peter M. Warren, University of Bristol, Bristol

Vance L. Watrous, University at Buffalo, Buffalo

Michael Wedde, the Swedish Institute at Athens, Athens



# Abbreviations

(other than those found in Archäologische Bibliographie).  
The list is general for all papers.

## Antichità cretesi

Antichità cretesi. Studi in onore di Doro Levi; I (Cronache di Archeologia 12, 1973). Catania 1977; II (Cronache di Archeologia 13, 1974), Catania 1978.

## Creta antica

Creta antica. Cento anni di archeologia italiana (1884-1894) (Scuola Archeologica Italiana di Atene), Roma 1984.

## Cypriot Ceramics

Cypriot Ceramics: Reading the Prehistoric Record. Eds. J. A. Barlow, D. L. Bolger and B. Kling, Philadelphia 1991.

## Eilapini

ΕΙΛΑΠΙΝΗ. Τόμος Τιμητικός για τον Καθηγητή ΝΙΚΟΛΑΟ ΠΛΑΤΩΝΑ, Heraklion 1987.

FM Furumark Motif, cf. A. Furumark, Mycenaean Pottery. I. Analysis and Classification, Stockholm 1941.

FS Furumark Shape, cf. A. Furumark, Mycenaean Pottery. I. Analysis and Classification, Stockholm 1941.

## Function

The Function of the Minoan Palaces. Proceedings of the Fourth International Symposium at the Swedish Institute in Athens, 10-16 June, 1984, Stockholm 1987.

## La Crète Mycénienne

La Crète Mycénienne. Table Ronde organisée par L'Ecole Française d'Athènes du 26 au 28 mars 1991. Eds. A. Farnoux and J. Driessen, (BCH, Suppl. 30), Paris forthcoming.

## La transizione

La transizione dal miceneo all'alto arcaismo. Dal palazzo alla città. Atti del convegno internazionale, Roma 14-19 marzo 1988. Ed. D. Musti et al., Roma 1991.



#### L'Habitat égéen

L'Habitat égéen préhistorique, Actes de la Table Ronde internationale organisée par le Centre National de la Recherche Scientifique, l'Université de Paris I et l'Ecole Française d'Athènes (Athènes, 23-25 juin 1987). Eds. P. Darcque and R. Treuil, (BCH Suppl. 19), Paris 1990.

#### Mitsotakis Coll.

*Minoikós kai ellinikós politismós apó tin sýllogi Mitsotáki*, / Minoan and Greek Civilization from the Mitsotakis Collection: Museum of Cycladic Art, Athens 1992.

#### Mykenaïka

Mykenaïka. Actes du IX colloque international sur les textes mycéniens et égéens organisé par le Centre de l'Antiquité Grecque et Romaine de la Fondation Hellénique des Recherches Scientifiques et l'Ecole Française d'Athènes (Athènes, 2-6 octobre 1990). Ed. par J.-P. Olivier (BCH Suppl. 25), Paris 1992.

PM Evans, A. The Palace of Minos at Knossos I-IV, London 1921-1936.

#### Problems in Greek Prehistory

Problems in Greek Prehistory. Papers Presented at the Centenary Conference of the British School of Archaeology at Athens, Manchester April 1986. Eds. E. French and K. Wardle, Bristol 1988.

#### Production and Distribution

Production and Distribution: a Ceramic Viewpoint, ed. H. Howard, E.L. Morris (BAR Int.S. 120), Oxford 1981.

#### SYBRITA

SYBRITA. La valle di Amari fra bronzo e ferro. (Ricerche Greco-Italiane in Creta Occidentale – II) Ed. L. Rocchetti, (Incunabula Graeca Vol. XCVI), Roma 1994.

#### Wace and Blegen

Wace and Blegen. Pottery as Evidence for Trade in the Aegean Bronze Age. 1939-1989. Proceedings of the International Conference Held at the American School of Classical Studies at Athens, Athens, December 2-3, 1989. Ed. C. Zerner with P. Zerner and J. Winder, Amsterdam 1993.



# Terminology – The Late Minoan Goblet, Kylix and Footed Cup<sup>\*</sup>

*Birgitta P. Hallager*



Fig. 1. Thelatron from a tomb in Odos Palama, Khania. KH 6338. After Hallager and McGeorge 1992, pl.23a.

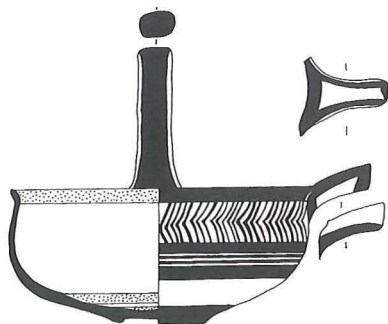


Fig. 2. Spouted cup from a tomb in Odos Higoumenou Gavril, Khania. After Karantzali 1986, Fig.12 (V20).

We all know this vase type (Fig. 1). But do we know what to call it? In articles and books I have accidentally come across the following names: side-spouted jug, side-spouted necked jar, spouted jar with basket handle (drinking jar), basket-handled jug with a tube spout and a basket-handled, side-spouted jar.<sup>1</sup> Many of us know it as a “feeding bottle” and most of us as a thelatron. I suggest we use this last name as a Greek name is preferable. It could easily be adopted in other languages like we today use the Greek names for the classical vases.

Another important shape in LM III is this called a spouted cup (Fig. 2). Or to be more correct, that is of course only one of its names. It is also called a spouted bowl, a bridge-spouted cup, a bowl with bridge spout and side handles, a side spouted bowl, a lip-spouted bowl and a bowl with handle and spout.<sup>2</sup> We need not argue over whether the subject is a cup or a bowl. As it has a vertical handle it is a cup and as the difference between this and an ordinary cup is the spout I suggest that we call it a spouted cup.

These are two shapes with many names, but we also have one name

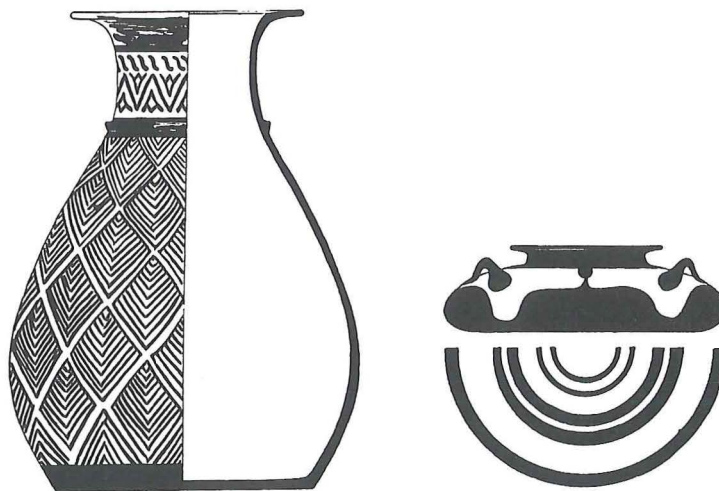


Fig. 3. Two alabastra. Left: After BSA 51 (1956), 69; right: After BSA 51 (1956), 71.

<sup>\*</sup>See addendum.

<sup>1</sup>Seiradaki 1960, p. 14–16; Betancourt 1983, 33 (No 69); Hood, Huxley & Sandars, 1958–59, 251 (XI.3 and XIIa1); Watrous 1992, 134 and 181.

<sup>2</sup>Kanta 1980, 269; Evans 1906, 96; Catling 1968, 128; Bosanquet & Dawkins 1923, 86; Pop-ham 1970b, 197; Seiradaki 1960, 21; Mitsotakis Coll. 1992, 122, kat.no.119.





Fig. 4. Miniature alabastron from a tomb in Odos Palama, Khania. KH 6345. After B. Hallager and McGeorge 1992, fig. 16.



Fig. 5. Globular alabastron. After Kreta 1990, 118, no.117.



Fig. 7. Straight-sided alabastron. From Mitsotakis Coll. 128, no.131.



Fig. 6. Two globular alabastra. Both after Kreta 1990, 129; left: no.152, right: no.154.

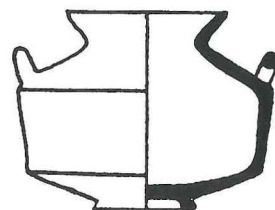


Fig. 8. Straight-sided alabastron from Karphi. After BSA 55 (1960), fig. 8:7.

covering many shapes: Both these two shapes (Fig. 3), which obviously have little in common, are called alabastra. To separate them the first has been called a flat or squat alabastron,<sup>3</sup> the second a bottle-like alabastron, tall alabastron (which is the name for it on the mainland) tall and baggy or just baggy alabastron<sup>4</sup> and this last term is preferable. In Crete it exists also in a miniature version (Fig. 4) which hardly could be called a miniature tall alabastron – but rather a miniature baggy alabastron.

Another vase belonging to the alabastron family is this (Figs. 5 & 6). Globular alabastron is a useful name for it but it is for example also termed: small two-handled pot, alabastron vase, collar-jar, alabastroid lekythios, two handled bowl with collar neck, amphoriskos, bowl or deep bowl.<sup>5</sup>

<sup>3</sup>Popham 1970c, 77; Betancourt 1985, 152, fig. 112.

<sup>4</sup>Kanta 1980, 159; Betancourt 1985, figs. 112 and 118; Kanta 1980, 278; Popham 1970c, 77.

<sup>5</sup>Evans 1906, 123; Kreta 1990, catalogue nos. 79, 152, 154 and 117; Kanta 1980, 111 and fig. 103:3, and figs. 34:3 and 96:3, and fig. 83:4; Mitsotakis Coll. 1992, 126, no 128; Seiradaki 1960, fig. 14:8-9.



Fig. 9. Straight-sided alabastron from a tomb, Khania. KH 740. Khania Museum.

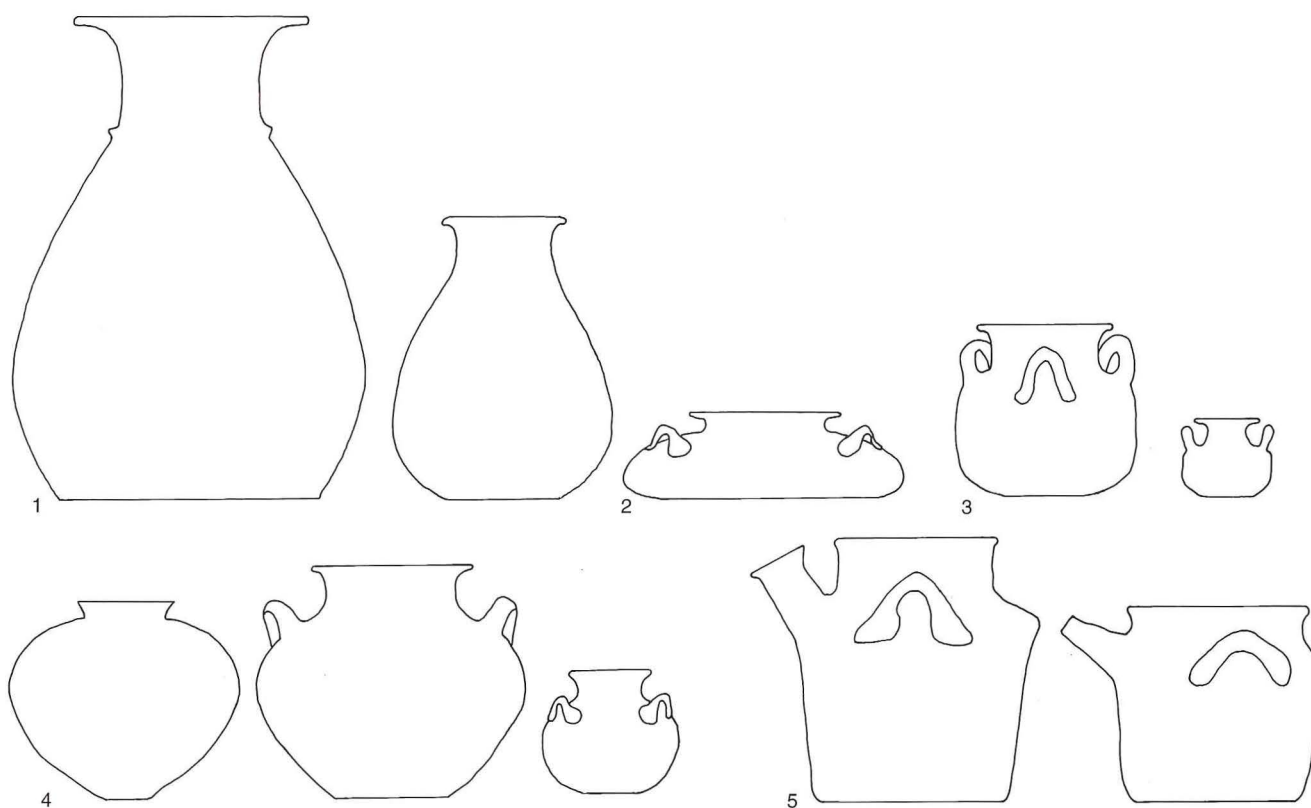


Fig. 11. The Minoan alabastra: 1. baggy; 2. flat; 3. straight-sided; 4. globular; 5. spouted. Drawing: B.P.H.

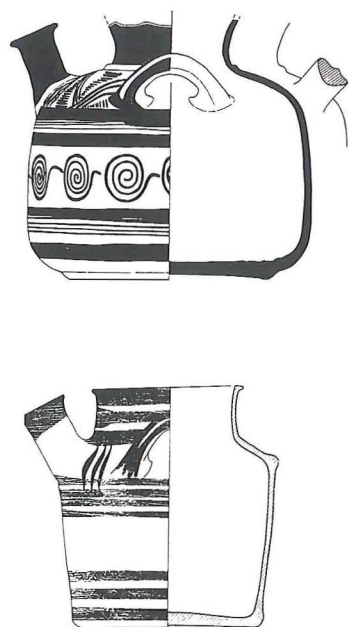


Fig. 10. Two spouted alabastera.  
Above: After BSA 53-54 (1958-59), 190, fig. 6:7; Below: After ADelt 34 (1979), 237, fig. 12.

Here is another vase called alabastron (Fig. 7). To separate it from the others it may be called a straight-sided alabastron.<sup>6</sup> This straight-sided alabastron resembles in shape one of the IIIC pyxides from Karphi (Fig. 8).<sup>7</sup> As the term pyxis normally is reserved for a wide open lipless vessel with no or an extremely short neck, I suggest that this Karphi shape should be renamed a straight-sided alabastron instead of making the straight-sided alabastron in to a pyxis. – If we accept that the straight-sided alabastron (Fig. 9) which can be found in different sizes and with a varying height of the neck, belongs to the alabastron family, then we have another shape, very much resembling it, the obvious difference being the added spout.

This latter is called a spouted pyxis (Fig. 10) when it is not called a side-spouted jar or a spouted cylindrical jar with side handles.<sup>8</sup> As with the straight-sided alabastron it may vary in size and in height of the neck. Why call it a pyxis or a jar when it obviously belongs to the alabastron family? (Fig. 11) Why not spouted alabastron?

Unfortunately I could continue with many more examples – but I

<sup>6</sup>Kanta 1980, 279.

<sup>7</sup>Seiradaki 1960, fig. 12:7.

<sup>8</sup>Kanta 1980, 283; Betancourt 1983, 31 (No 60) (the predecessor in LM IB); Hood & de Jong 1958-59, 190 and fig. 6:7.



hope that you already by now can agree that we have a small problem with our terminology. We have been working under the shadow of Furumark for some 50 years – but without being able really to use him. As we all know his Mycenaean system cannot be imposed on Minoan pottery and this is probably the background for the large repertoire of names within the Minoan shapes.

Needless to say, we have to define the Minoan pottery development on the evidence from excavations in *Crete*.<sup>9</sup> Furumark can only be used for the imported Mycenaean vessels in Crete which are important to keep separate from the Minoan vases.<sup>10</sup> Shapes *could* be described and divided as Furumark did it: with numbers. We could also consider an even more modern computer way of doing it: What about calling the shape alabastron 007 and subordinate variants to this shape 007-001 up to whatever number we need for this shape? – Or why not be out of date and create a human system?<sup>11</sup>

As I can never remember the shape behind a certain FS number and since a full series of computer numbers would create a total confusion, I suggest that we simply use words, i.e. the family name and short descriptions for each variant. Above I have shown some shapes and suggested names for them. I will continue with the perhaps most confused shapes within Minoan pottery: the goblet, kylix and footed cup. By discussing these three in detail, it can be seen that not only will it be a great help if we all use the same terminology, but it may as a consequence, be possible to trace the life time of each shape and thereby giving vital information for the chronology of the LM III pottery.

In his important article on “The Late Minoan Goblet and Kylix”,<sup>12</sup> Popham separated the two shapes, goblet and kylix, in the way that he talked about goblets for the LM II and early LM IIIA period and starts talking about kylikes in the LM IIIA:2 period and onwards. The terms goblet and kylix have been rather confusingly used in publications both before and after his article. The Ephyrean goblets are sometimes termed kylikes<sup>13</sup> and sometimes stemmed goblets.<sup>14</sup> Goblets are called pedestalled cups<sup>15</sup> and

---

<sup>9</sup>LM III has *far too long* (my italics) been dependent on mainland definitions (Betancourt 1985, 171) and datings has been accepted on the assumption that the Mycenaean chronology is identical and parallel with the Minoan.

<sup>10</sup>As a result of this it can for example be seen that imported Mycenaean kylikes are found in Crete *before* the first Minoan kylix appears. Cf. Hallager, B.P. 1993, 263; see also below n. 59.

<sup>11</sup>I am much indebted to Mervyn Popham with whom I have corresponded on the subject. My original idea was to give a shape a family name and the variants a letter in the alphabetical order ie. alabastron A,B,C and so on. But Mervyn Popham suggested short descriptive names instead, a piece of advice I agreed to and which I have followed here.

<sup>12</sup>Popham 1969, 299-304.

<sup>13</sup>Popham et al. 1984, 165 and n. 59 (see comment below in n. 23); Warren, 1982-83, 65.

<sup>14</sup>Hood & de Jong 1952, 262.

<sup>15</sup>Evans 1906, 26 (7f); 72 (66h and n).

kylikes and goblets are “the two stemmed cups”.<sup>16</sup> The picture becomes even more confusing when the so called champagne cup/glass is referred to as a goblet<sup>17</sup> or low-stemmed goblet<sup>18</sup> or a low stemmed version of the one-handled kylix<sup>19</sup> or one-handled kylix.<sup>20</sup>

The shape of a vase is far from irrelevant: it is the introduction, evolution and disappearance of a certain shape which is of invaluable help in finding the chronological distinction between the ceramic periods, rather than the decorative motives.<sup>21</sup>

Using Popham’s article as a basis and considering the new evidence from the stratified deposits at the Minoan Unexplored Mansion (hereafter MUM),<sup>22</sup> as well as evidence from recent excavations in Crete and not the least in studying the stratigraphical sequences of the LM III pottery in the Greek-Swedish Excavations (hereafter GSE) at Khania, a pattern of chronological value was found in the development of the three shapes discussed here (Fig. 12).

First the three shapes must be defined. If we keep the name goblet for the lower stemmed type, the definition of a kylix could easily follow Popham’s “old” definition, being reserved for the taller stemmed type.<sup>23</sup> A footed cup, (called by Evans a ‘champagne glass’ cup) is simply a cup on a distinct foot.

As each type has its own development within LM II-III, a specified subdivision of each shape could briefly be presented as follows:

## Goblet

The goblet always has a short stem, pronounced everted lip, deep rounded to conical bowl and usually two strap handles not going above rim.

---

<sup>16</sup>Betancourt 1985, 169; Catling 1968, 129 (No 38). At Kommos both shapes are called kylikes. Watrous 1992, 121; 127; 132-33 and 140.

<sup>17</sup>Betancourt 1985, 164; Warren 1982-83, 69; Watrous 1992, 132.

<sup>18</sup>Hood & de Jong 1958-59, 187 and fig 3.

<sup>19</sup>Popham 1974, 206, n. 6.

<sup>20</sup>Coldstream 1963, 33.

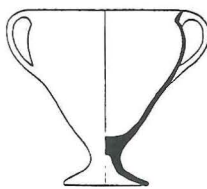

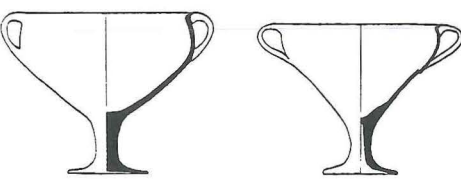
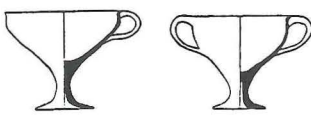

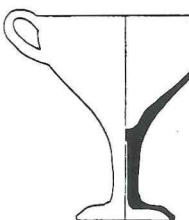
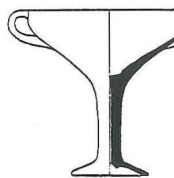
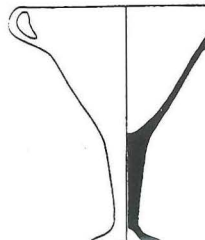
<sup>21</sup>Popham et al. 1984, 180.

<sup>22</sup>Popham et al. 1984.

<sup>23</sup>For “old” definition see Popham 1969. The distinction between goblets and kylikes was still kept in Popham 1978, 179-183 and Popham 1981, 330. In the MUM publication, however, Popham changed his mind and here the former goblets (including the Ephyrean type) are called kylikes. He argued that the function of the two types is the same and “distinction especially in the plain Cretan version somewhat arbitrary”. (Popham et al. 1984, note 59 on the pottery) The first statement I cannot speak against but with the second I unfortunately disagree.

There is a clear development in LM III of these vessel types, where the plain and the decorated types closely follow each other, but this cannot be easily understood unless we use the same terminology for the same type of vessel all though Crete. Here the “old Popham terminology” is more useful (and in harmony with the mainland use of the terms goblet and kylix, where the latter is reserved for the taller-stemmed shape) In this article I have stuck to the “old Popham” and I hope the reason will be understood in the end.



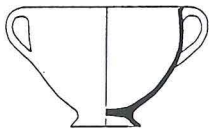
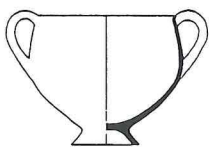
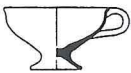
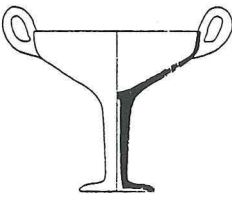
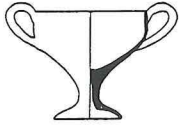
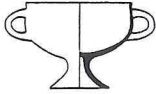

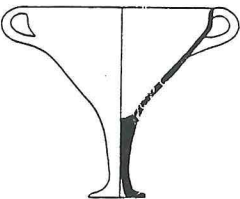

	Large goblet	Small goblet	
LM II			
LM IIIA:1			
LM IIIA:2			
LM IIIB			
LM IIIC			

The disc foot is hollowed underneath and the stem is usually pierced for most of its length in LM II<sup>24</sup> while the solid stem seems more common in LM IIIA. The goblet can be divided into two main types: The large goblet and the small.

**The large goblet** has always two handles and exists both in a decorated and in a plain version. The decorated version (within which the Ephyrean goblets belongs) has either a free-field design or circumcurrent decoration.

Fig. 12. The Minoan goblet, kylix and footed cup. Drawing B.P.H.

<sup>24</sup>For a more detailed description see Popham et al. 1984, 166.

Kyl- ix	Two-handled footed cup	One-handled footed cup
		
)		
	 	
		

**The small goblet** is somewhat smaller than the above and has a slightly thinner stem and a noticeably shallower bowl. As a result the rim diameter is smaller than for the large goblet and although it may have two strap handles, the version with only one seems, however, to be the most common. The decorated version is rare, the monochrome perhaps more common, and the plain version, the most popular. The large goblet belongs to the period LM II and LM IIIA:1, with the small goblet existing during the same period but continuing in LM IIIA:2.

## Kylix

The main characteristic feature of the kylix is the long stem which is usually pierced.<sup>25</sup> The handles are round in section (roll handles) and always two. Kylikes can be divided roughly into three main types:

**The loop-handled kylix** has a deep rounded (sometimes conical) bowl, pronounced everted lip, rather big roll handles which project considerably from the body and rise well above the rim (loop-handles). Usually arched foot.

**The shallow kylix** has a shallow rounded bowl, usually no pronounced lip and roll handles, either even with the rim or projecting above it (high slung handles.) The foot can be both arched and flat.

**The carinated kylix** has a carinated conical bowl, the roll handles are smaller than those of the other two types and set even with the rim. The stem tends to be shorter and somewhat thicker than on the loop-handled and shallow types. The foot is usually flat.

All three types exist both in decorated and plain versions. At the beginning circumcurrent decoration is the most commonly used while later the decoration covering the whole bowl (over all decoration) is far the most prominent. Kylikes belong to the period LM IIIA:2 to IIIC. The loop-handled kylix appears in LM IIIA:2 and is more or less replaced by the shallow kylix in LM IIIB:1. Few examples of this last shape occur in LM IIIC when the carinated kylix is the most prominent.

## Footed cup

The footed cup exists in two main types:

**The two-handled footed cup** always has two vertical handles.<sup>26</sup> The early type has a larger bowl than the later type, low hollowed foot and two strap handles. The later type has a high conical foot and oval roll

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<sup>25</sup>Goblets and kylikes in Crete differ from the mainland equivalents, not only insofar that other clays are used, but also in shape and decoration. For example: LH IIIA:2-B kylikes have solid stems and handles somewhat squarish in section while the Minoan counterparts usually have a hollowed stem and handles round in section. The choice of decoration is with few exceptions (for example the whorl shell) completely different. In keeping them separate interesting observations can be made, especially concerning the chronology. I am not absolutely convinced that we have full evidence for the parallels between the Mycenaean and Minoan ceramic sequences in LBA III. The mainland phases LH I, LH IIA and LH IIB, anyhow, seem to have begun before the corresponding Minoan LM IA, LM IB and LM II (Warren 1990/91, 35 and fig. 5). Inconsistencies have been pointed out. Some time ago the present author discussed the evidence for LH IIIA:2 having begun before the end of LM IIIA:1 as it could be seen in Khania. Hallager, B.P. 1988 and Warren's & Schofield's comments in the discussion (181) – For “a change of definitions rather than a difference in chronology” see Popham 1978, 181 and n. 13. Until we have enough closely dated contexts where the ceramics of both areas are present, it is perhaps better to keep the door ajar.

<sup>26</sup>If one handle and the foot are removed it resembles the contemporary cups. Footed cups must not be confused with footed bowls, which have (as the ordinary bowl) two *horizontal* handles set below the lip. – The two-handled footed cup is (if no foot is preserved) difficult to separate from the ordinary cup. Its foot can also be muddled with the foot of the one-handled footed cup. While the diameter of the stem of the one-handled cup usually can be found between 3 and 4 cms for the early type and between 2 and 3 cms for the later type, the two-handled footed cup is usually larger (5 cm and above). As with all definitions, exceptions can be found.





Fig. 13. Decorated large goblets.  
After Popham 1984, pl. 150.

handles. It exists in two versions: a taller with the handles from the lip and a smaller with handles below the lip.

**The one-handed footed cup** has only one vertical handle. The early type has a distinctive low hollow foot, usually an everted lip and strap to oval handles. The late type has a high conical foot, usually no pronounced lip and roll handle.<sup>27</sup>

The two-handed type is usually decorated or monochrome. The early type which can be found in LM IIIA:1-2 appears also in plain ware. The later type found in LM IIIB is so far only present in decorated ware. The one-handed type is very common in plain ware and rarely decorated. The early type appears in LM IIIA:2, the later type in LM IIIB:1. The latter continues into LM IIIC. The decorated version can only be found on the late type and so far beside monochrome painted, the only motif used is the blob decoration.

In the following the variants of each shape outlined above will be discussed period by period. The parallels are by no means intended to be exhaustive and "...the validity of these distinctions can best be tested and modifications made where necessary, by future excavations..."<sup>28</sup>

## LM II

The goblet seems to appear for the first time in Crete in LM II.<sup>29</sup> The **decorated large goblet** with free field design (Fig. 13) (also called Ephy-

<sup>27</sup>The distinction between the early and late type was observed by Popham many years ago. Popham 1969, 301. It was confirmed in the MUM excavation. Popham et al. 1984, 183. This chronological distinction has also been confirmed in the GSE at Khania.

<sup>28</sup>Popham's words, when publishing the MUM material. Popham et al. 1984, 180.

<sup>29</sup>Popham et al. 1984, 165. Here called short-stemmed kylix. For the origin of the shape see Popham 1969, 299 and n. 6. For a goblet decorated in marine style see Popham 1978, 182.

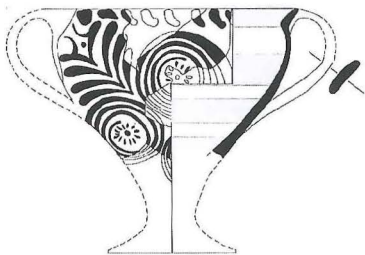


Fig. 14. Decorated large goblet from Khania. Knossian. After Hallager 1990, fig. 1:1.

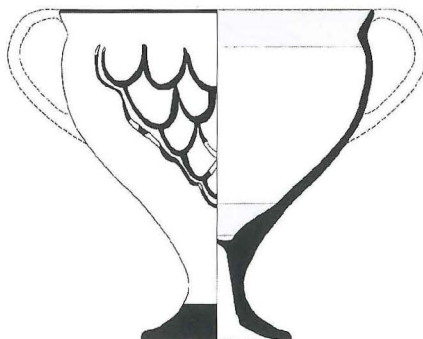


Fig. 15. Decorated large goblet from Khania. Local. After Hallager 1990, fig. 1:3.

rean goblet) varies greatly in size, although the shape is basically the same.<sup>30</sup> Circumcurrent decoration, however, seems to be rare.<sup>31</sup> The fine cream coloured fabric of the Knossian LM II workshop seems to have been much esteemed all over the island and most of the decorated large goblets found in Crete belong to this workshop (Fig. 14).<sup>32</sup> The greatest numbers of this vase type have been found at Knossos and its immediate surroundings but they are also recorded from Malia, Phaistos, Hagia Triada, Kommos, Palaikastro and Khania.<sup>33</sup> At Khania, however, we have found evidence for at least further one workshop producing decorated goblets in LM II (Fig. 15) and there seem to have been local production also at Kommos.<sup>34</sup> The plain version of this shape, (**plain large goblet**) seems to be very rare.<sup>35</sup> Recent excavations at Kommos, however, can add one fragmentary stem.<sup>36</sup> The **decorated small goblet** is found in two versions, a rare one-handled type with painted lip and foot and solid painted interior, and a less rare monochrome two-handled version (Fig. 16).<sup>37</sup> The **plain small goblet** seems to be a more common shape than the decorated and this can be found with either one or two handles, the former being the most common.<sup>38</sup>

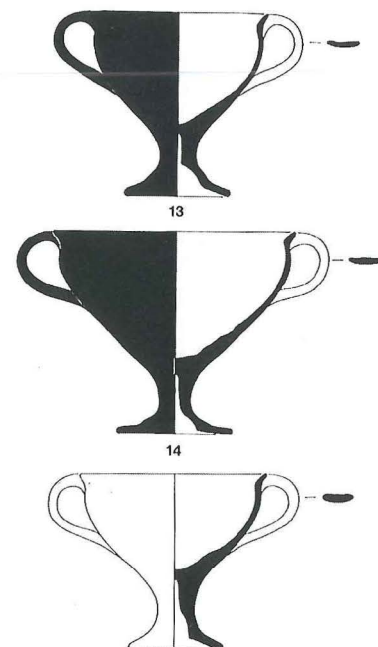


Fig. 16. Decorated small goblets from Unexplored mansion, Knossos. After Popham et al. 1984, pl.160, 11, 13, 14.

<sup>30</sup>Popham et al. 1984, 165.

<sup>31</sup>Popham et al. 1984, 167 and pl. 54d. An example can also be found at Kommos, Watrous 1992, fig. 19 No 383.

<sup>32</sup>Hallager, B.P. 1990, 81; Popham et al. 1984, 180.

<sup>33</sup>Hallager, B.P. 1990, 77-78. For Kommos see now also Watrous 1992. For Palaikastro; MacGillivray et al. 1989, 435 and fig. 15.

<sup>34</sup>Hallager, B.P. 1990, 82; Hallager & Tzedakis 1985, 20, fig. 11. - The unusual goblet with scale pattern at Khania can be paralleled with a roughly similar goblet found at Kommos which "may be a local adaption". Watrous 1992, 121 (No 384, fig. 20).

<sup>35</sup>Popham et al. 1984, 168 and pl. 84f.

<sup>36</sup>Shaw 1986, pl. 58c (C 7964).

<sup>37</sup>Popham et al. 1984, 168 and pl. 82g; 83b and 160:11; and 168 and pl. 82b,c; 83c; 160:13-14.

<sup>38</sup>Popham et al. 1984, 168 and pl. 82-83 and 160:15-16; Warren 1982-83, 67 and figs. 8-9.

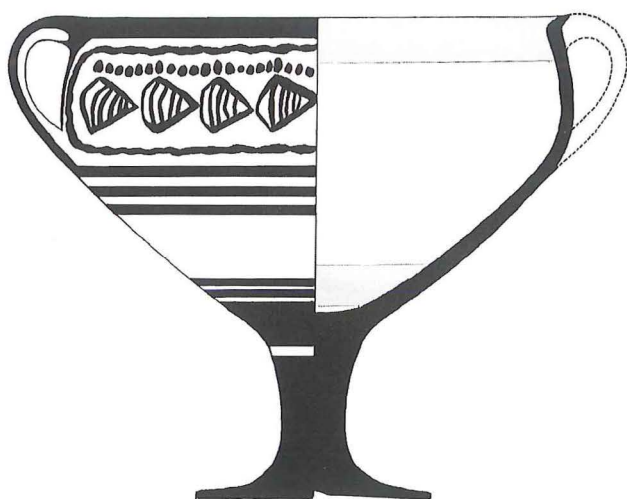


Fig. 17. Decorated large goblet from Khania. (GSE). Drawing B.P.H.

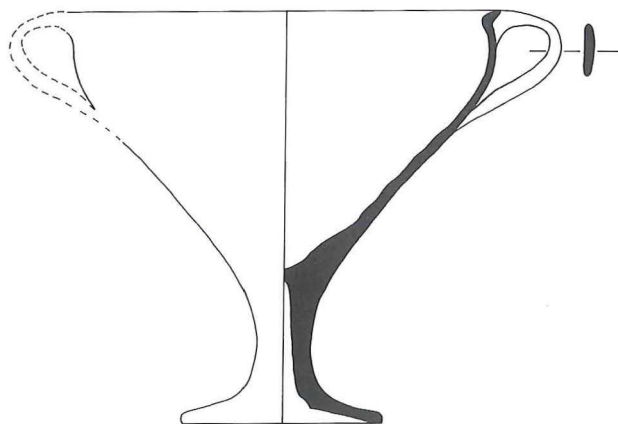


Fig. 18. Plain large goblet from Khania. (GSE). Drawing B.P.H.

## LM IIIA:1

In LM IIIA:1 the **decorated large goblet** (Fig. 17) is still in fashion, although it is not very popular in comparison plain version.<sup>39</sup> The way of decorating is now the reverse of that which was common in LM II. The free field decoration is absent<sup>40</sup> and instead they all have the circumcurrent decoration with several body bands. As the decoration is similar to those used on contemporary cups, this could be one reason why so few have been published.<sup>41</sup> Apart from examples in the LM IIIA:1 pits at the Greek-Swedish Excavations at Khania, a decorated large goblet from a pit excavated in 1969 at Khania has been published,<sup>42</sup> a further two from the MUM<sup>43</sup> and a few from Kommos.<sup>44</sup>

Plain large (Fig. 18) and small goblets dominate in IIIA:1 Khania and seem also to have been numerous at MUM. A single **plain large goblet**

<sup>39</sup>This is in contrast to the situation in LM II where the decorated large goblet was in majority, while the plain was virtually absent. Popham et al. 1984, 180.

<sup>40</sup>This decoration was the hallmark for the Ephyrean goblet. As it did not survive into LM IIIA:1, the EG is a vital chronological indicator. Popham et al. 1984, 180.

<sup>41</sup>If only a rim fragment is preserved it is difficult to separate the decorated cup from the large goblet as they are similar in size. A similar observation was made on the LM II material. Popham et al. 1984, 167.

<sup>42</sup>From Vlamaki plot, Kastelli, Khania. Tzedakis 1970, 466 and Pin. 408e.

<sup>43</sup>Popham et al. 1984, 181 and pl. 117a; 171,1; 172,7 and pl. 121b. One is dated LM IIIA:1 while the other was found in a mixed context.

<sup>44</sup>In the four LM IIIA:1 deposits (25-28) at least two fragments seem to be from large decorated goblets. Watrous 1992, 33 (No 548 and pl. 13), 34 (No 577 and pl. 11).





Fig. 19. Plain large and small goblet from Sellopoulo. After BSA 69 (1974), 207.

is published from the Royal Villa,<sup>45</sup> another from MUM<sup>46</sup> and examples have been found in Knossian tombs, like Sellopoulo tomb 4<sup>47</sup> and Zapher Papoura pit cave 7.<sup>48</sup> Outside Khania and Knossos the plain large goblet has, amongst other places, been found at Tylissos,<sup>49</sup> Akhladha,<sup>50</sup> Malia,<sup>51</sup> Khondros Viannou and Syme Viannou.<sup>52</sup>

The rare **decorated small goblet** still exists in IIIA:1. At Khania we have none with complete profile but a few stems, solid painted or banded reveal its existence. The monochrome type continues from LM II in IIIA:1 as can be seen at MUM.<sup>53</sup>

While plain large goblets seem not to survive in IIIA:2, the **plain small goblet** does continue throughout LM IIIA although in lesser amounts in the later part. When a plain small goblet is found with the large type, as the only vessels given as tomb gifts, these can be dated to IIIA:1 (as large goblets do not continue in IIIA:2), e.g. in Sellopoulo

<sup>45</sup>Popham 1970c, 19 and fig. 7:5.

<sup>46</sup>Popham et al. 1984, 181 and pl. 172,12.

<sup>47</sup>No 3 and 14. Popham 1974, 207, fig. 9. Tincovered.

<sup>48</sup>Evans 1906, 26 and 124, fig. 118 (7f). Tincovered. The tomb was dated LM IIIA:1 by Furumark. Furumark 1972, 104.

<sup>49</sup>HM 7271. From 1971 excavation. Kanta 1980, 9 and fig. 3:4.

<sup>50</sup>HM 3887. Kanta 1980, 19 and fig. 8:7.

<sup>51</sup>HM 17092. Kanta 1980, fig. 126:1.

<sup>52</sup>Platon 1957, Pin 70b (second row, second from right); Kanta 1980, fig. 47:7; Kanta 1991, 490 and fig. 21c and h.

<sup>53</sup>Popham et al. 1984, 181 and pl. 172,14.



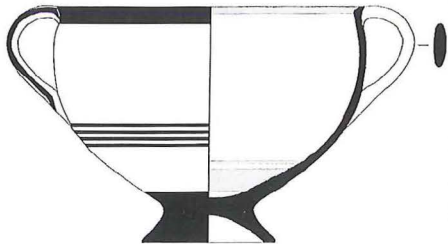


Fig. 20. Decorated two-handled footed cup from Khania (GSE).  
Drawing B.P.H.

tomb 3 and tomb 4 (Fig. 19).<sup>54</sup> Other examples published cannot in themselves be more closely dated within LM IIIA, e.g. the four from Syme Viannou, the three from Khondros Viannou,<sup>55</sup> the two mentioned (one published) from Zapher Papoura pit cave 66<sup>56</sup> and the ones from the Palace,<sup>57</sup> the House of the High Priest<sup>58</sup> and Royal Villa at Knossos.<sup>59</sup> Further, one is mentioned among the tomb material from Tefeli.<sup>60</sup> At MUM however two were found in a LM IIIA:1 context<sup>61</sup> and another four in LM IIIA:1 deposits at Kommos.<sup>62</sup>

The **two-handled footed cup** appears in a decorated and a plain version, the latter apparently more common. The decoration is either circumcurrent as on contemporary cups (Fig. 20) or monochrome. The shape seems not to belong to the most common but it must be pointed out that if the characteristic foot is missing and the rim not complete it is easily muddled with the contemporary cup.

Outside Khania, to my knowledge, only one two-handled footed cup from this period has so far been published. It is plain and was found in a tomb at Stamnoi.<sup>63</sup>

## LM IIIA:2

In LM IIIA:2 the large goblet is no longer produced, whether decorated or plain. The decorated small goblet, which was never a popular shape, has also ceased to exist. The **plain small goblet** continues, although in

<sup>54</sup>Popham 1974, tomb 3; 204, fig. 7 (no 4) and tomb 4; 207, fig. 9 (no 2 and 4) (NB! on first row in the middle 4/1 should be read 4/4). Most of the plain goblets were tincovered.

<sup>55</sup>Syme Viannou: Kanta 1991, 490 and fig. 21a,b,e and g (the last with faint traces of dark paint); Khondros Viannou: Published in a plate with both IIIA:1 and 2 pottery; Platon 1957, (Pin. 70b. (first row, first from left and right; second row, first from right).

<sup>56</sup>Evans 1906, 72 and 124, fig. 118 (66h) Tincovered. The tomb is dated IIIA:1 or early IIIA:2 by Popham 1969, 301, note 10. Furumark dated the same tomb to IIIA:2. Furumark 1972, 105.

<sup>57</sup>From cists in the Long Corridor: Popham 1970c, 52 and pl. 11f; fig. 10; Passage W of N Entrance: 44 and fig. 9:1,2 and 8.

<sup>58</sup>Popham 1970c, 20 and pl. 11e; fig. 9:10, 13 and 15.

<sup>59</sup>Popham 1970c, 19 and fig. 7:6-7. - An unusual IIIA type with high-slung handles has been found at Knossos and Heraklion. (Sellopoulo, House of the High Priest and Katsambas) The type is similar to FS 271/272 and as they are probably imports from the mainland, as Popham has pointed out, they are outside the interest of this article. Popham 1970c, 63-64; Popham 1974, 210.

Another unusual example "has the carinated profile of its Mycenaean counterpart and could even be an import" Popham et al. 1984, 182 and pl. 176:9. (FS 267). This type is also found at Kommos where it is considered to be "either a Minoan imitation of the mainland kylix form or an import." Watrous 1992, 38 (No 644 and fig. 27).

<sup>60</sup>No 17127 from a tomb. It is not published but mentioned as "a one-handled undecorated kylix" with parallels to Zapher Papoura pit cave 66h. Kanta 1980, 81.

<sup>61</sup>Popham et al. 1984, 181 and pl. 172, 10-11.

<sup>62</sup>Watrous 1992, 33 (No 549,550,551 and pl. 13); 34 (No 575).

<sup>63</sup>From tomb B. HM 17246. Platon 1952, 628, fig. 8; Kanta 1980, 55 and fig. 26:3; fig. 126:3.

smaller amounts than in IIIA:1. While the decorated large goblet never became a common type the new **loop-handled kylix** becomes immediately very popular and spread over the island both in the plain and the decorated version.<sup>64</sup> Decorated versions have been published from several places at Knossos: the Palace,<sup>65</sup> MUM,<sup>66</sup> SE House,<sup>67</sup> Royal Road (Fig. 21),<sup>68</sup> Temple Tomb,<sup>69</sup> House of the High Priest<sup>70</sup> and it is well known outside this centre in places like Stavromenos (Fig. 22),<sup>71</sup> Dictean cave,<sup>72</sup> Palaikastro,<sup>73</sup> Episkopi Pediados,<sup>74</sup> Stavros Galias,<sup>75</sup> Kalamion,<sup>76</sup> Heraklion (Poros),<sup>77</sup> Zakro,<sup>78</sup> Khondros Viannou,<sup>79</sup> Apostoloi,<sup>80</sup> Kommos<sup>81</sup> and



Fig. 21. Decorated loop-handled kylix from Knossos. After BSA 64 (1969), 301, fig. 4.



Fig. 22. Decorated loop-handled kylix from Stavromenos. After Kreta 1990, 111, no.84.

<sup>64</sup>This is against Betancourt 1985, 164; the importance of this new shape as a chronological indicator has been pointed out by Popham et al. 1984, 183 and more recently Popham forthcoming.

<sup>65</sup>The fragments from the Palace are discussed by Popham forthcoming.

<sup>66</sup>Popham et al. 1984, 183 and pl. 175,16-17; pl. 122d-e; 174,2.

<sup>67</sup>HM 3859. Popham 1969, pl. 64b; PM IV, 370, fig. 309b (where the stem and foot are incorrectly restored.) Popham 1970c, 75 and pl. 11b.

<sup>68</sup>Popham 1969, 301 and fig. 4.

<sup>69</sup>PM IV, 1017, fig. 965m; Pendlebury 1939, pl. XXXV,2; Popham 1970c, 75 and pl. 11d (all with wrongly restored foot).

<sup>70</sup>Popham 1970c, 75 and pl. 45f. (Three loop-handled kylikes mentioned).

<sup>71</sup>Kreta 1990, 111, no 84.

<sup>72</sup>HM 2149. PM IV, 370, fig. 309a; Mackeprang 1938, pl. XXVI,2.

<sup>73</sup>Bosanquet et al. 1902-3, 315, fig. 14; Bosanquet & Dawkins 1923, 85, fig. 68; Kanta 1980, 263 dates it to IIIA:2.

<sup>74</sup>From chamber tomb 1915. Popham 1969, pl. 64c; Marinatos 1933-35, Parart. 52, fig. 5. Kanta mentions two kylikes from this tomb but only the one is illustrated. Kanta 1980, 58-59 and figs. 27:1;130:2.

<sup>75</sup>From tomb. HM 16883. Kanta 1980, 89;263 and figs. 126:1;142:6. Dated IIIA:2.

<sup>76</sup>From a destroyed tomb in Faflangos valley. Ergon 1967, 119, fig. 121; Kanta 1980, 118 and fig. 48:1. Popham 1969, 304. Dated IIIA:2.

<sup>77</sup>From tomb 1 (orig. LM I.) reused in LM III. In IIIB dromos fill a kylix. Lembessi 1967, 204, pl. 184a. Dated LM IIIA:2 by Muhly 1992, 117.

<sup>78</sup>From the old excavations without further provenance, cf. Kanta 1980, 195 and figs. 73:1 and 4. Dated IIIA:2.

<sup>79</sup>Kanta 1980, fig. 47:8.

<sup>80</sup>Gavrilakis 1994, 44 and fig. 11, Ph. 12. (here dated LM IIIB).

<sup>81</sup>Watrous 1992, 37 (No 641) As it is restored in the drawing (except the handles), fig. 27, it may be a loop-handled kylix.

No decorated LM IIIA:2 kylix is preserved with full profile at Kommos. No 833 (fig. 34) could have had the loop-handles (and *not* the IIIB type high-slung handles as on the drawing) It was found together with an early type one-handled footed cup (No 832, fig. 34).

The Local Kydonian kylix (No 900, fig. 37) is published as coming from a LM IIIA:2 deposit. (p. 50) It could perhaps be of LM IIIA:2 date - but very few kylikes from this workshop have been found at Khandia of this early date and although the shape of the bowl could fit that date the decoration seems more in fashion in LM IIIB:1. Until further studies are done on the LW perhaps it is better to keep the door open for a LM IIIA:2/B:1 date. In any case it was found with a LM IIIB one-handled footed cup (No 877, fig. 37) and another kylix with high-slung handles (No 902, pl. 20).



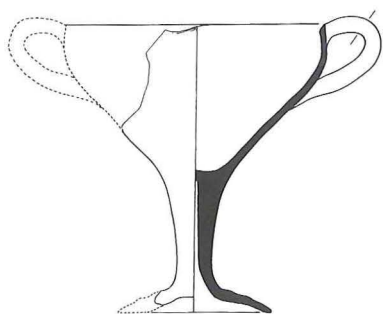


Fig. 23. Plain loop-handled kylix from Knossos. After Warren 1982-82, 77, fig.38.

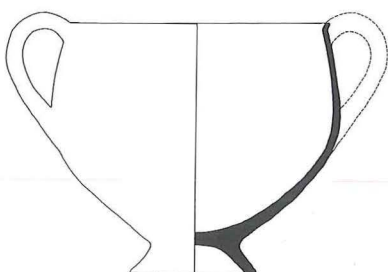


Fig. 24. Plain two-handled footed cup from Khania (GSE). Drawing B.P.H.

Hagia Triada.<sup>82</sup> A late version was found in a tomb at Pigi.<sup>83</sup> This early type of kylix usually has a circumcurrent decoration, but we also see in this period the beginning of the all-over decoration mainly with octopus.<sup>84</sup>

The **plain version of the loop-handled kylix** seems to have been equally common. Outside Khania it is, amongst other places, known at Filaki Apokoronou,<sup>85</sup> Khondros Viannou,<sup>86</sup> Katsambas,<sup>87</sup> Kommos,<sup>88</sup> Hagia Triada<sup>89</sup> and at Knossos from the MUM and the SEX excavations (Fig. 23).<sup>90</sup>

The **decorated two-handled footed cup** is difficult to trace in this period. This is probably due to the lack of published stratified IIIA:2 settlement deposits and tombs sealed (not reused) in this period are rare.<sup>91</sup> At Khania they are hardly present among the IIIA:2 material. The **plain version of two-handled footed cup** continues (Fig. 24), however, and now and then the characteristic loop handles of the contemporary kylix are adopted.<sup>92</sup>

<sup>82</sup>Kanta 1980, fig. 40:9 to the right. The unusual white on red kylix from the same site is without parallels and unfortunately without closer find context. Kanta 1980, 103 and fig. 40:2 and 5 and fig. 106:1.

Kanta dates it to IIIB, but the deep bowl seems more characteristic for a loop-handled kylix than for the shallow kylix. Some kylikes have been published from the new Hagia Triada excavations. La Rosa 1979, 52, fig. 2b and 155, fig. 110a and b. The first (fig. 2b) is typical LM IIIA:2 and this seems also to be the case with the last two (fig. 110a and b) although the excavator (on p. 156) dates the latter to the beginning of LM IIIB. Of course there need not be a contradiction in this as the LM IIIA:2 type of kylix could very well have survived into the beginning of LM IIIB. The four one-handled footed cups from the same deposit seem also to be of the LM IIIA:2 type (fig. 110c-f.) but as no scale is given and I have not seen them, this has to be confirmed.

<sup>83</sup>From tomb 771. The decoration with groups of curved bands in two zones is rather unusual. Tzedakis 1971, 516-7 and pl. 528d. The tomb is dated IIIA:1 and 2. The shape of the kylix is very close to the shallow kylix.

<sup>84</sup>Popham et al. 1984, 183 and pl. 122e; Complete kylikes with octopus decoration were found at Khondrou Viannou (see supra n. 79) and Apostoloi (supra n. 80) and sherds with the same decoration at Kommos, Watrous 1992, No 848, pl. 19; No 901, pl. 20 and No 936, fig. 37.

<sup>85</sup>ADeltChron 36 (1981), 399 and pl. 296a.

<sup>86</sup>Platon 1957, pl. 70b (first row, second from right) dated IIIA:2 by Popham 1969, 301; Kanta 1980, 117.

<sup>87</sup>Alexiou 1963, 199 and pl. 160a (2B). Dated IIIA:2 by Popham 1969, 301.

<sup>88</sup>Shaw 1980, 211 and pl. 54b (C 1964). Watrous 1992, 40 (No 691, pl. 16 and fig. 29); No 943, fig. 38; No 958, fig. 39; No 1312, fig. 49.

<sup>89</sup>La Rosa 1979, 52, fig. 2c.

<sup>90</sup>Popham et al. 1984, 183 and pl. 121d and pl. 175, 15 and 18. (The first also published in ARRepLondon 1972-73, 60, fig. 42); Warren 1982-83, 69 and fig. 38 (lower left).

<sup>91</sup>Perhaps two monochrome base fragments at Kommos belong to this type (see infra n. 190) Three decorated two-handled footed cups are found in tombs containing LM IIIA and B vases at Stamnoi and Satas. They are dated to LM IIIA but shape and decoration taken together seem however, to the present author, to place them in LM IIIB. See discussion below under this shape in IIIB.

<sup>92</sup>The only evidence so far comes from the unpublished GSE material. See drawing Fig. 24.

A new type of footed cup appears: **plain one-handed footed cup** (early type).<sup>93</sup> There seems to be a general agreement that this type can be used to mark the beginning of LM IIIA:2.<sup>94</sup> It is found in the Greek-Swedish Excavations and as grave goods in two tombs at Khania (Fig. 25).<sup>95</sup> At Knossos it has, amongst other places, been published from MUM,<sup>96</sup> NW House,<sup>97</sup> the Kitchen at Makritikhos,<sup>98</sup> the SEX excavations<sup>99</sup> and from a tomb on lower Gypsades.<sup>100</sup> Two are mentioned from the Late Minoan Shrine.<sup>101</sup> Outside Knossos and Khania they are found in places like Mitropolis,<sup>102</sup> Amnissos,<sup>103</sup> Stamnoi<sup>104</sup> and Metochion Kalou,<sup>105</sup> Stavros Galias,<sup>106</sup> Kommos,<sup>107</sup> Apostoloi<sup>108</sup> and Iouktas.<sup>109</sup>

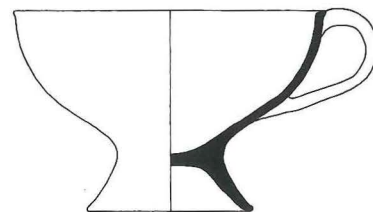


Fig. 25. Plain one-handed footed cup (early type) from a tomb in Odos Palama, Khania. KH 6347. After Hallager and McGeorge 1992, fig. 6.

<sup>93</sup>What looks like a decorated footed cup existed already in LM II at MUM. (Popham et al. 1984, L 99, pl. 79e and 156:6; M 161, pl. 80a)

It is, however, questionable if this could be a predecessor for the plain type in LM IIIA:2 as we so far have no convincing evidence for its existence in LM IIIA:1. The single plain one-handed footed cup Popham published in MUM from N. Corridor under the heading LM IIIA:1 pottery had an uncertain context (Popham et al. 1984, 182 and pl. 176:6) and in the catalogue it is dated to LM IIIA in general (Popham et al., 91, NC 4) In the Kommos publication, the earliest (here called goblets) are dated to "late LM IIIA:1 or early LM IIIA:2." But four lines below, it is stated that the earliest dates to the very beginning of LM IIIA:2. Watrous 1992, 132. Until other firm evidence is given the plain one-handed footed cup remains a new introduction in LM IIIA:2.

<sup>94</sup>For distinction of early and late type see supra n. 27; Alexiou's statement in Popham 1974, 206 note 6; Betancourt 1985, 164. Also discussed in Popham forthcoming.

<sup>95</sup>Khania, Palama tomb 2. Hallager & McGeorge 1992, KM 6347 (fig. 6 and pl. 9B) and 6556 (pl. 10A). Khania, in tomb from 1928 from the area of Court House. Matz 1951, 76 (P 754) and pl. 53.6. (Dated IIIA:2 by Kanta 1980, 226).

<sup>96</sup>Popham et al. 1984, 183 and pl. 122d; 176,10-14.

<sup>97</sup>Popham 1969, 301, n. 11 and fig. 5.

<sup>98</sup>Hood & de Jong 1958-59, 187, fig. 3:3-4.

<sup>99</sup>Warren 1982-83, 69 and fig. 38 (top right) This looks to be one close to the LM IIIB type, as far as the foot is concerned, while the oval handle obviously belongs to the LM IIIA:2 tradition.

<sup>100</sup>Coldstream 1963, 33 and 35, fig. 5 (I:2) dated IIIA:2 (the underside drawn as if the stem was solid ?).

<sup>101</sup>Popham 1970a, 191.

<sup>102</sup>Kanta 1980, 91 and fig. 49:10.

<sup>103</sup>From Marinatos excavations. Kanta 1980, fig. 19:1.

<sup>104</sup>Platon 1952, 628, fig. 8. It is very difficult to decide from the photograph if it belongs to the early or late type - but Hood has dated it to IIIA:2. Hood & de Jong 1958-59, 185 and note 6.

<sup>105</sup>Dimopolou-Rethemiotaki & Rethemiotakis 1978, 77, fig. 27 (No 21785a). Perhaps also the four from Hagia Triada can come into the family (supra n. 82).

<sup>106</sup>Karetsou 1975b, 525, fig. 3.

<sup>107</sup>Watrous 1992, No 735, pl. 17 and fig. 31; No 832 and fig. 34.

<sup>108</sup>Gavrilakis 1994, 45-46. Five were found but only two given in drawings. Both seem to belong to the early type.

<sup>109</sup>Karetsou 1975a, 341, fig. 9 and pl. 268 gamma.



## LM IIIB



Fig. 26. Decorated shallow kylix from Knossos. After Popham 1970c, pl. 11a.



Fig. 27. Decorated shallow kylix from Kritsa. After Davaras s.a., no. 60.

In LM IIIB:1 new types of kylikes and footed cups appear and the one-handled footed cup is for the first time seen in a decorated version.

If the loop-handled kylix became popular in LM IIIA:2, the new type, **shallow kylix**, experienced a real “boom” all over the island and it is not an exaggeration to say that it became the most common open shape beside bowls. The shallow kylix became equally common in decorated and plain ware. The old-fashioned circumcurrent type of decoration co-exists with all-over decoration consisting of, above all, octopoi, flowers and sprays.<sup>110</sup> It is a very common shape in the settlement at Khania<sup>111</sup> and seems equally common at Knossos. Except for the kylikes found in the Palace itself,<sup>112</sup> several are reported from Royal Road,<sup>113</sup> Little Palace,<sup>114</sup> MUM,<sup>115</sup> Royal Villa (Fig. 26),<sup>116</sup> South House,<sup>117</sup> and N.W. House.<sup>118</sup> It is not difficult to find it in the rest of Crete where it is published from places like Episkopi Ierapetras,<sup>119</sup> Kritsa (Fig. 27),<sup>120</sup> Tylissos,<sup>121</sup> Milatos,<sup>122</sup> Pentamodhi,<sup>123</sup>

<sup>110</sup>Central Cretan kylikes, like bowls and other open vessels, have very often a solid painted interior. Popham 1965, 320. This is in contrast to West Crete where the dominating Local Kydonian Workshop favoured a lip band only on the interior.

<sup>111</sup>Several decorated IIIB kylikes have so far been published from various plots within the Kastelli area: KM 1970. Tzedakis 1969, 401, fig. 15 (= Kanta 1980, fig. 90:7) and KM 1987, fig. 16; From 1964 excavation: Tzedakis 1965, 569 and pl. 718a.; From 1965 excavation: Tzedakis 1966, 426 and pl. 463b and d; From 1966 excavation: Tzedakis and Kanta 1978, 20 (with ref.); Kanta 1980, 217 and fig. 90:5; 7; Tzedakis 1967, pl. 375b; pl. 375c; pl. 377c; From Mathioudaki plot 1972: Tzedakis 1973, 582 and pl. 550a.

<sup>112</sup>From Kalokairinos' excavations. Fabricius 1886, pl. III.; From Court of the Distaff. Popham 1970c, 29 and pl. 19g and h; From Corridor of the Sword Tablets and from the south-east region of the Palace. Popham 1978, 180, fig. 1c; 183 and pl. 26c-d.

<sup>113</sup>Popham 1969, 302, fig. 10. (compare the motif with Popham 1970b, pl. 48e and d).

<sup>114</sup>Popham 1969, 303, fig. 11 and pl. 64e; Popham 1967, pl. 86f; Popham 1970b, pls. 48d and 51a-b.

<sup>115</sup>Popham et al. 1984, 185 and pl. 180,9; 180,4; 181c and d.

<sup>116</sup>The restored kylix from the Royal Villa is dated to LM IIIA:2 and it is stated that it was “...quite different in type and without parallel:...”. Popham 1970c, 75 and pl. 11a. The bowl however, is of the characteristic low shallow type of IIIB and seen in combination with the the decoration, the simple quirk, the kylix must be placed somewhere in LM IIIB. Other evidence of LM IIIB kylikes from this villa has been published; Popham 1970c, 18 and pl. 17e-f.

<sup>117</sup>Popham 1970c, 59 and 75, pl. 35f. See also Popham 1978, 183 (with n. 20) and 26a and b.

<sup>118</sup>Popham 1970c, 61 and pl. 39e and f; pl. 41g.

<sup>119</sup>Popham 1967, pl. 86d and Popham 1969, 304 and pl. 64d. (presumably a local Kydonian product); from bothroi of Kefala. Kanta 1980, 65 and fig. 29:2.

<sup>120</sup>Davaras s.a., no. 60. Perhaps this is the one mentioned by Popham 1969, 304, no 23.

<sup>121</sup>HM. 7269. Khatzidhakis 1921, 86, fig. 47; Mackeprang 1938, pl. XXVII,1; Kanta 1980, 10 and figs. 3:7-8; 130:1. A local Kydonian product.

<sup>122</sup>HM 677 and 678. Evans 1906, figs. 105d and 106m; Mackeprang 1938, pl. XXVII,2; Kanta 1980, 126 and fig. 52:7; 142:9.

<sup>123</sup>HM 233. Kanta 1980, 14 and fig. 6:2; 142:8.

Nirou Khani,<sup>124</sup> Phaistos,<sup>125</sup> Hagia Triada,<sup>126</sup> Kommos,<sup>127</sup> Rethymnon,<sup>128</sup> Idaean Cave,<sup>129</sup> Theriso,<sup>130</sup> Foinikia,<sup>131</sup> Metochion Kalou,<sup>132</sup> Malia<sup>133</sup> Syme Viannou and Amnisos.<sup>134</sup>

The monochrome kylix which was a very popular Mycenaean shape, seems not to have been appreciated by the Minoan potters: So far few Minoan monochrome kylikes are mentioned or published. The bulk of the LM III monochrome kylikes found at Khania are Mycenaean imports and this is also the case with the one found in a tomb at Gazi. One monochrome LM IIIB kylix, however, was found in a tomb at Agios Thomas and a monochrome kylix has recently been published coming from a tomb at Apostoloi.<sup>135</sup>

During IIIB the products of the Local Kydonian workshop were highly esteemed in the island. Kylikes from this workshop (outside Khania and its immediate surroundings) have been found at Knossos, (MUM, Little Palace, outside South House, in Royal Villa),<sup>136</sup> Malia, Tylissos, Episkopi, Kommos and Rethymnon.<sup>137</sup>

<sup>124</sup>Kanta 1980, 44 and fig. 11:5.

<sup>125</sup>From Palace? 1900 excavation. HM 1735. Pernier 1902, 115, fig. 45 (second from left); Kanta 1980, 96 and fig. 34:5. It is somewhat unclear if the kylix was found in a IIIB or C context.

<sup>126</sup>Kanta 1980, 102-103 and fig. 40:9 (top left).

<sup>127</sup>Shaw 1978, 118 (C528) and pl. 34e. I thought I found the same kylix in the Kommos publication, (Watrous 1992, No 1473, fig. 55 and pl. 37) but in the catalogue it has the excavation no C226. If not a confusion of excavation nos we have a rare case of two identical kylikes. For other IIIB see e.g. No 1555, fig. 57; No 1574, fig. 57 and No 1684, fig. 64 (the last two with somewhat incorrectly restored handles). All three are identified as Knossian imports. Watrous 1992, 152.

<sup>128</sup>From a tomb at Mastampas 1947. Kanta 1980, 211 and fig. 87:8; Kalokyris 1950, 41, pl. 1; Popham 1969, 304, no 10. Further two unpublished kylikes were exhibited in the old museum.

<sup>129</sup>Kanta 1980, 203 and fig. 94:7.

<sup>130</sup>From Kato Sarakina Cave. Kanta 1980, 230 and fig. 92:15.

<sup>131</sup>Plain and decorated shallow kylikes are common at Foinikia. Some of these are exhibited in Heraklion Museum: HM 10882, 10899, 10874; Kanta 1980, 24 and figs. 142:7; 142:12 and 130:7.

<sup>132</sup>HM 19014. Dimopolou-Rethemiotaki & Rethemiotakis 1978, 52-54 and pl. 16a and fig. 7. It has wrongly been mentioned as a Mycenaean import: Alexiou 1970, 253; Kanta 1980, 35 and 314.

<sup>133</sup>Pelon 1970, 125 and pl. XXV,6,e.; XLII,2,c and f. One kylix in the Heraklion Museum, of unknown provenience, is published by Kanta 1980, fig. 95:5.

<sup>134</sup>Syme Viannou: Kanta 1991, 490 and fig. 22b; Amnisos 1992, 190 and Taf. 50:3.

<sup>135</sup>Gazi: Alexiou 1972, 89, fig. 5 and pl. 39a; Agios Thomas: Kanta 1980, 82 and fig. 36:3; Apostoloi: Gavrilakis 1994, 34 and fig. 10, Ph. 11.

<sup>136</sup>While the main part of the Kydonian imports at Knossos are IIIB, anyhow one belong to the first produced kylikes, the loop-handled kylix. See Hallager, B.P. forthcoming.

<sup>137</sup>The Malia kylix: Poursat 1990, 160 and pl. 28c. For Episkopi and Tylissos see supra n. 119 and 121; the one from Rethymnon (supra n. 128) is now exhibited in the new Rethymnon Museum. Three fragmentary kylikes are mentioned in the Kommos publication (Watrous 1992, 153) For the Kydonian kylix (no 900) in LM IIIA:2 see supra n. 81. Another Kydonian kylix is now in Oxford. Catling 1968, 129, fig. 8 (No 38).



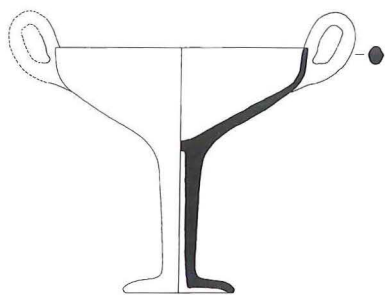


Fig. 28. Plain shallow kylix from Khania. (GSE). Drawing B.P.H.

The **plain shallow kylix** is not less common. Outside Khania (Fig. 28) (where it is present in the settlement as well as in tombs)<sup>138</sup> and Knossos where it has been published from MUM,<sup>139</sup> the Kitchen at Makritikhos,<sup>140</sup> and from various areas in the Palace<sup>141</sup> it is, among many places, recorded from a tomb at Tylissos,<sup>142</sup> Gazi and Syme sanctuary,<sup>143</sup> Gournes,<sup>144</sup> Episkopi,<sup>145</sup> Area of Mitropolis,<sup>146</sup> from a tomb at Kritsa,<sup>147</sup> a tomb at Foinikia,<sup>148</sup> a tomb at Kyparissi Heraklio,<sup>149</sup> Malia,<sup>150</sup> Hagia Triada Akrotiri,<sup>151</sup> Ligortyno,<sup>152</sup> Kommos<sup>153</sup> and Olous.<sup>154</sup>

In LM IIIB:1 the **decorated type of two-handled footed cup** appears in two new versions which are slightly different from the preceding periods. The one seems at first sight to be rather old fashioned in shape, a clumsy variant of the "old" goblet, but it has decoration typical for the LM IIIB period. One was found in a tomb at Stamnoi which contained both LM IIIA and B vases.<sup>155</sup> Kanta argued for a LM IIIA date for this vase but compared it with Olous O 85 which is of a IIIB date.<sup>156</sup> It is decorated with a simple quirk. The same simple quirk exists in LM IIIA on both open and closed vessels but in this period it is rarely found as the single decorative element but rather with added motives e.g. rows of dots

<sup>138</sup>Tzedakis 1971, 508-9 and pl. 520b; Papapostolou 1973-74, 929 (KM 3963).

<sup>139</sup>Popham et al. 1984, 185 and pl. 115,2 (handle along the lip); pl. 180,10 (high slung handle).

<sup>140</sup>Hood & de Jong 1958-59, 185-6; 189 fig. 5:1-2. Deposit dated IIIB by Popham 1969, 303, n. 16.

<sup>141</sup>Room South of Shrine; Popham 1964, 17, fig. 1a and pl. 9a; Popham 1970c, fig. 16:5; Area of the Corridor of the Sword Tablets: Popham 1970c, fig. 16:7; Domestic Quarters: Popham 1970c, fig. 17:6.

<sup>142</sup>HM 7270. Kanta 1980, 10 and fig 2:3.

<sup>143</sup>Gazi: HM 9315. Kanta 1980, 20 and fig.9:7; Syme: Kanta 1991, 490 and fig. 21d,f; 22a.

<sup>144</sup>HM 7184. Khatzidhakis 1918, 75, fig. 19:2; Kanta 1980, 48 and fig. 22:9. Tin-covered.

<sup>145</sup>Several examples from bothroi of Kefala. Kanta 1980, 65 and fig. 29:1.

<sup>146</sup>Kanta 1980, 91 and fig. 49:11.

<sup>147</sup>Kanta 1980, 137 and fig. 54:6. Tincovered.

<sup>148</sup>Both plain and decorated mentioned (see supra n. 131); Kanta 1980, 24 and fig. 126:6.

<sup>149</sup>Rethemiotakis 1987, 236 and fot. 4 (A3).

<sup>150</sup>From Maison E: Deshayes & Dessenne 1959, 129 (no 4) and pl. XLVI:4.; From quartier Nu: ARepLondon 1989-90, 74 and fig. 65.

<sup>151</sup>Alexiou 1961-62, 299-300 and pl. 358b (second from left); Kanta 1980, 233.

<sup>152</sup>Savignoni 1904, 658, fig. 120; Kanta 1980, 84.

<sup>153</sup>Watrous 1992, No 996, fig. 41; No 968, fig. 39 and No 1299, fig. 47.

<sup>154</sup>van Effenterre 1948, 55, O 82, pl. XV and XXXV; Kanta 1980, 132.

<sup>155</sup>HM 9892. From tomb Gamma: Kanta 1980, 55 and 263, figs. 126:4; 142:4.

<sup>156</sup>She recognised Olous O 85 as "a survival of a IIIA:2 shape" Kanta 1980, 132, but this vase together with Olous O 86 (van Effenterre 1948, pl. XV) both belong to the second version of two-handled footed cup in LM IIIB which is characteristic for its handles set below the lip.



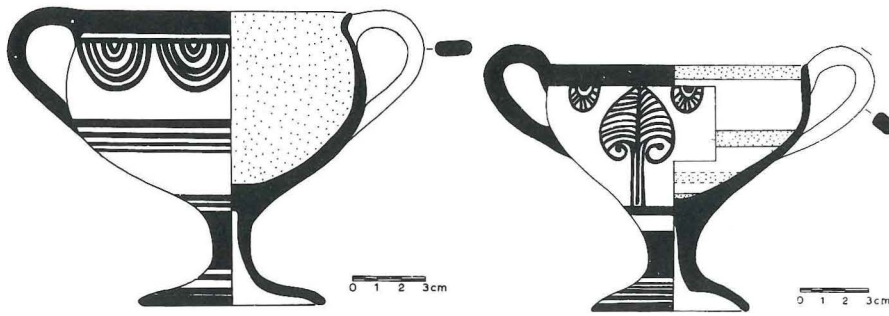


Fig. 29. Decorated two-handled footed cups from Satas. After Prokopiou, Godart and Tzigkounaki 1990, figs. 3a-b.

and wavy lines.<sup>157</sup> Also the two from a LM IIIA-B tholos tomb at Satas (Fig. 29) have been dated LM IIIA.<sup>158</sup> On the one we find concentric semicircles, so typical for the LM IIIB period and hardly found as a main motif before this date.<sup>159</sup> On the other we find a big papyrus flower with hatched semicircles and triangles hanging from rim. Identical papyrus flowers are painted on a LM IIIB larnax from Armenoi and the additional motifs (hatched semicircles and hatched triangles) are common in IIIB.<sup>160</sup> A plain version can be found in Mitsotakis Collection and another was found in Tholos A at Phourni-Arkhanes (Fig. 30) together with, among other vases, two one-handled footed cups. As none of the vases are drawn in profile it is difficult to decide whether they belong to IIIA:2 or IIIB:1.<sup>161</sup>

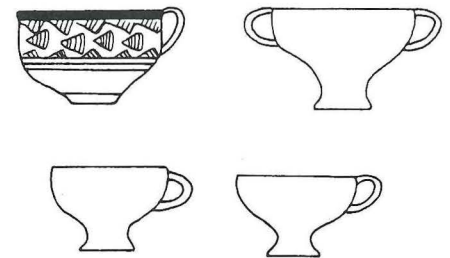


Fig. 30. Plain two-handled and one-handled footed cups from Arkhanes (top right). After Sapouna-Sakellarakis 1990, 80, fig. 22.

<sup>157</sup>Popham 1970c, fig. 13:59-60; pl. 42c; 45b; Popham et al. 1984, pl. 171:20 and 171:1. It is given as a IIIA:2 design in fig. 174:40, but only one sherd (pl. 178d) can be found among the LM IIIA type sherds (= not in a stratigraphical context). A shallow kylix from the Royal Villa has this simple decoration (see discussion supra n. 116); for some LM IIIB parallels: Popham 1970b, pl. 47e; Popham 1965, 325, fig. 5:18-19; Tzedakis 1969, 407, Tab. II. - A LM II bowl, however, has this simple decoration. Popham et al. 1984, pl. 53f.

<sup>158</sup>Prokopiou, Godart & Tzigkounaki 1990, 190-93 and fig. 3a-b (No 3630 and 3632).

<sup>159</sup>For examples as a principal decorative motif in IIIB see Popham 1970b, 199; fig. 3:36-38; Popham 1965, 325, fig. 5:25-27; Tzedakis 1969, 404, Tab. I.

<sup>160</sup>Armenoi larnax published in Kreta 1990, 133, No 170. For discussion on the papyrus flower, see the publication (supra n. 158) 193; compare the LM IIIA:2 more elaborate papyrus decoration found on a rhyton at Kommos. Watrous 1992, 76, No 1303, fig. 48 and discussed on 134.

The hatched triangles and semicircles are commonly found on IIIB stirrup jars, see for example Kanta 1980, fig. 117:6 and 120:6 both dated LM IIIB. There is nothing against a IIIB date for this vase, but of course we must keep the door open as the shape could have already appeared in IIIA:2.

Only future stratigraphic settlement excavations can solve the matter. Perhaps another two-handled footed cup decorated with spirals can be found at Kommos (Watrous 1992, no 967, fig. 39 and pl. 23). On the drawing it has two handles, but on the Plate, I can only see a single handle so the identification must be left open.

<sup>161</sup>Mitsotakis Coll. 1992, No 342 (here thought to be a Mycenaean import and dated LH II-III A:1) 275; For Arkhanes: Sapouna-Sakellarakis 1990, 80, dates the tomb to IIIA:1 and 2. A two-handled footed cup made in steatite was found in a rock-shelter at Alatsomouri. Hawes

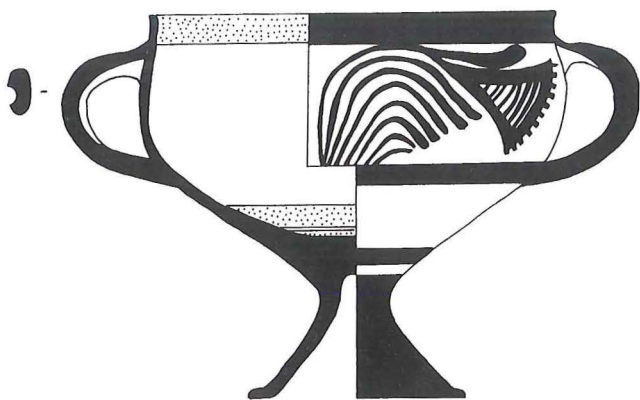


Fig. 31. Decorated two-handled footed cup from a tomb in Odos Higomonou Gavril, Khania. After Karantzali 1986, 61, fig. 10 (V6).

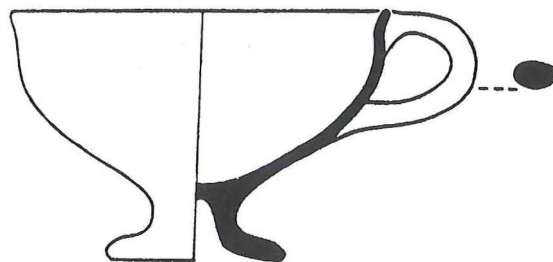


Fig. 32. Plain one-handled footed cup. (Late type). After Popham 1969, fig. 7.

The second version of the two-handled footed cup in this period is more “in the IIIB style”. Its main characteristic is the handles set below the lip. Two are published from the tombs at Olous<sup>162</sup> the others so far known come from Khania, where they are found in the IIIB strata of the settlement<sup>163</sup> and in two LM IIIB tombs in the town (Fig. 31).<sup>164</sup> In the settlement excavation it is found both in the LM IIIB:1 and 2 strata.

The two-handled footed cup seems not, according to our present knowledge, to be one of the most popular shapes in IIIB but this cannot be said for **the plain one-handled footed cup** which from IIIB:1 now appears in its late version (Fig. 32).<sup>165</sup> This type is one of the most popular in IIIB settlements and is commonly found in tombs. It has been suggested that the shape perhaps was a central Cretan one<sup>166</sup> and if this was the case the workshops responsible for its dissemination were indeed efficient as it seems to be equally common over the island at roughly the same time. Ex-

et al. 1908, 46 and pl. X:S 28. It was found together with several clay vessels most of which look LM IIIB:1. But as at least six individuals were buried in the shelter and one of the vases seem to be of an LM IIIA:2 date (pl. X:40) a closer date within IIIA:2/B:1 cannot be given for this stone vase.

<sup>162</sup>O 85 and O 86. van Effenterre 1948, 55 and pl. XV and XXXV. See also supra n. 156. Kanta compares O 86 to FS 269 “common on the mainland but rare in Crete” Kanta 1980, 131.

<sup>163</sup>Hallager & Tzedakis 1986, 22, fig. 8.

<sup>164</sup>The Stratopedo Markopolou 1974 tomb is dated LM IIIA:2/B; Papapostolou 1973-74, 929 and pl. 697st; the tomb in Odos Higoumenou Gavril to middle IIIB; Karantzali 1986, 60 (V6, No 6138) and fig. 10.

<sup>165</sup>See supra p. 23 and n. 27.

<sup>166</sup>Popham 1964, 17.

cept for examples from the settlement and the tombs at Khania,<sup>167</sup> several are published from the settlement, the palace and the villas at Knossos (the Kitchen at Makritikhos,<sup>168</sup> Shrine of Double Axes and room to the south,<sup>169</sup> Domestic quarters,<sup>170</sup> MUM<sup>171</sup> and Little Palace<sup>172</sup>). At Malia, where it is stated to be a very common shape,<sup>173</sup> several are published from the settlement (from Maison E,<sup>174</sup> Quartier E,<sup>175</sup> L'agora,<sup>176</sup> and from the new excavations Quartier Ny<sup>177</sup>). It existed in the settlement of Hagia Triada<sup>178</sup> and Kommos<sup>179</sup> and it can be found in caves (Asprosykia, Korakia cave<sup>180</sup>) and sanctuaries<sup>181</sup>. Finally it was not an uncommon gift in tombs, as can be seen for example, in two tombs at Gournes,<sup>182</sup> tombs at Milatos,<sup>183</sup> Katsamba(?),<sup>184</sup> Gazi,<sup>185</sup> Kyparissi and Metochiou Kalou Herak-

<sup>167</sup>Hallager & Tzedakis 1986, 25, fig. 11; Papapostolou 1973-74, 929 and pl. 697e.

<sup>168</sup>Hood & de Jong 1958-59, 187, fig. 3.5-8.

<sup>169</sup>Popham 1964, 16, (no 23) pl. 9b; PM II, 336; Popham 1964, 17 (no 27) fig. 1c and pl. 9a; Popham 1970c, fig. 16:2.

<sup>170</sup>Popham 1970c, fig. 17:1-2.

<sup>171</sup>Popham et al. 1984, pl. 180,5 and 180,7-8.

<sup>172</sup>Popham 1964, 17; Popham 1970c, fig. 17:7,8 and 9. - No 9 looks (very much) like FS 267. It falls immediately outside the Minoan known version of this type and the solid stem given in the drawing makes me even more suspicious about its origin. Solid stems in IIIB are Mycenaean potters habit (see supra n. 25).

<sup>173</sup>Deshayes & Dessenne 1959, 128.

<sup>174</sup>Deshayes & Dessenne 1959, 128 and pl. XLVI:1-2.

<sup>175</sup>Pelon 1970, 125 and pl. XXV,6,h.

<sup>176</sup>van Effenterre, H. & M. 1969, 126-27 and pl. LXV (Lambda 31 et 261).

<sup>177</sup>AREpLondon 1989-90, 74 and fig. 65; A footed cup HM 18115 from Malia is published in Kanta 1980, fig. 23:5.

<sup>178</sup>La Rosa 1990, 413 and Tav 56b-c.

<sup>179</sup>Shaw 1984, 276 and pl. 58e (C6395). (= Watrous 1992, 76, No 1309, pl. 30 and fig. 49) Further examples: Watrous 1992, 54, No 939, fig. 37 (wrongly referred to fig. 33); 73, No 1231, fig. 45; No 1309, fig. 49 (with solid foot "probably a late feature" 140); No 1347, fig. 50; No 1389, fig. 52 and No 1675, fig. 63.

<sup>180</sup>Kanta 1980, 237. Theofanidhis 1948-49, 12, fig. 22. (site called Georgioupolis by Popham 1964, 17).

<sup>181</sup>Iouktas: Karetso 1976, 416 fig. 3 gamma (dated LM IIIB but it seems to be of the LM IIIA:2 type); Syme: Kanta 1991, 490 and fig. 24.

<sup>182</sup>Gournes, tomb 2 and 5. Khatzidhakhis 1918, figs. 19; 32.

<sup>183</sup>Nos 686 and 688. Kanta 1980, 125 and figs. 53:3; 54:3; 126:7; also Evans 1906, 96, fig. 105c.

<sup>184</sup>Alexiou 1963, 199 and pl. 160b. Also in Alexiou 1967, 61 and pl. 26a. Here dated to LM IIIA:2-beginning of IIIB and compared to similar found, for example, in Khondrou Vianou. They seem to be of the late type to judge from the photograph on pl. 26a, but this must of course be confirmed.

<sup>185</sup>Alexiou 1972, 88 (Nos 18999 and 19000), fig. 6 and pl. 40.

<sup>186</sup>Rethemiotakis 1987, 236 and phot. 3 (A4); Dimopolou-Rethemiotaki & Rethemiotakis 1978, 71, fig. 22 (No 21784).



liou,<sup>186</sup> Episkopi Pediadas,<sup>187</sup> Kavrochori Herakliou<sup>188</sup> and from three tombs at Olous.<sup>189</sup>

The **decorated one-handled footed cup** appears in IIIB.<sup>190</sup> The decoration is either monochrome or confined to blobs. Although rare, the type with blob decoration exists in the Kastelli Khania material. In GSE we have one fragmentary lower bowl with the start of the stem and another IIIB footed cup with blob decoration has been published from a nearby plot in the town.<sup>191</sup> At LM IIIB Kommos blob decoration is rare while the monochrome one-handled footed cup is more common and two monochrome footed cups were found in a tomb at Gournes.<sup>192</sup>

## LM IIIC

In his article "The Late Minoan Goblet and Kylix" Popham stated that the IIIC phase "has not so far produced enough material for us to do more than sketch the development of the kylix at that stage."<sup>193</sup> And unfortunately we are not very much wiser today twenty-five years later. One reason, however, could be that the kylix seems to be far less common in this period.

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<sup>187</sup>ADeltChron 36 (1981), 389.

<sup>188</sup>ADeltChron 34 (1979), 236, fig. 10 dated IIIB on p. 242 (although it looks IIIA:2).

<sup>189</sup>van Effenterre 1948, O 87 from tomb 11, pl. XV and XXXV; O 88 from tomb 9; O 89 from tomb 14. Another plain ware shape could be of interest to mention, although it seems, with our present knowledge, to be rare. It has no pronounced rim, rather shallow bowl, sometimes a high conical foot open up to bowl, sometimes a low foot. It has two characteristic: it is handleless and has a suspension hole through the foot. In Khania it appears first in the LM IIIB:1 settlement. One complete example was found in a tomb in the town and it has been reported from Samonas Apokorono. (Tzedakis & Kanta 1978, 20 and fig. 14:9; Kanta 1980, 265). Kanta points out that they have been found in West Crete only, but a similar IIIB vase without handles and with suspension hole in the foot was found at Malia, in a room with plain one-handled footed cups of the late type. (van Effenterre, H. & M. 1969, 126-7 (Lambda 60) and pl. LXV). Two other vases at Malia are identical in shape but seem to lack the suspension hole. (From the same room as the one mentioned above (Lambda 263) pl. LXV; the second was found among the reoccupation material in Maison E: Deshayes & Dessenne 1959, 129 (no 5) and pl. XLVI,5). Both Kanta and Dessenne compare the type to identical vases found at Prosymna. But the Cretan vases seem not to be imports, and the ones found at Khania are, in any case, made of local clay.

<sup>190</sup>Two monochrome one-handled footed cups (in the publication called goblets) are, however, mentioned from LM IIIA:1-2 contexts at Kommos (Watrous 1992, 47 (No 827) and 50 (No 855)). But as the shape did not exist in LM IIIA:1 (see supra n. 93) and in the chapter of ceramic sequence it is stated that all IIIA:2 examples at Kommos are unpainted (*id.* 132) there does not so far seem to be strong evidence for the decorated one-handled footed cup before LM IIIB.

<sup>191</sup>Tzedakis & Kanta 1978, 21 and fig. 14:14. Here it is stated that blob decoration existed since IIIA:2, although not on kylikes. As a matter of fact it is one of the most persistent motives in the late Minoan repertoire and its history goes back at least to the LM II period. Popham et al. 1984, 162. For examples in LM IB (Watrous 1992, 113 and 117).

<sup>192</sup>Watrous 1992, 140; Gournes, tomb 1. Khatzidhakhis 1918, 67, fig. 11; Kanta 1980, 47 and figs. 21:9 and 22:11.

<sup>193</sup>Popham 1969, 303.



Fig. 33. Decorated shallow kylix from Khania (GSE). Drawing B.P.H.

The **decorated shallow kylix** continues to some extent in the very beginning of the period as can be seen in the settlement at Khania (Fig. 33)<sup>194</sup> and on a kylix from the palace at Phaistos which is decorated in "IIIC style".<sup>195</sup> But rather early in the period appears the new **carinated kylix**. Apart from having a carinated profile, the bowl again tends to become conical, a feature which is even more stressed when we come to the end of the bronze age. The early IIIC stems are rather slender and solid but sometime well into the period the stem becomes somewhat shorter and thicker.<sup>196</sup> Evidence for the new carinated kylix have been found, apart from the Khania settlement, in a tomb at Kritsa where the kylix is decorated with a typical LM IIIC motif, the tricurved streamer, which is also very popular on contemporary bowls and kraters.<sup>197</sup> Sherds from carinated kylikes with similar decoration have been published from Syme Viannou, Kastri and MUM.<sup>198</sup> A close variation on the same theme can be found on a kylix at Kavousi (Fig. 34).<sup>199</sup> Further fragments are reported from Sybritos, Vrokastro and Lenika, the latter with an elaborated



Fig. 34. Decorated carinated kylix from Kavousi. After Gesell 1990, 324, fig. 4:10.



Fig. 35. Decorated carinated kylix from Kavousi. After Gesell 1990, 324, fig. 4:11.

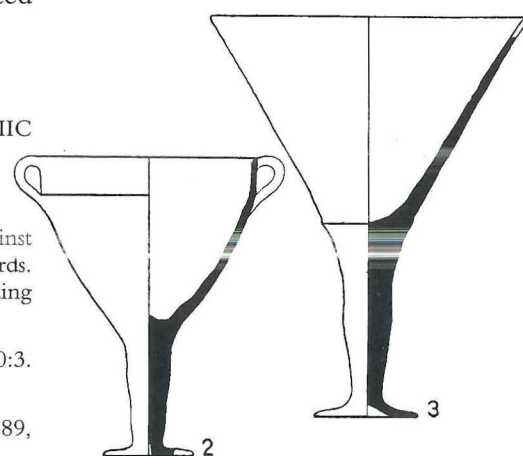


Fig. 36. Carinated kylikes from Karphi. After Seiradaki 1960, fig. 18:2,3.

<sup>194</sup>Tzedakis 1972, 391, fig. 5. The kylix is dated to LM IIIB but it was found on a LM IIIC floor.

<sup>195</sup>HM 1734. Pernier 1902, 115, fig. 45; Kanta 1980, 264 and fig. 130:5.

<sup>196</sup>The presence of "low stemmed kylikes at such a late date" is used as an argument against the validity of the kylix as dating criteria in deposits composed of non-diagnostic sherds. (Kanta 1980, 264-65) The stem is shorter but also somewhat thicker and cannot, according to the present author, be confused with the LM IIIA types.

<sup>197</sup>Popham 1967, pl. 89b; Popham 1969, pl. 64f and fig. 12; Kanta 1980, 138 and fig. 130:3. Kylix no 174. For tricurved streamers: Popham 1965, 323, fig. 4:12-15.

<sup>198</sup>Syme Viannou: Kanta 1991, 490 and fig. 23a; Kastri: Sackett & Popham 1965, 283; 289, fig. 10a and pl. 78b. MUM: Popham et al. 1984, 186 and pl. 182a and c.

<sup>199</sup>Gesell 1990, 324, fig. 4:10. This is dated later IIIC (p. 325) but its close resemblance to the Kastri sherd and the Kritsa kylix, both dated to early IIIC, cannot easily be denied. Popham 1969, 303.





Fig. 37. Carinated kylix from tomb in Vrokastro. After PM II, 137, fig. 70.

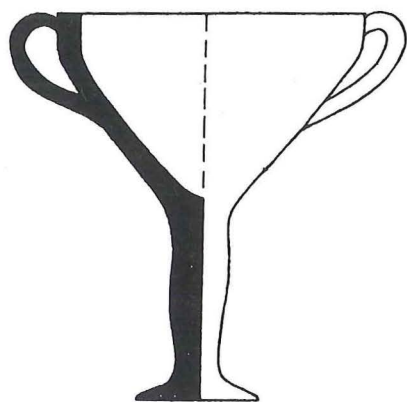


Fig. 38. Plain carinated kylix from Dreros. After van Effenterre 1948, pl. XV (D 30).

version of the tricurved streamer.<sup>200</sup> The development in the later part of IIIC is difficult to trace at the moment, but at Kavousi there is a type which is still carinated but with a more heavy conical bowl (Fig. 35).<sup>201</sup> This kylix can easily be paralleled with the carinated heavy conical kylikes from Karphi (Fig. 36) which are stated to be characteristic for the site.<sup>202</sup> Whether or not the bulging stems of the Karphi kylikes are to be taken as a late feature<sup>203</sup> and/or can be explained in terms of poor potting,<sup>204</sup> there cannot be a great gap between the Kavousi and Karphi type. Both seem to belong to the later part of IIIC.<sup>205</sup> For this late IIIC kylix type, there is a clear parallel (rather than continuation) in the kylix found in a tomb at Vrokastro (Fig. 37).<sup>206</sup>

Our knowledge about the plain carinated kylix is even more poor. It follows the decorated version in shape, as has been the case all through LM III for shapes discussed here. Kanta mentions that plain kylikes were common in IIIC Tyllissos,<sup>207</sup> perhaps a plain kylix was present in a house at Katsambas and one is published from Sybritos.<sup>208</sup> Late plain kylikes were found in the sanctuary of Syme Viannou and in Tomb 1 at Dreros (Fig. 38).<sup>209</sup> Two of the three have a bulge on the stem and all three belong to late IIIC.<sup>210</sup>

**Decorated one-handed footed cups** were the next most common

<sup>200</sup>Sybritos: Prokopiou 1991, 384 and fig. 8 (4254); Vrokastro: Kanta 1980, 133 and fig. 50:4; 51:4; Lenika: id. 196 and fig. 73:7 and 130:8.

<sup>201</sup>Gesell 1990, fig. 4:11. This is dated Sub-Minoan with parallels at Dreros and Vrokastro. The Dreros plain kylix, however, is dated late IIIC (see n. 210) and for the Vrokastro kylix see below n. 206.

<sup>202</sup>Seiradaki 1960, pl. 10b and fig. 18:2-3 and p. 26. On the drawing Type 3 is restored with a flaring rim and handleless. But Seiradaki comments on this: "The rims of type 1 and 2, which turn up sharply with a ridge at the angle, are characteristic and it is possible that the example representing type 3, of which the rim is missing, finished in the same way. At all events it is likely that it possessed handles."

<sup>203</sup>Kanta 1980, 264.

<sup>204</sup>Popham 1969, 304.

<sup>205</sup>For the date of the Karphi kylikes (late IIIC) see Popham 1969, 304. The two kylikes discussed from Kavousi (4:10 and 11) were found in the same room together with pithoi and another early IIIC kylix with reserved lip band. (4:12) (Gesell 1990, fig. 4 (Room B3)). 10 and 12 seem to be contemporary while 11 is somewhat later.

<sup>206</sup>Vrokastro tomb 5: PM II, 137, fig. 70; Betancourt 1985, pl. 32c and fig. 133. The tomb is generally dated "Sub-Minoan" but I must confess I cannot see why. The kylix is identical to one of the IIIC Karphi types and none has, to my knowledge, been found in a stratified "Sub-Minoan" settlement. Kanta has argued for a LM IIIC date for this tomb. Kanta 1980, 176.

<sup>207</sup>Kanta 1980, 13 and fig. 4:8.

<sup>208</sup>Katsambas: Kanta 1980, 27. The one "kylix" mentioned from the rectangular room of a LM IIIC house is not illustrated. The second found in the bathroom (Kanta 1980, 27) is not a kylix but a one-handed footed cup as can be seen in Alexiou 1955, pl. 117a (top row right); Sybritos: Prokopiou 1991, 384 and fig. 8 (4271).

<sup>209</sup>Syme: Kanta 1991, 490 and figs. 23b; 25; Dreros: Tomb 1. van Effenterre 1948, 63 (D 30) and pl. XV and XLI.

<sup>210</sup>For the date of the Dreros kylix see Popham 1969, 303-4 and fig. 13; Kanta 1980, 133.

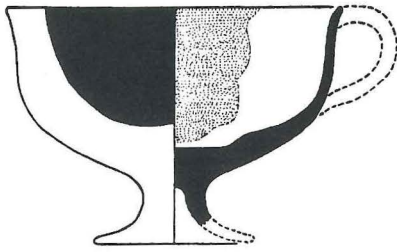


Fig. 39. Decorated one-handed footed cup from Kastri. After Sackett and Popham 1965, 295, fig. 15 (P 22).

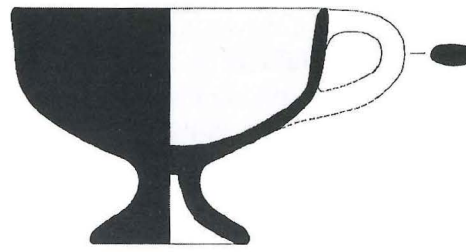


Fig. 40. Decorated one-handed footed cup from Khania. (GSE). Drawing B.P.H.

drinking vessel at IIIC Kastri (Fig. 39).<sup>211</sup> All were decorated with semi-circular blobs inside and out. Identical IIIC vases were found in a room at Kavousi and in a pit at Sybritos.<sup>212</sup> Blob decorated footed cups are not uncommon at Khania in the LM IIIC strata. Beside the canonical handle, another type with high slung (sometimes slightly set at an angle) appear.<sup>213</sup> A monochrome one-handed footed cup was found in the LM IIIC strata in the GSE excavation at Khania (Fig. 40). This vase shape which was rather common at Kommos in LM IIIB seems to be absent in the scanty LM IIIC material from that site.

In the absence of published LM IIIC settlements, it is difficult to tell if the popularity of the **plain one-handed footed cup** had decreased in IIIC. They are mentioned among the Tylissos IIIC material,<sup>214</sup> from the Milatos tomb group and Katsambas.<sup>215</sup> Among the GSE IIIC material they are present, but far less frequent than in the previous period. They seem to have disappeared in the later part of IIIC, and none is reported from Karphi.

From the above it can be seen that if each of the three shapes has a closely defined name and is treated as different, together they can give a rather firm framework for the Minoan pottery chronology. The large goblet, although not very common after LM II, except for the plain version in IIIA:1, is of importance for a chronological distinction in that the special decorated version of the Ephyrean goblet only seems to have been produced in LM II and ceased to exist after IIIA:1. The small goblet was never popular in the decorated version and is restricted within the same pe-

<sup>211</sup>Sackett and Popham 1965, 283; 289 fig. 10b-c; 295 fig. 15 (P22) and pl. 78b. (called kylikes in the publication).

<sup>212</sup>Kavousi: Gesell 1990, 327-28; fig. 6:15; Sybritos: Prokopiou 1991, 384 and fig. 8 (4255).

<sup>213</sup>Tzedakis & Kanta 1978, 21 and fig. 14: 13,15. They have two handles on the drawings, but among the photographs (pl. 3:15 and 4:8) I can only find evidence for the common one-handed type.

<sup>214</sup>Kanta 1980, 13.

<sup>215</sup>Popham 1964, 17 and *supra* n. 208.



riod LM II and IIIA:1. The plain variant was found to be especially popular in IIIA:1 and less so in IIIA:2. Of importance here is the fact that they disappeared at the end of IIIA.

The appearance of kylikes in IIIA:2 is equally important for chronology – note is the distinction between the loop-handled kylix popular in IIIA:2 and the shallow kylix which was common in IIIB. The development of the two- and one-handled footed cups, from the low hollow foot in LM IIIA:2 to the high conical in LM IIIB is equally helpful. The combination of a loop-handled kylix and early one-handled footed cup, for example, seem to be a good indicator of a IIIA:2 date.<sup>216</sup> Important is also the carinated kylix appearing early in IIIC the slender stem of which tends to become shorter and thicker in later IIIC together with a heavy conical bowl. The blob decorated footed cups can add to our picture of late IIIB and early IIIC, a period so far not very well defined.

The three types would be perhaps of less importance if they were intended for a narrow restricted use, few in number and/or restricted to certain places. But this is not the case. They seem to be involved in all Minoan activities and none of the three shapes are restricted geographically to one area of Crete. Neither are they few in number and the present statement that some seem more frequent than others must be “used” with caution. While our main knowledge about LM II comes from settlements, the main part of the LM III pottery, as we know it from publications today, comes from tombs and these are not necessarily representative for vessel shapes of the LM III settlements.<sup>217</sup>

According to our present knowledge, goblets do not seem to have been very popular nor widespread in the island,<sup>218</sup> but when we come to LM IIIA:2 and the first kylix type appears together with the footed cups, the picture changes. It has been stated that decorated kylikes are rare in Crete, but more common in West Crete.<sup>219</sup> However, as can be seen in the discussion above, decorated kylikes have been published from sites all over the island. At Knossos kylikes are very abundant in occupation deposits<sup>220</sup> and Popham points out, while discussing Knossian IIIB, that ky-

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<sup>216</sup>As found in the IIIA:2 deposits (Pits 10+11) at MUM (Popham et al. 1984, 183) and in similar deposits at Khania.

<sup>217</sup>Kanta 1980, 265...on kylikes, “Its supposed rarity in east Crete is probably due to the paucity of excavated deposits, especially in settlements”. Thus for example, the Ephyrean goblet was supposed to be absent in East Crete. Now, however an example has appeared in the settlement excavation at Palaikastro (supra n. 33). From the same site two “kylix stems” were found in 1991. They are, however, still considered to be “quite uncommon in eastern Crete”. MacGillivray, Sackett et al. 1992, 123-124 and fig. 3.

<sup>218</sup>Published goblets are not so common as published kylikes. They were obviously not among the most favoured grave gifts in LM II/IIIA although they appear in tombs in central Crete. On the other hand they seem to be common in IIIA settlements as seen at Knossos (where to the above mentioned examples can be added the examples found in quantities in the SW corner of the Palace (Popham 1978, 181) and Khania and the important unpublished IIIA settlement of Khondros Viannou could be added. Kanta 1980, 264 (called IIIA plain kylikes).

<sup>219</sup>Popham 1969, 299 and note 4; Kanta 1980, 220.

<sup>220</sup>Hood & de Jong 1958-59, 185 (here said to be rare in tombs).

likes together with cups and bowls were the most common shapes.<sup>221</sup> The same observations are made at the excavations at Khania and when other settlement excavations are discussed the kylikes and footed cups (especially the one-handled type) are very often mentioned among the material.<sup>222</sup>

They are actually not rare in tombs either. Except for the tombs mentioned in the text above, kylikes of LM IIIA and B date are for example reported (not published) from Khalepa Hagia Kyriaki,<sup>223</sup> Episkopi,<sup>224</sup> Trapeza,<sup>225</sup> Stavies,<sup>226</sup> Preveliana,<sup>227</sup> Kritsa,<sup>228</sup> Khoumeri,<sup>229</sup> Tymbaki,<sup>230</sup> Katofigi Padiadas<sup>231</sup> and Apodoulou.<sup>232</sup> Plain and decorated kylikes were common in a tomb at Foinikia.<sup>233</sup> In this connection, it is also interesting to note that the practice of covering vessels with tin is mainly restricted to goblets, kylikes and footed cups placed in tombs and that this practise can be followed through IIIA and B and even into the beginning of IIIC.<sup>234</sup>

Finally kylikes and one-handled footed cups are well represented in the funeral celebrations. Both shapes are frequently found in dromoi of tombs and in cult places connected to tombs.<sup>235</sup> Thus it is not surprising either

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<sup>221</sup>Popham 1970b, 196.

<sup>222</sup>A note of caution: With the present confusion concerning what to name what we cannot, of course, be sure of exactly which shape is reported. Unpublished "kylikes" and "champagne cups" are mentioned from Amnisos, (Kanta 1980, 41); Tylissos, (Kanta 1980, 13); Malia, (supra n. 173); Cave of Liliana, (Kanta 1980, 72); outside Double Axe Shrine at Knossos (PM II, 336) and from N. Entrance (Popham 1970c, 44). Mackenzie stated that among the reoccupation material at Knossos he found "thousands of kylix-cups.." (Popham 1964, 8 including note 26). Plain footed cups are "so popular at Knossos in LM IIIB deposits" (Sackett & Popham 1965, 283); they are also mentioned from sites like Paterikies near Phaistos, (Kanta 1980, 101) Stylos Azogyres (Kanta 1980, 235) and at Pseira (Betancourt & Davaras 1988, 340).

<sup>223</sup>Kanta 1980, 228.

<sup>224</sup>Episkopi. Kalyvotopos location. Tomb A. (Kanta 1980, 60-61). In the same location a tomb with a IIIB kylix was found in 1981 (ADeltChron 36, 389); In Tombs B, Gamma and Delta, two kylikes mentioned. Kylix no 9896 dated IIIA - Kanta 1980, 62. Kylix no 9914 dated IIIB - Kanta 1980, 63; Episkopi. Khristos. Tomb 1941. No. 17206 (Kanta 1980, 67 and fig. 142:10).

<sup>225</sup>Kanta 1980, 122-23.

<sup>226</sup>Kanta 1980, 87.

<sup>227</sup>Kanta 1980, 86. Alexiou 1970, 253.

<sup>228</sup>No 159 dated LM IIIB by Kanta 1980, 137.

<sup>229</sup>Kanta 1980, 202.

<sup>230</sup>ARepLondon 1982/83, 59.

<sup>231</sup>ADeltChron 36 (1981), 389.

<sup>232</sup>A kylix mentioned from tholos 5. ADeltChron 36 (1981), 402-3. IIIA:2/B.

<sup>233</sup>Kanta 1980, 24 and 263. Some of these are discussed in the text above.

<sup>234</sup>Discussed by Kanta 1980, 315. Contra Immerwahr 1966, 381-96.

<sup>235</sup>A practise which (with present published material) can be traced back to IIIA:2. Usually the fill of a dromos is discussed in neither the preliminary report nor the full publication of a tomb, but one complete loop-handled kylix was found in the dromos of a tomb at Heraklion (Poros). (See supra n. 77); In Odos Palama at Khania both types are found in the dromoi and the circular cult place (Hallager & McGeorge 1992); On broken kylikes in dromoi



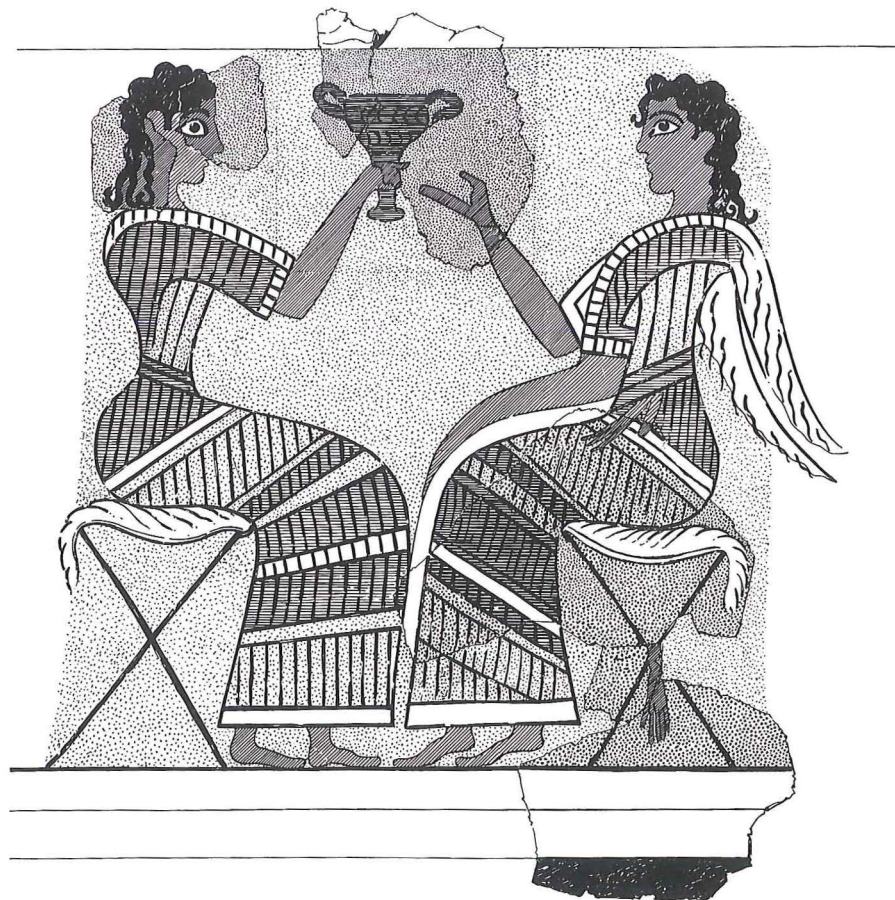


Fig. 41. Detail from the Camp Stool fresco after PM IV, fig. 323.

to find them in use in LM III shrines such as at Knossos, Gazi, Syme and Iouktas.<sup>236</sup>

It can be seen that each shape is most popular when introduced, and that this “popularity” rapidly declines when a new variant appears. This confirms the importance of the shape as compared to the design<sup>237</sup> and it may be reflected in the contemporary visual art. In the Camp Stool fresco, dated LM IIIA, some of the people present are holding a vase which has been interpreted as a goblet while on a LM IIIB larnax from Episkopi a person is holding a vase which can be identified as a kylix.<sup>238</sup>

and cult area at Armenoi (Tzedakis 1988, 296-7). A kylix stem found in dromos of tomb pi Mazali Khania. Kanta 1980, 225.

<sup>236</sup>Knossos: Popham 1970a, 191; Shrine of the Double Axes (supra n. 169), Gazi: (supra n. 143); Syme: (supra nos. 134, 143, 181, 198 and 209) and Iouktas (supra n. 109 and 181).

<sup>237</sup>See supra and n. 21.

<sup>238</sup>On the Camp Stool fresco unfortunately only the upper part of the goblet is preserved. (PM IV, 388-89. figs. 323-24). If it is a true goblet the stem ought to be restored somewhat shorter. On the other hand if we presume that the stem and foot is correctly restored, the painting must reflect a Mycenaean IIIA:1 kylix and thus it could be an addition to Cameron’s opinion that the frescoes from LM II and IIIA Knossos represented a Mycenaean occupation. The fresco is dated to LM IIIA by the form of the goblet, (Cameron 1987, 324).- Larnax from Episkopi: Kanta 1980, 150.



Although goblets, kylikes and footed cups constitute a vital part of the ceramic repertoire during the LM II and III period we must bear in mind that all the other Minoan shapes are equally important and when we agree on a common terminology the development of these shapes and their variants will give us the key to what we are above all looking for: an established relative chronology where all the known Minoan shapes are included.

## Addendum

In my original manuscript I called the footed cup, a stemmed cup. But after Mr. Popham's response and the following discussion I realized that it was a wrong term for this shape in English. Consequently I have changed it to footed cup as suggested by Professor Warren.

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# Response and Discussion

**Popham:**

(read by Warren): I wish I were here in person to congratulate Birgitta Hallager on her paper. It was high time that my article on the subject was revised and brought up to date, and she has done so admirably.

What is disappointing is not her contribution, far from it, but that, considering the 25 years which have passed since that article was written, a greater amount of pottery has not yet been published from excavations which have taken place in the intervening years, to enable a more complete reassessment to be made. There have been notable exceptions, of course, and I speak of the overall situation.

My comments begin, as does the paper, with terminology, on which, despite Birgitta's hopes and pleas, I doubt whether we shall ever achieve uniformity. The problems of individual perceptions are considerable, and I start with mine on goblets and kylikes.

My defection from the use in LM II of the term 'goblet' and the rather ambiguous replacement of 'goblet or kylix' was deliberate and arose from my unease over the name goblet when I came to publish the *plain* versions in the *Unexplored Mansion*. The deep bowl and the short stem of the decorated examples there fitted the accepted idea of the term, but these aspects of the shape were far from marked on the undecorated ones. A glance at the chart in the paper will point out the problem. Is there really much difference in proportions and in shape between those included in the examples called small goblets and the first example given of the IIIB version called a two-handled stemmed cup? I see here a danger of using chronological terminology rather than one directly reflecting shapes and proportions. I fear that, in my eyes, both seem to be kylikes in the customary use of the name. Such, anyway, is my defence.

My own preconception over terms again surfaces in the case of the illustrated examples of what are classified as two-handled stemmed cups in LM IIIA:1 and 2. The basic shape is, to me, a bowl, not a cup, and set on a raised ring foot, not a stem. I see the shape as a natural evolution, or local development, of an LM II version of the bowl (*MUM* pl. 161,9).

As for the main examples on the chart of what it is proposed should be called one-handled stemmed cups, I fear I shall use my rights as a citizen of an independently-minded member of the European Community, and opt out of this clause. The name 'champagne cup', however inaccurate it may be, brings to mind a precise shape and has been current for a long time in the existing literature. We all know immediately what vase shape is meant, whereas the proposed new terminology can cause misunderstanding as I shall show later.

On a few, more general, points, may I add my voice to that of Birgitta in deploring the tendency to use Furumark's Mycenaean shapes and motives, with their dating, as being applicable to Late Minoan pottery, though, exceptionally, they may be when there is an interaction between the two regions. I can understand the temptation for younger archaeologists without a long experience and background knowledge, wanting a ready-to-hand, clear-cut, answer to the problem of dating. And I fear that ultimately a writer, let's say X, will devise the same system, with 'X'Fs and 'X'Ms, to meet their needs and demands.

To cite an example of the dangers of using Furumark in this way, may I refer to a very recent publication of a tomb in the Rethymnon region in the Italian book titled *Sybrita*. This use is, I suspect, largely behind the dating of the burial to LM IIIB whereas Cretan parallels, particularly in decoration, strongly indicate that it must be IIIA:2 and not late in that stage. I am assuming that it is a single burial and does not contain a considerable num-

ber of long-lived 'heirlooms'. If it is a single early IIIA:2 deposit, it provides a different version of a kylix shape of this stage in both plain and decorated versions. This would not be surprising since it is inherently improbable that only one shape of kylix was current throughout this long stage.

Decoration brings me to another small point of disagreement with our paper today in that I think the importance of this aspect is unduly relegated to a back-seat position. Decoration can well reverse the position favoured in the account in that it may be the decisive factor in dating and, in turn, provide evidence for a particular shape being current at the time. This is principally the case, for instance, in the examples illustrated for the early IIIA examples, Figs. 21 and 22. So, too, kylikes decorated in imitation of Mycenaean ones with a linked whorl-shell pattern are by this alone sure to belong to LM IIIB, whatever their shape, one of those instances of interaction which I mentioned earlier.

Finally, a few incidental and rather disjointed remarks. On kylix stems, pierced or solid, it may be that the situation is different at Khania from Knossos where I would estimate that over 90% at all periods are pierced, – a useful distinction from mainland examples.

Seeing how diverse the local styles became in Crete from LM IIIA:2 onward, it is remarkable that there existed such a degree of uniformity in kylix shapes. Even so, local variations there must surely have been, and we should keep our eyes open for them. As for the distribution of kylikes, this is distinct, of course, from frequency at the sites cited. This aspect is at present probably ascertainable only at a few sites sufficiently excavated and adequately published. I suspect they are quite rare at the far eastern end of the island. Perhaps Professor MacGillivray can comment on this in the light of the new excavations at Palaikastro.

As for the early and late forms of the (forgive me) champagne cup, I wish the dividing line between them was as definitely at the beginning of LM IIIB as I once thought, since it would be a valuable chronological indicator. I now have some doubts since a very few borderline exceptions were present in MUM Pit 10+11 (*MUM*, 183), a deposit which stylistically is unlikely to belong to the end of the IIIA stage. This is a point on which Professor Warren may be able to help, at least for Knossos, with his much larger LM IIIA:2 deposits in the Stratigraphical Museum excavations. (As an aside, I may add that it is the early version which is represented in the Rethymnon burial mentioned above; one example could even belong at an experimental stage).

Reverting to the nomenclature of this shape and its problems. Reading the text of the paper, I was surprised at the statement (footnote 93) that one-handled stemmed cups were present in LM II in MUM. Looking up the references, I found two examples cited to be what I would now, and had then, described as ring-footed cups, whereas I had reserved the term "Stemmed cup" for a quite different shape, that sometimes called a goblet (more confusion) or less helpfully as a flower pot because of its pierced base. The root of the problem lies, of course, in English usage and the associations which an English person attaches to a term, which in the case of stemmed implies, as the Oxford Dictionary has it, a 'cylindrical support' for a cup, and I would add of some appreciable height. So, please let us avoid misunderstanding and keep the name 'champagne cup'.

The IIIB kylix with shallow bowl, undifferentiated lip and high handles is, as stated, quite common and could, with 'deep bowls' be one of the most easily recognizable features of that stage in any sherd deposit. I was somewhat surprised in going through Evans's boxes in the Stratigraphical Museum to see how many examples there were, with quite a range of decoration.

Well, as I said, somewhat random remarks, but ones stimulated by the excellent paper which you have been given today, and which I had the privilege and pleasure of reading beforehand.



**B.Hallager:**

Regarding the similarity of the small goblet and the two-handled stemmed cup in LM IIIB: they may look like each other, but the LM IIIB type of two-handled stemmed cup does not exist in plain ware, whereas the plain small goblet is rarely found decorated and not produced in LM IIIB. The small goblet besides being somewhat smaller has strap handles (usually only one) not raised above the rim, while the LM IIIB two-handled stemmed cup has roll handles raised above the rim or set below the rim. According to Popham the two-handled stemmed cups are not cups but bowls. I may be wrong, but to me cups have vertical handles and bowls horizontal handles. Usually a cup has only one handle but in LM IIIA the one with two handles is not uncommon. As they cannot be separated in the sherd material, unless both handles are preserved, they are very often overlooked in publications. I find it important to point out their close relationship and thus also term both of them cups, one-handled or two-handled. Confusion between cups and bowls is not confined to this type only. As I mentioned in my paper, the spouted cup has been called a “spouted bowl” but as it has a vertical handle I cannot see why it should be a bowl. Concerning the one-handled stemmed cup alias a champagne cup: I have never drunk champagne out of a cup, so probably it is a speciality of Britain. If we endeavour to attain greater precision in the terminology, we should not stick to old terms like “feeding bottles” and “champagne cups”. If, as Popham suggests, we do call both goblets and kylikes “kylikes”, how many more words do we need to specify the different types? I find it much easier if the shapes are divided (the short-stemmed being called a goblet and the long-stemmed a kylix) as it will mean fewer additional words for closer definitions. My aim is to simplify the terminology and above all ask for help to create a common language to enable us to know exactly what shape we are talking about.

**Warren:**

Can I just make four suggestions very briefly about the terminology? I have to say that I agree with Popham, that it is easier to call the whole shape from LM II onwards a “kylix”. By “LM II kylix”, I know what I mean, just as we know what we mean by a “IIIA:2 kylix” or a “IIIB kylix”. I do not see a problem there, requiring you to use the word goblet. The very large ones, the first one in your diagram, is to me a “LM II kylix”. We may take a different view on that. On the matter of the use of the word cup, though, I do not know how it is for those whose first language is not English, but a cup is something with one vertical handle. For example, the tea-cup. If it has two handles, it is something else. I would not hesitate to call those vases bowls, the ones you call two-handled stemmed cups. They are deep bowls and they happen to have two handles. The krater, the skyphos, many shapes have two handles. So I would actually – not challenging your shape chart or your chronology, but on the terminology – call those two-handled bowls. In English, I think Popham is right to say if you use the word “stem”, it implies a very definite cylindrical element, probably of some height. If we are going to use the term “stemmed” for what you are calling the “two-handled stemmed cup”, I would say a pedestalled foot or a ring foot. I think that if we are going to discuss the terminology and see where we get to, maybe we will take a large number of votes by the end. On the question of the use of the word cup, to me that is a one-handled object – the others would be bowls. Lastly, I would be very happy with the word “kylix” from LM II to LM IIIC.

**B.Hallager:**

If you are going to define my two-handled stemmed cup, in your terminology, a bowl with two vertical handles I presume you also have to define the common type of bowl and call it a bowl with two horizontal handles.

**Vlasaki:** We could say “bowl with vertical handles – kantharos”, as in the later periods, and for the shape with the horizontal handles, “skyphos”.

**Watrous:** The problem with the way the discussion is going now is that we could take each of these shapes, discuss them and then take a vote on them. It seems to be that the main problem here is that you have to decide when you create a terminology whether the basis for it is going to be morphological – in other words, you are just describing what you see – or developmental or even functional. If, like Popham, you have decided that the large goblet is in fact a predecessor for the kylix, then it follows that you call them the same thing. If you are going to do it morphologically, then, of course, you are going to split them. This is the decision that comes first.

**Coulson:** There is a difference between the Minoan and the Classical terminology. For instance, a bowl with a ring foot and horizontal handles in Classical times is called a skyphos, but I have been taught to call the same shape in Minoan times a deep bowl. You have, therefore, a split even in terminology when the same shape continues from Minoan to Greek times. Regarding the two-handled stemmed cup, I agree with Warren: the stem has to be appreciable, something of a certain height. You could even call this example a kantharos or a deep bowl with vertical handles. There is a problem in the prehistoric terminology: when the same shape comes down into historical times, the name changes.

**Hood:** If I might venture to take issue with Warren about the use of the word “cup” in English. May I take you down to the National Museum and place you before the so-called “Cup of Nestor”: are you seriously suggesting that we should change its name? I think that those great bowls with two handles that they use in Cambridge and Oxford colleges for feasts are called “loving cups”, are they not? I think you are being too severe in trying to restrict us in the use of the word “cup” to the one-handled ones.

**Watrous:** The suggestion made by Vlasaki about calling this shape a “kantharos” brings up the problem – which Coulson also mentioned – that is, if you are going to call this a “kantharos”, you immediately bring in a whole trail of connotations which we all know from Classical Greece. A lot of them are religious. Before choosing a name, you have to decide, if there is some kind of direct connection or not. I am personally not competent to say whether the two-handled stemmed cup from LM IIIA:2 has some kind of connection with later Classical examples, or even Geometric examples. If there is a connection, then yes, maybe we ought to call it a “kantharos”. But if there is not, then I would strongly oppose calling it that because people with little ceramic experience will start making false connections. To give you an example: when Mrs Caskey published the MH and LH material from the temple on Kea, she referred to some of those early vases as “kantharoi”. In effect, she was constructing a circular argument because the temple later belonged to Dionysos. So we have to be very careful when we start using these terms. If there is a continuous development, then, by all means. But if there is not, I think that we should not do it. That is why I go back to my original statement: it seems to me that the guiding principle has got to be that if there is a development that you can see, then use the same name. But if there is not, then go ahead and use a different name. We have to decide about the continuity or discontinuity of the shape before we go ahead and give it a name.

**Vlasaki:** We also use the term “kylix”, which is different in later times. We already use Classical or Geometric names in prehistoric times. If we use some Classical names, why not use others?



In Classical times the kantharos is a little different. When we think of a bowl with two vertical handles, it is the same. There is also the problem of the “kyathos” with the cup.

**Betancourt:** The problems coming out here are very numerous, and even setting aside conical cups, which have no handles at all, which we would probably all agree to call by that name, the position I would favor would be to simplify as much as possible and to use as few names as possible, so that keeping the word “kylix” for the group might be a good idea, and one could then add qualifiers that could point out one or another type. I also would feel, as Popham does, that the use of the word “stem” implies a particular type of shape in English, and probably should not be used for what he calls the “champagne cup”.

**Kanta:** I agree with Betancourt that there is merit in keeping the traditional names that have come through with the bibliography, although there are aberrations. This way there is a uniformity which excludes individual choice as much as possible, but I do not think that there is any way that one can totally eliminate. I feel that we have a general shape that is more or less similar right through and then you have to qualify and judge the form of the shape. One has high handles, another lower-set handles. This is unavoidable. It is best to keep to the established terminology, even if it is just a label, as it is with the “champagne glass/cup”. At least this way we can understand each other’s publications.

**B.Hallager:** I met the problem for the first time when reading Popham’s article “The Late Minoan Goblet and Kylix” in which he defined goblets, like I have done here, and where he started to talk about kylikes in IIIA:2. Very many years later, in the publication of the *Unexplored Mansion*, Popham decided that both types were kylikes. Suddenly the Ephraean goblets in “the established terminology”, were kylikes.

**Kanta:** The problem is that when you have complete vases, then it is easy. When you have – as most of us do in most layers – sherds, then it is best to talk about single shapes and describe the sherds. If you say “goblet” you immediately decide that this is one piece, and if you say “kylix”, you decide it is a bit of the other. But then you get a very large amount of personal discrimination. You may be sure of your material, about your sherds and your types, but other people may not be so sure because they do not have the complete shapes that you have. So it would be best to describe the material rather than make choices without having the complete shapes or forms. This is the real problem that I have had again and again in groups where you do not have complete vases.

**B.Hallager:** You are perfectly right. First of all, I do wish we had a lot of complete vases. But we do not. The Greek-Swedish excavations is a settlement excavation. The main part of the material consists of sherds. My basic knowledge comes from studying these sherds in the different strata. – You can not date a basket or a layer on a single kylix stem. You need additional information about all the other shapes in the unit to be sure that you are in let us say IIIA:1 or IIIA:2.

**Warren:** Can I return to the very important and correct point made by Watrous a few minutes ago? I think that Kanta was really substantially agreeing with it. We need a morphological criterion, just, of course, as Furumark used, and as is standard in pottery terminology, as the basis upon which we can then go forward. If there seems to be a morphological development through time, that is absolutely fine. The same term can be used throughout. In this matter, I personally have no difficulty in seeing a shape evolution from LM II into IIIA:1

into IIIA:2. Of course there are always variations, and the big tall vase you call a large goblet is very distinct, but one can see an evolution through this period. I would be quite happy to say, therefore, following a morphological criterion, that it is a kylix, and that in LM II it has a certain shape, and that it evolves through to IIIC.

**B.Hallager:** Actually, Furumark calls the short-stemmed vases goblets, and the long-stemmed, kylikes. This distinction is still valid in the Mycenaean pottery and yet another reason why we on Crete should keep them apart and use the same language as the mainlanders.

**Hood:** I was going to raise the same question as Warren did and ask B.Hallager if she accepted that there is an evolution from the goblet to the kylix, and one that is gradual with intermediary stages. I suspect that Evans did use the term goblet for the LM II ones. Of course, Furumark was very conservative, and I think rightly so, and followed the existing terminology.

**B.Hallager:** I do admit that there seems to be an evolution from the goblet to the kylix. The same evolution may be seen in the mycenaean pottery but here the goblet and the kylix are separated. To avoid confusion of terminology in Late Bronze Age pottery I think it would be a good idea to follow the established mycenaean terminology. Why should we rename the Ephyrean goblet a kylix?

**Gesell:** If we are going to keep the separate names of goblets and kylikes, then you will have to work out proportions, saying that for a goblet the stem is so long in comparison to the width of the bowl. How will you define the goblet as opposed to the kylix?

**Kanta:** As at Kommos, where the dimensions are given.

**Gesell:** Where is the cut-off point between the goblet and the kylix? This has to be determined. You have to have a set of proportions.

**Watrous:** When we study pottery, I think the most important thing to keep in mind is that our goal is to discover the ancient reality. Not superimpose our twentieth century perception upon this material. We also have to remember when we deal with pottery, that chronology is only one aspect of pottery. There are other aspects to pottery – its function, its cultural associations, and its development. If we end up by dividing all of our ceramic shapes strictly morphologically, it seems to me that these terms will actually obscure our principle goal. To return to the example of the kantharos, the reason why I object to calling something like the IIIA:1 two-handled cup a kantharos is that one of our goals is to discover the relations between it and its classical successors. To call it a “kantharos” at the very beginning is to presuppose the very question we are trying to answer.

I agree completely with B.Hallager that once you get a shape which is obviously new, then a new name is called for. Otherwise it seems to me that we ought to do less naming rather than more. Renaming LM III shapes should not take place before other implications are considered. Many LM III shapes can be traced back into the Middle Minoan period – do we want to rename these shapes as well? Also, quite a few of the new LM III vase shapes were probably imitations of metal vessels – which names do we use for these vases, ours or Matthäus's?

I agree with B.Hallager that the champagne cup begins in IIIA:2, but I remember going to Hagia Triada once and Enzo La Rosa pulled out one from a LM IIIA:1 context. So



even if it is a good chronological marker for IIIA:2, apparently the shape does begin a little bit earlier. Also, the question of why so few LM IIIA:2 kylikes are known. I do not believe that is simply because so much of our LM IIIA:2 material comes from tombs. This shape was rare in LM IIIA:2 levels as well.

**Betancourt:** I think there is a lot to be said also for the relationship that this must bear to the earlier body of LM I material out of which these shapes often come. In the case of the kylix or goblet, for example, there is a LM IB deposit at Kythera which has one example of an Ephyraean-type goblet or kylix with typical LM IB Marine Style decoration on it. I am not sure what that should be called.

**Kanta:** I commented on that particular sherd in the Nerokourou publication (A. Kanta & L. Rocchetti, *La ceramica del primo edificio in Scavi a Nerokourou*, Kydonias Rome 1989, 318). I agree with you there. To go away from the shapes and the names of the shapes, and go down to the archaeological part – which was most interesting – in your paper, I would like to make only one comment on what you said. If I understood it correctly, you were showing the kylikes from Karakovilia at Vrokastro, and you said that you did not see the reason why one should call it Sub-Minoan because they were similar to the kylikes of Karphi. I have recently studied the pottery of Karphi yet again, after twenty years, when I studied it for my thesis, and I am pretty sure that Karphi goes down to what we call SM. If you want to abolish SM altogether is another matter, but what we call SM, Karphi has plenty of. So if this kylix from Vrokastro looks like the kylikes from Karphi, this does not mean anything chronologically because Karphi has plenty of SM.

**Gesell:** But that one does have Fringe Style decoration.

**Kanta:** But it continues into SM, I am pretty certain. I have a lot of sherds like that from Tylissos.

**B.Hallager:** It is a matter of terminology, again. If we want to make SM a special period, I think we first of all have to find it stratified in a settlement excavation to be sure that it really exists. As long as we do not have it, I prefer to incorporate this “period” in late IIIC, at the very end of the Bronze Age. As far as I know, kylikes are not found in the following Protogeometric period.

**Coulson:** I have maintained that I do not like to call SM a period. We do have a period that we are calling “transitional” from IIIC to PG on the Kastro at Kavousi. We do not yet know if it is SM. If I remember correctly, in the preliminary reading of the pottery we did notice kylikes which go down into PG.

**Vlasaki:** There are some examples of kylikes in the Geometric material of Khania. We call them stemmed bowls, but when Popham saw them, he preferred to call them kylikes. They are dated to the eighth century.

**Tsipopoulou:** In Eastern Crete there is also a very rare type of angular-bodied stemmed cups, likewise dated to the Late Geometric period. Of the some 1000 vases I studied in my dissertation (*Υπομνητική, Πρωτογεωμετρική και Ανατολίζουσα κεραμική της Ετεοκρητικής επιρροής*, TAPA, in press), only two were of this kind, one from Agios Georgios the other from Sklavoi, both sites in the Siteia District. There is no continuity between the LM IIIC and this late variant. In the old material from Kavousi, there is a related type of one-handled



high-stemmed bowl with globular body, dated to the latest phase of Late Geometric. In the absence of stratigraphical contexts, the dating for both types is stylistic – but certain due to the decoration. At the LM IIIC settlement at Khalasmenos (under excavation since 1992 by W.Coulson and myself, cf. W.D.E.Coulson, M.Tsipopoulou, *Preliminary investigations at Khalasmenos, Crete, 1992-93*, *Aegean Archaeology* 1, 1994, 65-97), we have several late LM IIIC kylikes with conical body, occasionally with a swollen stem. They are unpainted or monochrome, one instance having bands around the body and stem. As far as we know, Khalasmenos must be rather late in the LM IIIC sequence, but it should be stressed that to date (September 1995) there is no evidence for stratified Sub-Minoan material. However, a probable tholos tomb (under excavation at the time of writing) with quadrangular plan, built into one of the rooms of the destroyed LM IIIC settlement, could contribute to our understanding of the pre-Geometric periods.

**Wedde:**

What Gesell was referring to is known as factorial analysis, and I believe it is standard practice in European prehistoric archaeology. It is the characterization of each shape by a mathematical formula which takes into account various proportions, followed by the plotting of the value attained on a graph. This allows distinguishing between shapes that are close to each other. You will have a concentration of dots on the graph for one shape, another concentration for another shape, and a scatter between the two. You are then able – if the pottery cooperates – to draw a line between the two.



# Provincial LM III at Pseira, Crete

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## Introduction

The Minoan town on Pseira Island, destroyed in Late Minoan IB, was excavated in an American-Greek synergasia directed by Philip Betancourt and Costis Davaras.<sup>1</sup> Excavations began in 1985 and continued until 1989. The finds are now being prepared for publication, and the pottery from the site's reoccupation in the later part of the Late Bronze Age is still under study. The material presented here is a preliminary report with conclusions that are subject to change as new insights are gained into the nature of the surviving evidence.

Pseira Island is an uplifted block of limestone located at the eastern end of the Gulf of Mirabello. It is about 2 km in length with several small anchorages and harbors on the southeast side, facing Crete. The best location is a pair of harbors protected by a long peninsula, and it was here that the settlers of Pseira Island built their town.

The island of Pseira was first settled in the Final Neolithic period. The size of the habitation gradually increased until by LM IB the town consisted of over 50 buildings. Like most sites in Crete, Pseira was destroyed in LM IB. Later occupation was by a much smaller population, and the island never regained its size or importance.

The Late Minoan re-occupation of Pseira can be studied from several parts of the island. Although one house from this period has been excavated, most of the information on the nature of the occupation comes from ceramics. Late Minoan III pottery comes mainly from three parts of the island of Pseira:

1. Building DA
2. Building AF North
3. Sites in the Hinterland of Pseira Island

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<sup>1</sup>Betancourt & Davaras 1986; 1988a; 1988b. The excavations were sponsored by Temple University, the Archaeological Institute of Crete, and the Archaeological Society of Crete, under the auspices of the Greek Ministry of Culture and the American School of Classical Studies at Athens. Financial assistance was given by: the Institute for Aegean Prehistory; the National Endowment for the Humanities, an independent federal agency; the Social Sciences and Humanities Council of Canada, The University Museum of Archaeology and Anthropology, The University of Pennsylvania; the Society for the Preservation of the Greek Heritage; the Arcadia Foundation; the Mellon Corporation; Hamilton College; Queen's University, Kingston, Ontario; the Long Island Society of the Archaeological Institute of America; Leon Pomerance; and other donors.



The nature of the surviving evidence from these locations reflects three very different situations. For Buildings DA and AF North, the data comes from excavated contexts. Building DA is a house with a floor deposit in one room, representing a destruction during LM IIIB. Building AF North consists of a destroyed LM I building with slight reoccupation in LM IIIC, without a trace of LM III architecture. Most of the information from elsewhere on Pseira Island comes from pottery gathered from the surface, but it contributes additional data on the situation in LM III and helps to put the information from the excavations into a better context.

The evidence from Pseira is important for several reasons. It provides information on the history of Pseira and its continuing role in this part of Minoan Crete. The small group of complete vases from the destruction of Building DA is useful for the study of chronology because it provides a group of ceramics that was in contemporary use. The vases from LM IIIC, the first coastal habitation noted from this period in the eastern part of the Gulf of Mirabello, are instructive because they demonstrate that the seacoast was not completely abandoned in this period when many "refuge sites" were founded on high inland peaks.

## Building DA

Building DA is a small structure at the western edge of the Pseiran settlement, in the portion of the town called Area D. The coast of this part of Pseira Island is cut by two ravines, with each ravine terminating at a small harbor. East of the ravines is a long peninsula named Katsouni where the oldest part of the Minoan town is located. Between the ravines is a hillside with a more recent part of the town, first settled in MM IIB. Area C is the eastern side of the hillside, facing the older part of the town, and Area D is the western slope of the hillside, facing the western ravine. Building DA is the northernmost structure in a row of buildings facing west, toward the ravine.

This part of the site was not excavated by Richard Seager when he worked on Pseira in 1906-07, and none of the buildings were indicated on his plan.<sup>2</sup> The other buildings in Area D remain unexcavated, but their general outlines can be seen clearly on the rocky and eroded hill.

Building DA was discovered in 1986. It was chosen for excavation because it appeared to be located at the extreme edge of the Minoan town, and it was excavated that year and in 1987 under the supervision of Georgia Salapata. The goals of the excavation included the recovery of the architectural plan and the retrieval of the artifacts and other finds within their contexts. As is normal practice at Pseira, both dry sieving and water sieving were used in the excavation process.

The building had a simple plan. It consisted of two rooms built up against an earlier retaining wall to the east. One entrance was on the south where a doorway led into a small landing at the foot of three stone steps leading up either to a second story or to the roof. Other entrances were

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<sup>2</sup>Seager 1910, plan.

not preserved, but the west wall had been washed away by torrents in the ravine to the west, so the original presence or absence of a doorway in this side could not be determined.

The pottery indicates the building was inhabited from LM IIIA:1 until LM IIIB. The date makes the building important for the history of Pseira because although a few finds from this period come from other parts of the site, this is the only building whose construction can be assigned to this period. The building was destroyed in LM IIIB.

#### *Room DA 1*

Room DA 1 is the largest ground floor room in the building. Although the soft soil floor was not recognized during excavation, the nature of the pottery leaves no doubt that it belongs to a floor deposit because it contains complete and largely restorable vases of homogeneous character. The whole vases are from LM IIIB. The fragmentary pottery ranges chronologically from MM IIB to LM IIIB with nothing being later than this date. Several indications of burned areas and brown marks on sherds suggest that the house was probably destroyed by fire during LM IIIB.

The pottery consists of all the local Pseiran fabric categories: the fine fabrics and the coarse fabrics containing phyllite are in the majority; the percentage of Mirabello Fabric, Cooking Class (which is substantially earlier than LM III) is low. Contacts with the Eastern Mediterranean are suggested by imports from Cyprus and the Syro-Palestinian region.

The five whole or restorable vessels found in the room represent the latest pottery in use at the time of the destruction. The circumstances of discovery indicate that some vases were on the floor and others were slightly higher in the fill, as if they had fallen from shelves or furniture when the room collapsed. All of the complete vases are from LM IIIB.

#### *Room DA 1, Complete Vases (Fig. 1)*

##### *LM IIIB, Fine Fabrics*

**1** (PS 387; DA 1-2). Shallow bowl, intact. H 3.6; d of rim 13.2; d of base 4.4. A fine fabric (light red, 2.5YR 6/6), slightly gritty. Low, open bowl; two horizontal handles at rim; flat base.

*Comments:* Shallow bowls with two horizontal handles are known from LM IIIA:2 (Popham 1970, fig. 7, no. 9) until LM IIIB (Popham 1970, fig. 17, no. 5). The thick walls and straight rim of this example suggests it is from LM IIIB.

*Parallels:* Popham 1970, fig. 7, no. 9 (Knossos, LM IIIA:2, with a slightly outturned rim); fig. 17, no. 5 (Knossos, LM IIIB, with a straight rim); Popham 1984, pl. 175, no. 13 (Knossos, LM IIIA:2); MacGillivray et al. 1987, fig. 6, no. 4 (Palaikastro, LM IIIB).

*Date:* LM IIIB.

*Bibl.:* Betancourt and Davaras 1988a, 221, fig. 7.

**2** (PS 396; DA 1-2). Champagne cup, over half complete. D of base 4.8; d of rim 10. A fine fabric (pink, 7.5YR 8/4). Goblet with low stem; one vertical handle with circular section; almost straight rim.

*Comments:* This shape is definitive for LM IIIA:2 and LM IIIB. In the

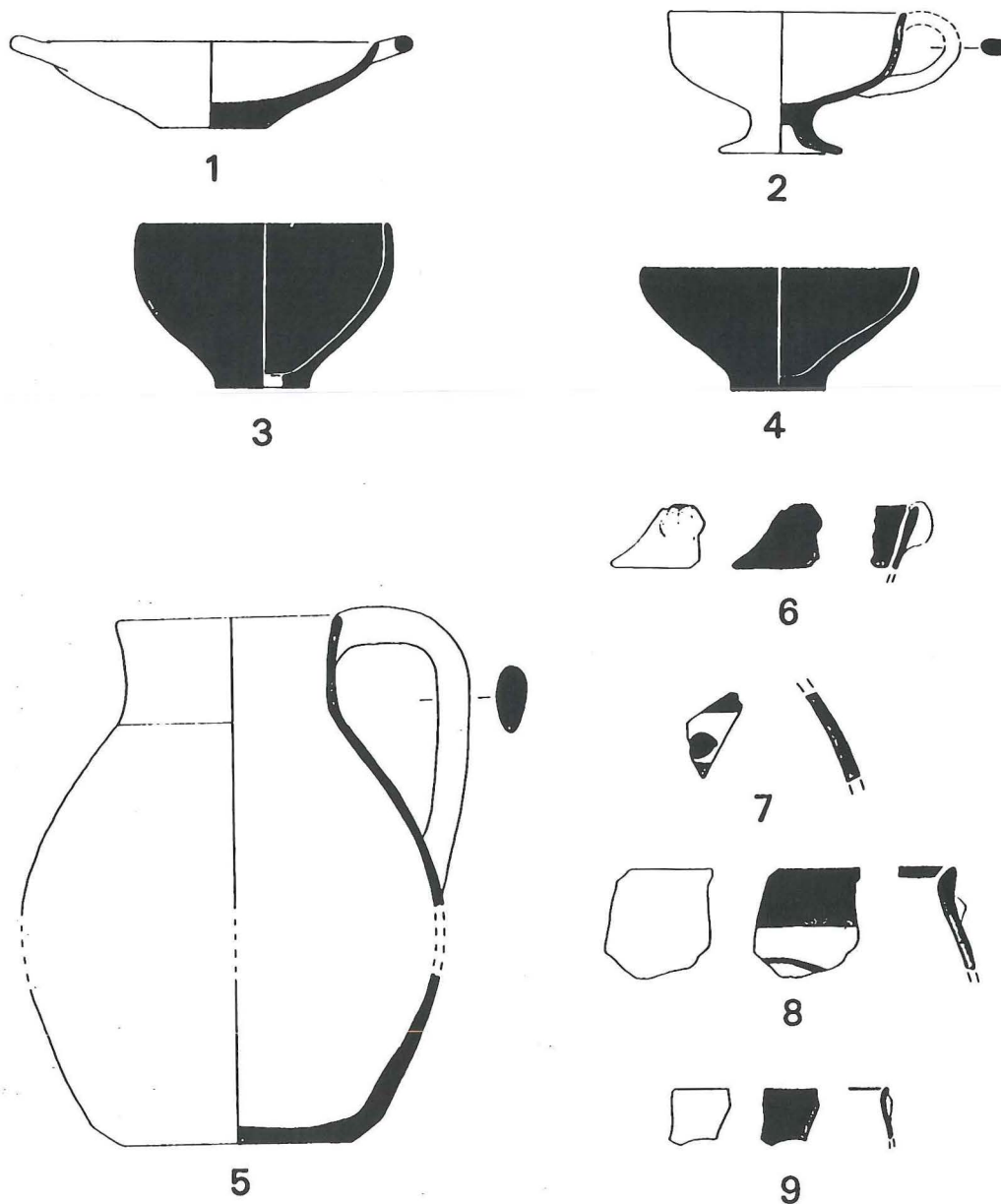


Fig. 1.

development suggested by Popham (1969), goblets with a splayed foot like this example are not the earliest cups in the sequence.

*Parallels:* An extremely common shape. See (among many others) Bosanquet and Dawkins 1923, pl. 28D (Palaikastro); Sackett, Popham, and Warren 1965, fig. 15, no. P22 (Palaikastro); Popham 1970, figs. 16, no. 2, 17, no. 9 (Knossos, LM IIIB); Kanta 1980, pl. 23, no. 5 (Malia); pl. 54, no. 3 (Milatos); Popham 1984, pl. 176, no. 15 (Knossos, LM IIIA:2); pl. 180, nos. 5, 7-8 (Knossos, LM IIIB); Watrous 1992, fig. 63, no. 1675 (Kommos, LM IIIB); Mee and Doole 1993, no. 294 (Knossos).

*Date:* LM IIIB.

*Bibl.:* Betancourt and Davaras 1988a, 221, fig. 7.



**3** (PS 402; DA 1-3). Ogival cup, largely restorable. H 6.6; d of rim 11; d of base 4. A fine fabric (reddish yellow, 7.5YR 7/6). Straight rim; convex-concave profile; flat base. Monochrome.

*Parallels:* Kanta 1980, fig. 106, no. 2 (Myrsini); Popham et al. 1984, pl. 163, no. 5 (Knossos); Sackett and Popham 1970, fig. 22, no. 6 (Palaikastro); MacGillivray et al. 1987, fig. 6, no. 1 (Palaikastro, LM IIIB); Watrous 1992, fig. 58, no. 1564 (Kommos, LM IIIB).

*Date:* LM IIIB.

**4** (PS 403; DA 1-3). Ogival cup, half complete. H 5; d of rim 11; d of base 3.8. A fine fabric (very pale brown, 10YR 7/4). Straight, rounded rim; convex-concave profile; lower shape than no. **3**. Monochrome.

*Date:* LM IIIB.

#### LM IIIB, Coarse Fabrics

**5** (PS 447; DA 1-4). Jug, largely restorable. D of base 10. A coarse fabric (very pale brown, 10YR 8.3). Rounded body; cylindrical neck; strap handle; flat base with bevelling.

*Comments:* The edge of the spout opposite the handle is not preserved, so a spout is conjectured but not certain.

*Parallels:* Sackett, Popham, and Warren 1965, fig. 16, no. P 16 and pl. 75e (Palaikastro, with a small spout, LM IIIB).

*Date:* LM IIIB.

#### Room DA 1, Catalogued Sherds (Figs. 1-5)

Several sherds were catalogued from this deposit to illustrate the range of ceramics found in the room. They represent sherds that were in the floor, walls, and ceiling and fell into the room when the house collapsed as well as stray pieces from vessels broken before the room went out of use. The sherds are useful as a document of the range of pottery used in and near the building over a period of many years before it was destroyed. The earliest material is from MM IIB, and the latest is from LM IIIA:2-IIIB.

#### MM IIB, Fine Fabrics

**6** (PS 3803; DA 1-3). Scoop, rim sherd.

#### MM III-LM IB, Fine Fabrics

**7** (PS 4320; DA 1-4). Open vessel, body sherd.

**8** (PS 3801; DA 1-3). Scoop, rim sherd.

**9** (PS 3804; DA 1-3). Scoop, rim sherd.

**10** (PS 3802; DA 1-2). Scoop, body sherd.

#### MM II-LM IB, Coarse Fabrics

**11** (PS 3805; DA 2-1). Scoop, body sherd.

**12** (PS 397; DA 1-2). Open vessel, body sherd.

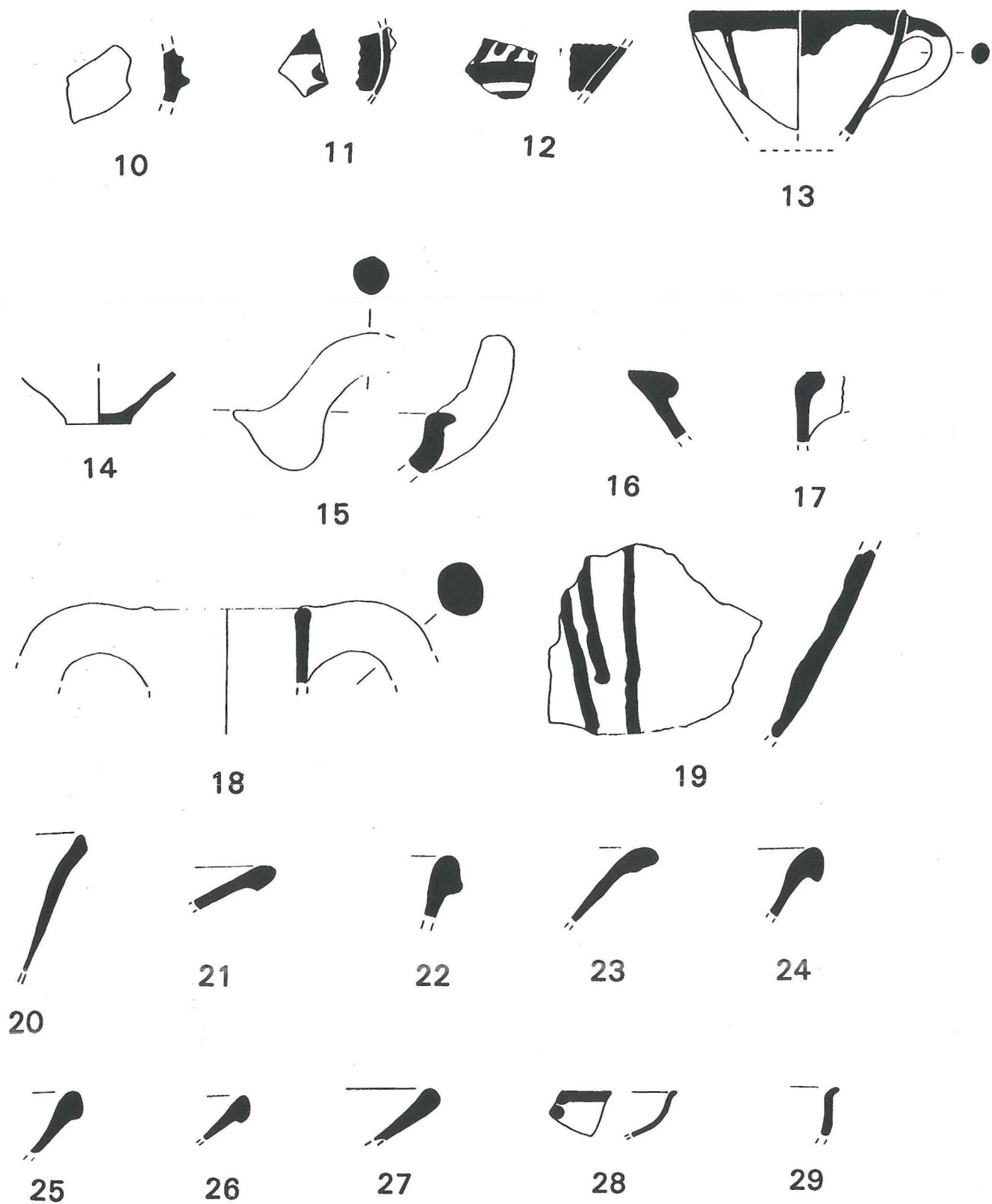


Fig. 2.

LM I, Coarse Fabrics

- 13 (PS 2562; DA 2-1). Cup, rim sherd.

LM I-III, Fine Fabrics

- 14 (PS 2487; DA 1-2). Conical cup, base and body sherds.

LM I-III, Coarse Fabrics

- 15 (PS 3978; DA 1-4). Basin (?), rim and handle sherd.  
16 (PS 3979; DA 1-4). Jar, rim sherd.  
17 (PS 4004; DA 1-4). Oval-mouthed amphora, handle sherd.  
18 (PS 4266; DA 1-2). Oval-mouthed amphora, handle.  
19 (PS 4319; DA 1-4). Closed vessel, body sherd.

LM I-III, Phyllite Fabrics

- 20 (PS 3993; DA 1-3). Cooking dish, rim sherd.  
21 (PS 2482; DA 1-2). Cooking dish, rim sherd.  
22 (PS 3986; DA 1-3). Cooking dish, rim sherd.  
23 (PS 3989; DA 1-3). Cooking dish, rim sherd.  
24 (PS 441; DA 1-4). Cooking dish, rim sherd.  
25 (PS 3973; DA 1-4). Cooking dish, rim sherd.  
26 (PS 3975; DA 1-4). Cooking dish, rim sherd.  
27 (PS 4285; DA 1-4). Cooking dish, rim sherd.

LM IIIA:1, Fine Fabrics

- 28 (PS 443; DA 1-4). Ledge-rimmed cup, rim sherd.  
29 (PS 3982; DA 1-4). Ledge-rimmed cup, rim sherd.  
30 (PS 440; DA 1-4). Cup, body and rim sherds.

LM IIIA:1-2, Fine Fabrics

- 31 (PS 3974; DA 1-4). Cup, rim sherd with handle.  
32 (PS 3980; DA 1-4). Cup, base sherd.  
33 (PS 4284; DA 1-4). Bowl, base sherd.  
34 (PS 444; DA 1-4). Cup or bowl, base sherd.  
35 (PS 3970; DA 1-4). Cup or bowl, base and body sherd.  
36 (PS 3983; DA 1-4). Kylix, rim sherd.  
37 (PS 2493; DA 1-3). Kylix, body sherd.  
38 (PS 4321; DA 1-4). Stirrup jar (?), body sherd.  
39 (PS 4270; DA 1-3). Open vessel, body sherd.

LM IIIA:2, Fine Fabrics

- 40 (PS 4269; DA 1-3). Jug or stirrup jar, body sherd.  
41 (PS 4271; DA 1-3). Pyxis or straight-sided alabastron.

LM IIIA:2, Coarse Fabrics

- 42 (PS 3981; DA 1-4). Semiglobular cup, rim sherd.

LM IIIA:2-IIIB, Fine Fabrics

- 43 (PS 4268; DA 1-3). Kylix or champagne cup, base sherd.



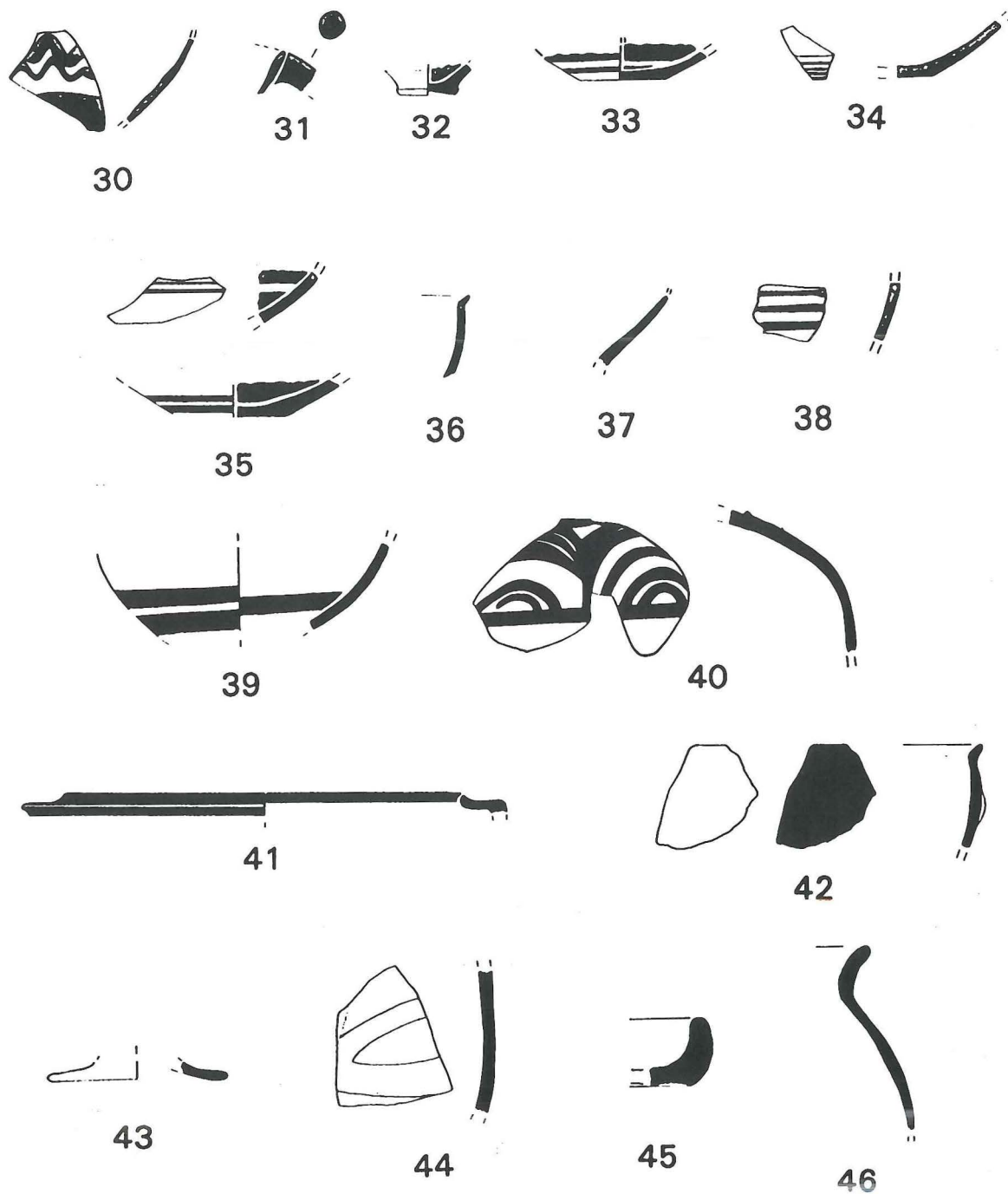


Fig. 3.

LM IIIA:2-IIIB, Coarse Fabrics

44 (PS 2490; DA 1-3). Stirrup jar (?), body sherds.

LM IIIA-B, Phyllite Fabrics

45 (PS 3971; DA 1-3). Cooking tray, rim sherd.

46 (PS 3991; DA 1-3). Tripod cooking pot, rim sherd.

47 (PS 3977; DA 1-4). Tripod vessel, leg (complete).

- 48 (PS 4265; DA 1-2). Tripod vessel, leg sherd.
- 49 (PS 4263; DA 1-2). Tripod vessel, leg sherd.
- 50 (PS 3990; DA 1-3). Disk, rim sherd.
- 51 (PS 4264; DA 1-2). Conical cup, rim sherd.
- 52 (PS 3972; DA 1-3). Conical cup, base sherd.
- 53 (PS 3992; DA 1-3). Basin, rim sherd.
- 54 (PS 3984; DA 1-3). Basin, rim sherds.
- 55 (PS 3985; DA 1-3). Basin (?), rim sherd.
- 56 (PS 4275; DA 1-3). Basin (or pithos?), rim sherd.
- 57 (PS 4267; DA 1-2a). Basin, body sherd.
- 58 (PS 401; DA 1-3). Brazier, rim sherd.
- 59 (PS 2483; DA 1-2). Jar, rim sherd.
- 60 (PS 3988; DA 1-3). Pithos, rim sherd.
- 61 (PS 3987; DA 1-3). Jar, rim sherd.

LM IIIA-B, Foreign Fabrics (Cycladic?)

- 62 (PS 2486; DA 1-3). Closed vessel, body sherd.

LM IIIA-B, Foreign Fabrics (Cypriot?)

- 63 (PS 2488; DA 1-3). Open vessel, body sherd.
- 64 (PS 2489; DA 1-3). Closed vessel (?), body sherds.

LM IIIA-B, Foreign Fabrics (Canaanite)

- 65 (PS 2484; DA 1-3). Transport amphora, body sherd.
- 66 (PS 2485; DA 1-3). Transport amphora, body sherd.

Floor Packing under the Floor of Room DA 1 (Fig. 5)

Excavations below the floor level uncovered a small deposit of pottery which gives a *terminus post quem* for the construction of the floor. A majority of the material from this unit is homogeneous LM IIIA:1/2 in date (the best date is provided by a ledge-rimmed cup) with the earliest sherds of MM II-LM IB date. All the common local fabric categories are represented with Phyllite Fabrics having the largest percentage. Nothing seems to be later than LM IIIA:1/2, and this date is probably the time when the room's floor was laid down.

MM II-LM IB, Coarse Fabrics

- 67 (PS 3875; DA 1-5). Scoop, base sherd.

LM IIIA, Fine Fabrics

- 68 (PS 4288; DA 1-5). Conical cup, rim sherd.
- 69 (PS 435; DA 1-5). Ledge-rimmed cup, largely restorable.
- 70 (PS 4289; DA 1-5). Stirrup jar, spout sherd.

LM IIIA, Phyllite Fabrics

- 71 (PS 4286; DA 1-5). Cooking dish, rim sherd.
- 72 (PS 4287; DA 1-5). Tripod cooking pot, rim sherd.

Southern Room (Space DA 2, a Staircase) (Figs. 5-6)

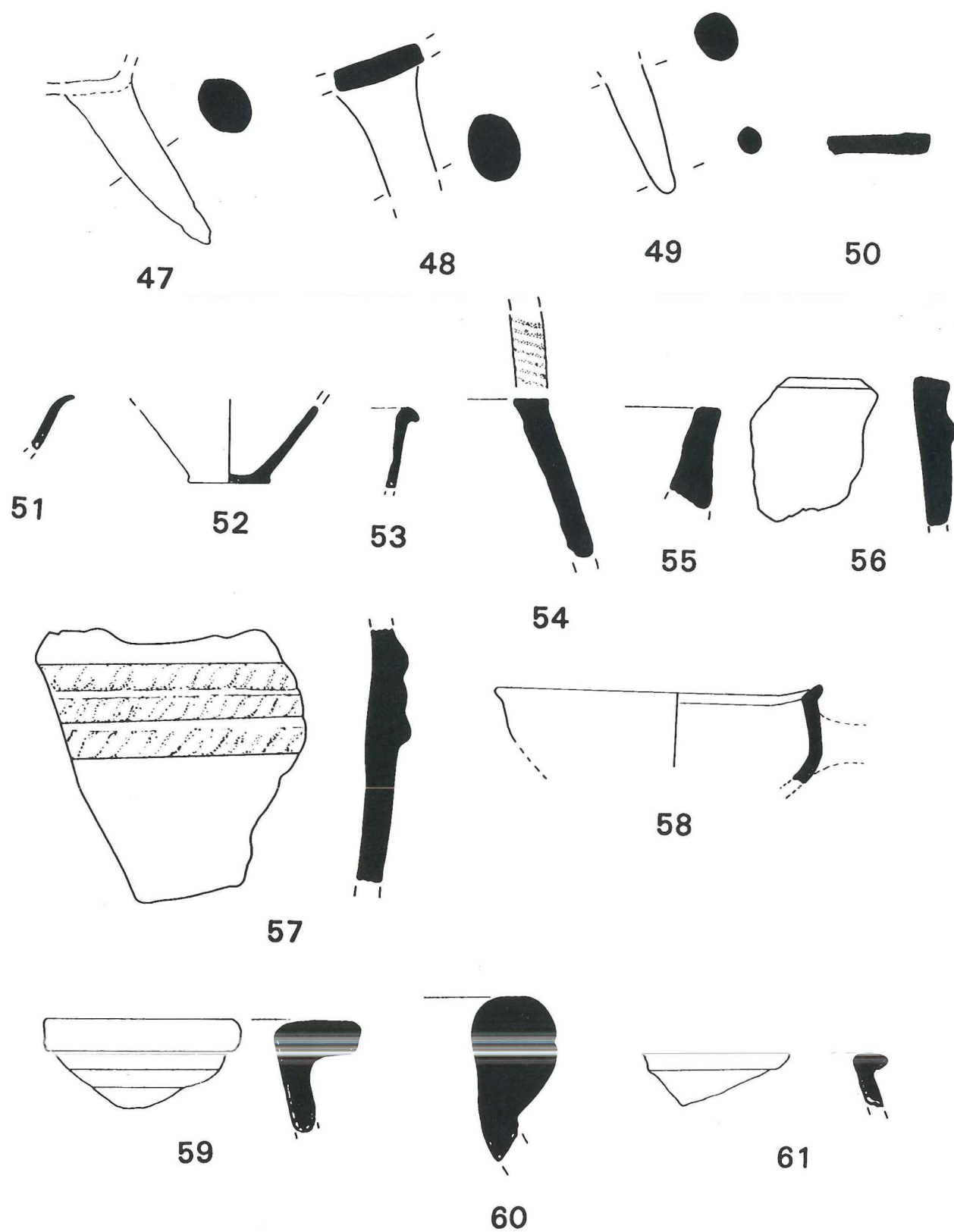


Fig. 4.



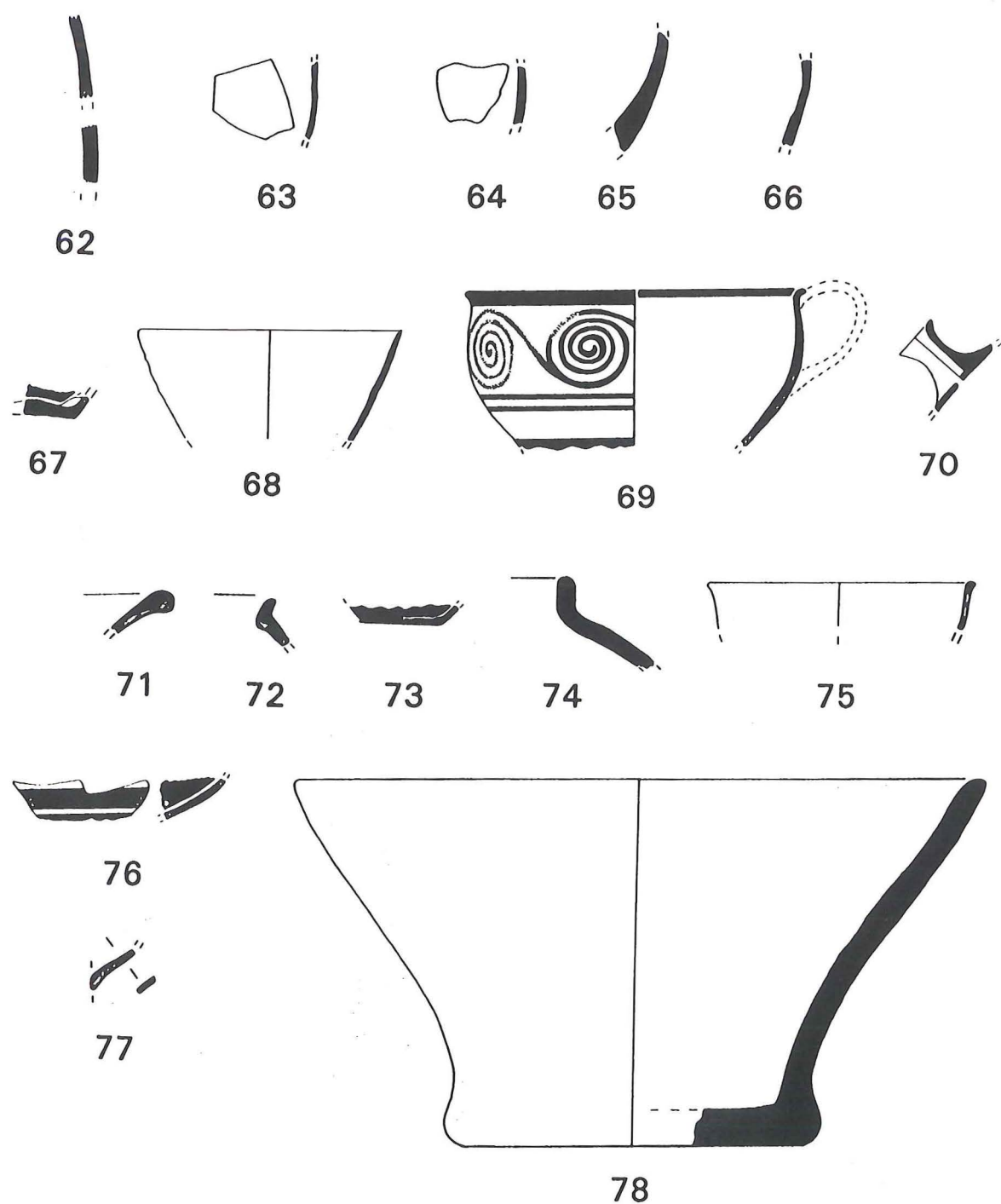


Fig. 5.

The pottery in the southern room did not include any complete vases. It consisted entirely of sherds which had fallen into the space from the collapse of walls and ceiling and of casual small pottery fragments left in the space.

MM II, Fine Fabrics

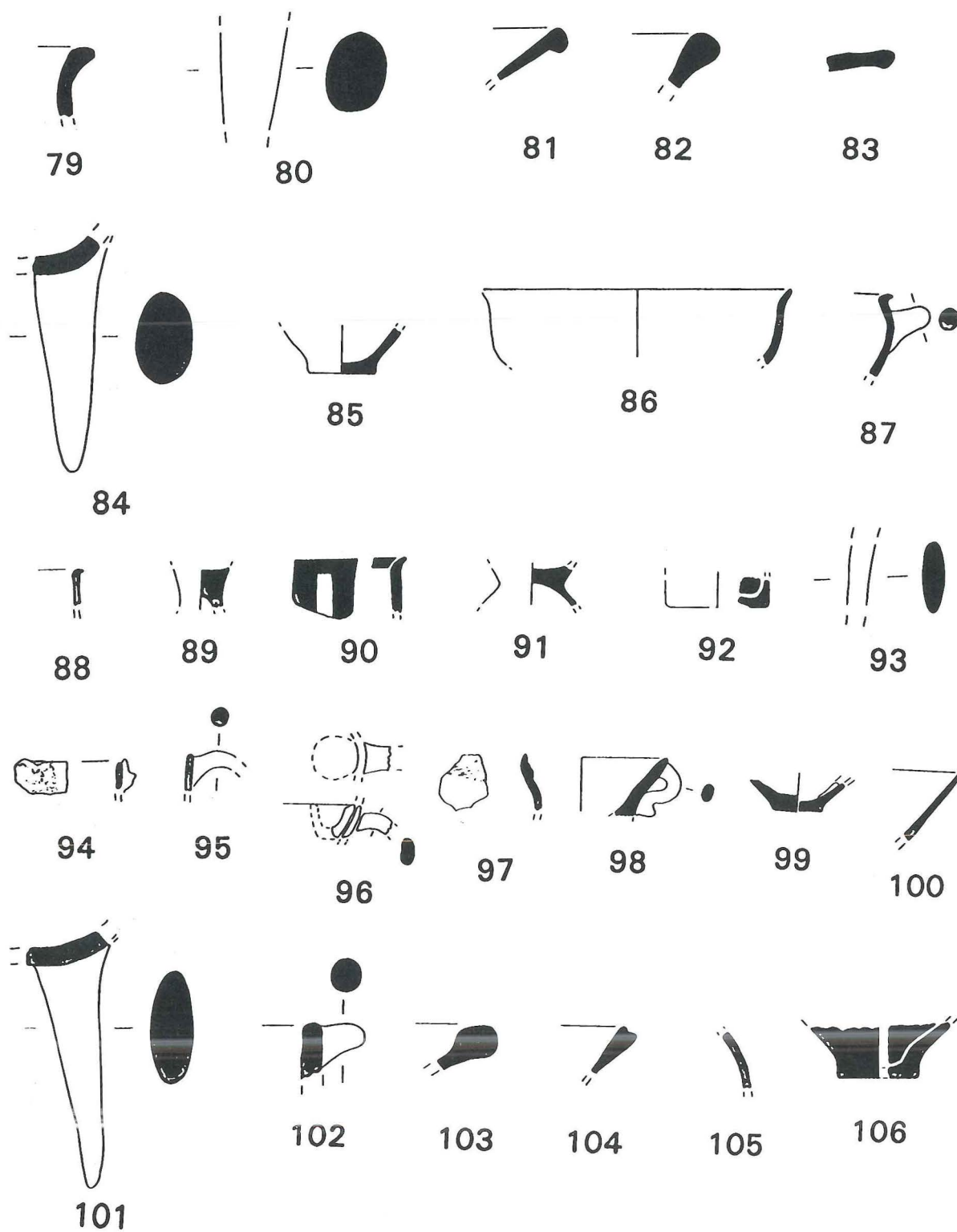


Fig. 6.

73 (PS 634; DA 2-on wall). Open vessel (carinated cup?), base sherd.

MM-LM I, Mirabello Fabric, Cooking Class

74 (PS 678; DA 2-3). Tripod cooking pot, rim sherd.

LM I, Fine Fabrics

75 (PS 4382; DA 2-2, DA 2-3). Cup, rim sherd.

76 (PS 649; DA 4). Cup, body sherd.

LM I-III, Fine Fabrics

77 (PS 4381; DA 2-2, 2-3). Cup, handle sherd.

LM I-III, Coarse Fabrics

78 (PS 2494; DA 2-2, 2-3). Basin, complete profile.

79 (PS 601; DA 2-threshold). Closed vessel, rim sherd.

80 (PS 4387; DA 2-3). Tripod cooking pot, leg sherd.

LM I-III, Phyllite Fabrics

81 (PS 4383; DA 2-3). Cooking dish, rim sherd.

82 (PS 4384; DA 2-3). Cooking dish, rim sherd.

83 (PS 3790; DA 2-3). Disk, rim sherd.

84 (PS 4385; DA 2-2 and 2-3). Tripod cooking pot, base sherd with leg.

85 (PS 677; DA 2-3). Conical cup, base sherd.

LM II-III A:1, Fine Fabrics

86 (PS 598; DA 2-2). Bowl, rim sherd.

LM III A:1, Fine Fabrics

87 (PS 679; DA 2-3). Bowl with ledge rim, rim sherd with handle.

88 (PS 4388; DA 2-threshold). Ledge-rimmed cup, rim sherd.

89 (PS 633; DA 2-wall 1). Kylix, stem sherd.

LM III A-B, Fine Fabrics

90 (PS 602; DA 2-threshold). Open vessel, rim sherd.

LM III A:2, Fine Fabrics

91 (PS 676; DA 2-3). Champagne cup, base sherd.

Near Building DA (Figs. 6-7)

The terrace behind the building, on the east, was excavated to confirm that the LM III architecture did not extend in this direction. The excavation showed that the space was an exterior terrace during LM III. The unroofed space yielded a number of pieces of pottery, mostly in small fragments, many of which must have come from Building DA's predecessors. Some of the sherds were catalogued in order to illustrate the range of pottery from this location on the site.

MM II, Fine Fabrics

92 (PS 3998; DA 3-2). Straight-sided cup, base sherd.



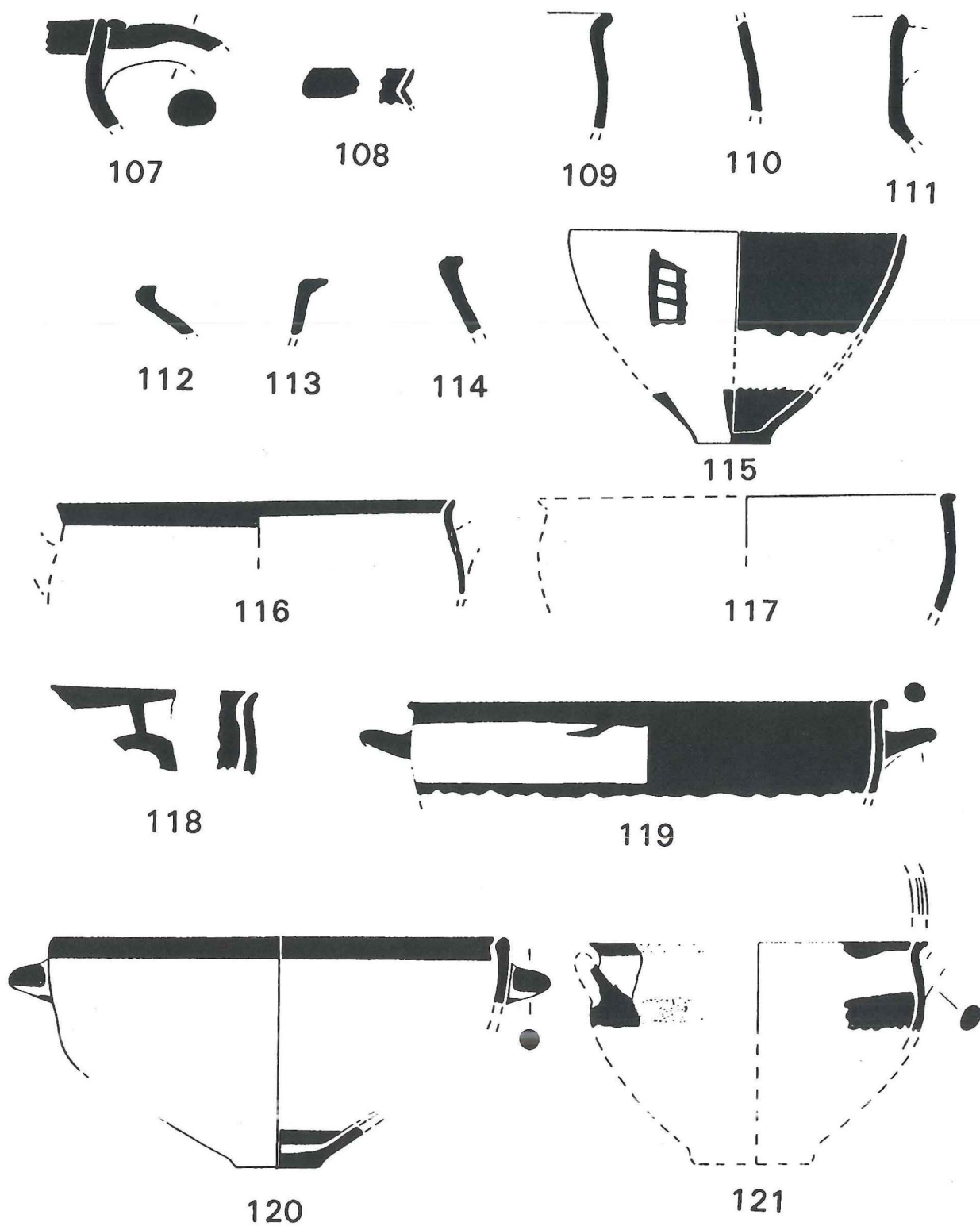


Fig. 7.

MM I-II, Mirabello Fabric, Cooking Class  
93 (PS 4397; DA 3-1). Tripod vessel, leg sherd.

MM II-LM IB, Fine Fabrics  
94 (PS 4389; DA 3-1). Scoop, rim sherd.  
95 (PS 4390; DA 3-1). One-handled cup, rim sherd with handle.  
96 (PS 488; DA 3-3). Kernos cup, handle sherd.

MM II-LM IB, Fine Fabrics  
97 (PS 3800; DA 3-2). Scoop, rim sherd.

MM II-LM IB, Coarse Fabrics  
98 (PS 494; DA 3-2). Miniature tripod cup, rim sherd.  
99 (PS 3799; DA 3-2). Scoop, base sherd.

LM I, Fine Phyllite Fabric  
100 (PS 4398; DA 3-2). Conical cup, rim sherd.

LM I, Phyllite Fabrics  
101 (PS 4392; DA 3-1). Tripod cooking pot, base sherd with leg.  
102 (PS 4396; DA 3-1). Tripod cooking pot, rim sherd with handle.

LM I-III, Phyllite Fabrics  
103 (PS 4393; DA 3-1). Cooking dish, rim sherd.  
104 (PS 4395; DA 3-1). Cooking dish, rim sherd.

LM III, Fine Fabrics  
105 (PS 3994; DA 3-2). Closed vessel, body sherd.  
106 (PS 3995; DA 3-2). Cup, base sherd.  
107 (PS 2511; DA 3-2). Jug, rim sherd with handle.  
108 (PS 3997; DA 3-2). Semiglobular cup, rim sherd.  
109 (PS 4003; DA 3-2). Cup or bowl, rim sherd.  
110 (PS 3996; DA 3-2). Closed vessel, body sherd.

LM III, Phyllite Fabrics  
111 (PS 3999; DA 3-2). Amphora, rim sherd.  
112 (PS 4000; DA 3-2). Cooking pot, rim sherd.  
113 (PS 4001; DA 3-2). Open vessel, rim sherd.  
114 (PS 4002; DA 3-2). Open vessel, rim sherd.

## Block AF, Building AF north

Fragments of LM IIIC pottery were found in the later strata of several rooms in Building AF North in Block AF. The building was a house whose main period of occupation was in LM I. It went out of use in LM IB, and several of the LM IB sherds show signs of burning, hinting at a

violent destruction. A re-occupation in the final days of the Late Bronze Age left only a small amount of pottery. No LM IIIC architecture was associated with this pottery, and perhaps some rooms in the LM I structure were still standing and being occupied. As an alternative, the dwelling associated with this tiny deposit may come from unexcavated LM III occupation nearby. The pottery consisted of only a few sherds, all in small fragments. A selection was cataloged.

LM IIIA-B, Fine Fabrics (Fig. 7)

- 115 (PS 4253; AF 8-3N). Conical cup, rim and base sherds.
- 116 (PS 4367; AF 6-5). Cup or bowl, rim sherd.
- 117 (PS 4363; AF 6-Surface). Cup or bowl, rim sherd.
- 118 (PS 3602; AF 8-2). Cup or bowl, rim sherd.
- 119 (PS 4296; AF 5-1). Deep bowl, rim sherd.
- 120 (PS 4337; AF 9-5). Deep bowl, rim and base sherds.
- 121 (PS 3603; AF 8-2). Deep bowl, rim sherd.

## Pseira Island in General

The surface survey of Pseira Island discovered several LM III sherds, indicating that the island had limited use at that time. No extensive farming seems to have taken place during LM III (as had been the case during earlier periods). Most of the evidence of LM III activity comes from near one of the LM I dams (at Site M 9), which seems to have still held water at this time, and from the Cove of Megali Ammos.

Megali Ammos is a small beach northeast of the main LM I town on Pseira Island. It preserves traces of a few houses from several prehistoric and historic periods. The site consists of a small beach with flat and relatively fertile land behind it, and sherds from LM III indicate that habitation may have existed at this location during LM IIIA-B, but no specific architecture could be definitely associated with this period. The area has been investigated only by surface survey and trial trenches.

A selection of the LM III sherds from the survey of Pseira Island is presented here. Among the important sherds are no. PS 3322, an import from central Crete, and nos. PS 3163 and 3216, which provide stylistic links between the pottery in Building DA and the pottery at Dam no. M 9.

LM IIIA-B, Fine Fabrics (Fig. 8)

- 122 (PS 3322; Megali Ammos, Site H 4, Surface). Cup, body sherd.
- 123 (PS 3813; Site G 2-South of Terrace, Surface). Bowl, base sherd.

LM IIIA-B, Coarse Fabrics

- 124 (PS 3320; Megali Ammos, Site H 4, Surface). Closed vessel, base sherd.

LM IIIA-B, Phyllite Fabrics

- 125 (PS 3163; Dam at Site M 9; M 9-10-3). Oval-mouthed amphora, rim sherd.



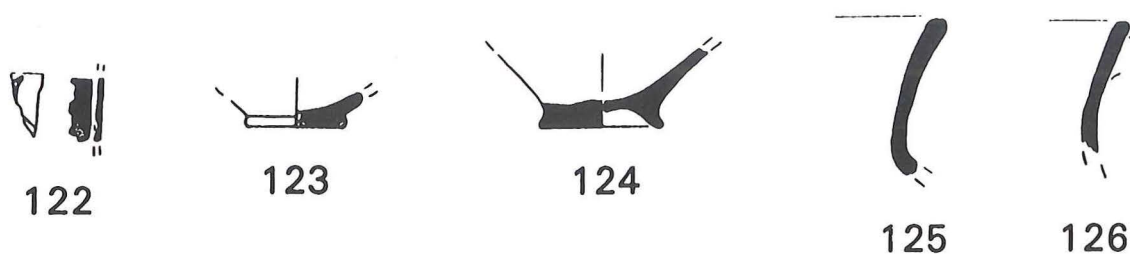


Fig. 8.

**126** (PS 3216; Dam at Site M 9; M 9-10-3). Oval-mouthed amphora, rim sherd.

## Discussion

The pottery from Pseira is all likely to have been imported into the island because the location has no clay source, little water, and probably limited fuel resources. For this reason, the conclusions on the LM III pottery have regional rather than local significance.

Late Minoan III pottery from the site was known before the modern excavations,<sup>3</sup> although Richard Seager did not recognize the period at the time of his early work. The study of LM III pottery was still in its infancy in 1907, and perhaps Seager found only a little of the pottery at Pseira or the stratigraphy was ambiguous, as in Building AF North.

The surviving evidence provides useful information on the LM III pottery at Pseira, although the ceramics is mostly in sherd form. The picture is most complete for late LM IIIA to early LM IIIB, the period represented by the bulk of the pottery from Building DA. Although the destruction of the settlement dates to LM IB, a few sherds from LM IIIA:1 indicate that the island was already re-inhabited by this period (28-30). We know little of the pottery in use at this time, however, and no LM II ceramics has been definitively recognized yet from the site.

## The Late LM IIIA to Early LM IIIB Pottery

### Cups and Bowls

The ogival cup (3-4) is in use at Pseira in the LM IIIA/B period. Other small open vessels in fine fabrics include the deep cup with one handle (31-32), the deep bowl (33), the shallow bowl (1), the champagne cup (2, 91), and the kylix (36-37, 89). The champagne cups include both the early type (no. 91) and the type that has been placed in LM IIIB.<sup>4</sup>

### Jugs

The jug with a small spout (5) is used for serving and pouring functions, along with other spouted vessels (108).

<sup>3</sup>Betancourt 1983; many additional LM III sherds from Seager's excavations are in the Herakleion Museum.

### Other Shapes in Fine Fabrics

A sherd of a pyxis or straight-sided alabastron (41) suggests the need for an occasional specialized vessel.

### Transport and Storage Vessels

The oval-mouthed amphora appears to be a common transport vessel in Crete at this time (17-18, 107). It is joined at Pseira by the stirrup jar (38, 70), miscellaneous jars of several types (16, 61) and pithoi (60).

### Cooking Shapes

Several shapes in the fabrics commonly used for cooking have been recognized from LM III Pseira.<sup>5</sup> The deep pot, always with tripod legs, is probably the most common vessel for cooking (46-49, 84, 113). Disks were probably used as lids (50, 83). The cooking tray, a more shallow vessel with tripod legs, also seems to be present (45). The cooking dish (20-27, 71, 81-82) is a shape with a thin-walled body and a thickened rim; it is common all over Crete from EM until LM IIIC.

### Other Shapes in Phyllite Fabrics and other Coarse Fabrics

The bowl (15) and the basin (53-55, 78) were large open shapes. The brazier (58) was a conical bowl with one side pushed in by the handle.<sup>6</sup>

## Imports

Several vessels which are not from the immediate vicinity can be recognized. One example is a cup in a central Cretan fabric (122). Another example, a stirrup jar (44), belongs to a class of vessel with white bands on a dark, often red, clay background. This class of stirrup jar with light slip applied directly on the dark surface of the clay is known from LM IIIA:2<sup>7</sup> until LH IIIB:1<sup>8</sup>. A close dating of this example from Pseira is not possible because of the poor preservation. The place of manufacture for this class of vessel is not known, but analyses suggest western Crete.<sup>9</sup>

Imports from overseas also exist. A sherd from a closed vessel containing abundant mica in its fabric might be from the Cyclades (62). Two sherds with pale colored slips are probably from Cyprus (63-64). Canaanite transport amphoras are recognizable by their distinctive clay fabrics (65-66), although the preservation is too poor for more accurate identification of the exact shape.

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<sup>4</sup>no. 2; see Popham 1964, fig. 1c.

<sup>5</sup>For a review of the evidence for this function see Betancourt 1980.

<sup>6</sup>For the shape see Betancourt 1985, 161, fig. 117.

<sup>7</sup>Popham 1970, pl. 41C.

<sup>8</sup>Haskell 1981, fig. 4a-c.

<sup>9</sup>Catling et al. 1980. Parallels include Popham 1970, pl. 41c (Knossos); Warren 1982-83, fig. 39 (Knossos); Kommos field no. C 7987 (Kommos, House X); Haskell 1981, figs. 1b, 2a, 4a-c (Mycenae, Cretan imports); Catling 1984-85, 31, fig. 42 (Gla, Cretan import).

In conclusion, the pottery from LM IIIA-B Pseira indicates a permanent or semi-permanent habitation, but limited in size. Most of the ceramic vessels are from the immediate region. The range of shapes suggests a full complement of the pottery required by a small household, but very little in the way of rare or specialized pieces. One is struck by the small range of shapes and decorations in contrast with most central Cretan sites (and also in sharp contrast with the fine LM III pottery from nearby Mokhlos). Imports indicate the residents were in contact with more distant parts of the Mycenaean world, but pottery seems to have been imported from afar mostly as containers for other commodities, not as aesthetic objects. Regional productions provide most of the ceramic needs.

The LM IIIA to IIIB residents of Pseira lived in Building DA and presumably other buildings as well. They did little farming, though they may have kept animals on the island. They used the water that still collected behind one of the LM I dams in the spring. They received goods that came from distant ports as well as closer ones, but they had no need for fancy pottery. Their building was destroyed in LM IIIB.

### The LM IIIC Pottery

The re-occupation pottery in Building AF North is later than the assemblage from Building DA. It is a small and incomplete unit with several examples of the two-handled deep bowl and its variations. Interiors are painted solid (119), painted with bands (120-121), or left plain (117). Few decorations survive. The assemblage is apparently from the closing years of the Bronze Age, from LM IIIC. It represents a very limited occupation, presumably by very few people for a short time.



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# Response and discussion

**Warren:** There is very little I would like to say as the respondent. I do prefer the word “respondent” to the earlier word “opponent”. Just a couple of questions. How firm is the date for each of the two little groups shown? Regarding the bowl with the horizontal handle and the champagne cup in the first deposit, how firm can we be in really calling that IIIB? Might it be IIIA:2? Kanta may like to comment. Secondly, the last group of material from AF on the tip of the peninsula: how firm can we really be in calling that IIIC? What is it about the last few sherds we were shown that places them distinctively in that period rather than, say, IIIB? One of the very difficult problems is making clear our definitions between late IIIB and IIIC in the various presentations we will hear. I am sorry it is a miserable response to the paper. It seems to me that those are two questions we could examine a little.

**Betancourt:** For the earlier group of material I think that there is no doubt that the house was built in IIIA – we have the ledge-rimmed cup as fairly distinctive for this period. The question then revolves around the date of this group of five vases which are burnt and represent the final date of the house. The most definitive vase for the date is probably the kylix. In Popham’s chronological development it would be a IIIB type. The jug also has parallels – I do not believe it appears in this form before IIIB, but it does go on a little later into IIIC. On balance, I would be pretty safe in assuming it is a LM IIIB destruction. For the later group of material, I am relying on Coulson, who saw it in person, and who has, in fact, said that it is not only IIIC but probably not early in IIIC – middle or late. Certainly the best parallels I have been able to find for it come from the site of Kastri near Palaikastro and from Karphi. Maybe people here can add to the parallels.

**Coulson:** You showed me the deep bowls. The handle zone did seem to have been left absolutely bare in many cases, a reserved handle zone is a good indication of lateness. To tell you the truth, we do not have very many comparisons for your material on the Kastro.

**Mook:** We do not have very good parallels for most of what you showed. There was one bowl on the left, no 115, which was very thin-walled and looked very globular, which looked to me, in terms of its shape, closer to our very latest phase, transitional IIIC into beginning of PG, the very end of IIIC on the Kastro. The shapes are certainly different at Pseira. No 115 is something we have absolutely no parallels for in our material.

**Kanta:** My opinion of the other group is that it might be a bit earlier – the jug looked later typologically. It seemed to me that the two conical cups with the very round profile – B. Hallager should know better because she has recently been doing work on that kind of material – are rather earlier in form. Also the fact that they were painted is very common in IIIA and IIIA:2. The champagne glass/cups are very difficult to date, but they seemed to fall within Hallager’s wider-based ones – she should be able to give a better answer. Regarding the IIIC material, I think that there are parallels. I was recently looking again at the Kastelli 66 material and I think that there are similarities there, so I would not hesitate to place the later Pseira group in IIIC.

**B. Hallager:** I am absolutely convinced that it is IIIB, not only because of the cylinder-necked jug, which does not look like this before, but also because of the type of the plain bowls which



are very common in the IIIB:1 floor deposits. Concerning the conical cups: they are all over, unfortunately. They are not good chronological indicators.

**Betancourt:** Has anyone seen any parallels for no 115 with its ladder motif? We have at least two, and possibly three, examples of a deep conical cup with slightly convex profile and probably with one vertical handle.

**Kanta:** Kastelli 66 has something like that. I can show it to you later.

**MacGillivray:** Could I comment on your earlier groups, taking on from what Kanta was saying, that is, that when Betancourt projected these things they all looked terribly familiar. They belong to a period that in the new British excavation at PK we call Period XV. But we avoid the issue whether it dates to IIIA:2 or IIIB. I was quite happy to see with the little champagne cup that our Period XV could actually go into early IIIB. But the other forms you showed, the skyphos, is absolutely standard, it looks like it was made in Palaikastro. I share your disparaging remarks about the quality of the clay. What we call our monochrome LM III rounded cup or rounded bowl, for some reason you people call a conical cup. There are conical cups in that period still that really are conical, as opposed to the rounded conical cups. Do you people call those rounded bowls conical cups? This is a little worrying because that form is absolutely typical for our LM III periods at PK, but there is another form which is a conical cup as well. The first ones are IIIA but they have a tooled rim, and that is our IIIA:2 to B, but in order not to involve ourselves in that, it is our Period XV on the site. It does carry on into Period XVI. We do not have any champagne cups whatsoever. You have to ask Tsipopoulou about that because she forms the bridge.

**Tsipopoulou:** At Petras there is very little early IIIB material, but a burnt floor deposit in the LM III 'West House' reoccupation in the palatial building (of which I will speak in my paper) has produced a champagne cup or goblet very similar to that of Pseira. We also have semiglobular cups (rounded cup/bowl in Pseiran terminology) as opposed to the rarer conical cups – a continuation of the Neopalatial conical cup (skoutelia). A similar champagne cup was among the old material from the Akhladia tholos tomb (cf. Tsipopoulou and Vagnetti in press). As for the bridge: all our semiglobular cups are imported from Palaikastro – as is most of the fine ware in LM III at Petras.

**Macdonald:** Just one tiny comment because it is something I am hoping over the next three days might come out: people are already starting to use the phrase "IIIB:1" again and again. Will people from different ends of the island please define what they mean with "IIIB:1" and "IIIB:2". Unless Warren is going to define them at Knossos we do not have this distinction there. As it is, we are totally at sea.

**Rethemiotakis:** Regarding the fragment with the white band which you say is imported: it may come from the Pediada area where this reddish clay is used in abundance. Also at Malia. So you may have some kind of trade with these areas.

**Kanta:** The white band is a Western Cretan characteristic. We have it at Kastelli 66 not only in IIIB but also in IIIC levels. Also at Samonas and at Rhethymnon. Whether it is West Cretan or Pediada, it is difficult to say not having actually seen the sherd itself. Maybe Rethemiotakis has a lot of that stuff. I thought the IIIB-C white painted style was a West Cretan characteristic.



**Rethemiotakis:** We have quite a lot of such material from Pediada. I will illustrate it in my paper. It is dated mainly in IIIC. I do not think it is only a West Cretan characteristic.

**Prokopiou:** The use of the white paint is also present in IIIC material from Sybritos.

**Watrous:** A couple of small comments on Betancourt's paper. Regarding the stirrup jar or amphora: there is one at Kommos in a IIIB context, and it is pretty certainly from Khania. It is from a larger class of fabrics we think are from Khania. He mentioned what a contrast Pseira was in LM III to Mokhlos. In fact, that may be a little bit misleading because what we have seen so far is the tomb material, and many of the vases there are imported, either from Khania, or from Knossos. If you look at the LM III pottery from the settlement on Mokhlos: they are mostly undecorated and in a soft fabric. Equivalent lots from Kommos are usually full of decorated cups, kylikes, etc. which appears to be missing at Mokhlos. The poverty of LM III ceramics in Eastern Crete is real, and it has some sort of historical meaning, I think.

**Rethemiotakis:** We have many tomb groups in Eastern Crete which have yielded a very rich material. I do not think it is accidental. Perhaps we have not excavated so much, or we have not found material in settlements which can be compared with the richness of the material from tombs. By rich – I mean in the pottery decoration.

**Tsipopoulou:** There was some local pottery production in the Mokhlos-Myrsini-Tourloti area, which is one of the two major LM III centres of Eastern Crete that I can identify, the other being Palaikastro. The LM III chamber tomb cemetery on the mainland at Mokhlos, currently under excavation, has produced interesting vases – mostly of local manufacture – with fine decoration. The finds have yet to be published, but as far as I can tell, imports from the Kydonia workshop are absent, an unusual situation given the number of such vases from other Eastern Cretan sites – for example in the assemblage collected by N. Platon at Kritsa, confirmed by my excavation of a further chamber tomb in the immediate vicinity (the publication of the latter will include the material from the four IIIA-C and IIIC-PG tombs investigated by Platon) – unless it is due to most of the material being IIIA in date. It may also be mentioned that a rescue excavation in 1986 of a chamber tomb at Tourloti-Plakalona brought to light IIIB and early C imports from West Crete and the Peloponnese, respectively (on display in the Siteia Museum). As far as Central Cretan imports are concerned, I do not feel competent enough to provide certain identifications.

**Betancourt:** One of the striking contrasts between the settlement material at Mokhlos and the settlement material at Pseira is the range of shapes. Pseira has very few shapes. One will find a much larger assortment from the settlement at Mokhlos – leaving aside the quality of the fabrics and the quality of the decorations and the quality of the ceramics as a whole.

**Hood:** You have obviously looked for tombs at Pseira and have evidently found no traces of them. Is there any possibility that they buried on the mainland in order to save what land there was for cultivation or grazing?

**Betancourt:** Yes, in fact, we do not have a LM I cemetery on Pseira, either. What we have is a cemetery which goes out of use in MM IIB, and then both the LM I habitation, which is the high point of the population on the island, and the people of LM III must be buried some place else, because we have done a very intensive survey of the island, and unless there are

burials in a beach which is now under water, and hence inaccessible since the sea level has risen since Antiquity, they must be buried on the mainland.

**Watrous:**

A comment on richness. I am not talking about richness of decoration alone. I know for a fact that in the Isthmus of Ierapetra the LM I countryside is covered with sites, they are almost absent in the LM IIIA/B period. This has nothing to do with pottery decoration. The fact is that there is a tremendous drop in the local population in LM III. I can not prove it but I am willing to bet that if we were to make a chart and compare period by period, any site or series of sites in Central Crete with what we know about East Crete, that we would find that there were decorations and shapes missing in East Crete at different periods in LM III. In other words, we are dealing with a limited ceramic repertoire in East Crete.

**MacGillivray:**

Carrying on from what Watrous was saying, can this difference not be seen as something cultural as well? In other words, we are looking at very different kinds of populations in Eastern Crete. For instance, you are all sitting here discussing Hallager's kylix typology. Well, kylikes are not made in East Crete. Whatever we find, and Tsipopoulou just reminded me that whatever she is finding at Petras, are certainly imports, and they form less than 0.001 percent of the ceramic assemblage in LM III deposits at PK. I can probably hold all the kylix sherds in one hand, and they are all of other fabrics. In other words, there is a different class of drinking vessel being used by people in Eastern Crete at this time. And it is not only drinking vessels, but there are other forms, as well, which are going to affect how you perceive what is going on in different parts of the island. I think the difference is more cultural than anything that can be studied in terms of art history and typological change. That difference is already there in LM IB, in fact.

**Warren:**

Can I just check with the last two speakers whether this position of apparent diminution of population in LM III applies also to IIIC, because I have the impression that there is plenty going on in East Crete in IIIC. One of the things I shall briefly draw attention to tomorrow is that the IIIC material from the Knossos Stratigraphical Museum Excavations, for example, is very similar to the material from Sybritos. It is extremely similar shape by shape. I have the impression that something really big and new and different is happening in IIIC, all over the island (though I am eager to know more about the Khania area in that period). I wonder whether you think this sort of diminution you just spoke about for IIIA-IIIB in relation to Betancourt's material is also true for IIIC. I have the impression that in IIIC in East Crete, also, there is plenty going on. We obviously will learn more from the Kavousi sites, but will that diminution argument apply to the twelfth century, to the final period?

**MacGillivray:**

In terms of regional survey, Krystof Nowicki is finding IIIC sites. Above PK there is the Plakalona site, a huge site that James Whitley found years ago that is IIIC. There is a large population in IIIC. Mervyn Popham suggested years ago that this was a new population from the Greek mainland living in Eastern Crete.

**Coulson:**

Donald Haggis' survey of the Kavousi area has shown that in IIIB there is a diminution of sites, and in IIIC, all of a sudden, there are large new inland settlements. The people move inland, up into the mountains, where there is water and terraces. Nowicki would say it is primarily for defence, against pirates, but I think there is also a shift in the agricultural base.

**Tsipopoulou:**

I can speak for the Siteia Bay area, where there is not a single tomb or cemetery that con-



tinues from IIIB to IIIC. This is important. In other areas such as Mokhlos-Tourloti-Myrsini there is continuity.

**Prokopiou:** In Sybritos, actually, I have the impression – I am not certain because the excavation is going on – that the site begins in early IIIC, without previous occupation. A strong Mycenaean component is also evident in the pottery.

**Watrous:** To answer Warren's question. In the Isthmus of Ierapetra, a big change takes place in LM IIIC. If you start at the north end of the Isthmus Kavousi and Vronda are LM IIIC sites as well as Katalimmata and Khalasmenos. Further south, in the Episkopi valley there are both large and small sites. At Profitis Ilias there is a site which is five hectares in size, covered with LM IIIC pottery. So on the eastern side of the main road the whole valley is lined with large LM IIIC sites that are up in the hills. Furthermore, there are signs of IIIC down in valley as well. They are not large sites, but one can pick up two or three sherds – usually they are pithos sherds – in the fields. And there is the tomb that Tsipopoulou excavated down by the cross-road at Vasiliki. So definitely there is a change taking place in IIIC. In the Isthmus the very few LM IIIA/B sites are replaced by more and larger settlements in LM IIIC.

**Vlasaki:** Concerning the plentitude of LM IIIC pottery in West Central Crete: it is very clear at Khamalevri, for example, where we have habitation from Early Minoan times, but just in IIIC this habitation is more widespread.

**Gesell:** I would just be interested in how you bring something from Mycenae at this time. There is one thing to think about, and that is that the religion seems to be the same. We do have our sanctuary at Vronda with the same type of material that you find over at Gournia in IIIB. You need to keep this in mind.

**Betancourt:** It is also important to remember that many of the pottery shapes have some continuity between IIIB and IIIC as well. What we are probably looking at is an extremely complicated situation. If new people do come in, they are in some manner interfacing with the local population in a peaceful enough way to have a transition that has made their presence rather difficult to determine in the past. I also want to at least mention that if this conference goes down in history as recognizing the arrival of the Dorians for the first time, it is going to be a very important conference.

**Vlasaki:** Peaceful arrival!





# LM IIIB and LM IIIC Pottery Phases Some Problems of Definition

*Athanasia Kanta*

There are two main problematic areas in LM III pottery. The first involves the subdivision of LM IIIB into LM IIIB:1 and LM IIIB:2. The second concerns the subdivision of LM IIIC into phases and especially the coordination of such phases with the corresponding ones from LH IIIC.

In recent years the terms LM IIIB:1 and LM IIIB:2 have been used progressively more to define LM IIIB material chronologically. This terminology brings Crete into line with the mainland subdivisions of LH IIIB:1 and LH IIIB:2. Unfortunately, in Crete, unlike the mainland, we lack the foundation studies which exist there and define these phases more or less well.

Fourteen years ago, when my book "The Late Minoan III Period in Crete. A survey of sites, pottery and their distribution" was published, I tried to see if a distinction of LM IIIB into IIIB:1 and IIIB:2 was viable. There was no evidence for such a division all over the island then. The most one could do was a distinction of LM IIIB into an Early and a Late phase. Most of the material, however, was just LM IIIB. The difference between the two systems is that Early and Late are deliberately vague while IIIB:1 and IIIB:2 are rigid and presumably well defined.

Our knowledge of LM IIIB has progressed considerably in these fourteen years. Nevertheless, in the various publications where the term has been used there was no adequate clarification as to the detailed evidence on which this division was based, so that other scholars could evaluate it and use it, or reject it accordingly. Such use is methodologically wrong. The proof must come first and the assertion second.

It must be stressed here that a division of LM IIIB into IIIB:1 and IIIB:2 is not necessarily wrong. However, it must be proven first. Before new elements are introduced into the existing chronology they must not have a questionable basis but have to be well proven and thought off. An example of what happens when this principle is not followed is the well-known case of the terminology of the Protopalatial period, the definition of what was MM IIB and what was MM IIIA and during which phase the destruction of the first palaces took place. A return to the established terminology has set matters right in the case of Protopalatial Crete. To examine whether such a division of IIIB is possible and valid all over the island we have to depend only on published settlement material and not e.g. on material from tombs.

Since Cretan chronology is based to a great extent on Knossos, we should comment first on Knossian material. A settlement site which has been published meticulously and in detail is the Unexplored Mansion.

The LM IIIB pottery from this site has not been divided into LM IIIB:1 and LM IIIB:2. Such a distinction was not possible stratigraphically, neither was it attempted, obviously because it was not warranted by the material itself.<sup>1</sup>

The more recent relevant published settlement material, that of Kommos, does not help very much in the definition of LM IIIB:1 and LM IIIB:2. Most of the LM IIIB deposits at Kommos are held to "span LM IIIB:1 and the beginning of LM IIIB:2" and for this reason the LM IIIB "is considered as one period" in the publication.<sup>2</sup> It seems that at Kommos LM IIIB:1 and LM IIIB:2 do not correspond to separate architectural phases, destructions or abandonments and no dividing point between the periods has been pinpointed. Nevertheless, the existence of LM IIIB:1 and LM IIIB:2 is taken for granted in the publication.

The difference is typological. The picture of Late IIIB pottery or "IIIB:2" as it is called, which is given in the published material of this site<sup>3</sup> is the normal one for the period. It should be considered, however, whether such typological progress in the material constitutes a proper well defined subdivision valid right through the island. The answer based on the Kommos material must be negative.

The other excavated site which has extensive remains of the period is Kastelli Khania. As the Greek-Swedish excavations have not been published yet, the comments made here refer to preliminary reports and to Kastelli 1966, trench B which remains the only other extensively published stratified site.

The term IIIB:1 and IIIB:2 has been used in the preliminary reports for this site.<sup>4</sup> However, as no proper ground for such a division has been laid down as yet we must consider it in need of proof.

The IIIB pottery of Kastelli 1966 consists of material which does not belong to the initial phases of this period. It does not help us therefore, in our quest. Warren and Hankey in their excellent book on chronology when they examine relative chronology for LM IIIB, they consider the various groups of material and report on the use of IIIB:1 and IIIB:2, although they do not expand on the problem one way or another. On balance, they seem to prefer an Early-Late division.<sup>5</sup>

The published evidence, then, as it stands at the moment, does not indicate a division of LM IIIB into IIIB:1 and IIIB:2. The use of the term at present seems deceptive and inadequate.

The LM IIIC is the other area where our knowledge is defective. While the LH IIIC on the mainland has been divided into several phases such

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<sup>1</sup>Popham 1984, 184, 185.

<sup>2</sup>Watrous 1992, 138, 145.

<sup>3</sup>Watrous 1992, 138-146.

<sup>4</sup>e.g. Hallager & Tzedakis 1986, 19-22.

<sup>5</sup>Warren & Hankey 1989, 89-90.



a division has not been attempted in Crete because of a lack of published stratified settlement evidence where LM IIIB is succeeded by several layers of LM IIIC.

Of course a division of LM IIIC into an earlier and a later phase is obvious from the Cretan material in general and has been used for some time. On the division of IIIC into phases Warren and Hankey comment on the lack of stratification, correlation with mainland phases and the fact that we know the later IIIC better than the earlier.<sup>6</sup>

An important problem is what the very beginning of IIIC consists of and where the dividing line between IIIB and IIIC falls. To elucidate these problems we have to turn once more to Kastelli 1966. For this reason I have made a new study of the material recently. The results of this new study and re-evaluation are presented here.

Kastelli 1966, trench B, contains stratified LM IIIB material under LM IIIC. The series of successive levels found in trench B represent an outdoor accumulation of material which took place over a reasonable but not excessive amount of time. No architectural remains were discovered. The relevant buildings were in trench A which has not been published yet.

The study of trench A has progressed considerably and will be published in the future with other relevant material by Yannis Tzedakis and Athanasia Kanta.

In trench B there were 15 levels in all. Of these, levels 1 and 2 were disturbed with later rubble and contained charcoal and traces of mudbrick from the superstructure of the LM III building in trench A. There was a deep well which started in level 2 and will not concern us here. Level 3 also had some traces of burning. Level 4 was a IIIC wall from trench A, just projecting into trench B and visible in the section.<sup>7</sup> Level 5 also had traces of burning, remnants of mudbrick and fallen stones but no trace of a wall or floor. Levels 6 and 8 comprised a reddish-brown layer with stones and charcoal. In level 8 was an open-air hearth with a beaten earth base, stones and ash. Level 7 was a localized feature of sandy soil like a pit not appearing in the section. Level 9 had a yellowish green soil with a considerable amount of pottery. Level 10 consisted of a hard soil containing a lot of stones and level 11 had a yellowish-grey soil and contained pottery, a deposit of kylix sherds, stones and ash. Levels 10 and 11 comprised one unit. Levels 12, 13 and 14 had a reddish soil and start containing earlier sherds. Level 15 above the bedrock had a few earlier sherds among which were some of Early Minoan date.

In its west and south sides where the IIIC wall projected into trench B, it was obvious that levels 1, 3 and 5 were well above the IIIC wall. Level 6 which was excavated separately although it was part of the same natural layer as 8, was well above the beginning of the IIIC wall. Level 8 which contained an open-air hearth covered the top and first row of stones of the IIIC wall. Level 9 finished with the bottom of the wall. Levels 10 and

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<sup>6</sup>Warren & Hankey 1989, 90-92.

<sup>7</sup>Tzedakis & Kanta 1978, fig. 1.

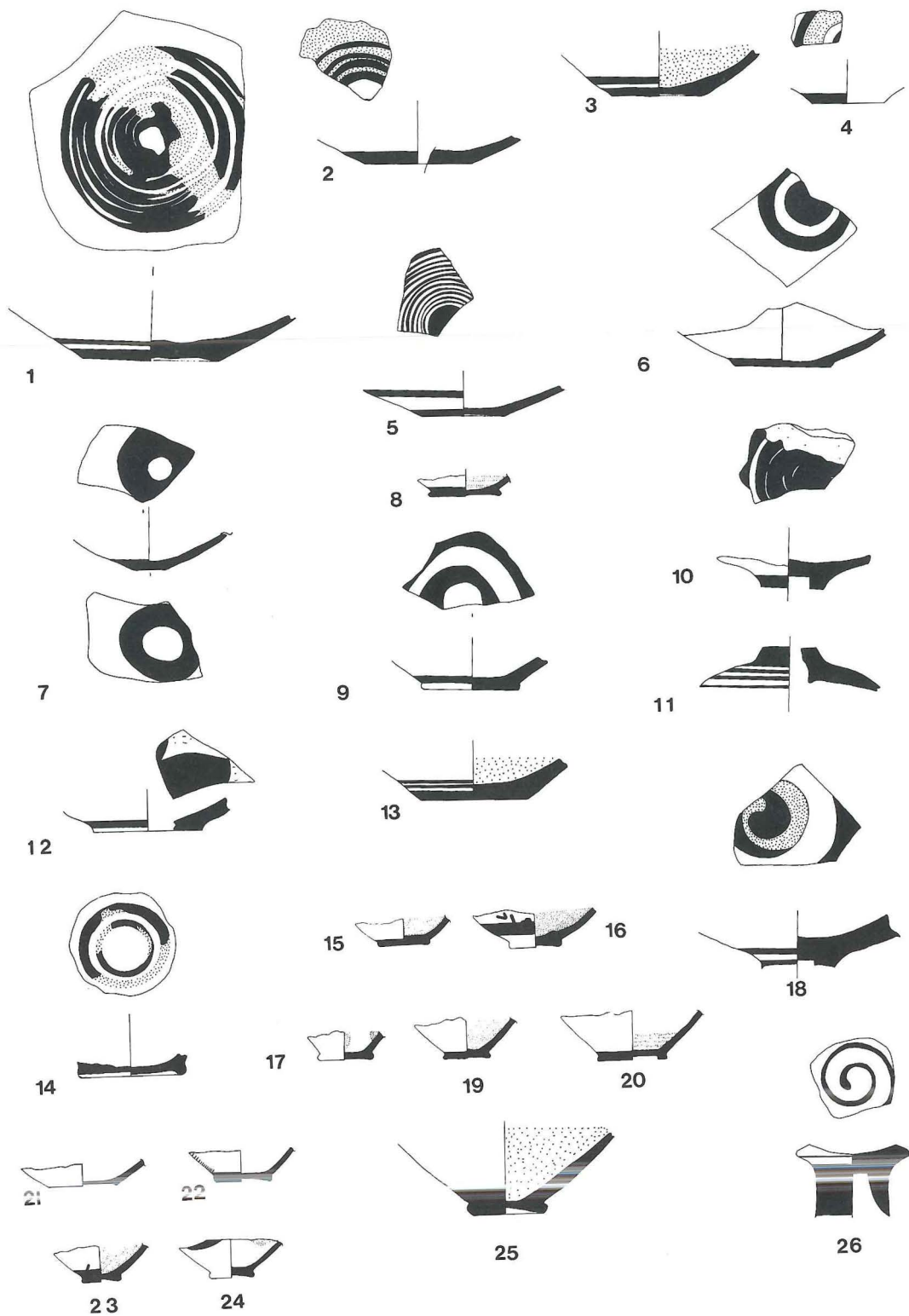


Fig. 1.

11 were clearly below the IIIC wall. The same is true for the remaining levels 12 to 15.<sup>8</sup>

Therefore, we can distinguish the following groups of levels:

A. Levels 1, 3, 5 which are later than the IIIC wall.

B. Levels 6 and 8, which are either later or contemporary with the IIIC wall.

C. Level 9 goes down to the foundation of the IIIC wall and could be contemporary with its construction.

D. Levels 10 and 11, which although they have been excavated separately, stratigraphically are part of the same natural layer. They are earlier than the IIIC wall since they are below it.

E. The same is valid for levels 12 to 15, which contain, apart from the LM III material, sherds from earlier periods.

Unfortunately, as trench A remains unpublished, we cannot define the exact stage of LM IIIC to which the IIIC wall belongs. However, the IIIC material found in trench B shows that its date cannot be very late in the period.

The published LM IIIB material from trench B indicates that its date should be placed at a late stage within this period. It seems, then, that trench B contains pottery of late LM IIIB, LM IIIB/C transitional and LM IIIC date. A re-examination of the characteristic trait of this pottery will help us to establish the elements of transition and initial appearance of IIIC. Only the traits relevant to this re-evaluation will be discussed here. The rest can be found in Tzedakis & Kanta 1978. Certain inferences can be drawn about the relation of this material with the corresponding faces of LH IIIB and C, so that there is an initial coordination with Mycenaean pottery. Among the material of trench B, deep bowls and cups, kylikes and imported Mycenaean, as well as Mycenaeanizing sherds have been chosen as specially significant to this re-evaluation (Fig. 1-3).

The deep bowl and the cup (Fig. 1) are the most popular shapes of the period. Because their forms are diagnostic and well dated, the changes they show can be referred to specific stages in the IIIB and C pottery sequence. It is not obvious, because of their fragmentary state, which belong to deep bowls and which to cups. A criterion of size which considers that the smaller bases and rims belong to cups and the larger to deep bowls,<sup>9</sup> does not always apply. As it is obvious in Fig. 2:10 quite small deep bowls do exist. However, for our purposes it does not matter greatly because the bases of both shapes develop along the same lines.

In levels 11 and 10 bases vary from flat to very slightly hollowed under so as to appear flat (flat Fig. 1:2,7. Hollowed under Fig. 1:1,3,5). The ring base Fig. 1:5, has strong Mycenaean features and will be discussed below.

There are flat bases in level 10 as well as others which are slightly hollowed under<sup>10</sup>. The waisted base exists in both levels 11 and 10. Fig. 1:6

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<sup>8</sup>Tzedakis & Kanta 1978, fig 1.

<sup>9</sup>cf. Kommos, Watrous 1992, 140.

<sup>10</sup>Tzedakis & Kanta 1978, fig 9:1,2; fig 9:3.



shows a slightly waisted example. Level 10 produced a well defined waisted base which, however, belonged to a closed vase.<sup>11</sup> Level 9 had a waisted base very slightly hollowed under (Fig. 1:8). From level 9 onwards the waisted bases become well articulated.

Level 8 produced both flat and waisted bases (flat Fig. 1:13 and waisted 9,12). A ring base, Fig. 1:14 is either imported Mycenaean or Mycenaeanizing.

Level 6 produced a Mycenaean type ring base (Fig. 1:20). By level 5 the bases start becoming more narrow. But there also are wider examples.

The waisted bases of level 5 on the outside look almost like the Mycenaean ring base but underneath are flat or slightly hollow (Fig. 1:15,16).

A slightly hollowed base still lingers in a closed vase of level 3 (Fig. 1:21), while well defined waisted bases are now the norm in closed and open shapes (closed Fig. 1:21,22; open 17,19,20). The waisted bases of level 3 are now hollowed under (Fig. 1:19,22). This feature continues and intensifies in level 1 (Fig. 1:23,25).

The interior of the open vases from these levels vary from the monochrome inside (Fig. 1:3) to concentric rings around the base.

Level 11 (Fig. 1:1), had several rather badly drawn concentric circles around the base. Fig. 1:2 had a reserved circle but within the thin paint concentric rings were clearly visible with thicker paint. Perhaps this particular vase started with an interior which had concentric rings and ended up as monochrome inside. Concentric rings appear also on Fig. 1:6. The small cup base Fig. 1:7 had a thick band inside.

Level 10 had bases monochrome inside and with concentric rings.<sup>12</sup>

The concentric rings continue in level 9 (Fig. 1:8) and in level 8 (Fig. 1:9,12,14). Level 8 had open bases monochrome inside, (Fig. 1:13) and so did level 5 (Fig. 1:15,16).

Level 3 contained bases monochrome inside and with blobs (Fig. 1:17,19). Both these traits are also found in level 1 (Fig. 1:23,24,25).

More than one band around the base outside exist in bases of level 11 (Fig. 1:1,3,5) and 8 (Fig. 1:13).

Levels 11, 10 and 9 contained bases from stemmed bowls (Fig. 1:10,11,18,26).<sup>13</sup> This shape indicates strong Mycenaean influence and will be discussed below.

Comparable bases exist in other well dated Cretan deposits. Not many LM IIIB bowl and cup bases have been drawn from the LM IIIB levels of Kommos. They seem to be flat, slightly hollowed under, or slightly waisted.<sup>14</sup> The deep bowls with a well articulated, hollowed under base no 1920-1922<sup>15</sup> are LM IIIC in date. They are comparable to the Kastelli ba-

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<sup>11</sup>Tzedakis & Kanta 1978, fig. 23:3.

<sup>12</sup>Tzedakis & Kanta 1978, fig. 9:1-3.

<sup>13</sup>Tzedakis & Kanta 1978, fig. 7.

<sup>14</sup>Watrous 1992, figs. 44, 45, 52, 55, 84.

<sup>15</sup>Watrous 1992, fig. 68.

ses of level 1, although the Kommos vases have a slightly more pronounced conical form.

The illustrated LM IIIB bases from the Unexplored Mansion are also few. One is flat.<sup>16</sup> The cup base in pl. 180:2 is waisted, slightly hollowed under and well articulated. Both these types of base are found in levels 11 and 8.

The published bases from Palaikastro-Kastri are comparable to those from Kastelli level 5 and level 3.<sup>17</sup>

The bases from Karphi look on the whole later than those of Kastelli. They tend to be narrower, of a more conical form and pronouncedly concave underneath.<sup>18</sup>

A comparable picture is presented by the rims of these levels, a selection of which appears on fig.2. The interiors are either monochrome or with bands around the rim. The reserved band makes its first appearance in level 6<sup>19</sup> but by a single sherd which is probably intrusive. A characteristic of the decoration is the existence of the panelled pattern right through the levels (level 11, Fig. 2:3-5; level 8, Fig. 2:13; level 5, Fig. 2:21; level 3, Fig. 2:23,25).

The time span of the pottery from all these levels is not very great. The point is illustrated well if we compare the zig-zag lines decorating sherds from levels 11, 8 and 3 (Fig. 2:2,10,16,22).

Level 11 also contained spirals, Minoan flowers and lozenges either in a lozenge and loop chain or in a non joining row filled with lines or chevrons.<sup>20</sup> The shapes were either open or closed. The same impression is created by the material of levels 10 and 9.<sup>21</sup> A Khania ware krater sherd from level 9 presents a feature which will be elaborated further from LH IIIC onwards. It is a body sherd which preserves a double handle ending in an elongated stub, a herald of the later bull protomes on LH IIIC kraters.<sup>22</sup> Worth mentioning from the sherds of level 6 is the appearance of the button hook spiral.<sup>23</sup>

In level 5 the features mentioned above continue. Spirals are prominent. Antithetic streamers (Fig. 2:20,18)<sup>24</sup> and the close style now make their appearance.<sup>25</sup>

In level 3 spirals are plentiful and so are panelled patterns. There is also

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<sup>16</sup>Popham 1984 pl. 179: 2

<sup>17</sup>Sackett & Popham 1965, fig. 14: P2; fig. 15: P 27. cf also the base of amphoriskos P23.

<sup>18</sup>Seiradaki 1960, 21, fig. 14.

<sup>19</sup>Tzedakis & Kanta 1978, 15.

<sup>20</sup>Tzedakis & Kanta 1978, pl. 8:3,15; pl. 9:2.

<sup>21</sup>Tzedakis & Kanta 1978, level 9, spirals fig. 33:2,7; level 10, lozenges fig. 10:6,11; level 9, fig. 33:10. Minoan flower, fig. 32:6,7,9,10,11.

<sup>22</sup>Tzedakis & Kanta 1978, pl.5: 2.

<sup>23</sup>Tzedakis & Kanta 1978, fig. 33:16.

<sup>24</sup>Tzedakis & Kanta 1978, fig. 3:2.

<sup>25</sup>Tzedakis & Kanta 1978, pl. 3:18.

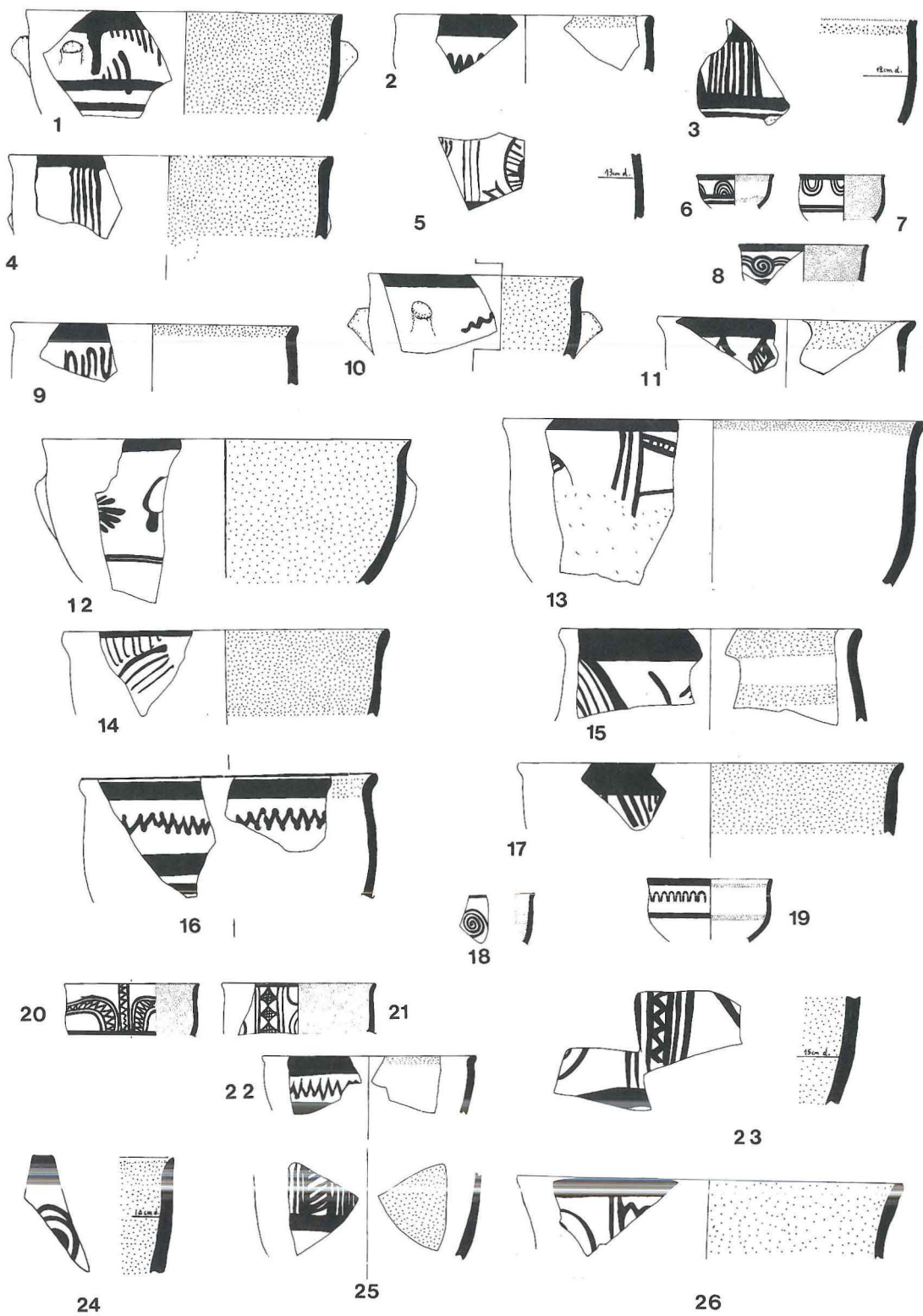


Fig. 2.



the button hook spiral and the lozenge and loop chain as well as flowers (Fig. 2:24).<sup>26</sup> Interesting for the definition of the chronological stage to which this material belongs is a close style krater sherd and a sherd with fringes and triangular patch.<sup>27</sup>

The antithetic streamers, flowers, spirals and close style of level 1 give a measure of the final chronological extent of this material.<sup>28</sup>

A distinct IIIC trait missing from the Kastelli material is the exuberant fringed kraters that appear at Karphi and the Knossos Stratigraphic Museum deposits.<sup>29</sup> Warren dates his examples to IIIC Middle.<sup>30</sup>

A characteristic of the decoration of many sherds from all levels of trench B is a linear tendency. A thin brush is used which produces dry and at times careless motives. It almost looks as if the motives are written rather than painted (Fig. 2:5,14,15,21,19,22,26).<sup>31</sup> This seems to be a late IIIB tendency which continues into IIIC.

It would be interesting to compare the Kastelli profiles with FS 284 the typical Helladic deep bowl form. FS 284 bowls have a well articulated and hollowed under ring base. Such bases exist at Kastelli from level 9 onwards (Fig. 1:8,14-17, 19-25). FS 284 rims vary from the straight, to the very slightly everted, to the properly everted in LH IIIB:1.<sup>32</sup> The same is true for LH IIIB:2,<sup>33</sup> while in early IIIC the majority tends to be more flaring.<sup>34</sup> Such rims exist at Kastelli from levels 11, 9 and 8 onwards (Fig. 2:1,4,8,9,10,12,13,14 etc). It is, therefore, possible that FS 284 already exists in levels 11 and 10 and the bases have not been found. It is certain, however, if we combine the evidence of rims and bases that FS 284 is present from level 9 of Kastelli onwards.

The various levels of trench B contained an amount of imported Mycenaean sherds which are identifiable not only from their decoration but also from their clay. Unfortunately most of them are of very small size. Apart from those, there is a group of sherds which have Mycenaean characteristics, but their ware is not so diagnostic. It is probable that those sherds are west Cretan. They do not just show Mycenaean influence, but there is evidence from other sites that they were manufactured on purpose to cache in on a demand for Mycenaean products on Aegean markets including the one in Crete.<sup>35</sup>

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<sup>26</sup>Tzedakis & Kanta 1978, pl. 3:2,3,4,5,7,9.

<sup>27</sup>Tzedakis & Kanta 1978, pl. 3:8,17.

<sup>28</sup>Tzedakis & Kanta 1978, pl. 2:4,8,3,10; figs. 4:6, 16:19, 8:16.

<sup>29</sup>Warren 1983, 84-85, fig. 55,59. Seiradaki 1960, fig. 25,26.

<sup>30</sup>Warren 1982-1983, 74.

<sup>31</sup>Also Tzedakis & Kanta 1978, pl. 2:6, pl. 3:6, pl. 5:6, pl. 7:13 etc.

<sup>32</sup>Mountjoy 1986, fig. 143.

<sup>33</sup>Mountjoy 1986, fig. 161.

<sup>34</sup>Mountjoy 1986, fig. 189.

<sup>35</sup>Kanta, forthcoming.

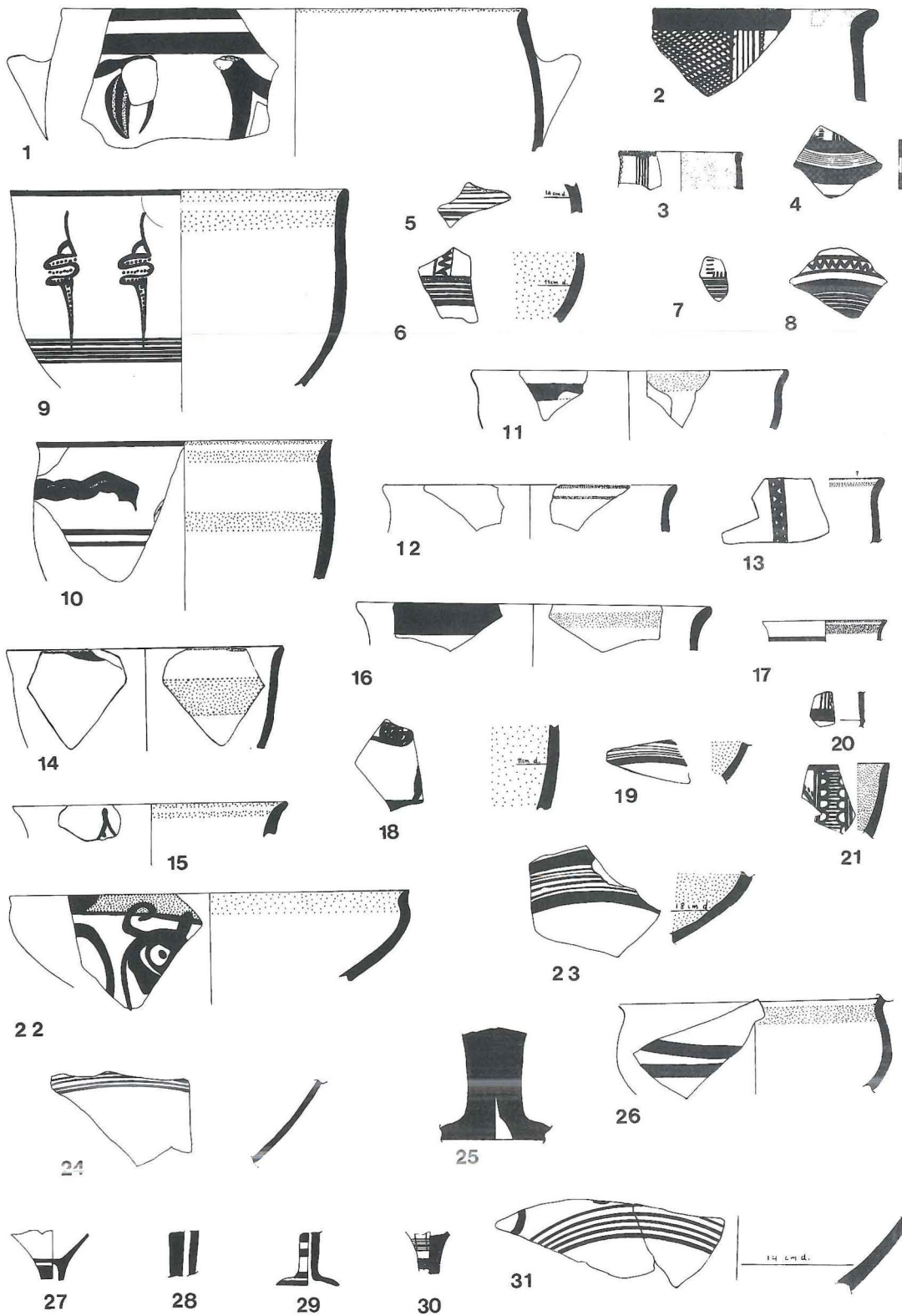


Fig. 3.

Level 11 has produced sherds from 2 kraters. FS 281, Fig. 3:1, has the incurving shape and rounded rim which appear in IIIB:1 examples. The 2 bands below the rim are typical for these vases which are plain inside except for one or two bands below the rim and lower down the body.<sup>36</sup> Unfortunately, the motif is not preserved.

Fig. 3:2 has a very wide triglyph of crosshatched lines, combined with a vertically joining semicircle row.<sup>37</sup> On balance these two vases seem to be LH IIIB:2 in date.

Level 11 also produced two sherds from the same fine FS 284 deep bowl decorated with dotted standing whorl shell ending in a series of fine lines set below the belly (Fig. 3:9). This vase could conceivably be LH IIIB:1 rather than LH IIIB:2 as the dotted whorl shell is more common in LH IIIB:1 rather than in LH IIIB:2.

A Minoan copy of a Mycenaean panelled pattern is Fig. 3:3. The motif is typically Mycenaean but the section shows the well-defined thickened Minoan rim.

Level 11 contained 2 very small Mycenaean stirrup jar fragments. Fig. 3:5 has the typical close, thin and straight Mycenaean lines but is difficult to date due to its size. However, a IIIB date would be suitable for this piece. Fig. 3:7 has part of an angular LH IIIB Mycenaean flower, FM 18:103,128-132. Level 11 also produced a Levanto-Mycenaean cup.<sup>38</sup>

In level 10 was found a small fragment of a Mycenaean stirrup jar, Fig. 3:4, with the same angular LH IIIB flower as the sherd from level 11. Another stirrup jar fragment (Fig. 3:8) had a zig-zag line on the shoulder zone.<sup>39</sup> A LH IIIB:2 date would be suitable for this piece.

Level 9 produced an intriguing sherd, Fig. 3:6. It has a vertical zig-zag panel framed by fine multiple lines. It looks like a type A LH IIIB deep bowl, but they are not monochrome inside as this piece. A type bowls of early IIIC date are monochrome inside but their motifs are not framed by multiple lines below the belly.<sup>40</sup> Perhaps this sherd has a transitional LH IIIB:2/IIIC character.

Level 8 produced an interesting sherd from an A type deep bowl, FS 284 (Fig. 3:13).<sup>41</sup> Only a small fragment decorated with a vertical zig-zag line is preserved. Inside there are two very thin bands, around the rim. These elements exist both in LH IIIB:1 and LH IIIB:2 deep bowls, while the interior of the early LH IIIC examples usually are monochrome inside. The Kastelli fragment could, because of its preservation, fit equally well in both LH IIIB:1 and LH IIIB:2. Fig. 3:12, also from level 8, illustrates an FS 284 rim fragment, plain outside obviously because it preser-

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<sup>36</sup>Mountjoy 1986, fig. 142:3.

<sup>37</sup>Mountjoy 1986, fig. 142:2 and fig. 159:1. cf FM 75:2,23.

<sup>38</sup>Cf. Tzedakis & Kanta 1978, 19 and pl. 8:1,4.

<sup>39</sup>Cf Mountjoy 1986, fig. 154:1, FM 61:4.

<sup>40</sup>Mountjoy 1986, fig. 284, 131, fig 189.

<sup>41</sup>In Tzedakis & Kanta 1978 it has been mentioned as coming from level 11 and from level 8. cf 27, 28 and 50. The correct provenance is level 8.



ves the part between two triglyphs. Inside the two thin bands are comparable to those of Fig. 3:13. This sherd must be of a comparable date. The same date would be appropriate for a deep bowl fragment decorated with a horizontal wavy line painted with shaded paint.<sup>42</sup> There are two bands around the rim and one in the middle of the body inside. Fig. 3:11 has a second band below the rim, but the first does not quite come properly over the rim. This is very unusual for Minoan bowls and the sherd is probably imitating Mycenaean features. Comparable is the case of Fig. 3:16 which has a thick band outside and a second one below the rim inside, where the first band hardly comes over from the outside.

Two sherds from level 6 need to be mentioned here: Fig. 13:17 is the rim from an amphoriskos. The amphoriskos appears already in level 11 which produced an almost complete profile. Level 9 as well as level 6 also produced a sherd of this shape.<sup>43</sup> The amphoriskos appears in LH IIIB:2 on the Greek mainland. Although the shape has a Minoan origin its presence here together with the rest of the Mycenaean sherds shows an awareness of fashions current on the Greek mainland.<sup>44</sup>

Fig. 3:20 is a sherd from a mug which preserves a ridge in the middle and a panelled pattern. A combination of these two features are found in LH IIIB:1.<sup>45</sup>

Level 5 has produced two body sherds monochrome inside but with a frame of multiple lines outside (Fig. 3:19,23). If these sherds are indeed imported Mycenaean as their fabric suggests they present the same anomaly as Fig. 3:6 from level 9. The lines and bands are finely executed and the drawings in Fig. 3 do not do them justice. They could be also of a transitional IIIB:2/IIIC date. A panelled pattern sherd from level 5<sup>46</sup> is near the rich middle IIIC designs which it imitates. Fig. 3:21 gives an example of the same style but in a local IIIC variation which is built upon the elements of the Mycenaean panelled patterns.

Three sherds from level 3 need to be commented upon here. Unfortunately all three are too small to allow very definite conclusions. Fig. 3:14 is a sherd plain outside but for a very thin line on the rim which turns into a small splash at one edge. The splash appears slightly inside, but there is a second thicker band below the rim. This sherd is either imported Mycenaean or Mycenaeanizing. It could be from the inter space of a panel pattern or from a "rosette" deep bowl and it could be of early IIIC date.<sup>47</sup>

The imported Mycenaean sherd of Fig. 3:15 has smaller dimensions but its attribution is clear. A partly preserved lozenge is painted high up near the flaring rim. There are two thin bands inside. The sherd was part

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<sup>42</sup>Tzedakis & Kanta 1978, fig. 2:7. Cf. Mountjoy 1986, 129.

<sup>43</sup>Tzedakis & Kanta 1978, fig. 19, fig. 25.

<sup>44</sup>Kanta 1980, 286.

<sup>45</sup>Mountjoy 1986, 112.

<sup>46</sup>Tzedakis & Kanta 1978, pl. 3:18.

<sup>47</sup>Tzedakis & Kanta 1978, pl. 2:11, 4:4, 14, fig. 33:9.

of an early IIIC “rosette” deep bowl, decorated with a lozenge. Such vases are present in early LH IIIC deposits. Characteristic of their date is their size, smaller than earlier examples and the placing of a smaller motif higher up on the vase.<sup>48</sup>

Fig. 3:18 is part of a pictorial deep bowl decorated with bulls. Part of one bull is preserved. The lowered head with its eye and horn is visible, as well as one leg. The leg is solid while hatched lines are visible on the head. The bull is perhaps getting ready to prod another animal with its horns. The interior of this vase is monochrome. Such imported pictorial vases are very popular in Cyprus and the Greek mainland but extremely rare in Crete<sup>49</sup> which had its local equivalents. The other well known pictorial krater with chariots comes from a tomb at Souda. Monochrome pictorial deep bowls exist on the Greek mainland from LH IIIB:2 onwards.<sup>50</sup>

The trench B material contained several examples of a local pictorial style. There was a sherd with a bird from level 9, a fish from level 6, the head of a bird from level 5<sup>51</sup> and a fine krater sherd from level 5 with a bird, fish and panelled pattern.<sup>52</sup>

Trench B (levels 11,10,9. Fig. 1:10,11,18,26) contained several sherds from stemmed bowls, a typically Mycenaean shape very rare among the material of other Cretan sites.<sup>53</sup> The Kastelli sherds have the distinct Khania clay and it is obvious that they are local products imitating specific Mycenaean ones. Complete vases of this shape have been published from a tomb at Khania.<sup>54</sup> Because of the very fragmentary state of these sherds it is difficult to date them very closely. However a late IIIB date seems appropriate.

A few comments should be made concerning kylikes, because they illustrate well the similarities and differences between LM III and LH III pottery.

There is an easy rule of thumb for separating Minoan from Mycenaean kylikes in a fragmentary state. The stems of Mycenaean kylikes are always solid. There is a small domed cavity where the disk ends and the stem begins, but the stem is solid. Minoan kylikes, on the contrary, have either a perforated stem (Fig. 3:27,28,29) or a very thin hole which goes most of the way up and then is blocked. Fig. 3:25 shows strong Mycenaean influence but is not quite Mycenaean. The solid stem does not start at the dome but a little bit higher up. This feature does not limit itself to LM IIIB, but goes back to earlier times. Even the LM II Ephyrean goblets have a perforated stem while their Helladic equivalents have a solid one.

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<sup>48</sup>Mountjoy 1986, 151.

<sup>49</sup>Vermule & Karageorghis 1982; Sakellarakis 1992.

<sup>50</sup>Sakellarakis 1992, *passim*.

<sup>51</sup>Sakellarakis 1992, 67, no 113 from Perati.

<sup>52</sup>Tzedakis & Kanta 1978, pl. 2:11, 4:4, 14; fig. 33:9.

<sup>53</sup>Tzedakis & Kanta 1978, 16.

<sup>54</sup>Karantzali 1986, fig. 12:9, 10, 12, 13, 17, 18; fig. 10:6.

Level 8 produced the stem of an imported Mycenaean LH IIIB:1 kylix (Fig. 3:30) decorated with whorl shell.<sup>55</sup> A Minoan equivalent from level 10<sup>56</sup> is betrayed by its hollow stem.

Level 11 (Fig. 3:24,31) has produced two kylix sherds decorated with multiple lines like the LH IIIA:2 and LH IIIB:1 kylikes. The well drawn thin lines are a direct imitation of Mycenaean kylikes. Octopus tentacles are discernible on Fig. 3:31, while part of the octopus is preserved on Fig. 3:22 also from level 11. The shaded paint allows the details of the octopus to be clearly visible. Part of a kylix bowl from level 8 is decorated with octopus which covers the whole kylix bowl. The beginning of the perforated stem is visible.<sup>57</sup>

A feature of the trench B material is the “champagne glass” cup decorated with blobs. This type of vase is present in level 11 and continues right through the levels. They are particularly common in level 5. This links the Kastelli material with Palaikastro Kastri where such vases are common and seem to a great extent to have replaced the kylix.<sup>58</sup>

The octopus in its various forms is a useful chronological criterion. An LM IIIB date is suitable for Fig. 3:22. The octopus appears on several stirrup jar sherds from various levels.<sup>59</sup> Mostly tentacles are preserved. The linear style is well exemplified on an octopus stirrup jar sherd from level 8.<sup>60</sup> White paint on coarse stirrup jars first appears in level 11 and continues right through the levels.<sup>61</sup>

What is absent among the octopus stirrup jar material of Kastelli trench B is as diagnostic as the extant material. The IIIC octopus stirrup jar style present in Crete and in Rhodes does not exist among the trench B material.<sup>62</sup> The developed octopus stirrup jar style on the mainland and the islands dates from LH IIIC Middle. The absence of such sherds or their Minoan equivalents at Kastelli provides a chronological frame for the material. Also, the bases of LH IIIC Middle vases, on the whole seem to be more conical than those of Kastelli.<sup>63</sup> These points should be considered together with the absence of elaborate IIIC Middle kraters mentioned above.

The presence in level 3 of a high number of sherds with spiral decoration is a feature which repeats itself in LH IIIC Early pottery. A feature which is prominent in LH IIIC Early deposits but absent in Crete at this stage is the monochrome, deep bowl. The reason for this absence pro-

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<sup>55</sup>Mountjoy 1986, fig. 141:12,18.

<sup>56</sup>Tzedakis & Kanta 1978, pl. 5:14.

<sup>57</sup>Tzedakis & Kanta 1978, pl. 5:3.

<sup>58</sup>Sackett & Popham 1965, 283.

<sup>59</sup>Cf. Tzedakis & Kanta 1978, fig. 31.

<sup>60</sup>Tzedakis & Kanta 1978, fig. 31.

<sup>61</sup>Tzedakis & Kanta 1978, 26, Kanta 1980, 257.

<sup>62</sup>E.g. Kanta 1980, fig 137:1,2, fig. 136:1, fig. 121-3, cf. also 254, 255.

<sup>63</sup>E.g. Mountjoy 1986, fig. 216, fig. 220, 223.



bably lies in the more exuberant artistic tastes of the Minoans who have a flair for decoration and variety and dislike thin straight lines and monotonous repetition.

If we consider the imported Mycenaean sherds from levels 11 onwards, although some of them are of LH IIIB:1 date, most of them accord well with LH IIIB:2 and some may be of a transitional character. There is a LH IIIC Early imported deep bowl sherd from level 3 which shows that there is roughly a chronological correlation between the two areas. Because there are a few sherds which have an early version of the Close Style on them,<sup>64</sup> it seems probable that the IIIC levels of trench B extended chronologically to the beginning of LH IIIC Middle.

This leaves the case of the reserved band to be clarified. On the mainland it appears in the early part of LH IIIC Middle. Warren and Hankey consider the possibility that the Cretan IIIC lags behind that of the mainland because they assume that the reserved band appearing in LH IIIC Middle comes to Crete as a result of Mycenaean influence.<sup>65</sup> There is no doubt from the analysis of the material that the earlier levels of trench B, 11 and 10 are of late LM IIIB date. If level 9 has a transitional IIIB/C character, levels 8,6 are of early LM IIIC date. The occurrence of a single sherd with a reserved band in level 6 must be intrusive. Levels 3,5,1 contain material which extends from early IIIC to the beginning of the phase which on the mainland is called LH IIIC Middle.

The evidence from Kastelli suggests that the reserved band is a Minoan creation just after the very beginning of LM IIIC.<sup>66</sup>

The picture that is now formed in late LH/LM IIIB to IIIC times is one of communication and adoption of Mycenaean elements from Crete (panelled patterns, a different version of deep bowl-FS 284) and Cretan elements such as the stirrup jar octopus style and the reserved band by the mainland in early IIIC / beginning of IIIC Middle times.

The material from trench B, clarifies the final stage of LM IIIB and its transition to LM IIIC. Also it provides a stratified corpus of early LM IIIC material and material up to the first half of the period. It indicates that IIIC development in Crete and on the mainland has a chronological correspondence. More published work is needed from various parts of the island involving earlier as well as later material before we can clarify with a reasonable degree of certainty the various IIIB/C stages. I hope that the material presented here will be a contribution towards filling a gap in this historically important period.

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<sup>64</sup>Tzedakis & Kanta 1978, pl. 3:8,18; fig. 33:18,21.

<sup>65</sup>Warren and Hankey 1989, 102.

<sup>66</sup>Tzedakis & Kanta 1978, 15, 16.

# Catalogue of figures

(The numbers next to the number of each level are either study numbers or museum numbers with four digits).

## FIG 1

BASES (nos 8, 15-17, 19-24 scale as no 22)

1. Level 11, no 3126. Light yellow clay and slip, orange paint. Concentric bands inside. Deep bowl. Khania.

2. Level 11:11. Brownish clay, buff slip, dark brown shaded paint. Thicker concentric rings are visible inside the area of thinner paint. Reserved circle. Probably deep bowl.

3. Level 11:9. Pink clay, buff slip, orange paint, monochrome inside. Deep bowl or cup.

4. Level 8:1. Buff clay and slip, shaded brown paint. Shaded concentric rings inside, solid circle on base. Cup.

5. Level 11:7. Reddish buff clay and slip, brown paint. Unusual interior, solid circle and 12 concentric rings. Mycenaeanizing or imported Mycenaean. Cup or deep bowl.

6. Level 11:5. Light yellowish-orange clay, light yellow slip, terracotta to black paint. Khania ware, burnt outside. Solid circle and ring inside. Cup or deep bowl.

7. Level 11:10. Light yellow clay and slip, terracotta-orange paint. Khania ware. Thick band around the base inside and under. Cup.

8. Level 9. Buff clay and slip, brown paint. Circles inside. Deep bowl. Tzedakis & Kanta 1978, fig. 6:1.

9. Level 8:1. Light yellow clay and slip, orange paint. Khania ware. Concentric circles inside. Probably deep bowl.

10. Level 11:1. Light yellow clay and slip, black paint. Khania ware. Stemmed bowl.

11. Level 11:6. Light yellow clay and slip, orange paint. Khania ware. Stemmed bowl.

12. Level 8:6. Reddish clay, whitish slip, reddish purple paint. Areas of solid paint inside but not monochrome. Probably deep bowl.

13. Level 8:2. Light grey-buff clay and slip. Dark brown paint. Monochrome inside.

14. Level 8:4. Greyish-buff clay and slip, black paint, concentric rings inside. Mycenaean type ring base. Deep bowl. Mycenaeanizing, or imported Mycenaean.

15. Level 5. Buff clay and slip, brown paint. Monochrome inside. Deep bowl. Tzedakis & Kanta 1978, fig. 6:2.

16. Level 5. Buff clay and slip, brown paint. Monochrome inside. Tzedakis & Kanta 1978, fig. 6:3.

17. Level 3. Buff clay and slip brown paint. Blobs inside. Cup or deep bowl. Tzedakis & Kanta 1978, fig. 9:5.

18. Level 10:2. Light yellow clay and slip, shaded brown to black paint. Shaded spiral inside. Stemmed bowl.

19. Level 3. Pink clay, buff slip. Red paint. Monochrome inside. Deep bowl. Tzedakis & Kanta 1978, fig. 6:4.

20. Level 6. Buff clay and slip, brown paint. Concentric band inside. Deep bowl. Tzedakis & Kanta 1978, fig. 6:10.

21. Level 3. Buff clay and slip brown paint. Closed shape, stirrup jar? Tzedakis & Kanta 1978, fig. 23:6.

22. Level 3. Buff clay and slip brown paint. Closed shape. Tzedakis & Kanta 1978, fig. 23:7.

23. Level 1, no 2996. Buff clay and slip

brown paint. Monochrome inside. Deep bowl. Tzedakis & Kanta 1978, fig. 6:5.

24. Level 1, no 2995. Buff clay and slip, brown paint. Blobs inside and outside. Tzedakis & Kanta 1978, fig. 6:6.

25. Level 1. Buff clay and slip, dark brown paint. Monochrome inside. Deep bowl.

26. Level 9:3. Light yellow clay and slip. Orange paint. Khania ware. Spiral around base inside. Stemmed bowl.

## FIG 2

DEEP BOWLS AND CUPS (nos 6-8, 18-21 not to scale)

1. Level 11:23, no 3120. Buff clay and slip, dark brown paint. Monochrome inside, alternating arcs. Deep bowl.

2. Level 11:8. Light yellow clay and slip, terracotta orange paint. Zig-zag line. Khania ware. Cup or deep bowl. 3. Level 11, no 3120/1. Light yellow clay and slip, orange paint. Panelled pattern. Khania ware. Deep bowl.

4. Level 11:4. Buff clay and slip, lustrous black paint. Monochrome inside. Panelled pattern. Deep bowl.

5. Level 11, no 3120/6. Light yellow clay, yellowish slip, brown shaded paint. Khania ware. Plain inside. Panelled pattern. Linear style.

6. Level 11. Greenish clay and slip. Brown paint. Standing concentric semicircles. Cup. Tzedakis & Kanta 1978, fig. 8:4.

7. Level 11. Light buff clay and slip, brown paint. Hanging concentric semicircles. Probably a cup. Tzedakis & Kanta 1978, fig. 8:5.

8. Level 11. Greenish clay and slip, dark brown paint. Running stemmed spiral.



Probably deep bowl. Tzedakis & Kanta 1978, fig. 2:1.

9. Level 9:2. Orange-buff clay and slip. Terracotta orange paint. S-shaped quirk. Khania ware, burnt. Deep bowl or cup.

10. Level 8, no 3102/5. Brownish-buff clay, whitish-creamy slip. Orange paint. Monochrome inside. Zig-zag line. Deep bowl.

11. Level 8:4. Light yellow clay and slip, orange paint. Khania ware. Probably cup.

12. Level 8, No 3102/24. Light buff clay and slip. Shaded black paint. Monochrome inside. Minoan flower. Deep bowl.

13. Level 8, No 3102. Buff clay and slip, reddish paint. Worn out. Panelled pattern. Deep bowl.

14. Level 8, No 3102/21. Buff clay and slip, brown shaded paint. Monochrome inside. Linear style. Deep bowl.

15. Level 8, No 3102. Reddish clay, light grey at core. Whitish slip, reddish paint. Uncertain motif. Deep bowl.

16. Level 8, No 3102/4A,B. Buff clay and slip. Orange paint. Zig-zag line. Deep bowl or cup.

17. Level 6:3. Buff clay and slip. Brownish paint. Monochrome inside. Deep bowl.

18. Level 5. Buff clay and slip, brown paint. Monochrome inside. Running spiral. Deep bowl. Tzedakis & Kanta 1978, fig. 3:6.

19. Level 5. Light yellow clay and slip, brown paint. Khania ware. Bands inside. Standing U-shapes. Deep bowl or cup. Tzedakis & Kanta 1978, fig. 2:4.

20. Level 5. Creamy clay and slip, dark brown paint. Monochrome inside. Antithetic tongues in a panelled arrangement. Deep bowl. Tzedakis & Kanta 1978, fig. 3:4.

21. Level 5. Pinkish buff clay and slip, brown paint. Monochrome inside. Panel-

led Pattern. Deep bowl. Tzedakis & Kanta 1978, fig. 3:5.

22. Level 3, No 3073. Light yellow clay and slip, shaded orange to dark brown paint. Zig-zag line. Cup.

23. Level 3:35. Buff clay and slip. Shaded brown paint. Monochrome inside. Panelled pattern. Deep bowl.

24. Level 3:13. Brownish buff clay, buff slip, terracotta red paint. Reserved band. Deep bowl?

25. Level 3, No 3064. Buff clay and slip, orange brown shaded paint. Monochrome inside. Panelled pattern. Deep bowl.

26. Level 1, No 3003. Light buff clay and slip. Red paint. Monochrome inside. Panelled pattern. Deep bowl. Tzedakis & Kanta 1978, fig. 4:7.

### FIG 3 MYCENAEAN, MYCENAEANIZING AND KYLIKES

1. Level 11, No 3120-40. Light greenish grey clay and slip. Dark brown paint. Imported Mycenaean.

2. Level 11. Pinkish buff clay and slip, shaded red to black paint. Krater. Imported Mycenaean. Tzedakis & Kanta 1978, fig. 29:1.

3. Level 11. Yellowish clay and slip, dark brown paint. Mycenaeanizing. Tzedakis & Kanta 1978, fig. 2:3.

4. Level 10. Buff clay, light yellow slip, brown paint. Stirrup jar. Imported Mycenaean. Tzedakis & Kanta 1978, fig. 29:3.

5. Level 11. Light grey clay and slip. Dark brown paint. Stirrup jar. Imported Mycenaean.

6. Level 9:6. Whitish-grey clay, whitish slip, shaded black paint. Monochrome inside. Imported Mycenaean. Tzedakis & Kanta 1978, fig. 29:5.

7. Level 11. Buff clay, yellow slip, brown paint. Stirrup jar. Imported Mycenaean. Tzedakis & Kanta 1978, fig. 29:2.

8. Level 10. Buff clay, buff slip with a greenish tint, dark brown paint. Stirrup jar. Imported Mycenaean. Tzedakis & Kanta 1978, fig. 29:4.

9. Level 11, No 3120/19. Buff clay, yellow slip, brown paint. Deep bowl. Imported Mycenaean. Tzedakis & Kanta 1978, fig. 30:1.

10. Level 8, No 3102/1.

11. Level 8:7. Light yellow clay and slip, orange paint, burnt. Khania ware. Deep bowl. Mycenaean features.

12. Level 8:8. Light grey-buff clay, dark brown paint, burnt. Deep bowl. Imported Mycenaean.

13. Level 8. Buff clay, yellow slip, brown paint. Deep bowl. Imported Mycenaean. Tzedakis & Kanta 1978, fig. 30:2.

14. Level 5. Pinkish-buff clay and slip, shaded brown to orange paint. Imported Mycenaean.

15. Level 3:4. Pinkish buff clay, buff slip, dark brown paint. Deep bowl. Imported Mycenaean.

16. Level 8:3. Buff clay and slip, orange paint. Mycenaeanizing.

17. Level 6. Buff clay and slip, brown paint. Amphoriskos. Mycenaean elements in banding. Tzedakis & Kanta 1978, fig. 19:3.

18. Level 3:3. Pinkish buff clay and slip. Black to brown shaded paint. Pictorial bull krater or bowl. Imported Mycenaean.

19. Level 5. Creamy buff clay and slip, shaded dark brown paint. Monochrome inside. Imported Mycenaean.

20. Level 6. Pale yellow clay and slip, dark brown paint. Vapheio cup. Tzedakis & Kanta 1978, fig. 17:13. Imported Mycenaean?

21. Level 5. Light red clay, creamy buff shaded slip, black paint. Deep bowl. Mycenaeanizing. Tzedakis & Kanta 1978, fig. 4:2.



22. Level 11, No 3120/10. Pinkish clay, whitish slip, shaded reddish-brown paint. Kylix of Minoan type.

23. Level 5:6. Buff clay and slip, dark brown shaded paint, monochrome inside. Probably imported Mycenaean.

24. Level 11:40. Buff clay and slip, brown paint. Kylix. Imported Mycenaean.

25. Level 11:14. Yellow clay, orange paint. Khania ware, burnt. Kylix stem. Mycenaean features.

26. Level 8:10. Buff clay and slip, terracotta paint. Mycenaean elements.

27. Level 12. Buff clay and slip, brown paint. Kylix of Minoan type. Tzedakis & Kanta 1978, fig. 14:1.

28. Level 12. Buff clay, brown paint. Kylix of Minoan type. Tzedakis & Kanta 1978, fig. 14:2.

29. Level 11. Buff clay and slip. Brown paint. Kylix of Minoan type. Tzedakis & Kanta 1978, fig. 14:3.

30. Level 8. Buff clay and slip, brown paint. Kylix. Imported Mycenaean. Tzedakis & Kanta 1978, fig. 14:4.

31. Level 11:35,36. Buff clay and slip, plain inside. Mycenaeanizing.

FIG. 4 (p. 105)

1. Popham 1984, pl. 148:6.

2. Popham 1984, pl. 156:14.

3. Watrous 1992, fig. 33:784.

4. Watrous 1992, fig. 33:787.

5. Popham 1984, pl. 115:1.

6. Popham 1984, pl. 175:12.

7. Watrous 1992, fig. 56:1484.

8. Watrous 1992, fig. 44:1155.

9. Popham 1984, pl. 179:2.

10. Popham 1984, pl. 179:1.

11. Kanta 1991, 495, fig. 27.

12. Watrous 1992, fig. 68:1921.

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# Response and Discussion

*The paper presented by Professor Kanta at the meeting started with a session on the LM III pottery from Kato Symi, while she has preferred in the printed version to concentrate the contribution to the problems concerning the subdivision of LM IIIB and LM IIIC. The editors have, however, chosen to keep the full discussion following her original paper.*

**MacGillivray:**

Voicing the comments of everyone here in saying that, once again, Kanta has made the most of badly preserved material from much abused deposits, as she did in the Nerokourou publication, again being forced to think much harder about the material than a lot of us do when it comes from nice clean stratigraphy, and for those of you who have been to Kato Symi, you will appreciate just how complicated pulling history out of that site is, but obviously Kanta has done that very well. What we just heard I think should be regarded as two papers in one. I hope that people will feel free to debate these two things separately. Something that struck me was that when you were going through the sherds material, it seemed as though you were illustrating a lot of drinking cups. Either that reflects the bias of archaeologists who are looking at forms that change over time and that is where we get our typologies from, or this reflects more the nature of the site at Kato Symi. I noticed you were not really very keen on typologies of cooking pots, or anything like that. Very few people could really love tripod cooking pots. I doubt we will see any others. What is interesting is that the primary context floor deposit that you have does not really reflect that. In other words, you have braziers and other forms that are involved with other preparations besides specifically water. It is interesting to contrast that sort of thing. The cylindrical stand with the kalathos on top is nice: after a debate between Hugh Sackett and myself, at Palaikastro we have settled on the name "snakeless tubes". For the first part of your paper, I was interested in that you talk about the black sacrificial layer from LM III onwards. Are there no earlier sacrificial layers? Does the cult change in LM III? Or is this because there are so few earlier levels? – The whole issue that period designations should be applicable throughout the island is serious, one of the reasons why we are gathered here. I noticed Watrous looking sideways at the ideas of having the "Knossos-Khania culture" as an alternative for LM II across the island. This came up when Betancourt showed a humble deposit from Pseira and the people gathered in this room could not decide on where to put it in terms of the overall island history. That is a serious problem. I think that you have hit the nail on the head in saying that period designations should be applicable throughout the island. What we had in past was people work up this so-called chest-of-drawers chronology, lots of hard work like Elizabeth French's pottery groups from Mycenae, studies of good primary closed deposits before we can talk about that. This is why I tend to favor site periods and talk locally in terms of individual historical and architectural sequences on a site and try to relate these over a broader scale. Not that I would ever think of throwing out something like LM IIIA:2 as a distinct period, but rather have LM IIIA:2 comprise, for example, Kommos Period 10, parts of Knossos Period whatever etc. Something like the system used in Anatolia.

**Kanta:**

MacGillivray is very perceptive, as always, regarding the two parts. I was delighted to hear B. Hallager's paper which also started on the terminology of the various shapes and continued with a most useful typology of the goblet and the kylix, as this was uppermost in her mind, as in my mind the problems with the divisions of the periods were uppermost. Symi



does not really solve any problems of LM III chronology – it is interesting for other reasons. Regarding the point raised about the kylikes and cooking pots: indeed, kylikes are plentiful because they have to do with the cult of the sanctuary (A. Kanta, “Cult, Continuity and the Evidence of Pottery at the Sanctuary of Syme Viannou, Crete” in *La transizione*, 479–505). We are looking at every single diagnostic sherd, regardless of shape. At the moment we are making a very detailed typology of cooking pots because they also have to do with the cult. The activities which involved a lot of cooking, make the study of the cooking pots vital for the understanding of the function of the cult at the sanctuary. We have a lot of “snakeless” stands, unfortunately, most of them fragmentary, and some earlier. As to the black sacrificial layer, we have earlier black layers because part of the cult at Symi was always open air and continued to be open air. In certain parts of the site there is a black layer which has earlier intrusions – everything is upside down at Kato Symi – but there is a general chronological horizon which is mostly LM III onwards mainly to Orientalizing. There are terraces which are only LM III in date with some later intrusions. The Grotta-Pelos-Keros-Syros bit was meant to be provoking, to make you think about the problem and give us some interesting answers. As for the site periods, I very much look forward to hearing MacGillivray on the relation of his LM IIIB to the beginning of the habitation at Palaikastro-Kastri which is absolutely crucial to Cretan chronology and understanding of the period.

**Macdonald:** I would like to try and pin you down on the development of the sanctuary from LM I to III. Is it true to say that after a scrappy LM IB, you do not have anything certain until LM III? Or do you have certain LM II?

**Kanta:** That is a very difficult question. The material is restricted. It is badly preserved due to the red soil of the sanctuary – as you know, wherever we have red soil the preservation is terrible – and the fires make it even worse. You are more of an expert than I am on whether the sherds are LM II or LM IIIA:1. Only a few sherds that are either LM II or IIIA:1 have been isolated.

**Macdonald:** There is no stratigraphic reason for seeing a gap?

**Kanta:** No. But you must realize that we have very substantial Protopalatial buildings and very substantial Neopalatial buildings. In LM IIIA onwards – I do not know whether to include LM II – you have platforms where they practiced open air cult. In certain parts of the site these platforms have been preserved. In other parts, you just have the black layer with a lot of offerings which can be dated, showing that the site was flourishing. They do not seem to have built the substantial buildings that they built in the earlier periods. Or – we must keep this in mind: as only a relatively small part, less than half, has been excavated – these buildings, if they existed, may be situated in another part of the site. We have to consider this as well. There is no particular reason to suppose a gap.

**Macdonald:** Do you consider these marvellous huge IIIC flasks a Cretan thing, bearing in mind that they are found on Naxos, with smaller ones at Perati and elsewhere? Do you think that there is such a thing as the “Close Style” and “Fringe Style” as styles?

**Kanta:** This particular flask is of a clay which is very similar to that of a lot of the pottery from the sanctuary. For this reason I take it to be “local”. However, it probably reflects Cypriote influence. As to “Fringe Style” and “Close Style” being two separate styles: I will only say

that we have “Close Style” which is fringed as well. I do not know if that answers your question. Perhaps Rethemiotakis can give a better definition.

**Rethemiotakis:** Judging from material I have excavated at Kastelli Pediada, I may suggest that “Fringe Style” may occur independently from “Close Style”.

**Warren:** “Αναβιώσεις και επιβιώσεις”, Kiki Lembessi’s famous paper about Symi. I do not think anyone could doubt that at Symi there is a continuity of use of the sanctuary from Middle Minoan, as you explained, to the third century AD. For that alone, of course, it is of enormous importance in the history of religion in the Aegean area. Within that framework, I wonder whether I could press you a little more about the status of the IIIC material. I will say straight away that allowing for the fact that it is a sanctuary site, many of your shapes are exactly what I find at Knossos as brand new in IIIC without any real precursors in IIIB. I wonder if you could speculate a little on how new, as it were, your IIIC is. If you ask the question in that way, it seemed to me from a glance that the material is rather different from the IIIA:1, IIIA:2, IIIB. In the IIIC material you have new shapes, the kraters, other shapes, the wheelmade figurines and other pieces. Related to that – and I expect the answer will be no – I wonder whether it is possible that the black sacrificial layer, rather than the platforms as such, might even have begun in IIIC and then continued to Orientalizing. Even if the answer to that question is no, I would still like you to say a word or two about how new you think your IIIC material looks from the preceding pottery.

**Kanta:** This is a difficult question. I think the answer is no in the sense that the IIIC material from Symi with few exceptions comes from layers which also contain material from other periods. We also have an earlier separate black layer with Neopalatial material. Regarding the newness of the IIIC material, I will just make a few comments and let you make up your own minds because the condition of the Symi material is such that it does not help to answer that question. Drinking has always been very important at the site, with the chalices first, kylikes, cups, and also small conical cups, then cups, skyphoi etc. in the Greek period from PG/G onwards. From this point of view, the same shape and probably function continues, with what happens to be fashionable at a particular time.

**Warren:** The same function? What about the deep bowl FS 284?

**Kanta:** Yes. The deep bowl has the same shape from IIIB to IIIC. It is not introduced in IIIC. We have deep bowls in IIIB. If you want to see that kind of thing and you wonder whether this way we can see if there is anything new introduced in IIIC, I have something better to show you. I have remade the stratigraphy of Kastelli 66 according to level (Tzedakis and Kanta 1978). E. Hallager has very kindly xeroxed it for me so that you can see how the assemblages change through the levels. There you can get an answer – perhaps. From Symi you can not. Deep bowls exist before IIIC, they exist after the beginning of IIIC. Cups also exist before and after. I know of kraters which exist in IIIB. Kraters continue into IIIC. I know of amphoriskoi which exist in IIIB – in definite IIIB contexts. And in IIIC. Of course, the shape changes a bit. But the Kastelli material might give you the answer.

**Warren:** You showed a selection of Symi pieces of IIIA:1, IIIA:2, IIIB, and then, suddenly, you concentrated on IIIC, and started showing shapes of which you had not shown any before. The first deep bowl, FS 284, was immediately recognized by everyone. I do not know one single one in IIIB of that particular type, but perhaps you have them, and B. Hallager has them.



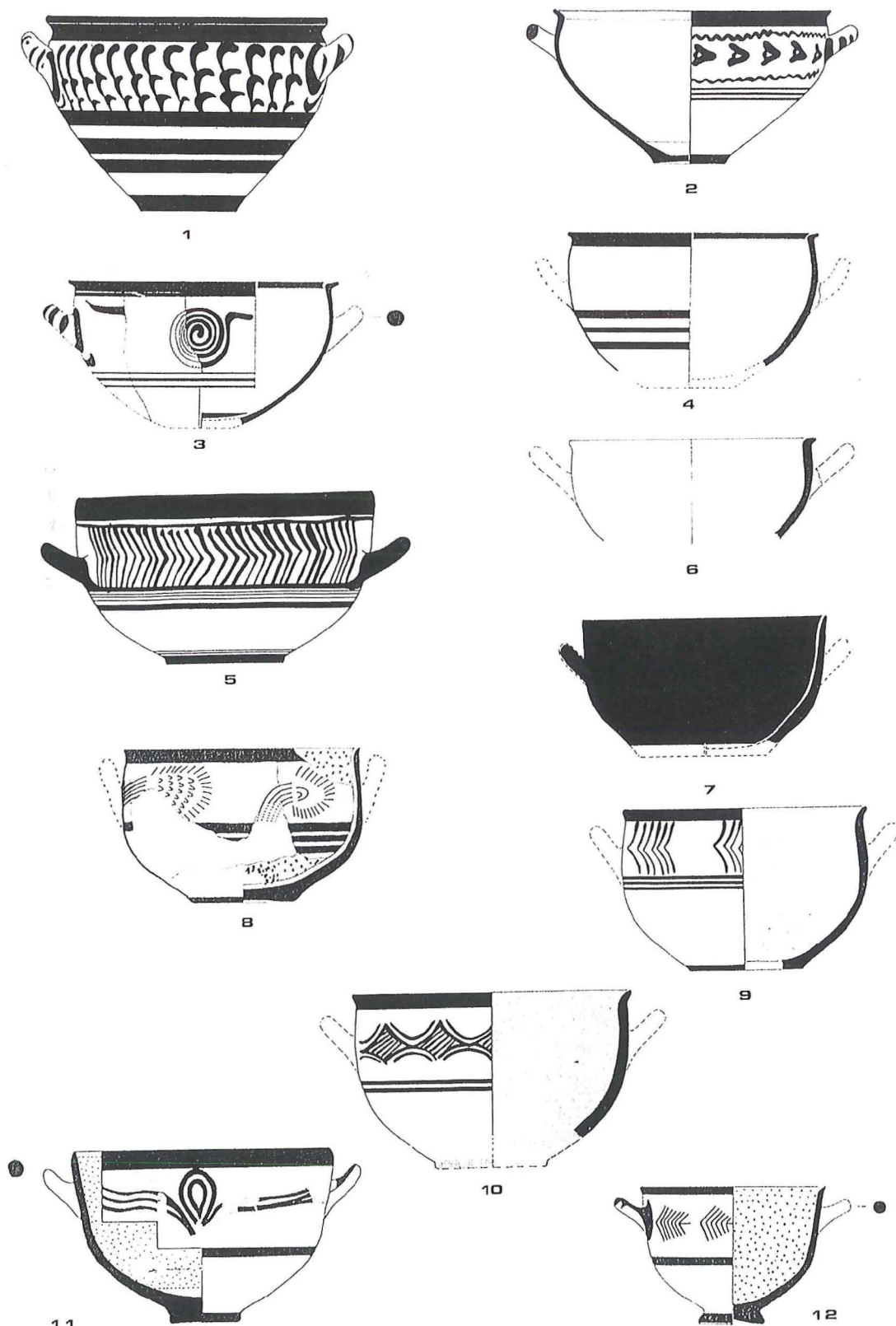


Fig. 4.



- Kanta:** The reason I concentrated on IIIC is not that we do not have the earlier material, but that a good selection of it has been published before (Kanta 1991 in *La transizione*). I wanted to show you some new material. The IIIA and B material was shown to refresh your memory.
- B.Hallager:** The decorated bowl existed in the LM II period, and then, strangely enough, it is rare, almost non-existent in IIIA:1. It starts again in IIIA:2. In IIIB the deep bowl is as dominant as the kylikes. The krater, which was said many years ago to be a new invention in IIIC, seems to appear in IIIA:2, and becomes more common in IIIB:1. One restored IIIB krater from the palace at Knossos was published by Popham already in 1964 (Popham 1964, pl. 8a).
- MacGillivray:** I wonder whether we can go back to something Macdonald was asking you about. That is: are you sure you have LM II. Is there a good definition of what LM II is in Lasithi, Kastelli? Or do you have to rely on imported Central or West Cretan pottery?
- Rethemiotakis:** It was LM IIIA:1, not LM II.
- Macdonald:** There may be no gap, but LM II is not there. It is a problem.
- Kanta:** You may not agree with me, but I feel that in typological terms the deep bowl – by that I mean a bowl with a narrower base and a wider mouth and two handles below the rim – exists already in LM II. The LM II bowls that Popham has published, and those from Malia, are basically of the same shape as those which we find in LM IIIA:2, IIIB, and IIIC. It is obvious that a shape has to be considered in all its forms. You cannot isolate one particular form of the shape and claim that it is totally different from all others. The history of each shape must be studied in its entirety. Only then can a correct historical perspective be achieved. This point is illustrated by Fig. 4. The deep bowls in this figure are taken from well known publications: 1 and 2 are from the Unexplored Mansion, LM II in date. 3 and 4 from Kommos are LM IIIA:1 or perhaps beginning of LM IIIA:2. 5 and 6 are IIIA from the Unexplored Mansion. 9 and 10 are late LM IIIB from the Unexplored Mansion. 11 is LM IIIC from Syme Viannou. Its base suggests a relatively early date within the period. 12 is LM IIIC from Kommos.
- Macdonald:** What you are implying is that the Mycenaean deep bowl comes from LM II “deep bowls” on Crete – which it certainly does not. Warren’s point is that he was not aware that FS 284, the classic Mycenaean deep bowl, does appear earlier than IIIC on Crete, but in fact it does – what Warren and I would call the “Mycenaean type deep bowl”. Unstratified examples from the Little Palace would be dated IIIB on the basis of decoration and shape, partly in comparison with the Mainland shapes. B. Hallager will surely be able to show you stratified material.
- Warren:** On the stylistic argument, the matter is still open for discussion. We have to show it on stratigraphical grounds. If you can do that, in a clear horizon, in a clear context with other material, then that is fine. But I have never seen anything from Crete published from a clear single floor or a single deposit with FS 284 found with other material that you call unquestionably Late Minoan IIIB.
- Watrous:** The question Warren is getting at is a very important one. I can only comment on my experience at Kommos: in IIIA:2 deposits, some of which were sealed, the bowl is practical-

ly absent. I am basing my statement on handles, not rims. In IIIB, we have as many as 50 examples in a deposit. They start at the beginning of IIIB, or at the very end of IIIA:2, and they are very common.

(Kanta showed the xeroxed Kastelli 66 material according to stratigraphical levels, starting at the lowest.)

**Kanta:** There is no doubt that the deep bowl exists before IIIC, although not with the handles placed high and close to the body. To say that it is a totally new shape in Crete, I think is most peculiar. If you want to say that this variation of the shape came to Crete because of Mycenaean influence, this is something else entirely. I would not disagree with that. I do not agree that by deep bowl we only mean FS 284 and that the deep bowl arrived in IIIC.

**Macdonald:** Do we have the Mainland shape of IIIB deep bowl on Crete in IIIB?

**B.Hallager:** Yes.

**Macdonald:** That is really what Warren is getting at, and he wants proof of it.

**Borgna:** I have a lot of deep bowls at Phaistos, and I am trying to build up a typology of this shape. I think it is very difficult. It is possible to find a dichotomy in the products between a Minoan tradition associated with a peculiar decorative repertoire, and a Mycenaean tradition as regards both morphological and decorative aspects as I shall try to show in my paper. It is possible that the real Mycenaean deep bowl FS 284 entered the local repertoire late in LM IIIB. I cannot say it on the basis of the material I am studying now because I do not have stratigraphical connections. The comparisons available with other contexts seem to show that in IIIB we have tentative imitations of the Mycenaean deep bowl while the real FS 284 bowls, like the ones we saw from Khania, are importations from the Mainland and are typical earlier products according to the wider decoration zone on the body. Other kinds of vases that we generally call deep bowls have a very narrow zone. They do not seem to have relations with the FS 284 of LH IIIB:1, but, in my judgement, to other classes of Mycenaean vases, such as FS 304 and other kinds of Aegean bowls.

**Hood:** I may have got lost. I thought that the appearance of the deep bowl in IIIB was one of Popham's main criteria for distinguishing IIIB from IIIA:2. Surely those deep bowls in his view were imitations of the Mycenaean shape.

**B.Hallager:** It was in the early 60s when he had gone through Box Gamma in the Stratigraphical Museum. He recognised that material as earlier and contemporaneous with Kastri, that is late IIIB and IIIC. In his article (Popham 1965), he discusses the bowl, and points out that it is one of the most common shapes in IIIB.

**Warren:** This is a mixed box with no provenance. You really cannot use anything from it. When Popham was giving these definitions years ago, we really did not know very much about IIIC. I have actually wondered whether some of that material would not now be classified simply as IIIC. It turned out that some of the material in that box was from Phaistos. I am afraid you can not do very much with that.

**Hood:** Putting myself under Popham's tuition to try and understand what he meant by IIIB, I have spent many hours examining the sherds he set aside as IIIB from the Unexplored



Mansion. I was thinking of that. But I entirely agree with Warren about what Popham was at one time calling late IIIB, which I would certainly, myself, like to consider as early IIIC. I am thinking of the material from the Little Palace with the rather scratchy decoration. And I must admit that – following the order to speak and think afterwards – looking at Kanta's Kastelli 66 material, I wondered very much whether that broken up decoration from Level 10 onwards might not be contemporary with this skimpy style at Knossos that Popham was calling late IIIB, but which, I must say, I would like to at least consider as the earliest IIIC in Crete.

**Warren:** I would only add to that – just a personal view of your material, and I am grateful to you for taking us through those stratified levels – that Level 11 appears mainly pre-IIIC (with some IIIC elements), 10 has pre-IIIC and IIIC and from 9 and 8 on I would say that you have features present there which I would call IIIC, and that 6 and 5 on are just pure IIIC. Obviously, in all these levels you get a few earlier intrusions – in any settlement situation that would be the case.

**Kanta:** Would you think that what you saw of 8 and 9 is the earliest IIIC or transitional?

**Warren:** Early IIIC on your stratigraphy; the stylistic data do not seem incompatible with that.

**Coulson:** In any stratigraphical context you are bound to get mixtures, especially when you have a transitional period, but you usually date the context by the latest sherd. So it is IIIC, but with some late IIIB admixture.

**Rethemiotakis:** From what you have shown us, I could see easily the stylistical characteristics of LM IIIB. I also have seen the characteristics of LM IIIC. Your LM IIIC looks later, somewhere in LH IIIC middle in accordance with the Helladic sequence. Which are the stylistic characteristics of the transitional period or early IIIC? Are there such stylistic characteristics in your material, or not?

**Vlasaki:** At Khamalevri, the reserved band inside the rim of the skyphos is scarce in early IIIC. It seems to be common a little later.

**B.Hallager:** What Kanta showed you from Kastelli 66 Level 11 and down to Level 7 is IIIB:2 in Khania. There are a few sherds that are IIIB:1 – but this is to be expected. Early IIIC starts in Level 6 where new features appear as for example the bowls with reserved band and two new designs, the button hook spirals and the tricurved streamers. None of these three features exists in our IIIB:2 strata. In our IIIB:2 strata (and only there) there exists a special type of cup, with a high-slung handle and flaring rim. The exterior decoration is very simple: a rim band and below it sometimes a wavy band or more often a single body band. In the Kastelli 66 material I find the interior double rim band very interesting. Kanta interpreted it as a feature immediately predating the reserved rim band of IIIC. This double rim band is very typical in our IIIB:2 layers and does not exist in the IIIB:1 layers. The same interior double rim band I found among Popham's IIIB material from the Unexplored Mansion.

**Kanta:** If that is so, then what Warren calls early IIIC is what you call IIIB:2.

**B.Hallager:** That is IIIB:2 Khania. We have floor deposits and rubbish pits and they are found on top of the destroyed IIIB:1 settlement. On the earliest IIIC floors we find bowls with reserved



rim band. Not all bowls have the reserved band, but many do. A parallel may be seen in early IIIC Kastri where the majority of the bowls have a reserved rim band. This has for long been a characteristic feature for the beginning of IIIC.

**Kanta:** If I understood you correctly, the reserved band is a characteristic of IIIC which has started some time before.

**B.Hallager:** The double rim band is a characteristic for IIIB:2 and the reserved rim band for early IIIC. It is two different strata in Khania. If the one ended a Monday and the other started a Tuesday, I do not know...

**Kanta:** Oh, no, we are not talking about so small a timespan! That is why I found what Warren said very interesting. I would like to take up Macdonald's point that the Mycenaean sherds seem to be mostly IIIB. Regarding Coulson's remark about taking the latest piece: you have to date these levels as roughly contemporary, otherwise you choose at will pieces you consider typologically later to date the levels. The Kastelli 66 site was properly excavated by Tzedakis and Popham – I was there as a very young site assistant – and it was published because it had a clear stratigraphy. It has not been messed up. This is what each level contained. I have considered the material along the lines of Warren's comment, but what held me back all those years ago from calling Level 8 and 9 IIIC is that the Mycenaean sherds seemed to be IIIB. We are back with the problem of what is the earliest IIIC, because there does not seem to be a gap in the sequence at this point. But I do think that Kastelli 1966 contains transitional material.

**Macdonald:** A question on methodology: we have got a Mainland sequence which they have done a lot of hard work on, and they know precisely when things change. Who or what is going to decide when Crete becomes IIIC? What major change is there, what is the dividing line stylistically or shape-wise or historically between IIIB and IIIC which gives us the right to say we are now going to start calling this IIIC? Level 8 is felt here to be IIIC but we have Mainland IIIB sherds in it which may or may not be contemporary. Who and what is to decide when we start IIIC? This is something I just do not understand.

**Kanta:** This is why I said at the beginning that before we start naming sub-phases, we first have got to prove their reality. This is a major stumbling block. We have got to start from there. Especially those of us who have the material.

**Warren:** Macdonald has put the question very well and very clearly. We can start talking about IIIC when we have clear floors with a coherent set of ceramic characteristics which did not exist before. I will just cite the pits at Sybritos, which is a new settlement, it appears in this period, with a coherent group of material, Khamalevri doubtlessly as well, and I would say for the tiny part of Knossos where I worked, that this stage is something quite new. It is an assemblage of features. If some of those features are derived from the Mycenaean Mainland, where they existed earlier, in LH IIIB, it would not be any surprise.

**Dietz:** I want to comment very briefly as an outsider. I have worked in the Argolid with LH III from Asine, but also in Rhodes. There are many similarities between the Cretan and the Rhodian material. And some of the same problems need to be solved. I would agree with Warren that the layers 8 to 9, compared to the Rhodian material, appears to be mainly LH IIIC. And it is not what I would define as transitional IIIB to IIIC: The deep bowl with

the very thin reserved band is, in the Argolid, very late. In Asine we call that Sub-Mycenaean, actually. Concerning Macdonald's comments: in Rhodes, when you get to IIIB:2, it becomes increasingly difficult to compare with the Mainland. As far as possible, you should define the transition IIIB to IIIC in accordance with the Mainland, but it is not possible to do it because relations in late IIIB with Rhodes, but evidently also with Crete, do not exist to any real extent. Relations with the Mainland in IIIC are not very extensive, either.

**Prokopiou:** Concerning the distinction between IIIB and IIIC, at Sybritos I have not found a pure IIIB level. I have the feeling that the site begins at some moment in IIIC. Therefore, everything we find there is not necessarily IIIC. This does not exclude the presence of earlier material brought along by the people who, coming from elsewhere, established the site, but the settlement will be understood as IIIC. Pure IIIB levels may, of course, still appear at Sybritos since excavation continues.

**Gesell:** If you date the level by the latest pottery in it, you may still have earlier material. A IIIB pot in a IIIC level still remains a IIIB pot. Or will it now be considered as a IIIC pot?

# LM IIIA:1 Pottery from Khamalevri, Rethymnon<sup>1</sup>

Maria Andreadaki-Vlasaki &  
Eleni Papadopoulou

The Khamalevri area has been part of the Minoan bibliography since 1960 through travels and surface surveys by several researchers.<sup>2</sup> However no systematic excavation had been carried out until the end of 1990, when a trial excavation was begun in the Bolanis fields, with the help of a small grant from the Rethymnon prefecture. This went ahead due to the great danger and threat to the archaeological site from arbitrary building activities, vast diggings and rural road construction. Since then, the Khamalevri excavations have continued yearly on different properties, as and when the needs arise (Fig. 1).<sup>3</sup>

The archaeological finds belong mostly to the MM and LM periods

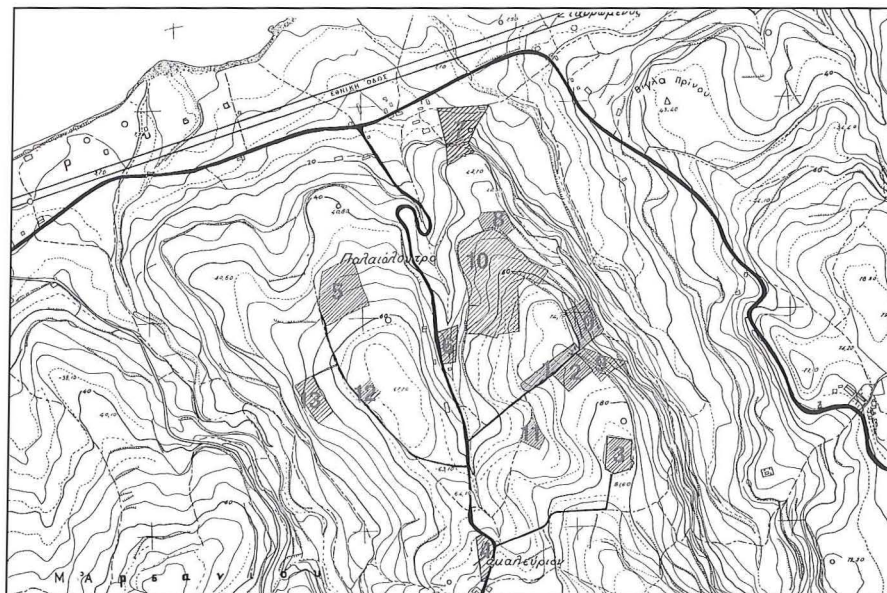


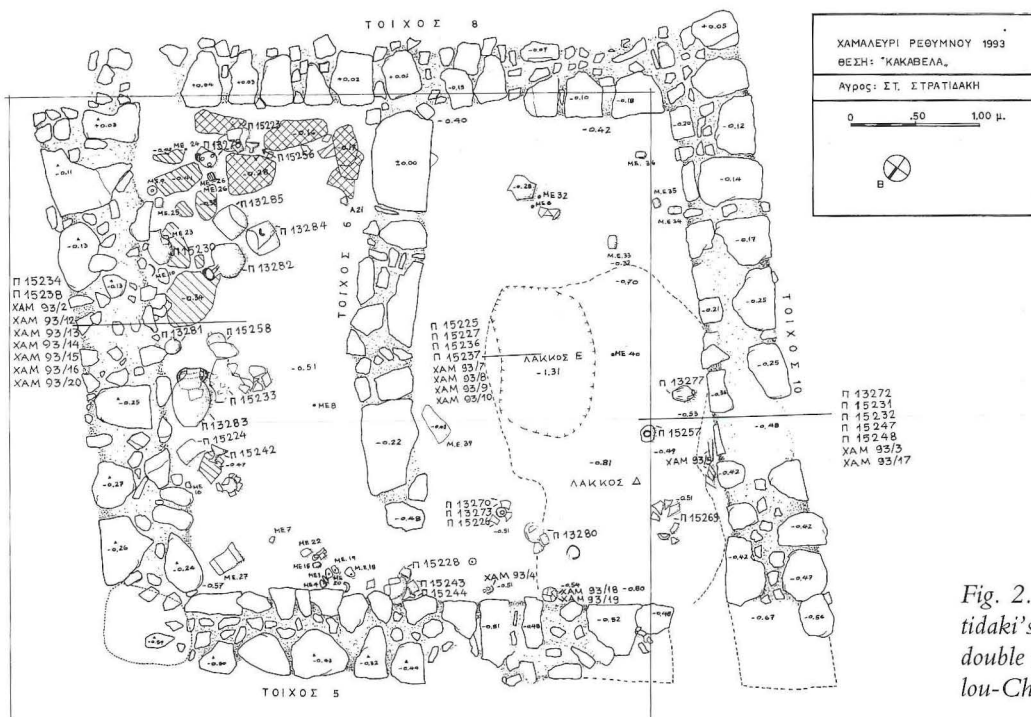
Fig. 1. Khamalevri excavations 1991-1994. St. Stratidaki's field is no.5 (Drawing: Y. Christodoulakos).

<sup>1</sup>We warmly thank Dr. Colin Macdonald not only for his sound and useful advice as a 'respondent' to our paper but also for his kind offer to correct our english manuscript. The plans were drawn by the writers and Y. Christodoulakos, the architect of the excavation. The excavation photographs were taken by E. Papadopoulou. K. and V. Konstantakis together with A. Mylona restored the pottery while V. Vrontaki and Ath. Malaxianaki made the drawings. Most of the photographs were made by St. Alexandrou; the rest by E. Hallager whose help as editor was inestimable.

<sup>2</sup>Faure 1960, 202-203; Faure 1962, 42; Hood et al. 1964, 50-53 and 62-66; Schiering et al. 1982, 15-47.

<sup>3</sup>For preliminary reports see *Kritiki Estia* Δ', vol. 4 (1991/93), 241-244 and vol. 5 (1994/96), 251-264.





with growing evidence for an important Minoan settlement. In 1993, during an excavation in Stella Stratidaki's field on the Kakavella ridge, part of a LM IIIA:1 building was uncovered (Fig. 1, no.5).

## The excavation

In detail, a double room measuring 5.00 X 5.60 m. came to light (Fig. 2). A door opening, 0.50 m. wide, is probably at the NW corner. The four walls each have a width of 0.40 m. and a maximum preserved height between 0.40 and 0.50 m. A small partition wall, 0.30 m. wide, divides the room in two long, narrow parts. Pieces of broken household vessels were scattered everywhere.

The eastern part of the room (Figs. 3-4), with remains of a slab floor, was possibly partly roofed, serving as a workshop. Close to the south wall a small, rectangular enclosure was revealed, probably a hearth, although signs of burning are not very clear.<sup>4</sup> However, next to it, a deposit of broken cooking and storage vessels, some heavily burnt, was found on the floor. Close to these were also found some snail and sea shells and a pumice stone along with clay cylindrical weights, stone grinders and pounders and a half-finished steatite seal. Most of the floor slabs lie on this side of the room. Along the eastern wall were more clusters of broken vases. From these sherds were reconstructed some vessels, a fine pyxis and a kylix containing sea shells. Along the north wall, near the entry, two stone querns, one large, one small, more cylindrical clay weights and some stone weights and grinders were gathered.

<sup>4</sup>Platon 1957, 139, 141. Platon mentions similar examples from Prassa, Tyllissos and Zou.



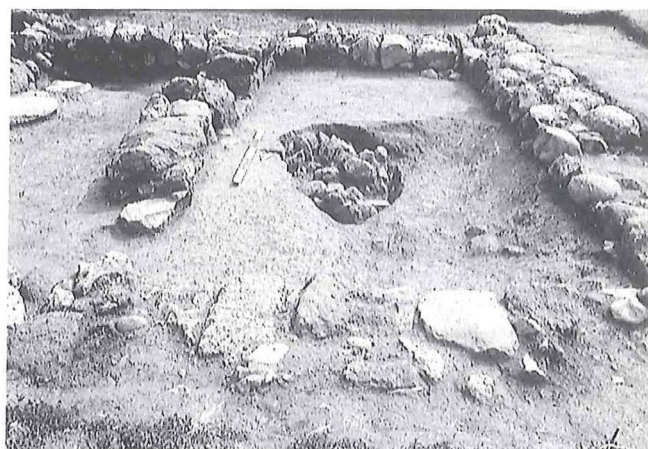
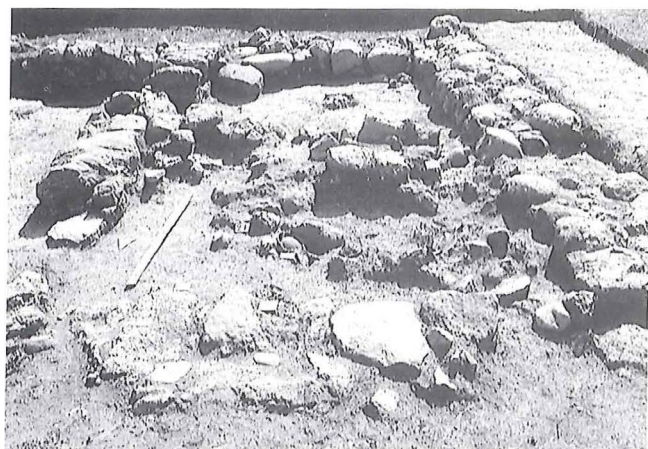


Fig. 3. The eastern part of the double room. Pottery in situ.

Fig. 4. The eastern part of the double room. Pottery in situ.

Fig. 5. The western part of the double room. Pottery in situ.

Fig. 6. The western part of the double room. Pits Δ and E.

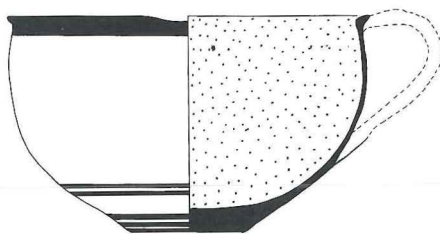
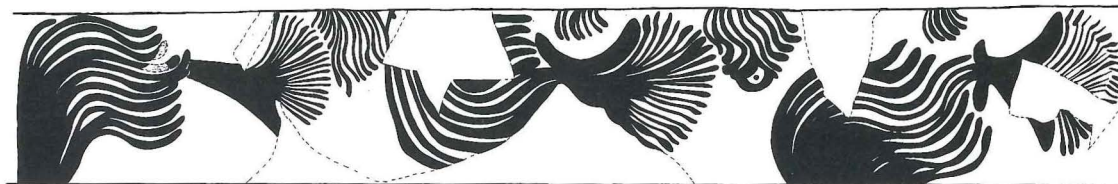
The western half of the room (Figs. 5-6) was somewhat different, as it contained two pits, one large and shallow, one small and deep (pits Δ and E = the last with massive stone debris), and it looks like an area for rubbish disposal.<sup>5</sup> The smashed vases found in the pits belong to the same chronological phase as those on the floor, thus excluding the possibility of an earlier dump for debris. Along the north wall were some decorated cups and by the west wall some coarse vessels were revealed. On the south side, where extended burning was visible, some stone grinders and pounders, a clay weight and two obsidian blades were gathered.

In general, both parts of the double room seem to have a working place or storage character and we hope that future research at the site will give us more information on this. The use of the room was of relatively short duration because we are unable to observe any real chronological difference between the pre-destruction and destruction pottery, as is indicated by a stylistic homogeneity of the pottery on the floor and in the rubbish pits.

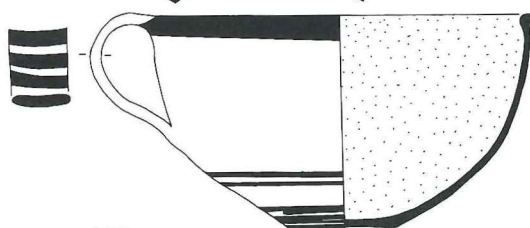
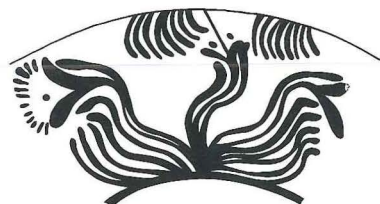
The building architecture has many similarities with the LM IIIA:1 settlement at Khondros Viannou where rectangular rooms are quite com-

<sup>5</sup>Platon 1957, 141; PAE 1959, 201.

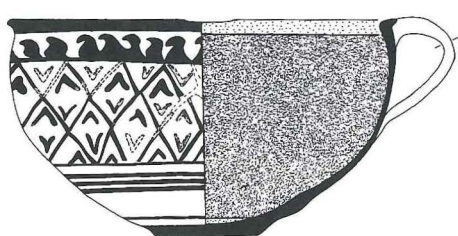




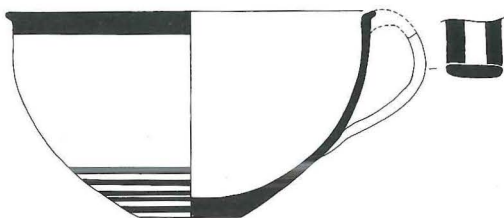
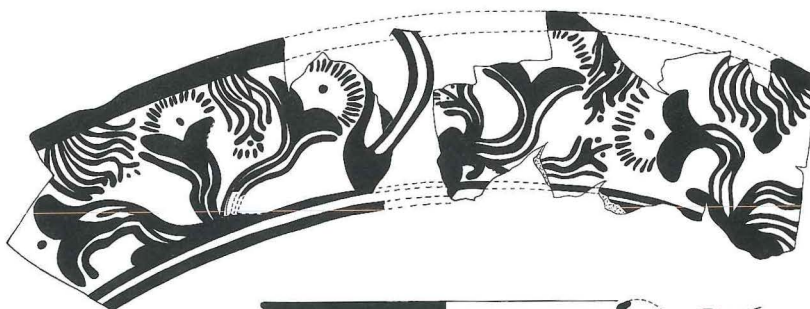
Π 13272



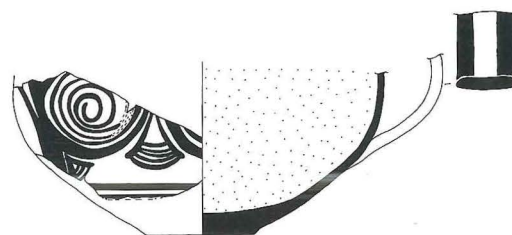
Π 15227



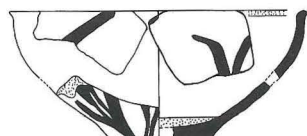
Π 15226



Π 15248



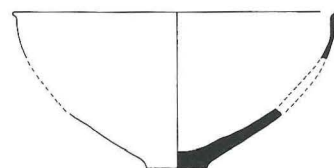
Π 15258



XAM. 93/4



XAM 93/10α-10β



XAM. 93/19

Fig. 7. Ledge-rimmed cup Π 13272, Π 15226, Π 15227, Π 15248, Π 15258, Cup XAM 93/4, XAM 93/10, Cup XAM 93/19.



mon, usually with the same internal division and an entrance at the corner of the room.<sup>6</sup>

## Pottery catalogue

### Cup, one-handed with pulled out lip (ledge-rimmed)

Π 13272 (Figs. 7, 8)

H. 0.085 m.; rim diam. 0.145 m.; base diam. 0.045 m. Some fragments are missing, including most of the handle; restored. Fine reddish yellow clay (5YR 7/6); very pale brown slip (10YR 7/4) and red to brown flaking paint (2.5YR 5/6 – 7.5YR 4/4). Deep, semiglobular, rather bulbous body with vertical strap handle and flat narrow base. Small out-turned flattened (ledge) rim, sharply defined; the lip has been slightly pulled out into a small pouring spout at right-angles to the handle. A wide band covers the rim and a group of three narrower outlines the base. A second series of two bands run around the lower part of the body. The main decoration on the handle zone consists of fern-like flowers with multiple curved stem, oriented in the same direction and flanked by tassel pattern. The spaces between the flowers are filled with tassel pattern and Minoan flowers pendent from the lip band. The handle is barred with a loop around its base. The interior is monochrome streaky red and black.

For the shape see Popham et al. 1984, pl. 172 (LM IIIA:1) and especially pl. 156:2,4 (transitional LM II/IIIA:1). See also Platon 1957, pl. 69b; Popham 1970, fig. 3 (LM IIIA); Watrous 1992, fig. 24 and 32 with various examples (LM IIIA:1); Banou-Rethemiotakis 1991, Part I (LM IIIA:1).

Similar flowers on cups: Popham 1970, pl. 15b and fig. 11:29 (LM II) and 38d. See also Popham et al. 1984, pl. 111f (LM II) and 116d (LM IIIA:1).

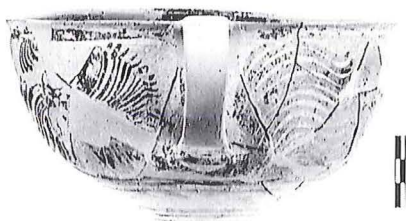


Fig. 8. Ledge-rimmed cup Π 13272.



Fig. 9. Ledge-rimmed cup Π 15226.

Π 15226 (Figs. 7, 9)

H. 0.086 m.; rim diam. 0.153 m.; base diam. 0.044 m.; w. of handle 0.018 m. Some fragments are missing; restored. Fine, pink clay and slip (10YR 7/4); red to very dark grey flaking paint (2.5YR 4/8 – 5YR 3/1). Similar in shape to Π 13272. The flat base is rather raised. A wide band covers the lip and continues below the upper junction of the handle. A second one outlines the edge of the base and one narrow band is painted above it. A group of three narrow bands frames the main decoration of the handle zone about two thirds down the body. Below the rim is a row of quirks. The main frieze consists of the criss-cross, trellis design filled with stylised iris flowers in opposite corners. The handle is barred; possibly loop around base. The interior is painted with sponge (stipple) pattern and a solid painted circle covers the bottom; lip band inside.

The same decoration: Popham 1970, fig. 11:8-9 (LM IIIA), pl. 24b and

<sup>6</sup>Platon 1957, 139. Room A1 has been characterised by the excavator as a room for weaving because of the amount of the spherical and cylindrical loom weights found on the floor (p. 141). The scattering of the clay weights in our excavation and the remaining picture of the room does not allow the same characterization.

Cf. also room N of the Unexplored Mansion (Popham et al. 1984, 69-76).

39b; ASAtene 1961-2, 41, fig. 38 (Kamilaris); ASAtene 1967-8, fig. 93a (Phaistos).

Π 15227 (Figs. 7, 10)

H. 0.085 m.; rim diam. 0.153 m.; base diam. 0.045 m.; w. of handle 0.023 m. Almost the half of the body is missing; restored. Fine reddish yellow clay and slip (7.5YR 7/6); red paint (2.5YR 5/6). Similar in shape to Π 13272. The base is rather concave.

A wide lip band frames the main decoration above and a group of two narrower below. The edge of the base is outlined with paint and three narrow bands are painted above it. The main frieze on the handle zone depicts three groups of three flowers with multiple-curve stem; two are placed antithetically while the space between them is filled with a third. The flowers are flanked by tassels and the same pattern is pendent from the lip band. The handle has two vertical strokes of paint on either edge and the middle is barred. Monochrome interior.

Similar decoration: Popham 1970, pl. 43a (LM IIIA). Popham 1967, pl. 82d and Popham 1994, pl. 8c (on the borderline between LM II and IIIA:1). Similar bunches of flowers with tassels above and below are depicted on the marvellous LM II pyxis (H 10) from Popham et al. 1984, pl. 65b, 155:1-4 and 165:51. See also the pyxis H 174: pl. 67c-d, 155:5 and 165:50.

Π 15247

Max. base diam. 0.0425 m.; w. of handle 0.022 m. Almost half of the body is missing; not restored. Fine pink-reddish yellow clay (5YR 7/4-7/6), pinkish white slip (7.5YR 8/2) and red paint, nearly all effaced (2.5YR 4/6). Similar in shape to Π 13272. The base is rather concave. There is a low moulding below the rim. Similar in decoration to Π 15227.

Π 15248 (Fig. 7)

Base diam. 0.0425 m.; w. of handle 0.022 m. About half of the body is missing; not restored. Fine pink-reddish yellow clay (5YR 7/4-6); pinkish white slip (7.5YR 8/2); reddish brown flaking paint (2.5YR 4/6). Similar in shape and decoration to Π 15247. The handle is outlined. Among the sherds of Π 15247 and 15248 we recognized a few sherds of a third, almost identical cup with an outlined handle and a lip band inside.

Π 15258 (Fig. 7)

Max. pres. h. 0.060 m.; base diam. 0.044 m.; w. of handle 0.022 m. Many fragments of the rim and body are missing; not restored.

Fine reddish yellow clay and slip (7.5YR 6/6); red paint (2.5YR 4/6), fugitive. Similar in shape to Π 15227. Running spiral as main decoration with isolated bivalve shells as fill above and below. At least two narrow bands on the lower part of the body. The handle is outlined. Monochrome interior.

For the running spiral cf. Popham 1970, pl. 29c, 46m and fig. 12:50. Kanta 1980, fig. 41:4,9 (H. Triadha).



Fig. 10. Ledge-rimmed cup Π 15227.



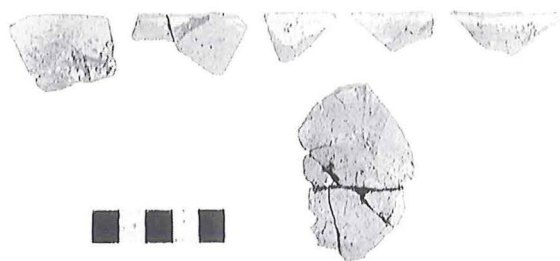


Fig. 11. Cup XAM 93/4.

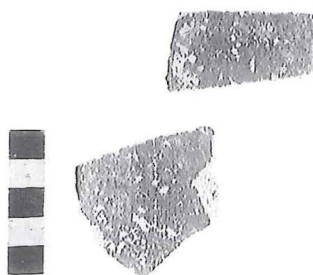


Fig. 12. Cup XAM 93/10.

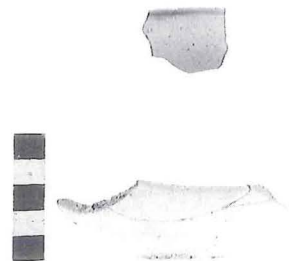


Fig. 13. Cup XAM 93/19.

### Cup

XAM 93/4α-στ (Figs. 7, 11)

Base diam. 0.032 m.; th. 0.003 m. More than half of the body and the entire handle is missing; preserved in pieces. Yellowish red, rather fine clay (5YR 6/8); lighter flaking slip (5YR 6/6); red, fugitive paint (2.5YR 4/8). Conical-semiglobular body with a flat base and a small horizontal ledge rim. Lip band in and out. Floral pattern covers the body. Painted circle inside base.

It recalls of the LM II reed cups (Popham et al. 1984, 162, pl. 151 and 156:8-9). For shape cf. Watrous 1992, fig. 23:514 (LM IIIA:1).

XAM 93/10α-β (Figs. 7, 12)

Max. pres. h. 0.034 m.; th. 0.004 m. Two fragments of the rim and the body are preserved. Very pale brown clay (10YR 8/3); very dark grey paint (10YR 3/1). Curved sides with vertical rim. Solid painted inside and out.

Cf. Popham et al. 1984, pl. 148:3 (LM II cup with stippling).

XAM 93/19 (Figs. 7, 13)

Base diam. 0.024 m.; th. 0.004 m. Fragments of the body and the rim are preserved. Very pale brown clay and slip (10YR 8-7/3). Small flat, rather raised base with wide body. The rim is ledged, almost horizontal. Traces of paint cover the rim and the interior of the cup.

Cf. Watrous 1992, fig. 23:514 (LM IIIA:1).

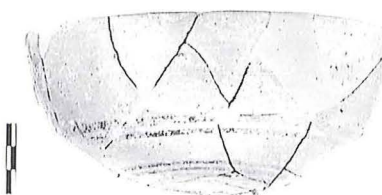


Fig. 14. Handleless cup Π 13270.

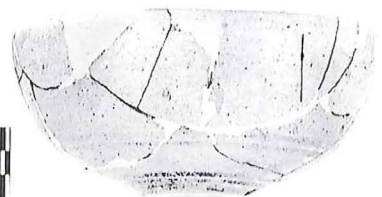


Fig. 15. Handleless cup Π 13273.

### Handleless semiglobular cup (lid?)

Π 13270 (Figs. 14, 16)

H. 0.060 m.; rim diam. 0.130 m.; base diam. 0.040 m. Some fragments are missing; restored. Reddish yellow clay (5YR 7/6); very pale brown slip (10YR 8-7/3), rather shiny; red paint (2.5YR 4/8). Semiglobular, quite deep body with flat base and vertical rim. One narrow band outlines the edge of the base and two more run above it. A group of two similar bands decorates the lower part of the body. Monochrome interior.

Π 13273 (Figs. 15, 16)

H. 0.056 m.; rim diam. 0.127 m.; base diam. 0.032 m. Some fragments





Fig. 16. Handleless cup Π 13270, Π 13273, Conical cup Π 13265, Π 15225, Stemmed cup XAM 93/6, Kylix Π 15242, XAM 93/1-3, Π 15243, Π 15244, Π 15256.

Fig. 17. Conical cup Π 13265.

Fig. 18. Conical cup Π 15225.



are missing; restored. Pink-reddish yellow clay (5YR 7/4-6); reddish yellow (7.5YR 7/6) to very pale brown (10YR 8/4) slip; red to dark reddish brown paint (2/5YR 4/8), rather fugitive.

Similar in shape and decoration to Π 13270.

### Conical cup

Π 13265 (Figs. 16, 17)

H. 0.048 m.; rim diam. 0.095 m.; base diam. 0.034 m. Some fragments are missing; restored. Reddish yellow clay (7.5YR 7/8-6/8), self slipped. Wide, conical body with flat raised base and rather vertical rim, slightly incurving. Plain.

Cf. Platon 1957, pl. 69b; Popham 1970, fig. 7:10; Popham et al. 1984, pl. 176:1.

Π 15225 (Figs. 16, 18)

H. 0.045 m.; rim diam. 0.093 m.; base diam. 0.031 m. Some fragments are missing; restored. Reddish yellow gritty clay (7.5YR 7-6/6); self-slipped. Similar in shape to Π 13265. Vertical rim. Plain.

Cf. Popham 1970, fig. 7:11, 9:11; Popham et al. 1974, fig. 9:4/10; Popham et al. 1984, pl. 176:2; Watrous 1992, pl. 15, fig. 27.

### Stemmed cup (rhyton)

XAM 93/6 (Figs. 16, 19)

Max. pres. h. 0.070 m.; base diam. 0.047 m.; th. 0.005 m. Only the lower part is preserved. Very pale brown clay (10YR 7/4); thin slip; yellowish red paint (5YR 4-5/6). Piriform body; hole pierced in base. A band outlines the edge of the base and a second one decorates the body.

Cf. Popham 1970, pl. 26e and Popham et al. 1984, 162, fig. 156, pl. 51 (LM II).

### Kylix

Π 15242 (Figs. 16, 20)

Max. pres. h. 0.058 m.; base diam. 0.050 m. Much of the body is missing; not restored. Pink clay (7.5YR 7/4); white, thin slip (10YR 8/2). Low foot widening slightly towards the disk-like base, with hollow on the underside. Rather conical body with one strap handle and everted rim. Plain.

Cf. Platon 1957, pl. 70b and Kanta 1980, fig. 47:7; Popham 1969, 300, fig. 3 (LM IIIA:1); Popham 1970, fig. 9:8; Kanta 1980, fig. 3:4 from Ty-lissos (LM IIIA); Popham et al. 1984, pl. 172 (LM IIIA:1).

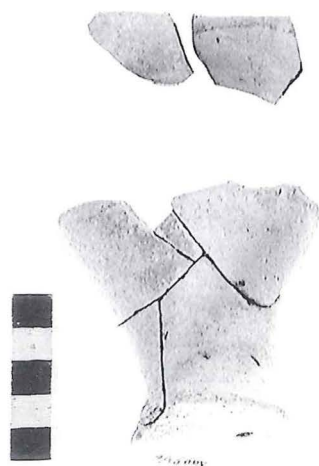


Fig. 19. Stemmed cup XAM 93/6.



Fig. 20. Kylix Π 15242.



Fig. 21. *Kylix* Π 15244.



Fig. 22. *Kylix* Π 15256.

Π 15243 (Figs. 16, 23)

Max. pres. h. 0.061 m.; body diam. 0.096; foot diam. 0.019; w. of handle 0.016 m. The base, almost the entire foot and part of the body are missing; not restored. Rather fine reddish yellow clay (5YR 6/8) with light red core (2.5YR 6/6) and shiny red slip (2.5YR 5/8). Wide conical body; hole pierced in foot. Small everted rim, vertical strap handle and solid foot. Plain.

Similar in shape: Platon 1957, pl. 70b; Popham 1970, 103, fig. 9 no. 15 (LM IIIA); Popham et al. 1974, fig. 9:4/3 (LM IIIA:1); Popham et al. 1984, pl. 172:10-12 (LM IIIA:1); Watrous 1992, no.737: fig. 31, pl. 17 (LM IIIA:1).

Π 15244 (Figs. 16, 21)

Max. pres. h. 0.077 m.; body diam. 0.011 m.; foot diam. 0.019 m. The base, the handle, almost the entire foot and half of the body are missing; not restored. Monochrome.

Similar in fabric and shape to Π 15243.

Π 15256 (Figs. 16, 22)

Max. pres. h. 0.079; rim diam. 0.11; foot diam. 0.021 m. The base, the handle and part of the foot are missing; partly restored. Very pale brown clay (10YR 8/3) with pinkish core (7.5YR 7/4); self-slipped. Rather shallow, semi-globular body with small, almost horizontal, sharp edged (ledge) rim and hole pierced in foot. One-handled. Plain.

Cf. Platon 1957, pl. 70b; Popham 1970, fig. 9:13 (LM IIIA), 10; Popham et al. 1974, fig. 9:4/1-2 (LM IIIA:1); Popham et al. 1984, pl. 176:7 (LM IIIA:1); Watrous 1992, fig. 27:643 (of early IIIA:1 type: p. 127).

XAM 93/1 (Figs. 16, 24)

Max. pres. h. 0.028; base diam. 0.061 m. Only the base and part of the foot are preserved. Light red, rather fine clay (2.5YR 6/8); yellowish red, flaking slip (5YR 5/6). Disc-like base with a shallow hollow on the underside; cylindrical, pierced foot. Plain.

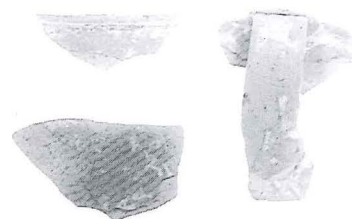


Fig. 23. *Kylix* Π 15243.

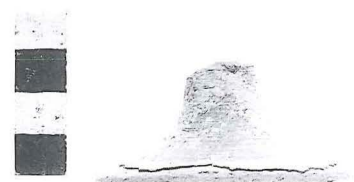


Fig. 24. *Kylix* XAM 93/1.





Fig. 25. Kylix XAM 93/2.



Fig. 26. Kylix XAM 93/3.



Fig. 27. Bowl XAM 93/18.

XAM 93/2 (Figs. 16, 25)

Max. pres. h. 0.066 m.; base diam. 0.055 m. Many fragments of the body and the handles are missing; partly restored. Reddish yellow, rather fine clay (7.5YR 7/6); thin slip. Similar in shape to Π 15242. Plain.

XAM 93/3 (Figs. 16, 26)

Max. pres. h. 0.053 m.; diam. 0.085 m. Only part of the body and foot are preserved. Reddish yellow, rather fine clay (5YR 6/8); very pale brown, flaking slip (10YR 7/4). Conical, deep body with a cylindrical, hollowed foot. The root of one handle is preserved. Plain.

### Bowl

XAM 93/18 (Fig. 27)

Base diam. 0.052 m.; th. 0.005 m. Fragments of the body and the rim are preserved. Fine reddish yellow clay (5YR 7/6); pink slip (7.5YR 8/4); fugitive paint. Flat, rather hollowed base with deep, wide body, possibly semiglobular, and everted rim. Traces of paint inside.

### Jug, trough-spouted

Π 13280 (Figs. 28, 30)

H. 0.177 m.; rim diam. 0.119 m.; base diam. 0.075 m.; w. of handle 0.020 m. Some fragments are missing; restored. Gritty, reddish yellow clay (5YR 7/6) with a thin outer layer of grey clay. Strong wheel traces inside. Rather piriform body with flat base. The neck is low and the rim vertical, forming a trough spout, placed opposite the handle. The vertical strap handle is attached from rim to shoulder. Plain.

Cf. Watrous 1992, fig. 29 (no. 693).

Π 13282 (Figs. 29, 30)

H. 0.228 m.; rim diam. 0.131 m.; base diam. 0.085 m.; w. of handle 0.023 m. Some fragments are missing; restored. Heavily gritted (schist inclusions), red clay (10R 5/8); self-slipped. Similar in shape to Π 13280, but with a rather conical body. Flattened handle with a triangular lower end. Burnt spout. Plain. Cf. Kanta 1980, fig. 108:2.

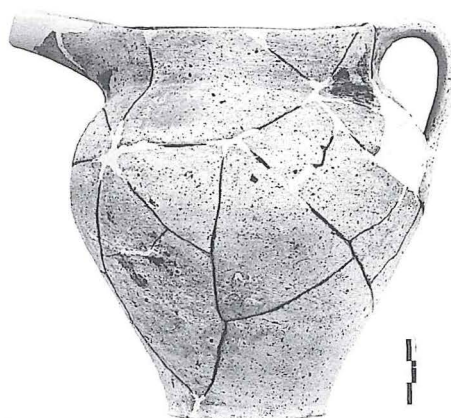


Fig. 28. Trough-spouted jug Π 13280.

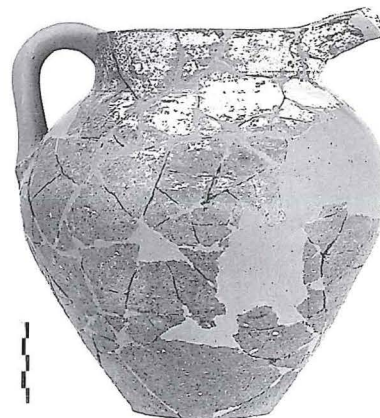
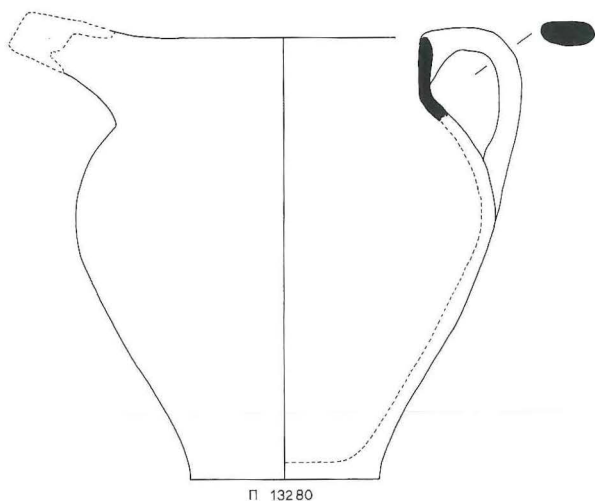
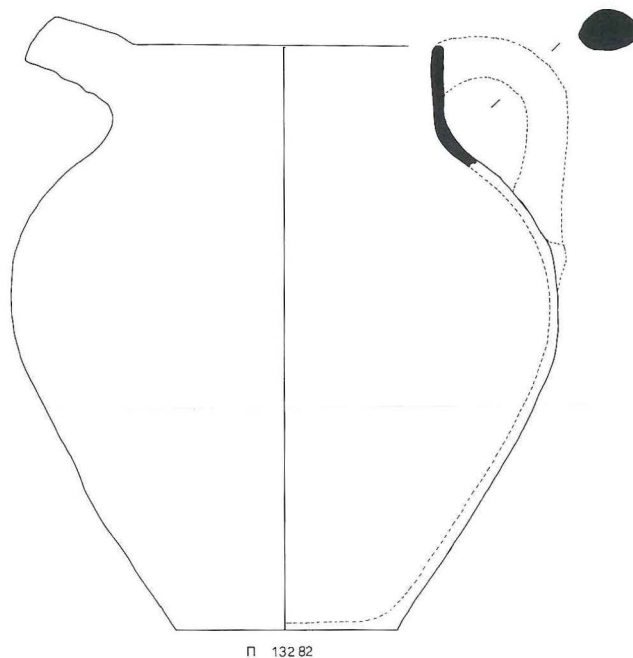


Fig. 29. Trough-spouted jug Π 13282.



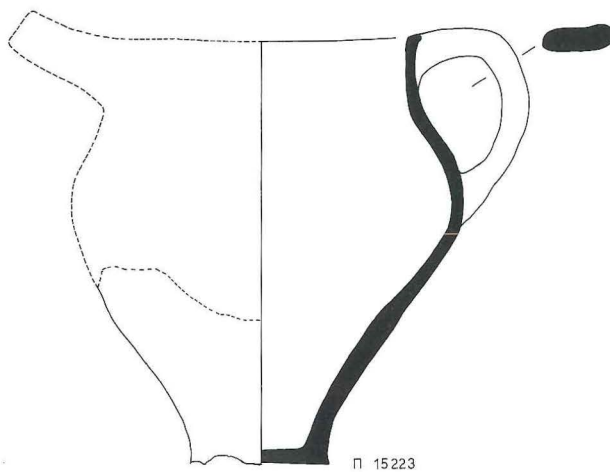
Π 13280



Π 13282



Π 13286



Π 15223

Π 13286 (Figs. 30, 31)

H. 0.222 m.; rim diam. 0.129 m.; body diam. 0.180 m.; base diam. 0.058 m.; w. of handle 0.032 m. Reddish yellow clay (7.5YR 7/6), very pale brown slip (10YR 8/4) and brown to black, very dark grey paint (5YR 3/1). Conical-piriform body with a flat base, a rather vertical low neck and a trough spout. The ledge rim is almost rounded. Three grooves along the vertical handle. Strong wheel marks inside. Band covers the rim and the base of the neck on the outside. A group of two parallel bands de-

*Fig. 30. Trough-spouted jug Π 13280, Π 13282, Π 13286, Π 15223.*



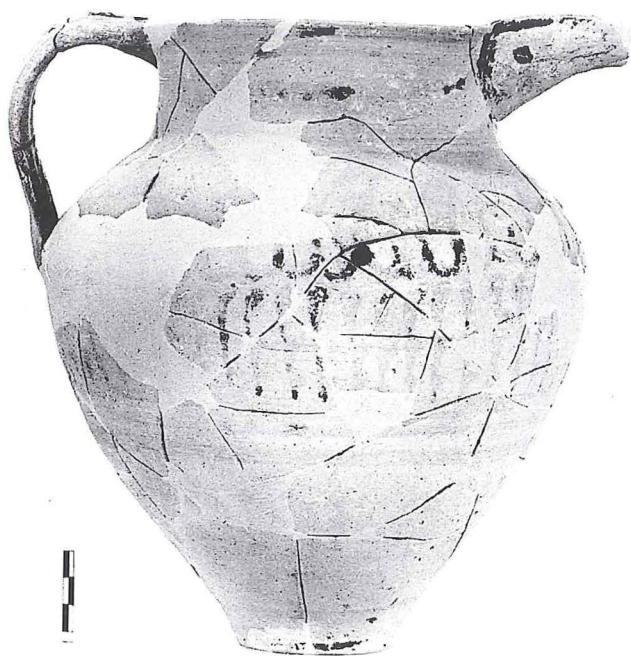


Fig. 31. Trough-spouted jug Π 13286.



Fig. 32. Trough-spouted jug Π 15223.

corates the belly and another wide one outlines the edge of the base. The main decoration is framed on the upper half of the body; it consists of a foliate band and a second row of stylised vertical reeds below. The spout is decorated with two leaves. Wavy line on the neck; diagonal bars across the handle.

The reed belongs to the preferred types of pattern on jugs; cf. Popham 1970, fig. 8:1 (beak-spouted jug), pl. 16b (trough-spouted jug). The various types of reed: Popham et al. 1984, pl. 165, pl. 104e (exactly the same version). The foliate band on the shoulder of jugs : Popham et al. 1984, pl. 60b (LM II beak-spouted jug). Wavy line on the neck of trough-spouted jug: Popham 1970, pl. 16b (Royal Villa). For the combination of the foliate band and reed pattern see Popham et al. 1984, pl. 104e (sherds of a LM II jug).

Π 15223 (Figs. 30, 32)

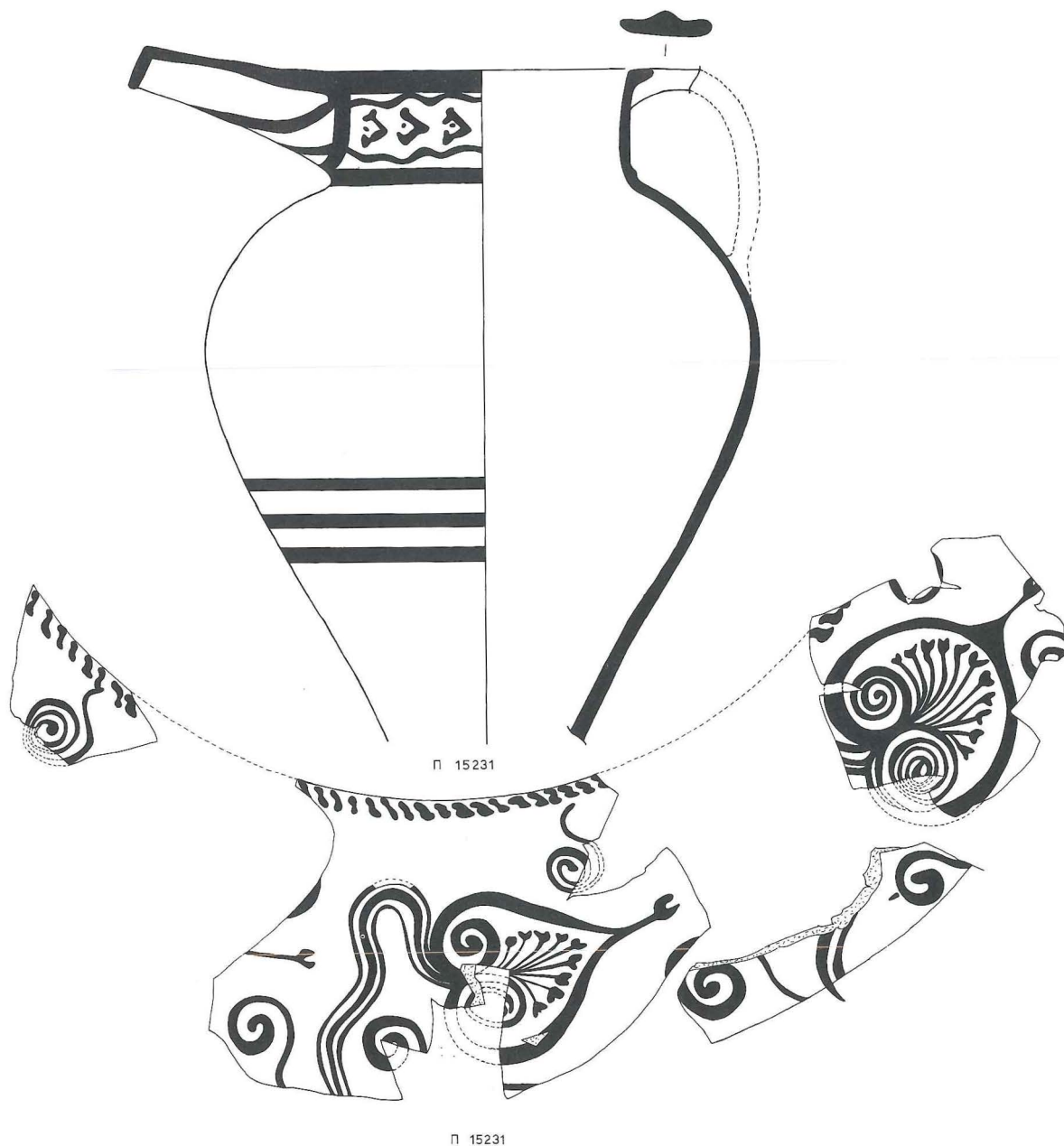
H. 0.168 m.; rim diam. 0.123 m.; base diam. 0.059 m.; w. of handle 0.030 m. Many fragments are missing as well as the entire spout; restored. Reddish yellow clay (7.5YR 7/6) and very pale brown flaking slip (10YR 7/3). Similar in shape to Π 13280 and 13286. Shallow groove along the handle and a low raised ridge at the base of the neck. The rim is short, horizontal (ledge). Plain.

Cf. Platon 1957, pl. 69b.

Π 15231 (Figs. 33, 34)

Rim diam. 0.161 m.; w. of handle 0.043 m.; l. of spout 0.074 m.; th. 0.004 m. The base and many fragments of the body are missing; not re-





stored. Fine pinkish clay (7.5YR 7/4), very pale brown slip (10YR 8/3-4) and dark brown to black flaking paint (5YR 3/4 to 2.5/1). Similar in shape to Π 15223. Vertical strap handle with a central ridge; attached from rim to shoulder. Diagonal bars cover the horizontal rim and a band outlines its outer surface, running below the junction of the spout. A wide band covers the raised ridge of the neck and a group of three bands decorates the lower part of the body. A band also outlines the spout, the outer surface of which is decorated with double V. The neck is covered by a horizontal row of iris buds – set on their sides – framed above and

Fig. 33. Trough-spouted jug Π 15231.

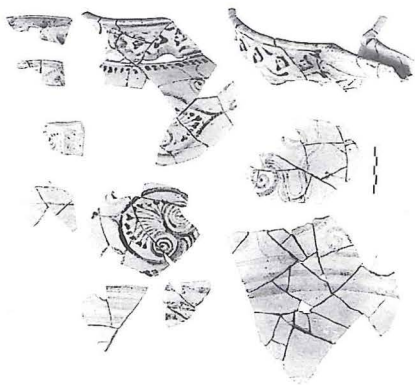


Fig. 34. Trough-spouted jug Π 15231.

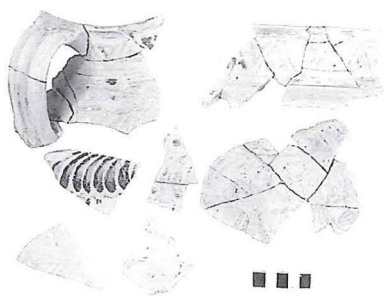


Fig. 35. Trough-spouted jug Π 15232.

below by undulating lines. On the shoulder there is a row of quirks and below it the main frieze consists of curve-stemmed sacral ivies filled with lilies. The spaces between them are filled with isolated stemmed spirals in a hanging and standing row. Vertical chevrons along the handle.

Sacral ivies similar to ours, but more stylised, are depicted on the LM IIIA:1 krater in Popham 1967, pl. 84c. In contrast, the ivy on the LM II jar of pl. 82b is more naturalistic. The Khamalevri ivies may be dated between these two examples. For the neck motif cf. Popham et al. 1984, pl. 165:30 (without the row of dots: LM II) and pl. 90a.

#### Π 15232 (Figs. 35, 37)

Pres. height 0.21 m.; rim diam. 0.158 m.; body diam. 0.287 m.; w. of handle 0.038 m.; th. 0.004 m. The spout, the base and many fragments of the body are missing; not restored. Fine pink clay and slip (7.5YR 7/4); dark brown to black fugitive paint (7.5YR 3/2 – 2/0). Similar in shape to Π 15223. The rim has two very small projections, perhaps opposite one another. The ornate handle is vertical with three grooves along and three rivets at the junction with the rim; its lower end has a triangular shape.

One band covers the horizontal rim, a second one outlines its outer surface, running below the handle attachment and a third one covers the base of the neck. A horizontal iris zig-zag decorates the surface of the neck. The main frieze is framed on the upper part of the body and divided into two narrow and one broad horizontal zones: the first is a row of solid painted circles with dots in the spaces above and below, the second is a foliate band and the third festoon patterns. Traces of paint cover the rivets. A band outlines the handle and two others run along the ribs.

The same elaborate body decoration appears on the LM IIIA:1 stirrup jar in Popham et al. 1984, pl. 152:2. The combination of circles, dots and foliate band: Popham 1970, pl. 15a and pl. 50:1–2 (LM II); cf. also Evans 1914, pl. II. The neck decoration: Popham 1970, fig. 11, mot. 1 and fig. 8:13. The festoon pattern: Warren 1983, 69, fig. 18 (LM II).

#### Jug

##### Π 15237

Max. pres. h. 0.115 m.; base diam. 0.061 m.; th. 0.004 m. Only the lower part of the vase is preserved; restored. Rather fine pinkish clay (7.5YR 7/4) and whitish slip (10YR 8/2). Piriform shape with a flat base. Plain.

##### Π 15257 (Fig. 37)

Max. pres. h. 0.112 m.; base diam. 0.081 m.; th. 0.005 m. Only the lower part of the body is preserved. White to very pale brown clay and slip (10YR 8/2–3); dark paint but all fugitive. Piriform body with raised base. Parallel bands of paint.

#### Jar

##### XAM 93/20α–β (Figs. 36, 37)

Max. pres. h. 0.057 m.; th. 0.004 m. Two rim fragments are preserved. Coarse reddish yellow clay (7.5YR 7/6). Low, collar neck, lipless, with one vertical handle, ovoid in section, attached below the rim.

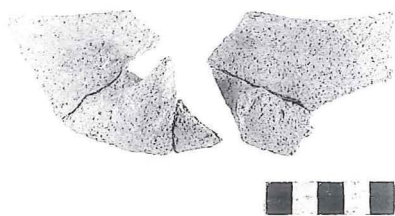


Fig. 36. Jar XAM 93/20.

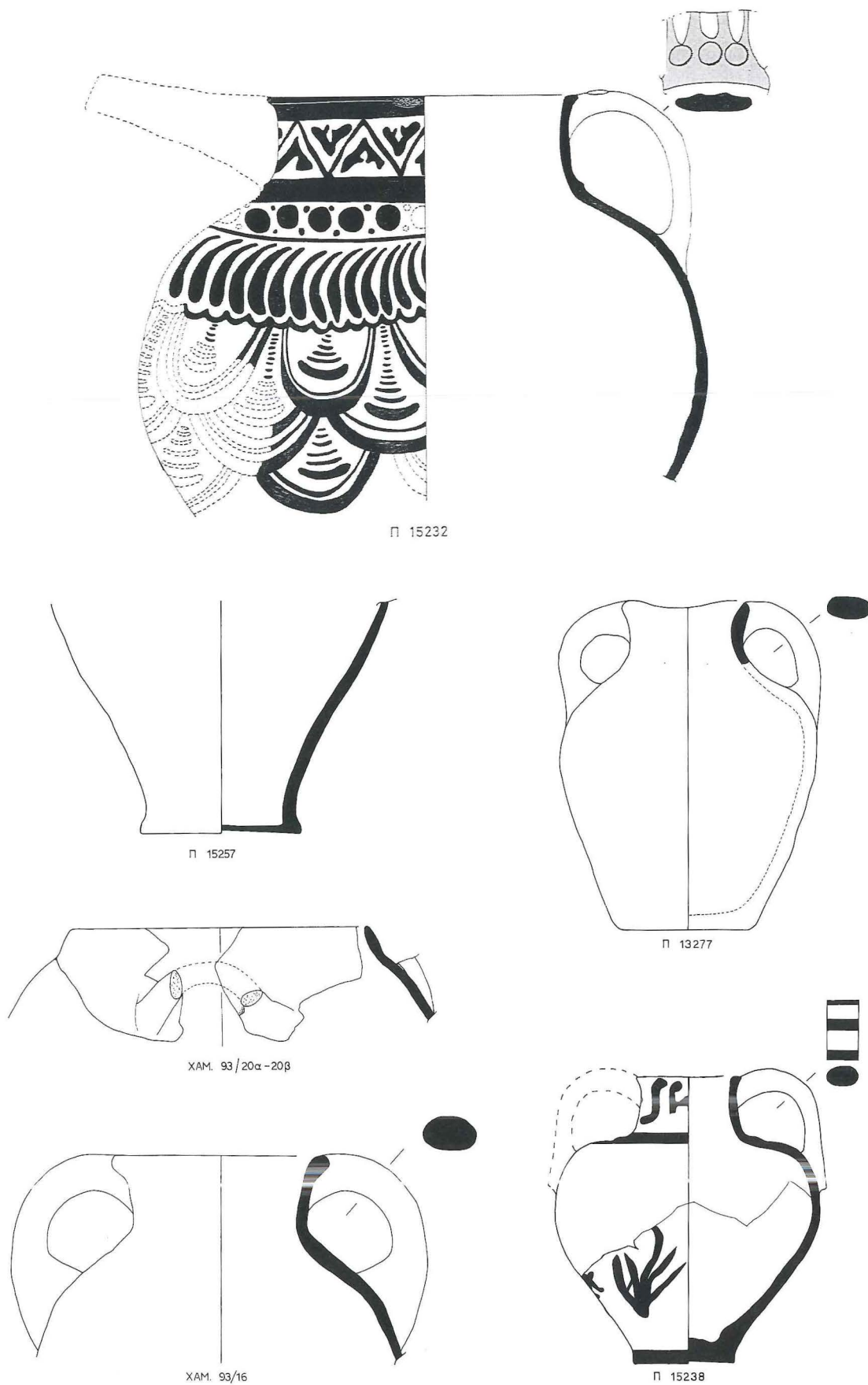


Fig. 37. Trough-spouted jug Π 15232, Jug Π 15257, Jar 93/20, Amphoriskos Π 13277, Π 15238, XAM 93/16.





Fig. 38. *Amphoriskos* II 13277.



Fig. 39. *Amphoriskos* II 15238.

### **Amphoriskos**

II 13277 (Figs. 37, 38)

H. 0.160 m.; max. rim diam. 0.065 and base diam. 0.072 m.; w. of handle 0.022 m. Almost complete; restored. Reddish yellow (5YR 6/6-8), heavily gritted clay (schist and gravel inclusions). Conical body with flat, bevelled base and short, concave neck. Oval-mouthed rim and two vertical, strap handles from rim to shoulder. Plain.

II 15238 (Figs. 37, 39)

Max. rim diam. 0.067 m.; base diam. 0.051 m.; w. of handle 0.016 m.; th. 0.004 m. The one handle and few body fragments are missing; partly restored. Grey clay with a thin reddish yellow outer layer (5YR 7/6); pinkish white, dilute slip (7.5YR 8/2); yellowish red (5YR 4/6) to very dark grey (10YR 3/1) very fugitive paint. Piriform body with flat to disc base and concave neck. Oval-mouthed with short horizontal rim and two slightly arching strap handles from rim to shoulder; their lower end has a triangular shape. A raised ridge at the start of the shoulder.

Solid painted rim. Possibly a variation of S-shaped pattern decorates the neck. Wide band covers the raised ridge. Traces of paint on the body indicate a floral spray pattern. Bars across the handle and possibly a loop encircles its base.

XAM 93/16 (Figs. 37, 40)

W. of handle 0.026 m.; th. 0.006 m. Only part of the neck with one handle are preserved. Red, heavily gritted clay (2.5YR 5/8); light red slip (5YR 6/8). Short neck with rolled rim and a vertical, flattened handle from rim to shoulder. Plain.

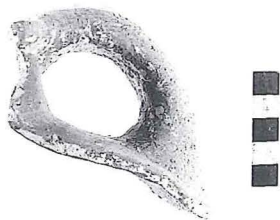
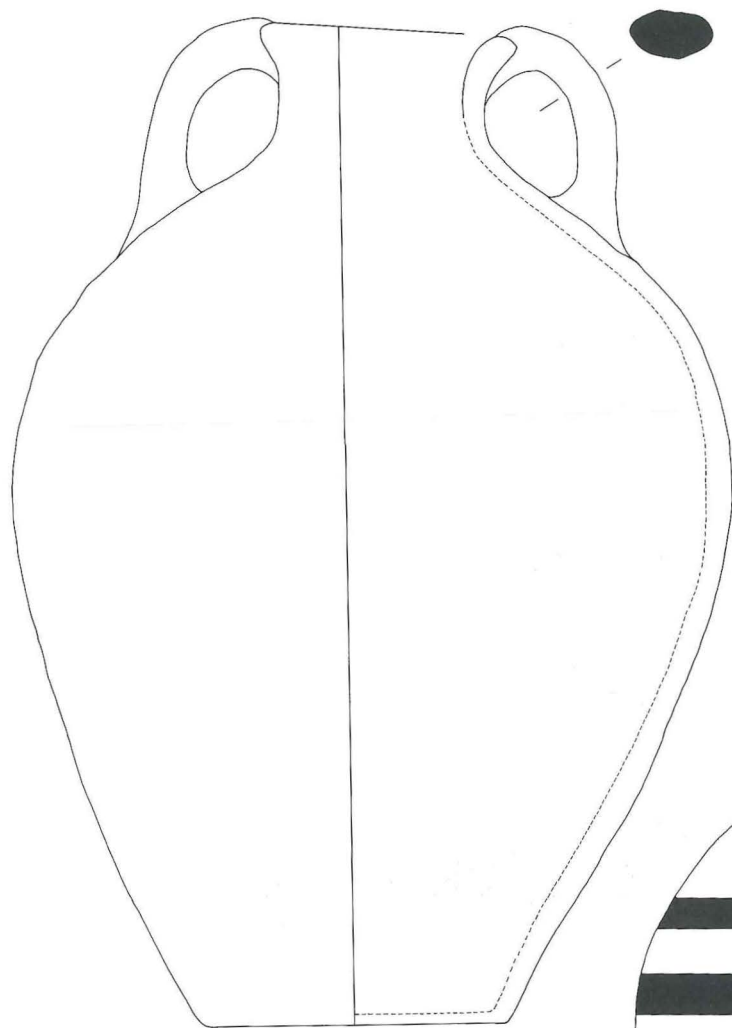
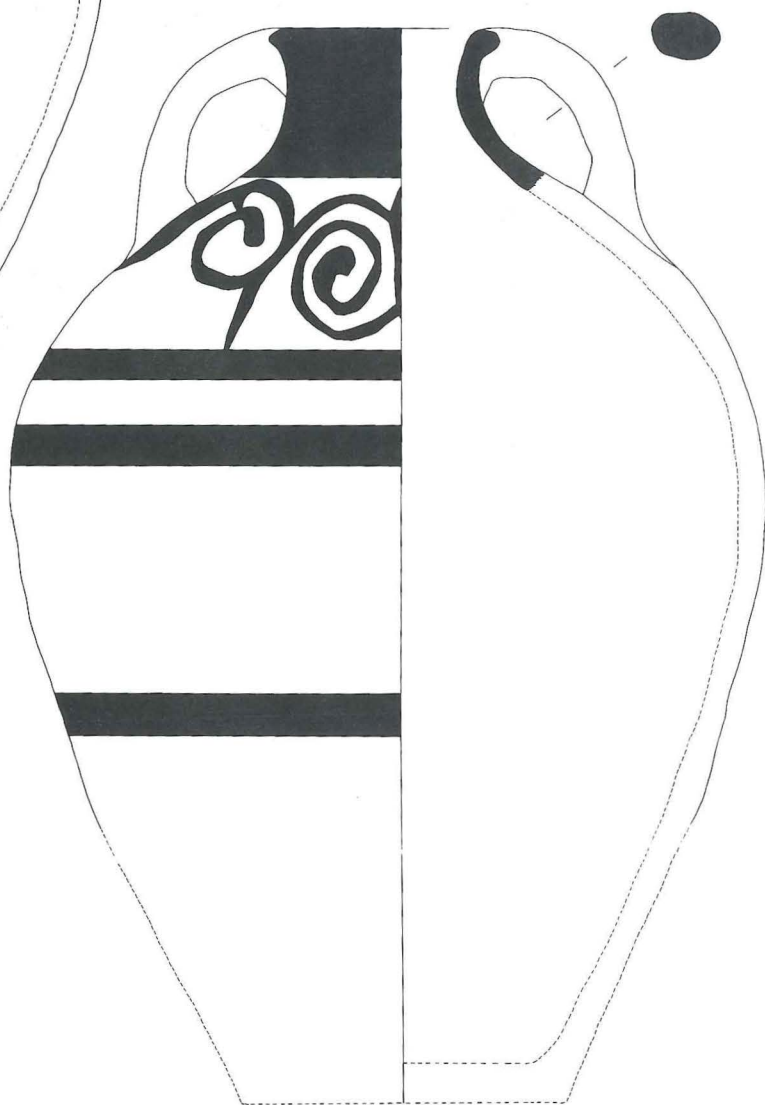


Fig. 40. *Amphora* XAM 93/16.



Π 13283



Π 13285

Fig. 41. Amphora Π 13283, 13285.

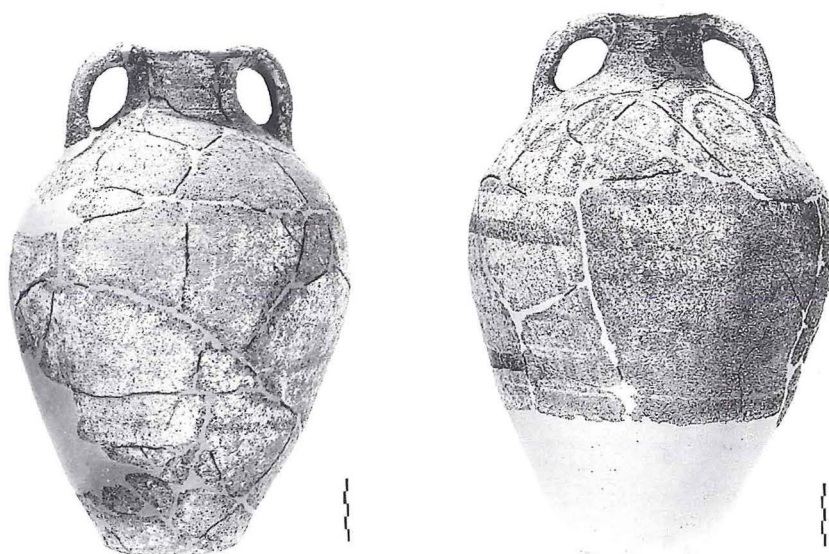


Fig. 42. Amphora II 13283.

Fig. 43. Amphora II 13285.

### Amphora

II 13283 (Figs. 41, 42)

H. 0.387 m.; max. rim diam. 0.114 m.; base diam. 0.112; w. of handle 0.003 m. Almost half of the body is missing; restored.

Red (2.5YR 5/8) to brownish-grey (10YR 6/2) heavily gritted clay. Ovoid body with flat, bevelled base and short neck. Oval-mouthed with horizontal rim and two vertical strap handles from rim to shoulder. Plain.

Similar in shape: Platon 1957, pl. 69a.

II 13285 (Figs. 41, 43)

H. 0.427 m.; max. rim diam. 0.105 m.; base diam. 0.122 m.; w. of handle 0.025 m. The lower part of the body and few fragments are missing; restored. Red heavily gritted clay (2.5YR 5/8); pinkish, flaking slip (7.5YR 7/4); red, rather fugitive paint (10R 4/8).

Tall, ovoid body with short neck, oval-mouthed. Small, rather rounded rim with two flattened handles from rim to shoulder.

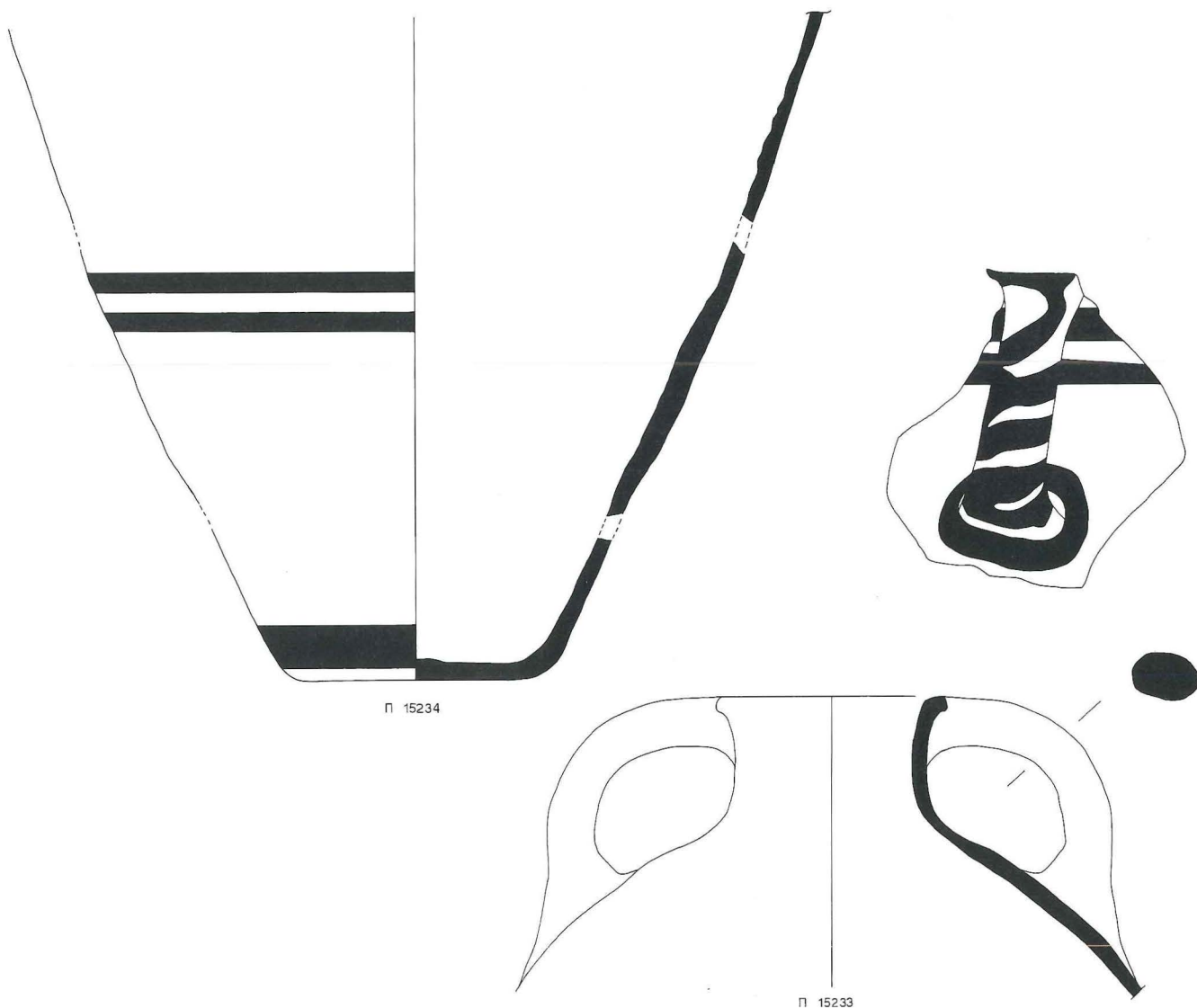
Solid painted neck outside; a wide band runs along the handles and a loop encircles the lower end of them. A group of two bands decorates the upper part of the body and a third one the lower. The main frieze is framed on the shoulder between the handles. On the one side there is a row of three and on the other a row of four isolated stemmed spirals; each spiral is connected with the vertical stem of the next one. Dribbles below the handles.

Cf. Popham et al. 1984, pl. 72 (LM II examples).

II 15228

Max. pres. h. 0.275 m.; base diam. 0.125 m.; th. 0.006 m. Almost the whole upper part of the vase is missing, including the handles; partly restored. Grey clay with a thin reddish yellow outer layer (5YR 6/6-8). Same fabric as II 15238. Rather ovoid body with flat base, short neck and small horizontal rim. Plain.





Π 15233 (Fig. 44)

W. of handle 0.029 m.; th. 0.007-0.008 m. Almost half of the body is missing; preserved in fragments, not restored. Yellowish red, gritted clay (5YR 6/6); very pale brown slip (10YR 7/4); dark brown, very fugitive paint (7.5YR 4/4). Storage amphora with cylindrical neck, horizontal rim and two vertical, flattened handles from rim to shoulder. Traces of bands on the belly. Bars on the handles and a loop encircles the lower end.

Cf. Watrous 1992, fig. 25:529 (LM IIIA:1).

Fig. 44. Amphora Π 15233, Π 15234.

Π 15234 (Fig. 44)

Base diam. 0.116 m.; th. 0.006-0.008 m. Half of the body is missing; preserved in fragments. Reddish yellow clay (5YR 6/6-8); very pale brown slip (10YR 7/4); brownish, fugitive paint (7.5YR 4/4). Wide, conical body with flat base. Groups of at least two bands decorate the body.

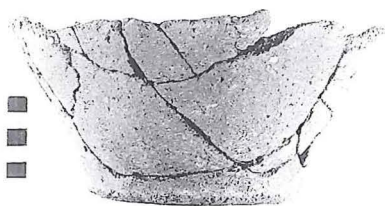


Fig. 45. Amphora XAM 93/15.

XAM 93/15 (Fig. 45)

Max. pres. h. 0.100 m.; base diam. 0.116.; th. 0.007 m. Only the lower part of the vase is preserved. Coarse red clay (2.5YR 4-5/8); self-slipped. Flat base. Plain. Heavily burnt.

### Pyxis

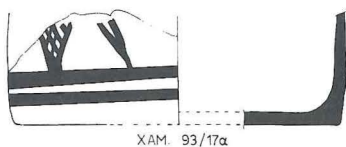
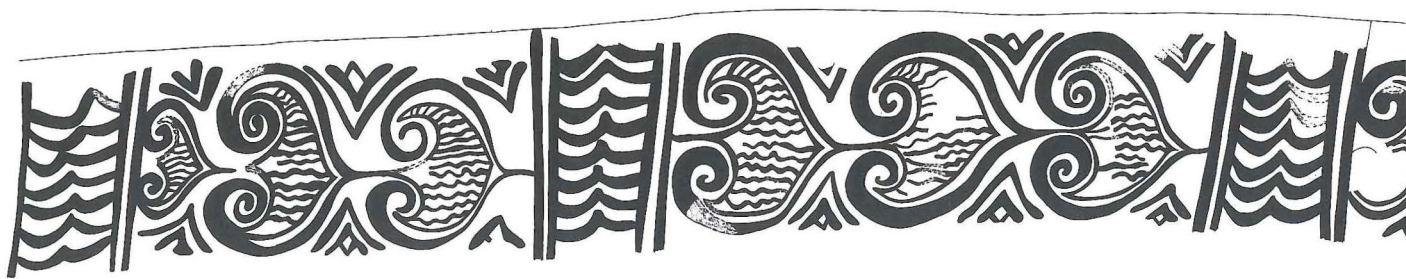
Π 15224 (Figs. 46, 47)

H. 0.149 m.; rim diam. 0.165 m.; base diam. 0.188 m.; max. body diam. 0.230 m.; w. of handle 0.010 m. Some fragments are missing; restored. Pinkish clay (7.5YR 8/4); whitish pink, dilute slip (5YR 8/2); dark reddish brown, flaking paint (5YR 2.5/2). Cylindrical body with rather curved sides and flat base. Narrow shoulder and short collar rim. Three horizontal strap handles, high on the body. The lip is solid painted. A wide band outlines the neck and the edge of the base; two similar bands run round the lower part of the body. The entire outer surface is divided into six panels: the three main panels are framed by the handles and depict a horizontal ivy chain filled with horizontal undulating lines. The space between the ivies is filled with iris above and below. Below each handle there is a narrow panel with wavy undulating lines. Diagonal bars cover the handles. Spattering inside.

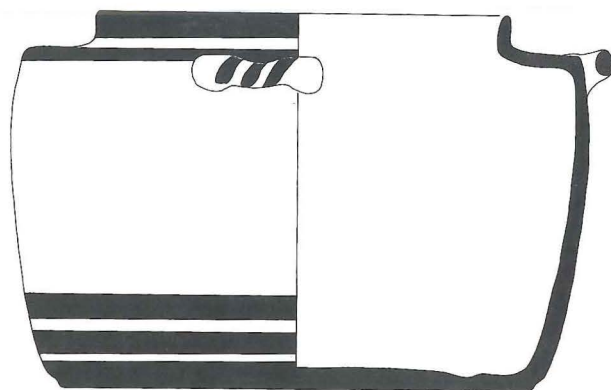
For the shape cf. the LM II cylindrical pyxis from the Unexplored Mansion (Popham et al. 1984, pl. 155:6, no. H 178) and the LM IIIA:1 example from a tomb at Alatsomouri near Pakheia Ammos (Betancourt 1985, 167, fig. 120). For the variations of the sacral ivy see Popham et al. 1984, pl. 166 (LM II). For the wavy lines cf. the LM IIIA jug from the Little Palace (Popham 1970, fig. 13:77 and pl. 3f) the body decoration of which is also divided in panels. Another LM IIIA:1 fine cylindrical pyxis from Khamalevri also carries panel decoration (ADelt 1969, Chr., pl. 436d; Kanta 1980, 218).



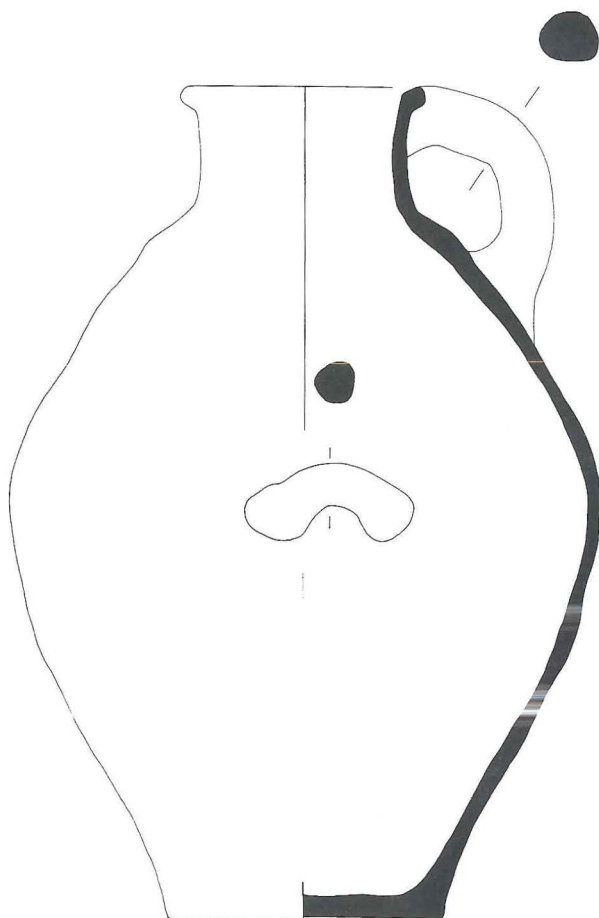
Fig. 46. Pyxis Π 15224.



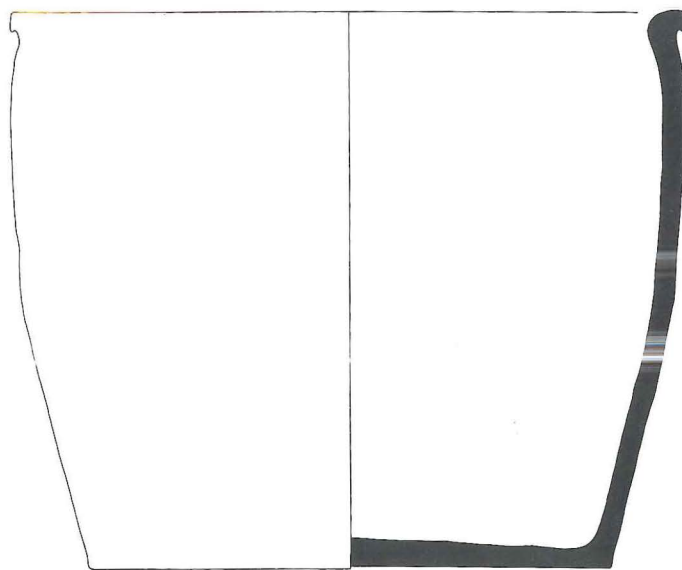
XAM. 93/17α



Π 15224



Π 15230



Π 15269

Fig. 47. Pyxis Π 15224, XAM 93/17, Hydria Π 15230, Basin Π 15269.



Fig. 48. *Pyxis*  
XAM 93/17.



XAM 93/17 $\alpha$ - $\beta$  (Figs. 47, 48)

Max. pres. h. 0.044 m.; th. 0.003 m. Only two fragments of the lower part are preserved. Fine pink clay (5YR 7-8/4) with darker core (5YR 6/4); very pale brown, lustrous slip (10YR 8/3); dark brown, very fugitive paint. Flat base with cylindrical body. Two parallel bands run round the belly, above the base. Triangular hatched ends are preserved.

### **Hydria**

$\Pi$  15230 (Figs. 47, 49)

Base diam. 0.112; w. of vertical handle 0.022 m.; diam. of horizontal handle 0.016 m.; th. 0.007 m. Almost half of the body is missing; preserved in fragments. Red, heavily gritted clay (2.5YR 5/6). Wide body, possibly conical with flat base and sloping rim; a vertical, flattened handle is preserved, from rim to shoulder and a horizontal round one on the belly, below max. diameter. Plain.

Similar jugs: Platon 1957, pl. 69a-b; Alexiou 1967, pl. 17b; Popham et al. 1984, 175, pl. 86a-b (LM II); Watrous 1992, no.740: fig. 31, pl. 17 (there is a lug instead of a horizontal round handle).

### **Basin**

$\Pi$  15269 (Figs. 47, 50)

H. 0.222 m.; rim diam. 0.290 m.; base diam. 0.235 m. Almost two-thirds of the vase are lost; partly restored. Pink-reddish yellow, heavily gritted clay (7.5YR 7/4-6); wet-smoothed. Almost cylindrical, wide body with a horizontal, almost square in section, ledge rim. Plain.

Similar basins: Popham et al. 1984, pl. 87e; Watrous 1992, pl. 13: 530 (with a downturned lug handle), and fig. 53: 1418 or pl. 36 (LM IIIB). Cf. also a LM IIIA example in Alexiou 1967, pl. 26b.

### **Tripod cooking pot**

$\Pi$  13278 (Figs. 51, 52)

H. 0.150 m.; rim diam. 0.143 m.; base diam. 0.123 m.; handle diam. 0.012 m. One handle and parts of the feet are missing; restored. Brownish red to red (5YR 5/4 - 2.5YR 4/8), heavily gritted clay (schist and gravel inclusions); wet-smoothed. Cylindrical body with flat base, everted rim and two horizontal, roll handles set obliquely below the rim on either side; a knob below the rim on the one side. Round leg section. Heavily burnt.

Similar in shape: Popham et al. 1984, pl. 86g and 162:9 (LM II); Watrous 1992, fig. 26, pl. 14: 581.

Fig. 49. *Hydria*  $\Pi$  15230.

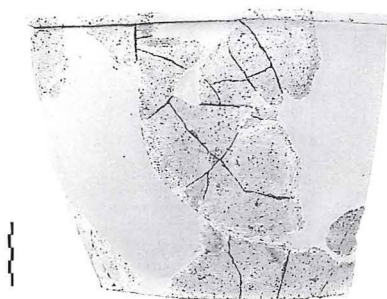


Fig. 50. *Basin*  $\Pi$  15269.



Fig. 51. *Tripod cooking pot*  $\Pi$  13278.

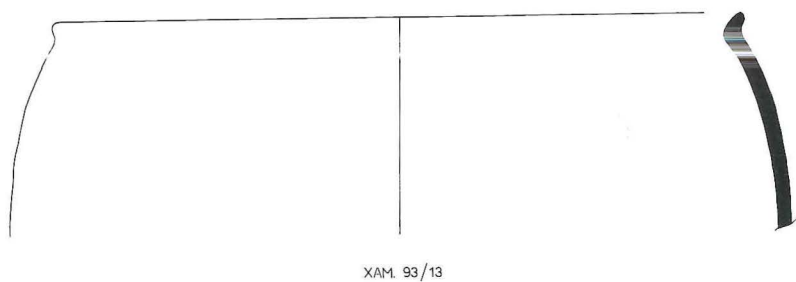
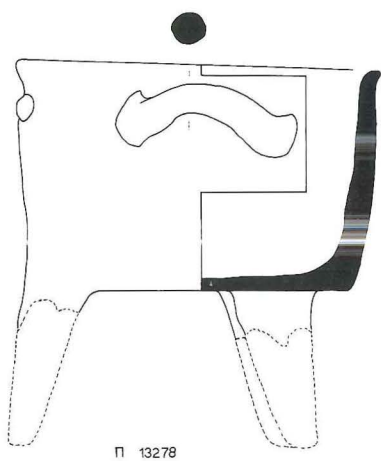
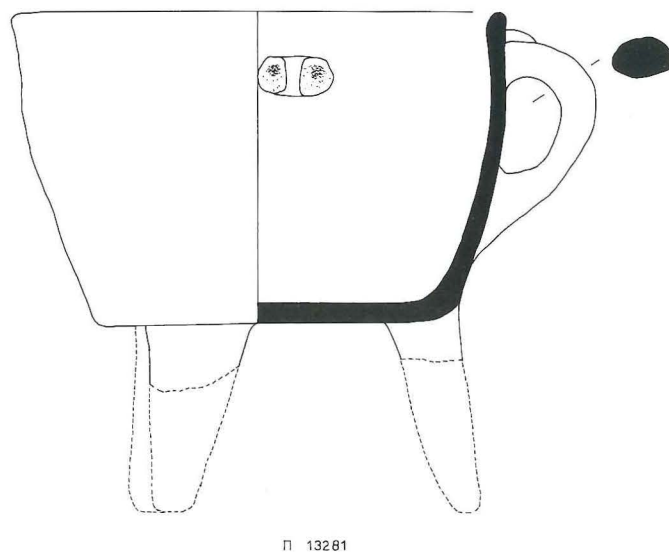
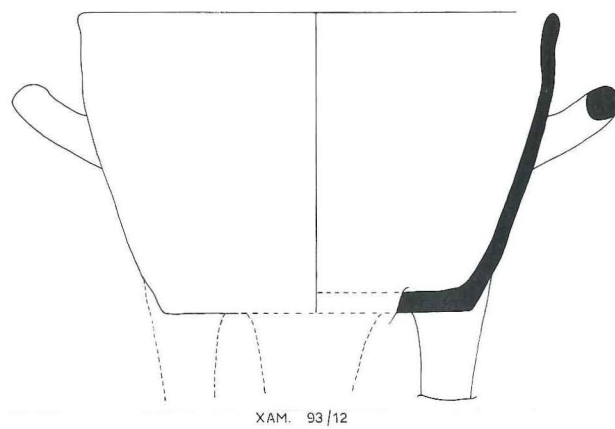
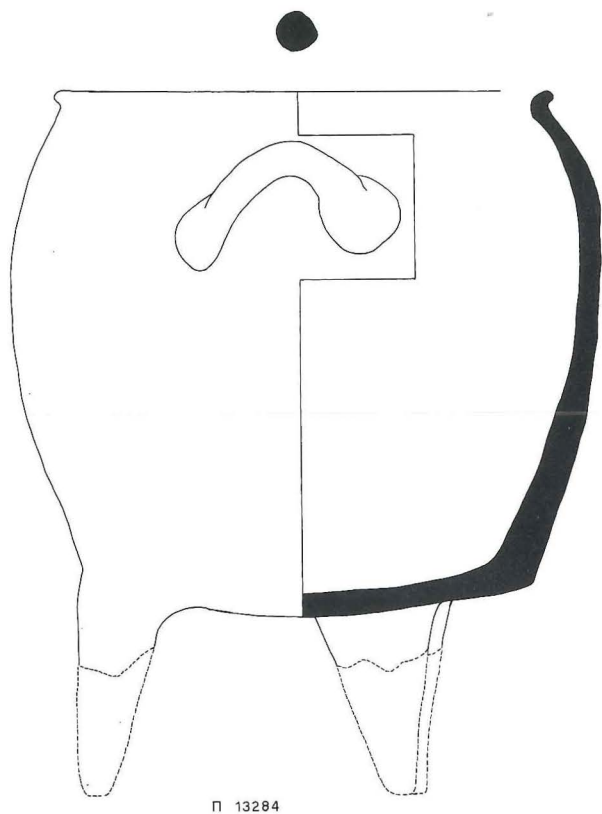


Fig. 52. Tripod cooking pot Π 13278, Π 13281, Π 13284, XAM 93/12, XAM 93/13.





Fig. 53. Tripod cooking pot Π 13281.



Fig. 54. Tripod cooking pot Π 13284.



Fig. 55. Tripod cooking pot XAM 93/12.

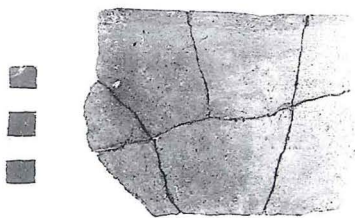


Fig. 56. Tripod cooking pot XAM 93/13.

Π 13281 (Figs. 52, 53)

H. 0.201 m.; rim diam. 0.197 m.; base diam. 0.137 m.; w. of handle 0.025 m. Many fragments are missing; restored. Red, heavily gritted clay (2.5YR 5/8); wet-smoothed. Rather cylindrical shape with curved sides, flat base and vertical rounded rim slightly pulled out to form a pouring spout, just opposite the handle. One vertical, flattened handle set below the rim with an attached knob on its upper end; a double knob on either side, below the rim. Triangular, flattened feet. Partly burnt.

Similar in shape: Popham et al. 1984, pl. 86h and 162:11 (LM II), Hawes et al. 1908, pl. II, 64.

Π 13284 (Figs. 52, 54)

H. 0.278 m.; rim diam. 0.195 m.; base diam. 0.170 m.; handle diam. 0.016 m. Many fragments are missing; restored. Red (10R 4/8), heavily gritted clay (schist and gravel inclusions); wet-smoothed. Quite deep body with curved sides; almost flat base; short everted rim; two horizontal roll handles set obliquely below the rim on either side; flattened feet. Heavily burnt.

Similar in shape: Popham et al. 1984, pl. 86f and 162:10.

XAM 93/12 (Figs. 52, 55)

Max. pres. h. 0.125 m.; w. of handle 0.014 m.; th. 0.005 m. Part of the body with one foot and one handle is preserved. Yellowish red, heavily gritted clay (5YR 5/8). Cylindrical body with almost vertical rim, flat base, flattened foot and horizontal rounded handle. Heavily burnt.

Similar in Watrous 1992, fig. 26:581 (LM IIIA:1/2).

XAM 93/13 (Figs. 52, 56)

Max. pres. h. 0.085 m.; th. 0.006 m. Only a part of the body is preserved. Red, heavily gritted clay (2.5YR 4-5/8). Cylindrical body with rather curved sides and short everted rim. Heavily burnt.



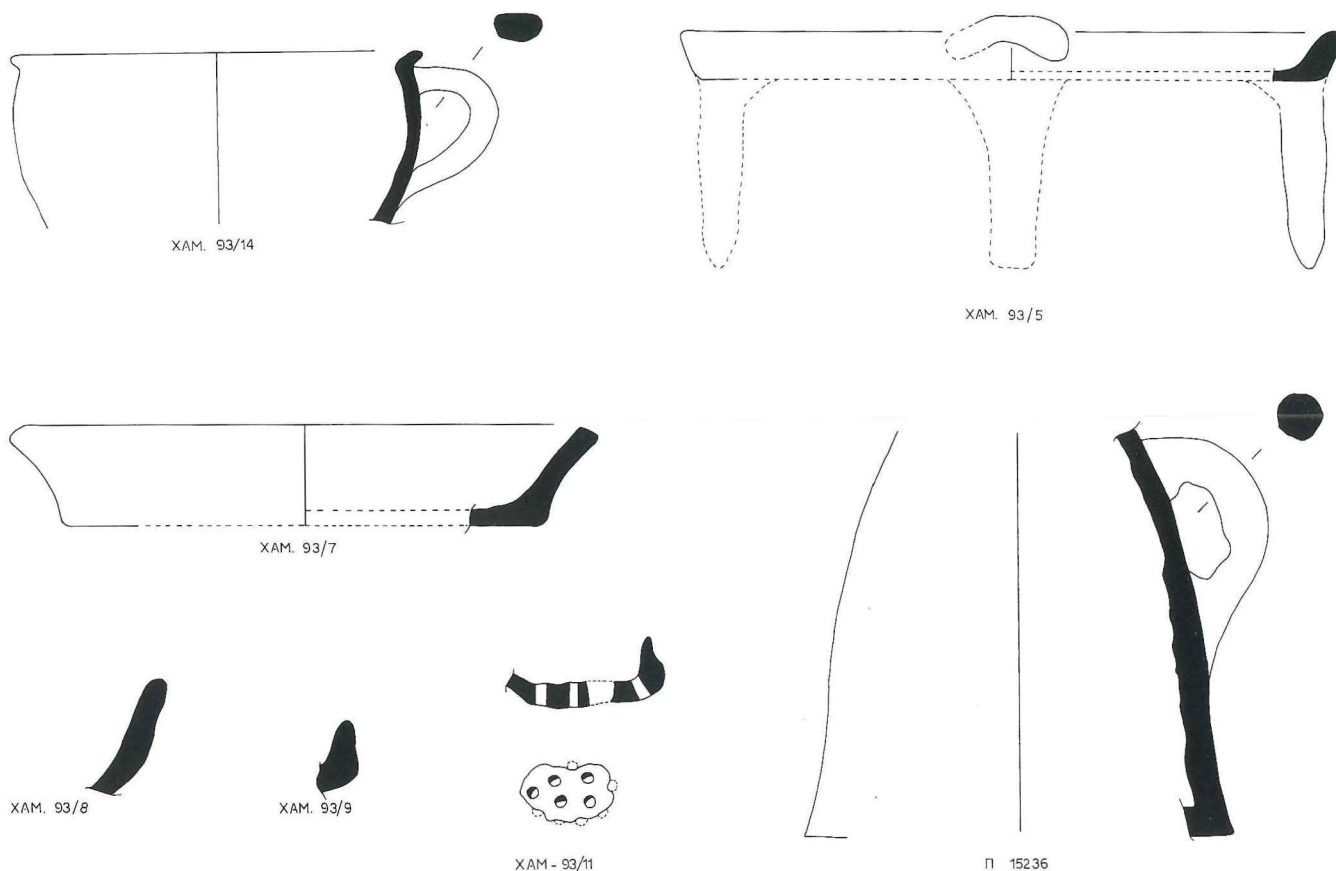


Fig. 57. Cup XAM 93/14, Tripod tray XAM 93/5, Cooking dish XAM 93/7-9, Firebox XAM 93/11, Cylindrical vessel II 15236.

#### XAM 93/14 (cup, not tripod) (Figs. 57, 58)

Max. pres. h. 0.071 m.; w. of handle 0.019 m.; th. 0.005-0.006 m. Only a part of the body with a handle is preserved. Yellowish red, heavily gritted clay (5YR 5/8); wet-smoothed. Rather globular shape with a short everted rim and a vertical, strap handle, attached below the rim. Heavily burnt.

Cf. Popham et al. 1984, pl. 162:6 and 8 (LM II).



Fig. 58. Cup XAM 93/14.

#### Tripod tray

XAM 93/5 (Figs. 57, 59)

H. of body 0.02 m.; h. of foot 0.064 m.; w. of handle 0.025 m. Almost two-thirds of the body and one handle are missing. Red (2.5YR 5-4/8), heavily gritted clay with grey core. Very shallow body with vertical rim and flat base. Flattened feet and a horizontal, elliptical handle. Plain.

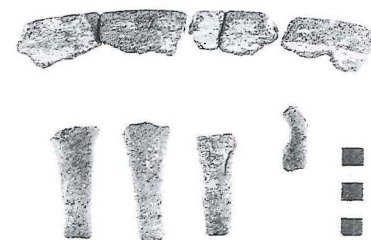


Fig. 59. Tripod tray XAM 93/5.

#### Cooking dish

XAM 93/7 (Figs. 57, 60a)

H. of body 0.039 m.; th. 0.008 m. A small part of the vase is preserved; complete profile. Strong brown (7.5YR 5/6), coarse clay with dark grey core. Flat base with concave sides and straight lip. Plain.

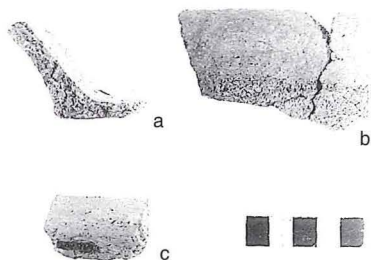


Fig. 60. Cooking dishes XAM 93/7-9.

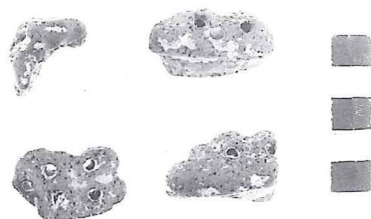


Fig. 61. Firebox XAM 93/11.

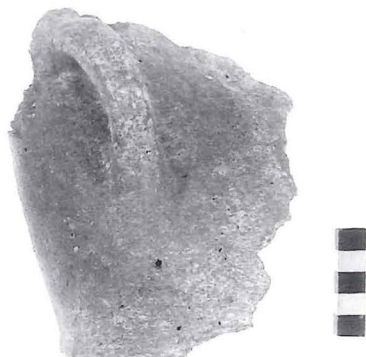


Fig. 62. Cylindrical vessel II 15236.

Similar: Popham et al. 1984, 174-5, pl. 95c (Room H); Kommos, fig. 25:565-6 (LM IIIA:1).

XAM 93/8 (Figs. 57, 60b)

Max. pres. h. 0.051 m.; th. 0.009-0.010 m. Only a small sherd is preserved. It belongs to the large spouted type with short walls and very thin base seemingly thrown on sand. Red, heavily gritted clay (2.5YR 4/8); red slip (2.5YR 5-6/6). Vertical side and rim.

Plain. Partly burnt.

Cf. Watrous 1992, fig. 25:565, 566 (LM IIIA:1). This vessel has a long history in the LM I period.

XAM 93/9 (Figs. 57, 60c)

Max. pres. h. 0.019 m.; th. 0.008 m. Only a small sherd is preserved. Reddish yellow (7.5YR 6/6), heavily gritted clay with dark grey core. Shallow body with vertical rim slightly pulled out to form a pouring lip. Plain.

Cf. Watrous 1992, fig. 28:668.

### Firebox

XAM 93/11α-δ (Figs. 57, 61)

Max. pres. l. 0.040 m.; th. 0.009 m. Four small pieces are preserved. Coarse brown clay (7.5YR 5/4) to dark greyish brown (10YR 4/2) from the firing. The underside of the container is perforated. Heavily burnt.

Platon 1957, 143 and pl. 70a.

### Cylindrical "industrial" vessel

II 15236 (Figs. 57, 62)

Max. pres. h. 0.150 m.; w. 0.120 m.; handle diam. 0.018 m.; th. 0.01 m. Almost two-thirds of the body are missing; Grey, heavily gritted clay with a red thin outer layer (2.5YR 4-5/8). Rather flattened cylindrical body with flat base and a vertical, round handle, attached obliquely on the body. Plain.

For similar cylindrical vessels see Georgiou 1986, 42-43, pls. 11, 20:169 and 170, with bibliography.

## Pottery analysis

Before the analysis of the LM IIIA:1 Khamalevri pottery it will be useful to present the other finds of LM pottery from this area. They are as follows:

a) Part of a remarkable LM IB hole-mouthed jug probably of Knossian workshop found at the cliff face of the Stavromenos coast by the school-teacher N. Niourakis.<sup>7</sup>

b) A superb neopalatial strainer together with some other vases, found by E. Kokolakis at the Sinanis low hill, a central Cretan product of the LM

<sup>7</sup>Hood et al. 1964, 51.62, pl. 13c.

II period. It is a splendid example of the mixture of the ornate, pompous and magnificent Cretan style with the Mycenaean predilection for abstract-geometric form and tectonic syntax.<sup>8</sup>

c) LM IIIA:1 and 2 clay vases found by professor St. Alexiou in a chamber tomb at the Vigla hill, together with two LH IIIA:1 and 2 Mycenaean imports.<sup>9</sup>

d) Early IIIC1 pottery from several buildings and pits found during the recent excavations.<sup>10</sup>

e) LM III sherds from the various surface surveys.<sup>11</sup>

f) Three Mycenaean clay figurines of the Proto-Phi and Phi A type (LH IIIA) found in 1926 at Khamalevri by E. Petroulakis during a short excavation.<sup>12</sup>

The LM IIIA:1 vases from Khamalevri are divided naturally into three broad categories according to fabric:

a) fine buff, usually soft and pink in colour (7.5 YR 7-8/4), or very pale brown (10 YR 7-8/4), or reddish yellow (5 YR 6/6-8, 5YR 7/4-6), identical to the contemporary Knossian fabric.

b) coarse red, ranging in colour from red (2.5 YR 4-5/8) to dark red (10 R 4/8) and from reddish brown (7.5 YR 5/4-6) to reddish yellow (5 YR 5/8).

c) grey, with a very thin outer reddish yellow layer (5 YR 7/4). There is only one example of this group.

The decorated ware of the Khamalevri material consists of six one-handled and three handleless cups, three jugs, one pyxis and one small amphora. A few sherds of a second pyxis, another jug, a cup, a bowl and the perforated base of a stemmed cup also belong to this group. Almost all the decorated vases are of high quality and show a stylistic homogeneity, though the state of preservation is bad, due to the ingredients of the soil of the site. Some outstanding painters were at work, as their designs are masterfully painted. They look quite close to the contemporary Knossian examples and their clay may be the distinctive Knossian, characteristic of Knossian imports at several sites.<sup>13</sup>

To the plain and monochrome ware groups belong three jugs, two conical cups, four one-handled and two-handled kylikes and a few sherds of three more kylikes, one jug and one monochrome cup.

The cooking and storage ware groups include five amphorae, one small amphora, three tripod cooking-pots, one tripod tray, one basin, one hydria, one cylindrical domestic or industrial vessel and a few sherds of three more tripod cooking-pots, three cooking-dishes, two closed vessels (amphorae), one bowl and part of a firebox.

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<sup>8</sup>Andreadaki-Vlasaki 1987.

<sup>9</sup>ADelt 1960, 272; Kanta 1980, 212, fig. 87, 88, 102.

<sup>10</sup>Kritiki Estia 1991/93, 241-244.

<sup>11</sup>Some more sherds, belonging to the school collection, are now in Rethymnon Museum.

<sup>12</sup>Mavriyannaki 1974.

<sup>13</sup>Watrous 1992, 129, 173.



The most common, characteristic and popular decorated vase is the *ledge-rimmed cup*, the hallmark of this phase.<sup>14</sup> Its predominance among the decorated ware and the absence of the 'Ephyraean' goblet comprise the outstanding features of the LM IIIA:1 pottery.<sup>15</sup> It has a distinctive horizontal ledge rim which is pulled out into a small pouring spout at right angle to the handle.<sup>16</sup> Its strap handle replaces the roll type of the earlier period and this is the main change from the LM I ancestor. Its body is rather bulbous and the base always flat.

Six restorable cups (Figs. 7-12) were found in the double room of Khamalevri with a rim diameter of 15 cm and an average height of 8.5 cm, like the LM II Knossian examples.<sup>17</sup> They seem to be products of one workshop. They are decorated within the handle zone bordered at the bottom by two or four thin bands running below the handle. Two or three bands are also painted at the base. A strong continuity is apparent in their decorative motives with a tendency, especially in the floral designs, towards greater stylisation.<sup>18</sup> Their decoration consists of flowers, fern-like flowers, tassels, criss-cross trellis design filled with stylised iris (= net pattern with irises), iris V's, spirals and bivalve shells. On II 15226 the traditional subsidiary motif of quirks still appears below the rim. The interior is painted all over or with sponge-print pattern. Most of the handles are barred, an early feature, since the LM IIIA:1 Knossian examples are usually outlined.<sup>19</sup>

The decorated cup competes with the *plain kylix*, as a drinking shape in the LM IIIA:1 phase.<sup>20</sup> After the disappearance of the 'Ephyraean' goblet, its place was taken by the kylix usually plain with a rather shallow and rounded body, short stem, small conical foot and one or two handles, always of the strap variety. The Khamalevri examples, about seven in number (Figs. 16, 20-26), are all of the plain version apart from one which is monochrome (II 15244). There are both one-handled and two-handled varieties with thin strap handles. No whole profile was preserved but its shape is restorable on the basis of other sherds. The rim is short,

<sup>14</sup>Watrous 1981, 76; Popham et al. 1984, 181; Betancourt 1985, 169, fig. 118; Watrous 1992, 125.

<sup>15</sup>At this period the cup has re-established its position as the normal *decorated* drinking vessel (Popham 1969, 300) while decorated kylikes are rare (Popham 1994, 99).

<sup>16</sup>In LM II the rim was more wide and uptilted while in LM IIIA:2 it was much less marked, often not marked off from the body at all (M. Popham's paper in Table ronde de l' Ecole Française d' Athènes 1991).

<sup>17</sup>Popham et al. 1984, 160.

<sup>18</sup>Popham et al. 1984, 181.

<sup>19</sup>As there are hardly any bowls in the Khamalevri group and this shape is generally rare in the LM IIIA:1 pottery, the large decorated cup could serve a dual function, as a drinking vessel and as the modern plate: Popham 1970, 79.

<sup>20</sup>The kylix was introduced into Crete in LM II, thus indicating the imposition of Mycenaean table habits in the island. It had a standard form which persisted without obvious change until the beginning of the LM IIIA:2 phase: Popham et al. 1974, 206, 210; Popham 1969, 299-301.

well-marked, offset, with a diameter ranging from 9.6 to 11.0 cm. The body is shallower than the LM II examples, coming down to a thin hole-pierced stem, longer than before.<sup>21</sup> The Khamalevri kylikes have a profile similar to contemporary Knossian examples, -i.e. the Π 15243 (see catalogue). The absence of decorated kylikes fits with their extreme scarcity at LM IIIA:1 Knossos and this may be the general rule, their function being served by the plain and monochrome varieties.<sup>22</sup> Between the one-handled and two-handled kylikes, the first seems to have a rounder body while the second is deeper and more conical.

Two *handleless semiglobular cups* could be products of the same workshop (Figs. 14-16). They have a vertical rim, a narrow, flat base, simple band decoration and may be interpreted as lids or covers. Another small decorated handleless cup with floral pattern is strongly reminiscent of the LM II counterparts.

The Mycenaean kylikes rival the traditional Minoan *conical cups*, ousting them in popularity as the ordinary drinking vessel among the plain vases. This last shape, so common in the LM I period, is curiously rare in the later phases. The narrow LM I mouth turns gradually to the LM IIIB wide-mouthed version,<sup>23</sup> the LM IIIA:1 body is slightly shallower than its LM II predecessor and the base becomes narrower. The two Khamalevri examples have an average height of 4.5 cm and a rim diameter of 10.0 cm. (Figs. 16, 17-18). They have the standard shape, with a conical profile and a vertical or slightly incurving rim.<sup>24</sup>

After the decorated cup, the most common LM IIIA:1 decorated vase is the *jug*. Almost all the Khamalevri jugs belong to the collared version with a ledge rim, trough spout and conical-piriform body (Figs. 28-35). This shape derives from the LM II collared jugs with a more bulbous body and narrower spout.<sup>25</sup> Three of them are decorated and another three are plain.<sup>26</sup> The main decorative zone runs around the shoulder and on the upper half of the body. It consists of vertical reeds, sacral ivies, iris buds, foliate band, quirks, solid painted circles and festoons. They seem to be Knossian products because of their clay fabric and the style of their decoration.<sup>27</sup> They have metallic-looking profiles, as the moulding at the base of the neck indicates, or the conical-piriform body, the trough spout, the ridges along the vertical handle, the clay rivets at the junction of the handle with the rim, the triangular lower end of the handle and the small projections on the lip. Among these jugs there is an example of

<sup>21</sup>In the LM IIIA:2 phase the kylix has an even longer stem, not distinctly offset rim and rounder in section handles (Popham 1969, 301-305; Betancourt 1985, fig. 121).

<sup>22</sup>Popham et al. 1984, 181; Betancourt 1985, 169.

<sup>23</sup>Popham et al. 1974, 209.

<sup>24</sup>Watrous 1992, 125; Betancourt 1985, 169, fig. 118.

<sup>25</sup>Popham et al. 1984, pl. 62-63.

<sup>26</sup>I.e. the Π 15232 carries the same decoration with a Knossian amphora: Popham et al. 1984, pl. 152:2.

<sup>27</sup>The plain fine ware jugs make an appearance in LM IIIA:1: Watrous 1992, 127.



coarse red ware (Π 13282), that may be an effort of the local craftsmen to imitate Knossian products. Another example of reddish yellow gritty clay with a thin outer layer of grey clay (Π 13280) may indicate a further effort to approach the metallic-looking vases. The indisputable wealth of bronze vessels in this period might lead to clay imitations or counterparts.<sup>28</sup>

Similar metallic memories are visible on the *small amphora* no. Π 15238 (Figs. 37, 39): the triangular lower end of the handle, the moulding at the base of the neck and the piriform body. This decorated vase is a unique and outsider example in the Khamalevri group since its fabric and style are not related to the Knossian workshop. A close parallel to it is a miniature piriform jar illustrated by Kanta, from the LM IIIA chamber tomb at Stavromenos dug by Alexiou.<sup>29</sup> It carries a similar kind of hasty decoration. If both of them belong to a local workshop, it's obvious that the strong Knossian production almost eclipsed the local decorated styles.

Concerning larger containers for liquid, the LM IIIA:1 *two-handled amphorae* have an ovoid body in comparison with the rounder upper part of the LM II predecessors. The Khamalevri examples (Figs. 40–45) keep the ovoid rim and the two roll handles from lip to shoulder. They are decorated only with a few bands except Π 13285 which has a simple ornament on either side at the shoulder, consisting of a row of isolated stemmed spirals.<sup>30</sup> These amphorae have a height of around 40 cm but there is also a miniature version.

The cylindrical *pyxis* is an outstanding vessel in our group (Figs. 46–48). Its body is divided in six panels decorated with ivy chain, irises and wavy lines. Its shape is reminiscent of Knossian LM II examples but its stylised decoration recalls LM IIIA:1 vases (see catalogue).

Half of the body of a *hydria* is preserved in fragments (Figs. 47, 49). Other examples from Knossos, Khondros Viannou and Katsambas resemble very closely a bronze type and Popham suspects a specialized centre of production.<sup>31</sup>

The plain *basin* with cylindrical body and square in section ledge rim is represented by an isolated example (Figs. 47, 50).

The three Khamalevri restored *cooking pots* vary in size (Figs. 51–54). Two have the usual profile with the two roll handles while the third one (Π 13281) is a rare smaller type with a cup-like handle and a front pouring spout.<sup>32</sup> The attached 'knobs' on the upper end of the handle and below the rim are reminiscent of metal pots. By coincidence these very

<sup>28</sup>The popularity of the ledge rim on the LM IIIA:1 shapes, the tendency towards dark monochrome vases and a certain fondness for the foliate band, abundantly decorating metallic vessels, may derive from metallic originals (PM IV, 302; Alexiou 1967, 67; Furumark 1941, 49, note 1; Watrous 1981, 76). This trend may be explained by the existence in LM IIIA:1 of a warrior class giving to Minoan society and art a more militant outlook than before.

<sup>29</sup>Kanta 1980, fig. 88:4.

<sup>30</sup>For the simple decoration of the LM III amphorae see Kanta 1980, 272.

<sup>31</sup>Popham et al. 1984, 175.

<sup>32</sup>Hawes et al. 1908, pl. II:64; Popham et al. 1984, pl. 162:11 with a side spout.



three pots also have three LM II counterparts in the Unexplored Mansion, as illustrated side by side on plate no. 162.

Sherds from another kitchen vase, the *tripod tray*, not restorable, have been recognized (Figs. 57, 59). It has a very shallow body, vertical rim, flat base, flattened feet and elliptical in section handles.

The flattened cylindrical “*industrial*” vessel (Figs. 57, 62) has an almost identical parallel from Keos.<sup>33</sup> It may confirm that the character of the double room was not simply domestic.

As regards other vase shapes, represented only by few or isolated sherds, we must note the *cooking dish* (Figs. 57, 60), the *firebox* (Figs. 57, 61) and the perforated base probably of a *stemmed cup* (Figs. 16, 19), a shape popular in earlier periods.

The Knossian ceramic influence, very strong over the whole island in LM IIIA:1, is apparent in the great majority of our group, both in shape and decoration. This conclusion does not cause any surprise since the same has already been pointed out at some other sites such as Kommos and Phaistos.<sup>34</sup> As is frequently remarked, in LM IIIA:1 decoration, formalism and stylisation dominate but without sterility. The decay of the floral motives with the anthers as simplified copies of earlier versions and the inversion of the flower, springing up to downwards, shows an artistic attempt to impose decoration against vividness. There is a tendency towards abstract motives, possibly borrowed from textile designs according to Popham, but most of the decorative compositions are organic subjects, separated from their original context, more simply executed and symmetrically arranged.<sup>35</sup> This is obvious on the floral cups and on the motif of the sacral ivy.

In this crowded decorative style, small subsidiary elements often fill the interval between the main motives, and lines are joined to make the design continuous. The zigzag motion is almost always present and the main ornament is usually confined on the upper part of the body, with the same elements repeated continuously.<sup>36</sup>

Some of the most favoured LM II-III A:1 motives are met in the Khamalevri group, such as the sacral ivy, the floral sprays, the iris zigzag and network, the foliate band and the festoon pattern. Their execution brings them closer to the beginning of the LM IIIA:1 phase as we shall now discuss.

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<sup>33</sup>Georgiou 1986, 42-43, pls. 11 and 20, nos. 169-170.

<sup>34</sup>Watrous 1992, 129.

<sup>35</sup>Alexiou 1967, 66; Popham 1967, 345; Watrous 1992, 128-129; Popham 1994, 99. According to Betancourt, “the Minoan romance with nature is still very much alive” (Betancourt 1985, 164).

<sup>36</sup>Betancourt 1985, 170.

## Chronological indicators

Quite a few LM II features survive in the Khamalevri material. However its attribution to the beginning of the LM IIIA:1 phase is due to the evolution or discarding of certain shapes and decorative motives, though the difference in decoration is less marked, since it concerns short consecutive phases.

The usual LM IIIA:1 features that are present in this group are:

1. The LM IIIA:1 decorated cup with a strap handle, ledge rim and multiple thin bands on the body. The same rim is to be found on the contemporary plain kylikes and collared jugs.
2. The plain fine ware jug.
3. The increased emphasis on abstract patterns, especially on the festoons.
4. The increased number of stems on the floral motives.
5. The sponge-printing in the interior of the decorated cups.

The LM IIIA:2 features that are still absent in this deposit are:

1. The early version of the standard LM IIIA:2 kylix with the characteristic large arched foot and the projecting ear-like handles.
2. The plain short-stemmed cup, conveniently termed as champagne cup.<sup>37</sup>

The LM II features that are absent in our material are:

1. The Ephraean type of kylix or goblet.
2. The LM II decorated cup with the roll handle and the considerably larger offset rim.

The LM II features that are still present in the group, thus prompting us to date it to the early stage of the LM IIIA:1 are:

1. The prevalence of the barred handle on the decorated cups, though there are outlined examples.
2. The stemmed cup.
3. The dimensions of the one-handled decorated cup which are close to the LM II predecessor.
4. The motives on the decorated vases, most of which are closer to the LM II repertory. The fondness of the floral sprays on the decorated cups is quite obvious, in contrast to the dominance of the abstract patterns later on. It is noteworthy that among the floral cups presented by Popham on pl. 8<sup>38</sup> and dated from LM II to LM IIIA:2, the closest parallel to the Khamalevri examples (II 15227, 15247 and 15248), both in shape and decoration, is c which the author on page 99 dates on the borderline between LM II and LM IIIA. In addition, if one compares the rendering of the sacral ivy on a LM II jar<sup>39</sup> and on a LM IIIA:1 kra-

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<sup>37</sup>Popham 1991, forthcoming.

<sup>38</sup>Popham 1994.

<sup>39</sup>Popham 1967, pl. 82b.

ter (pl. 84c) with the sacral ivy on the trough-spouted jug Π 15231 from Khamalevri it is obvious that the last one belongs to the interval between the first two.

Among the decorated vases, the floral cups and the trough-spouted jugs had been thrown in the pits Δ and E while the pyxis Π 15224, the cups Π 15226 with the criss-cross, trellis design and Π 15258 with the running spiral had fallen on the floor. Since the former vases indicate a slightly earlier decorative stage than the latter more conventionalised ones, they seem to be closer to the date of the construction of the building while the latter reveal the date of its destruction.

All the above evidence may indicate that the erection of this particular building at Khamalevri took place in LM IIIA:1 with a strong probability that it should be placed earlier rather than later in that interval. Not long after the building was erected a complete destruction caused the abandonment of it. A date between 1390 and 1370/1360 can at present be proposed, according to the Warren-Hankey chronological table.<sup>40</sup>

## LM IIIA:1 pottery evidence in West Crete

The settlements and cemeteries with LM IIIA:1 evidence are today abundant (see map, Fig. 63).<sup>41</sup> Among the settlements mentioned on the Linear B Knossian tablets, Bennet isolated a few place-names of special importance as 'second-order centres' in the LM IIIA period: Phaistos, Kydonia, *se-to-ja*, *da-<sup>\*</sup>22-to* and *ku-ta-to*.<sup>42</sup> The three of them are located in the west part of the island. By accepting the Khania settlement as Minoan Kydonia we recognize an important satellite of Knossos. The presence at Khania of 'burials with bronzes' suggests the relative significance of this site which in the succeeding periods becomes uniquely important by gaining power and establishing a kingdom itself.<sup>43</sup> In Khania the Knossian LM IIIA:1 ceramic style was adopted and closely imitated through imports which have been recognized there.<sup>44</sup> In the meantime the Kydonian workshop began to produce fine pottery with strong local features. A characteristic feature of the local cups is the simple rim band inside.<sup>45</sup>

South of Khania, on the mountainous and remote area of Keramia, in the Keramos cave, part of a LM IIIA:1 decorated cup was found with sponge-printing inside and papyrus derivatives outside.<sup>46</sup>

At the coastal site of Nopeghia, in the northwestern part of the island, an early LM IIIA:2 destruction has been noticed, with burnt clay vases on

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<sup>40</sup>Warren & Hankey 1989, 169.

<sup>41</sup>For similar maps see Kanta 1980, map 1; Popham 1980, 164, fig. 1; Driessen 1990, fig. 19.

<sup>42</sup>Bennet 1987, 307.

<sup>43</sup>Driessen 1990, 128, n.453; Popham 1994, 90.

<sup>44</sup>Tzedakis 1969, fig. 2-3; Kanta 1980, 218; Popham 1980, 165-166.

<sup>45</sup>Hallager, B.P. 1990, 79; Kanta 1980, 218, 223.

<sup>46</sup>Kanta 1980, 230, pl. 92:1-7, 112:1.



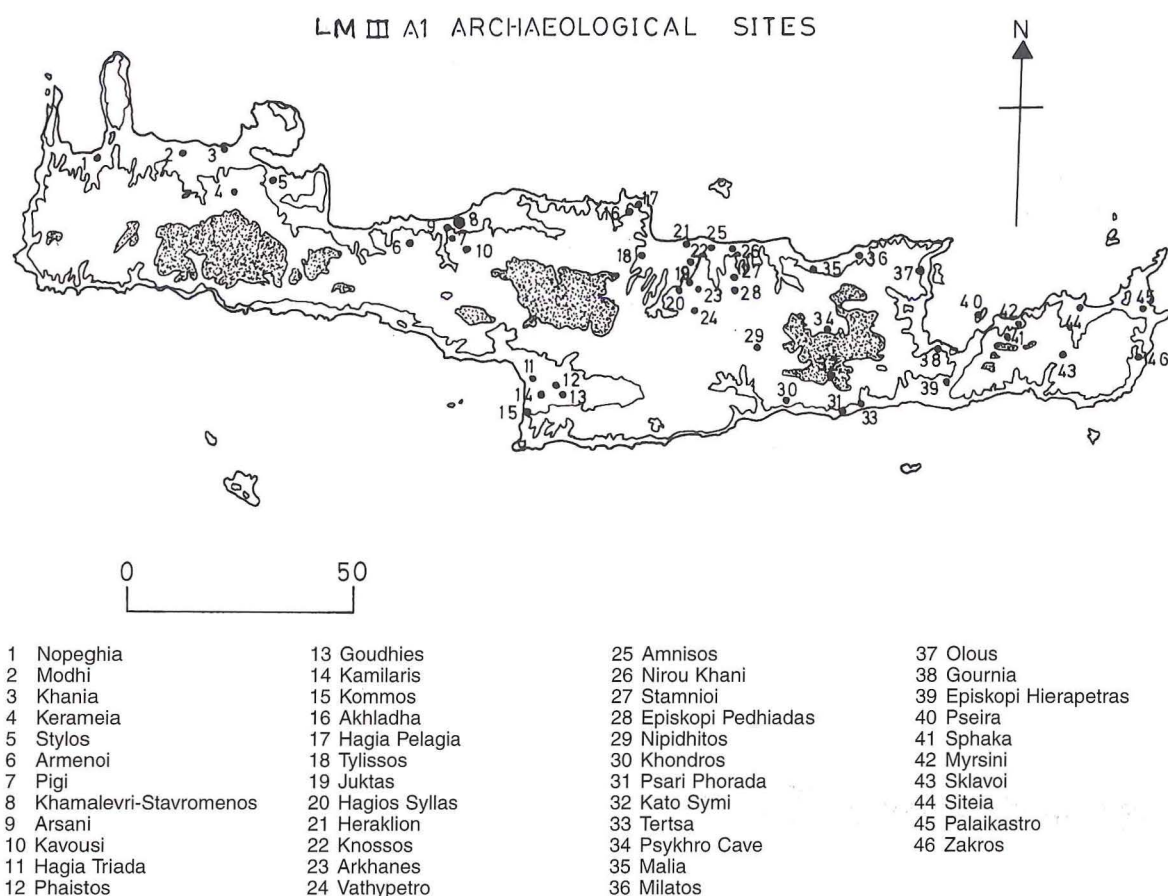


Fig. 63. Map of Crete. LM IIIA:1 archaeological sites.

a floor.<sup>47</sup> The same picture is shown by a LM IIIA:1 destruction of a rural house at Modhi, just west of Khania, according to a recent excavation there.

Among the material of the excavation at Stylos, in the Apokoronas district, Kanta recognized some decorated sherds of LM IIIA:1 date.<sup>48</sup> The decorated cup no. 36 is a characteristic example. Kanta suggests that here was probably located Minoan Aptara which is mentioned on the Knossian tablets (*a-pa-ta-wa*).

In the Rethymnon district the abundant LM IIIA and B burial finds from Armenoi, Rethymnon itself, Pigi, Maroulas, Adele, Messi, Arsani, Pangalokhori and Stavromenos pre-suppose equivalent dense settlements. Kanta conjectures that the chief settlement could be in the area of Armenoi.<sup>49</sup> The evidence also points to the fertile plain along the east coast where Khamalevri seems to play a leading role.<sup>50</sup> The rich cemetery of Armenoi has provided the Rethymnon Museum with quite a number of

<sup>47</sup>Andreadaki-Vlasaki 1996.

<sup>48</sup>Kanta 1984.

<sup>49</sup>Kanta 1980, 199.

<sup>50</sup>Bennet 1990, 208, fig. 5.

LM IIIA:1 vases.<sup>51</sup> According to Bennet, a possible identification of Armenoi would be the place-name *ku-ta-to* in the Knossian Linear B tablets with large numbers of sheep, since the cemetery evidence marks wool production.<sup>52</sup>

A LM IIIA:1 burial was found by Tzedakis in a chamber tomb at Pigi.<sup>53</sup>

In a tomb close to the Arsani monastery were found few LM IIIA:1 vases.<sup>54</sup>

Finally, at Kavoussi, a modern hamlet near the Arkadi monastery, LM IIIA:1 pottery was recognised by Banou during a short excavation in a small Minoan settlement.<sup>55</sup>

## Conclusions

The excavated part of the Khamalevri building seems to be of short duration in the LM IIIA:1 period with a probable use as a working place. The co-existence of luxury and utilitarian vessels comprises a close unity for the researcher of this period.

The cause of the building's destruction does not seem to be a fire as traces of burning are scarce and rather connected to domestic activity. Since the building was not abandoned but suddenly destroyed, the most probable cause is an earthquake.

This event seems to happen in the LM IIIA:1 phase and is therefore not connected with the later Knossian destruction. On the other hand, a clear LM IIIA:1 destruction, without indications of fire, has been noted at the Unexplored Mansion, a short time after the LM II major burnt destruction in the Mansion, as well as the palace and the town.<sup>56</sup> These disruptions in the LM II and LM IIIA:1 phases, before the early IIIA:2 destruction of Knossos have been explained as internal difficulties on the island during the period of Mycenaean domination or administrative control, or better during the Knossian economic and administrative control.<sup>57</sup>

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<sup>51</sup>ADelt 1976, 369, pl. 291; Godart & Tzedakis 1992, 85-94; Papadopoulou 1991.

<sup>52</sup>Bennet 1987, 311, n.29, 312; also Bennet 1985, 241, n.36.

<sup>53</sup>ADelt 1969, 435-436; Kanta 1980, 212-213; Popham 1980, 167.

<sup>54</sup>We express our thanks to Irene Gavrilaki for her permission to mention this evidence. See also ADelt 1970, 477-478, pl. 419; Godart & Tzedakis 1992, 94.

<sup>55</sup>We warmly thank Eleni Banou for this information.

<sup>56</sup>Popham et al. 1984, 264; Driessen 1990, 117-121. New building activity also marks LM IIIA:1 Kommos; Watrous 1981, 77.

<sup>57</sup>Popham and most scholars suggest a Mycenaean administrative control of Knossos in LM II/IIIA:1, succeeding in imposing a uniformity perhaps greater than Crete had known before (Popham 1980, 166; 1994, 89-90; Warren 1991, 32; Driessen 1990, 127). Some of them agree that this control may not have been achieved by conquest but others attribute to mainland attackers the LM IB destructions on Crete (Hood 1985, 170-178; Doxey 1987, 301; Popham 1994, 89, 90, 93). Doxey also attributes the LM II/IIIA:1 destructions to "the desire of the mainland Greeks to secure access to commodities such as copper from the Eastern Mediterranean. Competition to control such a trade may have resulted in destruction at Knossos".

Despite the undisputed evidence of the Mycenaean influence in LM IIIA:1 Crete, con-

By dividing the history of Late Minoan Crete in three periods, it means that important events created an entirely new situation on the borderline among these stages. Evans put at the end of LM II the destruction of the palace at Knossos. However, this crucial and severe event is not dated to 1400 B.C. but a few decades later, to the end of LM IIIA:1/ beginning of LM IIIA:2.<sup>58</sup> The same can be said for the course of pottery. As Popham writes, “there is no clear break between LM II and early IIIA pottery and the change is apparent rather in an increased emphasis on abstract patterns”.<sup>59</sup>

Thus, comparing Niemeier’s view for linking the LM IIIA:1 pottery with the LM II Palace Style jars and Ephyraean goblets<sup>60</sup> and Watrous<sup>61</sup> and other scholars’ remarks on the obvious separation of the above two phases we think that the term *LM IIB* would be more suitable for the so called LM IIIA:1 ceramic phase, a term that Evans and Furumark had also used in the past, each in a different way.<sup>62</sup> In this way the Knossian uniformity and preeminence during the Intermediate or Monopalatial period<sup>63</sup> would be emphasized and contrasted with the diversity of styles in the following LM III ceramic phases of the Final Palatial period.<sup>64</sup> Although regional workshops are recognized (ie. Khania), the all-embracing ceramic style emphasizes the closest contacts throughout the island.

The strong and clear Knossian character of the fine Khamalevri pottery is not strange as it follows the centralised trend around the Knossos palace. The close control that the Knossos rulers exercised over Crete in the LM IIIA:1 phase justifies the remarkable uniformity in at least some

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temporary Mycenaean imported vases are relatively rare. Watrous explains this influence as “a result of expanded trade and the presence of Mycenaean mercenaries stationed at Knossos” being “this trend in the Aegean a part of a wider phenomenon across Western Mediterranean” (Watrous 1992, 174. For a “koine” see Treuil et al. 1989, 540). He agrees with Furumark and Popham that “the LM IIIA:1 is a new ceramic phase of Mycenaean influence on Crete and vice versa, reflecting an extending Mycenaean presence” (Watrous 1981, 77), while Driessen adds that “the creative spirit behind the artefacts remains still largely Minoan” (Driessen 1990, 124).

On the other hand Niemeier, Hallager and others agree with Evans that “the LM IB destructions must have been an ‘internal affair’ with the result that the island was centralised under Knossos”. They propose that Mycenaeans conquered Crete later on “by seizing power over this central administration: Knossos” (PM IV, 786; Hallager 1988, 15; Niemeier 1982, 219-287; Niemeier 1985, 195-216; Treuil et al. 1989, 540).

Bennet also remarks that “perhaps we should not refer to this period as ‘Post-palatial’ but as ‘Monopalatial’ period” (Bennet 1985, 233 and 1987, 311).

<sup>58</sup>The borderline between LM II and IIIA:1 may be the fire destruction (probably an internal event) at the end of LM II, recognized for example at Knossos, Kommos and Mallia (Popham 1975, 372-374; 1988, 223).

<sup>59</sup>Popham 1967, 345; 1994, 99.

<sup>60</sup>Niemeier 1979.

<sup>61</sup>Watrous 1981.

<sup>62</sup>PM IV, 297-376; Furumark 1941, 82-85; Furumark 1950; Popham 1964, 352.

<sup>63</sup>Bennet 1987, 311.

<sup>64</sup>Hallager 1988; Popham 1994, 90.



fields, in the whole island.<sup>65</sup> According to the Linear B tablets the main agricultural products under palatial control were *wool* and *grain*.

In LM IIIA:1, the Knossian workshops exported a great quantity of their fine pottery throughout Crete, as can be seen at Phaistos, Kommos, Viannos, Palaikastro, Gournia and Khania. As an example, it is noteworthy that the motif of the criss-cross, trellis design, filled with iris flowers in opposing corners, found on cups at Knossos and Phaistos, now appears on a similar cup of Khamalevri (Π 15226).<sup>66</sup> In the meantime the local workshops made close copies of them.<sup>67</sup> It is indisputable that this island-wide style spread out from Knossos and set the standard for the local styles. By contrast, in the following phases, this uniformity breaks down and a diversity of style develops.<sup>68</sup>

The complete identification of our group with the contemporary Knossian pottery, even in the coarse ware, may mean more than a mere import or imitation. It may corroborate the view of potters travelling throughout the island.<sup>69</sup> They not only sold their goods in the periphery but probably made some of the bigger and simpler vases in situ, like the modern pithos-makers, training the local potters and reviving their repertory. Another suggestion is that Knossos, the only palatial centre in Crete in LM IIIA:1 may have attracted craftsmen from all over the island, who, on their return back to the periphery, exercised the new knowledge.

What we can say with certainty is that the Khamalevri pottery is directly connected with Knossos and that most of the decorated vases were made either at the Knossian palatial workshops or by Knossian travelling craftsmen. We have not been convinced that these vases could be high quality copies of Knossian originals made by local vase painters. Further research in the area and the clay analysis may give us more evidence for a better assessment of this aspect. Besides, a central Cretan product is the slightly earlier fine strainer from Stavromenos, according to the chemical analysis of the clay.<sup>70</sup>

According to Bennet, one of the second-order centres in LM IIIA Crete, *da-★22-to* of the tablets, may be the Stavromenos area.<sup>71</sup> If so, the

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<sup>65</sup>Popham 1980, 166. This considerable uniformity is seen on weapons, jewellery and chamber tombs with long dromos. Knossos also was a producer and supplier of weapons during LM IIIA:1 (Doxey 1987, 309). The disappearance of the 'burials with bronzes' in the next phases underlines the particularity of the social conditions during this very period (Treuil et al. 1989, 536, 541-543; Driessen & Macdonald 1984, 49-74).

<sup>66</sup>Popham 1980, 165; Popham 1970, fig. 11:8-9; ASAtene 1961-62, 41.

<sup>67</sup>Popham et al. 1984, 180; Popham 1967, 345; Watrous 1992, 173.

<sup>68</sup>Popham 1970, 88; Warren & Hankey 1989, 169.

<sup>69</sup>Banou & Rethemiotakis 1991, Part II.

<sup>70</sup>Andreadaki-Vlasaki 1987, 55-68. In addition, its lid has a very close parallel in decoration to a standed bowl from the Unexplored Mansion (Popham et al. 1984, pl. 66c and 158:8).

<sup>71</sup>Bennet 1987, 311. Cf. also Chadwick 1977, 199-201 for its coastal location. Bennet has proposed "an administrative structure in which the Mycenaeans at Knossos revived formerly important sites, to serve as 'second-order centres' to control local production on behalf of the capital. It relied more on satellites as the distance from the centre increased" (Bennet 1985, 233). He also puts highly hypothetically a LM I palace in the region of Stavromenos (Bennet 1988, 38, n.63; 1990, 198).

special importance of this site to the Knossos palace would be assured as Knossos would exercise via it an administrative control in the wider area. The commodities related to this toponyme are sheep, olive oil, grain and aromatics and at least the industrial activity of the textile production.<sup>72</sup> The existence of quite a few fine vases with strong Knossian features in a small area at Khamalevri would fit well with a relevant palatial connection. The Khamalevri area, as shown by the surface surveys and the excavations, hosted an important settlement of the broad Rethymnon district during the Minoan times. It could be a cross-road site connecting Knossos from the east as well as Phaistos from the south with Kydonia at the west end of the island.<sup>73</sup>

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<sup>72</sup>Moody 1987, appendix IV; Killen 1991.

<sup>73</sup>Bennet 1985, 238: group I; Kanta 1994, 67.

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# Response and discussion

**Macdonald:**

I perhaps have either the easiest task of the day, or the most difficult in that the material is straight-forward and you have been quite exhaustive in covering the stylistic analysis and the parallels etc. Both you and Eleni have done a terrific job on this. I would like to touch on a few points which I think are relevant here. One relates to the size of the deposit as a sample for characterizing the entire Rethymnon area. Another concerns the question of influence from Knossos, not only in the fine pottery, of course, but in the more local aspects such as cooking pots. Yet another, the question of the fine tuning of ceramic chronology, which is really what you have attempted to do. There is no question that Knossian elements in the fine wares are predominant, particularly your cups. The pendant grassy motives look rather early to me, as does the cup with the running quirk around it. And also the lilies on your superb trough-spouted jug. I think I better start out by presenting you both with two Knossian parallels for that, fairly precise ones. One for each speaker. (The speakers are presented with a T-shirt each) The motif is from a Palace Style jar which we date in LM II. Clearly your decoration owes a lot to LM II, although, as you pointed out, the arrangement of the decoration in zones reflects LM III tendencies. You have moved on. Your kylikes are IIIA:1. There is possibly one which approaches the LM II shape which might almost be a LM II goblet – but it is not. You definitely are in IIIA:1, although it all looks a bit early – as you say. The pyxis is rather interesting. I was discussing this with Eleni Hatzaki, who has a similar one from the Little Palace, divided into panels. She had, in fact, assumed, because of the panelling, that it was LM IIIA:2. How does one date vases like that? Obviously by its context. The Little Palace pyxis has the panelling which makes it look rather late. There is also the shape. But if you look at individual motifs, it has the LM II-like reeds. Preferably one would like to date it by a combination of elements, but the only indication on that particular vase is one tiny bit of reedmotif which is earlier. Clearly, panels are not necessarily a lateish feature – which is new to me. The only other comment I would make on the pottery in general is that MacGillivray might like to comment on this gray ware. It does exist at Palaikastro in precisely the LM II to IIIA period. But can we come back to that? What can we do with the deposit? Is it a representative sample for West Central Crete. It may be representative, but it is not a big enough sample for us to say that this was what West Central Crete was necessarily doing as a whole – although one gets the gut reaction that it probably was. Contemporary deposits may come up elsewhere which will help with this. What was obviously notable is your cooking pots – do we call them Knossian because we have parallels in the Unexplored Mansion? No, probably not. The adoption of the LM II-III A conical cup was interesting. That cannot be a local development, whereas with the cooking pots we know nothing about LM I Khamalevri and you have an enormous settlement, I believe, there to excavate.

**Vlasaki:**

Both of us thank you very much for all your help and your good words. We are deeply touched by the T-shirts. Concerning the cooking pots we suggested the complete identification of this Khamalevri group (fine and coarse) with the contemporary Knossian pottery as a possible result of the potters travelling. We also referred as a coincidence to the similarity of the three very pots with three LM III counterparts in the Unexplored Mansion. We presented only the pottery from the double room of a building of a bigger size. It has not been found yet. Of course, this pottery does not characterise the entire Rethymnon area. We have not said that; but it is a good sample of the strong Knossian influence during this



period. All these examples are of high quality and it cannot be by chance. They cannot all have been derived from elsewhere. That is why we speak about potters travelling.

**Macdonald:** My point vis-à-vis the cooking pottery is that it could be of Central Cretan influence during LM I, and carry on in that manner. If you go to Nerokourou, in LM I the cooking pottery seems almost identical to the LM II-III A Khamalevri examples. So I do not think that in terms of an active LM II-III A influence the cooking pottery need necessarily be important, although I have a gut feeling that it is.

**Vlasaki:** Anyway, the trend for Knossian centralization is obvious during this period. However important Khamalevri might be, it belonged to the periphery. The impulse for pottery production at this time comes from Knossos and other areas with more independent workshops such as Khamalevri and South Central Crete.

**Macdonald:** The real issue is the fine tuning of the chronology. You feel that it is early in LM III A:1. Possibly we might call this LM IIB. The funny thing is that when excavating last year at Knossos, both in a construction level and the destruction level above it, the pottery dated to LM II. But Eleni Hatzaki and I both had the feeling that it was really getting into LM III A:1. There were certain features such as a few ledged rims, the standard sort of pinkish buff burnished fabric was coming in. We were writing LM II-III A:1. Our stuff is certainly earlier than anything that you have. We are approaching from the other side, verging towards III A:1, while you are approaching backwards from III A:1 and verging towards LM II, but still there is a chronological division between our two deposits. I think that you must remain in III A:1. I would like to ask the audience whether we can fine tune such a deposit to early III A:1 or not? And also, in a period where we possibly do not have pan-Cretan events which give us, at lots of different sites, the ceramic development frozen all at the same moment, but rather one where we are going to have local sequences in which the ceramic development will be frozen at different moments in different areas, can we hypothesize that and say that it is perhaps early in III A:1 and this just happens to have caught the ceramic development of Central Crete at that moment? When you showed the Nopeghia jug, Kanta and I shouted that it looks like a mainland LH III A:2 import.

**Vlasaki:** When we spoke about the ceramic term LM IIB we did not mean an earlier stage than LM III A:1, but IIB instead of III A:1. The Nopeghia jug belongs to the early III A:2 period. Yes I said so. We said that this site was destroyed in III A:2. We showed this vase in order to say that it (the destruction) is early III A:2. So this site was inhabited in III A:1 too, since it was destroyed in early III A:2, and we included it in the general map. The Nopeghia excavation was presented at the 6th International Colloquium on Aegean Prehistory in Athens 1987. According to Dr. Richard Jones who analyzed the clay of this vase, it could be local. We have material from Knossos also, similar to this, a jug which is also local according to the clay analyses, and it is proposed that Crete could be the originator of this type of jug (Popham 1970, 24, pl. 3c).

**Rethemiotakis:** Have you made clay analyses of this material? No? The situation reminds me of Psari Phorada. There we have also material very reminiscent of Knossian wares, not only in terms of selection and execution of motifs, but also the appearance of the clays. There are pithoi which bear impressions made from „Knossian“ seals. They have similarities with sealings found on apparently contemporary pithoi at Knossos. The clay analyses undertaken in the Fitch Laboratory proved that this material was locally made. Probably the potters which



were sent from Knossos, were itinerant „missionary“ potters. They not only tried to execute the motifs in the Knossian manner, but also tried to select local clays which looked like those from Knossos. This may also be the case regarding your material. I do not think that such an abundance of material could be brought from Knossos. The same applies to the coarse vessels.

- Vlasaki:** At first we want to express our thanks both to you and Eleni Banou for your kindness in giving us to read your still unpublished text on LM II-III A:1 sites in the area of Viannos (Banou & Rethemiotakis 1991). I agree that the fine ware could have been made in Knossos and then brought to Khamalevri, or made directly at the site by travellers or potters who had been trained at Knossos. One way or the other, the main trait is the strong Knossian influence which may also mean Knossian control. This influence seems to be less strong in some centres, in Khamia, for example. But, what is your opinion about the use of the term LM IIB instead of LM III A:1?
- Vallianou:** I think there is a difference in the analysis between pithoi and small vessels, because pithoi were made in an area near Khamalevri by potters from Knossos. For this reason you find that the clay is local, and not Knossian. Small vases are sometimes exported from Knossos.
- Watrous:** You asked for our reactions to the date of your deposit. I think the vases you showed are clearly earlier than the III A:1/2 destruction material at Knossos. I do not think that they are at the edge of LM II. They are somewhere in the middle. You would have had some real obvious LM II features. I did not see anything.
- Vlasaki:** Yes, it is obvious on the floral cups, if we agree that the floral cup from Knossos is in the middle, at the borderline (Popham 1994, pl. 8c). Our counterpart is a bit later. But it looks closer to the beginning, not closer to the end of III A:1.
- Papadopoulou:** How can we say that it is the middle of the III A:1 phase if we have some very characteristic features of LM II, which still survive in our vases?
- Watrous:** The point is that LM III A:1 as a style is mostly LM II. The change is stylistic, not decorative. What seems to be missing are the shapes. Even at Knossos, the LM II is of relatively poor quality: the pottery is underfired and the kylikes are often a greenish color, or sometimes baked. You did not show us any small kylikes. I would have expected that if you are right on the edge, you would have shown us some things that would be part of LM II. I did not see any.
- Warren:** I was hoping Kanta would speak. I can not really agree with Watrous in saying that the decoration of Knossian LM III A:1 is largely the same as LM II. It just is not the case. There are many different motifs in LM III A:1, and to a large extent they form a coherent set. I would say that the material you have shown us is a classic statement of III A:1. It is neither II nor III A:2. It has some features, of course, from LM II. It is classic III A:1. LM II was different.
- Vlasaki:** We agree that the pottery is LM III A:1 by using the classical term. We are wondering here if it would be better to call the LM III A:1, LM IIB?
- Warren:** I would just remind us that it was Watrous himself who at Kommos presented us with

some of the best evidence for distinguishing between IIIA:1 and LM II (Watrous, V.L. „The relationship of Late Minoan II to Late Minoan IIIA:1“, *AJA* 85 (1981), 75-77). And Wolf Niemeier was courageous enough to change his mind, having at first said that the two phases were indistinguishable (Niemeier, W.-D., *Die Palaststil Keramik von Knossos* Berlin 1985, 173ff.). I think they are different.

**Vlasaki:** I wonder whether IIIA:1 could be called IIB, because at the end of IIIA:1 we have major events. We have the division LM I, LM II, LM III. There are events at the end of LMI, but at the end of LM II there is nothing. That is, nothing major. At Kommos we have a destruction, but not big enough to separate a period. Maybe it would be better to have LM II and IIIA:1 together in two phases of one period, i.e. LM IIA and LM IIB?

**Hood:** I would also like to join Niemeier in recanting. I came to this meeting very doubtful as to the existence of IIIA:1, and I must say I am totally converted. It is now absolutely clear.

**Vlasaki:** We agree that IIIA:1 is a clear phase. This clear phase, which has such close connections with LM II, appears to be part of a bigger period.

**Hood:** I think you are absolutely right as to the facts, but I wonder whether one should be tempted to change the nomenclature. For instance, I strongly suspect that Furumark, if he had been faced with the Unexplored Mansion material, would have said that it is IIIA:1. In fact, I heard him say this when I showed him that material. But Popham has now defined that as LM II. I think it would be disastrous to attempt to revert to calling it IIIA:1. My own inclination would be, not to call it a late a phase of IIB, but to leave it alone. But that may be innate conservatism.

**Watrous:** The reason I do not like the change you are suggesting is that you do get a certain amount of destruction, at Malia, maybe at Kommos, at Knossos, traces at Khania. I tend to agree with E. Hallager that you have signs of Linear A in LM II. As far as I am concerned, that is the final stage. In IIIA:1, probably the island begins to become Greek-speaking. I would not want to see a change there.

**E.Hallager:** We have some examples during Cretan history where historical events fit with the relative chronology. We have established a system which agrees quite well with LM II and IIIA:1. I agree with the historical events, but I think that this does not justify a reclassification or renaming of the pottery.

**Vlasaki:** The suggestion was made for discussion. We do keep the term LM IIIA:1 in our text. We wanted to know if you also have doubts like us and to discuss the matter.





# Late Minoan III Pottery from the City of Knossos: Stratigraphical Museum Extension Site<sup>\*</sup>

Peter M. Warren

Occupation in the western part of the city of Knossos began before the end of the Early Minoan period and lasted without a break throughout the Bronze Age. This conclusion is drawn from the building remains and associated pottery found in excavations on the western side of the Stratigraphical Museum and, at least from the MM IIIB-LM IA transition onwards, on the Unexplored Mansion and Little Palace sites also (Fig. 1). An area of some 593 m<sup>2</sup> was excavated in 1978-82 on the western side of the Stratigraphical Museum, in advance of any extension to the Museum. Study of the material, which included about 16,878 kg of pottery, plus 2,247 catalogued vases, was completed *in corpore* at Knossos in 1991. Material has been published in 22 papers and study and writing for the final publication is proceeding.<sup>1</sup> The present paper offers an account of the LM IIIA:1, IIIA:2 and IIIB pottery in relation to its find contexts and stratigraphy, together with a brief summary of the LM IIIC.<sup>2</sup> Most of the relevant areas of the site are considered, the evidence coming chiefly from

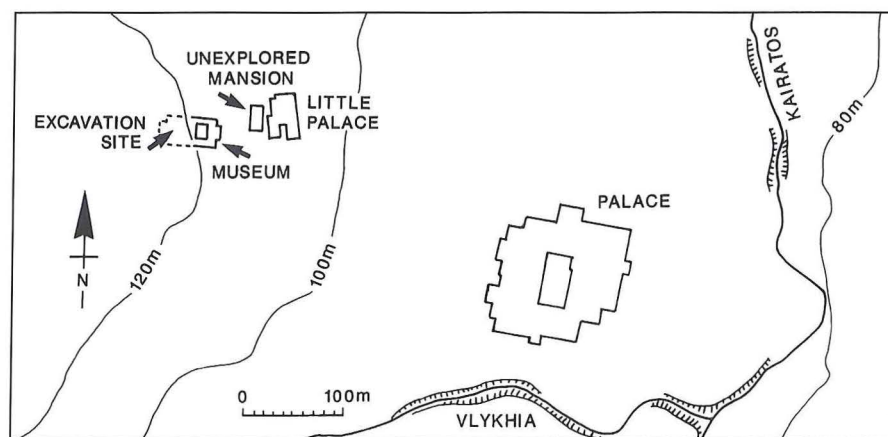


Fig. 1. Knossos, with the Stratigraphical Museum excavation site in relation to the Palace.

<sup>\*</sup>See addendum

<sup>1</sup>The main preliminary and pottery reports are Warren 1980-1; 1982-3; 1984-5; 1987-8; 1991.

<sup>2</sup>The material in the present article represents the main ceramic evidence for the period from the site, but it will be amplified by further material from trenches O, S and U.

The paper is a revised version of that presented at the Colloquium. I am particularly grateful to Professor Vance Watrous, Dr Birgitta Hallager, Professor Philip Betancourt and Dr Maria Vlasaki for their helpful and instructive comments on the material presented. I am also grateful to the Managing Committee of the British School at Athens for permission to use my drawings and photographs of material from the Stratigraphical Museum excavations.

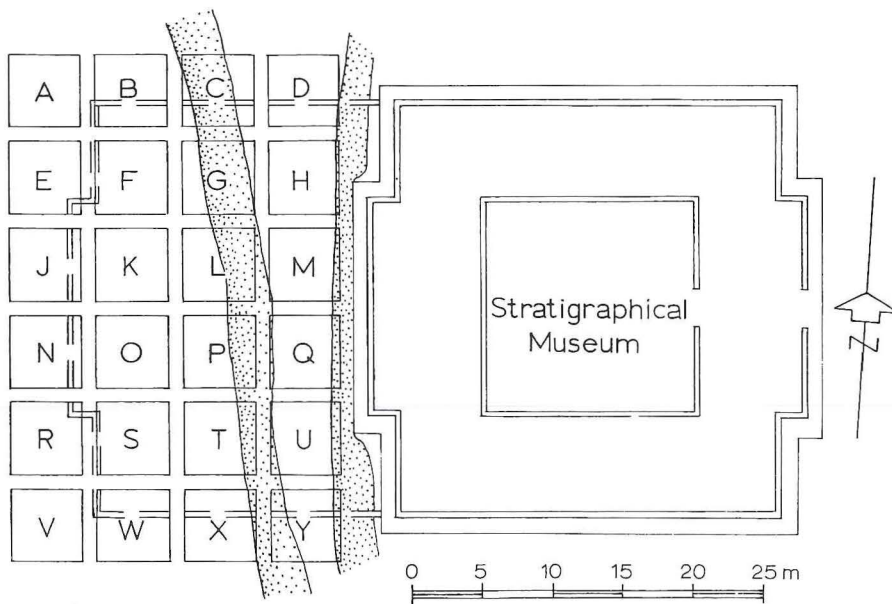


Fig. 2. Trench plan.

the southern part, trenches O, P, Q, S, T, W and X, where the Roman and Hellenic occupation had penetrated less deeply into the Minoan than in the northern part and eastern edge (Fig. 2).

The immediate background to the material examined here consists of Late Minoan II, with destruction deposits in substantial buildings, which had been built in LM II or rebuilt then after LM I use. Some of the LM II pottery has already been illustrated<sup>3</sup> and is in any case beyond the scope of this paper. The LM II pottery does however have close connexions with LM IIIA:1, as is well known from Khania, Kommos and elsewhere including Knossos itself. What happens on the Stratigraphical Museum site immediately after the LM II destruction, namely in LM IIIA:1, represents a very dramatic change of use. This is best seen through examination of the whole LM IIIA-B sequence in each of three areas in turn; the primary evidence of sequence is better demonstrated thus, area by area, rather than by presenting each ceramic period as a whole across the site, and so having to break off from and return several times to each complex area of stratigraphical sequence. The order in which trenches are discussed here does, however, broadly reflect the ceramic periods, since trench Q is chiefly important for LM IIIA:1, T for IIIA:1-2, W for IIIA:2 and X for IIIB.

### Trench Q (Fig. 2)

Above the preserved wall tops of a substantial building destroyed in LM II came over one metre of fill (Fig. 4), beginning beside the upper parts of the destroyed LM II walls (Q 13<sup>686</sup> 12 and 11)<sup>4</sup>, proceeding upwards

<sup>3</sup>Warren 1982-3, figs. 5-13, 16-18.

<sup>4</sup>References to excavation contexts first give the trench, in this case trench Q, next the excavated level, in this case 13, 12 and 11, and thirdly (superscript) the number of the separately excavated pottery lot, in this case <sup>686</sup>.



Fig. 3. LM IIIA:1 walls Q<sub>1</sub> (centre) and Q<sub>11</sub> lower (top right). From west. Scales 0.5 m. and 2.0 m.

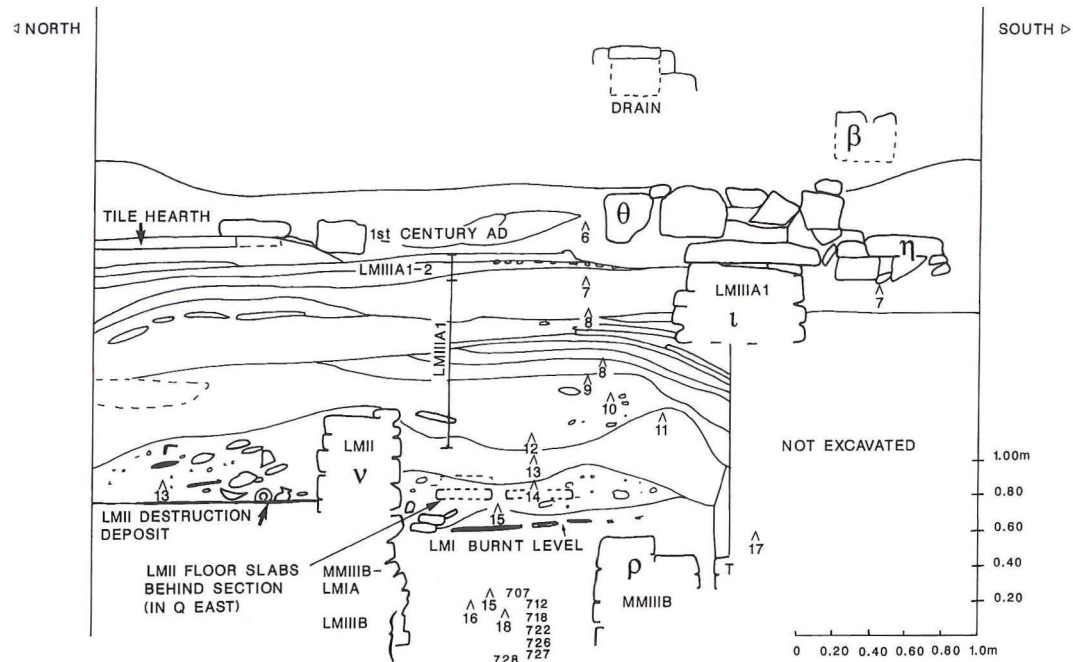


Fig. 4. Trench Q east section.

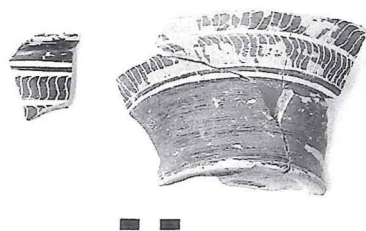


Fig. 5. LM IIIA incised and painted ware. Left, bowl rim (Q 10 664); right, closed jar base (Q 10 664, 11 668).

with levels Q 10 and 9, above them Q 8; into Q 8 had penetrated the foundations and perhaps the lowest above-ground courses of a wall (Q 1); above this, with wall 1 (Fig. 3), came Q 7 and above this Q 6<sup>649,648,646</sup> and Q 6<sup>651</sup> Pit 3.

The diagnostic pottery from Q 13<sup>686</sup> up to and including most of Q 7 was predominantly LM IIIA:1, though it included a few sherds which would normally be classified as IIIA:2. The top of Q 7, namely Q 7<sup>656</sup>, and Q 6 also contained much IIIA:1 but more clearly came on in time to IIIA:2. Examples of the IIIA:1 pottery are, from lowest levels to highest, a bowl fragment and a base of a large closed shape (amphora or piriform jar) with bands of S incision through the paint (Q 10, Q 11) (Fig. 5); P 1950, P 1951 (Q 10) (Fig. 6), standard tight rim cups; two fragments of a

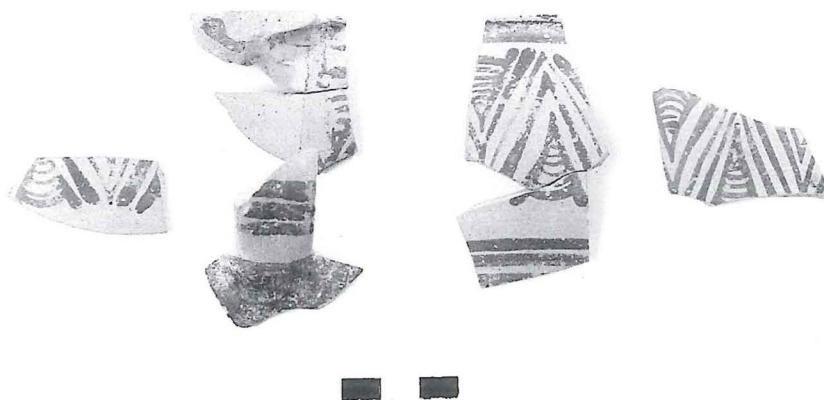


Fig. 6. LM IIIA:1 cup P 1951.



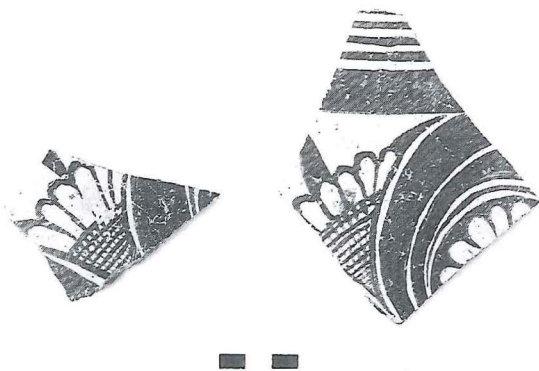


Fig. 7. LM IIIA:1 Palace Style jar (Q 9 <sup>663</sup>, 10 <sup>664</sup>).

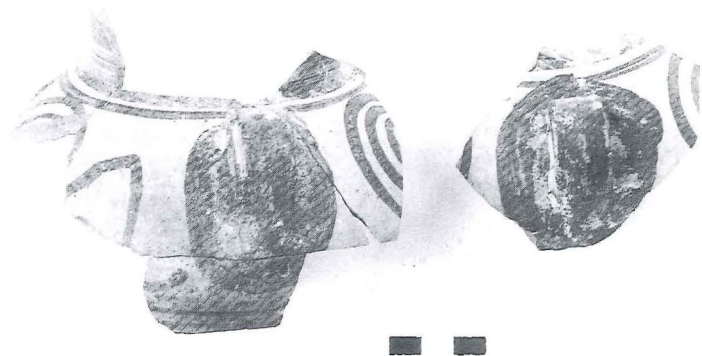


Fig. 8. LH IIIA:1 (?) piriform jar P 1953.

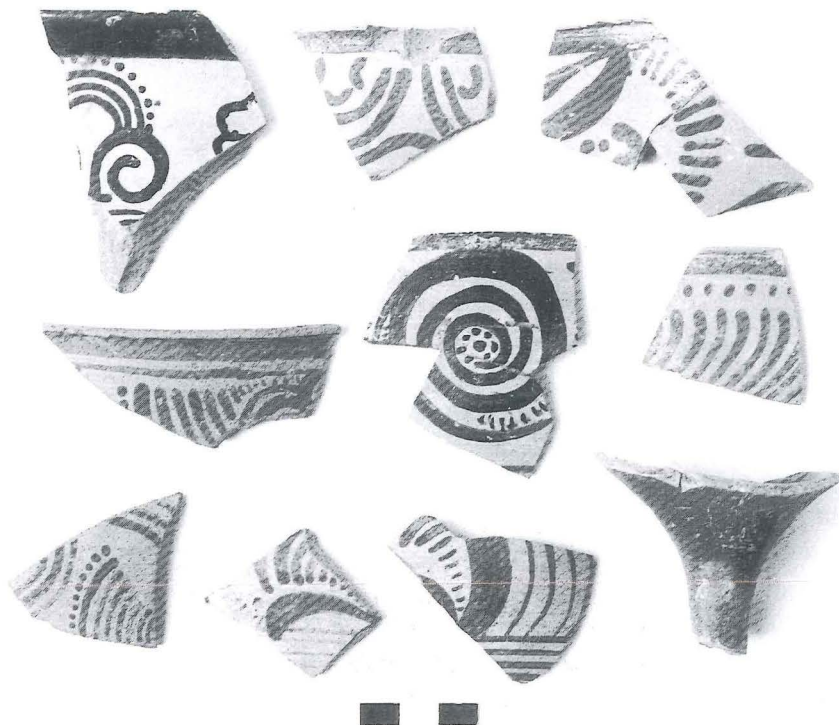


Fig. 9. LM IIIA:1 (Q 8 <sup>661</sup>) cups (except top left, bowl or kylix rim, IIIA:2 ?; bottom right, kylix); several with interior stippled.

Palace Style jar with stylized papyrus (Q 9, Q 10) (Fig. 7); P 1953 (Q 8, Q 25), an LH IIIA:1? piriform jar (Fig. 8); fragments of cups and a monochrome kylix (Q 8) (Fig. 9); P 2202 (Q 7, Q 8), fragments of a very fine and large flask with pieces scattered elsewhere (Fig. 10); a fragment of a small alabastron, perhaps LH IIIA:1 (FS 93), with net pattern (FM 57)<sup>5</sup> (Q 6 <sup>648</sup>).

These levels in Q thus offer good evidence of LM IIIA:1 stratified above an LM II destruction. The building or room of which wall i was the north wall, with only the stumps of the return walls to the south preserved at each end (Fig. 3 top right for the east stump, wall Q η lower), dates



Fig. 10. LM IIIA flask P 2202.

<sup>5</sup>Mountjoy 1986, fig. 65.

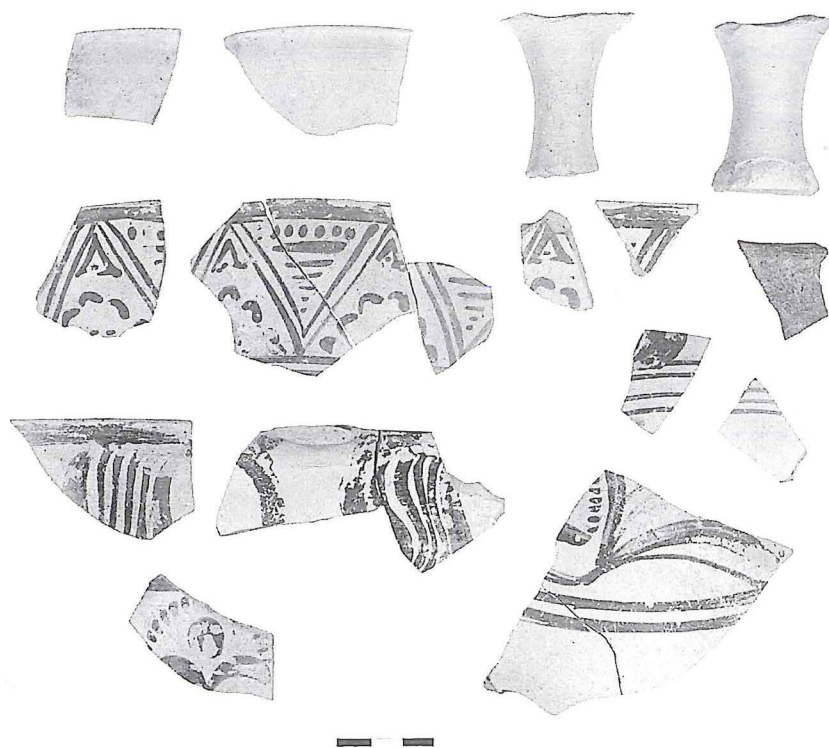


Fig. 11. LM IIIA:1 (T 32<sup>1093-5</sup>);  
second row P 389; bottom right, jug.

to the same ceramic period (LM IIIA:1) as the small circular platform only one and half metres to the west in trenches P/PT/T (p. 175 and Fig. 31). They must have been contemporary or very close in date.

### Trenches T, W and X

LM II buildings in this area were immediately followed by a dramatic change in building form and function. In LM IIIA:1 a series of circular platforms was built on open ground. These buildings have been published<sup>6</sup> and argued to be dancing places, vividly recalling Homer's description of the constructions built by Daidalos for Ariadne in broad Knossos, whereon circular dances were performed.<sup>7</sup> The large platform directly overlay an LM II wall in trench T (33<sup>1098, 1099</sup>) and the adjacent smaller platform directly overlay more of the same LM II building. Material beside the lower course of the large platform in T is LM IIIA:1. It includes a good IIIA:1 tight rim cup (P 389) (Figs. 11 second row, 12), neat, polished buff kylikes, other cups and part of a jug or other closed shape with floral decoration (T 32<sup>1094, 1095, 33<sup>1096</sup></sup>) (Figs. 11-12). This material, including stem/base fragments of 76 kylikes, but *no* footed cups (champagne cups/goblets) should represent use of the platform. The material immediately above (T 32<sup>1093</sup>) covered the lower course of the platform and should represent its final use, or use of the upper course only, or disuse. It is again LM IIIA:1.

<sup>6</sup>Warren 1984.

<sup>7</sup>*Iliad* XVIII 590 sqq.



Fig. 12. LM IIIA:1. Row 1 P 200, P 389; row 2 P 2162, P 1694; row 3 P 1695, P 1697; row 4 P 1712, P 1986; row 5 P 1689 (bowl), P 1625 (cup rhyton?). All others cups.

Next above this the material in T is IIIA:1-2 (T 32<sup>1091</sup>), including a piece of a large coarse ware stirrup jar, decorated with a cross in circle in creamy white on brown (T 32<sup>1086</sup>). Subsequent to that came two successive phases of activity, both of which are IIIA:2. First came walls (remnants only survived, T ξ, T δ south, T π) built against or near the upper



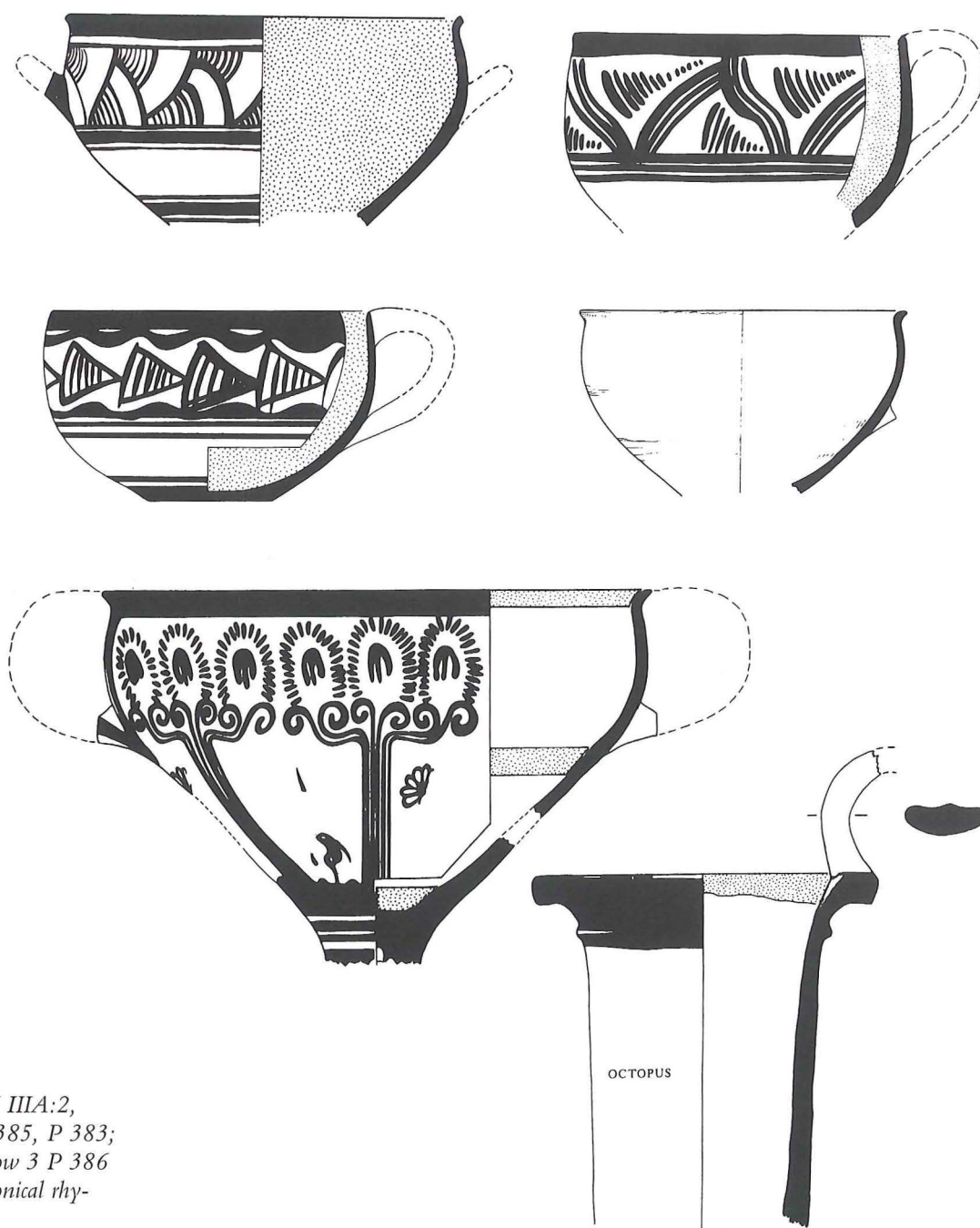


Fig. 13. Trench T. LM IIIA:2, earlier phase. Row 1 P 385, P 383; row 2 P 375, P 462; row 3 P 386 (kylix); row 4 P 377 (conical rhyton).

course of the now disused platform<sup>8</sup> (Fig. 31). Catalogued pots (Fig. 13) include a bowl (P 385), cups (P 375, P 383, P 462), a giant decorated kylix (P 386), a conical rhyton (popular shape in IIIA:2) with octopus (P 377) and a closed vessel, probably a stirrup jar (P 370) of hard whitish clay, polished buff slip and lustrous red/brown paint (Fig. 14). It appears

<sup>8</sup>Warren 1982-83, fig. 21.

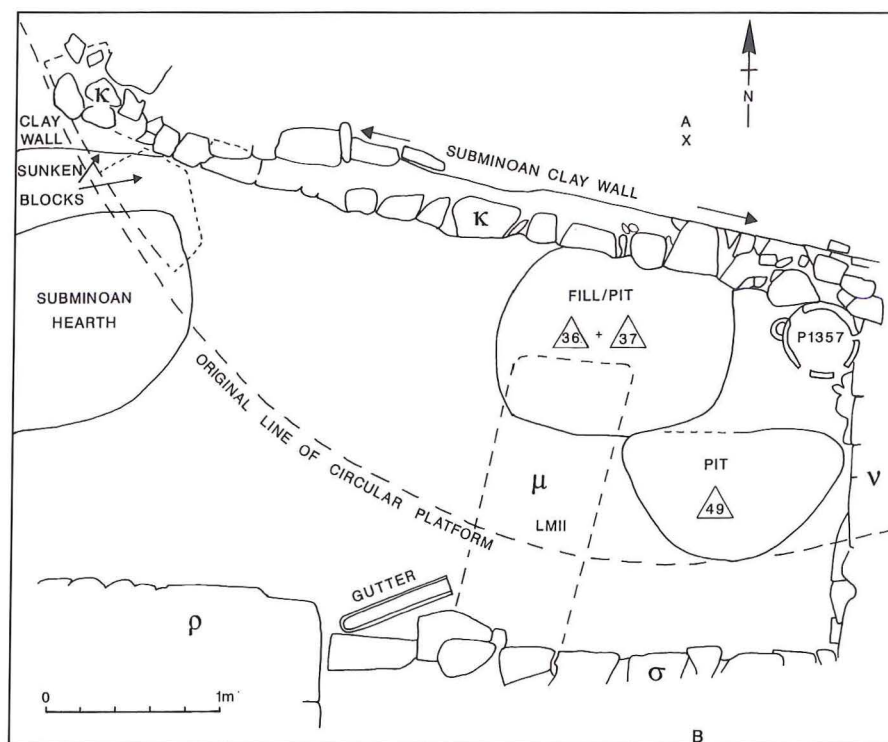


to be Khaniote. The bowl with S-profile and shoulder handles (P 385) should be noted. It may be seen as a further stage on from the LM II conical bowl,<sup>9</sup> though it might well have had a low pedestal foot like an otherwise very similarly shaped IIIA:2 bowl from the Unexplored Mansi-

<sup>9</sup>Popham 1984, pls 52-3.

Fig. 14. Trench T. LM IIIA:2, earlier phase (P 370); later phase, all others. Upper left P 370; right side from top down P 378, P 376, P 374, P 373, P 371, P 372; centre P 196 (with interior view and base view); lower left P 380.

Fig. 15. Trench W. Wall  $\mu$  (LM II), sunken Circular Platform blocks (LM IIIA:1), walls  $\kappa$ ,  $\nu$ ,  $\sigma$  (LM IIIA:2), IIIA:2 deposit or pit 36 + 37, Pit 49 (IIIB), wall  $\rho$  (IIIB/C?), hearth and clay wall (Sub-Minoan). For A, B see Fig. 21.



on.<sup>10</sup> The shape is in any case significantly different from the Minoan decorated deep bowl, which is discussed below (pp. 176–177). Next, making the second phase, above these walls came a pit with heavily burnt earth (T 24<sup>1065, 1066, 1068</sup>), with later IIIA:2 pottery. Of 15 catalogued pots, eight are illustrated (Fig. 14): three cups, four footed cups (champagne cups/goblets) and a closed shape, perhaps a piriform jar. There was also the top of a large coarse ware stirrup jar, dark on buff. From the adjacent level came part of a fine kylix with octopus decoration (T 29<sup>1078</sup>). The next main building phase above this was LM IIIC.

Trench W was south-west of trench T and it would have included the south-west quadrant of the large circular platform. This had been removed in IIIA:2 and the subsequent material comprised the best deposit of this period from the site. The relevant stratigraphy (Fig. 15) is, first, that wall  $\mu$  belonged to an LM I/II building, largely beyond the excavated area. Next came the circular platform in LM IIIA:1 (for which trenches T and X provide the evidence). Taking the platform's base line as horizontal, as in its preserved northern half, and at the same depth as in baulks SW and TX (its southern preserved ends on the west and east sides), we find that its construction would have cut away the north-south (LM II) wall  $\mu$ , just as indeed that wall does fall away to the north; the wall's preserved southern end is just 0.24 m below where the base line of the plat-

<sup>10</sup>Popham 1984, pl. 174,1; for a IIIA:2 or IIIB example from Khania: Kastelli, Tzedakis 1970, 466 and pl. 408γ.



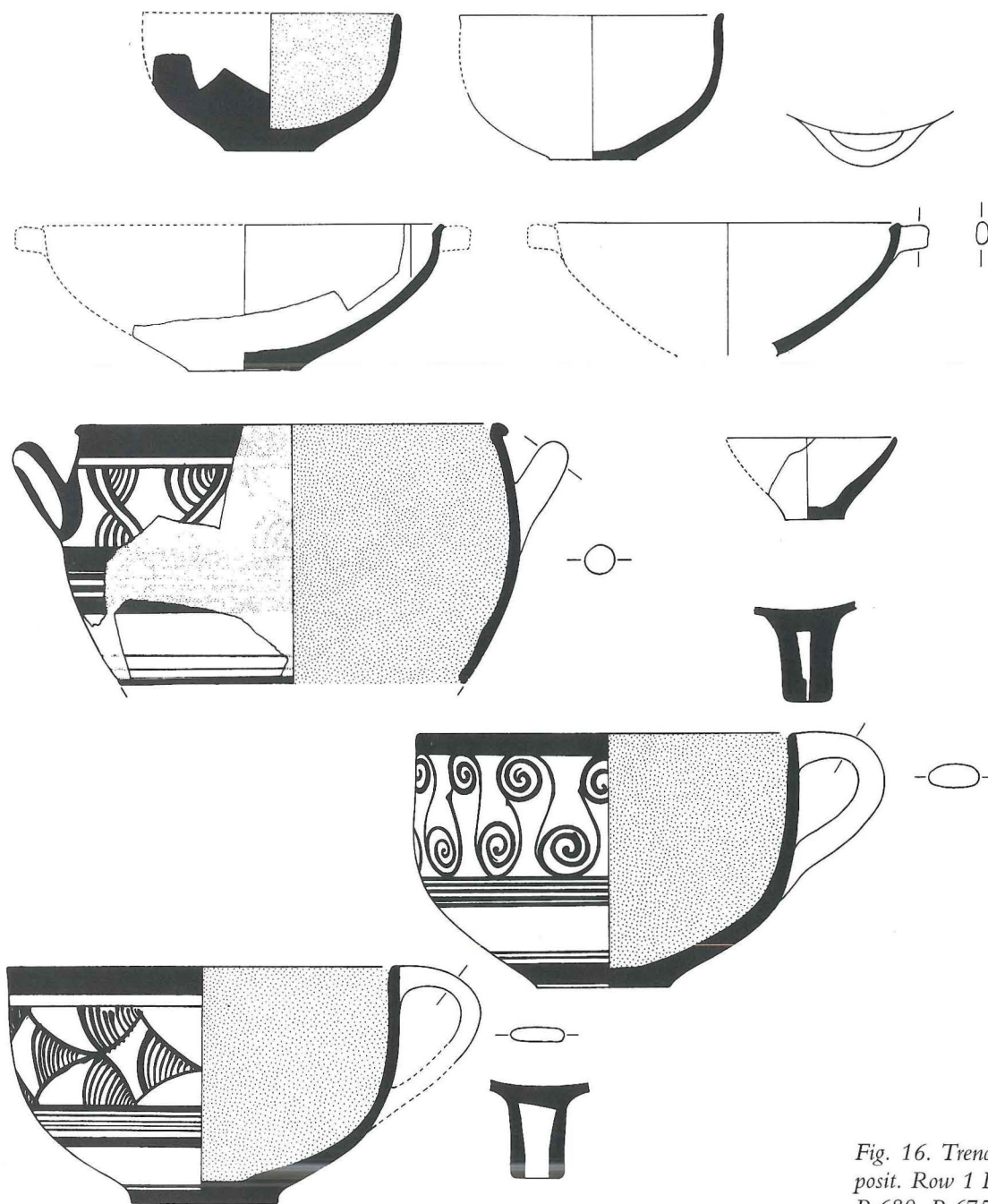


Fig. 16. Trench W. LM IIIA:2 deposit. Row 1 P 684, P 676; row 2 P 680, P 675; row 3 P 678, P 683 (conical cup); row 4 P 668; row 5, P 669.

form once ran across it 0.55 m to the north. Next, at the end of IIIA:1 or early in IIIA:2, the south half of the platform is removed, except for two blocks on the west which had sunk down to 0.41 m below their original level and were thus preserved. Next a long east-west wall was constructed (W 2) perhaps to retain the fill of the platform to the north. This wall at its west end ran over the northern of the two sunken blocks of the platform (Fig. 15). Beneath the wall here, on the northern of the two blocks,



Fig. 17. LM IIIA:2 bowl P 678.

Fig. 18. LM IIIA:2 mug P 1792.

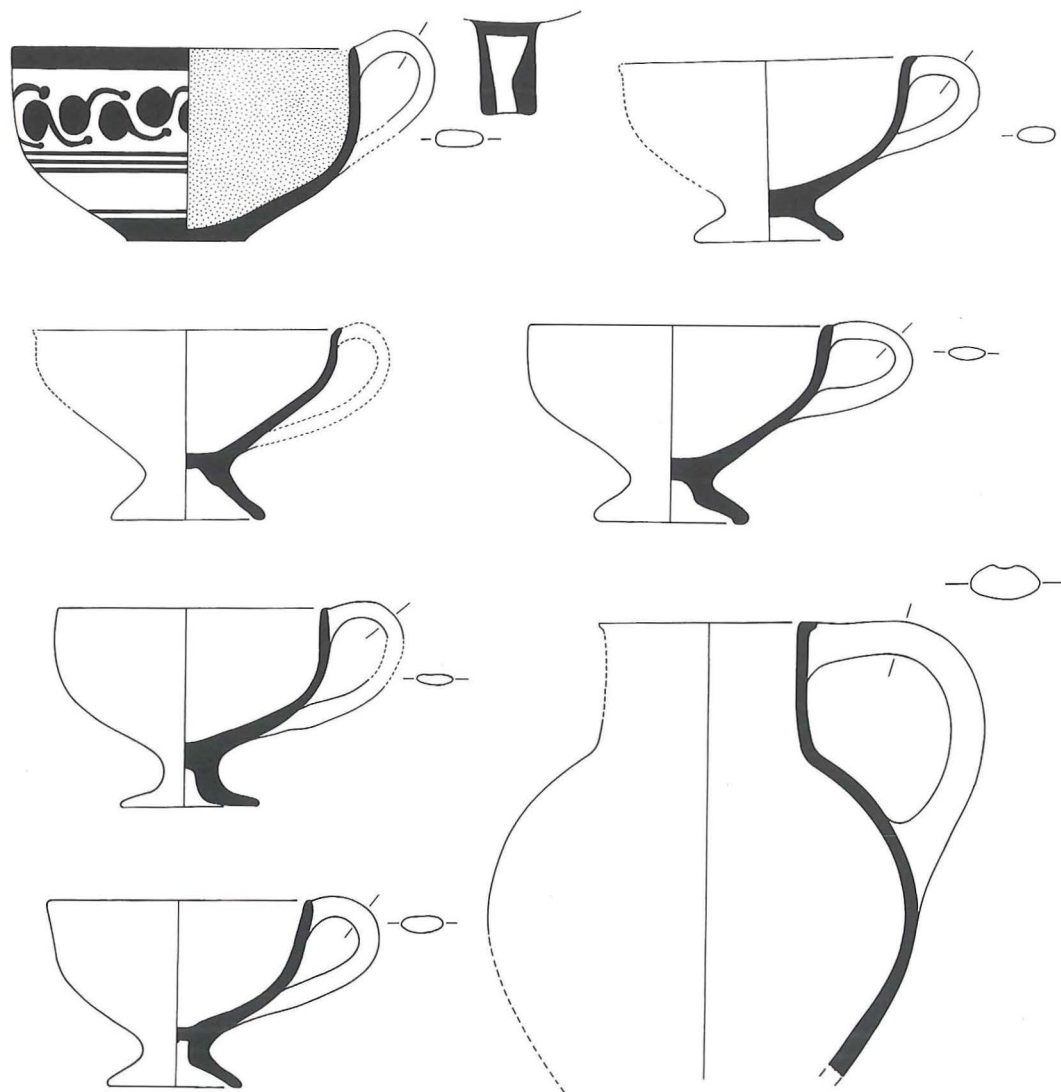
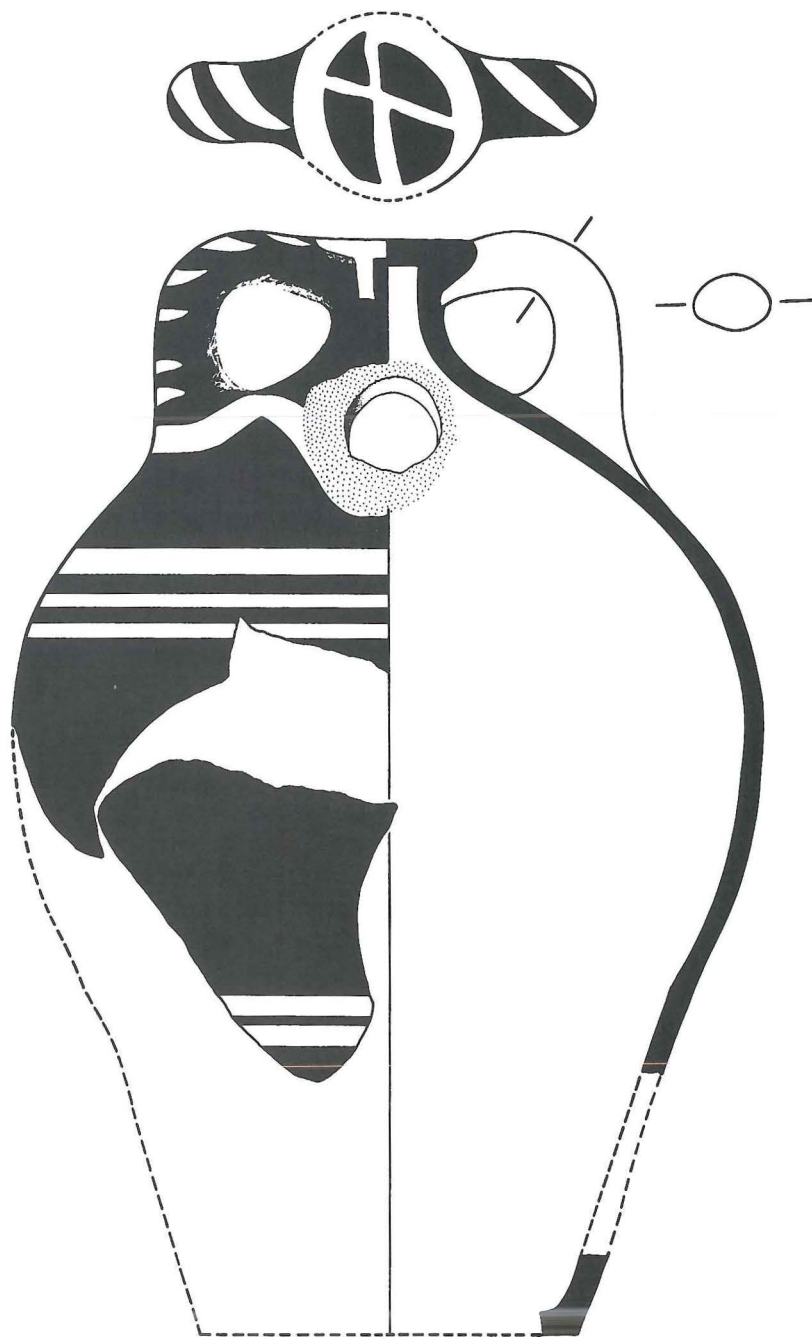


Fig. 19. Trench W.  
LM IIIA:2 deposit.  
Row 1 P 681, P 687;  
row 2 P 677, P 682;  
row 3 P 686;  
row 4 P 666;  
row 3/4 P 673 (jug).



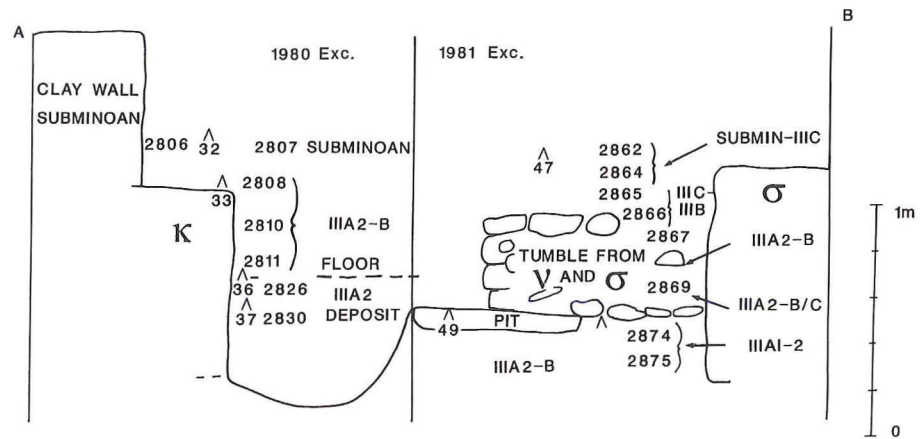
*Fig. 20. Trench W. LM IIIA:2 deposit. P 665.*

was an infant burial. At the east end of the wall, on the east edge of the trench, a north-south wall (W v) provided a southern return from wall  $\kappa$ , while the east-west wall W  $\sigma$  formed the south wall of the room. Within the room, towards the eastern end, was a homogeneous fill or pit of broken LM IIIA:2 pots (W 36 <sup>2826</sup> and 37).

The deposit comprised, in alphabetical order of shapes (Figs. 16-20, 22



Fig. 21. Trench W. Stratigraphical section diagram at A-B on Fig. 15.



top row): 2 plain bowls, one monochrome, one polished buff (P 684, P 676); 2 buff bowls, both presumably with horizontal handles at the rim (P 675, P 680); bowl, decorated, with bow-shaped shoulder handles (P 678, Figs 16-17) (note the incurving profile like that of P 385 from the IIIA:2 material in T, Fig. 13); conical cup, well slipped as usual at this time (P 683); four deep cups with strap handle, decorated (P 668, P 669, P 681, P 1793); a smaller, monochrome (red/brown paint) cup incurving at the rim (P 1778). Next come five footed cups (champagne cups/goblets) (Fig. 19). Note the range of base profiles on the underside, mostly of 'open' forms but one (P 666) with a true hole. Next a buff dipper or ladle handle, then a jug with horizontal rim, buff slip on a very hard pink-grey fabric with white and dark inclusions (P 673) (Fig. 19). Next seven kylikes (Fig. 22), with rim diameters, where preserved, of 16-20 cms, and (P 685) a very large foot, diam. 11.5 cm. All are the usual fine buff burnished. A mug (P 1792) decorated with a frieze of highly stylized diagonal palms with long triple branches came from the top of the deposit (Fig. 18). Finally we have the upper part of a large, coarse ware stirrup jar, black fabric with white grits and decoration in creamy white paint (Fig. 20).

The detailed stratigraphy above, east and south-east of this deposit is complex; the pottery lot numbers are shown at their measured depths on a stratigraphical diagram (Fig. 21). The northern area, levels W 32-37, was dug in 1980, the southern, W 47-50, in 1981. The essential points are that while W 33 was mainly IIIA:2 the lowest pottery lot over the W 36 + 37 fill or pit, W 33 <sup>2811</sup>, included two probably IIIB cup fragments and, more interestingly, the material to the south-east included clearer IIIB. W 47 <sup>2865-6</sup> came down in the south-east to a level of stones probably tumbled from walls W v and W σ. The pottery included fragments of IIIB bowls or cups and part of an LH IIIB:2 deep bowl, P 1813 (Fig. 22). The tumble was removed as 47 <sup>2867, 2869</sup>, which, while mainly IIIA, included a few fragments of IIIB and one krater fragment probably IIIC. Below the tumble and at the same depth as the IIIA:2 fill or pit deposit described above came a shallow pit (only 8 cms in depth), dug as 49 <sup>2870-2</sup>. While most of the diagnostic LM III in it was IIIA:2 and comparable to the fill or pit deposit, some seems clearly IIIB, including 10 out of 23 footed cup bases with a real hole in the upper underside of the base, a decorated stir-



rup jar fragment, a decorated cup, P 2233 (Fig. 22), which also had fragments in a IIIB level in trench O, and perhaps a Khaniote bowl, P 2242 (Fig. 22). The decorated cup P 2243 (Fig. 22) is IIIA:2 or early IIIB. One of the footed cups, P 1820 (Fig. 22), can be compared with a IIIB example in F/FG 45 (see below), and the roll handle also suggests this date. It cannot be far from the IIIA shallow examples P 756, P 1714 in Fig. 28.

The position of this pit, W 49, in location and depth means it is scar-

Fig. 22. Trench W. LM IIIA:2 deposit: top, row, P 672, P 667, P 671. LM IIIB: row 2 P 2233, P 2243; row 3 P 2242, P 1820; row 4 P 646, P 1813 (LH IIIB).



cely distinguishable from the W 36+37 IIIA:2 deposit. Its shallower depth might suggest slightly later deposition and the details given above allow it to be placed on the IIIB side of the IIIA:2-B border. At the same time the material clearly illustrates the absence of any sharp dividing line between the two ceramic periods. There was in fact a transition in shapes and decorative elements, for example in the underside profiles of footed cups (champagne cups). One from the south-east part of the IIIA:2 deposit, P 686 (Fig. 19), with hemispherical bowl and true hole in the base, might well be considered IIIB if studied in isolation and serves to show how close in time the deposit and the pit must have been. Decorated bowls and cups from trenches F/FG and P discussed below also demonstrate the smooth IIIA-B development equally clearly, compelling us to specify which of their elements indicate a date on the IIIB side of the border.

From fill west of and higher up than the W 37 deposit, but below the preserved top of wall  $\kappa$ , came fragments of a large decorated cup, P 1794 (Fig. 23), closely comparable to fragments of another, from trench L (P 35, Fig. 36). The context in each case is IIIA:2-B and from the decoration it does not seem possible to assign a closer date than late IIIA:2-early IIIB. Higher still, in the same area and again below the top of wall  $\kappa$ , was a ladle or small dipper decorated with bands, P 646 (Fig. 22). Within the late IIIA:2-B context the vase may well be IIIB.

Finally, there was the presence of a two-handled tub or basin, P 1357 (Fig. 15), *in situ* in the angle of  $\kappa$  and  $\nu$ , its rim level with the preserved tops of those walls (Fig. 24). The vessel rested on stones (under the top ones of which was a baby burial); it appeared that the floor to the west, which ran over the W 36 + 37 IIIA:2 deposit, had been cut to set the tub in. It is clearly later than the deposit and some of the pottery from below the burial came down to IIIB (W 33<sup>2834, 2843</sup>), like the W 49 Pit adjacent to the south. The tub is certainly post-IIIA:2. It was originally published

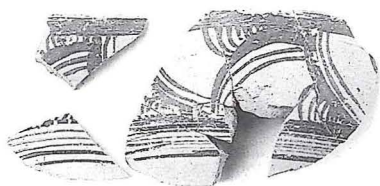


Fig. 23. LM IIIA:2-B cup P 1794.



Fig. 24. Trench W wall  $\kappa$  (left), LM IIIB tub P 1357 on stone tumble. From west. Scale 0.5 m.



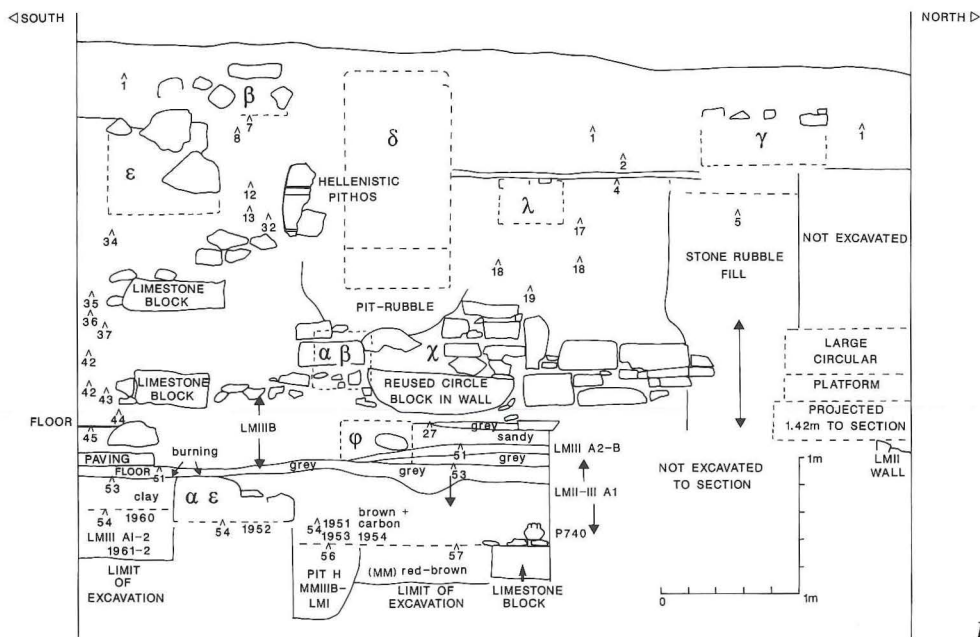


Fig. 25. Trench X west section.

as IIIC<sup>11</sup> and sherds of that date were found with it. They might however have been in it and thus possibly have been a little later than it; there is otherwise very little IIIC in this area of W. A IIIB date for the tub is therefore more probable, this representing the final use of the  $\kappa\nu\sigma$  room, like other IIIB pieces just to the south in W 47 and 49. This dating is supported by the existence of a IIIB floor at the same depth only a metre to the east in trench X (earlier IIIB phase).

East of trench W and south of T was trench X (Fig. 2). Here in X, as in W, the surviving sequence in this period was more complex, because during IIIA:2 the southern half of the large platform was removed and domestic buildings set down into the space it had once occupied. The sequence in X is also important because it preserves the only area of IIIB building on the site.

We begin, as in T to the north, with material immediately subsequent to the LM II buildings (Fig. 25). A fine stirrup jar (P 740) (Fig. 26) a metre west of one of their large walls (X αη) is presumably LM II rather than IIIA:1, although other pieces in these levels are IIIA:1, including two cups, low down beside a drain channel (P 1694, P 1695) (Fig. 12 second row right, third row left), two other cups (P 1697, P 1712) (Fig. 12 third row right, fourth row left) a little higher up near a IIIA:1 wall remnant (X αε), and a fragment of a jug with relief shields, pimpies and perhaps snakes (P 1716) (Fig. 27), like the well known tall-spouted jug from Katsamba tomb B.<sup>12</sup> There were also fragments of tight rim cups and part of a basket vase (X 54). A few pieces in these post-LM II levels can be IIIA:2, but two footed cups (P 756, P 1714) (Fig. 28) are somewhat shallow in



Fig. 26. LM II/IIIA:1 stirrup jar P 740.



Fig. 27. LM IIIA:1 closed shape (jug?) with relief decoration, P 1716.

<sup>11</sup>Warren 1982-3, 71, 73 and fig. 56.

<sup>12</sup>Alexiou 1967, pls. 5-6.

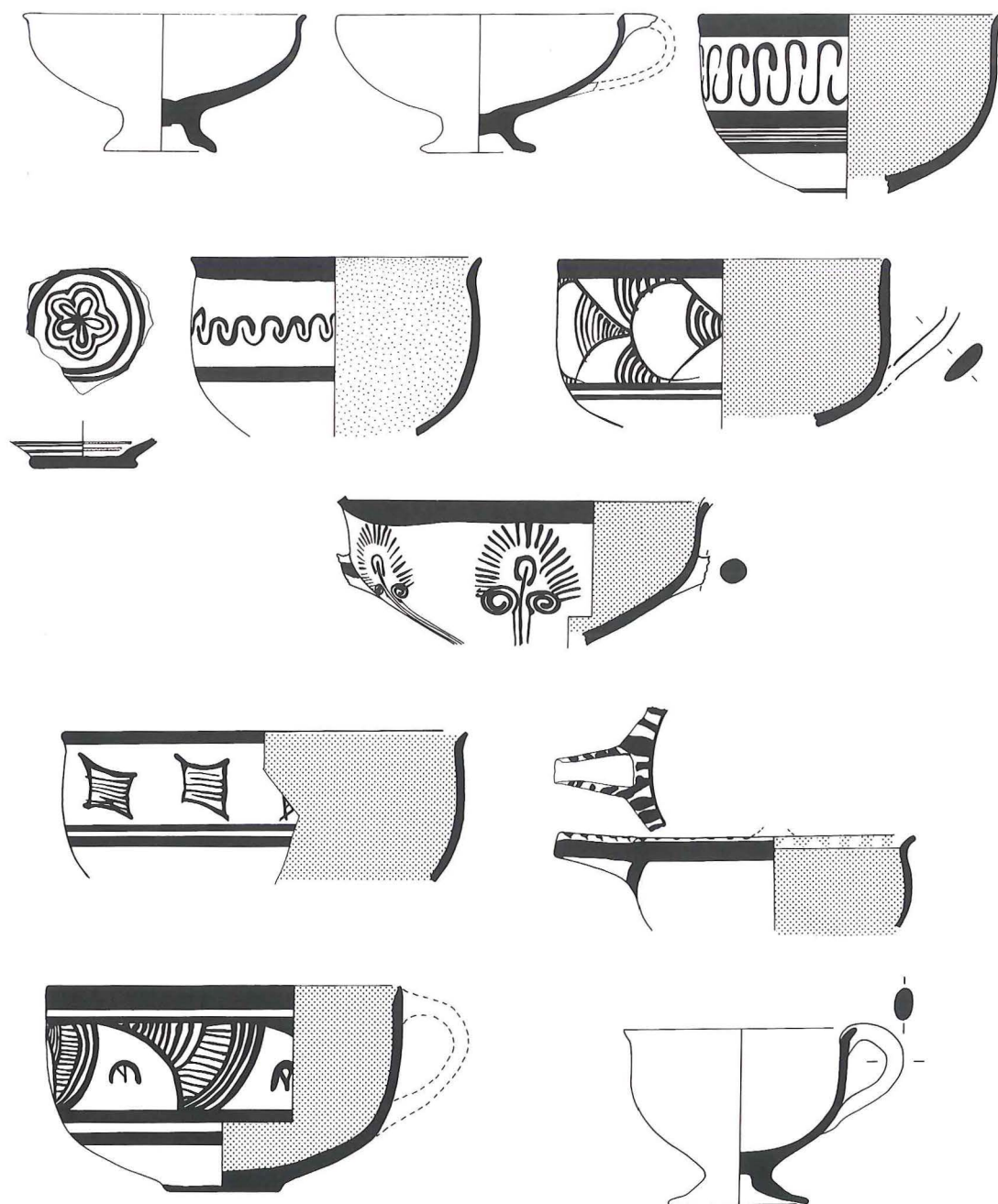


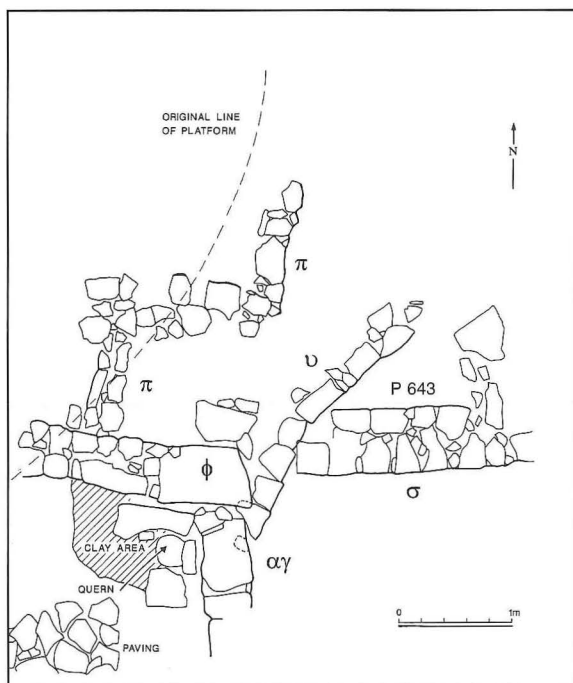
Fig. 28. Trench X. LM IIIA:2: row 1 P 756, P 1714, P 1698 (IIIA:2 or IIIB). LM IIIB earlier phase: row 2 P 1709, P 1699, P 1711; row 3 P 1696 (kylix). LM IIIB later phase: row 4 P 1713, P 1704; row 5 P 1710, P 643.

form like the somewhat shallow IIIA:1 decorated cups and there is a comparable plain IIIA:1 example from the Unexplored Mansion.<sup>13</sup>

All these levels, X 27<sup>1883</sup>, 53<sup>1946-9</sup>, 54, are below the depth at which the base of the lower course of the circular platform would have rested. Given the clear evidence of IIIA:1 against the surviving lower course of the platform in T just to the north, how should this physically lower ma-

<sup>13</sup>Popham 1984, pl. 176,6.





terial in X be understood? The levels cited all include LM II pottery also, so the IIIA:1 material may be pre-platform, thus giving it a construction date within IIIA:1 (and giving also a very short life for the building, which, as we have seen, may well not have outlived IIIA:1). But we must also note that certainly post-platform IIIA:2/B material (X 51<sup>1945</sup>) is also below where the base of the platform would have run, showing that its removal and cutting down into and below its space had taken place. But the LM II and IIIA:1 levels including wall X αε cannot represent that cutting into platform space too, since such an action at that date would eliminate any time for the existence of the platform. It may be that there was a slight landslope down to the south – indeed the LM II walls in the south of X were preserved 0.5m lower than those in the north of the trench – so that the deeper IIIA:1 in the south may simply mark a deeper accumulation of IIIA:1 here leading up to (as well as lying against) the southern part of the once existing platform.

Finally, however, we note that wall X αε (Fig. 25) is IIIA:1 (X 54<sup>1952</sup> underneath it) and had its preserved top 0.24 m below the base level of the circular platform (when the latter existed). The wall was not post-platform (see above) and is unlikely to have been contemporary with it, since it would have stood only 20 cms from the south-east face of the platform and would have prevented access. The wall must therefore have been pre-platform, as its preserved depth suggests. Given its IIIA:1 date the platform itself must have been built after the beginning of that period. Its terminal date, in early IIIA:2 at the latest, is discussed above under trench T.

Above the LM IIIA levels in X, in its south-west corner, come two building phases (Fig. 29) (first wall X υ, then walls φ, αγ, φ, σ) preserving precious evidence of LM IIIB. The first phase (X 46<sup>1939-1940</sup>, 51<sup>1941</sup>), in-

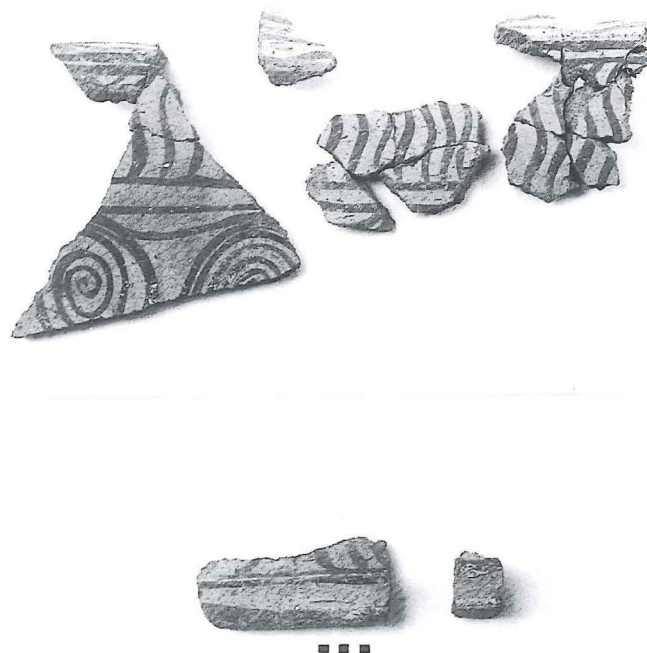


Fig. 29. Trench X. LM IIIB constructions. Earlier phase, wall υ and paving in south-west corner; later phase, walls π, φ, αγ, σ, and clay area in south-west corner.

Fig. 30. LM IIIB gabled lid of chest P 1622.



cluding a paving and floor and within which wall X v was built, was IIIA:2-B at base (X 51<sup>1945</sup>) and IIIB above (X 46<sup>1939-40</sup>, 51<sup>1941</sup>). The IIIB in X 51<sup>1945</sup> included part of a finely decorated kylix (P 1696) (Fig. 28), with a join in X 46<sup>1940</sup>. Catalogued pots, besides P 1696, comprise (Fig. 28) a bowl(?) base with an internal rosette (P 1709), two cups (P 1699, P 1711, the latter close to IIIA:2) and fragments of a gabled larnax lid decorated with spirals and S bands (other fragments were in trenches U and Y) (Fig. 30). This piece is interesting in that it shows terracotta chests were in use in houses (as well as tombs). Its size cannot be reconstructed, though the lid was more than 30 cms long and probably at least 30 cms high. Uncatalogued pieces included three long, straight kylix stems and decorated fragments of bowls, cups and a kylix (X 46<sup>1940</sup>, 51<sup>1941</sup>, 1945). Finally came fragments of a cup (P 1698) (Fig. 28), which, if IIIA:2 rather than IIIB, must represent surviving use or discarded fragments in this earlier IIIB phase.

In the second building phase, above the level just described and including a floor (0.24 above the previous floor and paving) (Fig. 25), that is with walls X  $\varphi$ ,  $\alpha\gamma$ ,  $\pi$  and possibly  $\sigma$  (which may have been slightly later than  $\varphi$  and  $\alpha\gamma$ ) (Fig. 29) came four more pots (Fig. 28), a bowl (P 1713), a spouted bowl (P 1704), a cup (P 1710) – these three decorated – and a footed cup (champagne cup/goblet) (P 643). LM IIIC and Sub-Minoan constructions and pits follow the IIIB.

### Trenches P and F/FG (Fig. 31)

There remain two areas of the site for brief consideration. First, just 2.45m north-east of the large circular platform stands one of the two smaller ones (in trench P and baulk PT), built directly over an LM II building with a destruction deposit. The IIIA:2 material subsequent to the large platform in trench T is therefore also adjacent to the small platform on the latter's south-west. There is in addition a number of IIIA:2 and IIIB vases from contexts subsequent to the use of this smaller platform, both over it and to the north. A wall (P  $\mu/o$  + PT  $\delta$ ) ran diagonally over the platform and northwestwards beyond it (Fig. 31). Another wall fragment, P  $\theta$ , stood in the north of the trench. Both walls had clearly been cut and disturbed by the immediately overlying IIIC building. In earth with wall  $\mu/o$  on the east were two cups, P 1987 and P 1990 (Fig. 32). The former is IIIA:2 (its large zigzag motif not far from IIIA:1), the latter surely IIIB with its spiral running over only half of the decoration zone and its two thick bands below. The fine, yet again fragmentary IIIA:2 cup P 2016 (Fig. 32) was with the wall where it overlay the circular platform (PT  $\delta$ ). Three pieces (Fig. 32) came from fill west of and just above the preserved top of  $\mu/o$ , in the floor earth and below the LM IIIC building: P 1988, another IIIA:2 cup; P 1989, a plain footed cup (champagne cup) with rather tall, upright body, which could be IIIA:2 or IIIB, though its apparently thinnish strap handle suggests the former period; and the IIIA:2 decorated lid fragment, P 1992. From earth beside the lower part of wall  $\theta$  in the north of the trench (P 6<sup>422</sup>) came a buff slipped bowl, P 46, and a fragment of a large buff slipped kylix, P 45, both IIIA:2 (Fig.

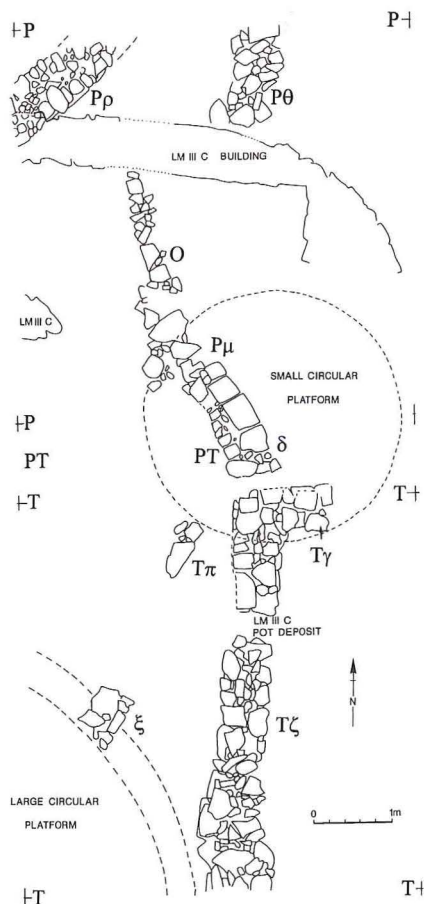


Fig. 31. Trenches P, T and baulk PT. LM IIIA:2 walls: P  $\theta$ , P  $\mu/o$ , PT  $\delta$  below LM IIIC building and above LM IIIA:1 small circular platform, T  $\delta$  south, T  $\pi$  and T  $\xi$  beside large circular platform.



32). Two metres east of  $\theta$  and below the level of its base was a fine, fragmentary IIIA:2 cup, P 209 (Fig. 32) and a fragment of a small, decorated kylix, P 210 (Fig. 32), IIIA:2-B.

Lastly, there is the deep bowl P 1991 (Figs. 32, 33). The surviving fragments were widely scattered, in trench O to the west, baulk PT (context as P 2016) and in P (context as P 1987 and P 1990). How should it be dated? The highly formalized flower suggests it is beyond IIIA:2. The shape of the bowl, with deep, upright profile, is close to that of the IIIA:2

Fig. 32. Trench P. LM IIIA:2 and LM IIIB; row 1 P 46, P 1987; row 2 P 2016, P 209; row 3 P 1988, P 1989; row 4 P 45; row 5 P 210, P 1992 (lid); row 6 P 1991 (LM IIIB), P 1990 (LM IIIB).





Fig. 33. Early LM IIIB bowl P 1991.

large, decorated cups, but is quite different from the incurving profiles of the IIIA:2 bowls P 385 and P 678 from T and W. The problem of dating such bowls was recognized by Popham in the *Unexplored Mansion*,<sup>14</sup> though not the profile distinction just made. He remained doubtful about placing a fine example with upright profile in IIIA:2 rather than in IIIB, and certainly its decoration of horizontal chevrons above thick-thin-thin-thick bands looks IIIA:2.<sup>15</sup> But the profile distinction made above may be useful, as Kanta carefully recognized.<sup>16</sup> The excavators of Khania and Kommos make the P 1991 shape of deep bowl a characteristic of LM IIIB.<sup>17</sup> Malia House E is instructive. A deep bowl close in shape, fabric and paint to ours (and with two thick bands framing three or four thin) was in a group in room XVII<sup>18</sup> which included a long, straight-stemmed kylix which must be IIIB.<sup>19</sup> Since the overall context of our bowl P 1991, IIIA:2-B, certainly permits a IIIB date we place it in IIIB:1 and strengthen the argument that *this particular form* of deep bowl (entirely different from the LM IIIC deep bowl, based on FS 284<sup>20</sup>) is a marker for LM IIIB. This means that body banding in the form of two thick bands framing two or three thin bands is not exclusive to IIIA:2; if combined on a vase with features otherwise IIIB, the vase may be early IIIB.

The second area for brief consideration is a small pit in trench F/FG in the northern part of the site. This pit (F/FG Pit 9) cut into a large east-west wall of LM IIIA. It includes (F/FG 45<sup>3016</sup> + <sup>3017</sup>) sherds from MM IIIB-LM IA onwards to LM III. Of 14 body/stem fragments of large buff kylikes 6 certainly and all the others probably have long straight stems (Fig. 34) which look a stage more advanced than the IIIA:2 kylikes, which are also large but still have a degree of curvature in their stem pro-

<sup>14</sup>Popham 1984, 183.

<sup>15</sup>Popham 1984, 183 and pls. 114 b, 115, 1.

<sup>16</sup>Kanta 1980, 258.

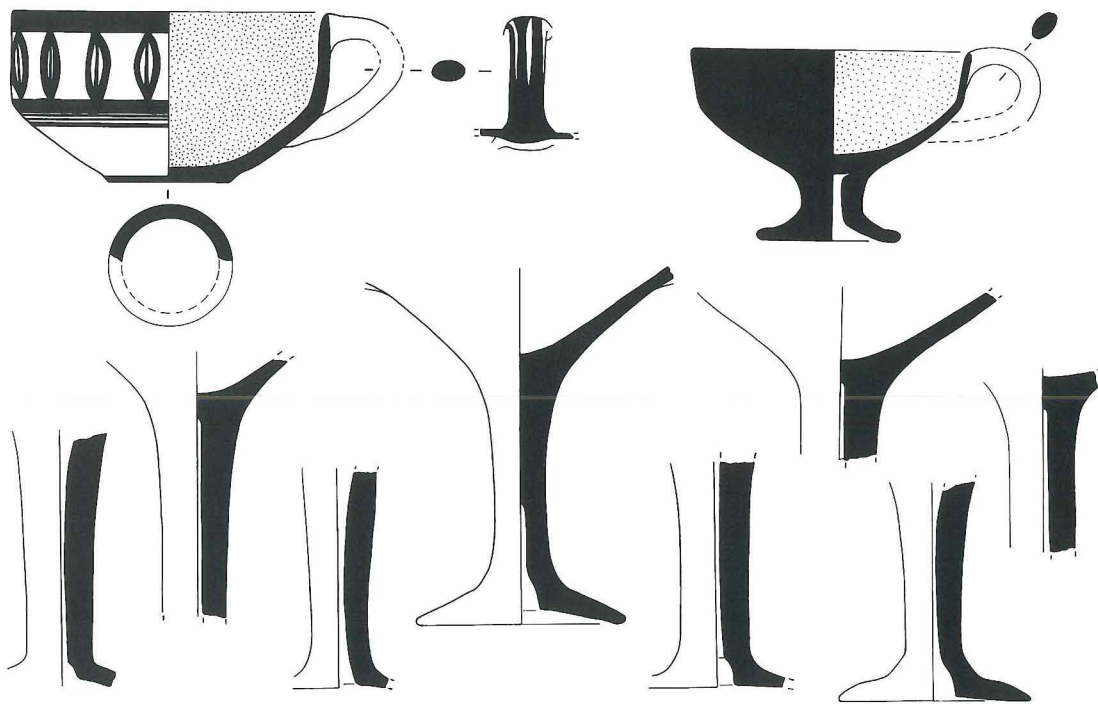
<sup>17</sup>Khania, information from B.P. Hallager; Tzedakis & Hallager 1983, 12 and fig. 9 left; Hallager & Tzedakis 1988, 40 and fig. 21 second row right; Kommos, Watrous 1992, 140-2 (nos. 1155, 1400, 1482-3, 1485 are good examples).

<sup>18</sup>Deshayes & Dessenne 1959, 105, 123, 129 no. 8 and pl. XLVI 6. Pelon 1967, 496 and 511.

<sup>19</sup>Deshayes & Dessenne 1959, 129 no. 4 and pl. XLVI 4.

<sup>20</sup>Cf Watrous 1992, 141.





files. These long and straight-stemmed kylikes in F/FG Pit 9 and in the immediately overlying level, including P 1632 (Fig. 34), (F/FG 42<sup>3012-3014</sup>, where they were mixed with Classical/Hellenistic sherds) may be taken as LM IIIB, as may very similar stems from trench S (S 30, 35) in levels subsequent to the large circular platform on its northwest. Also from the level immediately overlying the pit is the decorated cup P 1639 (Fig. 34). Its band of upright ovals with bar looks IIIB and this can be taken as the date, the body banding continuing from IIIA:2 as on P 1991 from trench P. Finally, from the F/FG Pit 9 there came a footed cup, P 1664, with a small hole in its stem (Fig. 34). This type is not unknown in IIIA:2 – we have seen an example from the W 37 deposit (P 666) – but is also common in IIIB. Given its thick strap or roll handle and the accompanying kylix stems this is its date here.

We may briefly summarize the ceramic development examined. In LM IIIA:1 (Fig. 12) the **cup**, quite often with a neatly curved or 'tight' rim, is the most distinctive of the fine decorated wares. It tends to be shallower than the large decorated cups of IIIA:2, but has the same strap handle with a vertical band of paint at the edges. In the band of decoration very large, repeated, horizontal, stylized flowers are popular, as are iris, chevron and other motifs based on a large zigzag or V-band. A horizontal wavy band or a row of dots may frame the upper and lower edges of the large flowers or other motifs. Sometimes a band of large ogivals fulfills the same function as the large Vs, filled with upright and pendent concentric arcs in alternation. Smaller **shallow cups** also occur, as in LM II, decorated with a band of Ss. Other shapes are monochrome **bowls**, **closed vessels** (**amphora**, large **flask**, **jug**, **Palace Style jar**, **piriform jar** and **stirrup jar**) and **conical rhytons** with bands of decoration. Neatly made

Fig. 34. Trench F/FG. LM IIIB: row 1 P 1639, P 1664; row 2 levels 42<sup>3012</sup>, 42<sup>3013</sup>, 42<sup>3013</sup>, P 1632 (42<sup>3014</sup>), 45<sup>3016</sup>, 45<sup>3016</sup> 45, <sup>3016</sup>, 45<sup>3017</sup>.

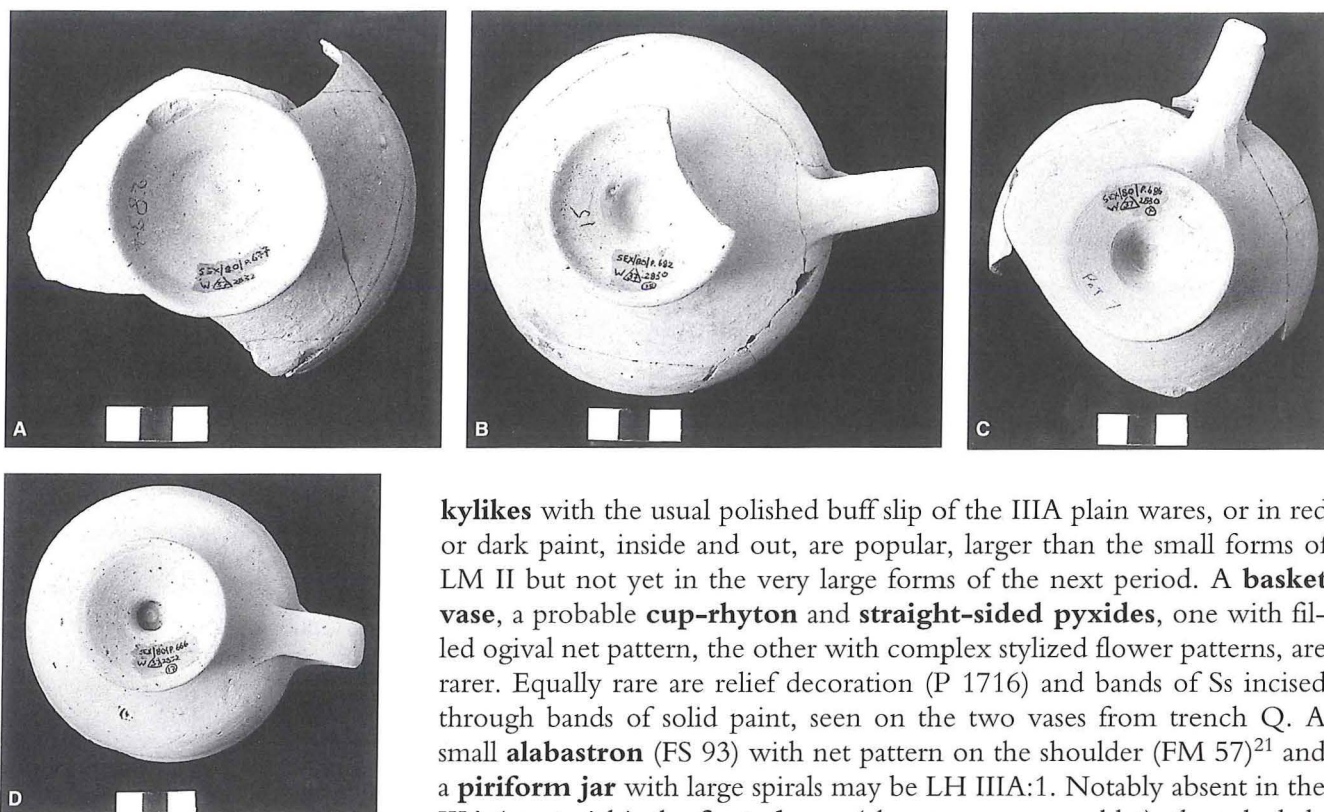


Fig. 35.

- A Footed cup underside type 1,  
P 677.  
B Footed cup underside type 2,  
P 682.  
C Footed cup underside type 3,  
P 686.  
D Footed cup underside type 4,  
P 666.

**kylikes** with the usual polished buff slip of the IIIA plain wares, or in red or dark paint, inside and out, are popular, larger than the small forms of LM II but not yet in the very large forms of the next period. A **basket vase**, a probable **cup-rhyton** and **straight-sided pyxides**, one with filled ogival net pattern, the other with complex stylized flower patterns, are rarer. Equally rare are relief decoration (P 1716) and bands of Ss incised through bands of solid paint, seen on the two vases from trench Q. A small **alabastron** (FS 93) with net pattern on the shoulder (FM 57)<sup>21</sup> and a **piriform jar** with large spirals may be LH IIIA:1. Notably absent in the IIIA:1 material is the **footed cup** (champagne cup, goblet), though shallow examples (P 756, P 1714), perhaps of this date rather than IIIA:2, are noted under trench X.

LM IIIA:2 is characterized by the following forms: monochrome and plain hemispherical **bowls**; decorated bowls with incurving or S-profile (no bases preserved); **cups**, often large and deeper than in IIIA:1, with a much greater decorative repertoire in which the IIIA:1 divisions emphasized by large Vs or ogivals have been replaced for the most part by a continuous, uninterrupted band of motifs, among which many variations of concentric arcs and spiral patterns are frequent; sometimes there are panels based on a split rosette or, in one case (P 1930), what may be a split rosette with a bird; **footed cups** with lustrous buff slip. These cups (champagne cups/goblets) appear to begin in IIIA:2, unless the rather shallow body form is earlier (P 756, P 1714); rounded and/or deeper forms (P 686, P 1989) are common in IIIA:2 and continue into IIIB (eg. P 643, P 2153 (Fig. 36), the last two clearly IIIB). As Popham explained,<sup>22</sup> the thicker roll handle is characteristic of IIIB. In IIIA:2 the underside of the foot (Fig. 19) is usually of open form (type 1, with uninterrupted (or almost uninterrupted) curve, eg. P 677 (Fig. 35A), P 687, P 1820; type 2, with the middle or inner part of the underside having the beginnings of a separately defined hole, eg. P 682 (Fig. 35B), but there can be a largish but true hole (type 3, eg. P 686 (Fig. 35C)) or a true hole, smaller and se-

<sup>21</sup>Mountjoy 1986, fig. 65.

<sup>22</sup>Popham 1969, 301 and fig. 7.





parately defined in the higher part of the underfoot (type 4, eg. P 666 (Fig. 35D)). It may be noted that all these foot forms occur together in the W 37 deposit, although overall in the IIIA:2 material from the site the true, smaller hole (type 4) is less common. Of the three drawn IIIB footed cups two (P 1664, P 2153) have this smaller hole and the other the similar but largish hole (type 3), so that the general development of this detail from open underfoot to clearly defined hole is clear. The neatly made **conical cup**, though quite rare, still occurs in IIIA:2 (Fig. 36). There are also **closed shapes** (finely decorated **jug**, **piriform jar** or **stirrup jar**);

Fig. 36. Other LM IIIA:2 and LM IIIB. IIIA:2: row 1 P 1828, P 327, P 191; row 2 P 2154, P 1932. IIIB: row 3 P 35 (IIIA:2-B), P 2102 (bowl); row 4 P 2153 (footed cup); row 5 P 382 (cup), P 1325 (LH IIIB mug).



**dipper** (large form of ladle), plain, buff; **jug**, monochrome, with horizontal rim; **kylikes**, now often very large (rim diameter up to nearly 24 cms, foot diameter up to 11.5 cms) in polished buff or yellow buff, or finely decorated with flower and bird patterns (P 386 (Fig. 13), P 191 and P 1932 (Fig. 36)); stems are relatively short in relation to the capacious, quite deep bowl and, though moving towards straight they tend to retain the older incurve in their profile (Figs. 22, 36 (P 2154)); a decorated **lid** (P 1992); a **mug** (P 1792) decorated with stylized diagonal palms; **conical rhytons**, a popular shape in IIIA:2 and with decoration, including octopus, over most of the body (P 377); although this decoration probably occurs in IIIA:1 also (X 54 <sup>1953</sup>, mainly LM II-III A:1), continuous derivation from the LM IB Marine Style is not demonstrable; large, coarse ware **stirrup jars**, evidenced by several tops with dark-on-buff decoration, by an example decorated with stylized flowers (P 2109), by the creamy white-on-brown fragment from T and by the white-on-black jar from the W 37 deposit (P 665) (Fig. 20).

LM IIIB has much less to summarize than IIIA. The decorated **deep bowl** with upright profile has been discussed under P 1991 from trench P; among decorated **cups** some seem clearly IIIB (P 382 (Fig. 36), P 1639, P 1699, P 1710, P 1711, P 1990), while others are perhaps early IIIB rather than late IIIA:2 (P 35 (Fig. 36), P 1794, P 2243 (Fig. 22)). P 2102 (Fig. 36) seems too large to be a cup and is taken as a bowl with flaring profile. IIIB plain **footed cups** have been discussed above in relation to those of IIIA and **kylikes** with long straight stems were described under the trench F/FG material. Decorated **bowls**, **cups** and a fine **kylix** with flower formed part of the IIIB material in trench X. A **ladle** with plain bands from W is probably IIIB (P 646), as is a large **tub** or **basin** with rib below the rim (P 1357) (Fig. 24). Some of the IIIB decoration is very close to IIIA:2 (P 1710, P 1711); otherwise decorative bands look more sparse, occupying less than the full height of the decorative zone and with space between repeated single motifs (P 1713, P 2102 and the kylix P 1696, where the detached upright flowers are slighter and more attenuated than the richer version of IIIA:2 as seen on the giant kylix P 386).

A large LH IIIB deep bowl was described under trench W (P 1813) and another bowl is from Khania (P 2242). Fragments of a large LH IIIB **mug** (P 1335 + 1338, rim diam. 18.1 cms) decorated with vertical whorl shells came from trench D (Fig. 36).

Consideration of the site's LM IIIC material is beyond the scope of this paper and it has been summarized elsewhere.<sup>23</sup> The salient features are simply enumerated here. The primary feature is the appearance, after the scattered and relatively slight building remains of IIIA:2 and, even more so, of IIIB, of new buildings. There appears to have been a newly built settlement, surviving mainly in trenches O, P, S, T and W. Such a well documented building phase was not to appear again here until the Hellenistic period. (Sub-Minoan may have been equally important but sub-

<sup>23</sup>Warren 1982-3, 69-83 and figs. 40-59.

sequent erosion and removal of the levels of this period have resulted in a much reduced survival of evidence).

In the new buildings after IIIA and IIIB the degree of ceramic change from the pottery of those periods is remarkable. **Footed cups** (champagne cups/goblets) are no longer found and **cups** have largely gone, the few catalogued IIIC cups all being individual pieces. The decorated **conical rhytons** and **piriform closed shapes** and the large coarse ware **stirrup jars** have also gone. **Kylikes** continue and are a prominent IIIC shape, tending now to have a shallow bowl, sometimes carinated.<sup>24</sup> They are still decorated, with fringe and other patterns, but no longer have the fine flower patterns of IIIA and B. The large **tub** or **lekane** also continues, the main example (P 204) having a rib with rounded profile below the everted rim, while the IIIB tub P 1357 had a sharp rib.

In contrast five shapes appear to be new. The **deep bowl** is closely related to and surely derived from the Mycenaean form FS 284. It is decorated outside and sometimes has a reserved band just below the lip on the monochrome interior; the profile is often bell-like and there are two bow-shaped handles, quite high on the body, and a distinct, small, concave base.<sup>25</sup> The shape is very common (35 catalogued and fragments of many others photographed). It has clearly replaced the **cup**. Also new and prominent is the decorated **krater** (22 catalogued pieces and fragments of many others photographed)<sup>26</sup>. **Deep bowls** range from small (smallest rim diameter 10.4 cms) to large (P 285, 18.6 cms), distinguished only by size from the small **kraters** (P 2144, 23 cms). These in turn range up to very large examples (P 10, rim diameter between 43 and 54 cms; P 11 rim 46 cms). Many of the kraters are richly decorated, an unexpected florescence after the relatively sparse IIIB decoration. The decoration extends down below the base of the handles, whereas in IIIB it stops at that point. The third prominent decorated shape is the **small stirrup jar** (P 173, globular, and fragments of 20 others photographed), some in Octopus or Close/Fringed Style. Rarer, but also new, is the quite large, decorated, straight-sided **pyxis** (P 308, with double-axe between horns of consecration, a motif found on deep bowls and kraters too). Two cooking pot fabric shapes also appear new, the globular **tripod cooking pot** with legs of circular section and often a thumb or finger hole at the top of the leg,<sup>27</sup> and the **circular tray**. Other shapes are a carinated cup, P 896, related to FS 240 (LH IIIC Middle) but with the more rounded bowl of the deep bowl – perhaps a Minoan fusion of the two shapes<sup>28</sup> and the **jug** with horizontal rim, buff with simple decoration (also new).<sup>29</sup>

Study of LM III settlement pottery at Knossos was fundamentally char-

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<sup>24</sup>Warren 1982-3, fig. 49 top right.

<sup>25</sup>Warren 1982-3, figs. 41, 47-8.

<sup>26</sup>Warren 1982-3, figs. 43, 55, 59.

<sup>27</sup>Warren 1982-3, fig. 53.

<sup>28</sup>Warren 1982-3, fig. 54.

<sup>29</sup>Warren 1982-3, fig. 42.



ted by M.R. Popham in his *BSA* articles of 1965 (early IIIC, from Knossos, Hagia Triada and Phaistos (1970, 202)), 1969 and 1970 (IIIB), and subsequently with the publication of the *Unexplored Mansion* (1984). Meanwhile, Kanta's work (1980) remains fundamental. The value of settlement pottery lies not only in its social and economic information, what range of shapes was in use, for what purposes and in what contemporary associations, but also in the stratigraphical and chronological information it yields, namely in the development of shapes and decoration. The present study endeavours to supplement this settlement evidence for Knossos, deriving almost entirely from contextual and stratigraphical criteria. From these criteria we observe that the pottery of LM II, IIIA:1, IIIA:2 and IIIB shows continuous, closely linked development, albeit with new forms and features which enable the phases or periods to be defined. The pottery of IIIC, while it not surprisingly shows some links with the preceding continuum, stands out much more for its remarkable differences.

These facts, the LM II-IIIB essential continuum and the break marked by the IIIC material, have a direct bearing on the question which must always be posed. What were the social and political correlates of the ceramic evidence? To investigate them is beyond our present scope, though of course Desborough and Popham, among others, have considered them. What stands out in our IIIC material from lowland Knossos, is not merely its close similarities with that of newly founded (or refounded) refuge or high sites like Arvi: Fortetsa, Dreros, Erganos: Kephali, Karphi, Kastrokephala, Kavousi: Kastro, Palaikastro: Kastri, Sybritos and Vrokastro, or inland sites like Kastelli-Pediada and Kavousi: Vronda, but also the marked degree of connexion with or derivation from LH IIIB, IIIC Early and IIIC Middle forms and features.

## Addendum

The printed text of the paper has taken account of helpful comments made by Professor Watrous and others in the discussion of the paper at the conference.



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# Response and discussion

## Watrous:

I would like to begin by thanking Søren Dietz, Birgitta and Erik Hallager for the opportunity to take part in this conference. It is also an honor and a challenge to have an opportunity to respond to such a knowledgeable and productive scholar as Peter Warren. As in all his fieldwork, his paper is typically thorough and precise. In the mid 1980's when my Kommos volume was in press, I sent the line drawings of the pottery to Mervyn Popham for his comments. I remember that his first reaction was surprise over how closely tied the LM III ceramic styles of Knossos and Kommos were. During the years I was working on the LM III pottery at Kommos, I often travelled to Knossos to look for comparanda. Thanks to the cooperation of the members of the BSA, I was able to look at a number of deposits from the old and new excavations there, including those at the Unexplored Mansion and Stratigraphical Museum Extension excavations. As I was studying all of this material, it became obvious to me that the ceramic styles of these two Central Cretan centres were very closely related to one another in LM IIIA and IIIB. One of the causes of this close connection is the large number of LM IIIA-B:1 Knossian vases that were imported into Kommos and locally imitated. Most of us know that Knossian LM IIIA:1 vases are relatively easy to recognize. LM IIIA:2-B Knossian exports, however, are much harder to identify. But they do exist, and at Kommos at least, I believe they exist in large numbers. I was able to identify three categories of Knossian vases at Kommos: 1) large decorated kraters and basins in a buff-slipped oatmeal fabric; 2) what I called "transport amphoras" in a buff fabric with dark metamorphic origeneous and hematite as well as white inclusions, which according to Peter Day is North Central Cretan; 3) a large number of cups, bowls, kylikes in a brown-buff fabric. The evidence is set out in Kommos III, 150-152, 181 and fig. 6. Similar vases from Khania have been analyzed and shown to be from Central Crete. This third category of vases was imitated repeatedly by local potters in the Mesara.

This brings us to a point we were discussing yesterday: how did the Knossian style spread so quickly across the island? At Kommos we know this happened because we have many doubles/triplets, even quadruple sets of identical vases, one of which is a Knossian import while the other(s) are in local clay. It is this similarity of Knossian and Kommos LM IIIA-B:1 styles that forms the basis for my comments today on the Knossian SEX material. The main point of my paper will be to suggest that a certain amount of the SEX material, based on parallels with Kommos, is probably LM IIIB:1. One must bear in mind that LM IIIA:2-B:1 is essentially a stylistic continuum and the differences between LM IIIA:2 and LM IIIB:1 often lie in small details and in the relative incidence of certain vase shapes. Thus identifications of individual pieces as LM IIIA:2 or LM IIIB:1 must be treated with caution. This certainly applies to my comments below.

But before I start let me define exactly why and how I determined the difference between LM IIIA:2 and IIIB:1 at Kommos. In this connection, I am afraid that I cannot agree with some of Kanta's comments yesterday. I believe that we can distinguish between LM IIIB:1 and IIIB:2 in Central and Western Crete. At Kommos, the 1976-82 excavations produced five LM IIIB:1 and 16 LM IIIB:2 floor deposits with whole or almost whole pots. There is no question of a lack of stratigraphy. These deposits are dated to IIIB by LM IIIB and LH IIIB imports and stylistic synchronisms with LM IIIB material elsewhere on the island.

Since so many of Peter Warren's deposits are dated to LM IIIA:2, I will begin my focusing on the transition between IIIA:2 and IIIB:1. (The later transition between IIIB:1



and B:2 is best treated at Khania, not at Kommos). Four features that distinguish IIIA:2 from IIIB (see pp.139–145 in my Kommos vol.) are 1) introduction of the Minoan deep bowl. Bowl handles are extremely rare in LM IIIA:2 deposits. They show up only at the very end of this period. However, bowls become quite common in IIIB deposits, though not as popular as cups. We measure the incidence of bowls vs. cups at Kommos strictly by handles. You cannot go by the diameter of the vase because often bowls and cups are the same size. In some cases the bowls are quite a bit larger. The ratio of bowls to cups in LM IIIB deposits was 1:5. The diameter of these bowls ranges from 15–19 cm. At Kommos these bowls – and this brings us to the crucial issue – are not exact copies of the Mycenaean FS 284. Incidentally, FS 284 takes two forms, one is the bell shape, but on the other the wall rises vertically to the rim like the rim of Minoan bowls. I relate the bowls at Kommos chronologically to LM IIIB and to the FS 284 shape because in the deposits in which they occur have LH IIIB imports. At Kommos the bowl shape begins without any real initial development in LM IIIA:2. I assume that this new shape is simply the Minoan response to the Mycenaean bowl. The Central Cretan potters very rarely directly imitate certain Mycenaean features, such as the ring base and the bell shape of FS 284 until very late in LM IIIB:2 and in IIIC. I think this may be a difference between Central and Western Crete.

When Peter Warren was kind enough to let me look at some of his SEX material a number of years ago, I strongly suspected that some of it was LM IIIB not earlier, but only yesterday do I think I understand why Warren dated his material to IIIA:2. It has to do with the fact that, since the bell-shaped equivalent to FS 284 does not appear in Central Crete until very late in LM IIIB, Warren took the presence of the FS 284 shape as the indicator of LM IIIB and so dated his LM IIIB:1 deposits to the LM IIIA:2. What I am suggesting is that LM IIIB:1 deposits in Central Crete can be recognized by the presence of the straight-rimmed Minoan bowl as well as by other features. These include 1) Other Mycenaean features associated with LH IIIB: voluted flowers, the whorlshell, probably the carinated kylix FS 267, and perhaps curve-stemmed spirals, and multiple stem curves, 2) Banding on cups and bowls, discussed below and 3) The shape development of the goblet (champagne cup), discussed below. In sum these are the four criteria for distinguishing IIIA:2 from IIIB. They exist at Kommos, Knossos, and elsewhere in some quantity.

Turning now to the material which Warren has illustrated, I will point out individual sherds which, based on my experience in Kommos, I would date to LM IIIB:1. The deep bowl (Fig. 13, P 385) may be LM IIIB since this shape only becomes popular at Kommos in IIIB. The multiple arc decoration is common both in IIIA:2 and IIIB. From this same area, over the so-called “Dancing Platform”, come sherds dated to LM IIIA:2 by Warren in *AREpLondon* for 1983, fig. 22. Several of these cup sherds can be IIIB (e.g. lower right, and third row, fifth from left). The cup in the lower left is almost certainly IIIB as its double body band indicates. The bowl two sherds up is also IIIB. This particular type of stirrup jar, occurs at Kommos in a IIIB context, so it is possible that it may be IIIB but I am not so certain. Turning to Fig. 22 (from Trench W), the plain lozenge chain and double band on the cup P 2233 are features of LM IIIB:1, and not necessarily early in B:1, at Kommos. In LM IIIA, the lozenge chain is more likely to be accompanied by loops, spirals or a wavy border, whereas the plain lozenge chain is characteristic of LM IIIB.

The banding on cups proved to be a helpful chronological feature at Kommos. Cups from stratified LM IIIA:2 deposits are usually decorated with two thick outer bands which inclose 2 to 4 thin inner bands. This is the standard banding in IIIA:2. This feature does continue into LM IIIB:1, however. Toward the end of LM IIIA:2, this scheme is often abbreviated into two thick bands, which becomes by far the most popular type of banding in



LM IIIB:1. These distinctions are based on deposit statistics, not individual vases. One cannot take a single decorated sherd and say that this is IIIA:2 or IIIB in date. But one can say that statistically, given the stratigraphy, it is likely that it is IIIB:1 or IIIA:2, based on the popularity of the two types.

Several of the champagne goblets in Fig. 19 may date to LM IIIB. I should preface my remarks by saying that while I was preparing the LM III pottery at Kommos for publication, it became evident to me that, since goblets, especially goblet bases, were extremely common in LM IIIA and IIIB deposits, it would be helpful to understand their morphological development a little more precisely than outlined by Mervyn Popham in his 1969 article. To do this, I went to Knossos and Popham showed me several IIIA:2 and IIIB deposits, including those from the Unexplored Mansion and the Private Staircase in the Queen's Megaron which contained goblets. The development I was able to work out was that IIIA:2 goblets tend to be relatively tall and to have a larger base than in later IIIA:2 – Fig. 19, P 677 is a good example of an early IIIA:2 type. Typically, the IIIA:2 base has a steep perked-up shape. In IIIB, the goblet becomes more squat and has a smaller base, and often a flatter upper and lower surface – Fig. 19, P 686 and Fig. 22, P 1820. In Fig. 16, P 678 (from Trench W), what appears to be a bowl at first glance may rather be a stemmed bowl dating to LM IIIB. If it is, it is an imitation of a Mycenaean shape. The rim is wrong for a bowl and the profile is too steep. The rounded rim and deep shape of the spiral decorated cup P 668 indicates a late LM IIIA:2 or IIIB date for it. I think the cups P 1639 (Fig. 34) and P 35 (Fig. 36) may be early IIIB, based on the large size (P 35) and on the simple leaf decoration (P 1639). In Fig. 32, the bowl P 1991 (for reasons already discussed) and the cup with running spirals (P 1990) are probably LM IIIB in date. The spirals do not fill the decorative panel the way LM IIIA examples do, and the double bands are a late development. In Fig. 34, I agree with Warren that the monochrome goblet P 1664 may be LM IIIB for reasons outlined above. Two of the kylikes (Fig. 34, first and fourth from left) may be LM IIIB based on their height, strictly cylindrical shape, and the relative flatness and small size of their bases. Goblet and kylix bases exhibit the same development. In Fig. 28 rows 4 and 5, the upper LM IIIB level in Trench X, is, I think, LM IIIB:2. The example in (Fig. 36, P 382) has a single band. Note also the very small double bands (Fig. 36, P 2102). One of the features of IIIB:2 is that the cups and bowls tend to get smaller. The goblet in Fig. 28 P 643 imitates this, as does the bowl with the squiggle line (P 1699). I would take those as being IIIB:2.

#### Warren:

In much we are in agreement. However, one or two of the pieces Watrous referred to, are in contexts later than the small circular platform, such as the interesting bowl in Fig. 32, P 1991, in which the context would allow a IIIB date. It is below the IIIC building. My reason for putting it in IIIA:2 was simply what I take to be a standard IIIA:2 band pattern of thick bands enclosing thin. If this banding, which is usually considered one of the hallmarks of IIIA:2, is demonstrated to continue into IIIB, it would no longer constitute a criterion. I am more concerned, since the context is open to that interpretation, about the vases from Trench W deposit, in the room fill, which MacGillivray excavated and which I would certainly date to IIIA:2. We need to have a view about that because it is a significant body of material. My main reason for dating it to IIIA:2 was that the magnificent decorated big cups cannot be other than IIIA:2. The pottery in the figures 16–20 and 22 top row, is a single deposit. I explained the context of the ladle Fig. 22, P 646, which was in the level above the IIIA:2 room, not part of the deposit. The three kylikes, the stirrup jar, and, importantly, the footed cups, as well as the big decorated cups – this I was proposing to be a IIIA:2 deposit. The cup Fig. 22, P 2233 to which Watrous rightly draws attention is some-

what problematical: some of it was found in another trench where the context is, indeed, IIIB, but other pieces were found in what I thought might be a sort of shallowish pit in the IIIA:2 fill in that room. Weighing all these things together, I did, in the end, include it with the IIIA:2 material. I looked very hard in the Unexplored Mansion plates to see if I could get a lozenge. If it can be shown to be IIIB, I will accept that. My escape route, as it were, is that there might perhaps have been some sort of intrusion into the top of the IIIA:2 fill. What I think really is more decisive are the footed cups because I tried all along to make this point, that we have a statistical situation in which there is not a sharp break in the footed cups. The open forms, which are indeed predominant in this deposit, are IIIA:2, but a continuum of development does not totally rule out forms with a small foot and the beginnings of the true hole by the end of IIIA:2. This is something we just have to take a view about. I have dated the W deposit to IIIA:2 and I am not persuaded that the date should change unless it is our consensus that these features cannot be accepted within the IIIA:2 period.

**Watrous:** I agree with you, and I think that it is standard when you have these early IIIB deposits that many of the pieces in them stylistically will be IIIA:2. You have to date the deposit by the latest pieces, so what you have got is a IIIB:1 deposit even though many of the pieces look IIIA:2. That would be my response.

**Warren:** It is partly a question of numbers. I do find it hard to see that the decorated pieces should be IIIB. The cup with the solid blobs (Fig. 19, P 681) was found together with the other cups (the large decorated ones) and the footed cups. There we are, we will just have to take a view.

**Gesell:** Is Watrous saying that the deposit was created in IIIB, although some of the vases were made in IIIA:2 and survived?

**Watrous:** No, that is not what I am saying. The vases Warren is showing are whole, and quite rightly he takes them as a single deposit. When you are focusing with this time period, you are dealing with a ceramic continuum. So you must depend on small features which tell you that you have crossed the line. Many of the features are, as Warren correctly points out, stylistically IIIA:2. But the date of the deposit is IIIB:1 and, therefore, you have to call these particular vases IIIB:1.

**Warren:** Some of you saw in the colour slides that it is a broken deposit. None of the vases is absolutely complete. They are of the general order of half to two thirds, in some cases three quarters preserved. Some are only big fragments. It is not a floor deposit, like what we saw from Khamalevri. It is only 30 cm depth of homogeneous fill in that room.

**Kanta:** I would like to say to Watrous that I did not quite say that there was a lack of stratigraphy at Kommos. What I said was that the stratigraphy did not help, because I read the description of each deposit, and for most of them it is stated that they contain MM III, LM I, LM II, LM IIIB, that they have a wide chronological range. Therefore, my problem was that when a certain date is given to certain sherds, one might accept it. Or if one disagrees for whatever reason, let us say theoretically speaking, if it is a mixed deposit chronologically, even though the level may have been clearly seen during excavation, one may wonder how one should date specific sherds. That was my problem with the stratigraphy of Kommos. I never doubted that one can distinguish between LM IIIA:2 and the beginning of



IIIB. What I question is whether one can distinguish between IIIB:1 and IIIB:2. I still have not had a clear answer from those who believe it is possible. As to Warren's paper, I must say that the material is fascinating and it brought out very clearly the points B. Hallager was making concerning the terminology. Warren's use of the term "deep bowl" and "bowl" appears colored by his opinions as to the historical significance of the pottery sequence. I must say that I now agree with Hallager more than I did yesterday.

**Watrous:** After Kanta's remarks yesterday, I went back to the Kommos book and counted the number of floor deposits. We were very careful: all the deposits have appendices at the back listing the sherds found, which vases were whole, which were not. By regarding the description of the deposits *and* the appendices, one can easily tell what was part of the final floor deposit, and what are the survivals. Concerning the distinction between IIIB:1 and 2, Kommos goes out of use at the very beginning of IIIB:2. It would be more useful to have B. Hallager answer that question.

**Vallianou:** I think that a lot of material of Knossos and Kommos may have come from the workshop of Gouves. This material is common in Crete. In Gouves we have peak production. Until now we have found nine kilns, and seven or eight potter's wheels. So we have a production not only for Gouves, but perhaps for all Crete, and more. On the basis of the Gouves material, LM IIIA late and IIIB, I do not think that there is a large chronological difference between LM IIIA-B and LM IIIB. It is bigger between LM IIIC and LM IIIA early.

**Warren:** This is, of course, extremely interesting. Everyone is most interested in the kilns at Gouves. I have not seen anything published about it, or any drawings. When you say that some of the production of Knossos and Central Crete may be from Gouves, that would be very exciting. Do you have any decorated pottery?

**Vallianou:** Yes, we have both decorated and plain. I showed some of this material at the last Cretological Congress, and at another congress in Athens. I also gave a paper to the ADelt. This year we have more material. It is in Herakleion. We continue the excavation to the end of this month.

**Macdonald:** I was wondering whether Warren is going to accept that there are clear IIIB elements in your IIIA:2 Trench W deposit? Are we going to say that it is IIIA:2-IIIB:1 or that IIIB:1 has just started but the majority of the pottery is IIIA:2? Compare the Palace destruction pottery: essentially IIIA:1, but IIIA:2 has just started; or the MM III/LM IA destruction: LM IA has just started, but it is mostly MM III. We may end up with a lot of phases that are "stroke the next period" or "early in the next period". How are we going to define this?

**Warren:** I came here to learn. But is there any way that these three kylikes (Fig. 22 top row) can be called IIIB? They are classic IIIA:2 kylikes, it seems to me. We also have the decorated cups and the bowl – thank you for the comment that it might be a stemmed bowl – and the footed cups and the jug. The footed cups are largely of the open-foot type. One or two (Fig. 19, P 686, P 666) have the more distinct type of hole. Here is the question. My conclusion was that it is IIIA:2. To follow Watrous you must assume that footed cups must be IIIB – and therefore the deposit is. I do not see anything else has to be IIIB. It is classic IIIA:2 material.



- Coulson:** When I said yesterday that one must date by the latest sherds, I meant that you have to look at the total tenor of the deposit. You might find some intrusions. I do not think it is a good exercise to pick out individual pots and say that because they are IIIB, then the entire deposit has to be dated to IIIB:1. I think Warren has proved that the general tenor of the deposit is IIIA:2. You should expect some IIIB intrusions, and you can explain them away.
- Rethemiotakis:** Let me remind you from my own point of view that there is no distinction between LM IIIA:2 and IIIB in tomb groups at least in Central Crete. We find the two phases together in single graves. As far as I can remember, there are no bowls in these contexts.
- Borgna:** I agree with Watrous as regards the local Minoan development of deep bowls. But I am not so sure that this development is connected with LM IIIB:1. We must not forget, especially considering mainland parallels, that we have other types of bowls, as I have already mentioned: shallow bowls, two-handled bowls, one-handled bowls, such as FS 283, 304, 305, stemmed bowls, some of which are widespread throughout the Mediterranean in IIIA:2 possibly having influence on local productions. As regards the two LH III deep bowls in your deposit, I did not understand whether both the bowls, the one with the triglyphs and half rosette, and the other one with running spirals (Fig. 22, P 1813), are in your opinion of mainland provenience. Can the second one be considered a "B" deep bowl in mainland conventional terminology in regards to the width of the band over the rim? In this case it would be a good chronological indicator for IIIB:2.
- Warren:** The context of the bowl (Fig. 22, P 1813) was later than the IIIA:2 deposit which I have been speaking about. It is from Trench W but from a higher level. It was seen by Penelope Mountjoy, and I think by Elizabeth French, and they were happy to take it as a LH IIIB bowl. Indeed, in mainland terms it is LH IIIB:2.
- Macdonald:** The band is not quite deep enough for a Type B deep bowl.
- Warren:** The nice thing about it is that its context is later in Trench W than the big W deposit which I have been showing you.
- Watrous:** Two comments. I do not understand the problem with seeing LM IIIA:2 *style* in an early IIIB deposit. What would you expect in an early IIIB deposit? King Minos did not say "Let LM IIIB:1 begin". No, you would expect to find just exactly what Warren has shown us: a large element which is stylistically IIIA:2, with certain things that we can pin-point as being a little later. After all, what we are interested in is the date of the deposits.
- Vlasaki:** Once again, I think we see the close similarity between IIIA:2 and IIIB. Yesterday we saw the similarity between LM II and IIIA:1 in the future something must be done in terms of terminology to indicate this, and not resort to "IIIA:2-IIIB", "LM II-IIIA:1" etc. As B. Hallager said yesterday, a new term may be better to highlight this similarity. Such a terminology would indicate differences between parts of the island. The LM IIIA:1 pottery you showed: is it of the construction or the destruction?
- Warren:** This material is from different contexts, which I spoke about. Four vases in Fig 12 (P 1694, P 1695, P 1697, P 1712) are from Trench X, in the upper levels, after the LM II building. The IIIA:1 cup Fig. 12, P 389 was associated with the lower part of the platform.

- Vlasaki:** Do you think that some could be dated to the beginning of IIIA:2? The early IIIA:2 destruction.
- Warren:** We do not have a IIIA:1 floor deposit or destruction. We have mainly the levels in Trench Q which came after the LM II building, which had a floor deposit with burnt kylikes. Then in Q we have these levels, on the top of which there was one single wall and a pit. The deposit includes some IIIA:2 sherds, but its predominant character was IIIA:1. We cannot point to a situation as that at Khamalevri. But it is not entirely a stylistic argument because stratigraphically it certainly follows LM II in X and Q. You have to take the buildings, also. It is the phase with the circular platforms.
- Vlasaki:** When were the platforms destroyed?
- Warren:** They stopped being used. Half of the big one was taken away. Already in IIIA:2 they were building those walls up against them (trenches T, W, X), which means they had gone out of use.
- Vlasaki:** Sometime in between there was the destruction. In clear IIIA:1 or the beginning of IIIA:2?
- Warren:** In trench T the lowest course of the large circular platform was covered with material still IIIA:1. So the platforms may have been abandoned by the end of that period. They had a short life therefore.
- Hood:** I entirely agree with Warren about this magnificent period of IIIA:2 with these great kylikes with very fine decoration. I am inclined, from my own study, to agree that you do, in IIIA:2, get a mixture of champagne cup and footed goblet feet of IIIA type together with the later IIIB type. On the other hand, if you have deep bowls, then that surely is a very strong indication that you are probably in IIIB deposit. That is, as Watrous emphasized, really the main criterion.
- Warren:** I do not have deep bowls in the W deposit.
- Hood:** But you did in the others, as Watrous pointed out. I would have thought that it should set alarmbells ringing for it to be IIIB. The emergence of a clearly defined IIIB:1 phase is going to be extremely important for the ongoing discussion concerning the final destruction of the palace at Knossos.
- MacGillivray:** Continuing from what Vlasaki was saying: looking for island-wide events is a big problem. We lamented yesterday the lack of detailed study similar to that undertaken on the mainland – where they are not absolutely unanimous, there are sticking points, there as well – but I think we have seen this morning that such study is taking place in Crete. We now have the publication of the Kommos deposits to refer to, and Warren's detailed deposits. Both are giving us the stratigraphy and groupings we are looking for. We have been relying on destructions at Knossos for years, Evans' preselected, chewed-up material, which probably did not form a very good basis for the definition we have been working with in Crete. I want to congratulate Watrous and Warren for presenting material which leads to this kind of discussion. I hope we can all carry on and do work in such detail.
- Betancourt:** I think we would all agree on the direction of the development: we are looking at a de-



posit in Trench W which is either somewhere at the extreme end of one period, or at the extreme beginning of the next. One of the most important things that can come out of a conference like this, is what questions are we going to ask of our own material in the future. What emerges out of this discussion are some very important things which we have to look at in deposits in the future. Do deep bowls begin at the same time that the goblet foot changes? Do the examples like the lozenge cup begin at the same time as these other features? We need to look at tombs and floor deposits. The answers may come one at a time, one answer out of one tomb, another answer out of another tomb. I want to encourage all of us, including myself, if we come across these things, to get them out in a conference paper very quickly so that some of the answers to these questions can be forthcoming. We are clearly not going to answer them completely to everyone's satisfaction on the basis of the material we have now.

**B.Hallager:** I agree on the importance of floor deposits and other stratified settlement material but tomb material may be highly unreliable. With the older tombs we do not know how many people were buried there. That is probably why there are so many tombs dated IIIA:2/IIIB:1 or transitional. In tombs with a single burial, the date ought to be according to the latest vases for which we can find parallels in stratified deposits.

**Rethemiotakis:** I have said that we have tombs that were used for a long time, but we can draw lines between the distinct burials. Behind every larnax there are vases which apparently belong to one burial. From my own experience I can say that we find vases which can very well be LM IIIA:2 and IIIB simultaneously. You cannot make any distinction between these vases which are found together. All excavators of rock-cut tombs of this period have the same picture in their minds.

**B.Hallager:** That is why it is so important when it is a single burial, to present the whole material. It has to be checked against what we find stratified in Minoan settlement excavations and not against what we may find in Mycenaean publications.

**Betancourt:** The problem of tombs and settlements goes back to the nature of stylistic change from one period to the next: potters do not all start making a new feature at the same time. It comes down to us to decide precisely where we want to draw the line, and what we want to call by one name and what we want to call something else.

**Kanta:** Concerning single burials, the date of deposition must be by the latest vase, but people accumulate things during their lifetime. I have various little pots at home from my grandmother and my great-grandmother! The contents of a tomb is not, by definition, of the same date. Macdonald was saying – and I agree on my experience – that deep bowls, at least, are very rare in tomb deposits. Thus they cannot help since they are not there to guide us.



# Late Minoan II and III Pottery and Chronology at Palaikastro: an Introduction

*J. Alexander MacGillivray*

One of the surprises of the recent excavations by the British School at Athens at Palaikastro is the size of the settlement at Roussolakkos in the Late Minoan III period.<sup>1</sup> When Hugh Sackett and I began the new campaign in 1986 we were thrown off at first, having fully expected to go straight into deep, burnt levels of the LM IB period, as the majority of the existing literature suggested. Instead, the first levels encountered below modern produced pottery of Dawkin's 'exodus' period.<sup>2</sup> Only Kanta had realised the importance of the site at the end of the Bronze Age, and listed the locations of the relevant deposits.<sup>3</sup> We were faced with unexpected pottery types from the very first day of excavation and when trying to find out to what periods our levels belonged soon found that the existing literature dealt with the well-known forms and styles of central Crete and the Argolid, but the plain wares that formed the bulk of our deposits could not be compared with those from elsewhere. Instead, they formed local styles of their own, apparently without reference to the major centres of the time. During successive excavation and study campaigns our team was forced to formulate new typologies based on internal change for the most part without the benefit of previous scholarship.<sup>4</sup>

The following paper is an introductory outline to the periods following the events at the end the LM IB period and the most distinctive 'type-fossils' in the ceramic typology currently being developed for the locally manufactured wares at Palaikastro. As both our period divisions and ceramic typologies are in the process of being refined, this survey must be taken as very much preliminary pending the full analysis of the stratigraphy and contexts revealed in recent years.

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<sup>1</sup>Acknowledgements: I am most grateful to Søren Dietz for the invitation to take part in this very useful workshop and to Erik and Birgitta Hallager for inducing me to submit a manuscript for publication here. I also gratefully acknowledge the permission to include material from the recent excavations at Palaikastro under the auspices of the Managing Committee of the British School at Athens and sponsorship of the Institute for Aegean Prehistory and co-direction of Hugh Sackett and myself.

<sup>2</sup>PK I, 306.

<sup>3</sup>Kanta 1980, 189-92.

<sup>4</sup>We have been most fortunate to have the assistance of a number of pottery specialists, including Alex Farnoux, Eleni Hatzakis, Colin Macdonald, Walter Müller, and Wolf Niemeier. This introduction to the Late Minoan II and III periods at PK owes a great deal to their efforts.

## Types of contexts

The nature of each deposit is regarded as a factor for evaluating the pottery in its context. We have adapted the definitions set forward by Elizabeth French,<sup>5</sup> and have four basic types of deposit:

1. *Primary*: A specific context, as left in position undisturbed – most likely the result of a single episode representing a brief moment in time. Two sub-categories may be distinguished: *A-Intentional*, which might include foundation deposits and single inhumations left as time capsules for posterity; and *B-Accidental*, that is floor deposits and associated architecture in contexts sealed by violent events such as earthquakes or fires. Typically in both cases, the most recent artefacts are over 50% preserved.

2. *Cumulative*: A succession of contexts with artefacts withdrawn from use over time; for example the re-layings of floors, the gradual formation of any sequential layering in streets or open spaces, rubbish deposits that may contain their own stratigraphy as distinct from that in surrounding spaces, etc. Artefacts may range from intact to only a small fraction of the whole and may include material from more than one phase.

3. *Re-deposited*: A context created during a filling operation, for example a dump resulting in the re-deposition of what might have been primary and/or cumulative contexts elsewhere, material used in construction for walls or foundation trench packing or raising a floor level, or strengthening a terrace wall, etc. The finds may vary from a valuable but fragmentary group of homogeneous material probably supplemented by artefacts from the time of the re-deposition to an obvious mixture of objects in a wide range of states of preservation from several time periods and differing functional origins.

4. *Severed*: A situation created by animals digging, deep agricultural ploughing, illicit or unsystematic excavation etc. resulting in artefacts divorced from their ancient archaeological context.

When constructing a typology for artefacts, the type of context is crucial to how much weight may be attached to the appearance or absence of wares, styles and types. The primary context is the only one to which any confidence may be attached, and even then the possibility of antiques and heirlooms, especially in the case of burials, should be considered.

## The site periods

We devised a system of internal site periods based primarily on architectural change, but also in part on the frequency of primary and cumulative deposits taking into account the results of all excavations at Palaikastro.

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<sup>5</sup>E. B. French, "Using pottery for chronology" Acta of the 6th International Colloquium on Aegean Prehistory in Athens 1987, in press. I am most grateful to Dr. French for an advance typescript of her most useful paper.

The great destruction deposits with LM IB pottery found throughout the site, in some cases stratified over burnt deposits with similar pottery, are taken to mark the end of Period XII.<sup>6</sup> The subsequent periods, XIII to XVI are what concern us here. I shall give a brief description of the deposits of these periods and some associated problems, before we get on to the characteristics of the pottery. It is necessary to deal with the material coming from levels immediately following the LM IB destructions because of its relevance in discussions of typologies and continuity.

*Period XIII* is one of the most difficult to define. This is because we have very few examples of primary deposits. One may be the foundation deposit for an internal wall in Building 1 after the period of its original construction and belonging to a radical change in the structure's design. The deposit contained a bridge-spouted jar (87/607) decorated in the Rim Banded Style in Light Slipped and Burnished Ware.<sup>7</sup> Otherwise, there is a primary deposit on a floor at 8.80 in Room 20 of Building 1 where we find forms that could be assigned to LM IB together with those that we have come to regard as LM IIIA early.<sup>8</sup> A series of thin superimposed floors in Building 7 contained cumulative deposits covering this and the subsequent period.<sup>9</sup> The use of Well 605 in the area of Building 6 as a rubbish dump seems to begin during this period.<sup>10</sup> The sample of pottery taken as characteristic for this period, then, is not well supported by a large group of primary contexts, as for example is that for periods XII and XV, and as such is the least reliable of those included in the pottery summaries below.

To *Period XIV* may be assigned the primary deposit in the "bathroom" or Room 10 of Block Gamma.<sup>11</sup> The traces of what may have been cumulative floor deposits have been recorded from a number of locations in the town exposed during the 1902-6 excavations,<sup>12</sup> from a floor above Block N,<sup>13</sup> and from floor levels in Building 7.<sup>14</sup> Other primary contexts may have been some of the larnax burials.<sup>15</sup> Re-deposited material appears in burnt levels of this period on the north and west sides of Building 1.<sup>16</sup> We understand the deposits to be roughly contemporary and to belong within the LM IIIA:1-2 periods.

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<sup>6</sup>The problem of the break from LM IB to LM II at Palaikastro and a discussion of its historical implications is given in MacGillivray 1991.

<sup>7</sup>PK 1987, 271-2, fig. 6, pl. 47a, b; PK 1988, 429.

<sup>8</sup>Identified during our 1990 study season and to be published as part of Building 1.

<sup>9</sup>PK 1991, 138-40 fig. 17.

<sup>10</sup>Excavated in 1994, to be published in PK 1994.

<sup>11</sup>PK II, 315 figs. 14-15, 327 fig. 28; Kanta 1980, 191 fig. 78.7.

<sup>12</sup>Kanta 1980, 189-92.

<sup>13</sup>PK VI, 266-7; VII, 232-4 fig. 22.

<sup>14</sup>PK 1991, 138-40 fig. 17.5, 6.

<sup>15</sup>Hutchinson, Eccles & Benton, 79 fig. 63.

<sup>16</sup>MacGillivray & Driessen 1991, 406.



*Period XV* is a major time of building, certainly at the north end of the site, but also it seems by the sea. This is also the period of the chamber tomb cemeteries. The majority of the primary deposits of the new excavations belong to the end of this period, when there may have been a seismic event, as suggested by deposits of fallen or knocked-over pottery; although this hypothesis is not supported unambiguously by any fallen architecture.<sup>17</sup> We equate the end of this period with the LM IIIA:2 or early LM IIIB period elsewhere in Crete.

*Period XVI*, the final period of the settlement site's occupation, if we can call it such, may have been a time of very selective use of the area. Pottery from the surface levels over the south rooms of Building 5<sup>18</sup> and over the south terraces of Building 4<sup>19</sup> may reflect sporadic use of the site. It includes fragments of deep bowls, kylikes and terracotta figurines – for the most part in styles and fabrics foreign to Palaikastro. (See addendum to discussion) The small settlement at Kouremenos may belong to this time.<sup>20</sup>

## The pottery

The most common clay used for potting has a reddish or orange-buff matrix. Gritty wares have visible sandy or silicate particles which give the surface a gritty, abrasive feel. Coarse wares have the natural phyllite schists characteristic of the landscape to the south of the town in a variety of colours from light grey to deep purple, often mixed with hard white particles: either calcium carbonate or quartz.

## Plain Ware

As the title suggests, the plain ware is distinguished by the surface of the pot left in a rough or slightly smoothed state after formation. The biscuit can be fine, gritty or coarse.

The common forms in Plain Ware are the conical cup, shallow bowl, kalathos and rounded bowl or bell cup.

### Conical cup (Fig. 1a-d)

The ubiquitous palm-sized handleless vessel well-known to all Cretan excavators as the 'conical cup' continues its career from the end of the early palace period as the most common form in use in Crete in the Late Bronze Age. As such, it is a reliable indicator of change and continuity. The Neopalatial form at Knossos has been well-published<sup>21</sup> and displays a similar development to that at Palaikastro. The cups continue to be

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<sup>17</sup>MacGillivray & Driessen 1991, 406-7.

<sup>18</sup>PK 1990, fig. 9.

<sup>19</sup>PK 1991, fig. 3.

<sup>20</sup>PK II, 320 fig. 19, 335.

<sup>21</sup>Catling & Smyth 1979.

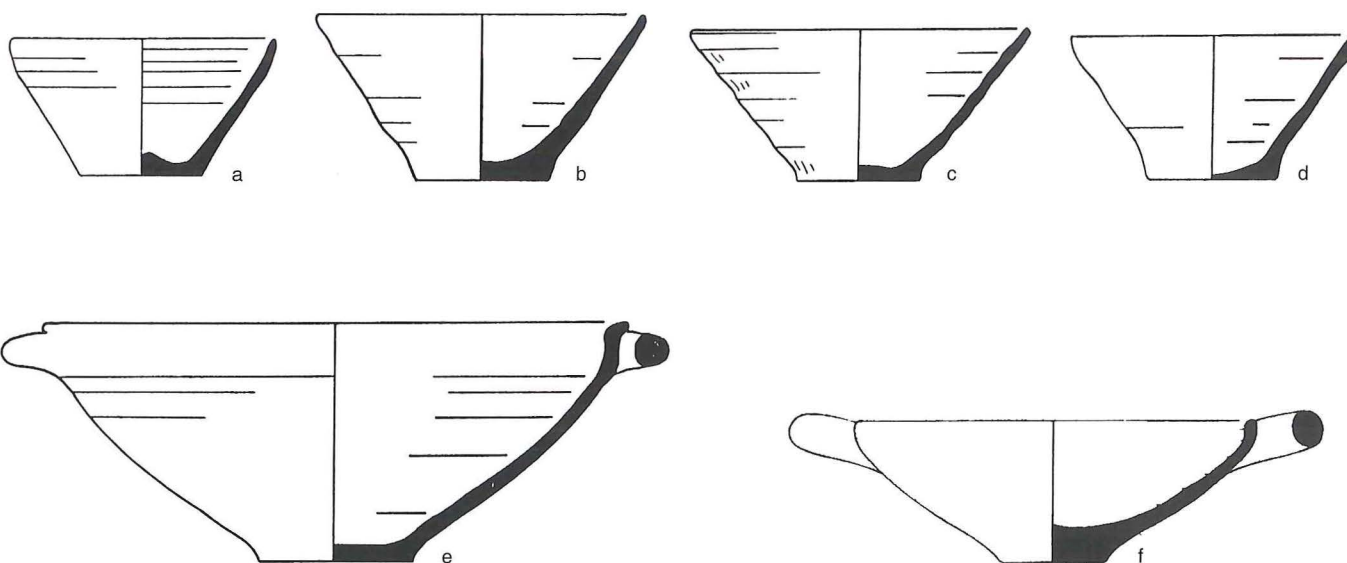


Fig. 1. Conical cups of Periods a: XII /5356, b: XIII /5163, c: XIV /5295, d: XV /5181. Shallow bowls of Periods e-f: XIV /5249 and XV.

thrown off the hump into the LM II and IIIA:1 periods, although their occurrence is less frequent. The form in Period XIV appears to be more carefully constructed than in Periods XII and XIII. By Period XV the form has become relative less common. The size is generally larger, the lip more flaring than previously and most examples quite carefully manufactured.

#### Shallow bowl (Fig. 1e-f)

The shallow bowl, well known from the LM III destruction deposits at Knossos<sup>22</sup> seems to make its appearance at Palaikastro during Period XIV. The early form has a well-defined sharply everted rim and two horizontal handles attached below the rim. The examples from Period XV contexts seem to simpler with rounded rims.

#### Kalathos

The kalathos, or large, deep, straight-sided bowl with handles or lugs on the sides and occasionally with pulled rim spout seems first to come into use during Period XIV, but is well attested in Period XV.<sup>23</sup>

#### Bell cup (Fig. 2a-b)

A new and distinctive form in Period XIV is a small handleless round cup or bowl known elsewhere in Crete as the bell cup.<sup>24</sup> In its earliest form the body is semi-globular and the rim is tooled to form a sharp inward

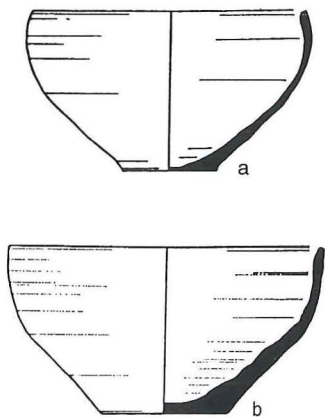
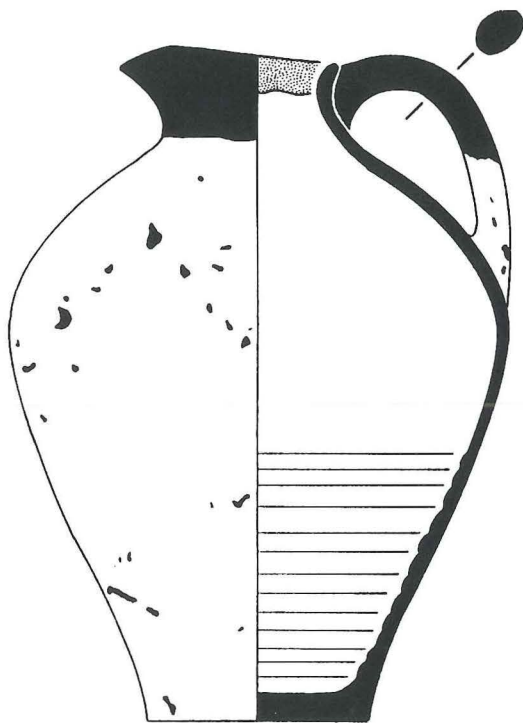


Fig. 2. Bell cups of Periods, a: XIV /5142, b: XV /5138.

<sup>22</sup>Popham 1970, 101, fig. 7.9.

<sup>23</sup>PK 1991, 142 fig. 20.4.

<sup>24</sup>Uncertain how to call examples of the form when first encountered, we came to call them 'LM III rounded cups'; thanks to Maria Vlasakis' suggestion at the workshop they are now called 'bell cups' in the site inventory.



*Fig. 3. Spray Painted Style jug /5363 of Period XII.*

sloping edge. By the end of Period XV the form has become upright with slightly outward turned rim.

## Light Slipped and Painted Ware

One of the most distinctive wares associated with Palaikastro has light cream or yellowish slip applied to the outer surface of the orange-buff clay in order to provide a canvas for a small group of dark on light decorative styles.

### **Spray Painted Style** (Fig. 3)

The technique of spraying or flicking dark paint on the applied light slip of the vessel seems to begin during the LM IB period in eastern Crete. Numerous examples are found in the destruction deposits of the final LM IB phase<sup>25</sup> and in the periods during which water was extracted from Wells 576 and 605. The most common form is the one handled rounded jug with either trefoil or trough-shaped spout. One deposit in Building 5 Room 9 also contained cup-rhytons decorated in this style.<sup>26</sup> The style continues into Period XIII on a jug from the floor deposit at 8.80 in Building 1 Room 20 and into Period XIV as attested by recently excavated but unstudied examples from Wells 576 and 605, but apparently not into Period XV.

<sup>25</sup>PK VII, pl. 62a.

<sup>26</sup>PK 1988, pl. 60.



### **Abstract Banded Style**

The most distinctive decorative style of the LM III period is composed of patterns based on natural motifs set out in horizontal bands.<sup>27</sup> The stylistic definitions of subdivisions within the period at Palaikastro are problematic. In general, the horizontal arrangement of continuous abstracted natural motifs is found on pottery in Period XIV contexts. A similar style existed in ceramics of the LM IA and LM IB periods in East Crete<sup>28</sup> alongside the well-known Marine and Alternating styles. The most common forms in Period XIV are closed shapes such as jugs, strainers, flasks and alabastra.<sup>29</sup>

### **Open Representational Style**

A style of large, open floral, astral and animal motifs set in rectangular panels is most characteristic of the contexts of Period XV. The forms seem to comprise only very large pots such as larnakes<sup>30</sup> and pithoid jars,<sup>31</sup> piri-form jars<sup>32</sup> and amphoroid kraters.<sup>33</sup>

### **Drip Painted Style**

Pottery decorated with a drip pattern from the rim and/or shoulder apparently formed by squeezing paint from a sponge or cloth in random patterns is quite characteristic of Period XV. The most common form is the rounded amphora, rather like the modern Cretan stamnos.<sup>34</sup> The style is also used on large storage jars.<sup>35</sup>

## **Light Slipped and Burnished Ware**

A very fine class of Light Slipped and Painted Ware had the surface lightly burnished after the slip was applied. Most distinctive is the fine hard quality of the fabric frequently fired dark at the core and pink grey to buff at the surface. This ware is associated with contexts of Periods XIII and XIV.

### **Rim Banded Style (Fig. 4a)**

A common style employs the rough application of a dark band of lustrous

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<sup>27</sup>Popham 1967, 343.

<sup>28</sup>Bosanquet & Dawkins 1923, pls. 14–16 (LM IA); *PK* II, 311 fig. 9 and Platon 1971, 108, 111, 114.

<sup>29</sup>*PK* II, 316–6 figs. 15–16; III, 225 fig. 8a, c; 1991, fig. 17.5, 6.

<sup>30</sup>*PK* I, pls. 18–19; Bosanquet & Dawkins 1923, pl. 18.

<sup>31</sup>Kanta 1980, fig. 77 2–3, 5–6.

<sup>32</sup>*PK* 1988, pl. 66a.

<sup>33</sup>*PK* II, 319 fig. 18.

<sup>34</sup>Bosanquet & Dawkins 1923, 112 fig. 97; 1987, fig. 9. 2–4; 1988, pl. 66c.

<sup>35</sup>*PK* 1991, 143, fig. 22. 1, 3, 5.

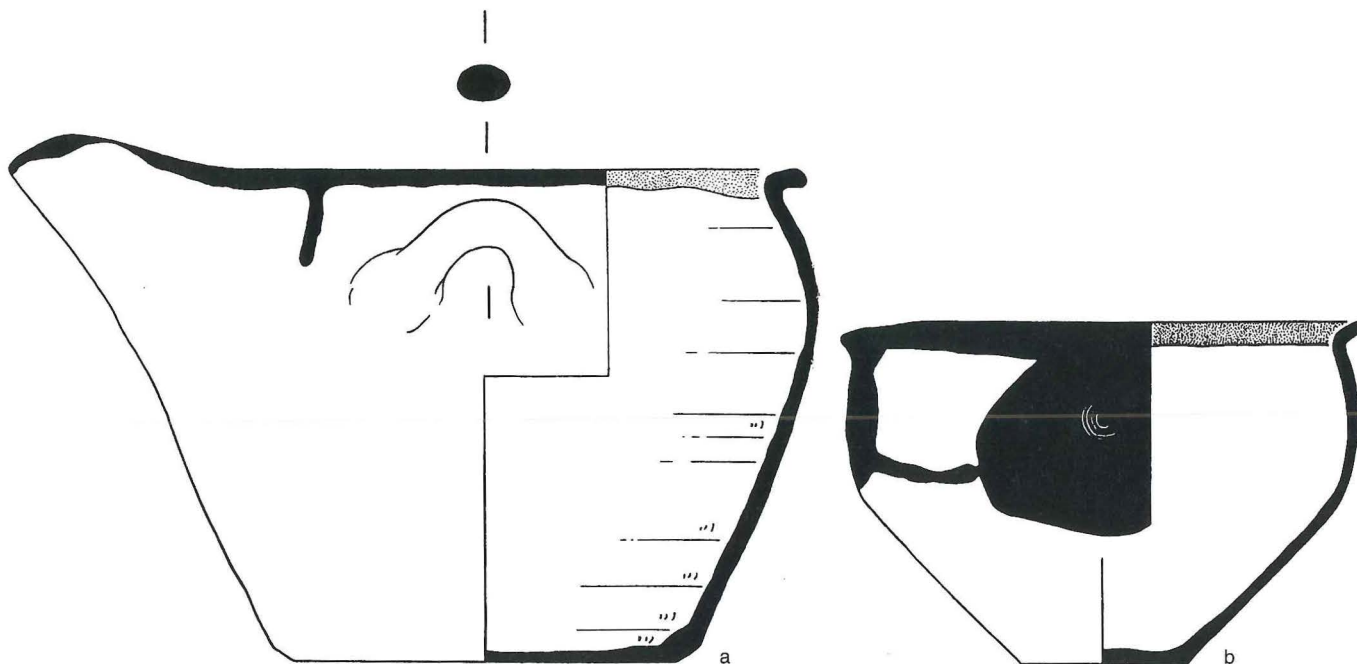


Fig. 4. a: Rim Banded Style two-handled spouted jar /5173 of Period XIV. b: Blot and Trickle Style pulled-rim bowl /5144 of Period XIV.

paint at the rim which often drips to the base in thin vertical streams. Common forms are the open drinking and pouring vessels, such as the pulled-rim bowl,<sup>36</sup> two-handled spouted jar and bell cup.

#### Blot and Trickle Style (Fig. 4b)

Bosanquet christened the decoration comprising a series of roughly circular discs from which fall irregular drips of dark paint as “Blot and Trickle”,<sup>37</sup> although his definition included examples that we would now call Drip Painted Style (above). The most common forms in this style are the pulled-rim bowl and jug. The style seems first to come into use in Period XIV and may not survive beyond Period XV when it has already become secondary to the Drip Painted Style.

### Comment

This summary of the most common characteristics of the LM II and III pottery considered to be of local manufacture at Palaikastro relies on preliminary results of the study of recently excavated contexts. I trust that the detailed study and publication of the finds from the 1986-1994 seasons will not seriously conflict with the general comments made here, but rather supplement our image of the potter's produce during the LM III period.

<sup>36</sup>Bosanquet's 'bathroom bowl', Bosanquet & Dawkins 1923, 85-6 fig. 68.2, 111.

<sup>37</sup>Bosanquet & Dawkins 1923, 111 fig. 96.

## Addendum

It became clear during the discussion that a fuller definition of Period XVI might be available if I were consider the apparent shrine deposits in Building 1 part of this period, as suggested by Kanta and Warren in particular. The period may now be considered to correspond to a middle or late stage of LM IIIB in central Crete, as suggested by the comparison of the deep bowl from the shrine in Building 1<sup>38</sup> with one from the Little Palace at Knossos.<sup>39</sup> An interesting comparison may be made with the Gournia Shrine, and the Shrine of the Double Axes at Knossos, and the late shrine at Kannia-Metropolis as possible parallel situations for our tiny bench shrine with sea-shells, stirrup jars and head of a terracotta statuette probably with raised arms. The group of tuyeres, crucibles and moulds from the south terraces of Building 4 used for the short-term manufacture of double axes and a large tripod stand seem to belong to this period and may have been used to produce materials for use in the latest stage of Building 1.<sup>40</sup> It certainly seems to post-date period XV and predates the well-published groups of late LM IIIB early LM IIIC pottery from Kastrì.<sup>41</sup> The Roussolakkos settlement of Period XV may have given way to a small shrine site with associated bronze working; the bronze tripod is especially compelling evidence for this. It may be that the schist moulds for gold votives should also be assigned to this late stage of the site's history.<sup>42</sup>

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<sup>38</sup>86/59; *PK* 1986, fig. 6.8.

<sup>39</sup>Popham 1967, 347 pl. 88a.

<sup>40</sup>*PK* 1991, 141-51.

<sup>41</sup>*PK* VI, 278-99.

<sup>42</sup>MacGillivray & Driessen 1991, 407.



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## *Special abbreviations*

### *PK I-VII*

"Excavations at Palaikastro I" to "VII",  
in BSA 8 (1901-2), 286-316; 9 (1902-3),  
274-387; 10 (1903-4), 192-321; 11 (1904-  
5), 258-308; 12 (1905-6), 1-8; 60 (1965),  
248-315; and 65 (1970), 203-242, respec-  
tively.

### *PK 1986-1988, 1990-1991*

"Excavations at Palaikastro, 1986" to  
"1988" in BSA 82 (1987), 135-154; 83  
(1988), 259-282; 84 (1989), 417-445; and  
"1990" to "1991" in BSA 86 (1991), 121-  
147; 87 (1992), 121-152, respectively.

# Response and discussion

**Kanta:**

It seems to me that it is a good idea to put things in periods where you have an absolutely clear and indisputable architecture, but when there are things that you are not so sure about, if you ascribe them to periods, you may get into difficulties, unnecessarily. From what I have seen, I think your Period XIV is IIIA:1, your Period XV is IIIA:2. I think you have IIIB. To me, the stirrup jars you have shown, which you said you found on a floor, are LM IIIB. You did not show us the "bathroom cups" that go with these – they may well be a development and they may well date from the same period. The bathroom material in PKU (Bosanquet & Dawkins 1923) is LM IIIA:2 – I do not think anyone would seriously dispute that date. I do not think that the stirrup jars you showed are contemporary. I do not know the exact area of the site, and their relationship, from which these two vases come, but why are you trying to label them within one period? To me they are LM IIIB. Some of your scattered sherds are also LM IIIB, but late. I was very interested in the monochrome deep bowl (PK 1986, fig. 6.7) but I am not prepared to comment on its date in relation to Kastri, because that was one of the things I wanted to find out: when are they introduced to Crete? The stirrup jar (fig. 6.6) I think is still late IIIB. The shallow bowl is IIIB (fig. 6.4). This material, with the exception of the monochrome bowl, is earlier than the earlier material from Kastri. If we could establish the date of the monochrome deep bowl in typological relation to the mainland examples which start at the end of LH IIIB, I would be very happy. To place your stirrup jar destruction with your earlier destruction in which the figurines from the dancing group were found, to me is unthinkable.

**MacGillivray:**

Thank you, it is very encouraging to hear that. Something that has been plaguing us as we are trying to write up Building 1 is what to do with this little group of material, which really does not relate very well stylistically, but continues to use a lot of the same architecture. It may be that I have to go back and look at some of these deposits more carefully, especially if the stirrup jars elsewhere on the island are later. We may be looking at something later than LM IIIA:2. We could hypothesize, then, that the event we are looking at, which lays down all these deposits including those of the older excavations, is a IIIA:2 event, and that there is a very sporadic reoccupation of parts of the site contemporary with IIIB. It does not have to be an instant return of people to the site, but rather a gradual sort of thing. Obviously, in terms of one's own personal agenda, the idea of somebody coming back during a mature stage, or a more mature stage, of LM IIIB, and what they do is clear out part of Building 1 to convert it into a small shrine – Hugh Sackett would be delighted if such a thing could be suggested.

**Kanta:**

I seem to remember having read in some of the reports that the top levels had very little soil on top and that there were floors that you could distinguish which had very little in between and on top. Could these floors not be LM IIIB?

**MacGillivray:**

The latest ones could. That is what I was thinking.

**Kanta:**

If your latest floors are LM IIIB, there is no problem.

**MacGillivray:**

But we could not call them LM IIIB because they only have plain pottery on them.

- Kanta:** But the plain pottery is datable!
- Watrous:** If you look in the Kommos volume there are two of those monochrome bowls (PK 1986, fig. 6.7) in a middle IIIB context. You can be pretty certain that these are around in the mid 13th century in Crete. I do not see any reasons why all three shapes can not be contemporary (fig. 6, 7, 8, + stirrup jar).
- Kanta:** Did you say that you have them in mid-IIIB at Kommos? And they are definitely painted all over, not blob?
- Watrous:** Yes.
- Rethemiotakis:** Concerning the head of the goddess figure (PK 1986, fig. 5) which is close in style to figures from Gournia: do you have any pottery material with them? They look LM IIIB.
- MacGillivray:** Yes, that is the material found with them (PK 1986, fig. 6). That is why Sackett would love to have this as a small IIIB shrine at Palaikastro after the town had gone out of use. This material (PK 1986, pls. 22, 23) is from adjacent areas, but probably contemporary.
- Vlasaki:** One question to Watrous: does the deep bowl have exactly the same profile?
- Watrous:** Yes.
- Vlasaki:** Regarding the handleless cup, the second one (Fig. 2), could we call it a bell cup?
- Watrous:** Yes.
- MacGillivray:** That is a good idea. We have always called it the LM III rounded cup because it appears only in those levels.
- Gesell:** Is the LM IIIB octopus stirrup jar with the shrine material?
- MacGillivray:** It is not from the floor.
- Gesell:** Something like the one at Kannia.
- MacGillivray:** There is some worked bone with it and a whole scatter of seashells.
- Gesell:** So that helps with the shrine.
- B. Hallager:** In the GSE excavations we have (as far as I remember) only one monochrome bowl and this was found below a IIIC floor in a IIIB:2 context. Its shape is similar to the contemporary bowls. This type of bowl can hardly be older than IIIB.
- MacGillivray:** If our criterion is architectural, and this shrine deposit comes at the end of something that we did not observe as a major architectural change, should we call it the end of this period, or as its own separate phase on the site? As you rightly pointed out, there is this event where a lot of deposits are laid out at the end of IIIA:2. This shrine material, then, has to be removed. Are we justified in completely removing that from these other events on the site?



- Kanta:** I would definitely remove it. I would not even consider it the very beginning of IIIB. I do not know if B. Hallager and Watrous would agree. I think that these stirrup jars are well into IIIB. So I would not group them with your Period XV. I would go over all the material you have to see how you can construct a nice Period XVI.
- MacGillivray:** There is not much good material for this period. The reason I ask what is relevant is, for those of you who follow metallurgy, the metallurgical group which includes nozzles, tui-lieres, moulds for double axes, and the moulds for a huge bronze tripod is a problematic date for us on the site. If it is LM IIIA:2, it is the earliest bronze tripod. It has extremely good parallels elsewhere.
- Kanta:** Why do you want to put it in IIIA?
- MacGillivray:** We had to until now. But if we are justified in having this kind of occupation in the middle of IIIB, then the metallurgists would be much happier to have this metallurgical debris associated with that period.
- Kanta:** My own study from publications and from admittedly limited sherd material in the store-rooms of the Herakleion Museum, convinced me that there was LM IIIB at Palaikastro (Kanta 1980, 189-193). How extensive it was, or whether it was scrappy – I just went by the sherds. There is IIIB. You mean a tripod stand?
- MacGillivray:** A huge tripod stand. We have the mould fragments. It was probably sent to Cyprus.
- Kanta:** I do not see how this can be IIIA and not IIIB.
- Vlasaki:** When we have whole vases, it means there must be a construction. They are not from a modern level above.
- Watrous:** Palaikastro is a lot like Kommos in that it is on a boundary at an end of the island and its importance probably has something to do with its connections with the outside world. There is a lot of metallurgy activity on both sites. At Kommos, there is evidence for metallurgical work in IIIB inside the houses. After the site is deserted, which is, I think, at the beginning of IIIB:2, the site is silted over, and on that surface, pre-Iron Age?, we found a couple of pot bellows. In the Iron Age the lower area of the site which is full of slagheaps, kilns etc. In other words, we should not be in too much of a hurry to push all this activity all together into one chronological period.
- Macdonald:** I would like to issue a slight admonishment at this point because during your talk we had these deep bowls being kicked around the modern surface levels. They gradually formed themselves into a tighter group as people have talked about them during the discussion. I hope that in the publication of the paper you will be precise as to what goes with what. It was not clear as we were going on as to whether we should give great value on these pieces or not in terms of anything particular connected with the site. As Warren just noted now, and I am sure you noted at the time, the IIIB decorated deep bowl (PK 1986, fig. 6.8, bottom right), it is an import, is it not?
- MacGillivray:** Yes.

- Macdonald:** Could it be from the mainland?
- MacGillivray:** That is what we thought at the time.
- Macdonald:** Specifically because of the very mainland IIIB shape. On the mainland there are no problems about the monochrome deep bowls being IIIB. Look at IIIB Lefkandi, for instance. The stirrup jars, specifically the shape of the whitish storage stirrup jar, the sort of perked up globular shape, that is very much a IIIB shape. I do not think it could exist earlier, nor does it really go into IIIC, although there are two from Rhodes, which could be IIIC, of that shape. On another matter: your Period XIII. The business of identification of LM II. Stratigraphically, your point is very well made that it is an activity which happens immediately following the Period XII LM IB destruction. That was, in fact, why we, together, dated that bridge-spouted jar to possibly LM II. It is a shape which should not really go into LM IIIA. It was in a foundation deposit for a wall which immediately post-dated the LM IB period on the site. That was the sole reason for doing that, because otherwise you can place it in LM I perfectly happily.
- MacGillivray:** That jar could be a mistake (PK 1987, fig.6). It could have been laid down in IB.
- Betancourt:** In regard to the bronze stand. I am familiar with that type of stand, and I would be very uncomfortable with it anything before IIIB.
- B.Hallager:** Is the Palaikastro workshop really in Palaikastro? When I see this provincial material I wonder because we have two marvellous imports in Khania, amphoroid kraters, with shiny cream-white slip, red to red-brown paint on exactly this clay. They are masterpieces. Could they be from Palaikastro?
- MacGillivray:** Due to the soil in Khania, Kommos and Knossos, the pieces are going to be very well preserved. The acid in the soil at Palaikastro eats the surface of the pottery. Either that or what you are getting is the best PK export ware.
- Betancourt:** There is also red clay with white slip at the palace at Zakro.
- Kanta:** On the same point: these very nice "Palaikastro workshop" vases are found on Karpathos. And they are also well preserved there. To go back to Hood's point regarding the provincial character of some of the pottery and its dating. I think that if one studies the forms of a particular shape, and compares with other such forms of other areas, one can get a result. As an example, I will quote something you showed us, which made me extremely happy: one of your ogival cups, which you dated to IB, is very similar to what we have at Nerokourou, which is also very provincial. The date was obvious from all the comparative work that we did. We must bear the importance of making such comparisons in mind when we come to the later phases.
- Tsipopoulou:** Regarding LM III pottery production in Eastern Crete: I believe there was another important workshop also using red clay in the Mokhlos-Myrsini-Tourloti area. Many of the vases from the Mokhlos mainland cemetery are thrown in an orange to red clay, and covered in a creamy white slip. The paint is red to reddish-brown. It is possible that some of the East Cretan vases from Central and Western contexts, usually assigned a Palaikastrian provenance, may, in fact, have been produced in the wider Mokhlos area. As the excava-

tors have correctly noted, it is now necessary to explore further the Tourloti area on the basis of what is known from Mokhlos.

**Watrous:** You only showed us one diagnostic sherd from your level XIII. That sherd, could be pushed into IIIA:1.

**MacGillivray:** Yes, Building VII, on the floor. I will bear that in mind. It may be that it is not a LM II level. What happens after LM IB locally is the major problem. Is this the one (PK 1991, fig. 17.1,2)

**Watrous:** No, the Ephyraean goblet (PK 1988, fig. 15).

**MacGillivray:** Oh, the Ephyraean goblet. That's cool, it is out of context anyway. The sherd (PK 1991, fig. 17.2) cannot be put in LM IB. My own feeling was to put it in LM II.





# Late Minoan III Reoccupation in the Area of the Palatial Building at Petras, Siteia\*

*Metaxia Tsipopoulou*

## Introduction

The image of LM III occupation in the Siteia Bay area, fragmentary and uncertain until the mid-1980's, has gained in clarity during the last decade. Prior to 1985, our knowledge was based on a series of chamber tombs, accidentally discovered through building or agricultural activities, mainly in three areas: within the town of Siteia, in the valley of Piskokephalo, and on the Papoura hill in the wider area of Petras. Further to the south, occasional discoveries, examined within the context of rescue excavations, brought to light isolated tombs, or even cemeteries, either of rock-cut chambers, or small tholoi, and in a few instances, burial caves, at the sites of Kimouriotis, Sklavoi, Agios Spyridon, Praisos, Agios Georgios, Sfakia, and Stavromenos. Frequently, the excavators – Nikolaos Platon, Costis Davaras, Iannis Sakellarakis – note the remains of settlements associated with the tombs, yet to date, none have been the subject of investigation.<sup>1</sup> Moreover, the work of Platon in the Akhladia area, six kilometres into the Siteia hinterlands, revealed the existence of a large Mycenaean tholos tomb, as well as the remains of a settlement and a potter's kiln. Having partially excavated the tomb, Platon assigned these three sites to LM III.<sup>2</sup> The investigation of the tholos was recently completed by a Greek-Italian team directed by Lucia Vagnetti and the author. It was possible to date its construction to LM IIIA:1. It remained in use until LM IIIB.<sup>3</sup>

In 1984, the systematic study of prehistoric settlement patterns in the Siteia Bay area was initiated. Within the context of a long-term project,

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<sup>1</sup>Cf. Tsipopoulou 1995 for a complete bibliography relative to research on the LM III period in the Siteia Bay area.

<sup>2</sup>Platon 1952a.

<sup>3</sup>Tsipopoulou & Vagnetti 1995.

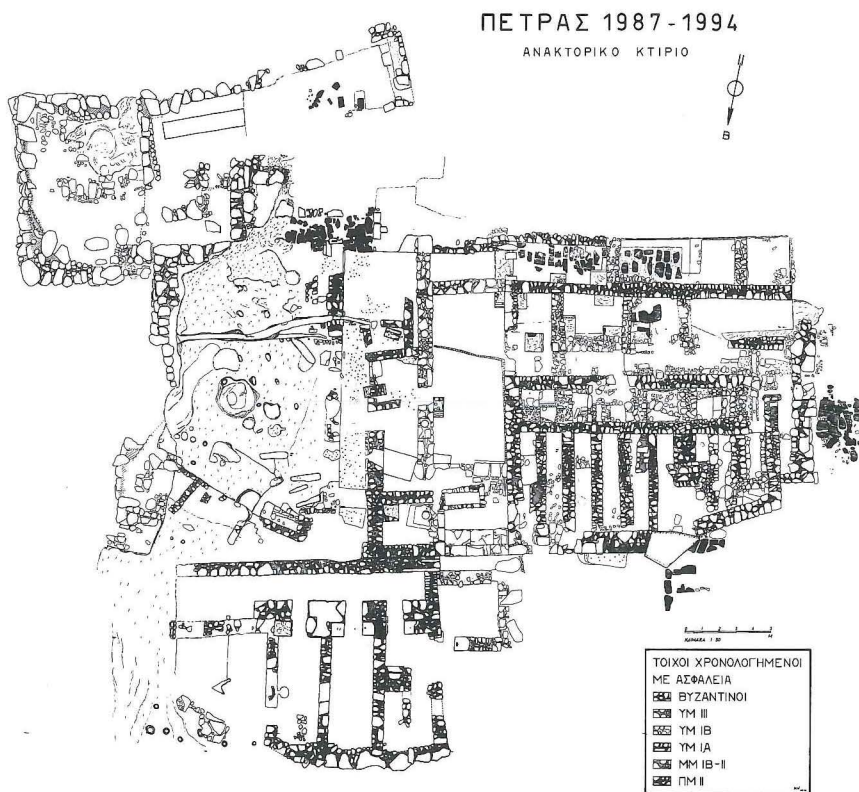


Fig. 1. Plan of the palatial building at Petras (1987-1994).

three excavations and three surveys have been undertaken at Hagia Photia, Petras, and Akhladia. Interesting results have been attained concerning all phases of Minoan civilization, including LM III.<sup>4</sup>

The area of Petras, the site of the chief Protopalatial and Neopalatial centre, was known from disparate LM III finds. At Papoura, one of the four hills of Petras, LM III chamber tombs have been destroyed at various occasions since 1904.<sup>5</sup> Fragmentary and complete LM IIIA and B vases and larnakes, both chest- and tub-shaped, were turned in to the Herakleion Museum.<sup>6</sup>

The larnakes can be attributed to a local workshop specialising in a decoration consisting of external octopi on both types, and internal fish on the bathtubs. The lids of the chest-shaped larnakes frequently imitate the back of a bull. This workshop also produced the larnakes of the Akhladia tholos, lost during the Second World War, of a tomb in the Kimouriotis area between Akhladia and Chamaizi, and a further two, today in Switzerland. It would appear that larnakes from various sites on the Isthmus of Ierapetra and from the Gulf of Mirabello, more precisely Episkopi, Pakheia Ammos, and Kritsa, are related to the same workshop.<sup>7</sup>

<sup>4</sup>Cf. Tsipopoulou & Papacostopoulou 1992 for references.

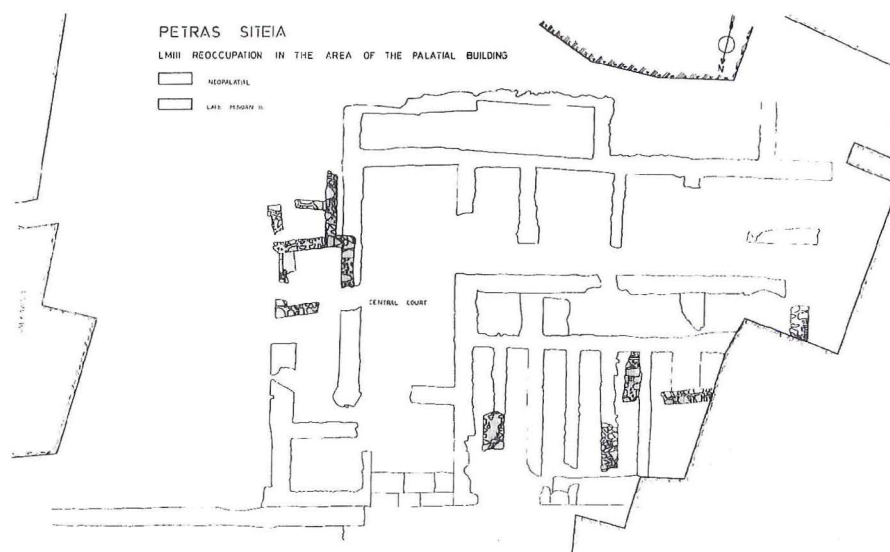
<sup>5</sup>Xanthoudides 1904.

<sup>6</sup>Platon 1953a.

<sup>7</sup>Tsipopoulou & Vagnetti 1995b.



Fig. 2. LM III reoccupation in the area of the palatial building at Petras (1987-1993).



The 1986 survey in the wider area of Petras located the remains of a rather extensive LM III settlement on Hill II. A LM IIIA seal with the representation of a wounded agrimi was found there.<sup>8</sup> The excavation of Hill I since 1985 has produced evidence for a LM IIIA and B presence at the main locus, but until 1992 no architectural remains had been uncovered.

Since 1987, a large central building of palatial character has been the subject of excavation on the plateau of Hill I: large storage areas, a central court, Hieroglyphic and Linear A inscriptions, sophisticated architectural features indicate an administrative function. It was destroyed by fire in LM IB (Fig. 1).<sup>9</sup> In various areas of the complex, LM III rooms – the subject of the present paper – have been uncovered (Fig. 2).

The East House is situated to the immediate east of the Central Court (Fig. 3). It consists of three small rooms, without right angles, built of



Fig. 3. LM III East House from East.

<sup>8</sup>Tsipopoulou 1990.

<sup>9</sup>Tsipopoulou & Papacostopoulou 1992.

small and medium-sized stones, measuring 3.5 x 6.5 m. in all. Entry was effected from the east, that is, from the seaward side, through two doorways with stone thresholds. The orientation of this building, partially founded on the remains of the east wall of the Neopalatial Central Court (Fig. 4), is slightly different from that of the latter. Earlier walls are not otherwise used since the eastern limit of the LM IB Central Court consists of a single course of slabs supporting a *stoa* formed by alternating columns and pillars. LM III sherds were also recovered from the Central Court, probably because this open space remained in use into the later period.

The second area with evidence for a LM III reoccupation is that of the multiple parallel rectangular spaces in the northwestern sector of the central building, immediately behind the north façade. It is likely that a second house existed here, although its plan cannot be reconstituted from the sparse remains.<sup>10</sup> It was extensively disturbed by Byzantine burials. The construction technique resembles that of the East House, but the walls are thicker, being founded on substantial earlier remains standing to a height of more than one metre. By necessity, the West House adopts the general orientation of the palatial construction (Fig. 1).

The West House, though of incomplete plan, offered a floor with a thick layer of burnt remains and vessels in situ. Of particular interest is the fragment of a larnax decorated with a double axe between horns of consecration (Fig. 5). It had been employed as a flagstone, placed with the decoration – which can be assigned to the workshop mentioned above – facing downwards.<sup>11</sup>

The vases found on the floor are mainly one-handled and handleless cups, as well as a footed cup, and fragments of pithoi with incised decoration. The destruction is dated to early LM IIIB. Subsequent to the fire, the entire area of Petras Hill I does not appear to have been settled again until the 12th Cent. A.D., at which time a cemetery was established on the large plateau. 33 Byzantine graves have been excavated. In fact, ten years of research on the site, including the survey, have produced only a few LM IIIC sherds, of which the most characteristic comes from a cup or deep bowl with a fringed decoration (Fig. 30).

Further LM III building activity was attested to during the 1994 campaign, which aimed at completing the plan of the central building. The most interesting discovery made is a two metre deep cutting into the bedrock on the eastern flank of the plateau, an area previously known through Prepalatial activities. It produced a number of LM IIIA:2 vases of which five have been mended to date: a stirrup jar decorated with Mycenaean flowers, imported from the mainland (Fig. 14k), a jug with blob decoration of the type known from Myrsini and Palaikastro, and also two amphorae with dribble decoration (Fig. 20a-b), and a semiglobular bowl of Palaikastrian clay. Further work in 1995 did not clarify the function of this feature.

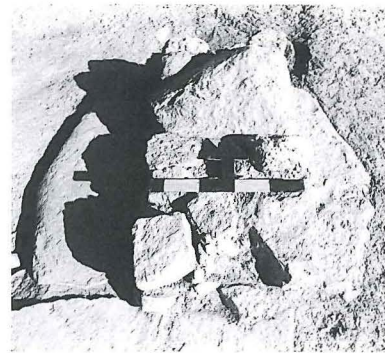


Fig. 4. East House. LM III wall founded on the East wall of the Neopalatial Central Court.



Fig. 5. Fragment of larnax from West House.

<sup>10</sup>The 1994 campaign revealed that the western-most wall, the south end of which emerges out of the baulk in Fig. 2, attains a total length of six metres.

<sup>11</sup>See also Tsiopoulou & Vagnetti 1995b, fig. 102, for a reconstruction of the decoration.





Fig. 6. Fragment of LM III pithos.



Fig. 7. Fragment of LM III pithos.

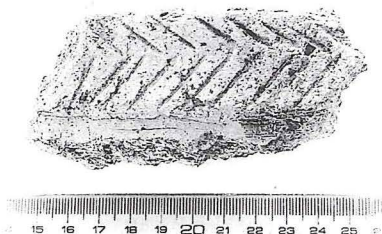


Fig. 8. Fragment of LM III pithos.

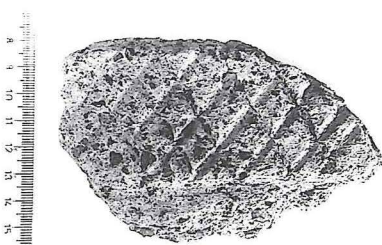


Fig. 9. Fragment of LM III pithos.

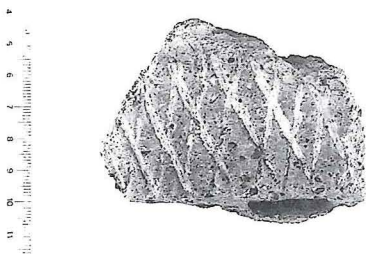


Fig. 10. Fragment of LM III pithos.

The present paper will review a representative selection of vases and sherds, proceeding from large coarse to small fine ware shapes, noting parallels from various sites. These comparisons do not attempt to establish purported interconnections between Petras and distant Cretan sites, but rather serve to create a chronological framework within which to place the material studied here.<sup>12</sup> Due to the restricted nature of human presence at Petras in LM III, particularly in comparison to Neopalatial times, the present purpose cannot be to elucidate typological details or finetune the regional chronology, but, based on the broadly agreed upon time frames, to attempt to gain an understanding of how this period at Petras relates to the general situation in Eastern Crete.

The terminology employed is that widely accepted by scholars before the symposium, and does not take into account the refinements proposed by B.Pålsson-Hallager and various discussants at the meeting.

## Analysis of shapes

### Pithoi (Figs. 6–13)

Fragments of pithoi came to light in both LM III buildings. On the burnt early LM IIIB floor of the West House numerous sherds from a single pithos, yet to be restored, were found. The pithoi are ovoid in shape, with a thick, outcurving rim, either elliptical in section, or rounded and placed on a short neck. The diameter attains 40 cm. at the rim, 40–50 on the widest part of the body. The handles, extant in one instance, are vertical and placed below the rim. A second series of handles lower down on the body can be reconstructed with some certainty.

The clay of the LM III Petras pithoi is coarse, brown or reddish, with many inclusions. Decoration consists of raised bands with incised net patterns, herring bones, and, in one case, an X-motif. Different patterns occur on the same vessel. A single, medium-sized pithos is monochrome. (Exceptionally, the photographs of pithoi constitute a general selection of fabrics and decorations.)

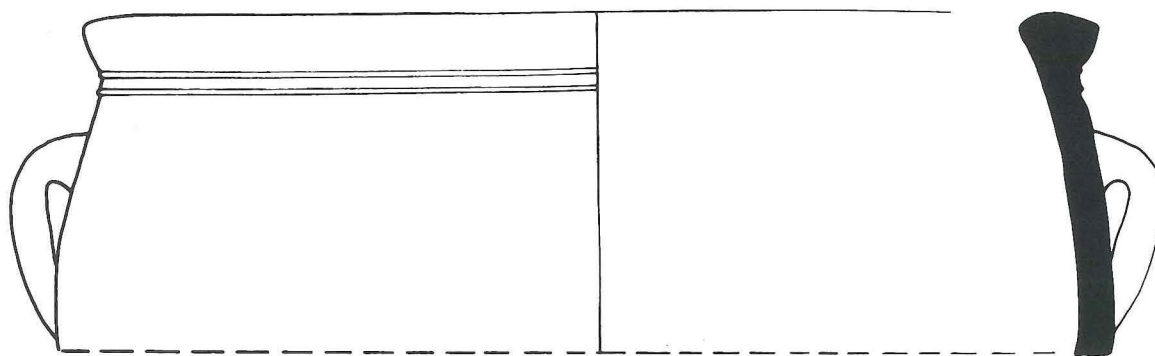
Unfortunately, earlier publications of pithoi rarely include drawings allowing comparison of profiles. It is, nonetheless, certain that the Petras specimens belong to types common to LM IIIA and B in Eastern Crete. 91.265.6 has a parallel for the rim profile from Palaikastro, dated to IIIA:2–B.<sup>13</sup> A specimen from the 1994 campaign by the author, in collaboration with William Coulson, at the IIIC settlement of Khalasmenos in the Isthmus of Ierapetra confirms the Postpalatial date. The second type, 92.106.1, finds comparanda from Quartier E at Malia.<sup>14</sup> Incised decorati-

<sup>12</sup>Reference to the figures and photographs included here appear in the heading for each type; reference to the photographs are repeated in the text, to the drawings generally not. In the text and the drawings each specimen is identified by an excavation number, being the year, the pottery bag, and the sherd selected for further study – thus: 91.265.6 – or the year, and the small find number – thus: 92.512.

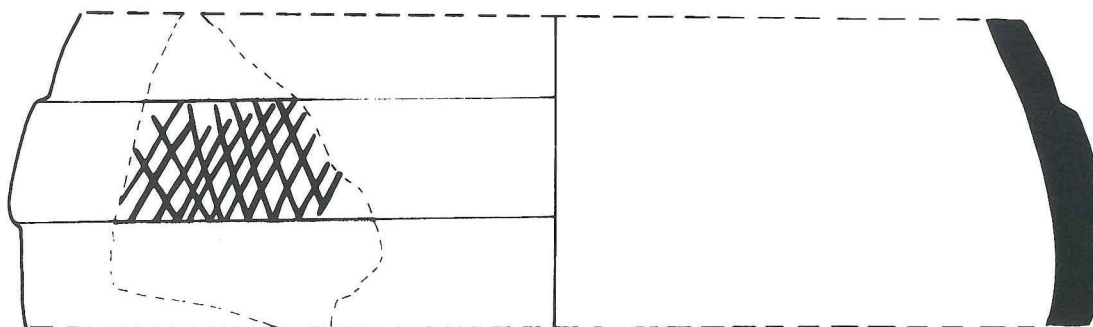
<sup>13</sup>MacGillivray et al. 1992, fig. 21 no. 5.

<sup>14</sup>Pelon 1970, pls. XXV.6a, b, XXVII.1a, XLII.2a.

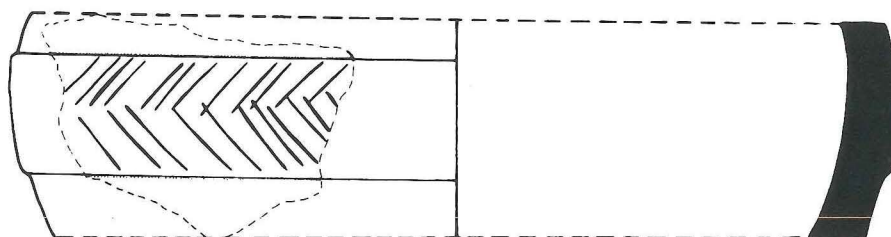




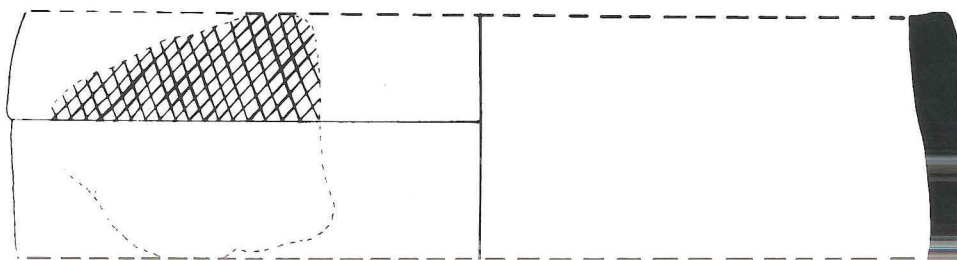
92.106.1



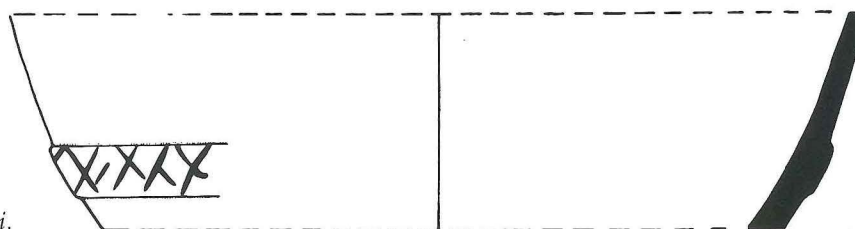
92.56.1



92.106.4



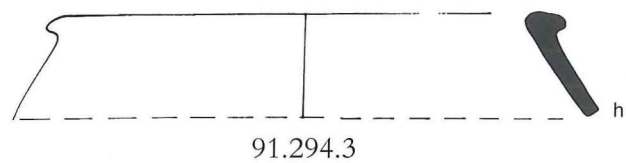
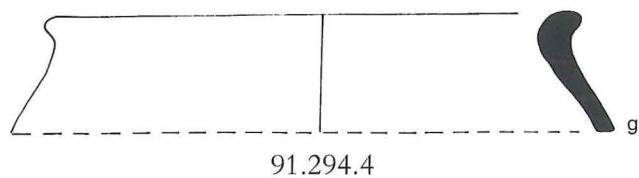
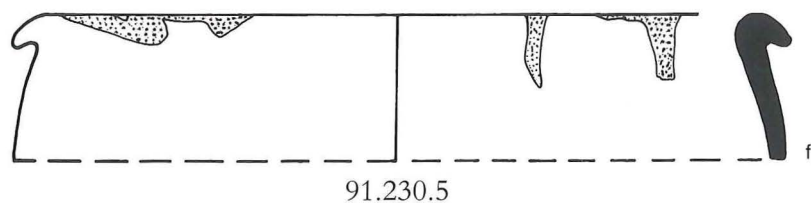
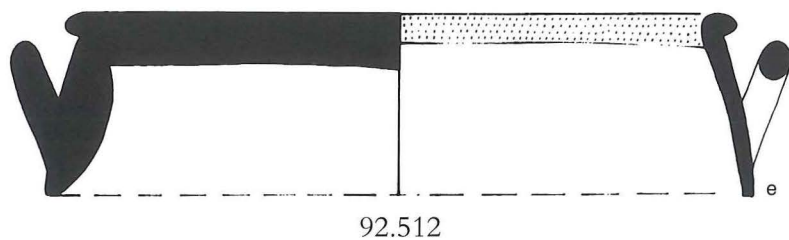
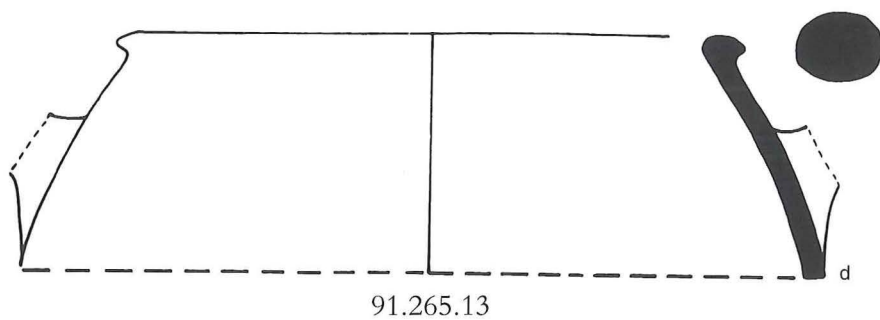
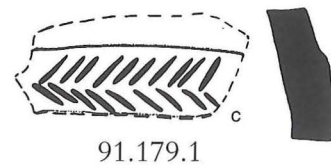
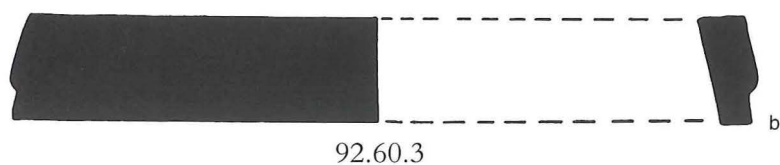
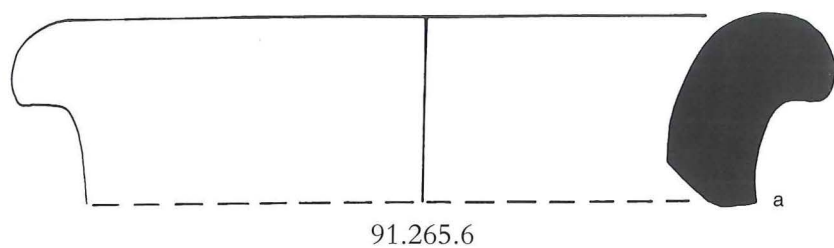
91.235.1



92.84.1

Fig. 11. Pithoi.

Fig. 12. a-c: Pithoi; d-h: Pithoid jars.



on on raised bands is standard for pithoi in Eastern Crete throughout the LM III period.<sup>15</sup> A similar scheme is also known from Central Crete, as illustrated by a small pithos from the “kitchen” at Knossos-Makritikhos, which combines two incised motifs, herring bones and a net pattern.<sup>16</sup> Further LM IIIA-B parallels come from Quartier E.<sup>17</sup>

### **Pithoid Jars** (Fig. 12d-h)

The five sherds discussed here are characteristic rim fragments of these types of vases. Pithoid jars were found in both the LM III buildings at Petras, 91.265.13, 91.294.4 and 91.294.3 coming from the West House, 92.512 and 91.230.5 from the East House. All are dated to LM IIIA:2 to IIIB.

Due to the fragmentary nature of the material, firm statements concerning the shape of the body cannot be made. It is, however, clear that these vases continue LM I types, having similar profiles. Where preserved, the handles are horizontal, circular in section, and placed below the rim. Judging from the extant sherds, the LM III pithoid jars differ from their predecessors in two significant aspects. The body is more often globular, whereas the Neopalatial vessels are ovoid or piriform. The fabric is generally finer and better fired. Three examples, 92.512, 91.230.5, and 91.294.3, are made from the characteristic orange clay of Palaikastro. The first two have reddish paint on the rim and the handle-attachment. The remaining two are made of brown, coarser clay with grey core, well-known from Neopalatial pithoid jars.

91.230.5 appears to belong to a type with cylindrical-ovoid body and rather wide mouth, such as those from the palace at Knossos, although with a different rim.<sup>18</sup> 92.512 resembles the rim of a somewhat wider LM IIIA:2 basin from Kommos.<sup>19</sup> This could suggest that the Petras sherd belongs to a shallower pithoid jar. 91.294.4 is also similar to a LM IIIA:2 to IIIB specimen from Kommos.<sup>20</sup>

### **Tripod cooking pots** (Fig. 14a-c)

No single complete LM III tripod cooking pot has been discovered to date at Petras. The three feet included here, all from the West House, are made from rather coarse orange Palaikastro clay. Two have the characteristic LM III circular section known from sites all over Crete, such as at Kommos,<sup>21</sup> while the third has an almost triangular section, continuing an earlier Neopalatial tradition.



Fig. 13. Fragment of LM III pithos.

<sup>15</sup>Cf. unpublished IIIA and B specimens from the Mokhlos cemetery, Siteia Museum.

<sup>16</sup>Hood & De Jong 1958-1959, 188, fig. 8, no. 16.

<sup>17</sup>Pelon 1970, pl. XXV.6c, d, f.

<sup>18</sup>Popham 1964, 19, fig. 5, pl. 2.

<sup>19</sup>Watrous 1992, 40, fig. 30, no. 697.

<sup>20</sup>Watrous 1992, 71, fig. 44, no. 1188.

<sup>21</sup>Watrous 1992, 95, fig. 62, no. 1654; 78, fig. 50, no. 1346, both IIIB.



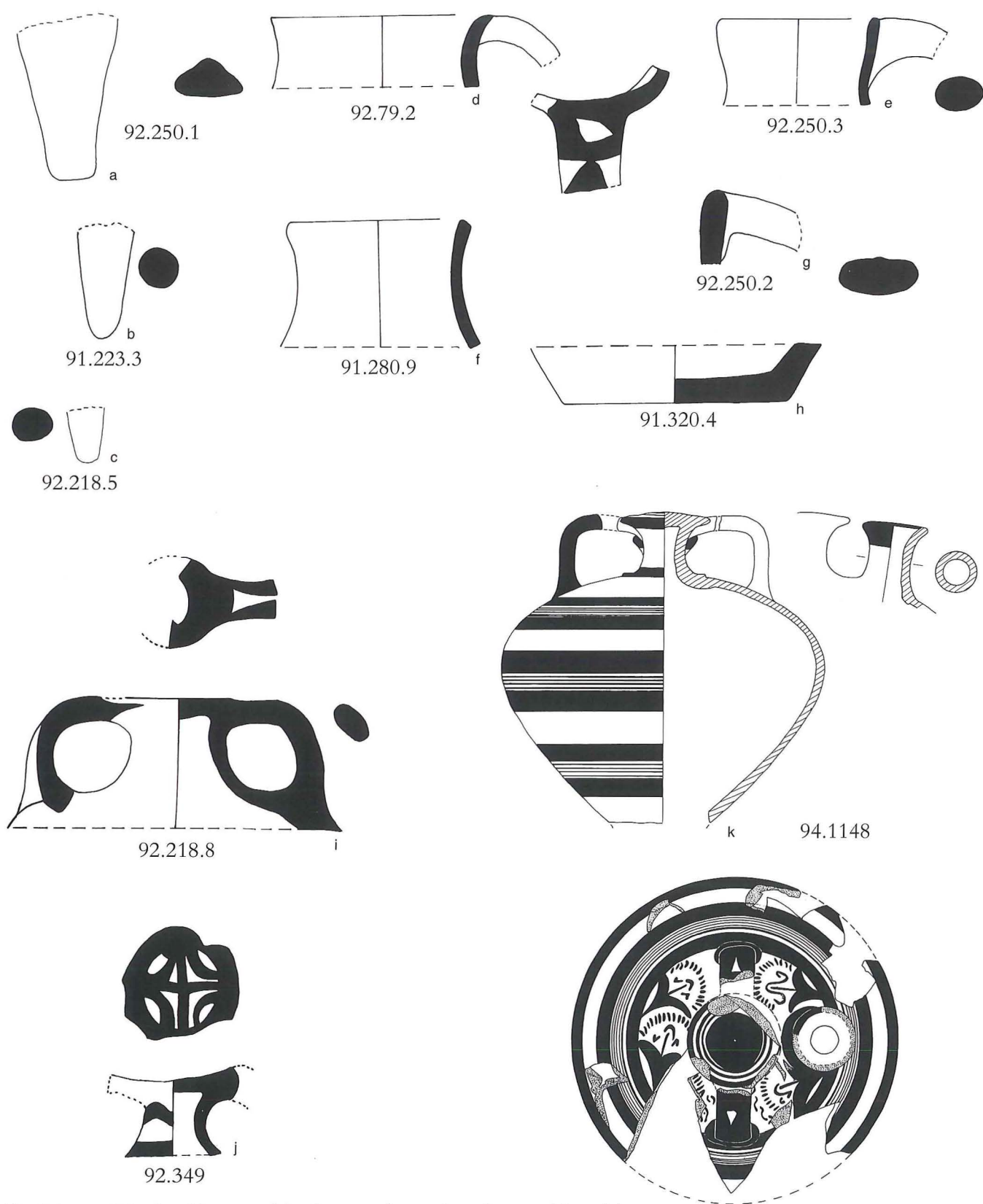


Fig. 14. **a-c**: Tripod cooking-pots; **d-h**: Coarse undecorated amphorae and jugs; **i-j**: Stirrup jars; **k**: Stirrup jar 94.1148.

### **Coarse undecorated amphorae and jugs (Fig. 14d-h)**

Fragments of coarse undecorated vessels, either one- or two-handled, have been found in both houses. The vases to which the sherds belong must have attained around 40 cm. in height, standing on a rather wide base of some 20 cm., and having a rim diameter of 10-15 cm. Usually they have a tall wide neck of concave profile and slightly outcurving rim. It should be noted that trefoil-mouthed jugs are absent from the material of the two LM III houses, although they appeared elsewhere at Petras, in unstratified contexts. The handles of both the amphorae and the jugs are either circular or elliptical in section.

Again, the fabric is the familiar Palaikastro orange-brownish medium to coarse. The vessels are self-slipped. In a single case there is a carelessly painted decoration on the rim and handle.

All the examples illustrated here come from the West House, and were burnt in the fire which caused the abandonment of the building in early LM IIIB.

Related jugs, both with trefoil and round mouth, have been found at Viannos-Kephali Chondrou, dated to LM IIIA:2.<sup>22</sup> Analogous is a jug from Knossos with the normal vertical handle and an additional small horizontal handle on the belly.<sup>23</sup> Smaller-sized jugs with similar rim and neck profile, usually decorated, comparable to 91.280.9, are known from Episkopi.<sup>24</sup> For this sherd, which in the absence of handle attachments could be either an amphora or a jug, a further early LM IIIB parallel can be cited from Knossos.<sup>25</sup> The band handle of 92.79.2 finds an undecorated parallel from Tomb B at Episkopi-Kephala.<sup>26</sup> The rare Cretan hydriae have a similar rim profile, as illustrated by the vase from the tomb at Apostoloi.<sup>27</sup>

Related coarse ware vases are present in the Palaikastro material, both undecorated and with dribble decoration. Only slight differences in profile to the Neopalatial specimens are noted, with the exception of the round mouth which replaces the oval-mouthed variant. One example was thought, based on the quality of clay and firing, to belong to the post-Bronze Age period by the earlier excavators. The find context, in association with three LM IIIA vases with blob decoration, dates it to the same period.<sup>28</sup>

### **Stirrup jars (Figs. 14i-k, 15-16)**

Sherds from stirrup jars are rare at Petras, not only in the two houses, but

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<sup>22</sup>Platon 1957b, pl. 69α, first from right, β, first row, second from left.

<sup>23</sup>Popham 1964, 19, fig. 4.

<sup>24</sup>Xanthoudides 1920-1921, 161, fig. 9, second from right.

<sup>25</sup>Hood & De Jong 1958-1959, 186, fig. 5, pl. 45f.

<sup>26</sup>Platon 1952c, fig. 3, upper row, second from left.

<sup>27</sup>Gavrilakis 1993, 37, photo 6, fig. 5.

<sup>28</sup>Bosanquet & Dawkins 1923, 112-113, fig. 97.

Fig. 15. Stirrup jar 92.218.8.

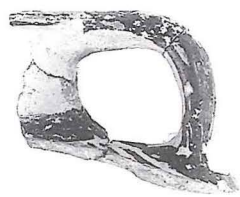


Fig. 15. Stirrup jar 92.218.8.

Fig. 16. Stirrup jar 92.218.8.

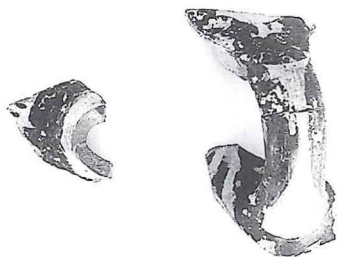


Fig. 16. Stirrup jar 92.218.8.

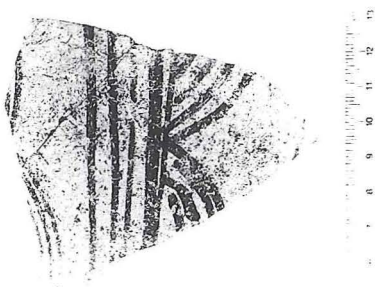


Fig. 17. Krater 91.317.4.

generally in any LM III context, including the surface finds from the survey. The two East House examples illustrated here belong to mid-sized vessels of medium orange Palaikastro clay with a grey core, a yellowish slip, and reddish-brown decoration (Figs. 15-16). They are dated to LM IIIA:2.

The 1994 season modified this picture by producing an almost complete specimen, 94.1148, dated to IIIA:2 (Fig. 14k). It is made of fine buff clay and has a buff lustrous slip and dark brown lustrous paint. The shoulder zone is decorated with five Mycenaean flowers, the body with three sets of thick bands enclosing thin lines. This last feature is very rare from Crete, and points, together with the clay and the type of flowers, to a mainland origin.<sup>29</sup>

### Kraters (Figs. 17, 18a-f)

Both LM III types of kraters, amphoroid and bell, are present at Petras. The examples in the drawings derive from the West House and the area to the west of it, and belong to the LM IIIB period. With one exception, they are made of the rather fine orange Palaikastro clay, usually with a grey core, and lustrous yellowish slip. The paint is orange or reddish, turning to brown, and likewise lustrous.

The exception is constituted by 91.144.2, a bell krater decorated with metopes containing two different types of rosettes. The clay is buff, very fine, the slip cream, the paint lustrous brownish-black. This is probably an import, from Knossos or mainland Greece.

Bell kraters are reported from Knossos and Khania, two sites under strong Mycenaean influence.<sup>30</sup> The metopal decoration of the two Petras examples is characteristic for the period. The imported vase 91.144.2 has a twin, both in terms of shape and decoration, rosettes in metopes, in an advanced LM IIIB krater from the palace of Knossos.<sup>31</sup> A near relative from Karteros is also decorated with two types of rosettes, not in a metopal arrangement, but in the more Minoan continuous zone.<sup>32</sup> Also late in the period is the second bell krater, 91.317.4, with a decoration announcing the Close Style in a manner akin to deep bowls and pyxides at Palaikastro-Kastri (Fig. 17).<sup>33</sup>

The Petras amphoroid kraters are typical for early LM IIIB. They have handles with vertical grooves, a wide mouth with an horizontal outcurving rim, necks decorated with wavy bands, and octopus tentacles on the belly, features already present in an advanced stage of IIIA.<sup>34</sup> Octopi, complete or reduced to tentacles, constitute the most common decorati-

<sup>29</sup>Cf. Kanta 1980, fig. 20 no. 10 for a parallel from Vatheianos Kampos.

<sup>30</sup>Kanta 1980, 272-273.

<sup>31</sup>Popham 1964, pl. 8.

<sup>32</sup>Marinatos 1927-1928, 80, fig. 5, pl. 1.

<sup>33</sup>Sackett & Popham 1965, figs. 9z, 10j.

<sup>34</sup>Kanta 1980, 273-276.



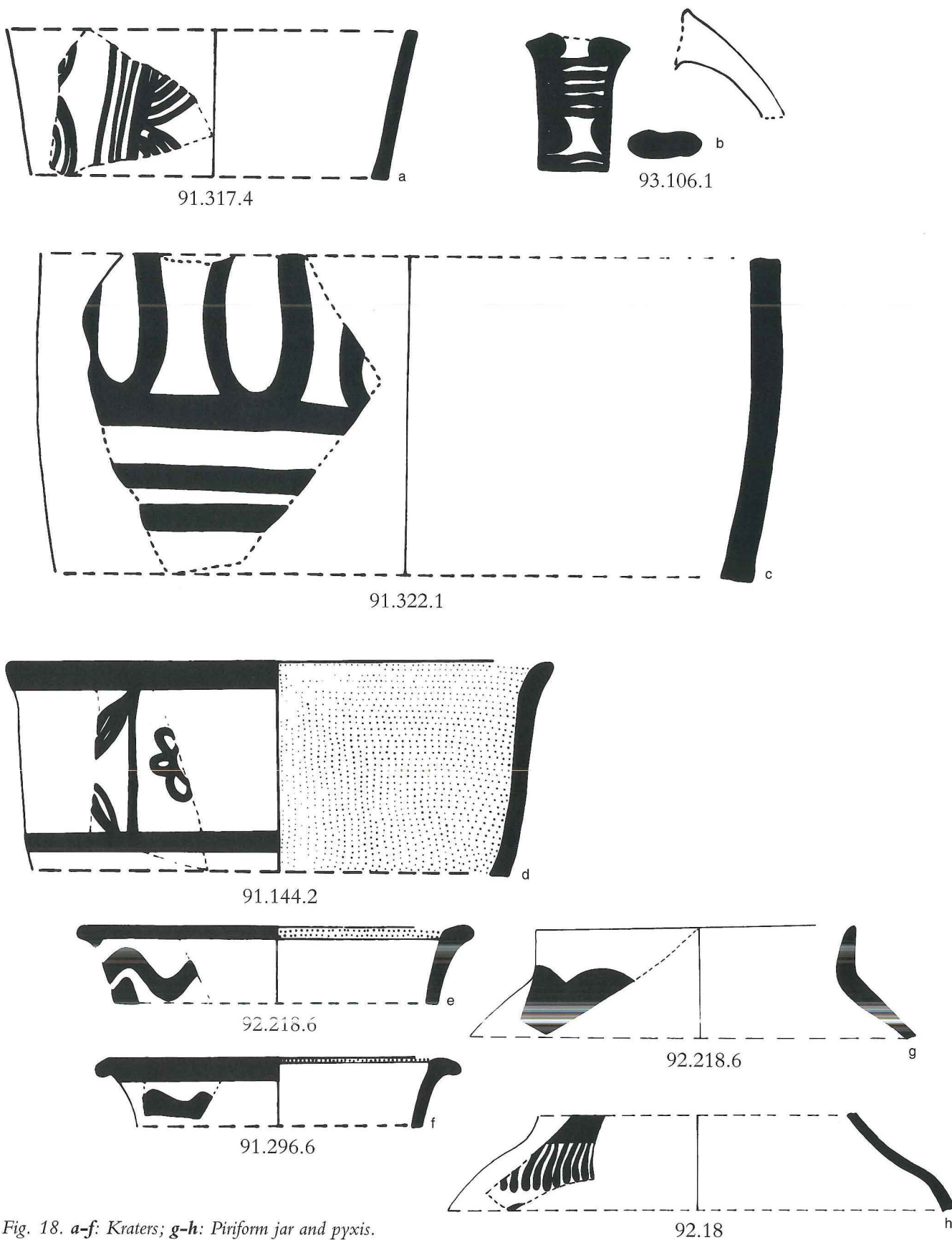


Fig. 18. **a-f**: Kraters; **g-h**: Piriform jar and pyxis.

on of amphoroid kraters. The wavy lines on the neck are also canonical, as illustrated by many parallels from Palaikastro,<sup>35</sup> Quartier E,<sup>36</sup> and Akhladia.<sup>37</sup> Moreover, IIIA amphoroid kraters from Knossos<sup>38</sup> and Karpathos, the latter imported from Palaikastro,<sup>39</sup> are similarly painted. The decoration of 91.296.6 is similar to that of a krater from Ligortyno.<sup>40</sup>

Although the octopus decoration is also well-known from large stirrup jars of the same period, it is clear that the sherd 91.322.1 does not belong to a closed vessel. Kraters with octopi or tentacles appear in the Central Cretan material, as illustrated by a LM IIIB parallel from Episkopi.<sup>41</sup> The vase from Milatos, a possible Palaikastrian production, parallels the Petras sherd right down to the triple horizontal lines below the tentacle.<sup>42</sup> It is interesting to note that the octopus is also featured on many LM IIIB larnakes, chest- and tub-shaped, that of Episkopi found together with octopus kraters. This observation is significant due to the apparent close connection between the subject matter and organization of the decoration on containers which offer large surfaces, chiefly kraters and larnakes. In the Siteia Bay area, at least, the octopus, or its tentacles, constitutes the main theme of most larnakes.<sup>43</sup>

#### **Piriform Jar (Fig. 18h)**

A single instance of this shape has been identified with certainty, coming from the area of the East House. It is dated to LM IIIA, probably not very late in the period, on the basis of its common and characteristic foliate band on the shoulder. It was imported from Palaikastro. The shape of the band, very frequent on piriform jars, also on alabastra and jugs,<sup>44</sup> as well as the fact that at the lower edge of the sherd there appears a further motif, probably continuous arches, suggests an early LM IIIA:2 date.

#### **Pyxis (Fig. 18g)**

A single rim and shoulder fragment of a pyxis is present in the West House material, belonging to a vessel with an ovoid to cylindrical body. It may be compared to a complete vase from the Akhladia tholos which has an angular shoulder profile.<sup>45</sup> The Petras pyxis is of Palaikastro clay, with a yellowish slip and brown lustrous paint. The motif on the shoul-

<sup>35</sup>Bosanquet & Dawkins 1923, 108, fig. 90.

<sup>36</sup>Pelon 1970, 119-121, pl. XXIII.3-5, no. 231.

<sup>37</sup>Vagnetti & Tsipopoulou 1995, 115, figs. 87.4a, 91.

<sup>38</sup>Popham et al 1984, pl. 107d, upper right.

<sup>39</sup>Charitonides 1961-1962, 36, pl. 12, upper row, left.

<sup>40</sup>Mavriyannaki 1974, pl. 20.

<sup>41</sup>Xanthoudides 1920-1921, 160, fig. 8.

<sup>42</sup>Evans 1906, 95-96, fig. 105.

<sup>43</sup>Tsipopoulou & Vagnetti 1995b.

<sup>44</sup>Bosanquet & Dawkins 1923, 79, fig. 63.1, 2 from Palaikastro.

<sup>45</sup>Vagnetti & Tsipopoulou 1995, 115, figs. 87.4, 91.

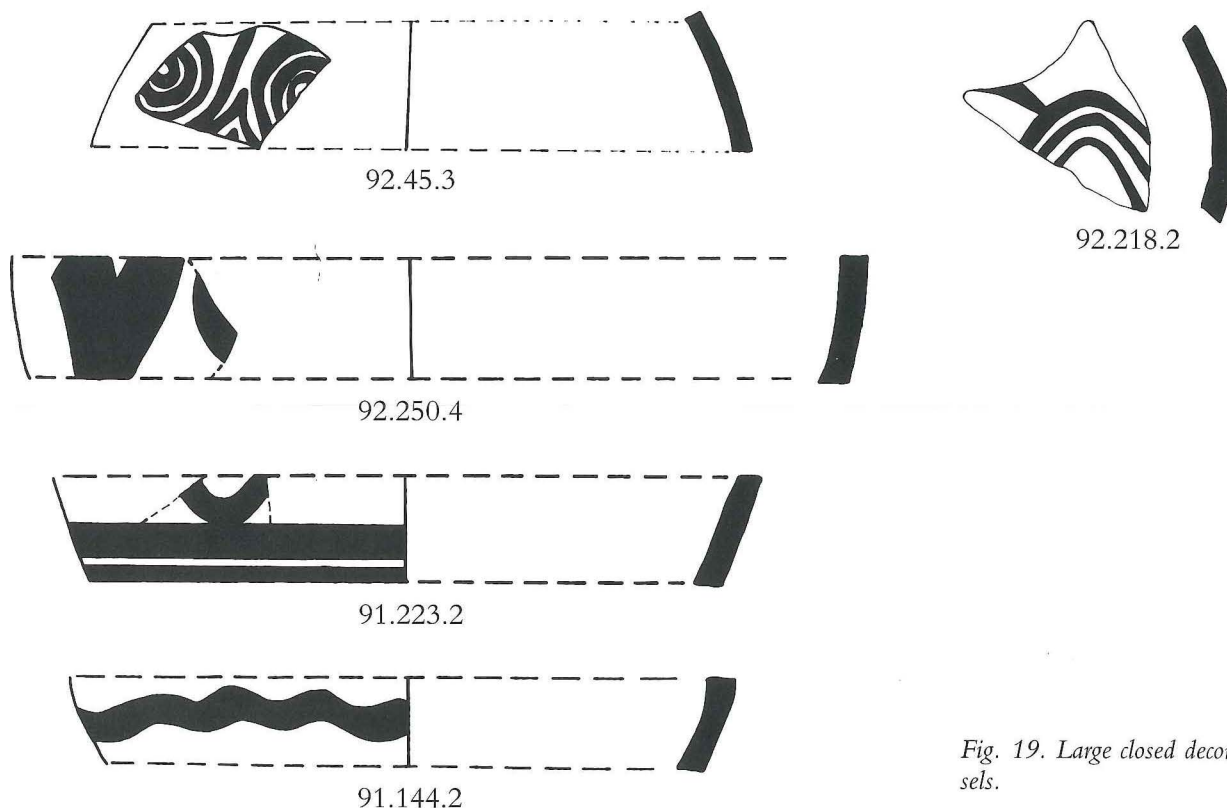


Fig. 19. Large closed decorated vessels.

der is probably a wide wavy band. Analogous vases are known from Palaikastro, both from the Aspa cemetery and from the houses in the area.<sup>46</sup>

Related – but larger – vessels, essentially pithoids with a rim diameter of 28–30 cm., are likewise found at Palaikastro.<sup>47</sup> Moreover, an undecorated LM IIIA:2 to IIIB pyxis from the recent Palaikastrian campaigns has a rim and shoulder profile comparable to the Petras example.<sup>48</sup> LM II to IIIA pithoid jars from Quartier E may also be mentioned.<sup>49</sup>

LM IIIB pyxides, generally smaller in size, are occasionally equipped with a tubular spout, as on an example from Gazi,<sup>50</sup> although here the high rim curves inwards and the shoulder is angular in profile.

The Petras sherd could also belong to a strainer pyxis, a chiefly Neopalatial shape that remained in production into LM IIIA in Eastern Crete, as indicated by parallels from Palaikastro<sup>51</sup> and Myrsini.<sup>52</sup>

<sup>46</sup>Bosanquet & Dawkins 1923, 95–96, fig. 79.

<sup>47</sup>Bosanquet & Dawkins 1923, pl. XXIII, especially c.

<sup>48</sup>MacGillivray et al. 1992, fig. 20, no. 7.

<sup>49</sup>Pelon 1970, 90, pl. XIX.4, no. 127.

<sup>50</sup>Alexiou 1972, 88, pl. 40.

<sup>51</sup>Bosanquet & Dawkins 1923, 101–102, fig. 85a, h. 21.

<sup>52</sup>Siteia Museum, unpublished.

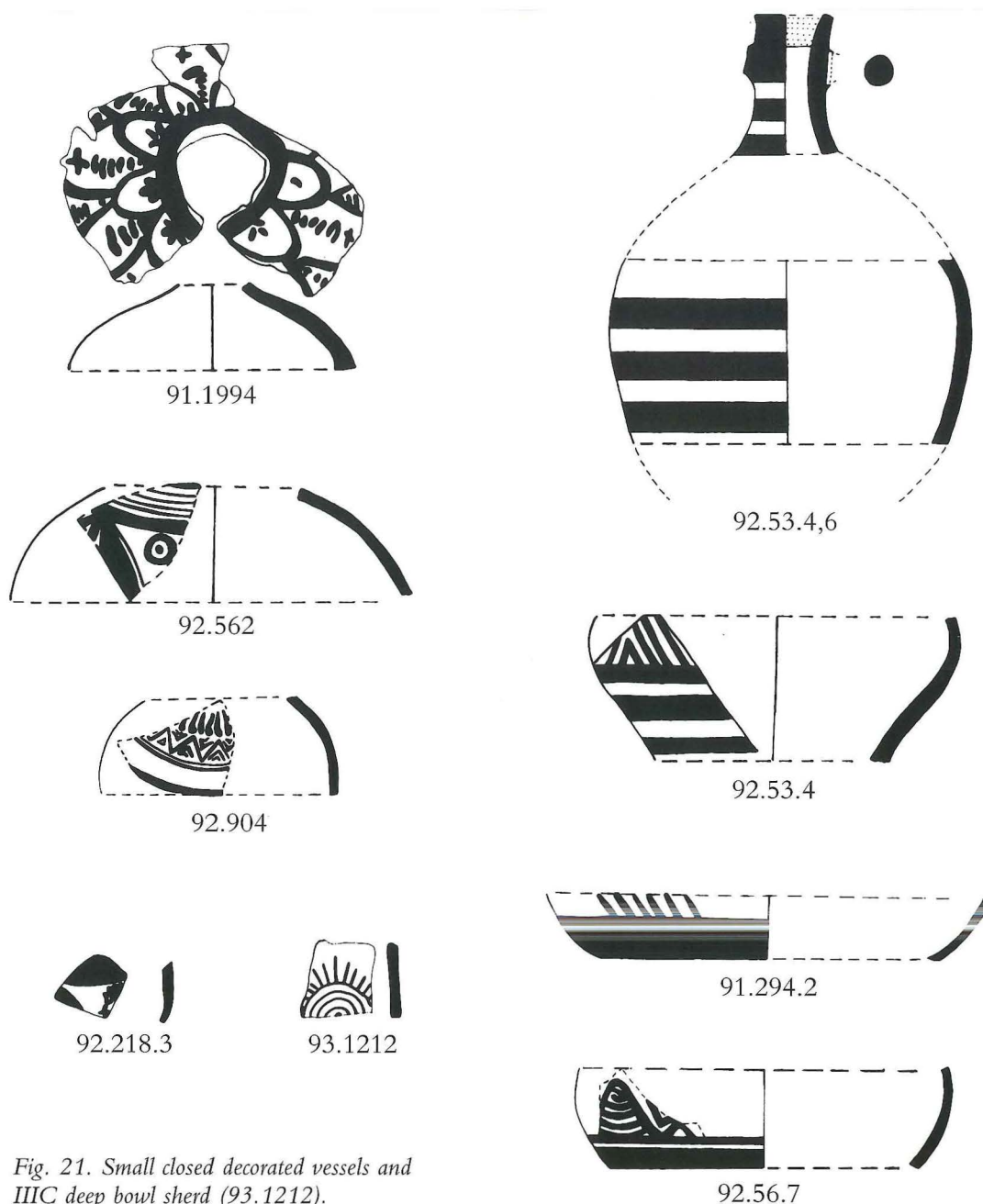




Fig. 20. **a:** Amphora with dribble decoration, 94.1043; **b:** Amphora with dribble decoration, 94.1548.

**Large closed decorated vessels (Figs. 19–20, 22)**

Body sherds from large closed decorated vessels, jugs, amphorae, or perhaps also stirrup jars, have come to light from various areas of the excavation on the main plateau at Petras. The chief finds are from the Central Court, immediately to the west of the East House, but also north/north west of the north facade of the palatial building, where, in LM I, there existed an open court covered with plaster and flagstones. The West House



*Fig. 21. Small closed decorated vessels and IIC deep bowl sherd (93.1212).*



Fig. 22. Sherd from large closed vessel with spiral decoration 92.45.3.

is situated to its immediate south. It is thus probable that both these courts were reused in the LM III reoccupation.

Two sherds, of medium Palaikastro clay, 91.223.2 and 91.144.2, are burnt and appear to date to the early LM IIIB destruction. The other sherds, of yellowish medium clay, self-slipped and decorated with a lustrous reddish to brown paint, bear no traces of burning. They were found in the area around the East House. Their decoration leads to a LM IIIA:2 date. The continuous spiral of 92.45.3 finds a very close parallel in a sherd from a large jug or amphora from Palaikastro, of the same yellowish clay (Fig. 22).<sup>53</sup>

The 1994 campaign added three more or less complete specimens of this category, two amphorae with dribble decoration (Fig. 20a-b) and a jug with blobs, all made of Palaikastro clay with reddish-brown paint. They belong to very common East Cretan types.

#### Flask, horizontal type (Fig. 21)

Of interest, mainly due to the rarity of its shape, is the flask 92.53.4 and 6 from the East House, a Palaikastrian import as indicated by the fine orange clay with grey core, lustrous yellowish slip, and orange to brown paint. The shape is Mycenaean,<sup>54</sup> dated on the mainland to LH IIIA:2 early and late.<sup>55</sup> A complete specimen with ring base and a stylized floral decoration on the shoulder comes from Block E at Palaikastro.<sup>56</sup> Due to the frequent eastern origin of flasks, the earlier excavators compared it to the pottery of Tell El Amarna, although they recognized that the clay and technique were similar to those of stirrup jars from the Palaikastro cemetery. A comparable vase from Knossos was thought to be a Cypriote import by Evans.

The technique of the Petras specimen, coupled with the exact parallel from Palaikastro allows no doubt as to its origin.

#### Juglets (Figs. 21, 23-24)

Numerous decorated shoulder and body sherds of juglets have been found in both areas of reoccupation. All are Palaikastrian imports, those from the East House dated to early and late IIIA:2, those of the West House to early LM IIIB.

The two most completely preserved examples, in terms of decoration, 91.1994 (Fig. 23) and 92.904, from juglets with narrow neck and depressed globular body, should be placed very high in the LM IIIA:2 period, near the border to the IIIA:1 phase. Thus, they may belong to the earliest LM III sherds at Petras.

For 91.1994 very close parallels are known from Palaikastro<sup>57</sup> and

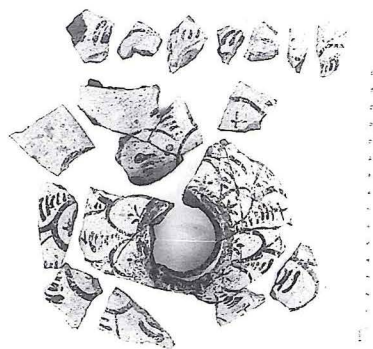


Fig. 23. Sherds from juglet 91.1994.

<sup>53</sup>Bosanquet & Dawkins 1923, 82, fig. 65.6.

<sup>54</sup>Furumark 1972, FS 190, 616.

<sup>55</sup>Mountjoy 1986, 81, fig. 96.

<sup>56</sup>Bosanquet & Dawkins 1923, 109-110, fig. 94.

<sup>57</sup>Bosanquet & Dawkins 1923, 79, fig. 63.1, with a bell-shaped mouth.



Gournia.<sup>58</sup> For 92.904, also common, a sherd dated to LM IIIA “not late in the phase” offers a good comparandum both in terms of shape and decor.<sup>59</sup> The type also appears at Gournia.<sup>60</sup> The Goudies chamber tomb has produced several examples, some decorated with a foliate band on the shoulder which does not compare exactly with the Petras individual.<sup>61</sup> A further parallel can be cited from the Karteros tomb.<sup>62</sup> Similar LM IIIA juglets come from Ligortyno.<sup>63</sup> The motif is also known from open shapes, such as on a semiglobular cup from Malia.<sup>64</sup>

The profile of the shoulder of the juglet 92.562 finds a comparandum at Palaikastro,<sup>65</sup> placed in the LM IIIA:1 period, but the decor of the Petras vessel could suggest a somewhat later date, early IIIA:2. The small sherd 92.218.3, is probably dated to LM IIIA on the basis of the decoration. Of the remaining juglet sherds illustrated here, 92.53.4 and 92.56.7 (Fig. 24) belong to the IIIA:2 type with piriform body, while the spherical vessel 91.294.2 finds its place in IIIB.

### Deep bowls (Figs. 25–28)

Sherds of deep bowls are fairly common in the context of the two LM III houses at Petras. Three different types of clay can be distinguished. The majority, 91.268.3 (Fig. 25), 91.66.1 (Fig. 26), 91.524, 91.326.3 and 91.161.5, are of a fine buff fabric, with a burnished self-slipped surface and dark brown paint, reminiscent of corresponding Central Cretan vessels. Three individuals, 91.154.6, 92.218.7 and 92.56.4 (Fig. 28), are thrown in the well-known fine orange Palaikastro clay, with lustrous orange slip and orange-brownish lustrous paint. The clay of 90.34.3 is fine yellowish, covered with dark brown paint. All the above examples are monochrome inside. The decoration of the exterior surface is organised in zones bordered by two bands of varying thickness. Some of the deep bowls attain a diameter of up to 20 cm., approaching in size the bell kraters. The Petras deep bowls are dated to LM IIIA:2 and B.

Of LM IIIA:2 date is 91.524, with LM IIIA:1 to A:2 parallels from Kommos in terms of the rim.<sup>66</sup> A similar decoration is found on an example from Malia.<sup>67</sup>

91.326.3 with a whorl shell design, FM 23, is dated to LM IIIA:2 to IIIB. The motif is Mycenaean: representative LH IIIA:2 parallels can be



Fig. 24. Sherd from juglet 92.56.7.

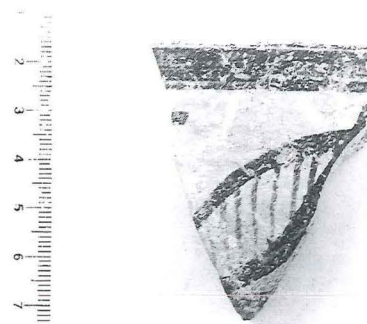


Fig. 25. Rim sherd from deep bowl 91.268.3.



Fig. 26. Rim sherd from deep bowl 91.66.1.

<sup>58</sup>Boyd-Hawes et al. 1914, pl. X.21.

<sup>59</sup>Sackett & Popham 1970, 234, fig. 23, left.

<sup>60</sup>Boyd-Hawes et al. 1914, pls. 19, 20.

<sup>61</sup>Laviosa 1970, figs. 13, 22c, d, f, g, i.

<sup>62</sup>Marinatos 1927–1928, 72, pl. 1, no. 8.

<sup>63</sup>Mavriyannaki 1974, 56, pl. 24.

<sup>64</sup>Pelon 1970, pl. XXI.2k.

<sup>65</sup>MacGillivray et al. 1992, 140, fig. 17, no. 6.

<sup>66</sup>Watrous 1992, 56, fig. 33 no. 787, pl. 18, and fig. 39 no. 971, pl. 23.

<sup>67</sup>Pelon 1970, pls. XXV.4a and XXV.5b.

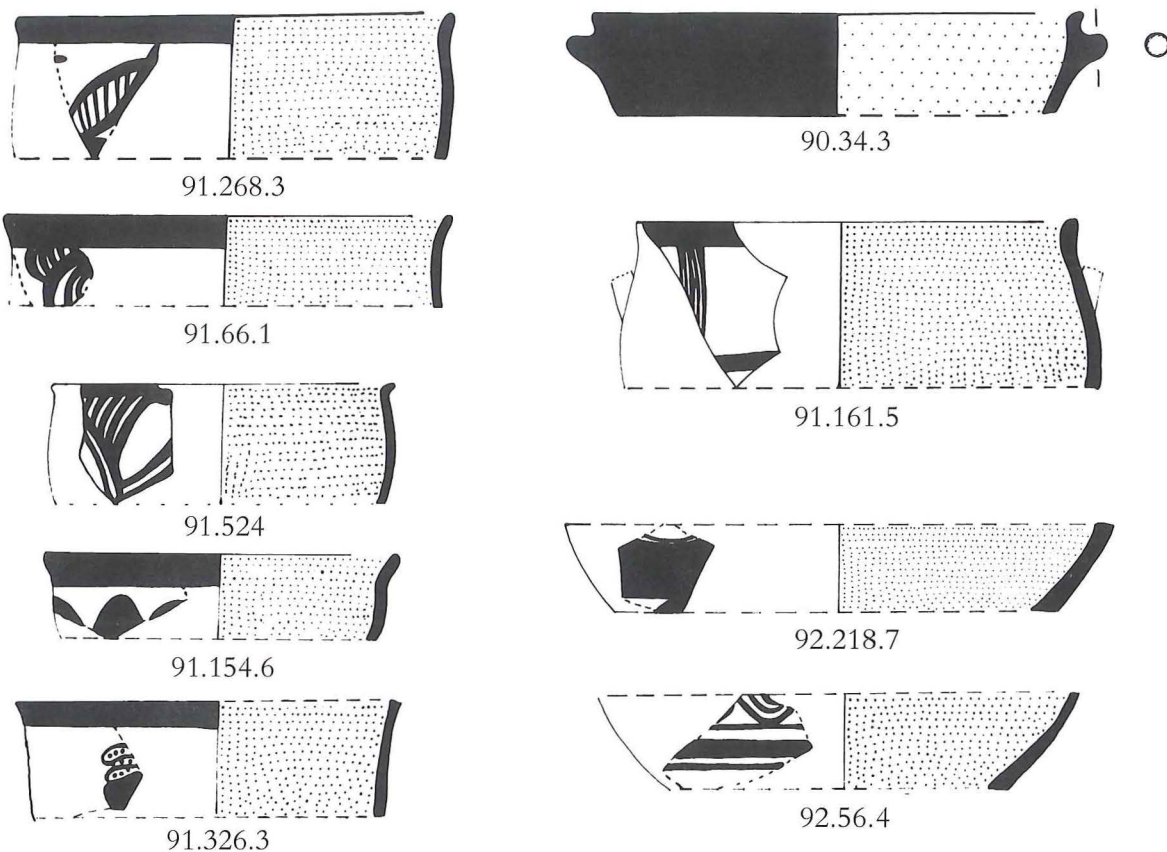


Fig. 27. Deep bowls.



Fig. 28. Body sherd from deep bowl 92.56.4.

sought from Berbati.<sup>68</sup> Kylikes from Kommos<sup>69</sup> and Knossos, of LH/LM IIIB date, are similarly decorated.<sup>70</sup> A deep bowl, a parallel to the Petras specimen in terms of shape and design, was found at Kastelli Khania and is thought to be an import.<sup>71</sup> Exactly the same type of whorl shell with monochrome body appears on a further kylix from Knossos.<sup>72</sup> A Knossian origin may thus be assigned to the Petras whorl shell deep bowl. An interesting comparison can be made with a whorl shell on the shoulder of a LM IIIA:2 to IIIB stirrup jar from Palaikastro.<sup>73</sup>

91.268.3 (Fig. 25) and 91.154.6, belong to LM IIIB, and find good parallels in the material from Kommos<sup>74</sup> and Malia.<sup>75</sup>

<sup>68</sup>French 1965, 194, fig. 11.

<sup>69</sup>Watrous 1992, 81, fig. 52, no. 1396, pl. 35.

<sup>70</sup>Popham 1970, pl. 41g.

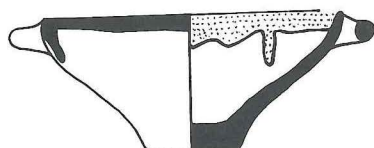
<sup>71</sup>Kanta 1980, fig. 90.10.

<sup>72</sup>Popham et al. 1984, pl. 110e.

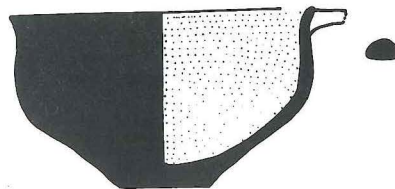
<sup>73</sup>Smee 1966, 158, fig. 1, no. 1, pl. 34, underlining the close relationship of this motif to Mycenaean Greece.

<sup>74</sup>Watrous 1992, 85, fig. 56, no. 1483, pl. 36, and no. 1482, pl. 38.

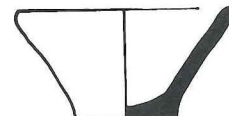
<sup>75</sup>Deshayes & Dessenne 1959, pl. XLVI.6, 10.



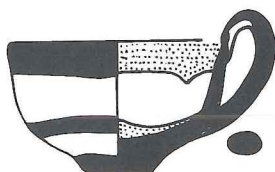
91.2023



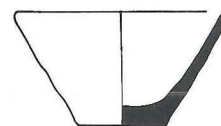
91.1864



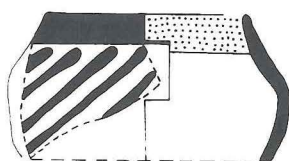
91.2025



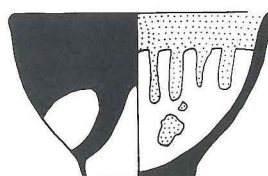
91.1360



91.2024



91.265.2



91.1518



92.56.13

Fig. 29. Bowl with horizontal handle, one-handed cups and handleless cups.

Likewise 91.161.5 belongs to the common advanced IIIB type, again with comparanda from Kommos,<sup>76</sup> and Palaikastro-Kouremenos.<sup>77</sup>

Interesting is also the LM IIIB monochrome deep bowl 90.34.3 from the West House, which appears to be from Central Crete. Viannos-Chondros,<sup>78</sup> Zafer Papoura, of LM IIIA:2 date,<sup>79</sup> Knossos-School Room,<sup>80</sup> and Kavrochori, IIIB<sup>81</sup> offer relevant comparanda.

To a deep bowl may also be assigned one of the rare LM IIIC sherds recognized to date at Petras, 93.1212 (Figs. 21, 30), from the surface level on the south-western side of the plateau. Of fine buff clay, self-slipped, and, despite its worn state, clearly monochrome inside, it carries a decor of concentric circles, the outermost fringed. A similar decoration, also on a small sherd, is known from Palaikastro-Kastri.<sup>82</sup>



Fig. 30. IIIC deep bowl sherd 93.1212.

<sup>76</sup>Watrous 1992, 89, fig. 58, no. 1557, pl. 39.

<sup>77</sup>Bosanquet 1901-1902b, fig. 2; Bosanquet & Dawkins 1923, 114, fig. 99.

<sup>78</sup>Platon 1957b, pl. 69β, lower row, second from left.

<sup>79</sup>Evans 1906, fig. 118.6k.

<sup>80</sup>Popham 1964, pl. 2b.

<sup>81</sup>Rethemiotakis 1979, 242, fig. 16.

<sup>82</sup>Sackett & Popham 1965, fig. 9u.





Fig. 31. Bowl with horizontal handles 91.2023.



Fig. 32. Goblet 91.1862.

### Bowl with horizontal handles (Figs. 29, 31)

Related to the deep bowls is the bowl with horizontal handles, or lekanis, 91.2023, discovered on the floor of the West House in the LM IIIB destruction horizon (Fig. 31). It is made of Palaikastro clay, with brownish orange paint. It belongs to FS 295,<sup>83</sup> a Mycenaean type exhibiting several rim variants dated LHIIIA:1 to IIIB.<sup>84</sup> A close LM IIIB comparandum for the shape, but with a different rim, was found in the Apostoloi tomb.<sup>85</sup> A shallower, earlier version comes from the early reoccupation levels at Palaikastro.<sup>86</sup>

### Goblets (Figs. 32–33)

The Petras plateau has produced one complete and several fragmentary goblets, the majority of Palaikastro clay. All come from the West House.

The complete individual, 91.1862 (Fig. 32), from the early IIIB burnt deposit on the floor of the West House, has formal parallels in two vessels from the Shrine of the Double Axes and the room to its south, except for the rim, which on the Knossian vases is slightly outcurving – as is canonical for goblets.<sup>87</sup> Similar, but with a band handle, are the LM IIIA:2 goblets from Tomb B at Palialona Stamni Pediada.<sup>88</sup> The outcurving rim also appears on parallels from Malia.<sup>89</sup> Kommian comparanda have a slight difference in the profile of the foot, more obviously conical, and thus are similar to the other Petras examples, with the rim again slightly outcurving.<sup>90</sup> The Kommos goblets have handles of elliptical section, and compare well to the Petras specimen. The rim of a cup from the Apostoloi tomb is related, whereas the foot differs,<sup>91</sup> being comparable to 91.175.3, and to a LM IIIA:2 to IIIB example from Pseira. This latter instance also has the same handle, whereas the body is shallower, and the rim slightly outcurving.<sup>92</sup> Viannos–Chondros has produced a very similar vessel both in the details of shape and proportions.<sup>93</sup> Parallels for the dimensions and profile are found at Katsambas, but, once again, the rim is outcurving.<sup>94</sup> The specimen from neighbouring Akhladia is interesting both as to shape

<sup>83</sup>Furumark 1972, 636.

<sup>84</sup>Mountjoy 1986, 133, fig. 164.2.

<sup>85</sup>Gavrilakis 1993, 47–48, fig. 14, photo 15.

<sup>86</sup>MacGillivray et al. 1992, 140, fig. 17, no. 7.

<sup>87</sup>Popham 1969, 301.

<sup>88</sup>Platon 1952c, fig. 8, lower row.

<sup>89</sup>Deshayes & Dessenne 1959, pl. XLVI.2.

<sup>90</sup>Watrous 1992, 53, fig. 36, no. 920, pl. 21; also a specimen used as a lamp: 54, fig. 37, no. 939, pl. 22.

<sup>91</sup>Gavrilakis 1993, 45–46, fig. 12, photo 13.

<sup>92</sup>Betancourt & Davaras 1988, 221, fig. 17, PS 396.

<sup>93</sup>Platon 1957b, pl. 70β, lower row, first from left.

<sup>94</sup>Alexiou 1963b, pl. 160β.

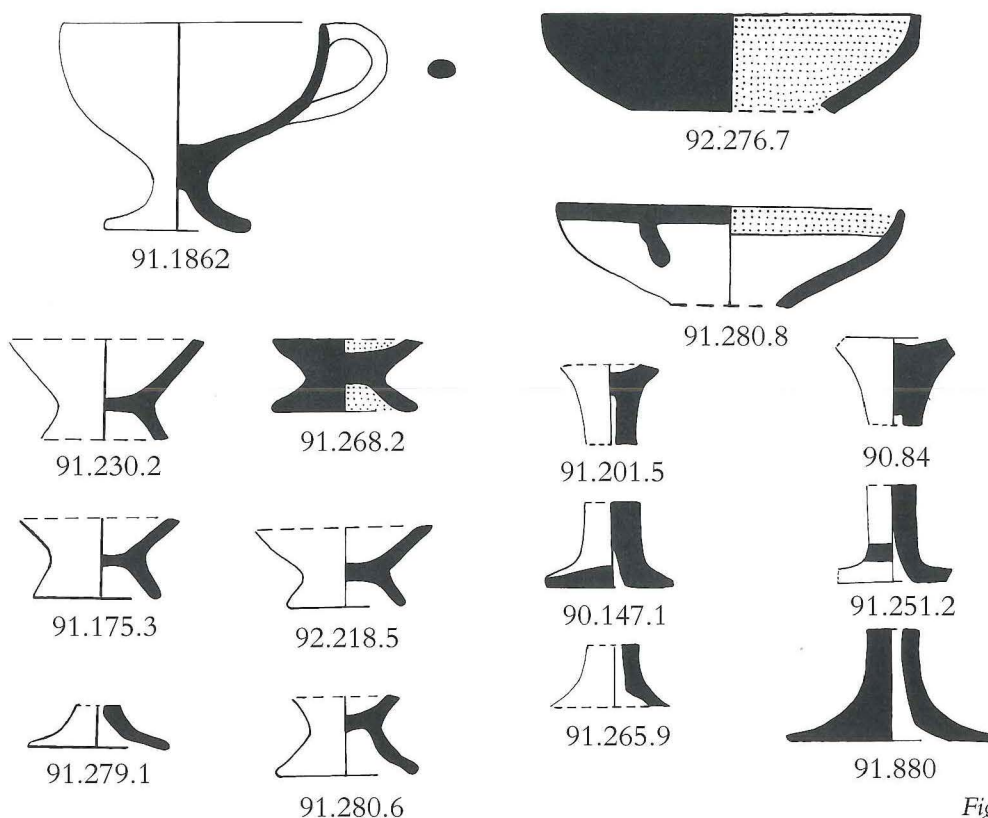


Fig. 33. Goblets and kylikes.

and dimensions.<sup>95</sup> The vertical rim of the Petras vase appears on a LM IIIB goblet from Kavrochori.<sup>96</sup> Comparanda for the base are provided by cups from the Makritikhos “kitchen” at Knossos,<sup>97</sup> for the base and the lower body by fragmentary individuals from Quartier E.<sup>98</sup>

Kommos<sup>99</sup> and Gazi<sup>100</sup> offer LM IIIB parallels for the conical base of 91.230.2, 91.175.3, 91.268.2 and 92.218.5.

The distinctly concave foot of 91.279.1 has LM IIIA:2 to IIIB parallels from Kommos.<sup>101</sup> The same site provides comparanda for the highstemmed goblet 91.280.6, with angular profile, and dated to LM IIIA:2 and B.<sup>102</sup>

<sup>95</sup>Vagnetti & Tsiopoulou 1995b, 115, figs. 87.3, 90.

<sup>96</sup>Rethemiotakis 1979, 236, fig. 10.

<sup>97</sup>Hood & De Jong 1958–1959, fig. 3, no. 4.

<sup>98</sup>Pelon 1970, pl. XLIIe.

<sup>99</sup>Watrous 1992, 59, fig. 41, no. 1005; 96, fig. 62, no. 1657, pl. 24; 98, fig. 64, no. 1680.

<sup>100</sup>Alexiou 1972, 88, fig. 6, no. 18999.

<sup>101</sup>Watrous 1992, 73, fig. 45, no. 1231.

<sup>102</sup>Watrous 1992, 56, fig. 39, no. 956; 85, fig. 55, no. 1470, pl. 22; 96, fig. 62, no. 1658.



Fig. 34. Rim sherd from kylix 92.276.7.



Fig. 35. Disk and lower stem from kylix 91.880.



Fig. 36. One handled cup 91.1864.



Fig. 37. One handled cup 91.1360.

### Kylikes (Figs. 33–35)

Decorated kylikes remain to date unattested at Petras, not only in the two houses on the plateau, but also in the surface levels of Houses 1 and 2 in the township, buildings which have produced LM III pottery unconnected with architectural remains.

On the other hand, undecorated fragmentary specimens are rather common, all except one thrown in a very fine buff lustrous self-slipped ware. The exception, 91.280.8, is made from Palaikastro clay. The kylikes studied here come from both LM III houses.

Kylix feet pierced up to the base of the bowl, 91.201.5, 90.84, 91.265.9 and 91.880 (Fig. 35), are dated to LM IIIA:2, in a rather advanced stage, as illustrated by the relevant complete examples from Kommos,<sup>103</sup> from the Room to the South of the Shrine of the Double Axes,<sup>104</sup> from Sellopoulo,<sup>105</sup> and from the Apostoloi tomb, the last dated LM IIIB due to the octopus decor.<sup>106</sup>

Kylikes of the second type, with a cavity in the lower part of the foot, 90.147.1 and 91.251.2, are somewhat later in date, early LM IIIB. Kommos once again provides complete profiles, dated to an advanced stage of LM IIIA:2.<sup>107</sup>

The two better preserved examples from Petras, 92.276.7 (Fig. 34) and 91.280.8, belong, the former, to FS 258,<sup>108</sup> with a good decorated parallel from Kritsa,<sup>109</sup> the latter, to FS 266,<sup>110</sup> both types dated to LM IIIA:2 and B.<sup>111</sup>

### One handled cups (Figs. 29, 36–37)

Both complete specimens of one-handled cups come from the early LM IIIB destruction level of the West House, and are products of the Palaikastro workshop.

The first one, 91.1360 (Fig. 37), decorated with bands inside and out, belongs to a very common Mycenaean type, resembling closely FS 222 and 238. The chronological range is wide, LH IIIA:1 to IIIC:1.<sup>112</sup> Very similar is a LM IIIB cup from Quartier E,<sup>113</sup> exhibiting only small differences: a more pronounced outcurving rim, and a handle set slightly lower.

<sup>103</sup> Watrous, 76, fig. 47, no. 1299; 77, fig. 49, no. 1312, pl. 30.

<sup>104</sup> Popham 1964, 16, fig. 1a, no. 25, pl. 9.

<sup>105</sup> Popham et al. 1974, 204–208, fig. 7, no. 3, fig. 9, nos. 1–3, 14.

<sup>106</sup> Gavrilakis 1993, 44, fig. 11, photo 12.

<sup>107</sup> Watrous 1992, 56, fig. 39, no. 968, pl. 22; 58, fig. 41, no. 996, pl. 24.

<sup>108</sup> Furumark 1972, 628.

<sup>109</sup> Davaras s.a., fig. 60.

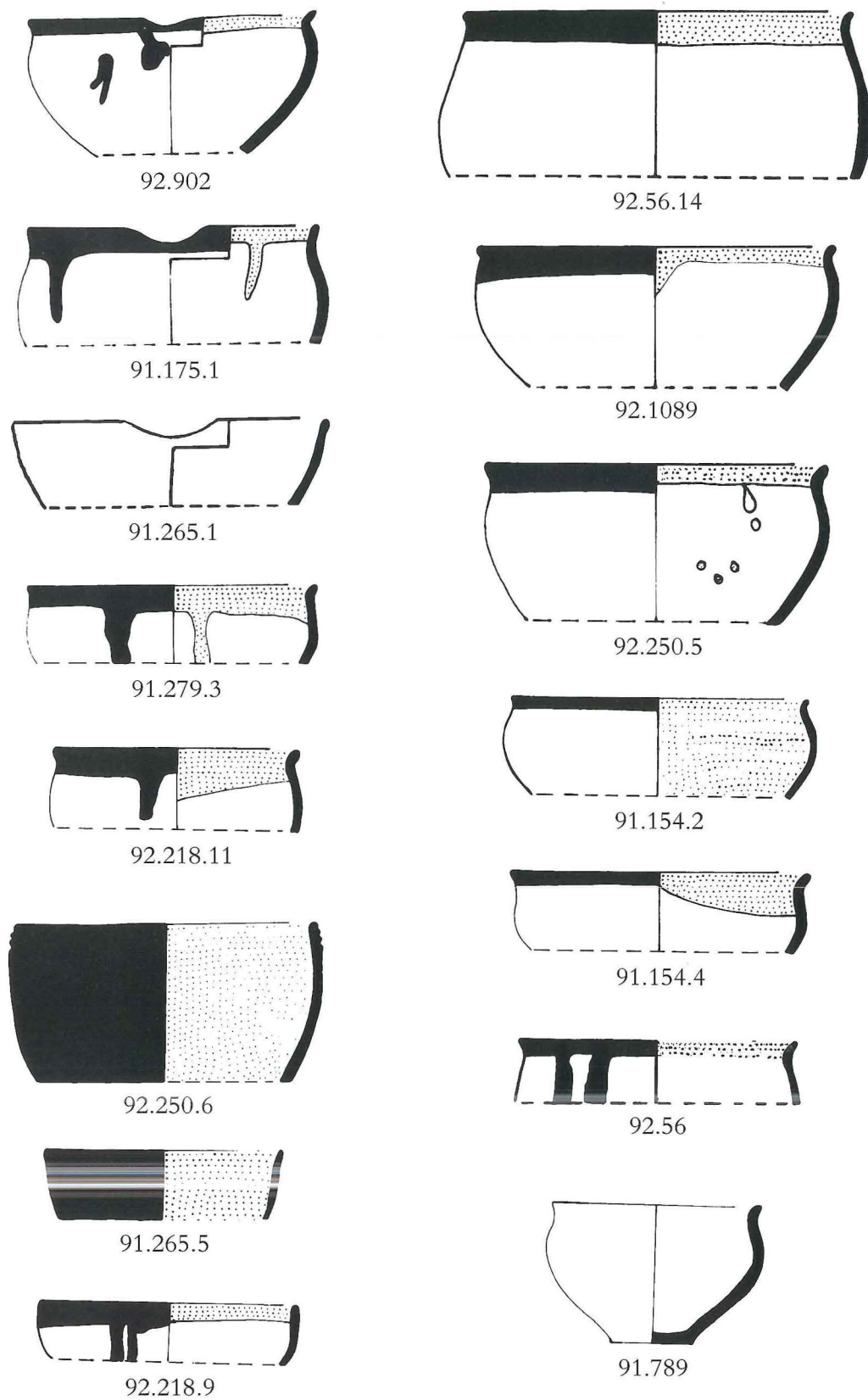
<sup>110</sup> Furumark 1972, 630–631.

<sup>111</sup> Furumark 1972, 622, 631.

<sup>112</sup> Furumark 1972, fig. 15.

<sup>113</sup> Pelon 1970, 118–119, pl. XXIII.1, no. 229.





*Fig. 38. Globular handleless cups.*

The second, monochrome, semiglobular cup 91.1864 (Fig. 36), belongs to FS 214,<sup>114</sup> and is dated to LH/LM IIIA:2 to IIIB.

#### Handleless globular cups (Figs. 29, 38, 39–40)

This is the most popular vessel type in all LM III levels at Petras, replacing the very common older handleless conical cup, the σκουτέλι. The shape is generally thought to continue, with minor changes in profile, the handleless semiglobular cup of the Neopalatial phase. All the Petras specimens studied here are made from Palaikastro clay, being thin-walled and well-fired. The orange or pink slip is lustrous, and the paint, employed for carelessly executed rim bands which tend to run, or for a monochrome treatment inside and out, is likewise lustrous, orange or reddish, sometimes turning to brown or reddish brown. A pulled-out spout is common on the rim, always more or less outcurving. The body has a curving upper part, and concave lower sides.

A few unpainted cups may be noted, always of Palaikastro clay.

It appears that the type is far more common in Eastern and Northern Crete, with many instances from Palaikastro, Myrsini, and the Mokhlos area, usually with blob decoration, and Amnisos and Episkopi-Pedia,<sup>115</sup> whereas it is entirely absent from Kommos. It is dated to LM IIIA and B. Palaikastro has produced some IIIA:2 to IIIB cups of this type with painted decoration.<sup>116</sup>

Concerning the examples from Petras studied here: 92.902 is identical to those of the Palaikastrian LM IIIA:1 early reoccupation levels;<sup>117</sup> 92.1089 has, likewise, good parallels from IIIA Palaikastro;<sup>118</sup> 91.154.2 has a formal twin at Palaikastro in a IIIA:2 cup with a careless band on the rim and upper part of the body, inside and out.<sup>119</sup>

Palaikastro also provides many comparanda, either undecorated, or with a rim band or blob decoration, for 91.789 (Fig. 39).<sup>120</sup> 92.218.9 is similar in shape and decoration to a complete IIIB specimen from Quartier E,<sup>121</sup> while 91.279.3 finds its closest comparandum in Gournia, both in form and decor.<sup>122</sup> Furthermore, it may be noted that two cups from Episkopi exhibit many similarities to the Petras material, also in terms of decoration.<sup>123</sup>



Fig. 39. Globular handleless cup 91.789.

<sup>114</sup>Furumark 1972, 620.

<sup>115</sup>Kanta 1980, 268.

<sup>116</sup>MacGillivray et al. 1991, 133, fig. 9, upper row.

<sup>117</sup>MacGillivray et al. 1992, 140, fig. 17, nos. 3–4.

<sup>118</sup>Sackett & Popham 1970, fig. 22, no. 8.

<sup>119</sup>Smee 1966, 161, fig. 1.5, pl. 34.

<sup>120</sup>Bosanquet & Dawkins 1923, 86, fig. 68.

<sup>121</sup>Pelon 1970, 119, pl. XXIII.2, no. 230.

<sup>122</sup>Boyd-Hawes et al. 1914, pl. X, no. 4.

<sup>123</sup>Xanthoudides 1920–1921, 161, fig. 9, second vase from left; fig. 12, second from left, LM IIIA:2–B.

The complete individual 91.1518 (Fig. 40) is the exact counterpart to a cup with blob decoration from Palaikastro, found in the Karpathos tomb.<sup>124</sup> A second parallel, somewhat shallower, and dated to LM IIIA:1 is provided by Palaikastro.<sup>125</sup>

The two monochrome and one unpainted cups 92.56.13 (Fig. 29), 91.265.5, and 91.265.1 (Fig. 38) belong to a slightly different type with a profile tending towards conical and the rim outcurving. A similarity to LM IIIB tankards is apparent, but the Petras sherds exhibit no traces of a handle.<sup>126</sup>

Related to the semiglobular handleless cup is, finally, a vase from the early LM IIIB West House, 91.265.2 (Figs. 29, 41), with a pronounced inward curve of the rim, and angular body, likewise of Palaikastrian clay, and with a simple linear decor.

### Handleless conical cups (Figs. 29, 42)

As already mentioned, handleless conical cups, the notorious σκουτέλια, are very rare in the LM III ceramic material from Petras, having been essentially replaced by the handleless semiglobular cups. This situation reflects that of Palaikastro, the source for the two complete Petras specimens. They were found in the early LM IIIB destruction level on the floor of the West House. Made of medium orange clay and self-slipped, both exhibit slightly different proportions than the majority of LM III examples, which are usually shallower. This second, more shallow, type is not unknown in the Petras area, represented by three σκουτέλια in the LM IIIA:1 to IIIB tholos tomb at Akhladia, probably also of Palaikastrian clay.

The cup 91.2025 resembles strongly IIIA:1 σκουτέλια from Kommos.<sup>127</sup> The IIIB σκουτέλι from the Room to the South of the Shrine of the Double Axes, although similar, is, on the other hand, not so high, following the prevailing LM III pattern.<sup>128</sup> Σκουτέλια adhering to LM I models appear sporadically in early LM IIIB assemblages, as illustrated by an example from Gazi.<sup>129</sup> Very similar σκουτέλια in terms of dimensions and proportions have been found in the tombs of Kephala Episkopi-Pediada, and are dated to IIIA.<sup>130</sup> A comparandum from Palaikastro exhibits a similar profile and base, but is slightly shallower.<sup>131</sup> The specimen from the Goudies tomb may also be mentioned in this context,<sup>132</sup> particularly

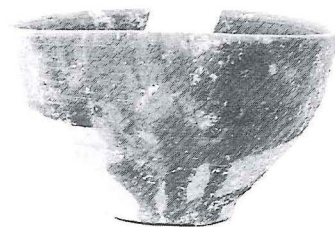


Fig. 40. Globular handleless cup 91.1518.

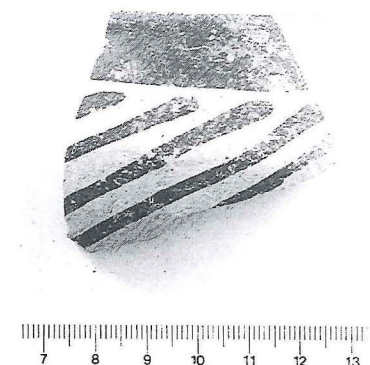


Fig. 41. Rim sherd from a small open vessel 91.265.2.

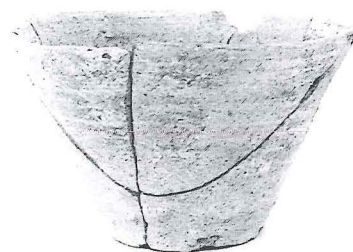


Fig. 42. Handleless conical cup 91.2024.

<sup>124</sup>Charitonides 1961-1962, 56, fig. 10.

<sup>125</sup>MacGillivray et al. 1992, 140, fig. 17, nos. 4, 6.

<sup>126</sup>Popham 1964, pl. 7c.

<sup>127</sup>Watrous 1992, 31, fig. 24, no. 524.

<sup>128</sup>Popham 1964, 17, fig. 1b, no. 26, pl. 9a.

<sup>129</sup>Alexiou 1972, 89, pl. 40γ, no. 19005.

<sup>130</sup>Platon 1952c, fig. 3, upper row, first from left.

<sup>131</sup>Bosanquet & Dawkins 1923, 86, fig. 69.1.

<sup>132</sup>Laviosa 1970, 116, pls. Θh, Zf.



since the second cup from Petras, 91.2024 (Fig. 42), has a parallel from the same source.<sup>133</sup> Further comparanda may be sought at Sellopoulo<sup>134</sup> and Palaikastro,<sup>135</sup> both IIIA:2 to IIIB in date.

### LM III Petras in the wider context

Within the framework created for the present symposium, the Late Minoan III period at Petras may appear as a minor event on an island-wide scale. The material is limited in quantity, fragmentarily preserved, of lesser quality when compared to the production of the major centres, and it is mainly imported. As an assemblage, it may not attract the extended attention of scholars for its own sake. Yet LM III Petras is part of an overall image, that of a region having seen halcyon days in the preceding periods, and as such provides data for our understanding of Postpalatial Eastern Crete. In particular, it emphasises the radical changes to the administrative structure after the LM IB destruction of the palatial centres, and, as a consequence, to the economic system.

The wider view will comprise a concise recapitulation of the LM III evidential situation in the Siteia region, beginning at the coast and moving up the Stomion (or Pandelis) River, followed by a briefer discussion of the period as it is known to date in Eastern Crete.<sup>136</sup> The picture thus gained will exhibit many imperfections. The state of research prohibits any advanced degree of synthesis, the most serious obstacle being the complete absence of systematic excavations in settlements solely of LM III date. Moreover, wherever excavation, of whatever nature, has taken place, the results have not been published in a final form, and preliminary reports, where extant, frequently provide but meagre information. In addition, the wide-scale looting and/or destruction of archaeological sites, either periodically by grave robbers, or by developers to remove ancient remains threatening modern construction, has seriously hindered the study of the area in antiquity. This activity has caused, and still causes, irreparable loss of evidence, through outright destruction, incorporation of unprovenanced material into local private collections, and illegal exportation. Entire sites have been obliterated, such as the important cemeteries at Agios Georgios (Tourtouloi) and Pharmakokephalo-Sklavoi.

#### **The town of Siteia and Petras; Hagia Photia and Roussa Ekklesia**

What today is the Siteia plain, in the Neopalatial period, formed a bay of the sea, a situation which probably continued into Postpalatial times. Research on the north shore of the bay, that is, in the township of Siteia,

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<sup>133</sup>Laviosa 1970, pl. Zc.

<sup>134</sup>Popham et al. 1974, fig. 9, no. 10.

<sup>135</sup>MacGillivray et al. 1992, fig. 22, no. 2.

<sup>136</sup>Progress from the coast up the river may be followed on the plan given in Tsipopoulou 1995, fig. 115.

has been sporadic, but it is probable that a settlement is to be sought under the modern town, given the series of LM IIIA and B tombs containing larnakes, uncovered during building activities and frequently destroyed before archaeological intervention could take place.<sup>137</sup>

A review of the evidence would thus be restricted to a staccato enumeration of finds, reduced here to the more interesting instances. Unusual is the tomb found during construction of the road near the hospital, containing a tub-shaped larnax inverted over a skeleton in contracted position on the floor. A stirrup jar and a triton shell constituted the grave goods.<sup>138</sup> Chamber tombs were dug near the Itanion cinema, one of them producing a tub-shaped larnax decorated with spirals.<sup>139</sup>

A short distance outside Siteia, at Xerokamara, a IIIB tomb was discovered and destroyed. Some vases and two larnakes were preserved. The tub-shaped larnax is decorated with octopi, and probably to be assigned to the Petras-Akhladia workshop.<sup>140</sup>

The main LM III presence is centred on Petras, which, in the period, consists of four distinct loci of different size and nature. On the plateau of Hill I the two buildings referred to above attest to a partial reoccupation of the palatial site in LM IIIA and B. No IIIC has appeared in the context of these houses, but scattered sherds have been noted in unstratified deposits. A more extensive settlement was founded in IIIA on the summit and west slope of Hill II, looking towards Hill I and the harbour between them. A LM IIIA seal was collected during the intensive survey of 1986.<sup>141</sup> Traces of LM III occupation were located on Hill IV during the 1990 fieldwork. LM IIIB larnakes, both tub- and chest-shaped, have been reported on various occasions since the beginning of the century from the wider area of Petras – whether from a single cemetery or several cannot be determined. Sporadic vases reputed to have been uncovered with larnakes, or single finds, date to the IIIA and B phases.<sup>142</sup> One merits special attention: among the Early Minoan vases in the Agios Nikolaos Museum is exhibited a handmade miniature jug decorated with groups of vertical lines. Closer observation by Lucia Vagnetti has identified it as Mycenaean.<sup>143</sup> Three larnakes, one chest, two baths, which appeared on the art market and now in Geneva and Zurich, can be assigned to the Petras-Akhladia workshop. Their provenance was probably these tombs in the Petras area.<sup>144</sup>

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<sup>137</sup>Platon 1953b, 485; 1958, 482.

<sup>138</sup>Platon 1957a, 340.

<sup>139</sup>Kanta 1980, 177.

<sup>140</sup>Kanta 1980, 198; cf. Tsipopoulou & Vagnetti 1995b for the workshop; for a more extensive treatment including the present larnax see Tsipopoulou & Vagnetti 1996.

<sup>141</sup>Tsipopoulou 1990, 319–321.

<sup>142</sup>Mavroidis 1936; Platon 1959a, 390; 1959b, 217–218.

<sup>143</sup>Cf. Mountjoy 1986, 126, fig. 153.1 for a very similar hydria from Tiryns. See appendix below.

<sup>144</sup>Mottier 1982; Sguaitamatti 1986; Tsipopoulou & Vagnetti 1995b.

The 1985 Hagia Photia survey located two LM IIIB and C sites, probably isolated farm-houses. One was situated on the plain, the other on the hill above the modern village.<sup>145</sup> A third location, probably a settlement, was discovered at Lagoudopatima, among the low hills between Hagia Photia and Roussa Ekklesia, and now a designated archaeological site. A tub-shaped larnax in the Agios Nikolaos Museum is said to come from Hagia Photia.<sup>146</sup>

### **The Siteia-Piskokephalo plain**

The 1990 Petras survey revealed the presence of habitation remains on the Anemomylia hill. At the base of the hill, chamber tombs, partially destroyed by cultivation or road construction, have been reported on various occasions.<sup>147</sup> A further settlement was located at Kato Episkopi-Agios Georgios.<sup>148</sup> At the site of Berati a burial cave was excavated, and although dating chiefly to the Protogeometric and Geometric periods, it was found also to contain a LM IIIC chest-shaped larnax decorated with spirals and wavy lines. The original inhumation had been placed outside the larnax to make room for a new occupant. Moreover, a large IIIC cylindrical pithos, and a spouted pithos, Minoan but not more exactly dated in the report, were also used for burial.<sup>149</sup>

At Kato Episkopi-Hellenika a small excavation was undertaken in an area where larnakes had previously been found, uncovering a looted tomb containing fragments of two larnakes, one chest-, the other tub-shaped, as well as a bronze mirror.<sup>150</sup> A chamber tomb was destroyed during mechanical cultivation at Piskokephalo-Khalepa.<sup>151</sup> Finally, a LM IIIA:2 stirrup jar from Piskokephalo in the Herakleion Museum is worthy of mention for the precision of its dating.<sup>152</sup>

### **Akhladia and Kimouriotis**

The Akhladia area receives extensive treatment elsewhere, making no more than a summary imperative here. The LM III evidence comprises four elements: the tholos tomb, a possible settlement, a potter's kiln attributed, on admittedly uncertain grounds and now lost, to the period, and a IIIB stirrup jar from an unspecified source in the area.<sup>153</sup> The tholos tomb, excavated in three campaigns over more than half a century, was construc-

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<sup>145</sup>Tsipopoulou 1989.

<sup>146</sup>Davaras 1979, 410; it may be assigned to the Petras-Akhladia workshop, cf. the study referred to above.

<sup>147</sup>Davaras 1972, 650.

<sup>148</sup>Davaras 1972, 646-648.

<sup>149</sup>Platon 1952b, 476.

<sup>150</sup>Platon 1952b, 476-477.

<sup>151</sup>Fragments of a chest-shaped larnax and IIIB sherds were collected. Siteia Museum, unpublished.

<sup>152</sup>Kanta 1980, 177.

<sup>153</sup>Siteia Museum cat.no. 77.



ted in LM IIIA:1, and remained in use until IIIB. It had been opened in Late Geometric times, as the deposition of two vases attests, and partially looted – as the absence of precious finds would indicate.<sup>154</sup> The recent study for publication of this structure uncovered a pit in the floor of the chamber, containing remains of a 45 to 60 years old woman. Presumably the first occupant of the tomb, she survived to a very advanced age for the period, despite having endured serious stress during her earlier childhood, possibly caused, as suggested in the osteological report, by malnutrition.<sup>155</sup>

A LM IIIB tomb at Kimouriotis near Chamaizi is worthy of mention since it contained two larnakes, one tub-, the other chest-shaped; the latter, decorated with double axes between horns of consecrations, can be recognized as a product of the Petras-Akhladia workshop.<sup>156</sup>

### **Stavromenos and Sphakia**

The area between and around Stavromenos and Sphakia is known from four loci, the chief being the Sphakia-Kastri “Sub-Minoan” acropolis with remains of fortification walls and buildings visible on the surface, and fragments of pithoi scattered on the slopes of the hill. It is dated to the end of the LM III period but has not been investigated.<sup>157</sup>

Earlier LM III phases are known through fragments of IIIB larnakes from destroyed tombs at Sphakia-Stavros,<sup>158</sup> by the small circular tholos tomb with a short dromos at Sphakia-Patela, containing larnakes, a few small vases, a bronze knife, and a seal with a goddess between antithetic griffins,<sup>159</sup> as well as a stirrup jar from Sphakia-Kouri.<sup>160</sup>

### **Maronia and Agios Georgios**

The area is known chiefly from looted graves. At Agios Georgios-Volakas a cemetery of nine small, irregular chamber tombs was severely despoiled by illegal activities. Two larnakes and 15 vases were confiscated, and various small finds and some vases uncovered during cleaning and documentation.<sup>161</sup> A LM III chamber tomb suffered a similar fate at Agios Georgios-Ammoudoplaka.<sup>162</sup>

To the south-east of Agios Georgios, on the Profitis Ilias hill, a Neopalatial building complex termed “villa” by the excavator also produced some LM III sherds, probably indicating a limited reoccupation.<sup>163</sup>

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<sup>154</sup>Vagnetti & Tsipopoulou 1995b.

<sup>155</sup>Liston 1995.

<sup>156</sup>Davaras 1979, 410; Tsipopoulou & Vagnetti 1995b.

<sup>157</sup>Platon 1956, 413.

<sup>158</sup>Davaras 1978, 393.

<sup>159</sup>Platon 1955, 563.

<sup>160</sup>Alexiou 1963a, 386; Kanta 1980, 187.

<sup>161</sup>Sakellarakis 1966, 414-416.

<sup>162</sup>Kanta 1980, 179.

<sup>163</sup>Kanta 1980, fig. 66 nos. 3-4, 8.

A stirrup jar and two conical cups have been found at Agios Georgios-Agios Antonios.<sup>164</sup> In addition, a small bronze dagger and a fragment of a larnax have been handed in, the provenance given as being Agios Georgios.<sup>165</sup> Further larnakes, tub-shaped, and various finds, including two finger rings have been collected in the area.<sup>166</sup>

A LM III settlement has been located west of the road to Maronia, and some sherds collected.<sup>167</sup>

### **Praisos**

The Praisos region forms the southern limit of the Siteia Bay area and the gateway to the south coast of Crete. Its importance is manifest throughout antiquity, not the least in the LM III period. The evidence is primarily funerary, but a number of uninvestigated settlements have been noted.

Near the acropolis there is a "Sub-Minoan" homestead,<sup>168</sup> and a further late presence is attested to on the hill of Potistiria (between Nea Praisos and Katelionas), where a "Sub-Minoan" settlement with a retaining wall preserved to a length of 60 m is situated. On the Stavromenos hill, south of Potistiria, there is a small acropolis with many walls visible and numerous LM III surface sherds. On Plakalonia hill there are extensive LM III, "Sub-Minoan", and Protogeometric remains belonging to a probable "refuge settlement". Finally, in the mountainous area opposite Kalamafki there is a IIIC acropolis, where exposed pithoi were noted when the location was first visited.<sup>169</sup> A bronze sickle, and a Karphi-Gazi type figurine, destroyed by the finder, are presumably from the same site.<sup>170</sup>

Praisos is primarily known for a number of tholos tombs at and around the Postpalatial site. Tholos A produced only a few LM III sherds, inducing the excavator to suggest that the structure, which contained Early Orientalizing material, had been cleaned and reused at the later date.<sup>171</sup> Tholos D, which has an almost horseshoe-shaped chamber, is the probable source of the LM IIIA seal embedded in a mudbrick from an adjoining Hellenistic building.<sup>172</sup>

The rectangular-chambered Tholos B, at Praisos-Arfanoperivolia, produced significant finds, a IIIA:2 chest-shaped larnax with running spirals and rosettes, a IIIB tub-shaped larnax with octopus tentacles, as well as a

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<sup>164</sup>Alexiou 1963a, 386.

<sup>165</sup>Platon 1954, 516; Alexiou 1963a, 386.

<sup>166</sup>Platon 1965, 283.

<sup>167</sup>Davaras 1972, 646-648.

<sup>168</sup>Kanta 1980, 182.

<sup>169</sup>Faure 1962, 36-41.

<sup>170</sup>Platon 1952b, 481.

<sup>171</sup>Bosanquet 1901-1902a, 240-245.

<sup>172</sup>Bosanquet 1901-1902a, 251-254.

gold ring, and other jewellery.<sup>173</sup> The rectangular chamber also appears in Tholos E, at Praisos-Riza, but no finds have been cited as found within the structure.<sup>174</sup>

A rare unlooted tholos was excavated at Praisos-Photoula. The tomb, dated to the IIIC phase, has a rectangular low chamber and an unlined dromos. It held two burials, one in a tub-shaped larnax containing a cylindrical urn with burnt bones, gold jewellery, a large finger ring with granulation, a gold sheet with argonauts, a gold nail, an ivory fan handle with four gold rivets, a bronze spearhead, a bronze fibula, as well as a juglet, and two stirrup jars. The cylindrical wooden pail clad in bronze sheathing constitutes an unusual find. The second burial lay on the floor, accompanied by two stirrup jars.<sup>175</sup>

A series of tombs are known from the general area of Praisos, frequently through investigations subsequent to looting and destruction. From Praisos-Sto Mavriki larnax fragments were collected and further destroyed larnakes noted.<sup>176</sup> Similarly, fragments of larnakes, and vases – including three early IIIC stirrup jars – were collected from rock-cut chamber tombs at Praisos-Tzani Metochi.<sup>177</sup> At Praisos-Kapsalos parts of the contents were collected from a chamber tomb with small dromos, being a chest-shaped larnax and IIIB vases.<sup>178</sup> A further tomb, having a rectangular chamber,<sup>179</sup> was found to have been looted, some sherds and fragments of a chest-shaped larnax remaining. Traces of more tombs were noted in the area. LM IIIA to C vases and a larnax fragment, which had been handed in some time earlier, probably originated from these tombs. Two stirrup jars, one IIIA in date and from the Palaikastro workshop, the other a LH IIIB Mycenaean import, are of particular interest in the present context. The IIIC material from the same group is early, and attests to connections with Palaikastro-Kastri, as does a larnax fragment of Palaikastro clay, dated IIIB or C.<sup>180</sup>

At Praisos-Agios Constantinos two LM III tombs were looted, and further tombs noted but not excavated.<sup>181</sup> Scattered fragments of LM III larnakes, a stirrup jar, and a bronze knife were recovered from Agios Spyridon-Agios Nikolaos. Subsequent excavation uncovered several LM III tombs, the only published chronological reference point being a IIIC stirrup jar.<sup>182</sup> The Protogeometric to Early Orientalising burial cave at Agios

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<sup>173</sup>Bosanquet 1901-1902a, 245-248.

<sup>174</sup>Bosanquet 1901-1902a, 254.

<sup>175</sup>Platon & Davaras 1960, 514-515.

<sup>176</sup>Bosanquet 1901-1902a, 237-238.

<sup>177</sup>Platon 1960, 302, Kanta 1980, 181.

<sup>178</sup>Kanta 1980, 179-180.

<sup>179</sup>Whether tholos or chamber tomb is not clear from publication, Platon 1960.

<sup>180</sup>Kanta 1980, 179-180.

<sup>181</sup>Bosanquet 1901-1902a, 254.

<sup>182</sup>Platon 1950, 529, 534-535; 1951, 445.



Spyridon-Kalathiana (or Petrota) yielded, from a corner of the cave, seven LM IIIA:2 vases, but it is not known whether the site had a funerary use in this period.<sup>183</sup> The cave at Skales has produced LM IIIB sherds.<sup>184</sup>

### **Sklavoi**

Sklavoi-Pharmakokephalo is known from the extensive, and thoroughly looted, LM III cemetery of rock-cut chamber tombs, of which only two were properly excavated. Among the finds may be noted bronze finger rings, a bronze knife, a seal, and beads. The chief vase shape is the IIIA piriform jar, three being placed in each of the two excavated tombs. A further 28 such vases, products of a single workshop, were confiscated in 1966, along with 14 bronze objects and other vases, permitting the assignment of analogous jars in Greek private collections to this cemetery.<sup>185</sup> The complete absence of larnakes is highly unusual, and may be due to a direct Mycenaean influence, at least one of the piriform jars being a mainland import.<sup>186</sup> The small LM IIIA piriform jar in grey wheel-made ware, published by Lucia Vagnetti and the author<sup>187</sup> from Pharmakokephalo points in the same direction, particularly given the extreme rarity of this class of pottery in Eastern Crete.

## **The LM III period in the Siteia Bay area**

The image projected by the LM III data of the Siteia Bay area may be summarized along the following lines.

The state of research prohibits extensive analyses for the region, but the distribution of reported finds indicates certain patterns here deemed more than fortuitous. Although the destruction of the Neopalatial palace of Petras removed a major centre from the map, the hills upon which had spread the township continued, it would seem, to support a local human presence of some consequence. A second such nucleus is to be situated at Praisos, where the concentration of tombs suggests the existence of more than one settlement.<sup>188</sup> Although the Postpalatial settlement at Akhladia remains unconfirmed, the tholos tomb, one of two Mycenaean tholoi in Crete (the second being that of Archanes), indisputably confers upon the site a definite significance – particularly in the current state of our knowledge. Whether a third centre, however the term should be defined in the LM III period, should be located here must remain open. It is, however,

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<sup>183</sup>Tsipopoulou 1983.

<sup>184</sup>Bosanquet 1901–1902a, 235, Papadakis & Rutkowski 1986.

<sup>185</sup>Alexiou & Davaras 1964, 442–443; Kanta 1980, 183–184, figs. 74–76 in the Metaxas Collection; Tsipopoulou 1987, 293–295, fig. 4: °28, 31, pls. IV.5, V.4 in the Mitsotakis Collection; Marangou 1985, 35–38, cat.nos. 12–17 in the Goulandris Collection.

<sup>186</sup>Sakellarakis 1966, 419.

<sup>187</sup>Tsipopoulou & Vagnetti 1994.

<sup>188</sup>Kanta 1980, 182.

significant that the building of the tholos took place in LM IIIA:1, at a time when the evidence from the Neopalatial central place at Petras is restricted to a few sherds.

Topography and modern patterns of settlement have played an important role in the placing of dots on the distribution map. Most of the tombs and settlements enumerated above have come to light through construction, particularly along the axis formed by the river and the Siteia-Ierapetra road. The widening and paving of the road itself in the early 1950's had a significant impact in terms of reported finds, and of subsequent excavations.

Thus far the distribution in space. When time is factored in, a more subtle picture can be sketched. It is notable that whereas only a relatively short hiatus is evident at Petras, the reoccupation taking place chiefly in LM IIIA:2-B (on a different orientation to the palatial building), Praisos enters primarily in IIIB – although IIIA appears in graves. In this latter period, Petras is less well represented since floors are lacking in the small areas with Postpalatial remains. Lest the suggestion be made too quickly that the IIIB of Praisos could indicate a movement towards the southern part of the region discussed here, the puzzling IIIA cemetery at Pharmakokephalo should be recalled. Generally, in terms of chronology, the picture remains unfocused. Scattered finds from looted tombs which cannot be assigned to settlements do not contribute to a more detailed reconstruction.

On the basis of the available material, it is difficult to fashion a historical account. Nonetheless, work at Petras, Akhladia, and generally in graves throughout the area, when preliminary reports exist, indicate that a major change took place at an advanced stage of the LM IIIB period. Sites are abandoned; new ones, occupied into the IIIC phase and beyond, appear. The graves exhibit discontinuity, thus suggesting a significant rupture in human presence.

A final point to be made at the level of the Siteia Bay area concerns pottery production. It should be kept in mind that no efforts have been made to analyse petrographically the wares found in the area. Furthermore, the only known potter's kiln is that of Akhladia, whose date remains uncertain.<sup>189</sup> Identification of wares is made by macroscopic inspection, either comparing clays or decorative styles. Workshop assignments should, then, be treated with circumspection. Whenever observations concerning such matters have been published, a major role of pottery "made in Palaikastro" is evident.

## The LM III period in Eastern Crete

The wider East Cretan context offers much the same picture, but with some significant variations. Discontinuity after the LM IB destructions is general, with the sole exception of Palaikastro. Reoccupation occurs at all the other key Neopalatial sites, governed by unknown factors strong

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<sup>189</sup>Platon 1952a, 646; 1952b, 476.



enough to cause some settlements to re-emerge at an earlier, IIIA:1 in the Mokhlos-Myrsini-Tourloti area, or later stage, at the beginning of IIIA:2 at Petras and Zakros, the situation at Diaskari being unknown.<sup>190</sup> In all instances, the Postpalatial presence is less extensive. In addition, the Neopalatial buildings may be abandoned, and new ones are constructed in the vicinity, as is the case at Zakros, where the community moves to Agios Antonios.<sup>191</sup> At Palaikastro and Petras an additional settlement is founded, at Kouremenos<sup>192</sup> and on Hill II, respectively.<sup>193</sup> The central Neopalatial site appears to break up, scattering the inhabitants into peripheral clusters. A similar phenomenon can be observed in the distribution of tombs: the concentration of graves in the one and the same place is restricted – isolated, or in twos and threes. Even though Palaikastro and Petras suggest comparable settlement patterns, the scale is different: the former constitutes the largest LM III township in Eastern Crete, the latter a modest – and to date mostly unexcavated – presence.

A vital distinction between Petras and Palaikastro is evident in the production of pottery. At Petras there is no evidence for local production of fine wares. The existence in the area of a workshop producing larnakes argues – along with practical considerations concerning transport – for regional manufacture of storage vessels and kitchen wares. However, it must be noted that the very characteristic yellowish clay employed in the Neopalatial period for both fine and coarse wares is not present in LM III ceramic assemblages at the site. This could indicate that the source had been exhausted. Other fabrics, less typical, may have continued. Palaikastro, on the other hand, is the chief producer of fine wares in Eastern Crete in the Postpalatial period, exporting to the entire area, as well as to the Dodecanese.

A major human presence is evident in the Mokhlos-Myrsini-Tourloti area, where large cemeteries are known from the mainland opposite Mokhlos, at Myrsini-Asprospilia,<sup>194</sup> and Tourloti-Plakalona.<sup>195</sup> The settlements to which these cemeteries are to be attached are as yet unstudied, although some have been located. There is reason to believe that a second pottery production centre was operating in the region. Topographical factors appear to have played a role: a series of mountains creates a defined unit, and an access to a good harbour provided a gateway to the wider context.

## From LM IB to LM III and beyond

Towards an understanding of the LM III period in Eastern Crete, and particularly in the Siteia Bay area, three factors merit special attention: the im-

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<sup>190</sup>Tsipopoulou 1995.

<sup>191</sup>Hogarth 1900-1901.

<sup>192</sup>Dawkins & Tod 1902-1903.

<sup>193</sup>Tsipopoulou 1990.

<sup>194</sup>Platon 1959a, 372-373; Kanta 1980, 163-172.

<sup>195</sup>Platon 1959a, 388-389; Davaras n.d., pl. 71; Kanta 1980, 173.



pect of the destruction of the palatial centres at the end of LM IB, the rearrangements evident in the settlement patterns, and the extent of the Mycenaean presence. They require a more detailed treatment than possible here, but given that elements relative to all three are present in the archaeological evidence of the Siteia Bay area, a summary treatment will at least serve to open a discussion, which – although restricted in scope to a small geographical region – has a relevance to the Cretan situation in general.

The violent destruction of the palatial centres – the present study-case being Petras – which served as nuclei for the redistributive economy characterizing Neopalatial Crete,<sup>196</sup> entailed a substantial rupture in the daily existence. It may be hypothesised, in the absence of excavation data, that some highly specialized production – and therefore highly dependent – sites ceased to exist shortly after the enormity of the catastrophe became apparent. Other sites within the hierarchy may, on the contrary, have felt but fainter vibrations, being less tightly attached to the nucleus in terms of subsistence.

The central site itself suffered an abrupt loss of significance: the workings of the Neopalatial administrative system came to a sudden halt, goods no longer flowed into the now ruined storage areas, and, on the lower levels in the hierarchy, attention turned from surplus production to survival. The Postpalatial presence on the plateau itself at Petras is limited; at Zakros, the remains are even more restricted.<sup>197</sup> The LM IB destructions had an immediate decentralising effect.

The full impact of these events can only be imagined since demographic data are almost wholly absent. At Petras, the inhabitants were not surprised in their sleep, as it were, for the site attests to their efforts to increase storage. The monumental staircase, probably severely damaged in an earthquake in the LM IA phase, was closed off, and another room added to the North-Eastern Magazines. Pithoi were placed in the down-scaled central court. Several rooms, or spaces, in the ground floor were devoted to storage (whether they were thus employed in LM IA cannot be determined). This suggests that the economic climate had begun to deteriorate well before the end. When the destruction came, the inhabitants had time to leave with most of their belongings.

On the basis of the above reconstruction, a substantial food shortage may be postulated, not associated with wide scale ravaging of fields and orchards, but with the cessation of its redistributive activity by the central place. Large amounts of food stuffs were destroyed at Petras itself, depriving the palace and the township of its daily bread. Settlements highly dependent in terms of their nourishment had to scramble to feed their people. Although food surely existed, since the LM IB destructions did not attain biblical proportions, it may not have been where it was needed, and the system to distribute it no longer existed. Added to these woes, a serious refugee problem must have resulted from the end of Petras.

A first, although uncertain, glimpse at the difficult conditions which

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<sup>196</sup>Tsipopoulou & Papacostopoulou 1992.

<sup>197</sup>Platon 1976, 432.

prevailed after the destruction may be offered by the osteological analysis of the bones found in the pit in the floor of the Akhladia tholos. The extreme stress suffered by the woman in her childhood may have been caused by malnutrition. Her age, and the date of the tholos, projects her birth backwards into the Neopalatial period, suggesting that she witnessed the destruction and suffered the resulting hardship. Her burial in the tholos indicates that she belonged to the élite, being, perhaps, a member of the ruling families at Petras. Her elevated status would have cushioned the impact of the devastation – as may be argued from the fact that there is no cultural discontinuity between LM I and LM(II/)/III – whereas it may have been all the more brutal for the lower classes. Of this, the evidence does not speak.

The short term impact on the dependent sites within the now headless and unadministrated region of the old centralized economic system can only be reconstructed through the use of models. The effect over the longer duration is evident in the distribution of sites – with the usual caveat that little has been excavated. A test case is offered by Akhladia. An important – but to date unknown – settlement, indicating a local population increase, may be associated with the tholos tomb. The latter's immediate contiguity to the small LM I rural settlement excavated by the Greek-Italian expedition<sup>198</sup> speaks for the arrival of new settlers, unconnected with the previous inhabitants. Whereas the origin of the builders cannot be ascertained due to the direct contrast to the monumentality of the funerary architecture in which stand the extant offerings (and keeping in mind that the tomb was opened in the Iron Age), it may be argued that the settlement history of the Akhladia area mirrors developments elsewhere. Previous inhabitants moved in the first, most difficult years, and were later replaced by others, perhaps refugees from other areas, or newcomers from outside Crete moving into a vacuum.

This argument, if it does not manipulate the evidence too much, would then allow us to postulate different rates of recovery in LM III. As testing this hypothesis involves finely tuned local ceramic chronologies, it can only be undertaken when several sites of the period have been excavated and properly published. It would be interesting to know, for instance, whether successive layers of settlement took place up the valley to Praisos. As was noted above, the available – and in many respects leaving much to be desired – data are restricted to tombs, structures having a longer life than floors in a habitation site and thus less indicative of change over shorter time spans. It is clear, even from sporadic investigations, that old sites were abandoned when no longer viable, and new sites established – here the funerary bias is helpful as it is surely axiomatic that a tomb is always associated with a site, even when the latter remains invisible.

The variations manifest in the settlement pattern are hardly random, and would thus illustrate both a shifting economic base, as well as a general – and temporally fluctuating – insecurity compelling a movement away from the sea. The creation of surplus to support an administrative

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<sup>198</sup>Tsipopoulou & Vagnetti 1995, 17-24.



system being a thing of the past, a more regionalized economy resulted, directed by different needs, and towards other centres. When the influences from outside Crete, as attested for the Siteia Bay area by the Akhladia tholos, are factored into the reconstruction, a complex equation, resulting from readings of the past as it is written in the evidence, and considerations of the invisible imponderables, slowly emerges.

For Eastern Crete, it amounts to different degrees of rupture with the past. Key sites such as Petras and Zakros, equals in the Neopalatial hierarchy by virtue of their function as local administrative centres, decline, while previously subordinate settlements such as Akhladia and Palaikastro emerge. The latter is a good illustration for the reshuffling of the cards in the Postpalatial period: then, an important site under Zakrian rule, now, the most important settlement in Eastern Crete, the source of much of the decorated pottery in the Siteia Bay area, if the Petras evidence (probably some 85% of the painted fine wares), coupled to restricted observations concerning the inland sites, may be extrapolated upon pending more detailed investigations. Akhladia tells a similar story: the seat of two separate settlements, one with a so-called “villa” (according to the excavator) in LM I, it becomes that of a tholos – and, by extension, that of a local pontiff.<sup>199</sup>

There are many aspects which still require treatment, such as the unknown cause of the fires which destroyed various sites in LM IIIB, the renewed population movements in the IIIC phase, much discussed at the present symposium, the local instances of continuity and discontinuity into subsequent phases as illustrated by the pottery. The discussion of the Siteia Bay area must content itself with a brief concluding summary of the LM III evidence.

Two sites indicate that life did not cease in the area following the LM IB economic collapse. The LM IIIA:1 phase is present at Akhladia and at Sklavoi-Pharmakokephalo, the latter being a single-phase cemetery, suggesting a transit station to elsewhere. Nothing argues against a short-term shift of people outside the Siteia Bay area. The phase is also known at Palaikastro, Episkopi, Myrsini, and Tourloti, with two major centres evident, the one at Mokhlos-Tourloti-Myrsini, the other at Palaikastro.

A negative effect ensuing from the destruction of the Mycenaean palace at Knossos during the transition from LM IIIA:1 to IIIA:2 cannot be identified in the East Cretan evidence. The phase saw a population increase, particularly towards the transition to IIIB. Whether it was caused by a higher birth rate, or by new arrivals from outside cannot be determined. The settlement around the old centre at Petras developed, and new sites were founded. A rather high population density is apparent for the wider area of Praisos and the valley of Siteia.

In the LM IIIB period, Siteia continued a quiet existence in relative prosperity, the economic base being almost exclusively agricultural. The settlements are situated inland, on hills near fertile valleys. External relations are evident from numerous vases of Kydonian manufacture in tombs,

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<sup>199</sup>Platon 1959b.



brought into the area through a few coastal sites still occupied. Although far from the major centres of Knossos and Kydonia, the eastern part of the island was not a cultural backwater, the concept of the "Eteocretan" "wild country east of Dikte" therefore required substantial revision.<sup>200</sup>

A noticeable change takes place in the final phase of LM IIIB. Coastal settlements such as Petras – and, more significantly, Palaikastro – were abandoned. Changing conditions had rendered navigation unsafe, and the inhabitants sought the heights, a situation mirrored by the cemeteries.

This radical redistribution of sites continues into early LM IIIC. Settlements are – with some exceptions which, however, do not suffice to alter the general picture – moved to higher locations. A series of defensible hill top sites suggest a menace from the sea, although it must be stressed that there is no evidence in Eastern Crete, or elsewhere in the island, for armed invasion. Evolving economic structures should be argued. The change may have been imposed by increased difficulties affecting maritime movement, caused by the decline of the Mycenaean administrative system – thus stressing, once again, the capital role played by centralisation in the Aegean Bronze Age. It may also be surmised that the changes were less extensive in such areas, for instance the upper regions of the Stomion river valley, where geography provided fertile land. Cultivation and animal husbandry replaced trade and maritime transport as an economic base.

A major change took place at the end of the Bronze Age: in the Siteia Bay area not a single site exhibits proof of continuity between the LM IIIC and Protogeometric periods. Again, the mechanics of change cannot be established, but it is highly unlikely that the stratigraphical rupture in the sequence at individual settlements amounts to a wholesale replacement of the population by elements moving into the area from elsewhere. There was abandonment of the old, and creation of something new, probably by the same population groups induced to do so by interregionally active factors. Foreigners may well have entered, carrying with them new ideas; there may have been violence and the removal of ruling families, but, as so often in history, the substance of human presence in a region shows a basic continuity – as illustrated by pottery production.

## Postscript

The above contribution was authored during the 1994 Petras season. During the process of writing, the situation regarding the LM III period at the site was changing in terms of number of finds, although the material was largely unstratified. However, it did not alter general conclusions, such as the provenance of the fine wares and the dribble decorated vessels being Palaikastrian. A rectangular cutting in the bedrock along the eastern flank of the plateau upon which stands the central building produced a large amount of IIIA:2 decorated and undecorated pottery, including a fine imported LH IIIA:2 stirrup jar with Mycenaean flowers (fig. 14k). The cutting itself is dated to the Protopalatial period, suggesting a reuse as

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<sup>200</sup>Bennet 1987.

a dump. In the 1995 season work progressed down to Protopalatial levels. Additional data concerning the LM III occupation at Petras were provided by the 1995 campaign. A new sector was opened to the west of Sector I, which had produced one of the two completely excavated houses of the township. For the first time there are architectural remains in the settlement connected with LM IIIA:2 pottery. This would indicate that the LM III presence was more extensive than originally thought. Once again, the pottery is largely from Palaikastro, the significant exception being numerous fragments of kylikes, usually monochrome or unpainted. Further specification must await completion of the Sector III excavation, and study of the material.

## Appendix

The permanent exhibition in the Agios Nikolaos Museum includes three vessels of LM III date with a recorded provenance as being "Petras, destroyed tombs, 1954". These chance finds were originally deposited in Herakleion, before being transferred to the newly constructed regional museum. In all probability, the entries for HNM 1096, 1097, and 1098 refer to the burials noted by N. Platon in the area of the Papoura Hill. As suggested above, these graves should be associated with the main LM III Petras settlement on Hill II.

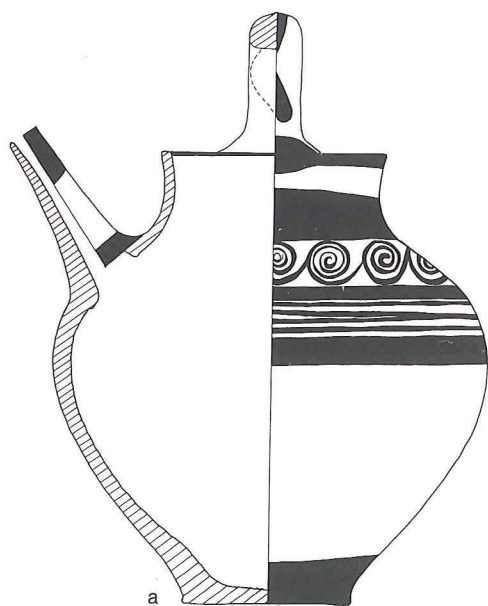
Although outside the nucleus of the present paper, their intrinsic interest, as well as the wider scope adopted in the discussion, justifies their inclusion here in the form of a preliminary presentation. A complete treatment will follow at a later date within the Petras publication.

The three vases, a thelastron (HNM 1096), a beaked jug (HNM 1097), and a juglet (HNM 1098), represent three different pottery traditions: a non-Palaikastrian product (Fig. 43a), the Palaikastro workshop (Fig. 43b), and the handmade miniature strain of mainland Mycenaean manufacture (Fig. 43c).

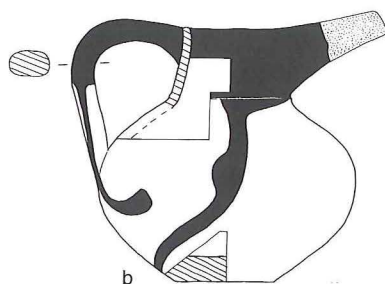
The thelastron is thrown in a fine, greenish-yellow clay with few inclusions, and covered with a white slip, upon which a simple decor of bands in a very dark brown paint is added. The main motif is a running spiral on the shoulder. The absence at Petras of a continuation into Postpalatial times of the local workshops employing the characteristic yellowish clay so dominant among the Neopalatial fabrics argues against seeing a local origin for this vessel. The clay resembles to a certain degree that of the krater fragment 91.144.2 found in the area of the West House, probably a Central Cretan import.

The beaked jug, of fine Palaikastrian clay with a grey core, is covered in reddish-brown to black lustrous paint on the upper third of the surface (neck, spout, and handle), from which run two substantial dribbles. This type of decoration is very common among both open and closed vessels produced by the Palaikastro workshop (see above under amphorae and handleless cups).

The miniature handmade juglet belongs to a class of pottery believed to be produced almost exclusively in the Peloponnese, and found primarily in settlements. The medium fabric and the slip are orange, the paint reddish and lustrous. The decoration consists of a band at the junction of neck and body, from which descend vertical strokes.<sup>201</sup> The thelastron and the jug can be dated to LM IIIA:2, whereas the juglet, according to the mainland data, belongs to the LH IIIB period.



HNM 1096



HNM 1097



HNM 1098

Fig. 43. *a:* Thelastron HNM 1096; *b:* Jug with horizontal spout HNM 1097; *c:* Handmade miniature Mycenaean juglet HNM 1098.

<sup>201</sup>Identification by Dr L. Vagnetti. On this class, cf. Furumark 1972, 35 fig. 7, 604 FS 126; Mountjoy 1986, 101, 102 fig. 123, 126 and 126 fig. 153.



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# Response and discussion

## **Borgna:**

We can underline once more the different nature of the problems involving sites which can be compared on the basis of certain features, especially those concerning the Palatial and Post-Palatial traditions. In fact, according to the state of research at some sites such as Kommos, Arkhanes, Hagia Triada, and Phaistos, we can infer that the occupation was almost continuous through LM II-III A:1, although changes are noticeable in the layout of the inhabited areas and in the settlement patterns. I would like to ask whether it is possible to determine the precise chronological point inside III A for the beginning of the reoccupation at Petras – you spoke of late III A:1 – in order to establish chronological correlations on the basis of the pottery, as a few Petras sherds, mostly juglets, do not seem to exclude, with the events of discontinuity marked in pottery deposits of Central Crete in an early phase of III A:2, for example Phaistos, with the buildings at Khalara, some deposits at Kommos, some buildings at Hagia Triada. These are perhaps related to the early III A:2 destruction at Knossos. On the other hand, most of the decorated pottery published in your paper seems to suggest a more precise relationship with the later III A:2 phase represented at the same sites mentioned, and especially with groups usually defined as III A:2/B. In this context I found the suggestions of a Mycenaean presence in the Siteia area in LM III A to be very interesting and important. When you speak of “Mycenaean presence”, are you referring to some quasi behavioural cultural features such as burial customs? Or to a wider group of material elements, in particular a repertoire of pottery styles which distinguish the regional production from contemporary Cretan ones? Regarding the provenience of Mycenaean influence, mentioned in the conclusions, I ask if you do not think it possible that the patterns of influence in the successive chronological phases may be substantially different also in relation to the different trajectories of interconnection with mainland geographical areas. I am referring in particular to possible new trends in LH IIIB:2, when the peripheral areas of the Mycenaean world show an increase in local production with stronger interregional connections, while Argive production seem to suffer a major crisis and is less widespread throughout the Mediterranean. In this context, the link with the Peloponnese exhibited by some Aegean III A/B workshops – you mentioned the Myrsini one – could be the result of a pattern of connections absolutely different and no longer active in the later period when the presence of Mycenaean influence in pottery production could be explained by the transfer of models or people from different regions in the Mycenaean world, such as Western Peloponnese, on the one hand, or Dodecanese, on the other – the latter being particularly relevant to Palaikastro.

As to the latest occupation of Petras, I would like to know if you think that pottery evidence in LM IIIB:2 does not exist at all, especially concerning the krater which you have compared to the Knossian example attributed to the late phase of IIIB in the reoccupation of the Knossos palace, and the one you consider as announcing the Close Style. Finally, I would add a note about possible pottery relationships between Eastern Crete and the Mesara plain. In the Phaistos evidence I noticed a few sherds characterized by an unusual red or orange-reddish fine clay. Among these I mention in particular a LM IIIC octopus deep bowl in Fringe Style with burnished slip. The association of fabric and decoration could suggest an Eastern Cretan provenience.

## **Tsipopoulou:**

The area of the West House has late IIIB material but it is unstratified due to the presence of a large 12th to 13th Cent. A.D. pit, which also tore out part of the Neopalatial

North Façade. These finds come from an open space to the north of the house, not from floors within the building. This would answer your third point. I believe I showed that the floor deposit was homogenous, and very early in IIIB, or of the phase you call IIIA:2/B. Concerning the Mycenaean influence: I did not claim – nor could anyone argue for it – a real Mycenaean presence. What we traditionally think of Eastern Crete is that the area was isolated from the Mycenaean sphere of influence – “the Wild Country east of Dikte” (Bennet) – and continued a different life with different settlement patterns etc. I tried to argue for the opposite: there were many similarities between this area and other areas of Crete. There was Mycenaean influence, and probably also a Mycenaean presence. The Neopalatial administrative system is replaced by something else. No ordinary person built the Akhladia tholos tomb. The probable first occupant of this tomb was a very old woman who had suffered from very serious stress, possibly malnutrition, in her childhood. Lucia Vagnetti, who studied – on the basis of the documentation kindly provided by Platon – the lost ceramic material from the tholos, placed the construction of the tomb in the LM IIIA:1 phase. If, as we suggest, the woman was born before the LM IB destruction of Petras, she – not I – forms the bridge; not only between two chronological periods, but, most significantly, between two different administrative systems (assuming that her difficult childhood was Cretan), the one that built the palatial building at Petras, the other the tholos tomb. The tomb and the change in the administrative system suggest that there is evidence for a Mycenaean presence both in the Siteia Bay area and the hinterlands. Returning to the pottery and burial customs, the Pharmakokephalo cemetery falls outside of the normal Minoan pattern in LM III due to the absence of larnakes, which, as we know, are rare on the Mycenaean mainland – the exception being Tanagra. The same cemetery has produced the grey wheel-made piriform jar, as well as at least one Mycenaean import. The same may be concluded from one of the tombs of Petras. It is an earlier find. Lucia Vagnetti discovered it accidentally in the Agios Nikolaos Museum. We thought it was Agios Onouphrios Ware. It is in the Early Minoan section of the Museum. Regarding a precision of the IIIA re-habitation at Petras: the main phase is IIIA:2, but, as I noted, there are some sherds from late IIIA:1. What must be underlined concerning the LM III period in Eastern Crete is the extremely poor state of publication. The museum storerooms are bursting with material either from old excavations, or from illicit digging. We are basing our reconstructions on the first publications from Palaikastro and the invaluable survey by Kanta. *The LM III Period in Crete* constitutes our ticket to a symposium such as this. A serious programme of systematic publication is indispensable if we want to advance towards a synthesis.

**E.Hallager:**

There are, in fact, two different parts to your paper. We have heard several papers on Eastern Crete so it would be a very good idea to have, in the final discussion, a session on the special role of Eastern Crete. So I suggest that, at this point, we concentrate on the pottery part of your paper.

**Kanta:**

Concerning the pottery first – about the Mycenaeans I will disagree later. Two minor points about the pottery. First the kraters you showed us from the area of the West House (Fig. 18): these kraters were a bit deceptive because I think that in your drawing the diameter is wrong. The kraters are larger. It was very obvious from the one of which you must have found further sherds after the drawing was completed. That krater is one of these large later kraters. The other one is much wider. The proportions look wrong.



- Tsipopoulou:** It is about 0.30 in diameter.
- Kanta:** I think it should be wider on the basis of the paneled pattern. (Fig.18:91.144.2) You can see the curvature of the wide band. It is very big. This seems to be within IIIC, because it is so big. We do have earlier kraters, but they are not these enormous things. So I wonder whether you do not have later material. I would also like to say something that I think Vlasaki agrees with: the sherd you showed of a pithos with raised rope and incisions – your drawing did not reflect the quality of the sherd – must be IIIC. (Fig. 11)
- Tsipopoulou:** No, it is not. This is the usual LM III East Cretan type of decoration. This sherd comes from the floor. You agree that the floor is much earlier than IIIC. It is late IIIA:2 or early IIIB. Of course, I know that there are similar sherds from Vronda, Kavousi, Khalasmenos, and every site of the IIIC period.
- Coulson:** Concerning the krater, Gesell just pointed out that we have a similar one from Vronda, so it must be late IIIC.
- Tsipopoulou:** If the general consensus wants to place this krater in IIIC, then some activity on the plateau appears to be indicated, although I cannot connect it with architectural remains.
- Vlasaki:** Concerning West Crete, these pithoi are known from Khania, from Gribiliana-Kissamos, from Khamalevri, from Sybritos, but not earlier than the beginning of IIIC.
- Tsipopoulou:** What about IIIB?
- Vlasaki:** Not in IIIB. The relief band (Fig. 11) has not been found earlier than IIIC. Especially the herring-bone. LM III pithoi are mostly decorated with rope pattern and wavy lines.
- Tsipopoulou:** That is not the situation in Eastern Crete. Are there any LM III pithoi from Palaikastro?
- MacGillivray:** I can not state with certainty, but this type of raised band with the hatching on it is something that obviously one instantly identifies with IIIC. We discussed this last year with Krzysztof Nowicki because sherds of these things, fairly large fragments, do come in late levels of IIIB in Eastern Crete.
- Tsipopoulou:** The pithos fragment from the floor goes with the goblet, the cups etc., which are late IIIA:2 or early IIIB.
- Watrous:** I agree with MacGillivray. That sherd does not have to be IIIC. We also found them earlier in our survey.
- Tsipopoulou:** There are no rope decorations at Petras in LM III. Not even of the hasty type. This is a distinction between West and East Crete.
- Vlasaki:** Maybe the skyphos is also IIIC.
- Tsipopoulou:** They do not come from the floor deposit, but from a court outside the building.
- Macdonald:** I want to congratulate you on one thing: nobody until now has given such an enormous



amount of comparanda for their material. But at the same time, I would like to wonder about the value about some of the comparanda which, on the one hand, maybe with material which is not particularly valuable in itself anyway, and, on the other hand, vis-a-vis the pithos sherd – we can make comparanda but we cannot make chronological synchronisms on such material. It is a terrific job you have done, but only some of the comparanda will be the most valuable for the dating. Concerning the octopus kraters (here Fig. 18:91.322.1): these vessels intrigue me because you pointed out the parallel from Milatos. This was one of Furumark's groups for early IIIC, because the tomb has a very good LM IIIC stirrup jar in it. Perhaps it is more than one burial. Can anyone tell me whether this group is of value or not? Generally, how late can these octopus kraters go? They might look IIIB in style, but Furumark was quite convinced that the amphoroid krater did go into IIIC. When did your champagne cups appear – are they from the West House?

**Tsipopoulou:** The complete specimen comes from the floor of the West House, whereas the others are from the general area of the West House.

**Macdonald:** It struck me as being slightly similar to Warren's situation in Trench W, where all the different kinds of bases are flung together.

**Vlasaki:** Is the krater from the floor deposit?

**Tsipopoulou:** No, the floor deposit had only two skoutelia, two cups, one goblet, one pithos in fragments, the larnax fragment, and the lekanis or bowl with horizontal handles.

**Vlasaki:** In my opinion, the kraters are later, IIIC.

**Warren:** Can we perhaps for the moment leave the question of the West House? I really do not think there can be much doubt about the date of the West House, that it is, as Tsipopoulou says, IIIA:2 or IIIB. We have a complete champagne cup from the floor and these pithoi sherds with herring-bone – of course they can be IIIC as well – but I am sure that a IIIB date is not excluded. Much more interesting, I think, is the question which we now are establishing, whether there is any IIIC activity on the Petras site. We left the krater (Fig. 18:91.144.2) rather quickly to get to the pithos, which I think is less interesting. The krater is a fine large decorated vase, which is not a casual sherd on the site. If you have a vase of that size and quality on the site, then something is going on there.

**Tsipopoulou:** Could it not be earlier?

**Warren:** I would not have any hesitation, it would fall among my 30 or 40 decorated IIIC kraters, without any difficulty. The question of IIIC emerged from what Kanta said in support of a late date for it. The suggestion is now that you do actually have some IIIC activity on the site. You do not have architectural remains. But it is not just casual activity. This was a magnificent vase.

**Tsipopoulou:** And it is probably imported.

**Kanta:** We also have the one that Macdonald pointed out. The one with the octopus tentacles, which is also IIIC.

- Macdonald:** No, I was asking if the context of the Milatos krater and several others are really IIIC, as Furumark suggested.
- Tsipopoulou:** There is some IIIC in Milatos.
- Kanta:** I want to pick up another point made by B.Hallager, because it brings us to the IIIB:1/IIIB:2 puzzle again. I would like your opinions on that so that we can establish a few concrete facts. I am referring to the complete cup with the raised handle you showed from the floor (Fig. 29:91.1360). Hallager said that at Khania these are typical IIIB:2. She pointed out that I had it in the Kastelli 66 material – which yesterday she persuaded me was all IIIB:2. She said that this cannot be earlier.
- Tsipopoulou:** But they are complete and from the same floor.
- Kanta:** We need some clarification. What does the panel think on this particular point?
- Warren:** A very brief comment. When I was making my notes on that vase, I noticed that it is extremely close to a small ladle I showed you (Warren in this volume, fig. 22, P 646). The only difference is that ladle has a rather higher handle than this cup 1360. The context of the ladle was IIIB. Rather late in IIIB as indicated by a IIIB/IIIC deep bowl found near it.
- B.Hallager:** An answer to Macdonald. The two amphoroid kraters in Milatos must be IIIB – there could not be any doubt that they were produced in IIIB. Show me just one of these huge IIIB amphoroid kraters from a IIIC context in Crete. They are not there. If you find amphoroid kraters in IIIC contexts, they are much smaller, as in Phaistos, and the ones you find up in Karphi. The size shrinks to something which is very far away from these huge IIIB amphoroid kraters. The main part of the pottery from the Milatos tombs is IIIB, not IIIC.
- Kanta:** What about the cup?
- B.Hallager:** The cup (Fig. 29:91.1360) is typical IIIB:2 in Khania but here they are bigger than this one. In Khania the rim diameter range from about 12-16 cm. This one look like a miniature version of ours. There are strange things in LM III Eastern Crete which we do not have in the western (or central) part of the island as for example the amphorae with dribble decoration. (Fig. 20a-b) They are closer to MacGillivray's material. Something different is going on in LM III East Crete.
- Watrous:** I do not know why that nice krater (Fig. 18:91.144.2) can not be IIIB. In fact, I do not know why everything you have showed us can not be IIIB.
- Coulson:** Concerning the krater: we have one from Vronda, exactly the same, and it is IIIC.
- Tsipopoulou:** This is earlier. I mentioned a twin from Knossos, which we should discuss. LM IIIB, from the Palace.





# Quartier Gamma at Malia Reconsidered

*Alexandre Farnoux*

## Introduction<sup>1</sup>

When studying the LM III period, the re-examination of material discovered during the pioneering days of Minoan archaeology can be both a frustrating and rewarding enterprise. One knows that Late Minoan III pottery was either confused often with the pottery that preceded it, especially that of the Neopalatial period, or that it was neglected because one realised that it dated to a period following the more prestigious phases of Minoan civilisation. This is a problem that is especially acute at sites where archaeological exploration started early in this century. It is also the case at Malia, a site that may well have had a much more important post-palatial occupation than has hitherto been assumed. Recent research and excavations, moreover, have contributed considerably to this knowledge, especially regarding the latest phases of Maliot occupation, during LM IIIA:2-B.<sup>2</sup> Because of these recent excavations, a re-examination of the material kept from the old excavations was undertaken by the author in order to establish whether more hitherto neglected evidence could not be identified, suggesting a more extensive post-palatial occupation of the settlement areas at Malia.<sup>3</sup> Quartier Gamma forms a good example of this research.

Quartier Gamma – now back-filled – is situated to the north-west of the palace, near Quarters Mu and Nu (Fig. 1).<sup>4</sup> It was excavated in 1924–1925 and again in 1931 (Fig. 2) and published in 1953.<sup>5</sup> The date of construction of the complex is debated but must be Middle Minoan.<sup>6</sup> No

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<sup>1</sup>I thank J. Driessen for the translation of my text into English. All photographs accompanying this paper, except for Fig. 9, are by Ph. Collet.

<sup>2</sup>The LM II–III history of Malia forms part of an ongoing research programme that started in 1988; for Quartier Nu, see, most recently, Driessen & Farnoux 1995, 54–64.

<sup>3</sup>Farnoux 1989–90, 25–34 gives a brief review of this research. Likewise, rather abundant traces exist for a LM II–IIIA:1 occupation for Quartier Lambda, for instance, see Farnoux 1991.

<sup>4</sup>On the localisation of this “lost” occupation quarter, see Schmid & Treuil 1978, 836–839 and, for additional examinations, Guest-Papamanoli & Hobbs 1980, 751–755. Only those rooms excavated in 1931 have, however, been indicated on the plan.

<sup>5</sup>Demargne & Gallet de Santerre 1953, 24–39. For a brief review of this quarter, see Effenterre 1980, I, 15–16 and n. 41.

<sup>6</sup>MM I (Demargne & Gallet de Santerre 1953, 26 and 29; Effenterre 1980, I, 39 and 236); MM II (Pelon 1970, 166). J.-Cl. Poursat (1988, 72 and 74) proposes to date a first phase to MM I and a second phase to MM II.

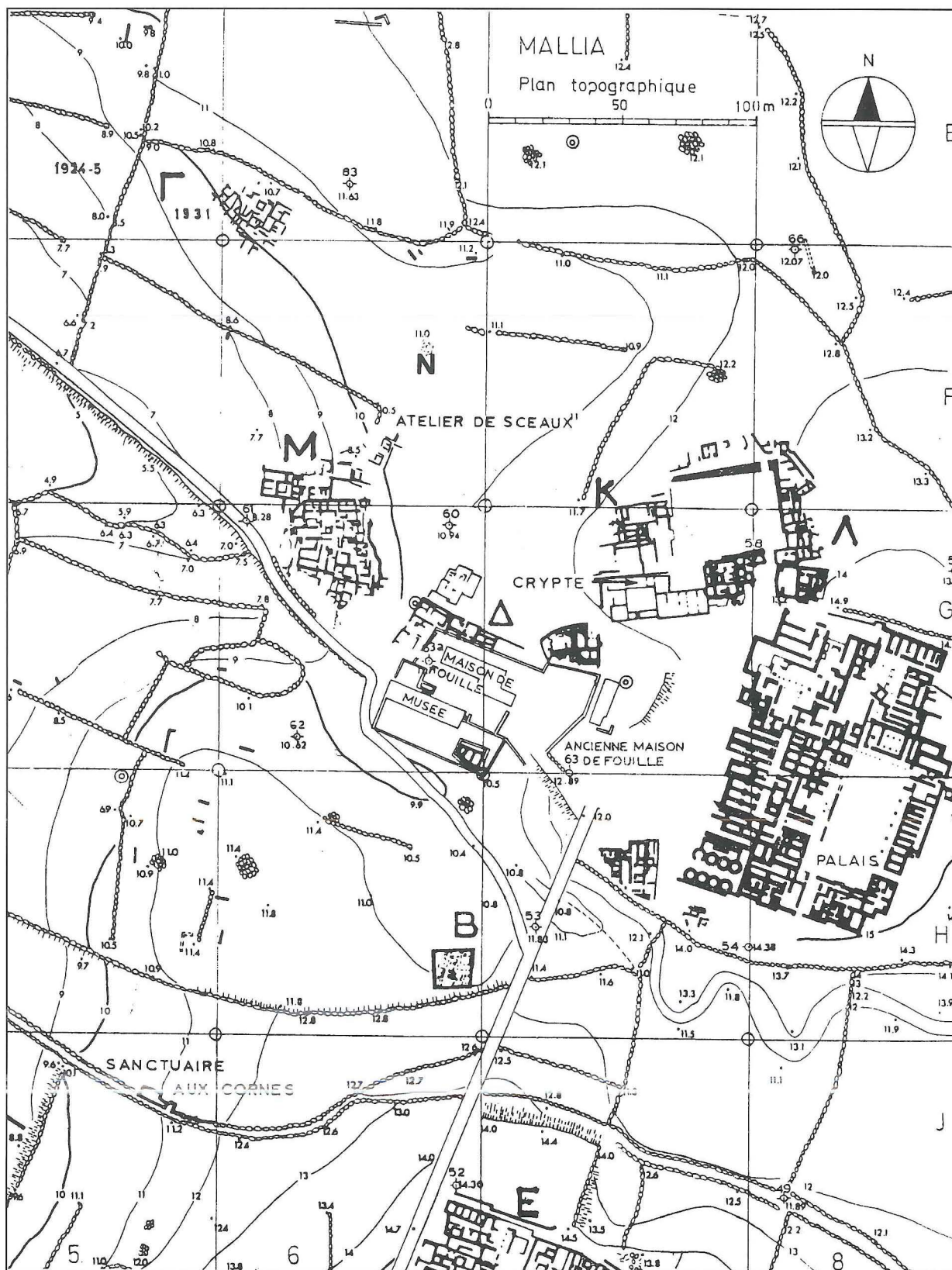


Fig. 1. Topographical plan of Malia with localisation of Quartier Gamma.



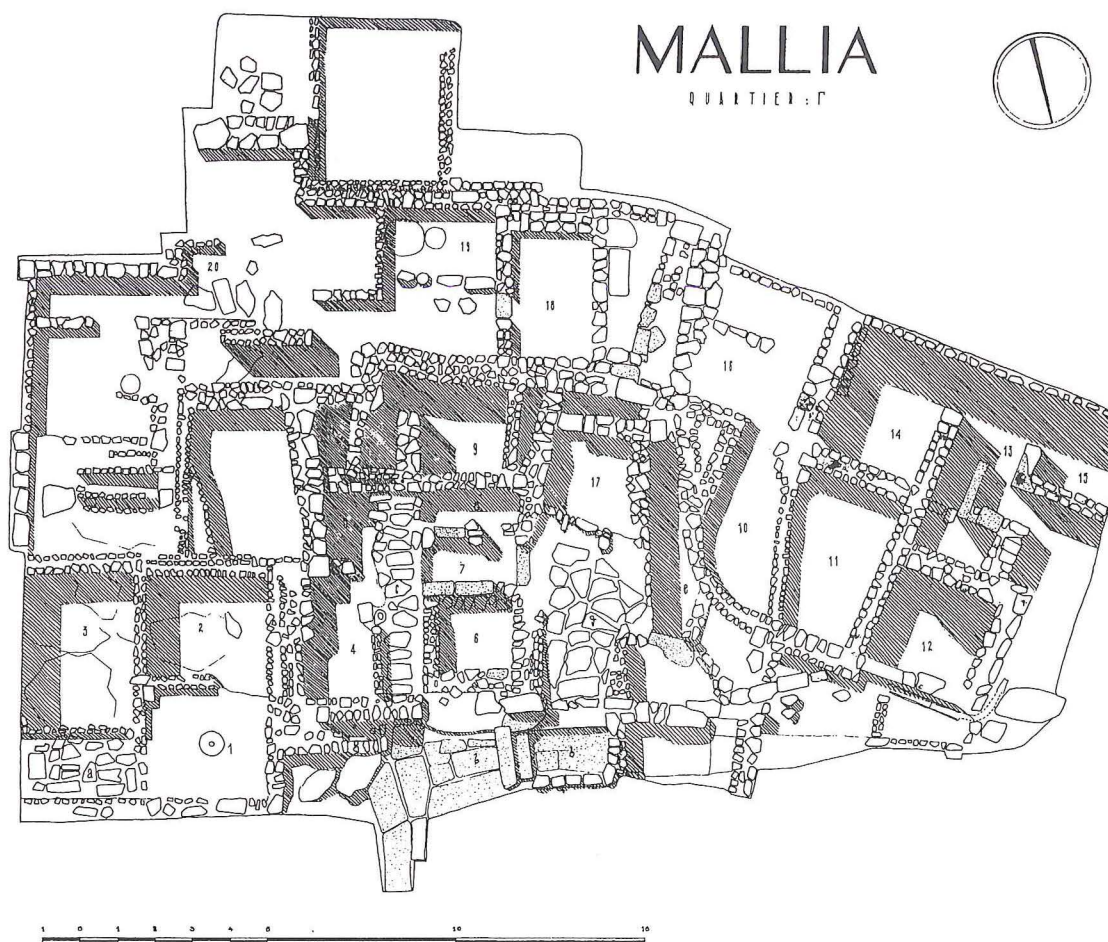


Fig. 2. Plan of Quartier Gamma  
(after *Maisons I*, pl. LXII).

Late Bronze Age levels were reported in the publication but the latter includes some sherds and a complete vase which were dated to this phase. I would like to re-examine this material briefly and at the same time show that it is much more abundant than the publication lets us assume. Moreover, I would like to stress that the preserved Gamma material in some cases agrees perfectly with other post-palatial occupation assemblages found at Malia. The suggestion that there existed a post-palatial occupation in the Gamma area would then confirm an old hypothesis,<sup>7</sup> namely that the Minoan town had moved more to the west, towards the coast, in Mycenaean times.

## Pottery

Among the material from Quartier Gamma kept in the Stratigraphical Museum at Malia, about 30 LM IIIA:2-B sherds can be identified which

<sup>7</sup>Gallet de Santerre 1949, 363-391.



Table I

Inv.no.	Provenance	Shape	Illustration
M174	Maisons Gamma	kylix	Fig. 4
M232	Maisons Gamma	champagne cup	Fig. 3
M239	Maisons Gamma	kylix	Fig. 9
M243	Maisons Gamma	kylix	Fig. 3
M244	Maisons Gamma	kylix	Fig. 3
M316	Maisons Gamma	champagne cup	
M323	Maisons Gamma 1931	krater	Demargne & Gallet de Santerre 1953, pl.LIIh
M329	Maisons Gamma 1931	cup	Demargne & Gallet de Santerre 1953, pl.LIIg; Fig. 3
M429	Maisons Gamma 1931	cup	Fig. 3
M550	Sounding north of Gamma	stirrup jar	Fig. 5
M553	Sounding north of Gamma	flask	Fig. 7
M554	Sounding north of Gamma	deep bowl	Fig. 5
M555	Sounding north of Gamma	kylix	Fig. 8
M557	Sounding north of Gamma	deep bowl	Fig. 7
M558	Sounding north of Gamma	kylix	Fig. 5
M577	Sounding north of Gamma	kylix	Fig. 8
M581	Sounding north of Gamma	vase stand	Fig. 5
M589	Sounding north of Gamma	cup	Fig. 5
M590	Sounding north of Gamma	shallow bowl	Fig. 5
M591	Sounding north of Gamma	kylix	Fig. 8
M592	Sounding north of Gamma	kylix	Fig. 8
M596	Sounding north of Gamma	ladle	Fig. 4
M598	Sounding north of Gamma	champagne cup	Fig. 8
M603	Sounding north of Gamma	champagne cup	Fig. 7
M607	Sounding north of Gamma	champagne cup	Fig. 6
M608	Sounding north of Gamma	champagne cup	Fig. 6
M610	Sounding north of Gamma	champagne cup	Fig. 6
M611	Sounding north of Gamma	champagne cup	Fig. 6
M612	Sounding north of Gamma	champagne cup	Fig. 6
M613	Sounding north of Gamma	champagne cup	Fig. 7
M619	Sounding north of Gamma	kylix	Fig. 4

may be added to the single complete vase and the sherds reported in the original publication.

## Identification of provenance

The material discussed here is only partly published. It is kept in boxes labelled M85/M145 to M550/M619 in the Stratigraphical Museum. Three different provenances are explicitly mentioned: «maisons Gamma», «maisons Gamma 1931» and «sondage au nord de Gamma». Although it is not absolutely certain that the first reflects the 1924–1925 excavation campaigns,<sup>8</sup> it is likely that both the second and third indeed refer to the 1931 campaigns and hence to the rooms shown on the plan published as plate LXII of *Maisons I* (Fig. 2) or, at least, to an area close to that shown on the plan. The earlier published complete vase and sherds also originate from this area and from the 1931 campaign.<sup>9</sup>

## Catalogue

The sherds are here discussed following their shapes. In Table I are given the provenance (if known) and the illustration.

### Cup

Two fragments of the same vase, belonging to a LM IIIA:1 type with ledge rim: M329 and M429 (Fig. 3). Published in *Maisons I*, 35, plate LIIG and dated there to LM I.<sup>10</sup> Rim fragment of ledge rim and short edge, very rounded belly. Soft and fine clay, bright yellow. Brown-black band on the lip, papyrus motif and sponge pattern on the interior.<sup>11</sup>

A third fragment belongs to a cup of a common IIIB type. M589 (Fig. 5): Belly fragment with straight rim and large vertical strap handle with flat section. Fine yellow clay. Decorated with bands on handle and monochrome black on the inside.<sup>12</sup>

### Champagne Cup

A complete vase of this type is discussed and illustrated in the original publication.<sup>13</sup> There are at least ten other fragments of which two belong to the upper part of a cup (M316, M598) and eight to the bottom part. M316: fragment of the cup (rim diam. 0.09), shallow, rim almost straight, handle with oval section. Soft yellow clay. Yellow-white slip, lustrous and polished. LM IIIB.

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<sup>8</sup>P. Demarge notes explicitly in his brief analysis of this material that «Le MR. est nettement exclu» (cf. Demarge & Gallet de Santerre 1953, 26).

<sup>9</sup>Three sherds and a champagne cup mentioned in Demarge & Gallet de Santerre 1953, 35, pl. Lf and LIId, g, h. I was unable to recover the champagne cup nor the sherd shown in pl. LIId, d.

<sup>10</sup>But see Niemeier 1985, 176, n. 1329.

<sup>11</sup>For the decoration, see Niemeier 1985, fig. 14, 44 and Popham et al. 1984, pl. 171, 16.

<sup>12</sup>On this type of cup with large flat handles, Kanta 1980, 267.

<sup>13</sup>Demargne & Gallet de Santerre 1953, 35, pl. Lf.

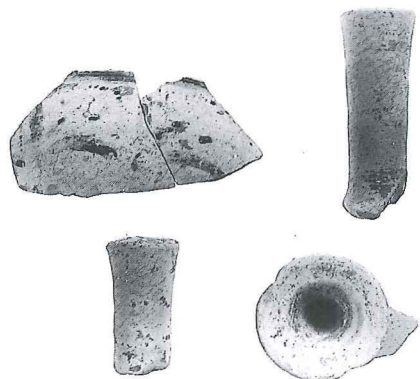


Fig. 3. Fragments of a champagne cup (M232, bottom right), of kylikes (M244 & M243, top right and bottom left) and of a cup (M429 & M329, top left).

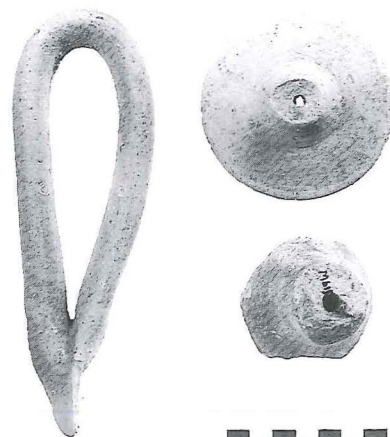


Fig. 4. Fragments of a ladle (M596 left) and of kylikes (M174 & M619).

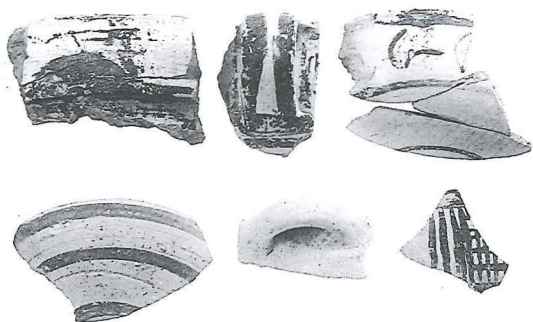


Fig. 5. Sherds from Gamma 1931 (from left to right, top row: M581, M589, M558; bottom row: M550, M590, M554).

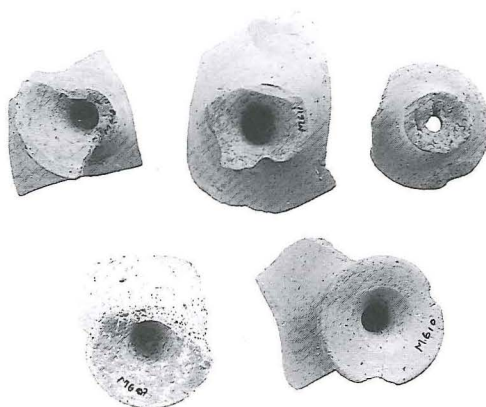


Fig. 6. Fragments of champagne cups, Gamma 1931 (top row: M612, M611, M608; bottom row: M607 & M610).

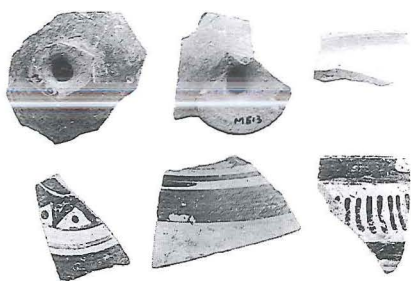


Fig. 7. Fragments from Gamma 1931 (from left to right, top row: M603, M613, M585; bottom row: M553, M556, M557).



Fig. 8. Fragments of kylikes, Gamma 1931 (from left to right; top row: M592, M555, M591; bottom row: M598, M577).



M598 (Fig. 8): rim with a widely splaying lip, rounded cup, vertical handle with round section. Bright yellow clay, bright yellow slip, lustrous. End LM IIIA:2.

M232 (Fig. 3): conical foot but bottom part very flat. Perforated up to the cup. LM IIIA:2/B.

In addition, seven foot fragments (M603-607-608-610-611-612-613) can be identified (Fig. 6-7).

The champagne cup is by far the best represented shape among the kept material. These fragments belong to the IIIA:2 type (Fig. 6, M612) or IIIB type (Fig. 6, M610).<sup>14</sup>

### Kylix

Ten fragments belonging to vases of this type were identified and two of these are most certainly imports from Khania.

M577 (Fig. 8): fragment of a kylix foot with flat disc (diam. c. 0.095), bright yellow clay, hard and fine, decorated with bands. LM IIIB.

M174 (Fig. 4): large foot (diam. 0.085) with a slightly convex disc, yellowish clay, fine and soft. LM IIIA:2.

Fragments M243, M244 (Fig. 3) and M619 (Fig. 4) are parts of high stems, decorated with bands and vertically perforated as is common on Crete.<sup>15</sup>

The sherd M239 (Fig. 9) shows an interesting feature: it is the lower part of the cup of a kylix of yellowish clay, fine and hard and with a white-yellow slip; the join for the stem is visible underneath the cup: a striated surface shows where the two parts were joined.<sup>16</sup>

M555 (Fig. 8). Fragment of everted rim with shallow cup (th. 0.003, rim diam. c. 0.12). White clay, hard and fine. Outside and inside slip is ivory white, in places shiny. The spiral or volute motif is in a characteristically lively red paint. The sherd is a product of the Khania workshop.<sup>17</sup> Fragment M591 (Fig. 8) shows the same features. It may be one of the vertical handles of the same vase.

M558 (Fig. 5). Fragment of the shallow cup of a kylix with straight sides and a slight everted lip (th. 0.004; rim diam. c. 0.14). Yellowish clay, fine and hard. White slip, polished. Decorated band on the lip and bivalve shell motif.<sup>18</sup> On the inside, a band on the lip and a large band on the bottom. Early LM IIIB.

M592 (Fig. 8). Fragment of a high kylix handle with straight rim. Yel-

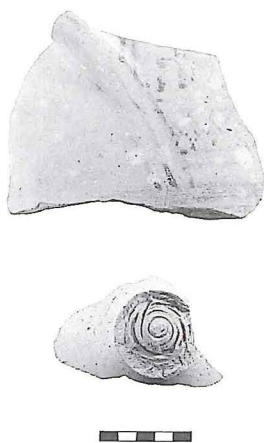


Fig. 9. Fragments M239 & M635.

<sup>14</sup>On the different types of champagne cups, see Popham 1969, 299-304 and B.P. Hallager this volume. It must be added, however, that the LM IIIA:2 type still occurs in LM IIIB. Most recently Kanta 1980, 265.

<sup>15</sup>Kanta 1980, 263-265.

<sup>16</sup>This is usually considered as a late feature (Seiradaki 1960, 25) but, in the absence of a general study of the manufacture of kylikes, I find this a rash conclusion. In fact, there is only a single good technological study and this deals with stirrup jars (Leonard, Hughes, Middleton & Schofield 1993, 105-124).

<sup>17</sup>Kanta 1980, 288-289; Poursat 1990, 160, pl. 28c.

<sup>18</sup>See Popham 1965, 330.

lowish clay, fine and hard. Monochrome black on the inside and bands on the handle.<sup>19</sup>

### Deep Bowl

Quartier Gamma only yielded two fragments of a type of vase that usually is well represented in occupation sites.

M554 (Fig. 5). Fragment of a straight rim. Yellow clay, fine and hard. White and polished slip. On the exterior, a horizontal band and a metope with cross-hatching.<sup>20</sup> Interior monochrome black. Early LM IIIB.

M557 (Fig. 7). Fragment of a straight rim. Yellowish clay, rather fine and hard. White to yellow slip. Band on the rim and several vertical strokes. Interior monochrome black.

### Shallow Bowl

This shape is only represented by fragment M590 (Fig. 5). It is a fragment of a rim with slightly everted lip and a horizontal handle. Yellowish clay, fine and hard; white and polished slip.

### Ladle

A characteristic fragment (M596) highlights the presence of this shape among the Gamma material (Fig. 4). It is a high handle, with flat section, made in a rather fine greenish clay.

### Krater

This shape is represented by a fragment published in *Maisons I*, 35, pl. LIIh. It is fragment M323 and belongs to the rim of a krater with thick everted rim and straight sides (th. 0.006). The clay is white, fine and hard. On the outside, a large band covers the lip and on the belly is a metope motif with a branch in black. The inside is monochrome black.

### Flask

Fragment M553 (Fig. 7) is part of the belly flask belonging to a type also known at Malia in Quartier Lambda. The decoration is formed by a band and a star surrounded by dots. The paint is brown-black and the slip is white. The clay is red, fine and hard.<sup>21</sup> LM II-III A:1.

### Stirrup Jar

Fragment M550 (Fig. 5) illustrates the presence of a squat stirrup jar. Green clay, rather fine and white slip. Lower part decorated with regular bands.

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<sup>19</sup>Popham (1969, 302-303) dates the appearance of these high handles on decorated kylikes – a Cretan feature – to the end of LM IIIB whereas Kanta (1980, 263) prefers, correctly I think, an early LM IIIB date.

<sup>20</sup>On the metope motif, Popham 1965, 321. It is a very frequent motif at Malia, especially the type with cross-hatching.

<sup>21</sup>On this fragment, see Farnoux 1991.

### Vase Stand

Sherd M581 (Fig. 5) is a fragment of a vase stand (clay ring of the top part),<sup>22</sup> which compares well to the examples found in Quartier Nu. It is also manufactured in a very similar way: not only the clay and the colour of the paint are similar but they also show the same drops of slip on the inside.

### Typology

The entire material hence covers ten shapes: the cup, the champagne cup, the kylix, deep and shallow bowl, the ladle, krater, flask, stirrup jar and vase stand. This assemblage is very similar to the ones found at Malia and elsewhere. Thus, in room II,2 of Quartier Nu, for instance, fourteen champagne cups, six kylikes, two kalathoi, one amphoriskos, two stirrup jars, an amphora and a krater with horizontal handles were found on the floor.<sup>23</sup> A very similar assemblage was found in Quartier Epsilon where there was also a pyxis and a flat or rimmed cover. At Knossos, too, S. Hood and P. De Jong excavated a room with a similar collection of vases.<sup>24</sup> In each case, the assemblages are quite characteristic. The only often recurring shape lacking from Gamma is the storage stirrup jar. It may be observed, however, that the early excavators mention two stoppers of stirrup jars but they are neither described in detail nor illustrated. At Malia, this type of stopper is quite common in LM III. Quartier Epsilon yielded one example with seal impressions, dated to LM II-III A:1.<sup>25</sup> and the pit to the south of Quartier Nu produced another LM III A:2/B example.<sup>26</sup> Moreover, from Quartier Nu come a series of LM III B conical amphora stoppers without seal impressions. The presence of imported pottery – especially from Khania – also agrees with other Maliot evidence: other vases or sherds come from Epsilon,<sup>27</sup> from the pit south of Nu<sup>28</sup> and from Nu itself.<sup>29</sup>

### Chronology

Except for the LM II-III A sherds M553, M329 and M429, most of the sherds presented here date to the end of LM III A:2 and to LM III B. Only M635 (Fig. 9) may be later than the end of the Bronze Age. The material does not show any of the characteristic features usually associated with the LM III C style, not even to the style of the end of LM III B, such as

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<sup>22</sup>See Kanta 1980, 280 on this shape.

<sup>23</sup>Farnoux 1990, 912-919.

<sup>24</sup>Hood & De Jong 1958-1959, 182-193.

<sup>25</sup>Pelon 1970, 130-135 and pl. xxvi, 4-6.

<sup>26</sup>Poursat 1977, 836.

<sup>27</sup>To the sherd noted in Kanta 1980, 253 may be added four other sherds belonging to stirrup jars.

<sup>28</sup>Farnoux 1989b, 767 and fig. 8 (left).

<sup>29</sup>Driessen & Farnoux 1992, 736 and fig. 26.



the reserved band on the inside of the deep bowls.<sup>30</sup> The material is thus contemporary with some other Maliot deposits. It is, however, too scanty to allow a more precise synchronicity.<sup>31</sup>

## Architecture

The character of the studied material also leads to a reconsideration of the architectural remains discovered in 1924–1925 and 1931. No LM III level as such was excavated. Although P. Demargne noted in 1953 with regards to the postpalatial sherds that “... quelques fragments posent ici pour la première fois le problème de la prolongation de l’occupation minoenne sur le site de Mallia, au MR III”,<sup>32</sup> he did not go as far as to venture to identify architectural remains that would belong to this occupation. Quartier Gamma was built on top of an Early Minoan fill and the construction was dated to MM IB.<sup>33</sup> Two phases were identified without being further dated but LM III was excluded. There are, however, three features which may suggest that some architectural traces may indeed be associated with the pottery mentioned above: the first is a stratigraphical observation, the second relates to the architectural characteristics as observed by the early excavators and the third is a general observation based on Maliot urbanism during LM III.

## Stratigraphy

The excavators of 1924–1925 noted a layer of earth with a thickness of 40 cm between the two phases of the building.<sup>34</sup> A difference in level between certain rooms was also noted in the areas excavated in 1931 but no mention is made of the precise differences. This is between rooms 10, 11 and 12, situated at a higher level than rooms 13, 14 and 15.<sup>35</sup> The excavators also observed that the ruins were very close to the surface<sup>36</sup> and that the walls were only preserved a single course, especially in rooms 10, 11 and 12. These observations may allow the following remarks. First of all, the LM III levels at Malia, as often elsewhere on Crete, mostly form the latest occupation level of a site before a lengthy period of abandonment. They are hence the ruins most exposed to erosion, whether by man or nature. The state of preservation of the LM III houses is often disappo-

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<sup>30</sup>For the definition of LM IIIC, see the remarks by Sackett & Popham 1965, 281 and n. 65; Betancourt 1985, 177.

<sup>31</sup>We assume Quartier Nu to have had two occupation phases, the first at the end of LM IIIA:2 and the beginning of IIIB, the second LM IIIB, perhaps till its very end, on the fringe of LM IIIC (?) (cf. Driessen & Farnoux 1995, pl. I:3).

<sup>32</sup>Demargne & Gallet de Santerre 1953, 35.

<sup>33</sup>Supra n. 5.

<sup>34</sup>Demargne & Gallet de Santerre 1953, 24 and fig. 3.

<sup>35</sup>Demargne & Gallet de Santerre 1953, 28.

<sup>36</sup>Demargne & Gallet de Santerre 1953, 26: in the area excavated in 1931, the presence of rock outcrops undoubtedly explains this situation.

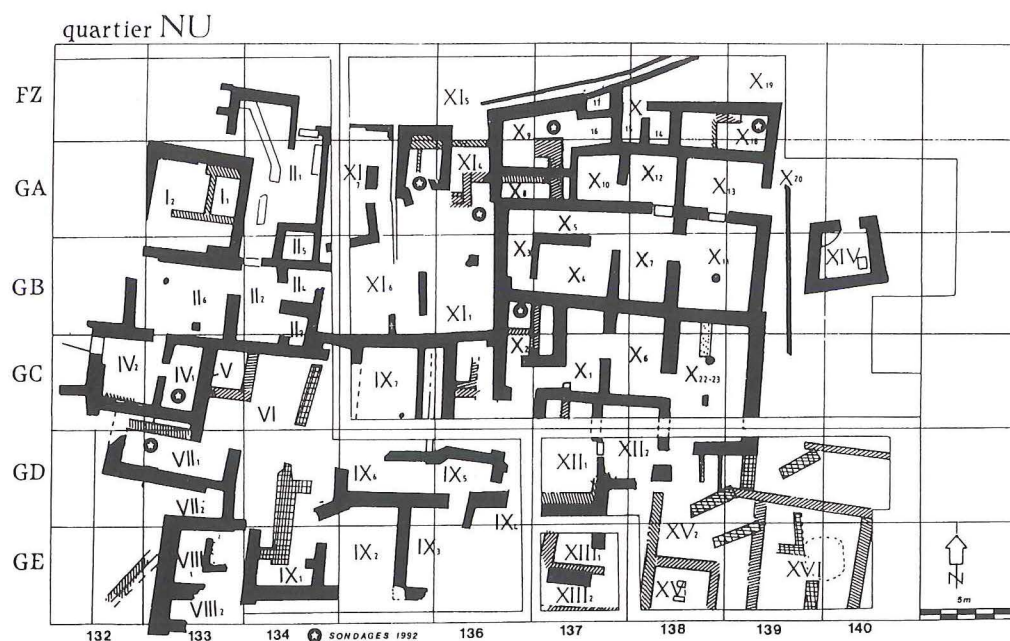


Fig. 10. Plan of Quartier Nu (by J. Driessen).

inting: the walls are rarely more than two courses high and the floors have often disappeared. For this reason one has for many years underestimated both the quantity and quality of the LM III occupation of Malia. The fact that no floors of the LM III period could be stratigraphically isolated in Gamma may also be the result of the superposition of LM III occupation on previous occupation of Middle Minoan or Late Minoan I times. Hence, the excavation of Quartier Nu amply illustrated how the Malians of LM III reused walls or construction materials of LM I and sometimes reached and disturbed MM II levels.<sup>37</sup> Given the date and circumstances of the excavation, it is certainly not impossible that LM III levels were missed.

### Architecture

In the general description of the architecture of the Gamma complex, some features deserve special attention since they might well indicate postpalatial occupation, but certainty is, of course, not possible.

First of all, the excavators noted a series of architectural modifications, especially visible in the streets blocked off with large walls.<sup>38</sup> They also noted how the construction of certain rooms was highly irregular and that the walls were not always perpendicular.<sup>39</sup> The west sector of Quartier Nu, especially around rooms II, 2, shows similar features which, however, are not proper to LM III (Fig. 10). We may also mention that, amongst

<sup>37</sup>Driessen & Farnoux 1995, 56, 63.

<sup>38</sup>Demargne & Gallet de Santerre 1953, 27. Other streets blocked in LM III: Pelon 1970, 13 and van Effenterre 1969, 135-136.

<sup>39</sup>Demargne & Gallet de Santerre 1953, 25.

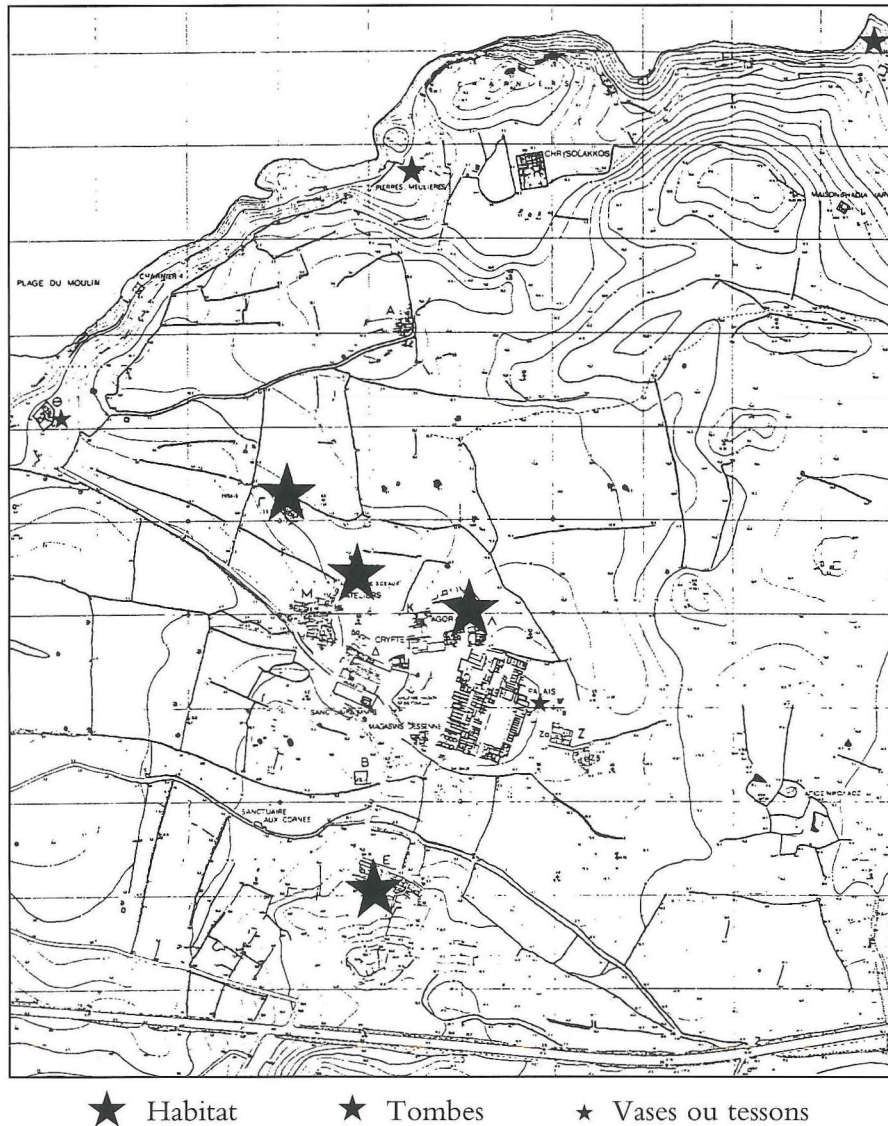


Fig. 11. LM III traces of occupation at Malia.

the floors described, one was made up of beach pebbles as well as slabs and earth:<sup>40</sup> a similar mixture of floor material exists e.g. in Quartier Nu (II, 1). Finally, the drainage system in Gamma may probably date to LM III: it consisted of a channel made up of cut U-shaped ammouda blocks and terracotta slabs, running alongside rooms 10, 11 and 12.<sup>41</sup> This system is similar to the one excavated by A. Dessenne in Quartier Epsilon and dated to LM IIIB by O. Pelon.<sup>42</sup>

<sup>40</sup>Demargne & Gallet de Santerre 1953, 25, room 14 of the 1924-1925 excavation.

<sup>41</sup>Demargne & Gallet de Santerre 1953, 28.

<sup>42</sup>Pelon 1967, 504; Pelon 1970, 130. H. van Effenterre found a terracotta channel close to Quartier Theta which he prefers to date to Mycenaean times (H. & M. van Effenterre 1976, 21) but no LM III material was published (although a single kylix foot in the Stratigraphical Museum may date to this phase).



Hence, there are only meagre indications for a LM III architectural phase and it is not possible to go any further because of the lack of precise observations made during the excavation.

### Maliot urbanism during LM III (Fig. 11)

The extension of the settlement of Malia during LM III has, on the other hand, become more clear. In 1949, H. Gallet de Santerre suggested that the postpalatial town had moved somewhat to the west, closer to the shore. This hypothesis was especially based on the presence of cemeteries along the coast, excavated at the very beginning of the exploration of the area.<sup>43</sup> A review of the material still extant illustrates that LM III occupation – and especially that of LM IIIA:2 and LM IIIB – is clearly attested for Lambda (*Maison des vases à étrier*, *Maison de la cave au pilier*, *Maison de la façade à redans*, *Kappa Epsilon*), *Quartier Epsilon* and *Quartier Nu*,<sup>44</sup> whereas the areas east of the palace and at Hagia Varvara have produced no LM III evidence.<sup>45</sup> The intensive Malia survey, undertaken since 1990, confirms this impression.<sup>46</sup> Finally, the LM III cemeteries are situated north of the palace (Mill Stones – Pierres Meulières) and to the west of the Mill Beach (especially Hagia Pelagia, Agios Demetrios and Azyimo). An occupation of Gamma during LM III would hence agree well with the general impression of the extent of the settlement in this period.

## Conclusion

It thus seems advisable to include the Gamma quarter in the general study of the LM III period at Malia. Although it has not been possible to associate pottery with floors and walls, nor to establish which constructions were new for the LM III period, as was the case for *Quartier Epsilon* and *Nu*, the pottery from Gamma agrees well with that from the other areas of occupation. This further highlights the importance of the Maliot material for the LM III period. Whereas more than half of the sites of this period on Crete are formed by tombs or cemeteries, Malia is one of the few sites having both cemeteries and several buildings which preserve part of their original assemblage. The site hence offers an excellent test-case for the understanding of this crucial phase in the history of the island.

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<sup>43</sup>H. & M. van Effenterre 1963. All this material was assembled in my (unpublished) PhD (Farnoux 1989).

<sup>44</sup>Based on the evidence collected in Farnoux 1989. I leave aside the problem of the reoccupation of parts of the palace close to which two LM IIIB vases were found (cf. Farnoux 1989–90, 28 and Pelon 1991).

<sup>45</sup>Nevertheless, a LM III tomb was excavated close to the bay of Hagia Varvara in 1925 (Demargne & Gallet de Santerre 1953, 10); this material was erroneously published as coming from the Island of Christ (H. & M. van Effenterre 1963, 112).

<sup>46</sup>Müller 1990, 923 for the bay of Hagia Varvara; Müller 1991, 743 and fig. 39–40 for the zone between the palace and the Mill Beach (plage du moulin).

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# Some Observations on Deep Bowls and Kraters from the “Acropoli mediana” at Phaistos

*Elisabetta Borgna*

1. The approach to research at Phaistos, originally aimed at the discovery of the MM palace, has constituted a serious obstacle to the knowledge of the site in the final phase of the Bronze Age. However, in the last forty years several investigations have suggested that Phaistos was a very important LM III site.<sup>1</sup> Furthermore, the results of the more recent excavations at Hagia Triada have established a complementary relationship between the LM IIIB-C settlement at Phaistos, then increasingly inhabited, and Hagia Triada, then suddenly depopulated.<sup>2</sup> In this light, the discovery of one of the largest groups of LM III pottery at Phaistos on the “Acropoli mediana”, the hill overlooking the Minoan palace from the west, becomes particularly significant.

The pottery, retrieved from the southern part of the hilltop in 1955 when digging the foundations for the present Stratigraphical Museum,<sup>3</sup> cannot be considered a homogeneous deposit because the mode of excavation did not permit the pottery’s stratigraphy – with regard to both the remains of the buildings brought to light and deeper layers – to be recorded. However, with more than 2000 sherds, this group at least bears witness to the intense occupation of the hill during the LM III period.

The study of the material is currently only at an initial stage,<sup>4</sup> that of analysing the different classes of pottery. Yet, while it provides only a few preliminary results, it at least raises some major thematical points and provides a framework for exploring their wider implications.

2. Provisional evaluation of the material – that is, considering strictly only the evidence of the “Acropoli mediana”, as yet unconnected with that of other parts of the Phaistos area – indicates that the history of the settlement seems to be marked by: a) an early occupation, certainly during LM IIIA:1 and possibly earlier; b) a building phase at the beginning of LM

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<sup>1</sup>Cf. e.g. Laviosa 1977; Levi 1985, 47ff.; Creta antica 1984, 121ff.

<sup>2</sup>Cf. La Rosa 1985; La Rosa 1992; La Rosa 1994.

<sup>3</sup>Levi 1956.

<sup>4</sup>I was enabled to study this group of pottery by means of a scholarship to the Italian School at Athens; the research is included in the scientific planning of the Italian Mission at Phaistos, directed by Prof. V. La Rosa; it was entrusted to me thanks to the kindness of Prof. C. Laviosa.



IIIA:2;<sup>5</sup> c) a continuous presence, perhaps not very intense as the scarcity of pottery evidence would seem to suggest, in the period between IIIA:2 late and IIIB early, corresponding to the major expansion of the nearby Hagia Triada; we should not, however, exclude the possibility that the earlier evidence had been destroyed by the final building activity; d) a quite important settlement in LM IIIB – IIIC. This last phase seems to have experienced an increase in population directly connected with the abandonment of prominent sites such as Hagia Triada and Kommos and, less directly, with the discontinuity detected in several archaeological contexts of the island,<sup>6</sup> possibly related to the final collapse of the Knossian administration.<sup>7</sup>

After the first part of LM IIIC, during which Phaistos was probably a centre of original stylistic development in pottery production, it seems possible to record a decrease in the hill settlement or, at least, a slight local gap, possibly connected with a change in the settlement pattern in the Phaistos area and in the immediate environment which, as different kinds of evidence would seem to suggest, continued to be inhabited in the later periods.<sup>8</sup> This decrease could be approximately dated to after the first phase of IIIC Middle in mainland chronological terms (Mycenae Developed; Tiryns Entwickelt, Lefkandi 2a; Rutter's phase 4a) and could be related to another considerable settlement discontinuity in Crete,<sup>9</sup> well represented by the new foundations of such inland settlements, difficult of access, as Karphi.<sup>10</sup>

3. The lack of a stratigraphy prevents a detailed chronological assessment of the pottery evidence, which therefore depends on the support of external sequences – all the more so when we consider that methodological criteria in Aegean pottery studies are founded not so much on recognizing diagnostic associations as on isolating the appearance and evaluating the quantitative occurrence of single diagnostic elements within associations of material in closed deposits. Furthermore, the fragmentary condition of the pottery makes it difficult to establish internal typological sequences.

Within these recognized limits, the prosecution of the research will nonetheless aim at raising some relevant questions in a systematic way.

A problem particularly connected with the pottery system which the

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<sup>5</sup>The earliest building of a wall discovered on the excavated southern area, along the slope of the hill (cf. Levi 1956; Levi 1960; Drerup 1969, 41–43; Hayden 1988, 5–6) should be dated, on the basis of the now revised evidence of small groups of pottery from the foundations and from the internal fill, to LM IIIA:2 early.

<sup>6</sup>Cf. e.g. Hallager & Tzedakis 1985, 27–28; Sapouna-Sakellarakis 1990, 97–98; MacGillivray & Driessen 1990; Farnoux 1989–1990; Poursat et al. 1992.

<sup>7</sup>Hallager 1977; Hallager, Vlasakis & Hallager 1992; Olivier 1993.

<sup>8</sup>Rocchetti 1969–1970; Rocchetti 1978.

<sup>9</sup>Cf. Andreadaki-Vlasaki 1991, 421ff.

<sup>10</sup>Seiradaki 1960; Desborough 1972, 113; 120–129; Desborough 1964, 166ff.; Kanta 1980, 121; Nowicki 1987a; cf. Nowicki 1987b.

evidence of Phaistos helps to elucidate concerns the Mycenaean influence in Crete and, in particular, the last waves of “Mycenaeanisation”. This corresponds to the diffusion of certain pottery shapes such as deep bowls and kraters and of decoration patterns represented principally by antithetic spirals and panels.<sup>11</sup>

On the evidence of a Mycenaean *facies* – particularly well attested at Phaistos – an historical explanation would have to clarify the pattern of the Mycenaean presence, whose definition on an ethnic-cultural level is extremely problematic and difficult to assess.<sup>12</sup> To this end, the results of the different approaches to the potential of pottery as archaeological evidence<sup>13</sup> must be correlated. In particular, one must test not only the patterns of manufacture and distribution by means of the evidence of the technological and functional features of the vessels,<sup>14</sup> but also the aspects of social organization and ideological structure by the analysis of style and decorative patterns.<sup>15</sup>

The rich LM IIIB-C pottery evidence at Phaistos will also possibly suggest, with a more detailed account, the precise geographical points of contact with the Mycenaean world. The problems of connections with the Mycenaean pottery spread throughout the Eastern Mediterranean, primarily in Cyprus, well represented by deep bowls with antithetic spirals and panels, are particularly relevant in this context. In the more recent debate, an interesting point, perhaps indirectly concerned with the explanation of Mycenaean pottery in Crete, is emerging: the so-called Mycenaean “IIIC:1b” pottery seems to be recognized in archaeological deposits earlier than LC IIIA. With regard to the historical implications, the events that caused the start of this pottery production were not inevitably the result of population movement and the coming of refugees after the final fall of Mycenaean palatial centres at the end of LH IIIB.<sup>16</sup>

4. Setting aside more general historical problems and considering only the analytical approach suggested by the subject of this meeting, I would like to introduce some limited and preliminary results of the analysis of the

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<sup>11</sup>Popham 1965; Popham 1967, 201 n. 13; Popham 1979, 187ff.; Desborough 1972, 112; Schachermeyr 1979, 84 ff.; Schachermeyr 1982, *passim*; Betancourt 1985, 179; Rocchetti 1991.

<sup>12</sup>Cf. Sherratt 1992.

<sup>13</sup>See e.g. Leonardi, Pracchia & Vidale 1989; Orton, Tyers & Vince 1993, 23 ff.

<sup>14</sup>For Aegean contexts see for instance Matson 1972; Katsa-Tomara 1990; Shelmerdine 1992, 517-519; cf. in general Arnold 1981; Rice 1987.

<sup>15</sup>See e.g. Hodder 1981; Washburn 1983; Shanks, Tilley 1987, 87 ff.; Plog 1990; Melas 1993.

<sup>16</sup>See for example Sherratt 1990, in part. 118 n. 26; Sherratt 1991; Kling 1987; Kling 1988 (with the introduction of the conventional phase LC II C 2); Cadogan 1991; Cadogan 1993; Karageorghis 1992; for an interesting case on the Syrian coast see a krater with antithetic spirals and central, elaborate panel from Ugarit, in a III B context: Yon et al. 1990, 17 fig. 10; cf. Yon 1992.

two best-represented pottery classes among the LM IIIB and IIIC material in the Phaistos deposit: deep bowls and kraters. Discussion of these, as we shall see, inevitably involves one in problems of the terminological and chrono-typological aspects of LM pottery production.

The lack of stratigraphical connections and the absence of definitive systematic classifications in the literature on Minoan pottery in general suggested a preliminary analysis that would arrange the material in sequences of different “specialized” typologies,<sup>17</sup> in particular as regards their morphological, decorative, technological and functional aspects. These “thematic” typologies do not claim to reflect the taxonomic order of the ancient producers; rather, they aim first at recognizing units of production, stylistic traditions and trends of development through the associations of different attributes in conventional and provisional clusters, and then at comparing these with shapes, types or other typological units established in available current classifications in Aegean studies. The support of external evidence based on stratigraphical grounds will be able to provide not only a chronological value to the trends of development possibly identified but also a more detailed historical significance to some indications as regards two distinct traditions, one Minoan, the other Mycenaean, in the manufacturing of the same class of pottery, together with suggestions for the explanation of processes of interaction and integration between different styles.

The present project of classification does not aim at dating precisely the individual vessels that make up the deposit of Phaistos, but at connecting in a sequence of relative chronology the classes of production that they represent – that is, of course, if the identified typological varieties can be considered reliable discriminants.

5. With regard to two-handled deep bowls, the approach to classification immediately raises, as I suggested earlier, a terminological problem: the use of the term in Minoan pottery studies reveals a certain degree of ambiguity in expressing, on the one hand, a pure morphological or functional definition and, on the other, a specific chronological and cultural meaning when used to indicate the Furumark shape 284 as established in Mycenaean pottery classifications.<sup>18</sup> Since in the description of LM IIIB-C pottery deposits we need to express both meanings and since the difference between the two concepts may become on some occasions a good device for recognizing local traditions as opposed to pure Mycenaean ones (as the case of Phaistos seems to reveal), it would be useful to distinguish conventionally on terminological grounds pottery shapes which are similar but not identical.<sup>19</sup>

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<sup>17</sup>Brown 1982, 180; cf. Adams & Adams 1991, in part. 216 ff.

<sup>18</sup>Mountjoy 1986 (cf. Concordance of Furumark Shapes Names).

<sup>19</sup>About the development of deep bowls in Crete see Popham 1965, 318; Tzedakis & Kanta 1978, 15–16; Schachermeyr 1979, 88; Kanta 1980, 258–260; Watrous 1992, 134, 140 ff.



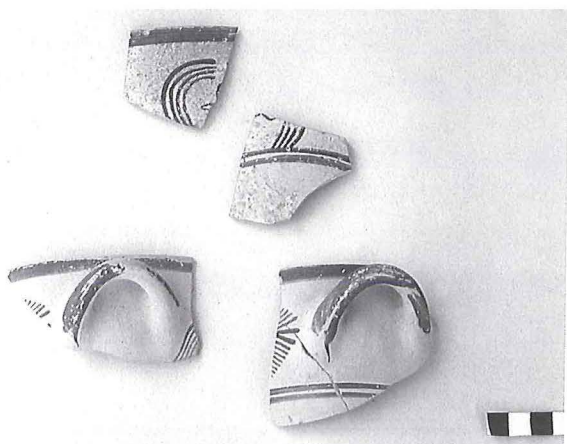


Fig. 1. LM IIIB-C semiglobular bowls.



Fig. 2. LM IIIB-C semiglobular bowls.

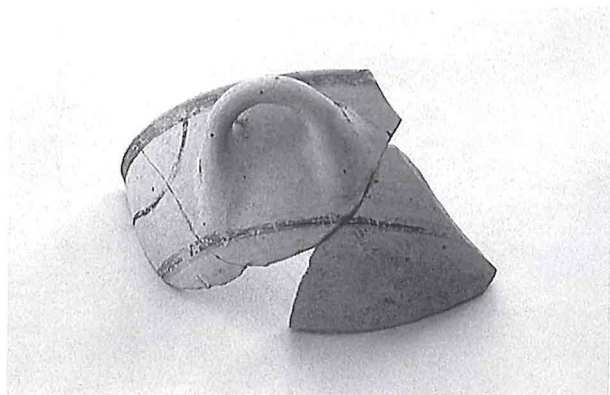


Fig. 3. LM IIIB-C semiglobular bowl.



Fig. 4. LM IIIB-C semiglobular bowls.

5.1. Among unarticulated or simple shapes,<sup>20</sup> I have assembled, first of all, semi-globular bowls with straight lipless rims: they can be divided into a tiny group of specimens with low walls (Fig. 1) and a much larger group of specimens with high straight walls (Figs. 6.1; 2, 5); some bowls, more open because of the outwardly slanting walls also show a roughly semi-globular profile (Figs. 1.2; 3, 4; 6.2); we may also infer a similar profile for two

<sup>20</sup>The typological classification as regards morphological aspects was primarily founded on the tectonic structure of the vessels and so used the basic opposition between articulated/unarticulated shapes and accepted as discriminant varieties or as casual variations (for the typological meaning of the concepts in Italian terms see Peroni 1994, 25-30) attributes concerning conformation of rims and other functional parts such as handles, not always detectable given the fragmentary state of the materials; especially with regard to the bases it is often difficult to assess their typology, although from a preliminary view we can argue the predominance of traditional Minoan raised bases in respect to the ring-shaped one in deep bowls. For some methodological questions and especially for terminological problems concerning the translation into English of the technical vocabulary – especially of the discriminants recognized and conceptually described according to terminological trends inherited from an Italian tradition of palethnological and protohistorical studies – I refer principally to Rice 1987, 207 ff., in part. 215-219; and, as far as it is possible, for Aegean matters, to Mountjoy 1986. In this provisional classification, furthermore, I have not emphasized size parameters, generally extremely variable, which will be recorded in the definitive catalogue principally with regard to the consideration of the pottery functions.

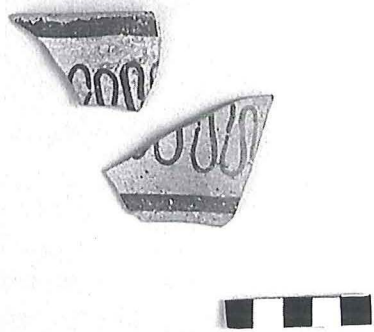


Fig. 5. LM IIIB semiglobular bowl.

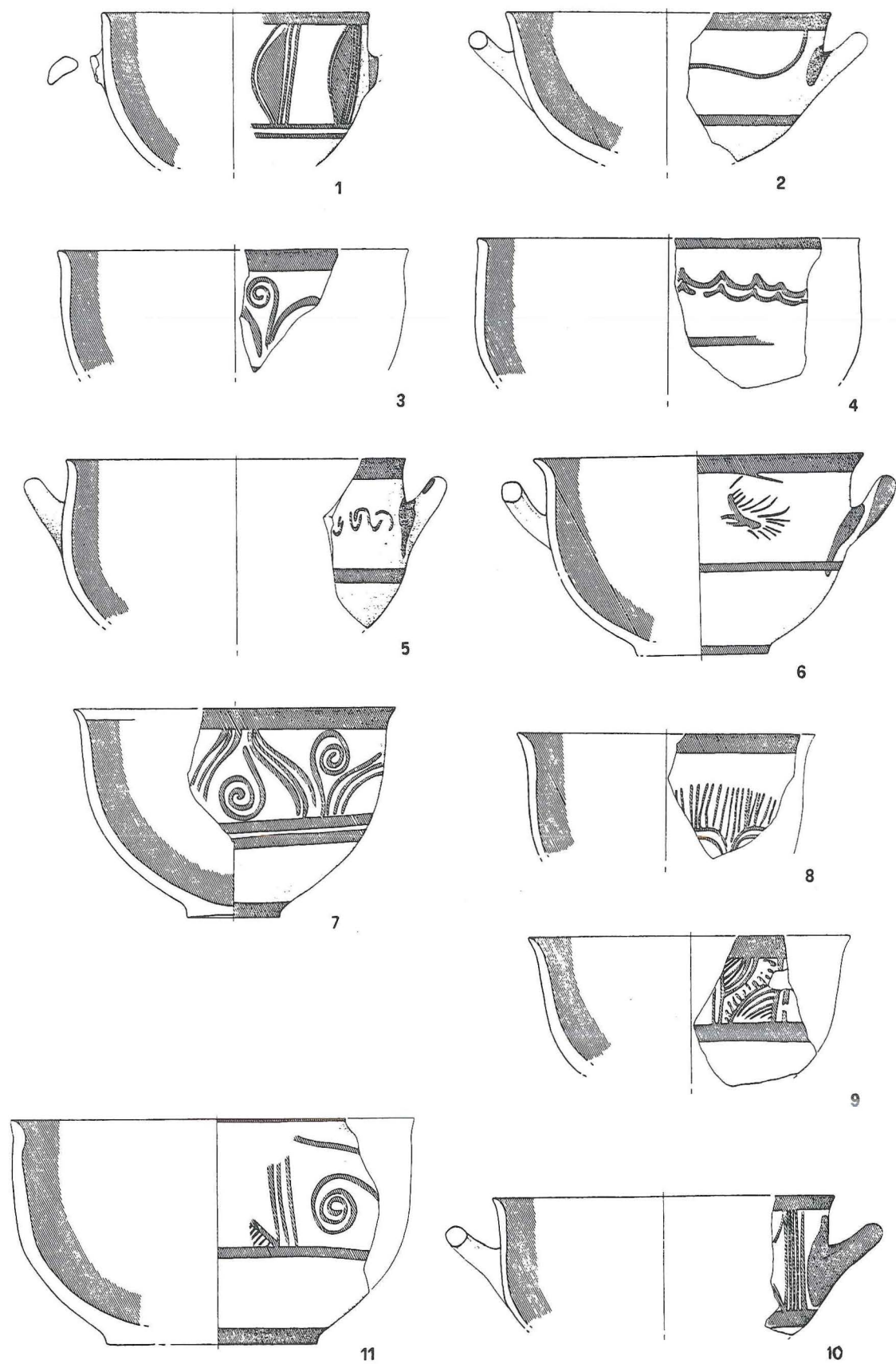


Fig. 6. 1-2, LM IIIB-C semiglobular bowls; 3-5, LM IIIB-C subglobular and deep-bellied bowls; 6-7, LM IIIB-C bell-shaped deep bowls; 8-11, LM IIIC bell-shaped deep bowls.



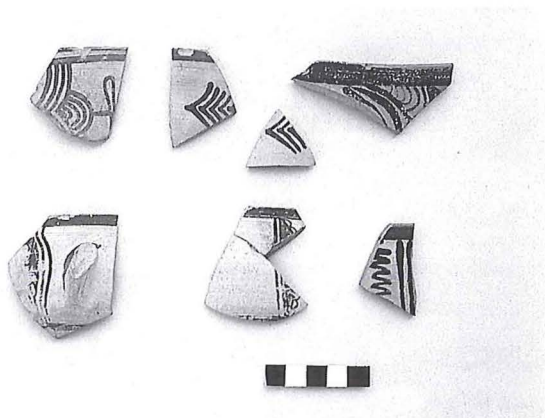


Fig. 7. LM IIIC subglobular bowls.

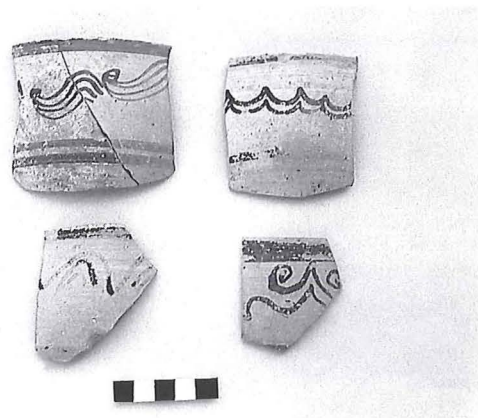


Fig. 8. LM IIIB-C subglobular bowls.



Fig. 9. LM IIIB-C bell-shaped deep bowls.



Fig. 10. LM IIIB-C bell-shaped deep bowls.



Fig. 11. Articulated low-walled bowl.

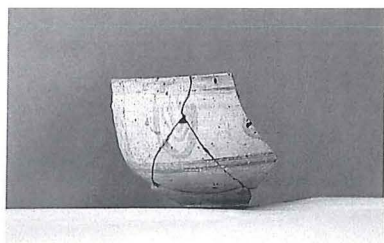


Fig. 12. Articulated angular bowl.

groups of bowls slightly narrowing towards the mouth, one with a slightly distinct rim and a markedly rounded body (Figs. 6.3; 7), the other with high, slightly convergent walls (Figs. 6.4; 8).

Furthermore, a simple shape is peculiar to a small group of specimens, admittedly very fragmentary and difficult to restore to the original shape, with a heavier semiglobular, deep-bellied profile and a slightly restricted mouth with, usually, a rounded lip (Fig. 6.5).

Among articulated or more complex shapes, we have isolated only a few incomplete bowls distinguished by an almost angular profile, with a conical lower body and low straight walls with a lipless rim (Figs. 11, 12). These represent a very small group in the Phaistos evidence.

Very different from the bowls included in this sporadic group are many other items, articulated on the basis of organic parts of the vessel, interconnected not by an angular outline, but with a continuous curve, which usually gives them the so-called "bell-like" shape.

These bowls may be ordered in a series of clusters: -bowls with a deep semi-globular body, vertical, only slightly sinuous walls and a flaring or everted rim (Figs. 6.6; 9); -bowls with a semi-globular body, flaring walls and a flaring rim (Figs. 6.7; 10, 19) – sometimes with less promi-



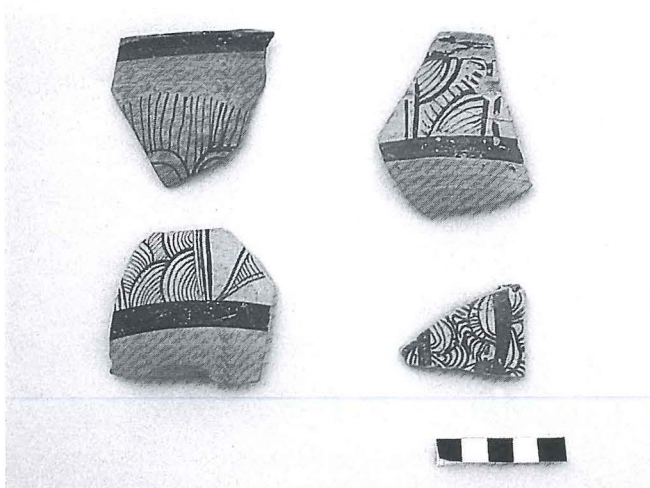


Fig. 13. LM IIIC bell-shaped deep bowls.

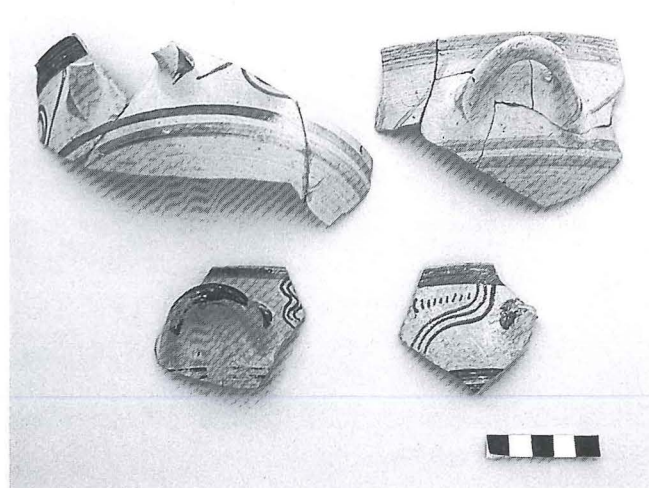


Fig. 14. LM IIIB-C bell-shaped deep bowls.

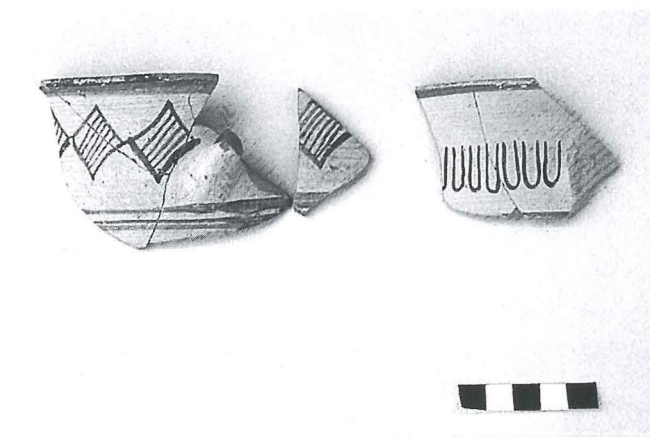


Fig. 15. LM IIIB-C bell-shaped deep bowls.



Fig. 16. LM IIIB-C bell-shaped deep bowls.



Fig. 17. LM IIIC bell-shaped deep bowl.

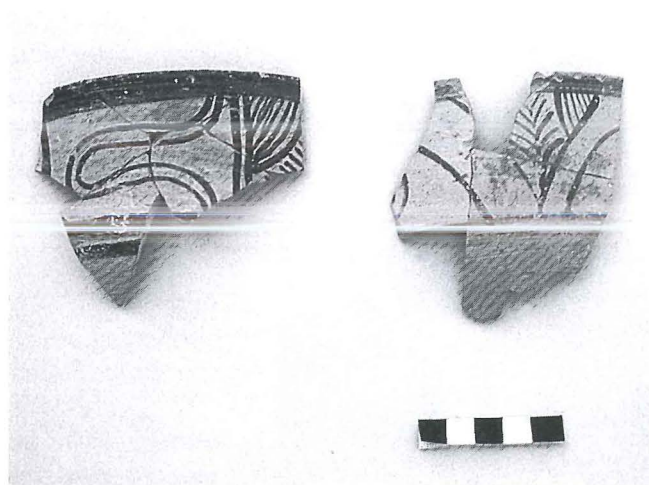


Fig. 18. LM IIIC bell-shaped deep bowls.



Fig. 19. LM IIIB-C bell-shaped deep bowl.

nent convex curves (Figs. 6.8; 13), sometimes with very flaring, outwardly-slanting walls (Figs. 6.9; 13); -bowls with a more bulging lower body and lower walls with a less articulated rim (Fig. 14); -bowls with a distinctly sinuous form, i.e. "S"-shaped profile (Figs. 15, 16). As evidence of a later date, a more markedly articulated shape distinguishes some generally larger-sized bowls with a biconical profile or with straight, vertical walls and generally sharply everted rims (Figs. 6.10; 17, 18). By contrast, very slightly articulated shapes are represented by some more open bowls with a convex profile of the walls, and a thickened inside rim (Fig. 6.11).<sup>21</sup>

5.2. With regard to the attributes relative to decorative and technological subsystems, on the present occasion I shall limit myself to some observations, unsystematic yet useful to sustain the formal discriminants.

5.2.1. The group of simple semi-globular bowls and related shapes shows in most cases homogeneous manufacturing features, in particular in the frequent use of a cream-white slip. Zonal decorative compositions with continuous sequences of isolated motifs or with chains of motifs (for example wavy border, hooked spiral, Minoan flower, alternating multiple stem, chevron, bivalve shell with or without loops, panels with vertical zig-zag lines, zig-zag arcs etc.) make possible in these cases the comparison with LM IIIB products, themselves distinguished by a clearly local decoration or influenced by the Mycenaean wares widespread during the LH IIIA:2-B "koiné" and so deeply rooted in Minoan productions.<sup>22</sup> Among the varieties identified, in particular bowls with straight, outwardly slanting walls, often show further homogeneous features, as for example in the recurrence of matt slip and paint and the thickness of the walls; even though the decoration is still mostly rooted in the local tradition, the relevant association with frontal decorative composition of symmetrical motifs, such as streamers, hints at a later date, surely in the LM IIIC period.

The roughly-angular-shaped bowls, distinguished by a more conical profile, display decorative patterns which we can easily classify as purely local, such as concentric semicircles disposed in typical isolated sequences and linked whorl-shell with a disintegrated composition, but still strictly dependent on a pattern belonging to the Knossian palatial style.<sup>23</sup>

<sup>21</sup>The extremely fragmentary state of the pottery and the indications of a not very standardized production prevent one from including in the distinguished groups several bowls whose presence is detected by small fragments; this problem is especially notable when we deal with the evidence of late bowls which generally show common and current attributes such as the small size, the outward slanting of the walls, and the straightness of the walls, particular also to a group of very large bowls, usually exceeding the average of sizes (cf. for example at Karphi and Kavousi: Seiradaki 1960, fig. 14; Gesell 1990, fig. 6, 13-14).

<sup>22</sup>For the dating of the individual vessels at Phaistos we will however have to consider that some of them have a thin reserved line on the inside rim, revealing a feature usually considered diagnostic of LM IIIC: Popham 1965, 320-321.

<sup>23</sup>Niemeier 1985, 32, fig. 7.



When we look for external parallels we have to admit that almost none of these bowls can easily be compared with mainland pottery, while their connections with vessel shapes widespread in LM contexts provide them with a good background in local production.

Typological parallels for the simple semi-globular shape can be found in several LM IIIA:2 late or IIIA:2-B contexts, including Malia, Hagia Triada-strato VI, Knossos (Unexplored Mansion); and, as regards examples with high straight walls, they have parallels not only in IIIA:2-B deposits (for example Kommos and Hagia Triada-strato V) but also with the pottery dated to later phases, such as the LM IIIB contexts of Khania, the IIIB Knossian groups of the Unexplored Mansion, the later IIIC Strati-graphical Museum site, and the LM IIIB:2 pottery from the so-called "Lilianou cave". Finally, as regards specimens with outwardly slanting walls we should bear in mind examples from the IIIC settlement of Sybrita Amariou.<sup>24</sup>

The more closed semi-globular shape, with walls slightly narrowing towards the mouth, seems to find parallels in the same contexts, especially in those attributed to the second part of LM IIIB, such as some Knossos deposits and the "Lilianou cave";<sup>25</sup> LM IIIC pottery offers clearer possibilities of comparison for heavy, deep-bellied bowls.<sup>26</sup>

Bowls with an articulated conical body<sup>27</sup> find clear connections, particularly in levels dated to IIIB, in sites with an architectural tradition of the quasi "palatial" type, such as Khania and Kommos and of the palatial type proper, namely Malia,<sup>28</sup> and Knossos, with IIIB late pottery, from the palace's later occupation phase, where the decorative composition of the heavy panelled style seems to depend on Argive LH IIIB:2.<sup>29</sup> This shape of bowl is, moreover, very similar to that of some LM IIIA:2-B stemmed bowls, clearly influenced by mainland production – and possibly by that included in Furumark shape 304 – but generally adapted to the local tra-

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<sup>24</sup>Noting first that the photographic illustrations often do not ensure the absolute reliability of the comparison, we may cite, as regards semi-globular bowls with low walls, La Rosa 1977, 331, fig. 39a (str.VI); Deshayes & Dessenne 1959, pl. 46,6; Popham et al. 1984, pl. 115,1; Popham 1970, pl. 52d; Watrous 1992, pl. 33 no. 1351; 78 no. 1353 (Kommos, IIIB); with high straight walls, La Rosa 1977, 331, fig. 39b (str.V); Watrous 1992, for example nos. 961, 1648; Tzedakis & Kanta 1978, fig. 2,2; Karantzali 1986, fig. 13 F4 (?); Popham et al. 1984, pl. 181b; Kanta 1971, fig. 5; Warren 1982-1983, fig. 48; Prokopiou 1991 fig. 21; cf. possibly ADelt 1969, pl. 435b; Tzedakis 1969, 404, pl. 1; Sakellarakis 1972, pl. 291a (?) (Arkhanes); outwards slanted walls, Prokopiou 1991, fig. 11 (4253); Prokopiou 1994, 252, fig. 3.

<sup>25</sup>Popham et al. 1984, pl. 179, 1 (?); Kanta 1971, fig. 16; for Eastern Crete see Lebessi 1970, pl. 361a; cf. possibly Popham 1965, fig. 5,25.

<sup>26</sup>For example at Kavousi: Mook 1993, P 217; cf. Kanta 1980, fig. 1, 2 (Tyliossos); in IIIB context, with a less deep body, see Popham 1965, pl. 85c (but perhaps a cup).

<sup>27</sup>Already distinguished by Schachermeyr (1979, for example 95) from high-walled Mycenaean "skyphoi".

<sup>28</sup>ADelt 1980 (1988), pl. 311c (?); Tzedakis 1969, 402, fig. 19; Watrous 1992, for example nos. 1155, 1200; with a pronounced articulated profile and a very slightly flaring rim, see Farnoux 1992, 210, fig. 14 (Malia); Hallager, Vlasakis & Hallager 1992, 68, fig. 4c.

<sup>29</sup>Popham 1964, pl. 8, c-d; see also Popham 1970b, pl. 50b (Little Palace); Popham 1967, pl. 87d.



dition.<sup>30</sup> In fact, we have evidence to suppose that this group of bowls, themselves admittedly not very deep, is connected on the one hand with local production of cups and bowls, active from the beginning of LM<sup>31</sup> – as seems especially clear from small sized specimens with a low conical body, possibly handleless<sup>32</sup> – and on the other hand with Aegean bowls especially widespread during the LH IIIA:2 period, for example those clustered by Furumark in shape 283.<sup>33</sup>

To sum up, on the basis of internal and external evidence, in the Phaistos deposit we may detect possibly two types of unarticulated bowl, probably belonging to a wider typological family, with an obvious local evolution in Minoan pottery production, as clearly shown by the constant association with Minoan decorative patterns: one represented by a simple semi-globular shape, the other by a more closed, baggy shape, with belly diameter greater than mouth diameter. For these types we have good parallels, as has already been remarked, in LM III cups;<sup>34</sup> in particular the second, baggy type, whose production seems to be later on the basis of available parallels, looks very similar to a type of cup called by Popham “deep-bellied”,<sup>35</sup> especially common in late IIIB contexts.<sup>36</sup> At Phaistos, all bowls included in these typological groups were probably produced in a period extending from LM IIIB:2 to IIIC, either contemporarily or in a sequence that permits one to discern a chronological value in the variability of shape. Most probably, we have to admit an evolutionary process in the development of high straight walls, restricted mouths and, in LM IIIC, of markedly outward inclination of walls of simple semiglobular bowls; and in the increasing heaviness of the lower body of the more rounded, baggy types.

Meanwhile, in the evidence of articulated bowls with a sharply conical profile we can detect features common to a wider circulation of types and shapes in the Aegean “koinè”, coincident with the Mycenaean IIIA:2-B expansion.<sup>37</sup> The production of these vessels may have been continued in

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<sup>30</sup>Farnoux 1989-1990, 31, fig. 17.

<sup>31</sup>Cf. Betancourt 1985, 118, 172.

<sup>32</sup>Cf. La Rosa 1977, fig. 36c; Watrous 1992, no. 989.

<sup>33</sup>Furumark 1992, pl. 156; cf. Mountjoy 1986, 90: “one-handled bowl”, IIIA:2 late.

<sup>34</sup>Cf. Watrous 1992, 141; we should not exclude a connection with metal vessels: see Mitsotakis Coll., 236, no. 303 (“semiglobular bowl”, LM IIIA); 238, no. 306 (“two-handled semiglobular bowl”); Matthäus 1980 (nos. 414-420: “kalottenschalen”; 442-444: “zweihehenklige schalen”).

<sup>35</sup>Popham 1970b, 197; cf. Popham et al. 1984, 185.

<sup>36</sup>Watrous 1992, 185.

<sup>37</sup>With regard to this point, I suspect that a few fragmentary Cretan vessels classified as bowls should be specified as stemmed bowls FS 304, as suggested by the diffusion of this type of Mycenaean vessel in certain Minoan contexts and by the coincidence of decoration of the narrow zonal type, typical in Mycenaean production of these stemmed bowls: see Karantzali 1986, in part. fig. 12; furthermore see possibly some vessels from Khania (Tzedakis & Kanta 1978, fig. 2), which would have been more influenced by this type of bowl than by the FS

the succeeding LM III periods (at least in LM IIIB:2), perhaps in small-sized varieties, as the evidence of Phaistos seems to suggest.

5.2.2 The articulated deep bowls with a continuous curving profile attested in Phaistos greatly differ, as regards forms and decorative structure and patterns, from the types so far considered and reveal more or less direct connections with the Mycenaean two-handled deep bowl FS 284.

The first group considered, that with quasi vertical walls, shows features both technological – in terms of good fabric and surface treatment – and stylistic, which suggest a not very late chronology among the products attested at Phaistos; in particular, the inside surface with bands, the disposition of patterns on a wide zone of the wall, and some kinds of decoration such as the frontal antithetic hatched tongues or vegetal motifs, find strict parallels in mainland products still dated to LH IIIB:1.<sup>38</sup> In Crete, the Phaistos specimens seem to be typologically connected with some bowls, distinguished in particular for their depth, dated to LM IIIB, possibly to the middle or later part of the period.<sup>39</sup> Both the occurrence of a decorative repertoire provided with local motifs (e.g. Minoan flower, palm), disposed in a typical kind of LM IIIB composition, alongside some examples of Mycenaean style (tricurved arch with filling motifs), and the lack of specific parallels in mainland contexts, suggest these products as the first imitations by local producers of the Mycenaean deep bowl FS 284.

All the other varieties of articulated deep bowls in the “Acropoli mediana” deposit may be identified *tout court* with FS 284, as individual vessels are often indistinguishable from mainland examples and they are mainly associated with the Mycenaean type of decoration, especially panels with triglyphs, antithetic spirals, tricurved arches in disintegrated form, zig-zag lines, isolated semicircles framed in panels. Furthermore, the bowls occur in the same varieties as those in mainland contexts, though

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284 deep bowl, which in LH IIIB:1 is not usually decorated with narrow zonal patterns, but with panels or other patterns extending from below the rim to just below the belly (see Mountjoy 1986, 117). Perhaps the specific influence of a mainland vessel type – such as stemmed bowls (304) or “one-handled bowls” (283) – should be inferred in the production of some Minoan bowls already mentioned, with more pronounced articulation of body and rim, found in deposits that seem to represent crucial discontinuities in about the middle of LM IIIB, as at Khania and Malia: see Hallager, Vlasakis & Hallager 1992, fig. 4c; Farnoux 1992, 210, no. 14; for mainland parallels see Mountjoy 1983, in part.52, fig. 19, 67 and 69 (Drachmani-Piperi IIIA:2); cf. also French 1967 (“shallow bowls with two horizontal handles”).

<sup>38</sup>In particular in Boeotia, where pottery production shows interesting connections with Cretan ones; cf. Mountjoy 1983, 77, fig. 30, 116; for the profile cf. Wardle 1969, fig. 6, 47–49 (Mycenae, IIIB:1).

<sup>39</sup>Popham et al. 1984, pl. 179, 2 (Unexplored Mansion); Sackett, Popham & Warren 1965, fig. 14 P2 (Palaikastro); possibly also MacGillivray et al. 1987, fig. 6,8; Tzedakis 1969, 403, fig. 20 (Mamelouko Cave, with close panelled decoration, similar to the Argive IIIB:2 style); Kanta 1971, 437, fig. 12 (“Lilianou cave”).

<sup>40</sup>It is perhaps significant that we recognize examples of elaborate styles, similar to mainland “Close Style”, or a fringed octopus, on bowls typologically considered of advanced date in

perhaps this does not have a chronological value;<sup>40</sup> bowls with flaring walls, bowls with a bulging lower profile and bowls with an “S” profile exist together in mainland closed deposits.<sup>41</sup>

With regard to local contexts, the main parallels may be detected in products mostly dated, though perhaps not exclusively, to LM IIIC, among which we can cite examples from Palaikastro-Kastri and Knossos.<sup>42</sup>

5.3 In short, the indications concerning morphological discriminants of the Phaistian deep bowls deserve to be considered at least on the grounds of three neatly differentiated typologies: the Minoan simple semi-globular, the simple angular or conical, and the Mycenaean articulated bell-shaped; the general exclusiveness in the association of shapes and decorative patterns, as regards, on the one hand the first two types and, on the other the Mycenaean deep bowl, support the basic distinctions and argue for the presence of two separated contemporary groups of pottery producers, having different stylistic and technological backgrounds.

The minor morphological distinctions into subgroups may be useful in indicating, on the one hand, “spatial variability” – as possible indications of provenience from different production units, either households or workshop industries – and on the other, as I suggested before, “temporal variability”.

The latest products, surely LM IIIC, such as unarticulated deep-bellied bowls or slightly articulated Mycenaean bell-shaped ones, make much more difficult the task of distinguishing the previous dichotomy and possibly attest a fusion of traditions, whose significance may be evaluated from a demographic viewpoint.

5.4 Omitting any further detailed consideration about typological variability, we have to remember that deep bowls with Mycenaean decoration – such as antithetic spirals and panel patterns – are generally considered to have entered the local contexts by the beginning of LM IIIC. I would like, however, to point out some indications in the Phaistos evidence which may prove useful in connecting their diffusion with a slightly earlier chronological phase, or at least with production well rooted in an earlier mainland tradition.

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existing classifications, as we may assert for bowls with a very flaring high rim or more open ones, with less prominent convex curves, or, finally, with straight walls: cf. Furumark 1992, pl. 157 (FS 285); Kanta 1991, 495, fig. 127; Gesell 1990, 328; Popham & Milburn 1971, pl. 57 (Lefkandi); cf. Mountjoy 1986, 150, fig. 189,4 (IIIC early).

<sup>41</sup>See for example Döhl 1973, 160, fig. 9.

<sup>42</sup>With flaring walls: Sackett, Popham & Warren 1965, fig. 15 P 21, P 27; Popham 1970b, pl. 52b (IIIB); Popham 1965, fig. 1b; with bulging lower part: Sackett, Popham & Warren 1965, fig. 8h; Popham 1965, fig. 3,4; with “S” profile: Sackett, Popham & Warren 1965, fig. 8d; Popham 1965, figs. 1d; 3,1; with thickened inside rim: *ibid.*, fig. 3, 11 and 14; for central and western Crete see also Prokopiou 1991, fig. 20; Prokopiou 1994, fig. 2; cf. Watrous 1992, fig. 68; Warren 1982-1983, fig. 41 (Knossos-Stratigraphical Museum); BCH 1973, 410, fig. 347 (Khania IIIC).



In this group we distinguish, first of all, an interesting bowl fragment with an isolated wheel motif, very probably representing a provincial version of the mainland IIIB:2 “rosette bowl” (Fig. 10).<sup>43</sup>

We may observe, then, that the best parallels for the deep bowls with an “S” profile of Phaistos are to be found in such deposits, dated to LH IIIB:2, as those at Teichos Dymaion, Tiryns, and possibly Athens.<sup>44</sup>

With regard to mainland pottery, we may now state that deep bowls with zonal linear decoration together with deep bowls with frontal compositions of symmetrical motifs such as antithetic spirals, sometimes considered typical of LH IIIC early, actually form pottery associations in LH IIIB middle contexts; they mostly characterize IIIB:2 deposits, especially at sites less central than Mycenae, such as Korakou, Tiryns, Midea,<sup>45</sup> and regions peripheral to the Argolid, such as Achaea with Teichos Dymaion, Messenia with Nichoria and Boeotia with Thebes. In these contexts we can observe, already in LH IIIB:2 pottery, the lack of rules in linear decoration of deep bowls and the common use of paint for the interior, features that we find in LM groups.<sup>46</sup>

Finally, we have to recognize that some decorative patterns of Phaistos deep bowls refer to a quite early chronology in terms of their Aegean parallels: Mycenaean deep bowls with antithetic spirals seem now to have been exported during LH IIIB:1,<sup>47</sup> and local production of the same kind of vessels seem to have started before the beginning of LH IIIC in some contexts, such as Miletus.<sup>48</sup> So, other individual motifs attested in Crete find comparisons in the LH IIIB style.<sup>49</sup>

On the basis of these observations, I would like to choose in particular one group from the articulated deep bowls of Phaistos to suggest a LM IIIB date: the “S”-shaped deep bowls. These reveal homogeneous features: in a) the good quality of their fabric and surface treatment – usually polished and sometimes slightly slipped; in some cases in b) linear decoration, consisting of a very thin band over the rim and a series of lines on the body; but chiefly in c) zonal decorative compositions with chains or linear motifs, consisting of “N” and “U” patterns, lozenges, ovals, strokes or foliate band, wavy and zig-zag lines, all patterns com-

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<sup>43</sup>Another fragment, belonging to a very large bowl, narrowing towards the mouth and with a high flaring rim, decorated with antithetic spirals and with a wide band over the rim – possibly an import in the Phaistos archaeological record – permits a comparison with type “B” deep bowls, though the rim band does not reach the canonical 3 cm.

<sup>44</sup>Mastrokostas 1965, pls. 163a; 166a; Broneer 1939, figs. 40–41; cf. Mountjoy 1986, 121; Grossmann & Schäfer 1971, pl. 57, no. 28; Verdelis & French 1965, e.g. fig. 1,3.

<sup>45</sup>Rutter 1980; Schönfeld 1988; Verdelis & French 1965; French 1992–1993.

<sup>46</sup>Mastrokostas 1965; cf. Sherratt 1980, 182–183; Shelmerdine 1992; Taylour, French 1972; ADelt 1973–1974 (1980), 43 ff., pl. 284.

<sup>47</sup>Cf. Benzi 1993, 280, fig. 3f (Kalymnos).

<sup>48</sup>Voigtlander 1986.

<sup>49</sup>For example “disintegrated tricurve arch with stemmed spiral”: see Mee 1982, pl. 21,2; in mainland Greece see Voigtlander 1973, pl. 89, 1; Mylonas Shear 1987, no. 87; cf. Müller 1992, 460, fig. 7b (LH IIIC early).

mon in Greece,<sup>50</sup> but particularly popular in LM IIIB:2 products, as some features, such as hatched lozenges,<sup>51</sup> seem to suggest. I think it is possible that this group of bowls does represent the coming of the true Mycenaean deep bowl into a local context: if it really attests a manufacture by Mycenaean artisans, a possibility their morphological features seem not to exclude, we should have direct evidence of the integration process of foreign elements in a social context in which stylistic language can play a significant role in message exchange.<sup>52</sup>

5.5 From this short account, it emerges that at Phaistos, in a period extending from IIIB:2 onwards into IIIC, different bowls were used, probably coming from different production units, which kept alive local traditions alongside new foreign trends. In this context, the Mycenaean element seems to be particularly active in the integration with the local tradition, as we may detect in the products of the LM IIIC elaborate style, where it joins the local repertoire to accelerate new stylistic developments.

The evidence of Phaistos and the comparison with pottery of dated Minoan contexts then suggest that the local manufacture of the true Mycenaean deep bowl 284 cannot be easily recognized before an advanced phase of LM IIIB, probably in the last part of the period. Whether the production of Mycenaean deep bowls in Crete must be considered contemporary with the use of the Mycenaean style with antithetic spirals and panels or whether its first coming was earlier, are questions which the evidence of Phaistos, in the absence of stratigraphy, cannot answer in the present circumstances. However, we must not underestimate several other indications in the same evidence, which seem to suggest that rather strong connections with the Mycenaean world really did exist in the last phase of IIIB, corresponding to a period marked by upheaval and population movements throughout the Mediterranean regions.<sup>53</sup> If antithetic spirals and panels entered the local contexts already in IIIB, the pottery of Phaistos, so rich in this kind of evidence also with regard to other LM IIIC groups, could suggest that directional, selective Mycenaean connections involved at a certain moment only some island sites or areas, as in earlier periods is clear in the case of Khania.

If this is the case, the richness of decorative styles and the variability of motifs attested at Phaistos in LM IIIB-C could be explained by processes of proliferation often coincident with relevant and dramatic social transformations.<sup>54</sup>

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<sup>50</sup>Cf. in part. French 1992-1993, fig. 13 (Midea, IIIB:2); BCH 1986, 686, fig. 31; Prakt 1987 (Mycenae, IIIB:2).

<sup>51</sup>Popham et al. 1984, pl. 179.

<sup>52</sup>Cf. Wobst 1977; Plog 1978; Plog 1980, in part. 11 ff.; Shanks & Tilley 1987, 89 ff.; Perlès 1992, 138 ff.; Orton, Tyers & Vince 1993, 227 ff.

<sup>53</sup>Cf. Crisis Years 1992.

<sup>54</sup>Broodbank 1992; for the meaning of change and variability in pottery systems cf. for example Vitelli 1978; Rice 1984a.

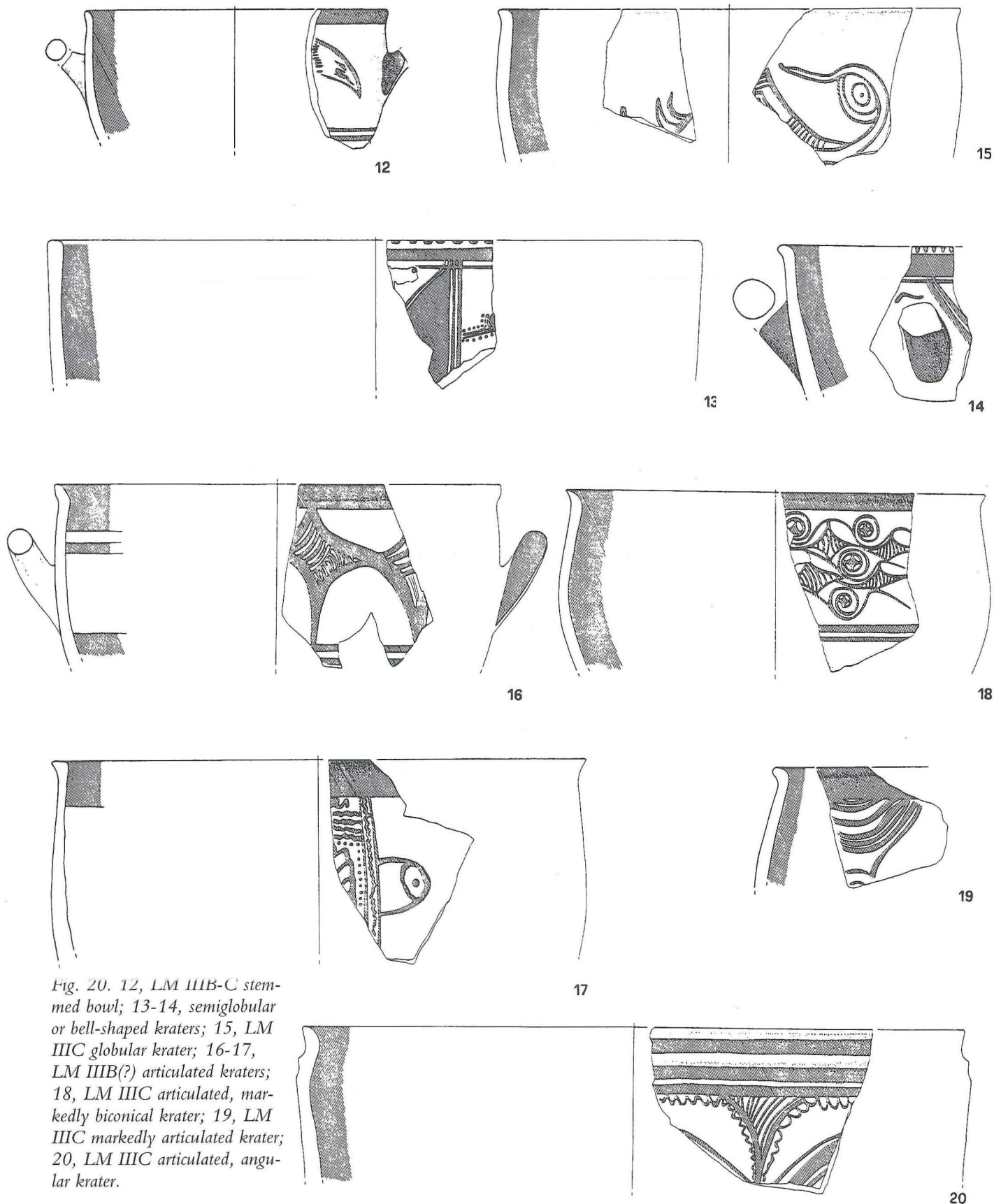


Fig. 20. 12, LM IIIB-C stemmed bowl; 13-14, semiglobular or bell-shaped kraters; 15, LM IIIC globular krater; 16-17, LM IIIB(?) articulated kraters; 18, LM IIIC articulated, markedly biconical krater; 19, LM IIIC markedly articulated krater; 20, LM IIIC articulated, angular krater.



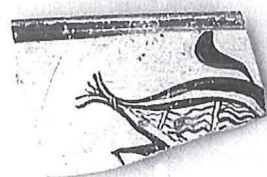
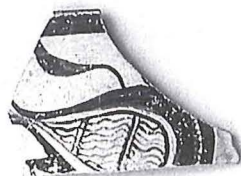


Fig. 21. LM IIIB-C stemmed bowl(?).

Fig. 22. LM IIIC stemmed bowl(?).



Fig. 23. LM IIIC semiglobular kraters.



Fig. 24. LM IIIC semiglobular kraters.

6. Also the evidence of another pottery class attested at Phaistos seems to point to Mycenaean connections during the IIIB phase: some sherds – belonging to vases with a rounded body, short vertical, only slightly distinct walls and a straight rim with a rounded lip, handles set under the rim and with linear decoration often consisting of double bands on the inside or outside rim (Figs. 20.12; 21) – probably attest the presence of stemmed bowls very similar to the Mycenaean FS 305 bowls; mainland examples, whose production sharply decreases with the beginning of LH IIIC, offer particularly good parallels for the evidence of the Phaistos deposit.<sup>55</sup> Furthermore, the shape of this group of stemmed bowls in some larger-sized examples seems to offer a link with LM IIIC kraters (Fig. 22).

<sup>55</sup>Mountjoy 1983, 92, fig. 37, 115; Mountjoy 1986, 119, 165; cf. AAA 1974, 172, fig. 13 (Thebes); Shelmerdine 1992, P 3820; in Crete cf. Tzedakis & Kanta 1978, 16.



Fig. 25. LM IIIC globular kraters.



Fig. 26. LM IIIC globular kraters.

7. As regards the class of kraters, a preliminary typological analysis distinguished little-articulated shapes with an open mouth from more-articulated ones with a slightly narrowing upper part.

7.1 In the first group we can detect two typological varieties: kraters with a semi-globular body, straight, vertical walls and a straight lipless rim (Fig. 20.13; 23), and kraters with slightly sinuous walls and a slightly everted rim with a rounded lip (Figs. 20.14; 24, 27). In this case we deal with the varieties of a typological family well known in local contexts and, though sometimes considered influenced by Mycenaean products, without detectable comparisons in mainland deposits.<sup>56</sup> At Phaistos the shape is frequently associated with an elaborate style of decoration, including a rare example of the Octopus Style and other complex compositions adopting a reserved technique which shows strict connections with the Aegean IIIC Middle styles.<sup>57</sup>

7.2 In the other group of shapes we isolate a single example, now in the Heraklion Museum (Fig. 28), which can be compared, for the globular form with a thickened rounded rim, with a type attested in Crete by only a few specimens, – one from the reoccupation level of the Knossos palace, one from Foinikia and one perhaps from Khania – already acknowledged in the rare FS 303;<sup>58</sup> the panelled decoration of the Phaistos krater is not unlike that from Knossos, dated to late IIIB and similar to the heavy panelled style products of LH IIIB:2 in the Argolid.

A group of kraters attested at Phaistos by many sherds may perhaps be

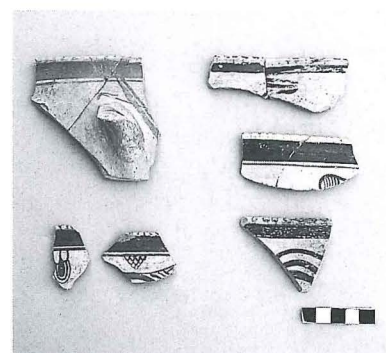


Fig. 27. LM IIIC semiglobular kraters.



Fig. 28. LM IIIB-C globular krater.



Fig. 29. LM IIIB-C articulated krater.

<sup>56</sup>Kanta 1980, 272-273; Tzedakis & Kanta 1978, 19-20; see for example Sackett, Popham & Warren 1965, fig. 13 (Palaikastro-Kastri); Lebesi 1970, pl. 364a; Popham 1967, pl. 90a; Warren 1982-1983, fig. 43 (Knossos-Stratigraphical Museum); Seiradaki 1960, fig. 15, 1-2 (Kaphi); Kanta 1991, 495, fig. 26 (Syme Viannou).

<sup>57</sup>Cf. Broneer 1939, figs. 30-31 (Athens-Fountain House).

<sup>58</sup>Kanta 1980, 24-25, fig. 13,3; Popham 1964, pl. 8a; ADelt 1969, pl. 436c (dated to IIIB/C).



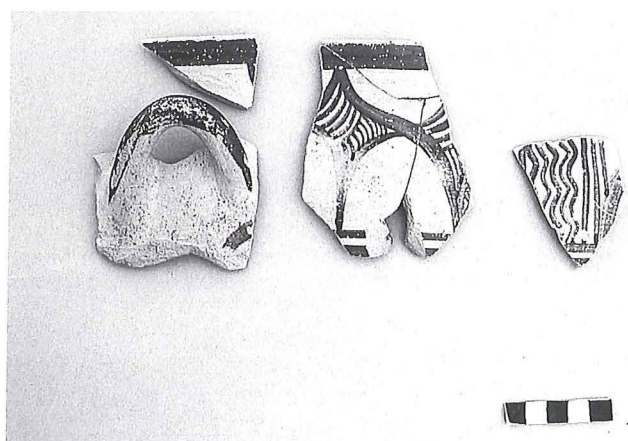


Fig. 30. LM IIIB(?) articulated krater.

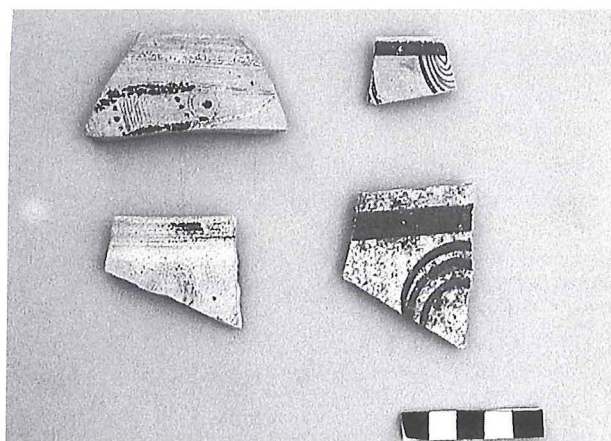


Fig. 31. LM IIIB-C articulated kraters.



Fig. 32. LM IIIC articulated, mostly biconical kraters.



Fig. 33. LM IIIC articulated, mostly biconical krater.

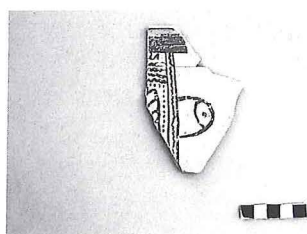


Fig. 34. LM IIIB(?) articulated krater.



Fig. 35. LM IIIC articulated kraters.

considered a later variety of this type: it has a globular shape, restricted at the mouth, with a very short, thin and slightly distinct rim, and is frequently associated with elaborate decorative motifs (Figs. 20.15; 25-26), recalling compositions common in Aegean IIIC Middle.<sup>59</sup>

7.3 The remaining material seems to offer evidence of four different types of kraters, with several formal variations depending on rim shapes: kraters with convex, slightly articulated walls (sub-ovoid profile?) and a distinct rim, sharply everted or thickened inwards and rounded (Figs. 20.16; 29-31); kraters with a rounded body and short straight, vertical walls and a flat rim with a sort of ledge-lip (or thickened, almost triangular in section) (Figs. 20.17; 34-35); kraters with convergent upper walls producing a biconical profile and a sharply everted rim (or thickened and flat inwards; or everted and rounded; or everted with a flattened lip) (Figs. 20.18-19;

<sup>59</sup>See fringed motifs and reserved technique with panels and semicircles, with parallels at Perati: Iakovidis 1980; Sherratt 1985, in part.192; see also elaborate triangles with stylized birds: cf. Iakovidis 1987, 451-455 for parallels in the Peloponnese and Dodecanese.





Fig. 36. LM IIIC articulated krater.

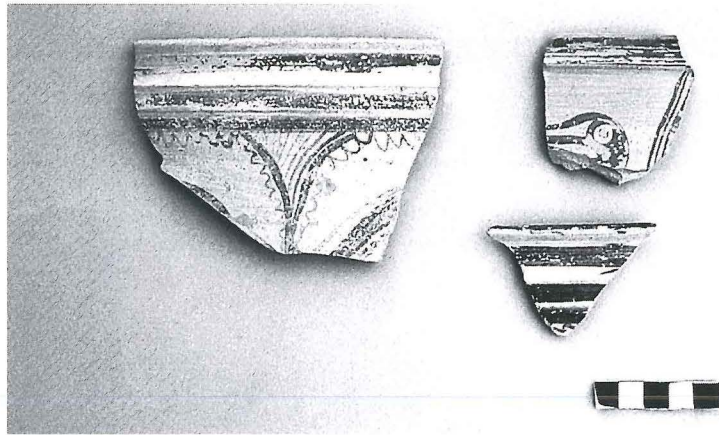


Fig. 37. LM IIIC angular kraters.

32-33, 36); kraters with angular profile, with short inwardly inclining walls and ribs below the rim (Figs. 20.20; 37).

In the first two of these four groups, the vessels do not usually display much elaborate patterning, but offer examples of decoration with panels and chains of motifs such as lozenges or, frequently, of pictorial style, especially birds and fish.

By contrast, the kraters with a biconical profile are more often associated with compositions revealing incipient elaboration, with complex, closed, sometimes fringed patterns. The clearest examples of these kinds of decoration are detectable on the walls of the few angular kraters identified at Phaistos.

All the kraters included in these provisional four typological groups do not seem to find good parallels in published LM pottery;<sup>60</sup> on the contrary, by examining Mycenaean typological classifications, they may be identified with the kraters with horizontal handles, the so-called “bell-kraters” in Cypriot and eastern Mediterranean contexts.<sup>61</sup> We are dealing in particular with FS 281/282. In the meantime, while we may easily state that our angular shape is very similar to the “carinated” one peculiar to a subgroup of FS 282 kraters produced during LH IIIC Middle,<sup>62</sup> the other shapes identified may not be easily compared with mainland IIIC shapes as these are mainly characterized by a wide angular squared rim which does not occur on our specimens.

7.3.1 Looking at this in greater detail, we may consider the first two less-closed articulated shapes, with a convex profile or with short straight walls, as more similar to mainland FS 281 kraters when compared against the shape

<sup>60</sup>See possibly a fragment from Kavousi: Gesell 1990, 331, fig. 8.

<sup>61</sup>Kling 1985 (in contexts contemporary with LH IIIB); Kling 1988; Kling 1989, 108-126.

<sup>62</sup>In particular in the first phase, corresponding to Rutter 4a, Lefkandi 2a: Mountjoy 1986, 174; Sherratt 1981; for the addition of a plastic rib below the rim see Mountjoy 1986, 175; Mountjoy 1993, 97; cf. Podzuweit 1983 (Tiryns, IIIC “entwickelt”).

with a slightly narrowing biconical profile, peculiar to later 282 kraters according to Furumark's description.<sup>63</sup> This morphological dichotomy seems to be confirmed by the difference in the decorative patterns, at Phaistos much more elaborate on the "282 like" kraters. In effect, parallels for the roughly-biconical kraters are detectable in LH IIIC pottery, especially with regard to examples with a sharply everted rounded rim (e.g. Fig. 20.19).<sup>64</sup>

7.3.2 When we examine the first two groups, we realize that we have to consider earlier Mycenaean products to find significant and close parallels for them, in particular for two well-preserved sherds at Phaistos, one with a convex wall and a thick, rounded, little-everted rim, decorated with panels and lozenge-chain in lustrous paint with bands on the inside wall (Figs. 20.16; 30); the other with short straight walls and a flat, slightly ledged rim, frontal panel and half-rosette and unpainted inside surface with a rim band (Figs. 20.17; 34): the best Mycenaean parallels belong to late IIIB:1 or IIIB:2 deposits;<sup>65</sup> we have in particular to remember that decorative patterns with panels and half-rosette, though arranged in a complex "provincial"-kind of way on the example from Phaistos, are typically Mycenaean, with major diffusion in LH IIIB:2 contexts.<sup>66</sup>

Returning to the Minoan contexts, we have now the possibility of comparing this last krater, at least in terms of its morphological aspect, with a vessel belonging to one of the latest deposits of Kommos, still dated to LM IIIB,<sup>67</sup> a vessel which may offer a point of contact between early Mycenaean products and the Phaistian ones.

7.4 In short, after investigating the relations with island and mainland products, the kraters of the "Acropoli mediana" seem to permit one to recognize the development through successive stages in local production of a class of pottery with precise parallels in Mycenaean products, starting from a developed phase of LM IIIB and with continuous connections through IIIC.<sup>68</sup>

8. To sum up, the deep bowls, like the kraters, seem to attest to new important connections with the Mycenaean world in terms of pottery ma-

<sup>63</sup>See now Furumark 1992, pls. 154-155.

<sup>64</sup>E.g. Alzinger et al. 1985, 413, fig. 15, 1 (Aigeira); Mountjoy 1985, 179, fig. 5.14 (Phylakopi, phases 2b/3c); for the typological definition see the group in Mountjoy 1986, 174, no. 1 ("rounded-rim", Rutter phase 4a): cf. no. 5.

<sup>65</sup>See in particular Shelmerdine 1992, e.g. P 3827 (Nichoria); Grossmann & Schäfer 1975, 63, fig. 1 (Tiryns); Åström et al. 1990, fig. 10 (Midea); Mountjoy 1976, 85, fig. 4; French 1969, 76, fig. 3 (Mycenae, IIIB:1 and IIIB:2); Mountjoy 1983, fig. 17, 123 and 125; fig. 29, 204; Mountjoy 1986, 115-116, in part. fig. 142,3; 129, in part. 159,2.

<sup>66</sup>See Åström 1987, 9, fig. 5; Schonfeld 1988 (among innovating motifs of III "B mitte" at Tiryns); French 1966; French 1969b (Mycenae); in part. Mountjoy 1985, 159, fig. 5.5 (a deep bowl fragment dating the construction of the fortification wall at Phylakopi).

<sup>67</sup>Watrous 1992, no. 1512.

<sup>68</sup>As a LH IIIC Middle krater's sherd with squared rim, possibly imported from mainland Greece, seems to suggest in the evidence of Phaistos.

nufacture, at least from late IIIB into IIIC. However, these connections do not seem to suggest a sudden coming of a Mycenaean “facies” corresponding to a total change in pottery evidence at a certain moment in the Minoan chronology, as one might imagine for the beginning of LM IIIC with the arrival of a Mycenaean style of decoration; we can notice in this regard that so far, in the whole record of vessels of this Phaistian group, it seems impossible to identify clearly those diagnostic elements used in mainland classifications for recognizing the beginning of IIIC.<sup>69</sup> In a Minoan-rooted pottery tradition well attested also in the LM IIIC period we perceive rather the outline of continuous, particularly strong relations with mainland Greece, whose effects on pottery production seem to have been inherited from a previous period. Historical implications to be discussed in this regard could suggest that, if we have to recognize a new pattern of contacts between Greece and some areas of Crete such as Phaistos – implying perhaps movements of people – we might consider in more detail the troubled decades after the first destructive disturbances in Mycenaean settlements and not exclusively the period succeeding the definitive collapse of the mainland palaces.

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<sup>69</sup>French 1969b; Rutter 1977; Iakovidis 1979; Mountjoy 1986, 134 ff.; Mountjoy 1993, 90–91.



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## Response and discussion

**Betancourt:**

First, we need to really thank Elisabetta Borgna for rescuing this body of material, which, if I understand it correctly, was excavated 40 years ago in a rescue excavation in connection with construction, and totally ignored until she began to study it. I think we need more examples of people who are looking at this type of material because it really establishes Phaistos as a major IIIC site. She presents us with a body of material which we have not seen before – and in an extremely rich way. It is only a pity, I think, that the coarse fabrics and the non-fine fabrics were not saved from this excavation so that we might, perhaps for the first time, begin to understand what some of the other shapes in this period looked like. The presentation raises some extremely important questions. It is extremely good that we have had an opportunity to look at it in this detail. One of the consensus points which seems to be rising from this conference is in the great importance of IIIC in Crete. We have seen many new sites presented for this period, we have seen a pattern of, on the one hand, new settlements, on the other hand, a reuse, and sometimes return to, existing settlements. The overall pattern seems to be one of greatly increased pottery production and use in Crete beginning in IIIC. This paper makes a very important contribution in analysing where these ideas come from, and in looking beyond Crete to the Mycenaean world and in isolating two groups of shapes and motifs, one group which comes from the Mycenaean sphere, and one group which comes from the Minoan sphere. For many years people have looked for the arrival of Dorians in Crete, and they have been archaeologically invisible. Perhaps after decades, we are now getting to the point where we can begin to understand some of the reasons for that invisibility. Perhaps some of the points we have seen raised in this paper bear directly on that problem, because I am struck by the fact that the Mycenaean influences do not come at a single point in time, but instead are spread over what must have been several decades in the Mycenaean period, beginning perhaps even in IIIB:1. They are then combined with and integrated with local Minoan productions in an extremely complicated way. By the time we are looking at this body of material from Phaistos, it can include many different bowl shapes, many different krater shapes, all coexisting and apparently being used in the same town within a probably not too long period of time. The pattern which begins to emerge is that if we want to find the model for increased population at this time – and I will go out on a limb and suggest that perhaps this is what we are seeing – it is of small groups of people entering over a period of time and being received peacefully within the existing towns in Crete, sometimes establishing new ones, sometimes living in scarcely settled places, and sometimes being just absorbed into existing communities, but coming over a period of time, so that by the end, that is, by IIIC, their influence in pottery is really considerable. This results in a new Minoan style in IIIC of great complexity and great richness, and – I think we have seen this from some of the slides today – of a great beauty as well. This is a very attractive style in its own right. I think there is much to discuss here, so I'll throw the conference open for general questions and comments.

**Vlasaki:**

I was very glad that Betancourt spoke of Dorians. A few years ago I hinted in an article at the two different comings of the Dorians to Crete, the one before the end of the Bronze Age. It was the early IIIC Minoan pottery which made me speak about this matter.

**Watrous:**

This is lovely pottery. You showed us mainly bowls and kraters. Do you have other material, other fine ware? If so, how representative of the complete range is what you showed us?



- Borgna:** I have other material, of course, especially cups, but not so representative as regards quantity to encourage a similar analytical typological analysis. Then, I find it difficult to assemble this material together to form homogeneous clusters which point to significant functional sets of pottery precisely related to the different chronological phases attested on the "Acropoli mediana", and with only this group of Phaistian material to establish in detail the associations between different shapes: whether the cup goes together with the deep bowl, or whether the deep bowl substitutes for the cup, or whether the deep bowl substitutes for the kylix. Anyway, I have several vessels consisting of cups, shallow and conical bowls, champagne cups, kylikes, basins, and a more scanty range of closed shapes – jugs, jars, and small stirrup jars of globular type. Furthermore, I have some specialized shapes such as rhyta, pyxides, lids, figurines of Mycenaean type, especially of the LM IIIC period.
- Watrous:** Specifically what I wanted to know is do your cups show as strong a Mycenaean tradition?
- Borgna:** No, they do not. I speak about a Minoan kind of production because I think that the style remains Minoan. In the later phases I still have cups with blob decoration, which on the mainland I find in a very late IIIC phase at Tiryns, where they are considered of possible Cretan influence. Yes, I have Mycenaean features in some kinds of cups, for example, with elaborate lozenge patterns, but not so important as in the case of the deep bowls and kraters.
- Macdonald:** This is not directed at the speaker, unless you have found out from other, stratified, sites that there is a rule here. Bands on deep bowls: is there any chronological significance to, for instance, one or two bands beneath the decorative zone, a simple narrow band at the top of the zone, or a deeper band, which, of course, is not as deep as the LH IIIB:2 deep band deep bowls, or bands on the insides of bowls, say, two bands as opposed to a pure monochrome interior? Has anyone spotted any chronological significance to the positioning of bands? This is the kind of thing they go mad about on the mainland.
- Borgna:** In effect, I am not able to find out a rule in the setting of bands on deep bowls at all, though I think there is a possibility of having some indications – for example in the presence of very few sherds with a wide rim band which we may consider imitations of IIIB:2 mainland products. On the other hand the use of a very thin line on the rim may be linked to Mycenaean imports and it is often associated with double banding on the inside unpainted wall. This use could be a hint of a relative early chronology in the context of LM IIIB-C productions: perhaps earlier imitations of Mycenaean bowls are unpainted with bands inside. Regarding the bands on the body, I am not sure that the sequence of two or one may show a rule. It seems to be scanty recognizable patterns in the recurrence of linear decoration.
- Warren:** In joining all those who are praising the wonderful quality of this material, I would also like to say that it is indistinguishable from what we see on the tables at Knossos. Vase after vase. Fabric, slip, paint, motif, shape. I almost thought you were showing my material, only yours is much nicer. It is astonishingly similar. In other words, it is likely that whatever was going on at Phaistos, was also going on at Knossos. One simple point on a detail: do you have any internal reserved bands on any of these deep bowls?
- Borgna:** Yes, I have and this possibly helps to demonstrate that the bulk of the material is surely IIIC. I would like to ask you whether you think there is a chronological difference be-



tween the use of a real reserved band under the rim and that one of a thin reserved line over the rim. As regards the reserved band, it is surely LM IIIC, but I am not so sure that it is a later characteristic.

**Warren:** On this question of the internal reserved band, it is natural that we have used the mainland tradition to start our consideration. It has always been perhaps a potential difficulty that the reserved band on the mainland IIIC is quite late, well after the beginning. Talking with B. Hallager and others, we really are feeling quite strongly that maybe the internal reserved band could be a Minoan feature, and that it could, therefore, begin earlier. It could begin at the beginning of the LM IIIC. I does not have to go back. There is a further point that I would like to explore, and build on your remark that the bulk of this material is IIIC. You were arguing that there is quite a lot of Mycenaean, LH IIIB:2, even in one or two cases IIIB:1, background that is present in your material. It would be useful for us to clarify this. That must mean, if these Mycenaean traits were being picked up in Crete, as I think you were arguing, in LM IIIB, that this material must have accumulated over quite a period of time, because IIIB is not IIIC. I just would like to press a little bit – I know that Watrous may take a different view – whether or not the whole of this material could be called IIIC.

**Borgna:** I think I have a wider chronological spectrum which can show that the “Acropoli mediana” was occupied – although in different and sometimes sporadic patterns – during the whole period from LM IIIA:1 on. Though the bulk of the deep bowls are to be dated in LM IIIC, I do not find easily credible to state that only in IIIC people produced bowls and kraters, while before all the other shapes, except these ones existed.

**Warren:** The parallels you were using all the time, or mainly, were not with stratified Minoan material. Watrous has now published, of course, some material, and we have Kastelli 1966. On the whole, you were using mainland LH IIIB material. But the appearance of LH IIIB features in Crete can be explained in other ways than strict contemporaneity. The connections do not have to have occurred throughout mainland IIIB. It is possible that mainlanders could have arrived at the end of IIIB/beginning of IIIC, bringing older LH IIIB ceramic traditions with them. So I am just trying to press as much as I can whether any of this material necessarily has to be IIIB, that is, pottery made and used in LM IIIB, or whether all that you have shown us of this wonderful material could not, in fact, be IIIC production, incorporating LH IIIB and early LH IIIC features.

**Borgna:** I cannot prove sharp chronological distinctions, but I think that some comparisons, also in Crete – for example bowls and some decorative patterns in LM IIIB Unexplored Mansion – make it likely that a minor part of the vessels I have shown could be of IIIB date. Furthermore, as regards Mycenaean contexts, I think that we have, for example, in the rosette bowls, the possibility of finding earlier reliable comparanda. I think that the great problem is that we have the impression that LH IIIB:2 Mycenaean pottery does not influence Mediterranean contexts because we always have to do with the production of Mycenae or the Argolid, but if we look at peripheral Mycenaean contexts, we find the possibility of good and useful LH IIIB parallels.

**Betancourt:** Could you say something about the figurines?

**Borgna:** I have some zoomorphic figurines, a Psi-figurine, and perhaps hints of wheelmade figures,

evidence I have to relate to the one already known from the area of the Palace published by Halbherr in *Monumenti Antichi*.

- B.Hallager:** I would agree with you that part of your material is late IIIB. Did I understand you correctly that you asked if there were antithetic spirals in IIIB? They exist in IIIB:2 in Khania. Regarding the bands: in Khania the double interior rim band is a IIIB:2 trait, as opposed to the reserved rim band, which appears in early IIIC.
- Borgna:** Do you think that the banding on the wall has a significance?
- B.Hallager:** There is a general idea that in IIIB:2 cups and bowls have two body bands, but there are obvious exceptions to that. In IIIC the bowls usually have only one body band. But I do not think it is a good idea to date pottery on their number or size of body bands.
- Borgna:** One of the bowls I showed you has two or three wide bands, but also the reserved band on the inside rim.
- Rethemiotakis:** I think that Mycenaean are present at Phaistos. Popham and Laviosa have established this long ago by taking account of the considerable number of figurines found at Phaistos, especially in the old excavations at the beginning of the century. These are LH IIIB figurines. We must remember that the restricted number of Mycenaean figurines found in Crete, since the Cretans did not adopt easily the Mycenaean form. This means that we have a marked presence at Phaistos. One also has to consider the large number of hollow wheelmade animal figures found at Hagia Triada, and also at Phaistos. This may also be evidence of Mycenaean religious activity in the area.
- Prokopiou:** I want to point out the similarities between Phaistos, Knossos, and Sybritos. On seeing the ware, its quality, I had the impression of familiarity. Regarding the interior band of the deep bowl: in my material, deep bowls with or without a reserved band coexist. For instance, I have a deep bowl without a reserved band, but with a tricurved streamer. Whether this material should be dated late IIIB/early IIIC or early IIIC only needs to be discussed.
- Hood:** I entirely agree with Warren that this looks absolutely comparable with what we find at Knossos. The deposit of this which I studied I certainly would like to call early IIIC. I thought it had an early tinge. One marked thing about it, which seems to be same in your case, is that the deep bowls far outnumbered kylikes, and this is extraordinary at Knossos which is bursting with kylikes in earlier LM III phases, even in IIIB. The deep bowl is not at all common, in my experience, in IIIB. There were one or two fragments of deep bowls with the reserved band inside the rim, but this was rare in the deposit which I studied. There were other features which, I think, everyone probably would agree were IIIC, such as the hollow lip on the rims of jars, again rare. Also large twisted handles, which, again, should be IIIC. And I hardly dare mention it, but the deposit was marked by the first appearance of the so-called "barbarian" ware, of which there was a small but significant amount. The gray ware comes earlier at Knossos, in my experience. But the hand-made dark "barbarian" ware, of which we have so much at Khania, as far as I know, first appears in this horizon at Knossos, and not earlier. There were – after all, what I have studied, and what you are studying – a significant number of IIIB sherds, at least I thought I could distinguish them as being IIIB and not contemporary with the bulk of the deposit.



**Warren:** Are there any kylikes?

**Borgna:** Yes there are. Among them some quasi carinated examples possibly of LM IIIB date, according to Kanta's indications from Kato Symi, and some others showing Mycenaean connections, on the one hand as regards LH IIIA:2 conical stems with reserved banding, on the other hand for the use of horizontal handles: perhaps it is a local tradition, but I found comparisons from Pylos in IIIB:2.

**Kanta:** This was indeed beautiful material. I have seen the ones exhibited at the Museo Pigorini, I studied it years ago. Most of the features you considered early in the material you showed us exist at Kastelli 66 – as we have seen. What struck me from the photographs you showed us of the Pigorini material was the quality, and the fact that it all looked so similar that I could not, without knowing much about it, see this particular material as being of a great chronological range. For this reason, one way out of the chronological problem that I would like to suggest is that, indeed, the reserved band is a Cretan characteristic – I already suggested this in my Kastelli 1966 book. Your material starts in early IIIC, just at the threshold of IIIC, and continues to a not very advanced stage. The similarity with Warren's published material is very great, and the similarity with Sybritos is very great.

**Vlasaki:** I completely agree with Hood. I must add for those who have not seen the Khamalevri material that it is very similar. It means that at this time, in late IIIB or early IIIC, something happens not only in Knossos or Phaistos, but in the whole of Crete, also in Khania. The same fabric, everything. It is a general event at this time. We only have a few kylikes – the deep bowl takes over from the kylikes.

**Watrous:** Watching you show all this material from Phaistos, I could not help but being struck by its lack of overlap with the Kommos pottery. Out of all the material you showed us, I saw maybe three sherds that I would have guessed to be IIIB. The difference between the LM IIIB Kommos material and your material is one that cannot be accounted for in chronological terms. That is what everybody else is saying, too. The material is so different in its shapes and motifs. I think Kommos is deserted at the beginning of IIIB:2. Borgna's material, talking conventionally, is not more than a generation later. You would expect in such circumstances some kind of overlap in the shapes and decoration from the two sites, yet it is minimal. One possible problem with the material is that it has been presorted. We do not know to what extent it is representative of the whole.





# Late Minoan III Pottery from Kastelli Pediada

*Georgos Rethemiotakis*

Changes in pottery styles may sometimes mirror historical events such as migrations and invasions, or signal the increase or weakening of an external influence upon a pre-existing cultural structure. Pottery, as a popular art form, is usually expressive of local artistic idioms and, in this way, it may thus become a means to emphasize localism against the centrally controlled official art, which usually tends to assimilate local diversities.

A local ceramic tradition can be seen in the persistence of local wares in the ceramic production of workshops active in the central Pediada area from the dawn of the Old Palace period. Though of good fabric, pottery shows no sign of polychrome decoration. The absence of polychromy, so typical in the Old Palace ceramic production, is oddly accompanied by the adoption of an old-fashioned mottled ware, sometimes in combination with white motifs.<sup>1</sup> It is possible that conservatism is a way to respond to the infiltration of foreign elements coming from Malia and Knossos, as becomes evident from recent finds at Kastelli and Galatas, the two main settlements dominating the Eastern and Western part of Pediada.<sup>2</sup>

Despite the fact that Knossian and Maliote influence weakens in the New Palace period, Pediada workshops continue to produce uninspired pottery made of the same red clay without any painted decoration except bands. Such highly characteristic pottery was found in various locations all over the Pediada plain, marking the existence of several installations and settlements of the Old to the New Palace period. More evidence came from the recent excavations at Kastelli, where an extensive settlement thrived from MM IB onwards.<sup>3</sup> Successive destructions of the settlement during both palatial periods had no effect on the productivity of the local workshop. A great mansion was built during MM III on the top of the low hill, in which were concentrated the religious and social activities of the community.

The great destruction that overwhelmed the whole island in LM IB put an end to life at Kastelli, at least in the form of the settlement organised around the central building which was set on fire after being looted. The local ceramic workshop did not survive the disaster. Vases of Pedia-

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<sup>1</sup>Demopoulou 1986-7, 31-3 figs.1-3; Rethemiotakis 1990, 243-5 pl. 40.

<sup>2</sup>Rethemiotakis 1990, 241-8, on the Maliote influence. Connections between Knossos and Galatas are attested especially during MM IIIA. Preliminary reports will be published in *ADelt* and *Kritiki Estia*.

<sup>3</sup>*ADelt*. 42 (1987), 531-2 1988-1992: in publication. *Kritiki Estia* 2 (1988), 327-8; 3 (1988-9), 282-3.

da red clays were never to be made again, either because the potters changed occupation or adapted to new demands.

Soon after the site was reoccupied. Evidence on this is now turning up from two rescue excavations within the modern settlement of Kastelli. A plot owned by the Kastelli Community yielded rich material dated to the LM IIIC.<sup>4</sup> Another plot 200 m to the NE, owned by the local Church, is now under excavation. The latter produced successive layers with pottery dating from LM IIIA:1 to LM IIIC, lying immediately upon the destruction debris of the New Palace settlement.

Unexpectedly the LM III pottery excavated at both plots does not adhere to the conservatism of the Old and New Palace period workshops, being now fully adapted to the current fashions.

Fine LM IIIA:1 decorated pottery is now made of buff or yellowish clay with a slipped surface. The colour of the paint ranges from bright orange to black. Red clays are no longer in use in fine wares. Pottery from the second plot (registered as "Kastelli '93"), includes mainly cups and kylikes with flattened rims monochrome red or black or decorated with festoons in combination with zig-zag and lozenges, concentric arcs, foliage sprays and stipple (Fig. 1).<sup>5</sup> A sherd belonging to a knobbed cup, a normally plain East Cretan shape,<sup>6</sup> has painted decoration consisting of a bird and a pendent stylized flower (Fig. 1α). Only one sherd with iris zig-zag came from the Community plot, suggesting that the area of the Neopalatial mansion remained unoccupied. Similar pottery, produced under strong Knossian inspiration attested by both fabric and decoration, is known from Malia, Phaistos, Hagia Triada, Kommos, Viannos and Poros. Local variations occur in the Eastern and Western part of the island.<sup>7</sup>

The rapid alignment of Kastelli with the LM IIIA "Cretan" ceramic style is signalled by the elimination of the local Old and New Palace styles. It seems that this uniformity in pottery style was centrally determined perhaps by the Knossian workshops which trained and sent skilled potters all over the island. In our case, this intervention brought about a total break with the past, since there was no interruption or retrogression in pottery production, which shows now an awareness of the current stylistic tendencies throughout the Post-Palatial period.

Although we have not so far come across a stratified LM IIIA:2-B sequence there are some isolated finds that may belong to this period. Among them are a sherd from a west Cretan amphora or stirrup jar with a stylized octopus (Fig. 2), and another from a stirrup jar with carefully drawn floral decoration (Fig. 3), also the product of a western workshop as shown by its fabric. Parallels have been found at Armenoi, dating to the LM IIIB period.<sup>8</sup>

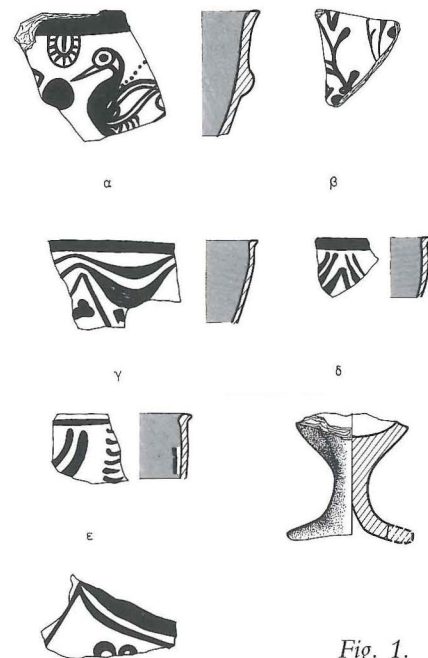


Fig. 1.

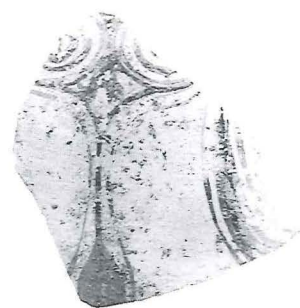


Fig. 2.

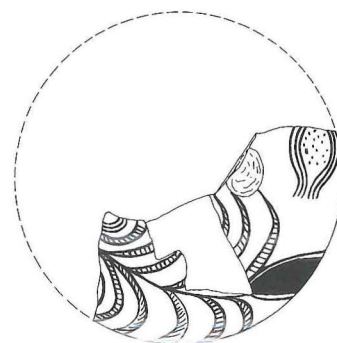


Fig. 3.

<sup>4</sup>Rethemiotakis 1991.

<sup>5</sup>Popham 1970b, figs. 11,14; Watrous 1992, fig. 24.

<sup>6</sup>Kanta 1980, pl. 106:3; Banou & Rethemiotakis 1991.

<sup>7</sup>Banou & Rethemiotakis 1991. Also Vlasaki and MacGillivray in this volume.

<sup>8</sup>ADelt 25 (1970), pl. 418a; Tzedakis 1971, 217 pl. 2.



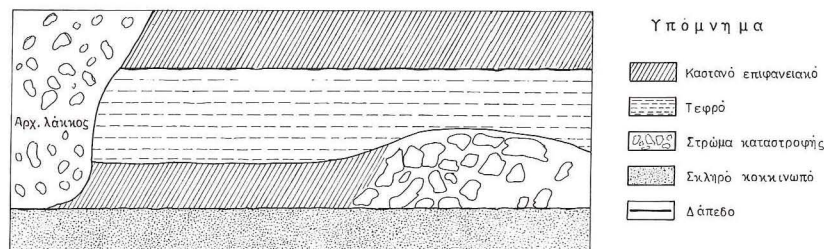
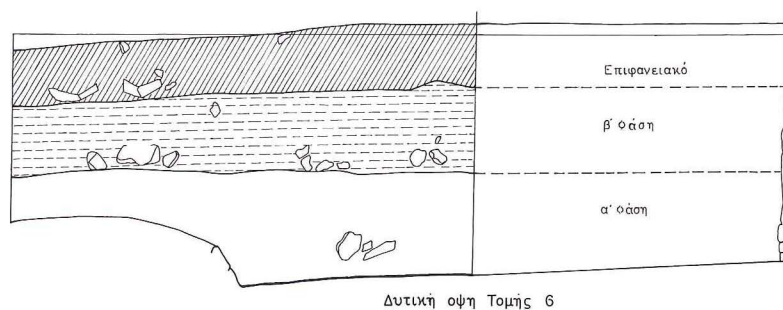


Fig. 4.



Fig. 5.

The excavation in the Community plot furnished sufficient evidence on the designation of two LM IIIC phases. Though limited in scale (only 35 m<sup>2</sup>, divided into four trenches: 5, 6, 8, 9 /the first number in our drawings) the excavated area proved very productive in ceramic material. Starting from the surface towards the bedrock, nine successive levels were numbered: 1-3 correspond to the second phase and 5-9 to the first, while level 4 and partly 5 are transitional (the second number in our drawings) (Fig. 4).

The phase 1 remains comprise a partly preserved building, possibly destroyed suddenly by earthquake (Fig. 5). It had at least three rooms with earth floors (walls κα'-κγ', κζ, κη'-ιθ) and a paved corridor between the walls ιζ'-κζ' (Fig. 6). Due to the sudden collapse and abandonment some domestic vases and stone tools were left in their original position (Fig. 7): two jars still standing on stone potstands and a cylindrical pithos sunk into the floor. The ruins of the building were soon covered by a deep ashy



Fig. 6.

layer containing abundant pottery and animal bones. Two detached walls framing the N side of the deposit (ι', κβ: highlighted in dark – Fig. 6) do not seem to have any relation with any building. In all probability the material of our phase 2 was part of a large rubbish pit although the possibility that it was associated with some kind of religious activity cannot be ruled out.

Domestic and fine wares were amply represented in both phases. The two storage jars and a cylindrical pithos (Figs. 8-9), already mentioned above, have parallels from Karphi, Kastri, Kavousi and Phaistos.<sup>9</sup>

The most frequent fine ware vase of Phase I is the deep bowl, solid painted inside or with bands (Fig. 10a-c). A sherd of a conical kylix has in and out bands (Fig. 10m). There is also a foot of a one-handled kylix (Fig. 10t). The painted decoration derives from the standard LM IIIB repertoire like the flower, the shell, the running spiral, concentric semicircles – plain or fringed – and the lozenge (Fig. 10a-l).<sup>10</sup> A sherd from a conical rhyton bears finely drawn multiple bands and tricurved alternating arcs (Fig. 10u). There are also some krater sherds. One has a triglyph and a loop around the handle (Fig. 11a). Another, with a low stem and splaying foot, is decorated with a fish and a voluted flower, with white added on the volutes and a red horizontal band below (Fig. 11b).

<sup>9</sup>Seiradaki 1960 pl. 1d; Sackett & Popham 1965, fig. 17 pl. 76c; Kanta 1980 fig. 57:6; Betancourt 1985 pl. 26B.

<sup>10</sup>Popham 1965, 316-345; Popham 1970a, 195-202.

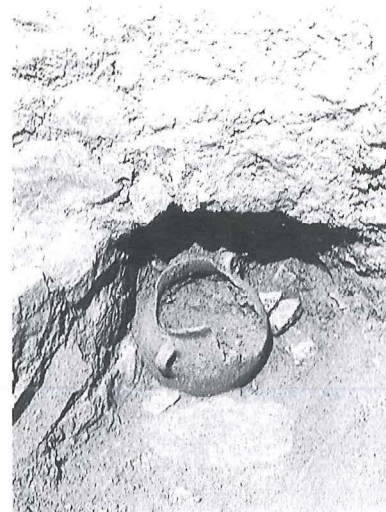


Fig. 7.



Fig. 8.

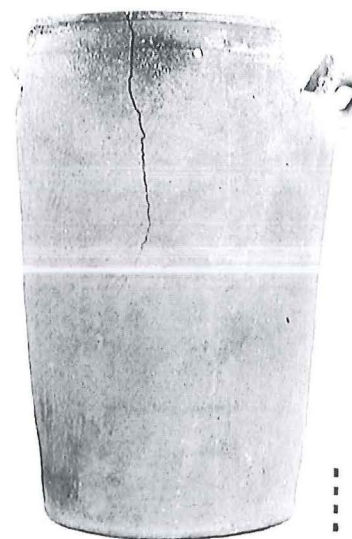


Fig. 9.



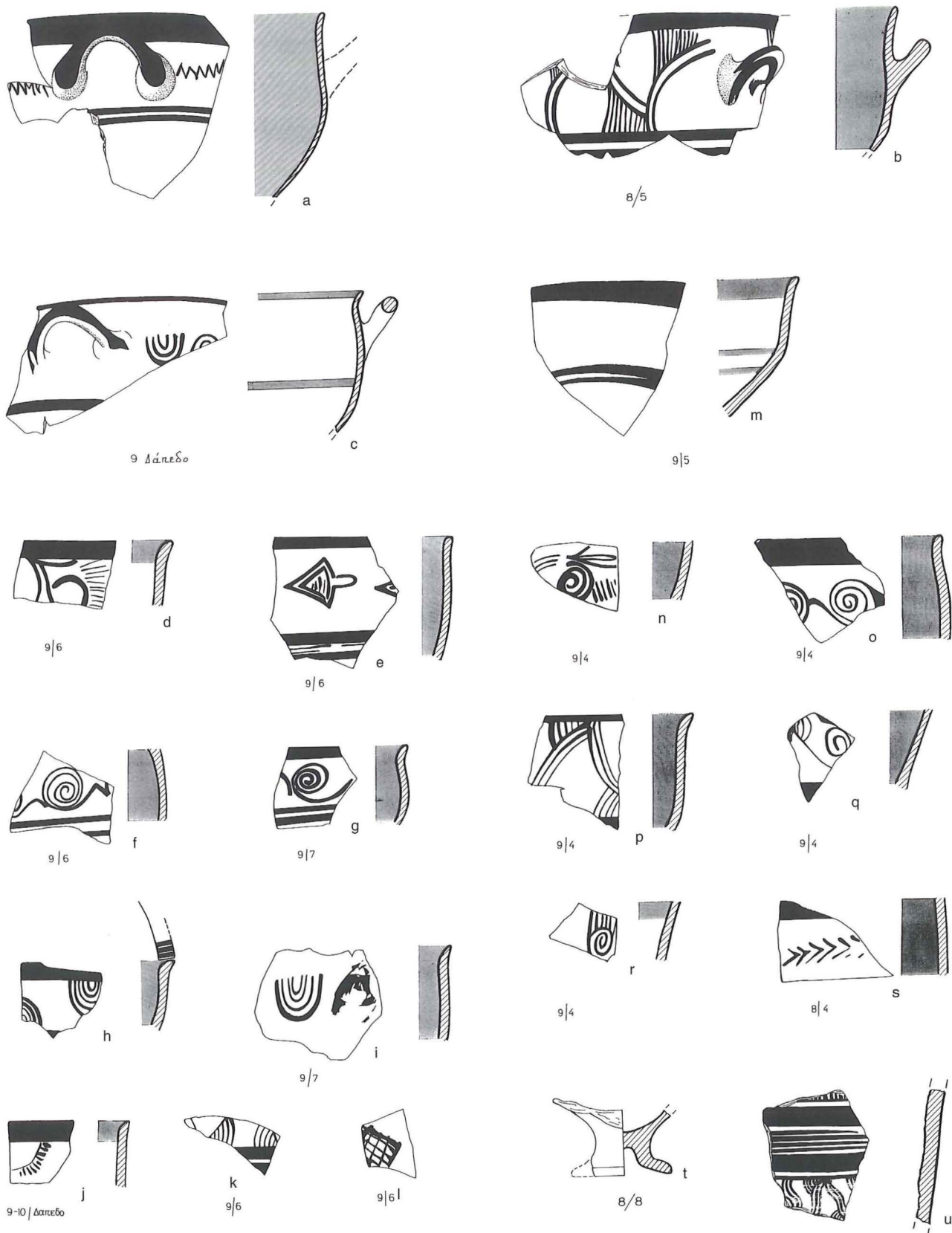


Fig. 10.



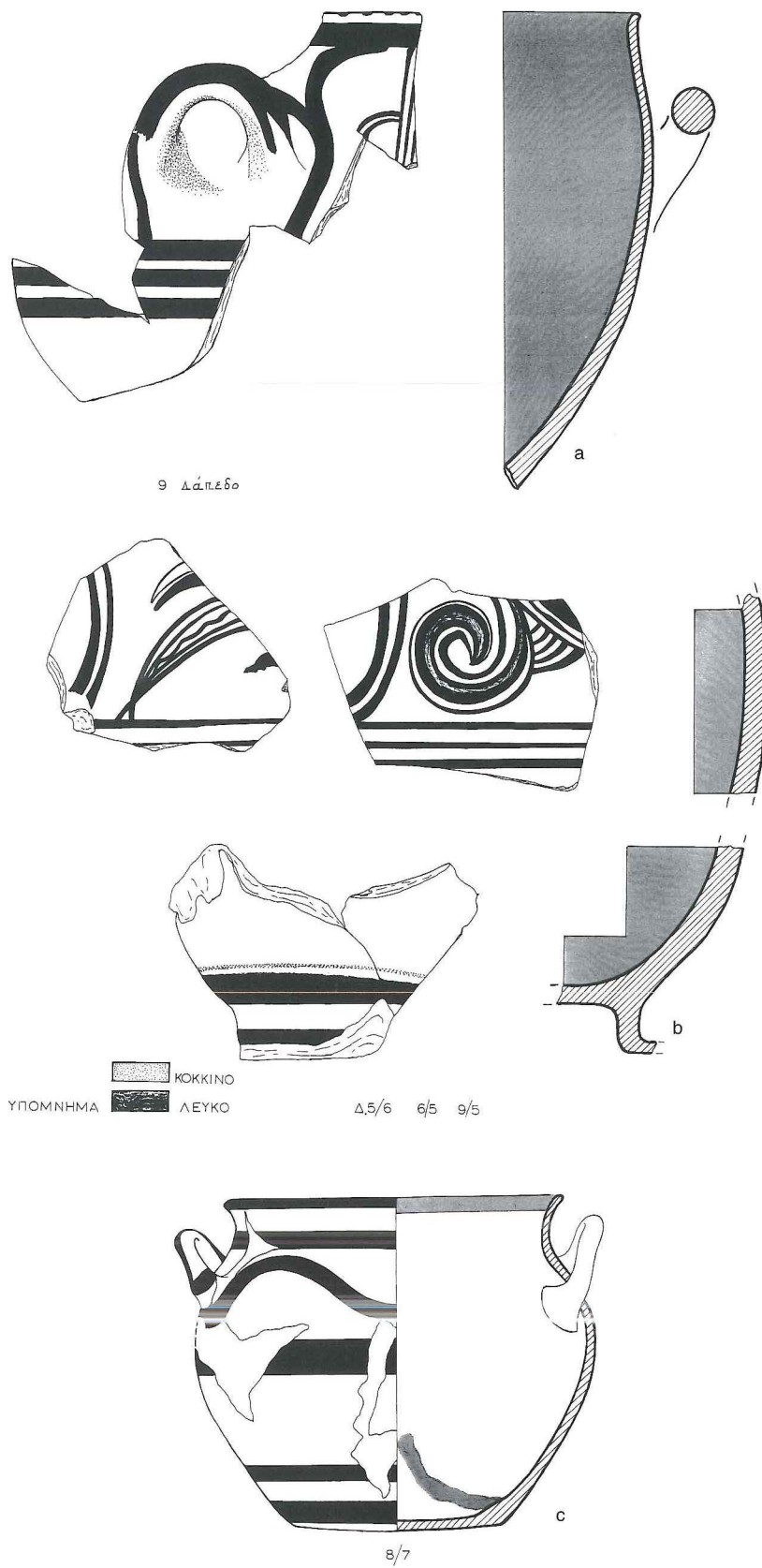


Fig. 11.

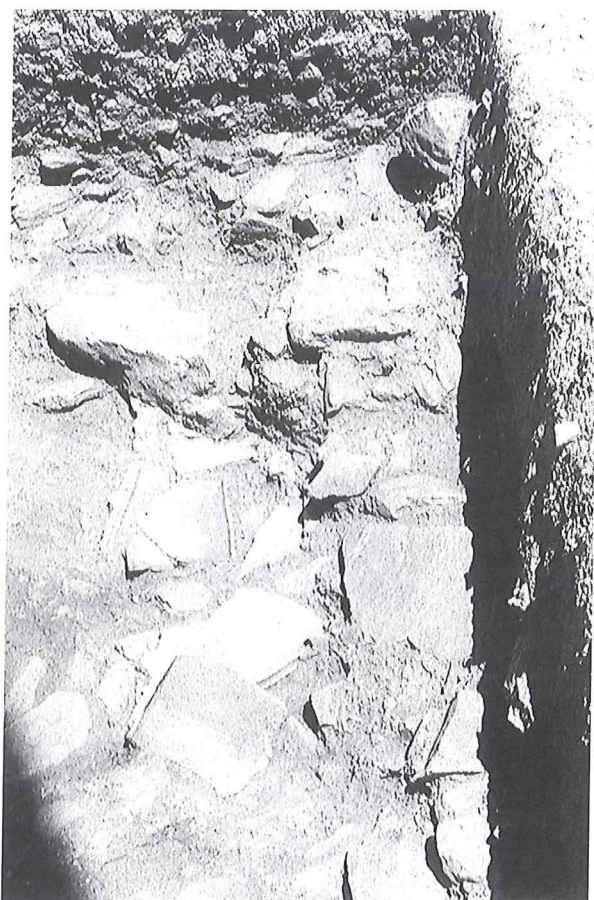


Fig. 12.

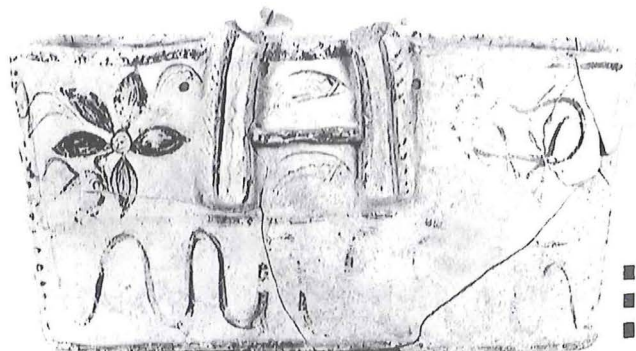


Fig. 13.

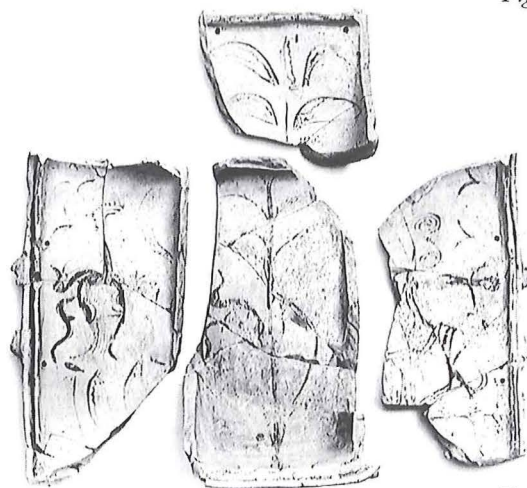


Fig. 14.

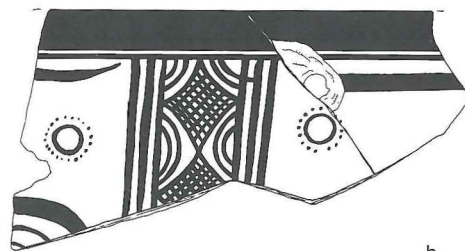
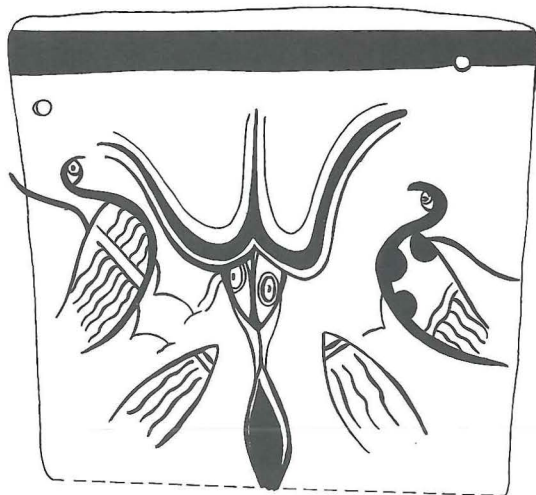
All this ceramic material may well date to LM IIIB. However a more advanced date is provided by an amphoriskos, a chest-shaped vessel and a fragmentary krater.

The amphoriskos with a wavy line between the neck and belly bands (Fig. 11c) has parallels in the LM IIIC material from Kastri and Karphi.<sup>11</sup>

The decoration of the chest and the krater manifest the development towards the formation of an early version of the Cretan close or fringed style. The chest-shaped vessel (Figs. 12-14) is under publication in the Acts of the Congress on "La Crète Mycénienne" in a paper mainly concerned with the religious associations of the pictorial decoration. The motifs, pictorial and geometric, derive from the LM IIIB repertory known from vases and larnakes. However the fringing applied on the wings and tails of the birds, the branches of the trees, the concentric semicircles and an inverted V motif is a new element, characteristic of the decorative style which will predominate in a more advance stage of LM IIIC.

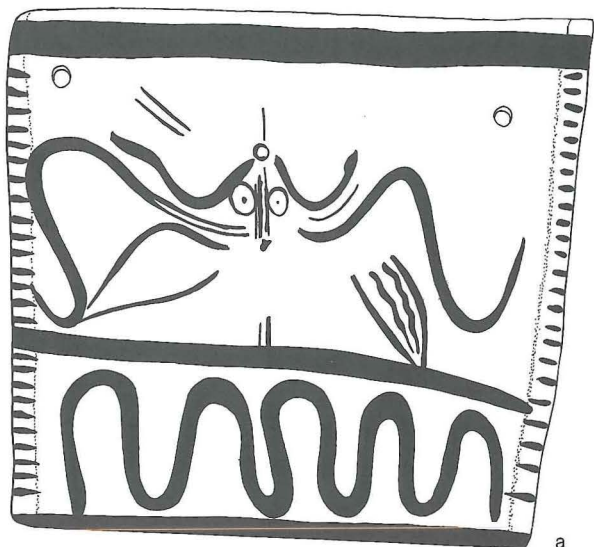
A composition made up of birds, fishes and octopuses, painted twice on two narrow sides (Fig. 15a), bears syntactic and iconographic comparison with the elaborate synthesis of the same motifs frequently occurring

<sup>11</sup>Seiradaki 1960, fig. 3:10 pl. 1e; Sackett & Popham 1965, fig. 15.



9/4

b

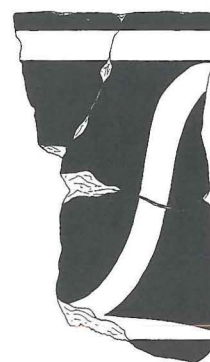


a



c

Δ. 5-6 / 4-5



d

6/7

d



e

Fig. 15.



on the Aegean LH IIIC octopus stirrup jars, mainly those coming from Naxos.<sup>12</sup> However the isolated motifs are treated differently. On the Cretan vessel they represent the natural world, as on the pictorial larnakes from which they derive, while on the Aegean stirrup jars they become part of an ornamental synthesis, without any clear religious significance. For this very reason the octopus, the most elaborate motif, gains in size becoming the dominant element of the synthesis, while fishes and birds are reduced to minute ornaments amid the tentacles.

Even more revealing for the stylistic tendencies of the period is the decoration of the krater (Fig. 15e, max.diam. 0,296 m.). A combination of spiraliform motifs and other fillings produce a highly ornamental effect, alien to the LM IIIB ceramic style. On the other hand all the isolated motifs are still equal while during the next stage heavy curvilinear motifs will prevail.

A krater sherd from the intermediate level 4 bears a Mycenaean-type decoration consisting of triglyphs and hatched lozenges among two dotted circles and a spiral (Fig. 15b).<sup>13</sup> Evidently the local painter did not feel bound to reproduce mechanically the Mycenaean motif since the right spiral is omitted. From the same level comes a black polished sherd of a hand-made vase with curving walls apparently of non-Cretan origin (Fig. 15c).<sup>14</sup>

The levels of phase 2 contained abundant household pottery. All the shapes known from Karphi and Kastri are present: cooking pots, jars, amphorae, storage stirrup jars, basins, trays, lids (Figs. 15d, 16-22).<sup>15</sup> They are undecorated or bear simple decorations of horizontal bands and wavy lines both in dark on light and light on dark technique. In the latter case white is used frequently. There is also an isolated tassel painted on the black-washed surface of a sherd (Fig. 21).<sup>16</sup>

Fine ware is also richly represented. The surface is always slipped, the paint ranges from bright red to mat black and the motifs are in most cases carefully drawn.

A richly and finely decorated conical rhyton has been reconstructed in drawing. The decoration is arranged in zones divided by thick and thin horizontal bands. It includes solid-painted triangles, shell chain, vertical wavy stripes and chevrons (Fig. 23a). Similar joined oblong triangles with curving sides occur on a Phase 2 krater (Fig. 23b). The most frequent shape is again the deep bowl (Figs. 23c-f, 25). It has a flaring to almost straight-sided upper body and a slightly raised concave base. Normally they are solid-painted inside, occasionally with a reserved disc on the bottom, or sometimes have bands and a spiral (Fig. 24). With only one exception, on a bowl's interior surface, no true reserved band is attested although in

<sup>12</sup>Kardara 1977, especially fig. 2.

<sup>13</sup>FM.50; Mountjoy 1986, 95, 123, 135, 158.

<sup>14</sup>Rethemiotakis 1991, n. 5.

<sup>15</sup>Sackett & Popham 1965, fig. 11 pl. 76; Seiradaki 1960, figs. 4-7 pls. 2-4; Gesell 1990, fig. 7 pl. 137a; Prokopiou 1991, figs. 5-7; Tzedakis & Kanta 1978, 23 fig. 10:1,2.

<sup>16</sup>FM.72; Mountjoy 1986, 135, 158, 182.

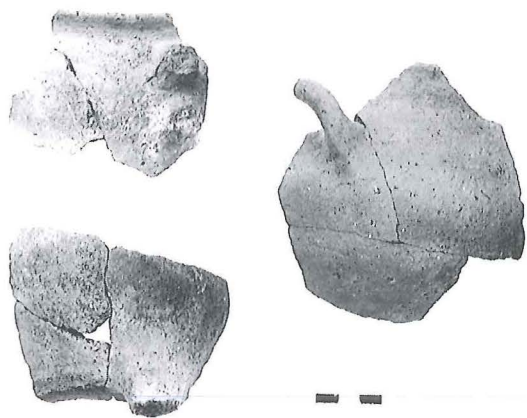


Fig. 16.



Fig. 17.

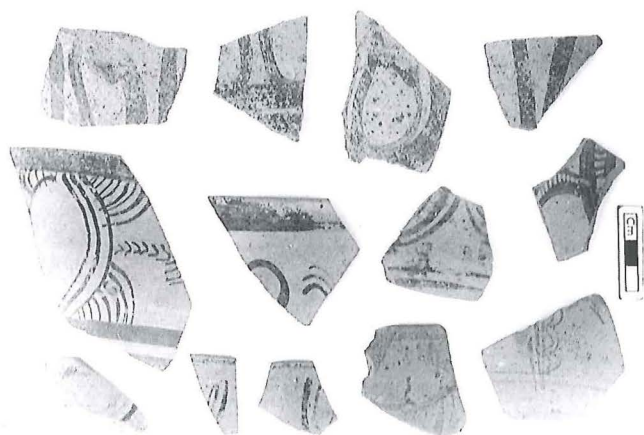


Fig. 18.

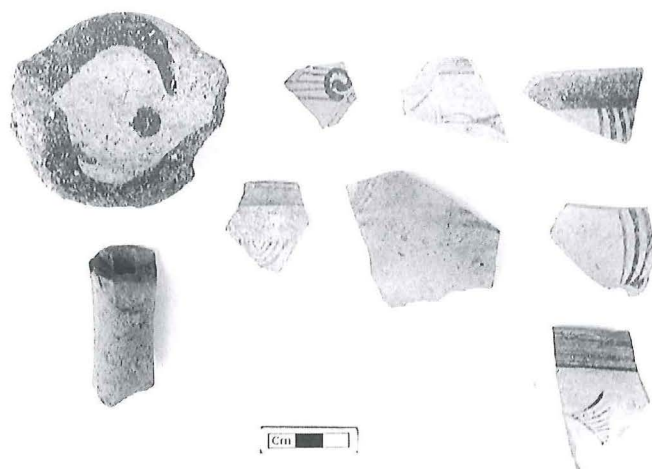


Fig. 19.

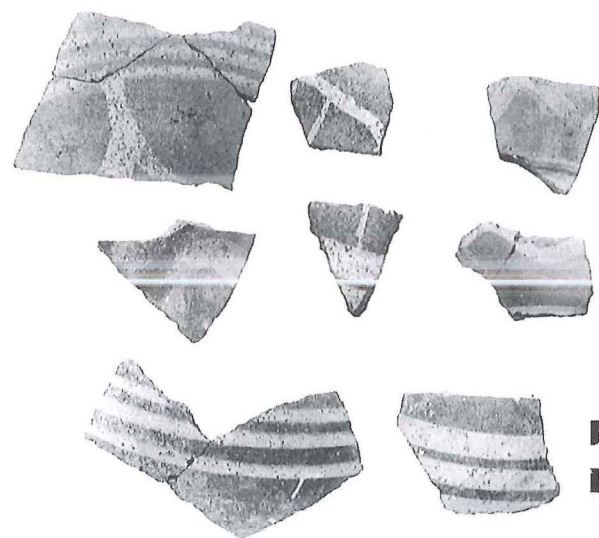


Fig. 21.

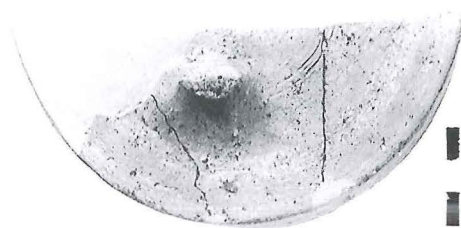


Fig. 20.



Fig. 22.

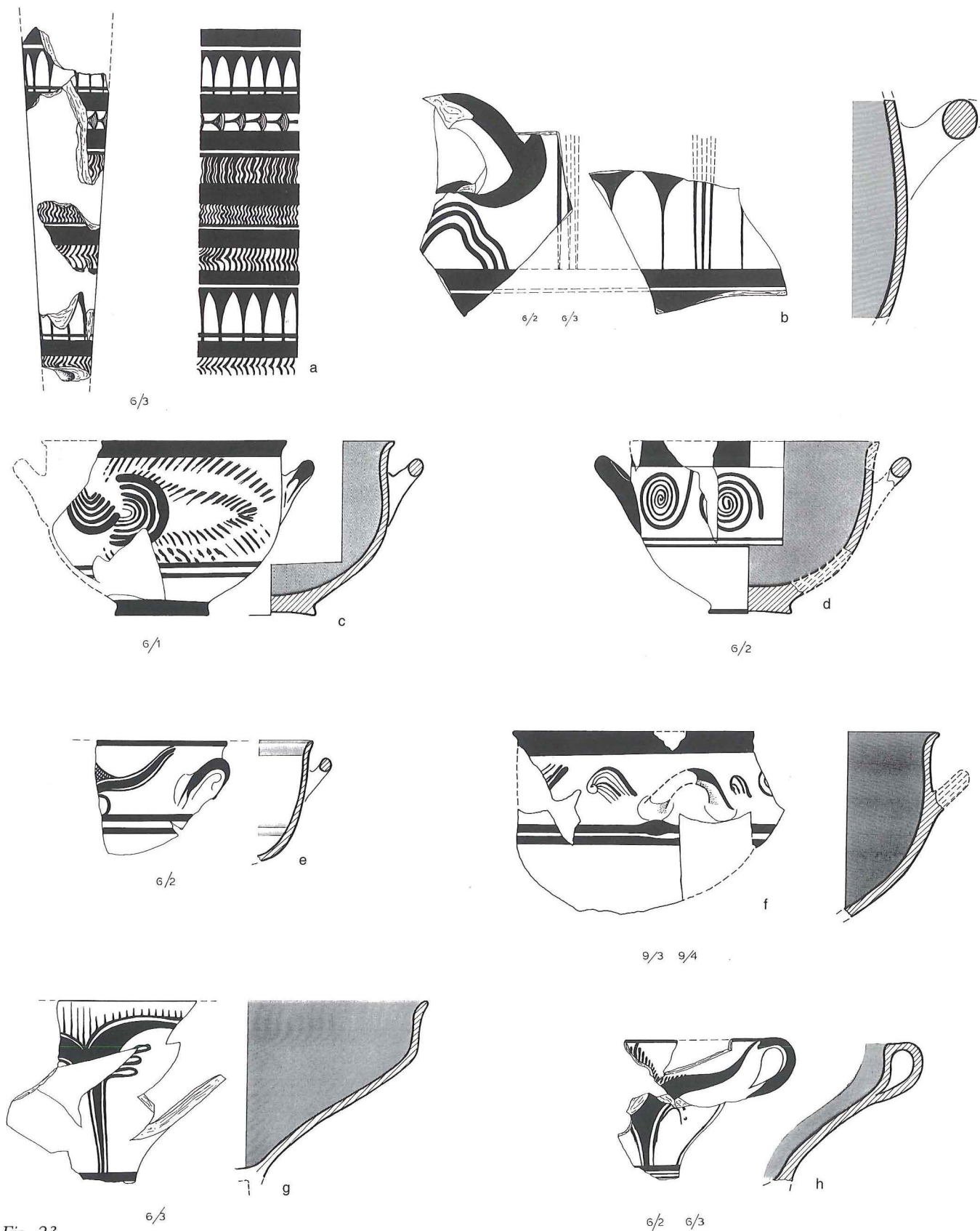


Fig. 23.



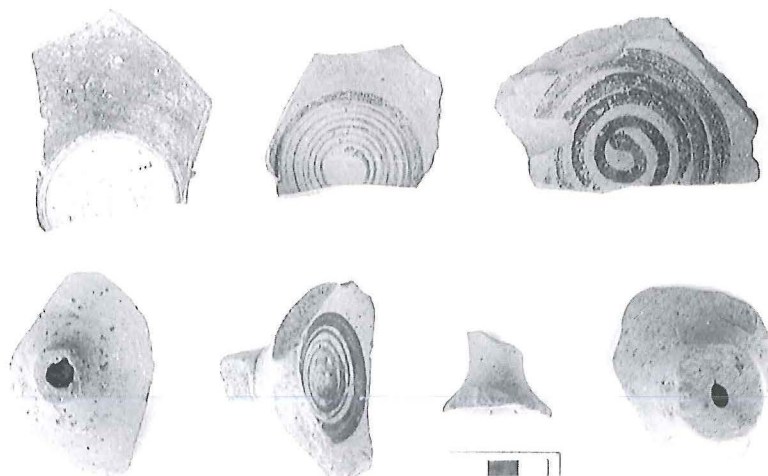


Fig. 24.

some cases two closely painted horizontal bands below the lip give the impression of a purposely unpainted band (Figs. 23e, 27k).

Kylikes with a carinated profile are less popular (Fig. 23g-h). Their interior surface is treated similarly. Other shapes are rare, such as one-handled cups (Fig. 26a) and kylikes (Fig. 26b), amphorae or jugs (Fig. 26c), straight-sided vases (pyxides or mugs, Fig. 26d) stirrup jars, a carinated cup and a rhyton with a plastic rib under the rim (Fig. 26o).

The decoration includes the standard repertory of abstract and pictorial motifs known from other sites:<sup>17</sup> birds in bilateral arrangement flanking a triglyph (Fig. 26d), a fish-like design (Fig. 26f), a degenerated octopus (Fig. 26o), several variations of the Minoan flower (Figs. 23c, 26a, h-n, p, 27a-d, 28ai), multiple stem (Figs. 23f, 27p), shell, running, isolated and stemmed spirals (Figs. 23d, 27f-h, k-o), the quirk in many specimens (Figs. 27q-s, 29), alternating arcs (Figs. 25, 27t,w,v,z, 31a), lozenge, lozenge and loop chain (Fig. 28a-b), concentric arcs (fringed or simple – Fig. 28c,e) V pattern, zig-zag (Fig. 28f-j), triangular patch (Fig. 28ab), continuous semicircles (Fig. 28ac) and panelled patterns with antithetic spirals (Fig. 28k), rendered upside down (Fig. 30), streamers and loops (Figs. 23e, g-h, 28o-s, ah, 35). The last two motifs, characteristic of Middle LH IIIC<sup>18</sup> testify to the infiltration of Mycenaean elements into the Cretan repertory.

Similar pottery was excavated in the Church's plot. Bowl sherds bear flowers, running, isolated, button-hook and curtailed spirals, concentric arcs and vertical wavy lines (Fig. 31). Two sherds with close style decoration (Fig. 31e-f) prove that this material should also be assigned to the LM IIIC chronological horizon.



Fig. 25.

<sup>17</sup>Kastri, Sackett & Popham 1965, figs. 8-10 pl. 77; Karphi, Seiradaki 1960, fig. 21 Vrokastro, Hall 1914, fig. 49, Kanta 1980, figs. 50, 51; Khania Tzedakis & Kanta 1978, 29-30; Amnisos, Kanta 1980, figs. 14-19 Tylissos, Kanta 1980, figs. 4,5.

<sup>18</sup>FM.50, 62; Mountjoy 1986, 155.

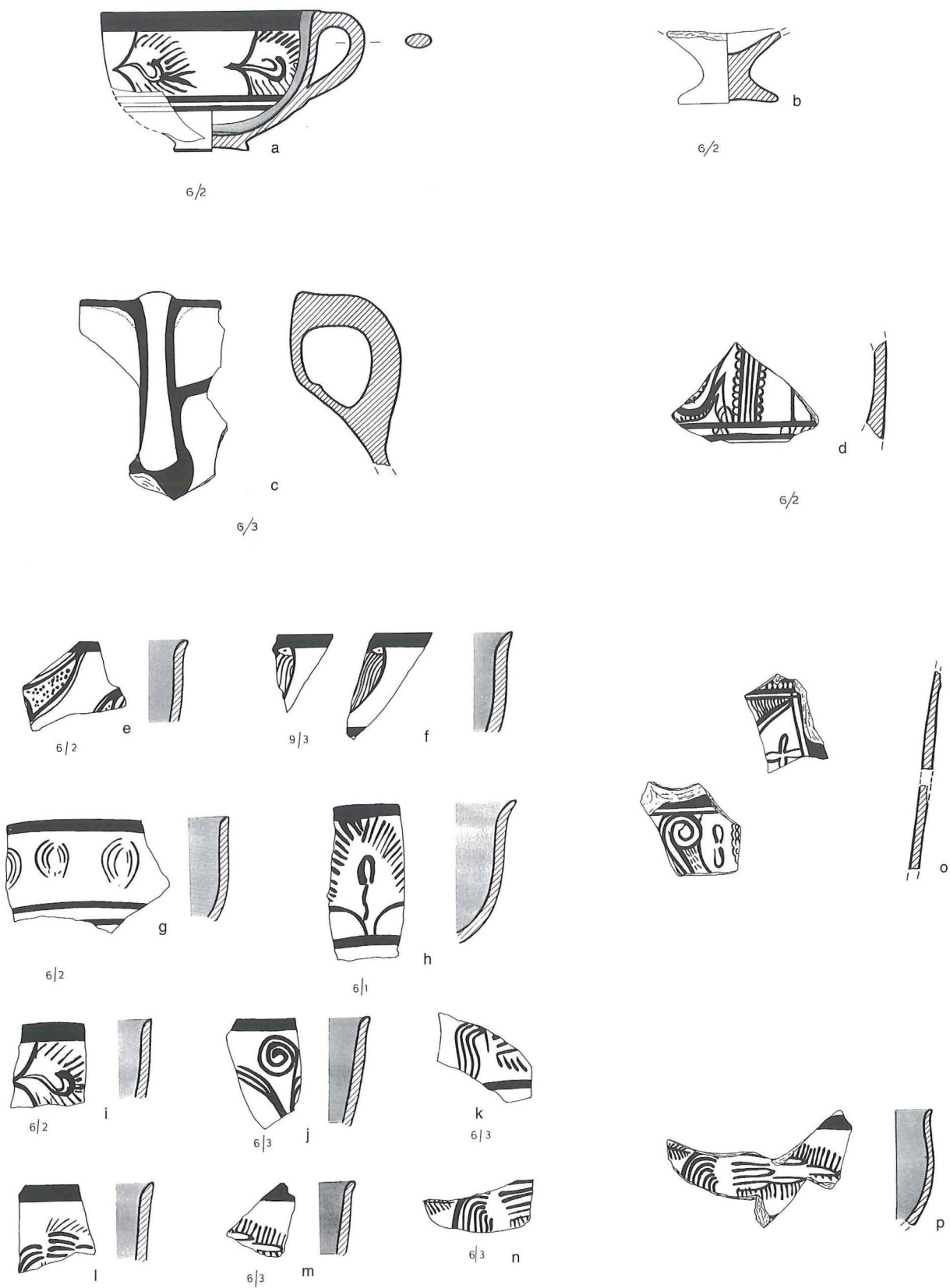


Fig. 26.

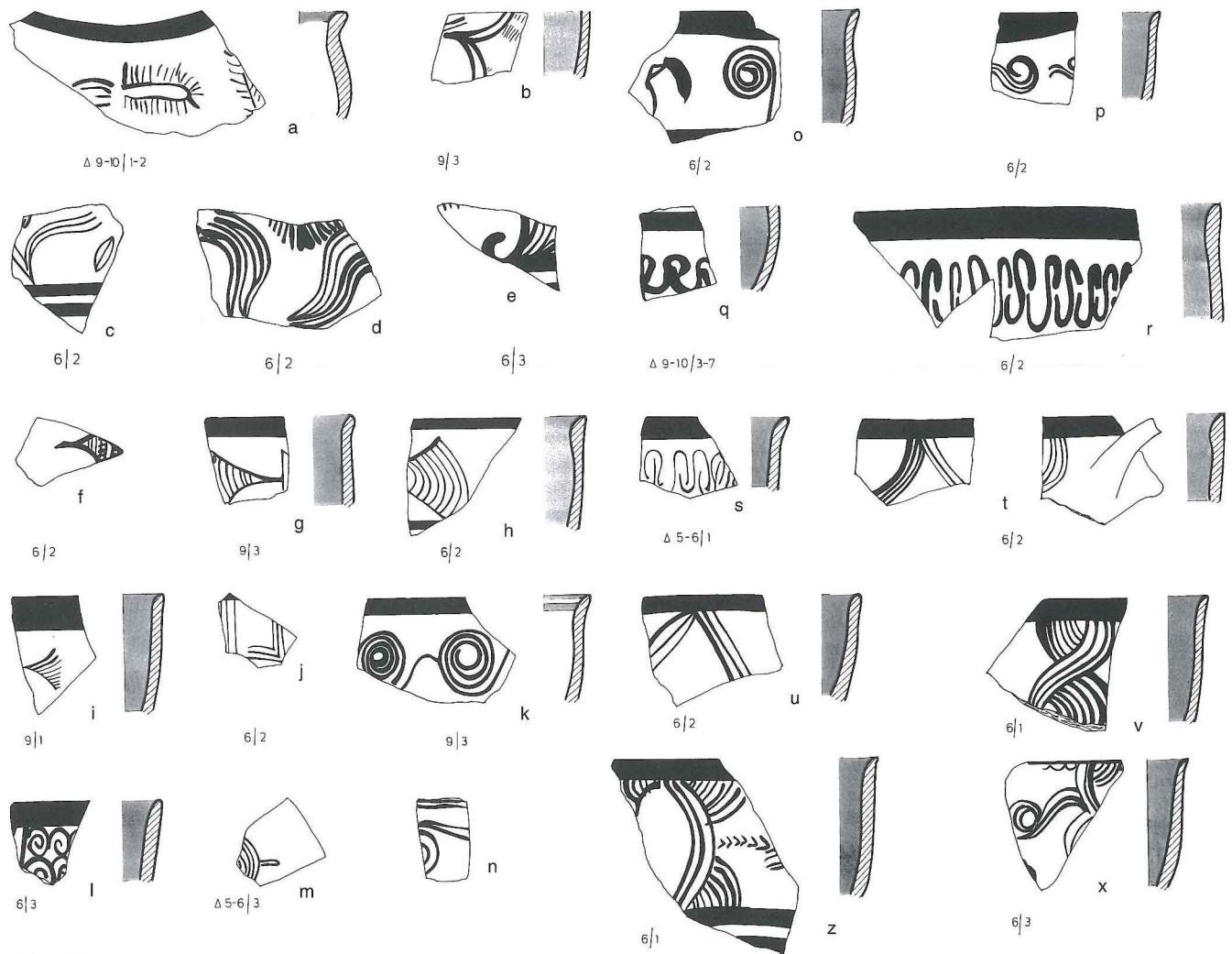


Fig. 27.

A pictorial composition painted unexpectedly on a one-handed cup is of special interest because of the rarity of pictorial representations in LM IIIC.<sup>19</sup> An unspecified male animal is chased by a smaller predator, obviously a hound. It should be taken as a hunting scene in spite of the absence of human participation in the action. The sketchy design resembles that of the corresponding motifs of the above mentioned Phase I chest-shaped vessel. These scenes together with an abundance of domesticated and wild animal bones in the ashy debris of Phase II, hint at activities related to hunting and possibly the sacrifice of animals.

Highly significant for the study of the stylistic tendencies of advanced LM IIIC is a considerable number of fragmentary kraters and sherds most of them bearing close-style decorations. The fabric is fine, the clay buff, sometimes with a pinkish core, the paint bright red to brownish or faded

<sup>19</sup>Rethemiotakis 1991.





Fig. 28.

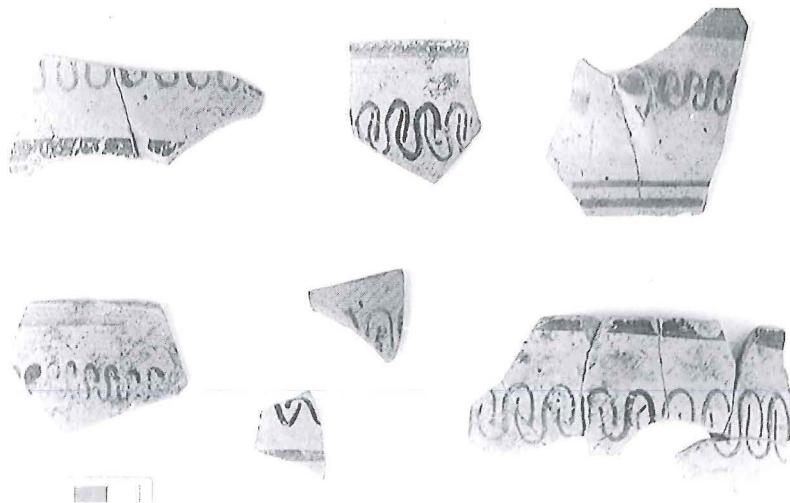


Fig. 29.

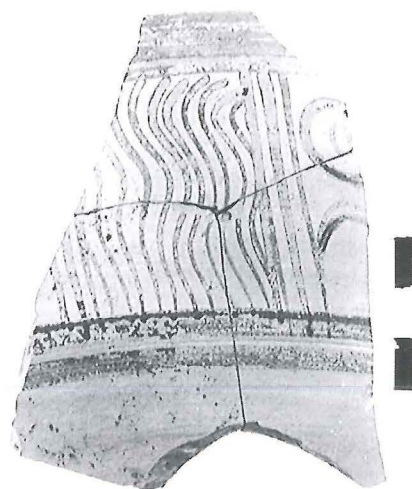


Fig. 30.

black. The decoration includes a variety of motifs and embellishments. We examine here the most characteristic.

A broad tricurved motif with multiple outlines occurs among spirals and solid circles. To the left, part of a double axe with horns of consecration may give a religious meaning to the otherwise decorative composition (Fig. 33a). It comes from the intermediate level 5 but on stylistic grounds it belongs to Phase 2.

Another fine specimen has elaborate tricurved streamers embellished with a combination of chevrons and hatching where the streamers join and lateral bunches of curving stripes (Fig. 33b, max.diam. 0.30).<sup>20</sup> A third bears the unique composition of four-spoked wheels, isolated antithetic spirals, solid circles and joined arcs (Fig. 33c, max.diam. 0.26).

There are also other fragments with birds and stylized trees (Figs. 33d, 32)<sup>21</sup> combinations of curving multiple lines with arc fillings (Fig. 34d),<sup>22</sup> a net of joined rosettes with spirals among them (Fig. 33e), triglyphs (Fig. 34a-b) and the Mycenaean – derived joined whorl shells (Fig. 33f).<sup>23</sup>

The contextual and stylistic coherency of this material makes it easily comparable with pottery from other sites which have failed to give standard dates. What is conclusive for the character of the LM IIIC ceramic production is the striking homogeneity of material coming from distant sites all over the island, and the progressive infiltration of Mycenaean elements peaking somewhere in the middle of the period. It is also clear that

<sup>20</sup>See Popham 1965, fig. 9 (from Knossos) and Pernier 1902, pl. 8a (from Phaistos).

<sup>21</sup>A sherd from Arkhanes has identical decoration obviously painted by the same hand: PAE 1970, pl. 373a, bottom left.

<sup>22</sup>Seiradaki 1960, 26; Pernier 1902, pl. 8a, reverse side.

<sup>23</sup>FM 23; Mountjoy 1986, 95.

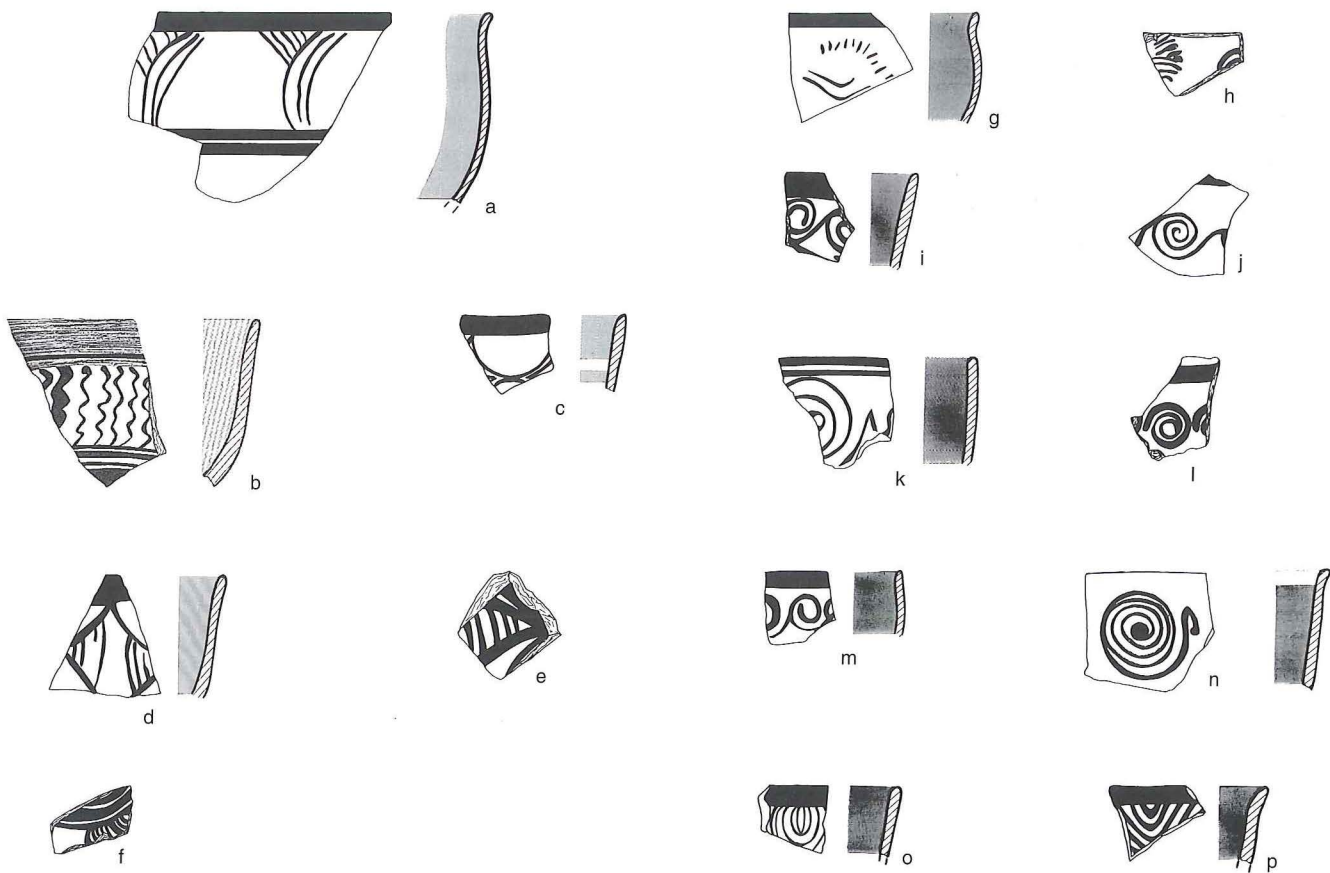


Fig. 31.

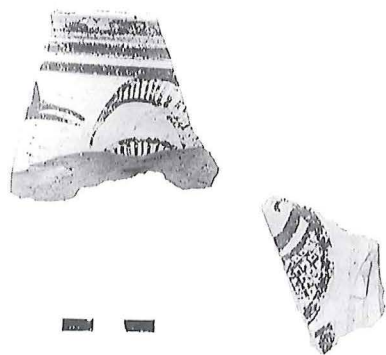


Fig. 32.

such sites as Kastri, Karphi, Vrokastro, Kavousi, Knossos, Arkhanes, Phaistos, Hagia Triada and Khania, to mention only the most important or productive, are partly contemporary within LM IIIC, but in all likelihood some of them lasted longer than others. A response to this primarily historical problem depends on the possibility of establishing firm links with LH IIIC sequences from stratified sites which, in contrast to what happens in Crete, have provided reliable evidence on defining several subphases.

It is helpful that we now possess a rich stratified material which may be securely dated in terms of Helladic chronology. Our Middle IIIC correlations have already been analysed. In support of this is the decoration of a small krater which shows stylistic convergence with the classic Middle LH IIIC close style. It is composed of a striped triangle, a derivation of the whorl-shell, a large and a tiny fish all set in panels, framed by vertical lines and joined semicircles (Fig. 34c). Despite the fact that the loose syntax is akin to the creations of the Cretan close style, the execution of the isolated motifs comes closer to its Helladic counterpart. The heavy, solid elements of the "classic" Cretan close style have now given way to minute designs and thin, linear embellishments. Vases similar in style have been



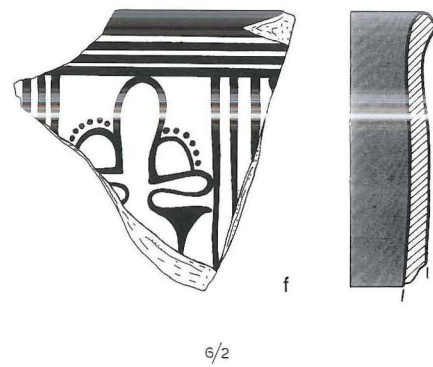
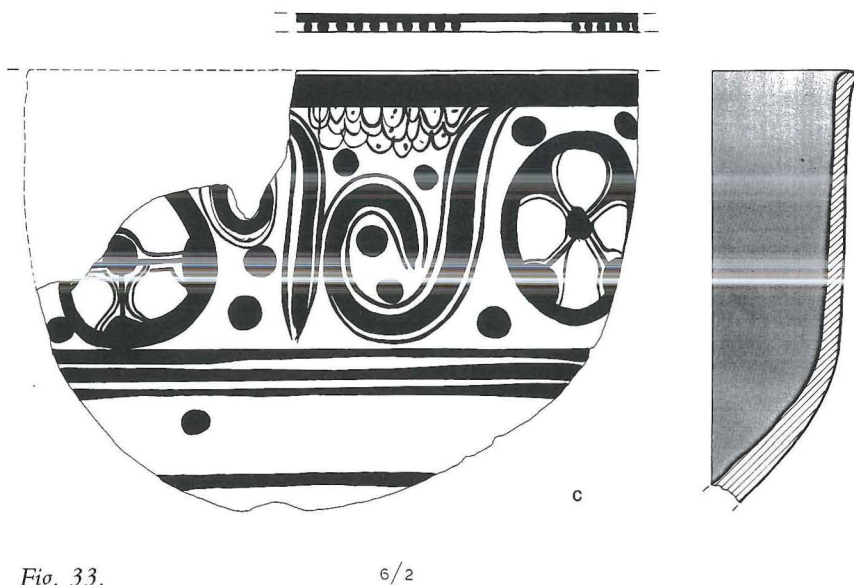
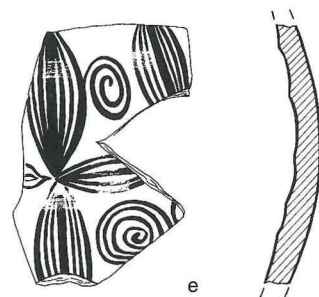
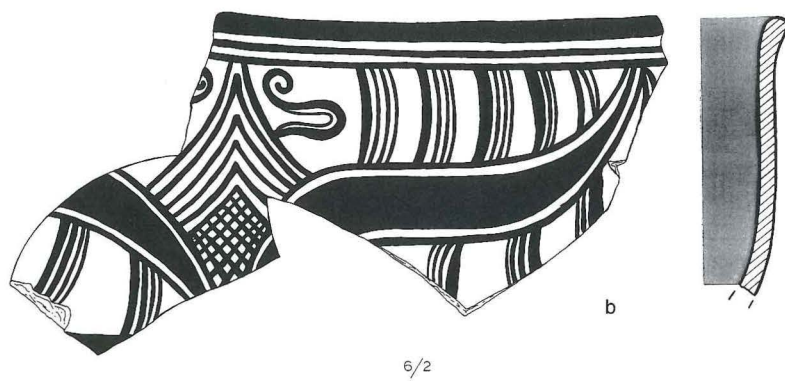
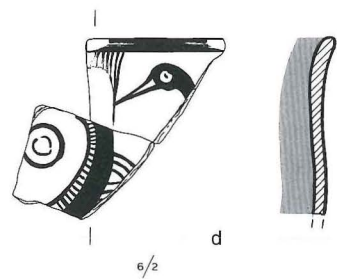


Fig. 33.

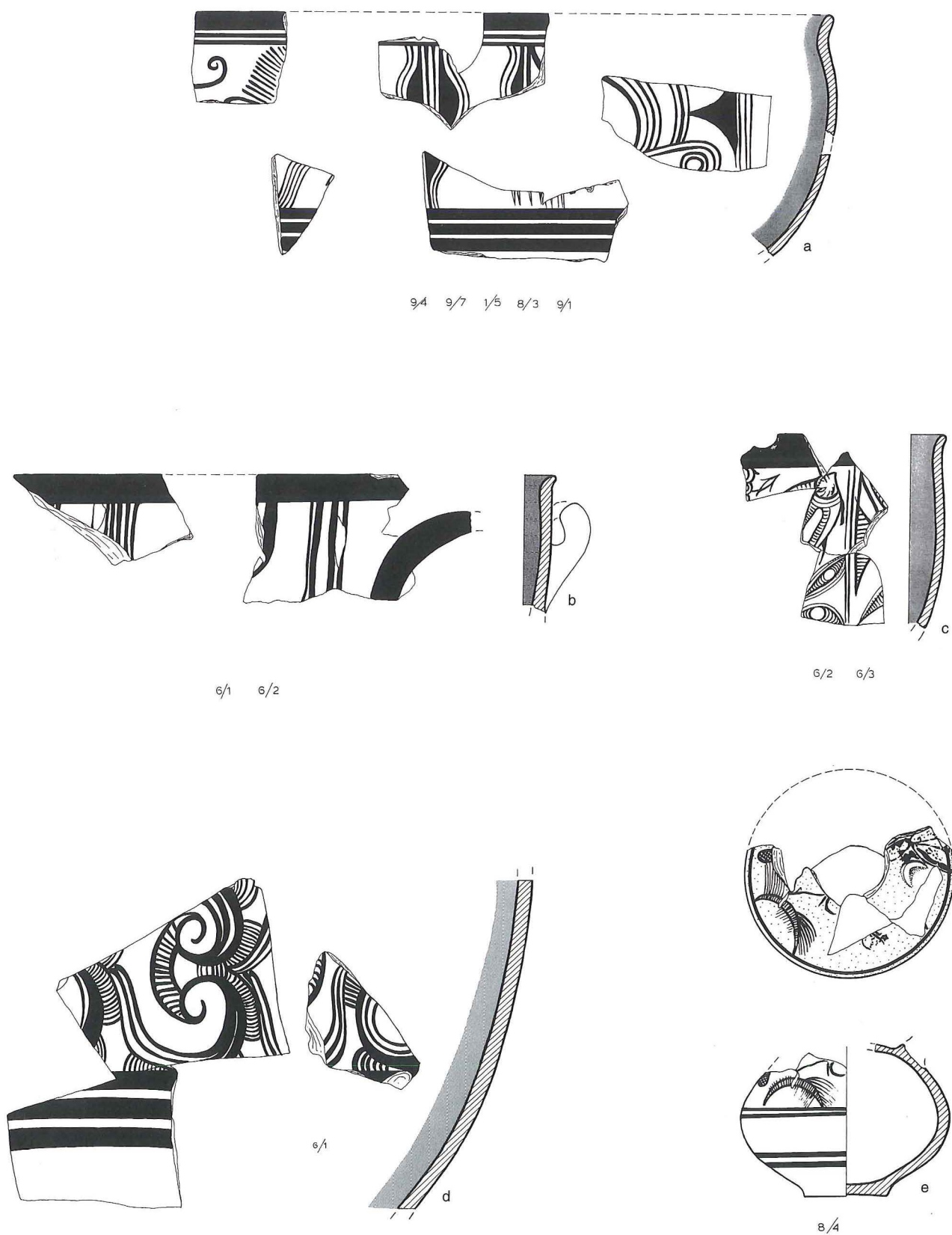


Fig. 34.

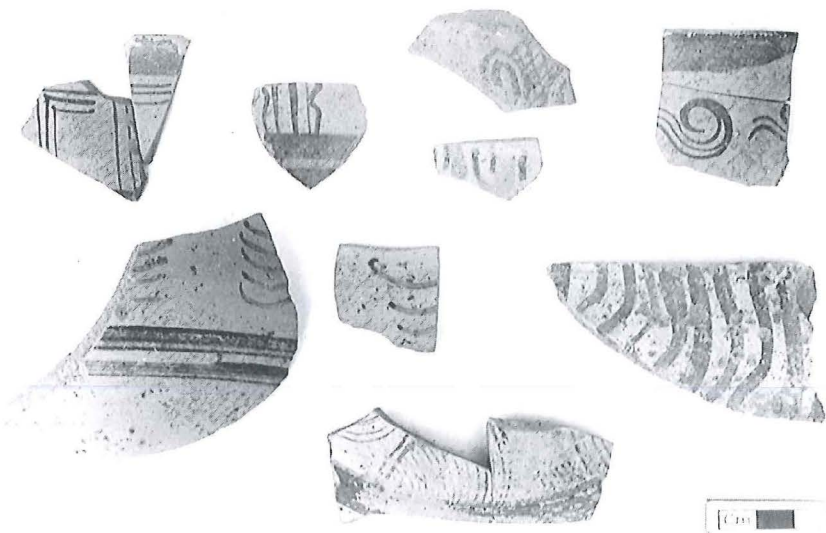


Fig. 35.

found at Phaistos, Hagia Triada, Knossos, the Idaean Cave, Karphi and Khania.<sup>24</sup> One may also take into consideration as a further documentation of this tendency the decoration of two Phase II stirrup jars with arcs, thin curvilinear fillings, a hatched loop and a dotted rosette (Figs. 34e, 35). They also establish stylistic and chronological correlations with a series of stirrup jars mainly from tomb-groups excavated at mountainous sites, which bear fine linear decoration.<sup>25</sup> A simplified version of this type of decoration persists to the end of LM IIIC, as proved by a recent find at Knossos.<sup>26</sup>

From what we have discussed, it is to be concluded that towards the Middle of the LM IIIC, Cretan ceramic production becomes susceptible to a marked Helladic influence, as proved not only by the adoption of motifs but mainly by the adaptation to the Hellado-Mycenaean vein.

To sum up. The present short study of the LM III pottery from Kastelli provides a good piece of evidence for the evaluation of the historical background of the LM III period. The emphatic and oddly persistent provincialism evident in local wares of the Old and New Palace periods strongly contrasts with the uniform style throughout Crete which penetrates Pediada after the LM IB destruction. Since this development goes with the destruction or abandonment of the rural settlements around Kastelli it may be seen as a consequence of the infliction of a new economic and social system based on a different exploitation of the land. It is to be repeated here that the ceramic finds turning up from individual sites tend to verify the historical reality of the Knossian overlordship during LM IIIA:1, a picture also mirrored in the Linear B tablets.

<sup>24</sup>Borda 1946, pl. XXXVII:1,2,5,11; ARRepLondon 1982-3, fig. 59 comparable with Middle LH IIIC Aegean stirrup jars, cf. Ergon 1987 fig. 167; Seiradaki 1960, figs. 20, 23; Tzedakis & Kanta 1978, pls. 2:11,3:18.

<sup>25</sup>Kanta 1980, figs. 24:1, 5, 6, 33:7-9, 82:2-9, 121:3, 4, 7, 134:2; Gesell 1990, fig. 5.

<sup>26</sup>To be published by E.Grammatikaki.



The excavation of the LM III settlement at Kastelli also provides evidence for the definition of chronological and stylistic subphases within LM IIIC.

The situation may be briefly outlined as follows: The onset of this period saw the formation of an early version of the close style deriving from the pictorial decoration of the painted larnakes. The maturity of this style, in an advanced stage of LM IIIC, corresponds chronologically with Middle LH IIIC.

The pottery of our Phase I (apparently Early LM IIIC) remains in contact with the Minoan past, while Phase II (Middle LM IIIC) saw the adoption of Mycenaean motifs such as the antithetic streamers and loops and the creation of a highly decorative miniaturistic version of the Cretan close style resembling Helladic close style. Several sites which have produced such pottery may well be dated to this very period. Several lowland and mountainous sites thrived during this period and nothing seems to foreshadow and justify the much debated flight to the mountains at least until Middle LM IIIC. What happened after this is not clear. Several settlements including Kastelli declined or even ceased to exist. Our material sheds no further light on this but I hope that future research of stratified deposits will elucidate the problem.

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# Response and discussion

**B.Hallager:** Thank you very much for your interesting paper and for your presentation of the two LM IIIC subphases. I have had the opportunity to see and discuss the material with you and as you perhaps remember I was not totally convinced of your datings. I have some small questions and then I will discuss your two phases. You noticed a change of clay beds after the LM IB destruction. The clay used in LM III is that the same during the whole period?

**Rethemiotakis:** I think it looks very similar. I am not quite sure that it is the same, but the general appearance of the vases is more or less the same.

**B.Hallager:** We have a similar situation in Khania. Another thing you mentioned from the IIIA period were the monochrome cups and kylikes. Are they very common in your district? If they are, they must be a local feature.

**Rethemiotakis:** We have to await the completion of the excavation. As I told you, work is continuing. I have not excavated the whole of the plot. I am not ready to answer.

**B.Hallager:** Concerning your Phase 1 and 2: a quick résumé to remind the audience. Phase 2 is the stratum 1, 2 and 3, while the transitional you put in 4, and Phase 1 is 5, 6, 7, 8 and 9. We followed these two phases in the community plot. Can you see both phases stratified in the church plot?

**Rethemiotakis:** The situation in the church plot is not so clear. I have made only a few trenches to check the stratigraphy. I have not excavated the whole of the plot. There is much to be done there. There exists this LM IIIC pottery in this plot.

**B.Hallager:** You said about your Phase 1 that all the ceramic material may well date to IIIB. To me some of it is late IIIB. You did not want to put your Phase 1 in IIIB because of three vases: the amphoriskos, the chest-shaped vessel and the krater. The amphoriskos (Fig. 13) may be IIIC but it could as well be IIIB. It is a rather large vase, about 14 cm in rim diameter. It does not resemble the small ones we have in Katsambas, or Phaistos. The clay is not fine, the walls not thin. The wavy line is very common decoration especially in IIIB:2. We have sherds of them in Khania, and I have also seen them in the Hagia Triada material. I am not redating your vase I am just pointing out that it could be IIIB as well.

**Rethemiotakis:** In terms of the Mycenaean mainland, this is taken as a normal IIIC shape.

**B.Hallager:** Yes, but in Crete it does exist earlier.

**Rethemiotakis:** The IIIB appearance of this vase is not very well known.

**B.Hallager:** If we take the small amphoriskos, Kanta knows that it existed in IIIB. It is not a new vase in IIIC. In Karteros we have a good example of a IIIB amphoriskos.

**Kanta:** Yes, it exists in IIIB. We also know it with simpler motifs, others than the wavy band. It is found in tomb groups where everything else is IIIB. I list all the old examples in my



book and since I wrote it I have seen some more (Kanta 1980, 286). Kastelli has a few sherds like those in the levels which Warren suggested were transitional IIIC, and also in the later levels, which I think are early IIIC. I think we are again at the transition and very beginning of IIIC with your level.

**Rethemiotakis:** I am a little unhappy with the word "transitional". It is not very good as a historical term.

**B.Hallager:** I would also like to comment on the other two vases, the chest-shaped vessel and the krater.

**Rethemiotakis:** It was also the coarse ware, especially the small cylindrical pithos with the ribbon under the rim which has close parallels at Karphi or Kastri. It is dated to Phase 1. It was sunk into the floor of Phase 1.

**B.Hallager:** Is there any parallel for the chest-shaped vessel in IIIC?

**Rethemiotakis:** There is one from a tomb in the Siteia Museum, LM IIIC with Close Style. From one of the tombs excavated by Platon in the area of Siteia.

**Tsipopoulou:** Photoula Praisou. IIIC.

**Rethemiotakis:** That is the closest parallel I have found in Crete.

**B.Hallager:** In which one of your levels was it found?

**Rethemiotakis:** It was found in the destruction debris of the first phase. It was among the stones fallen from the walls. It is definite that it belongs to the first phase.

**B.Hallager:** I am not going to redate this vessel either but I want to point out that all the elements in this vase also existed in LM IIIB, one by one. The trees, the leaves with what you call fringes exist as a decoration on vases from IIIA:2 and onwards. It becomes more popular in IIIC, I agree. The birds are not uncommon in LM III. Dots and fringes are not uncommon as additional motifs on LM III pottery. The hunting scene reminded me very much of that on the famous Armenoi larnax (Tzedakis in AAA 4, 1971, 217, fig. 4). No-one, to my knowledge, has disagreed with the IIIB date of that larnax and I can not see that there has to be a very great gap of time between your vessel and this larnax.

**Rethemiotakis:** I was speaking of the general tendency, the characteristics of this period, no matter what we call it. I have spoken about the correlation with larnakes. I think that all the motifs derived from this repertory. I do not speak about isolated motifs or details thereof. Most of the motifs have the fringe. There are at least five cases of fringed concentric semicircles. We are looking at the formation of the Fringe Style. I do not think that it is random that we have so much fringing on this vase.

**B.Hallager:** I will in a while return to the fringing. But first the krater (Fig. 15) which I find very fascinating. It was found in your level 7. Here I would put your transition. Level 8 and 9 are to me late IIIB. – The problem with kraters in Crete are that they are not well known before IIIC. Very few IIIB kraters have been published and therefore perhaps we have a tendency to place kraters low down in the Minoan chronology. I have xeroxed one good example from Knossos. It is published by Popham in his book, "The Last Days of the Palace

at Knossos" (Popham 1964, pl. 8a). Nobody will doubt that it is IIIB, I hope. It is decorated with quatrefoils, a motif which may be found from IIIA and onwards. The typical trait of the IIIB kraters is that they have a rounded body. The IIIC kraters have a tendency to have a carinated body. In IIIB they are decorated like the bowls with the body bands just below the handles. In IIIC they need more space for the motifs, so the bands go rather deep down, ca two third down on the body. With these two characteristics in mind your krater seem to be IIIB. The isolated motifs which decorate your krater may be found in IIIB as well as in IIIC. But there is one thing which places your krater in early IIIC: the rim. In IIIB they are all more or less rounded. This is the triangular rim which appears for the first time in early IIIC. I have so far not found any in a IIIB context and in Khania they are not uncommon on the big kraters found in the early IIIC strata.

**Hood:** Seeing those vases from Knossos, I cannot refrain from making a comment on them: I must say that I agree about the top left one being IIIB, but to my eye it is in a completely different world from the one that Rethemiotakis has shown us. Look at that decoration. It is absolutely rigid in its panels, while the other one is all over the place. It is a completely different world.

**B.Hallager:** Yes, the Knossian is IIIB:1 and Rethemiotakis' is early IIIC.

**Hood:** Good. Well, d'accord. I suspect that, in fact, we are in agreement about the sequence, and about the correlations, and that we are becoming involved in a terminological war, as it were. I must say, I do not think that matters, myself, as long as it is clear how everyone is using the terms. My own feeling is that in due course agreement will form as to how the terms should be used. What is really important is to agree about the sequence of the different deposits.

**B.Hallager:** You are completely right. But I think it is important to discuss how and why we are dating our deposits as we do. I was wondering about your stirrup jars. You mentioned that you did not have many. The small stirrup jars of IIIC are made in another technique than in IIIB:2. The solid false neck is made on a disc and then "glued" to the rest of the vase. Is this the type you have?

**Rethemiotakis:** There are very few specimens of stirrup jars in this context. The only one with decoration is the one I showed you. I have not seen any discs in the material. I know it is crucial information, but I can say nothing about it.

**B.Hallager:** Concerning your division between early IIIC and mid IIIC I have a suspicion that your krater sherd (Fig. 16) from the transitional level 4 is the bad guy. It has a central panel which is framed by antithetic spirals, although one spiral is missing as you pointed out. We talked about this antithetic spiral after Borgna's paper. She had it on bowls she dated late IIIB. In Khania we have them in IIIB:2. This example I show you here comes from Box Gamma in the Stratigraphical Museum dated IIIB late and IIIC early. Antithetic spirals appear in IIIB:2 and continue in early IIIC in Crete. I have tried to argue that your IIIC material is not so far away from IIIB. I cannot see any "advanced" IIIC in your material. Your level 1 to 7 is all early IIIC to me.

**Rethemiotakis:** Where do you place the antithetic streamer and loop motifs? As far as I know, they are thought of as a typical middle LH IIIC characteristic.



- B.Hallager:** It is only typical middle IIIC if you take the inspiration from the mainland. In Crete, it is earlier.
- Rethemiotakis:** You do not see correlations with this phase on the mainland?
- B.Hallager:** We cannot use Furumark. We have to fall back upon ourselves here in Crete, and the collaboration between us. Only stratigraphy can help date the material. If you date Minoan material according to what you find in Mountjoy or Furumark, things like that mentioned by Popham (in his response to my paper) will happen: a IIIA:2 tomb will, in Furumark's terms, become IIIB.
- Rethemiotakis:** But these are Mycenaean motifs. They are unthinkable without the Mycenaean background. The Cretan examples must be close in absolute chronology, no matter what we call it in Crete. Why don't we use the Mycenaean terminology?
- B.Hallager:** I agree that things would be more simple if we could use the Mycenaean terminology for pottery shapes. Then at least we would all know what shape we are talking about. But we cannot a priori use the Mycenaean chronology. We have to establish our own pottery sequences in Crete first, based on stratified excavations, observations and comparisons. The mainland people did not go to Crete to date their pottery. When we have this sequence first then can we start checking how close or far away our relative sequences run.
- Rethemiotakis:** Let me remind you that during LM IIIC Crete is highly Mycenaeanized. It becomes a Mycenaean colony, in several characteristics. Not just pottery. (General uprising in the audience.) Sorry for the term. Terrible. Inappropriate. We are Cretans. Let us forget it. There are many aspects, religions, figurines etc. that show that we are very close to what happens in Mycenaean Greece. So I am not a separatist.
- B.Hallager:** I want to put a peaceful question in between. You mentioned in your late material – and showed – the stirrup jar fragments decorated with creamy white color. We thought in Khania that we had the privilege of being the production centre for these stirrup jars. Perhaps we now have to share this honour with you. But you said you have other shapes painted in this technique. I was thinking about the famous Hagia Triada kylix (Kanta 1980, 103, fig. 40:2,5 and fig. 106:1). Do you think that there is a possibility that it could come from your area?
- Kanta:** I dated it to IIIB. Hagia Triada. No provenance. In boxes. My reason for dating it to LM IIIB was that it has a deep rather angular form. I recently saw that La Rosa has also dated it to IIIB. The fabric is unique. I do not know the grounds of La Rosa's dating.
- B.Hallager:** Probably because of the simple decoration.
- Kanta:** What about the shape?
- B.Hallager:** That is why I was so happy to hear about this Kastelli material. I thought that finally we could place it.
- Kanta:** Yes, but the red clay is very unlike any clay from Kastelli, which does not continue in this period.



**Rethemiotakis:** They are not employing red clays very much in this period, at least in the fine wares. They use other clays, buff or yellowish etc. Not the red clays of the Neopalatial period. There is a very marked difference.

**B.Hallager:** You talked about one of the differences between your Phase 1 and 2: the “Close Style” becoming more advanced. How do you recognize what is advanced in Close Style? The moment it appears, it seems to be very advanced and it coexists with the so called “Open Style” from the very beginning of IIIC. The so-called “Close Style” is painted on kraters, stirrup jars, vases with greater areas to decorate, while, at the same time, the bowls are very simply decorated. I can not see the evolution as being less “Close Style” to more “Close Style”.

**Rethemiotakis:** I spoke about the different conception of the Close Style, not the chronological implications of the term. It brings the Cretan Close Style closer to its Helladic counterpart. It may have some chronological value. The material from Karphi looks later – at least a part of it – than that which I have illustrated. Perhaps it may go well into the third phase of my own terminology.

**B.Hallager:** The last thing I want to touch upon is the fringes and the so called “Fringe Style”. I do not think there exists a “Fringe Style”. Fringes existed in Minoan vase painting from at least IIIA. As Kanta very wisely points out in her book: “...latent tendencies towards such a style can be found as early as LM IIIA (Kanta 1980, fig. 79:7). This trend is more apparent in LM IIIB and especially toward its end, where IIIB and IIIC elements are mixed together.” (Kanta 1980, 254–255). Fringes are used to decorate other motifs, spirals etc., or as added motifs. They become perhaps more frequent and apparent in IIIC. But I do not believe in anything called a “Fringe Style”.

**Rethemiotakis:** This fringe must not be confused with the digressions of the Minoan flower, which has fringes. The Fringe Style is a matter of quantity of fringing. We may find fringes but they are very rare at least before the very beginning of IIIC.

**B.Hallager:** I will end with a small thing. You summed up, for your IIIA:1 pottery, that you could see local variations in the eastern and western part of Crete, and that there was a uniform style in Pediada after LM IB, which you interpreted as being the results of the Knossian overlordship. In IIIC, you also pointed out that the style is uniform. Is there another overlordship in IIIC in Pediada?

**Rethemiotakis:** We are discussing it here. What happens in IIIC.

**B.Hallager:** It would be interesting if the reason for the pottery styles in Crete in LM III is that there is a centre which pushes them, then there must be centres all the way down. The pottery styles are very uniform – except for Eastern Crete. Perhaps there might be other explanations. Improved road system allowing more contact?

**Rethemiotakis:** From what we know, the area of Pediada was open to different influences from MM IB onwards. The MM IB vases have parallels from Malia, from the Lasithi etc. This is a cultural region. Gerald Cadogan has spoken about this. At Galatas, which is a quite different case, we have, in a more advanced period, in MM IIB–IIIA, a very marked Knossian influence. So we have very easy communication with other palatial territories. I do not think

that the roads to Pediada were closed and, suddenly, opened again during LM IIIA:1. There must be another explanation.

- Coulson:** I think that in your response to Rethemiotakis' talk we were very close to losing sight of the main thing: the stratigraphy. You have two phases; the first one ends with a destruction; then there is a little fill, and then a second phase with no real buildings. I do not know whether one really should take a vase from, let us say, Level 7, and say that, because it has IIIB:2 characteristics, then this becomes your transitional level. It does not fit in with the stratigraphy. There are several other explanations for a IIIB:2 vase in that level, especially if Phase 2 is not associated with any buildings, but sort of a squatter settlement. It is the stratigraphy and the general tenor of the deposits which are the main things, not the individual vases.
- Rethemiotakis:** I tried to keep with the stratigraphy of the site. I said that all the vases of Phase 1 were found in the destruction debris of the houses. There may be other explanations, but this is the excavation picture. There are floors in the first phase. In the second, there are no floors, just a rubbish pit, and retaining walls. It seems to be part of a large rubbish pit, of material which was deposited there. It should belong to a settlement in the adjacent area. I have yet to find traces of it because I have excavated only 40 square meters. Perhaps it exists in the other plot I am excavating.
- Dietz:** I certainly do agree that it is a very good idea to get a local Cretan chronology for LM III based on stratigraphy and context. On the other hand you systematically place elements which should be late LH IIIB in the Argolid in LM IIIB:1 on Crete, I think you might get into trouble. It is very important to keep the Aegean area together so that we can understand the historical development. Of course, we have to abandon Furumark, in a way. Furumark is fundamental for the classification, but his chronology is not valid any more. There is a very well established chronology for the Argolid at least, particularly for Tiryns. Although it is not published to the same extent, Mycenae has good contexts and associations for IIIC. This is what you have to stick to, not to Furumark's chronology.
- Borgna:** I noted that in the Kastelli repertoire the presence of Mycenaean elements is quantitatively much less important than Phaistos, especially in regards to the simple and pure motifs such as antithetic spirals with simple panels without other elaborate patterns, or the row of simple patterns, such as the U-pattern or the N-pattern. If you have a lot of points of contact, we can also isolate some elements without correlations. Whether this is a chronological matter, or related to workshops, it needs to be discussed. I can state that the best parallels with the pottery of Phaistos are with the latest material, such as the one in the Pigorini Museum. I consider that the bulk of the Pigorini material, as published by Borda (Borda 1946, pls. XXXV-XXXVII), and the latest material of my group points to a quasi-homogenous facies. So it seems possible to redefine more clearly perhaps only two close facies, strictly similar, but characterized by the presence of some new features, such as the reserved band of deep bowls, the elaborate style, the streamers pattern, as it begins to emerge observing also other settlement deposits at Phaistos. In other words, I would like to ask, if you do not think that we might eliminate one phase, either IIIB late or IIIC early. As regards Mycenaean elements, I do not think that streamers are a pure Mycenaean influence. Perhaps it is an elaboration in Crete under a Mycenaean influence. I agree with B. Hallager that some elements are earlier in Crete. We can have very useful indications from the mainland with regard to IIIB and IIIB/C, but for the development of IIIC, I think we have



Cretan elements which spread on the mainland in the middle of IIIC: the reserved band, perhaps streamers, some elaborate elements of Pictorial Style, blob decoration on cups etc.

**Rethemiotakis:** If the antithetic streamer is a Cretan invention – personally I do not believe in parthenogenesis – which is the Minoan predecessor? Does it occur suddenly? Is there anything before?

**B.Hallager:** The tricurved streamer and the button-hook spirals are new motifs in early IIIC. I can not see the obvious origin right now.

**Macdonald:** Just a suggestion on the antithetic streamer: the antithetic idea may be Mycenaean, while the streamer itself is, in fact, a very abstract version of a tiny part of the floating upper tentacles of the octopus. That is what it is reminiscent of. It may be a combination of the two: antithetic plus very derivative octopus tentacle.

**Warren:** Following on from Borgna. If we say that from the Minoan tradition only we have a horizon where new things are appearing, I have to say, returning once again to the big krater that we have seen, not only are there very many parallels for that kind of complex arc system from the Stratigraphical Museum excavations, but Karphi is full of them. There are many examples of that kind of krater in Karphi. So for me again this is the mark of a new horizon which, at the moment, I would prefer to call early IIIC, although this is still the point of our discussion. There is something new here, and the interesting point is that it might derive from a Minoan tradition at this point, which I think would be early IIIC. But if we say from a Minoan tradition, then that itself has historical implications.

**Watrous:** I would like to add – I think this is what the last three people have said that I am a little uneasy about this discussion. I want to agree with what Rethemiotakis said about the way in which the mainland correlations are established. If we are going to take the tricurved streamer as the beginning of IIIC, but in the mainland it is in the middle of their sequence, we have to have a good reason for this distinction. So my question would be to B. Hallager: if someone were to ask you why you are giving priority to the Cretan sequence here – if someone were to say to you, yes, you do have the sequence through IIIB:2 and into IIIC and you find your tricurved streamers earlier, why could it not be simply that these things date to the same period both on the mainland and in Crete? This is a very important point. How do you know that what you are calling IIIB is not in fact early IIIC?

**B.Hallager:** I was thinking of that when Hood said that it was a question of terminology. I would be very worried if someone told me that IIIB:2 in Khania must be early IIIC. It is a stratum between the early IIIB settlement and the early IIIC settlement. I do not mind what it is called. I have used IIIB:2 because to me it looks more in the IIIB tradition (Popham has seen some of it and he called it late IIIB) and, perhaps more important, our early IIIC material has many parallels with the rest of the island.

**Watrous:** We are engaged in two processes at once. We are trying to decide on a terminology for our sequence, but at the same time we have to be aware of the implications of this terminology for the rest of the Aegean. We can not work in a vacuum. We must test our sequence against that on the mainland and elsewhere before we decide to adopt it. Otherwise what we decide to call LM IIIB may turn out later – when Mycenaean imports are finally discovered in similar deposits – to be contemporary with LH IIIC.



- Kanta:** Rethemiotakis' material, from the very beginning, from the time of the tumblers, has very close relations with material from Kato Symi. Even to the clay, even to the cups with a wavy rim, and also with IIIC material, although ours is not very well preserved. We have the same type of things, especially those sherds from kylikes you showed us. Do you have the kylix stems, and if so, are they straight or with a bit of a bulb in the middle? I think the question will give us a good idea of what the deposit is like. If they do not have the bulb, do they have a bit of a bulb, and are they big and chunky or thin and fine? To B. Hallager I will say that now I am totally confused about IIIB:2 – as I was at the beginning. Could we perhaps eliminate IIIB:2 late and call it early IIIC? Of course, they are your labels, but it seems to me that there are certain things that go together in more than one group. Kastelli is one such instance. Perhaps we should all have another look.
- Rethemiotakis:** I am afraid I must disappoint you about the stems: straight and narrow.
- B.Hallager:** To me typical early IIIC.
- Vallianou:** I did not understand what you said about an earthquake. Did it cause the destruction of Phase 1? Gouves is also Pediada. Gouves is destroyed by an earthquake and a tsunami. But Gouves is earlier than your phase – I think it is IIIB early. We have a common style. Perhaps there are smaller or bigger differences, probably due to different workshops. Same period but different workshops, and different places. The date perhaps is the same, but the differences come from other reasons.
- Betancourt:** I think that on the issue which we are discussing, I have to disagree with B. Hallager. We must relate our terminology to the mainland even if we have a slightly different series of elements that come in at different times. Nothing is more confusing for the discipline as a whole than to have the Aegean with one set of words for a chronological period in one part of the geography, and a different set for the same chronological period in a different part of the geography. If the mainland has one set, and we have one set, what happens when we deal with Rhodes? What happens when we deal with Kos? What happens when we deal with anywhere else where the two are going to interface? I would prefer to say that we do not know when IIIC begins for another year, and try to establish more securely what the chronology is, for example, in Rhodes, where there may be ties to both places, and then, later, come up with a hard and fixed terminology which can be put in the handbooks.
- B.Hallager:** I do not think I said that we should have different terminologies. I did not mean that, anyhow.
- Betancourt:** If the tricurved streamer begins in the mainland at one stage, and in Crete at a different stage, and everything else remains the same, in both stages, then that is okay, but what happens if the curved stemmed spiral also begins earlier in Crete? And a series of other motifs? What I am really asking is that if there is a Mycenaean IIIC first phase vase found in Crete, what is it associated with?
- B.Hallager:** Warren and Hankey (Warren and Hankey 1989) have shown that the earlier periods, LH/LM I and II, do not necessarily start or end at exactly the same time. I cannot see anything shocking in that Crete should be a little bit ahead of the mainland in the later part of IIIB and in the beginning of IIIC. Particularly when we see what happens after the destructions of the palaces.

**Watrous:** When you very helpfully pointed out the correlations between the Khania material and what Rethemiotakis showed us – and I believe what you pointed out was correct in terms of your sequences – a problem arises when we are trying to decide what to label this material. When I asked you, how do you know what you are calling IIIC is IIIC, the answer I hoped to hear was: I know this because I get LH IIIB imports up until this point at Khania, and my first LH IIIC import comes in afterwards. I believe this is the kind of correlation that we need before we want to start labelling this material IIIC. If we do not wait until we get that kind of correlation, we are going to get the mess that you see in the Cycladic and the mainland in the EBA and MBA chronological sequences.

**B.Hallager:** It should be as simple as we can do it. But I do not think we have done enough to check what we have in Crete. – When we have an early IIIC stratum in Khania which corresponds to other early IIIC strata in Crete I cannot see how I can change or redate that in Khania only without consequences for the rest of Crete? Do we have to rename our pottery periods because we cannot accept that, let's say, the reserved rim band was an invention in Crete and not on the mainland? – We have Mycenaean imports in Khania during the whole period, except in IIIC. And we hardly have any LH IIIB:2. The main part of our imports end in IIIB:1. Why?

**Macdonald:** Betancourt mentioned the problem of dealing with the Cyclades and the Dodecanese. I have had to deal with it to some extent. One of the problems one came up against... If I could characterize mainland IIIB and IIIC pottery rapidly. IIIB:2 is an Argive stratified phase which cannot be used outside the Argolid. IIIC early, again a stratified phase at several sites, is, in terms of decoration, rather like the calm before the storm. There is not very much, actually, to identify it by. Nothing distinctive. If Betancourt was writing a book on how the student should identify his early IIIC, it would be jolly difficult. You can refer to Mountjoy's book, but it is not easy. It is merely a stratified phase. I think that if B. Hallager had been working on the mainland, she would have started IIIC in middle IIIC, because she sees that as the big change. Again, on the mainland, that is the big change. My gut feeling is that we will be out of sync with the mainland if we begin IIIC with elaborate Fringe and Close Style and the rest of it. If we do so we will be in great problems. It may be – and it is not a very great thing to say here – that we are not ready at this conference to assign final terminology to this very important period between IIIB and IIIC, but that for a few years we should wait until the study and publication of the very important stratigraphies which we are getting from Khania and elsewhere, and possibly meet again at that point when we have more stratigraphies which cover this very vital phase, and then decide what to call it, rather than leaping in now. This is the first ever conference on LM III pottery. By the way, we have to bring in Cyprus to a certain extent because it is getting quite a number of the same things. At the same time, or at a different time? If you go according to Cypriote chronology, it is getting it in the middle of IIIC, because you are basing it on the mainland. The tricurved streamer: the finest deep bowl from Cyprus is the one with the tricurved streamer from Sinda II, which would be normally dated some time after the beginning of IIIC. So, I am not sure that we are quite ready.

**Kanta:** On this point: a month ago in Austria I was discussing exactly this problem with S.Jal-kotzy, who was saying from the mainland point of view that Crete has all these Mycenaean IIIC characteristics, but when do they really start, in IIIB? Is the mainland early IIIC contemporary with the Cretan early IIIC? Where does Cyprus come in? She suggested that one should look, not necessarily at the Argolid, but at the Mycenaean periphery and the is-

lands, because there we may find not only the parallels but also the potential imports that are so similar to the Cretan material that at the moment we cannot recognize them at first glance.

**Gesell:**

I was thinking when Macdonald was saying that we are not ready today to make this decision, and that we should wait until all these things are published, what will they be published as? Once they are published it will be in the literature and it will be locked in.

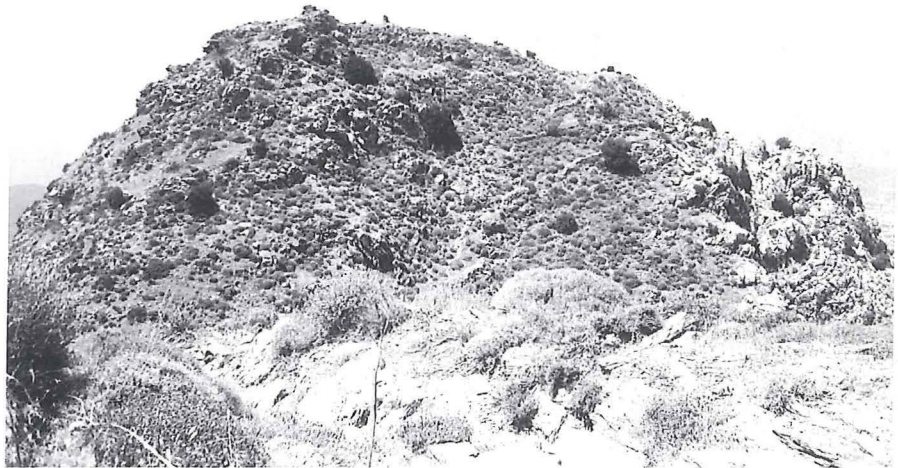


# Late Minoan IIIC Pottery from the Kastro at Kavousi

*Margaret S. Mook &  
William D.E. Coulson*

The Kastro is a settlement site continuously occupied from the beginning of the Late Minoan IIIC period into the seventh century B.C. It is located in the foothills of the Siteia Mountains, 700 m. above sea level on a peak above the modern village of Kavousi (Figs. 1-2).<sup>1</sup>

Late Minoan IIIC levels were excavated in 1989, 1990 and 1992 and three phases of Late Minoan IIIC habitation, Phases I-III, have been str-



*Fig. 1. View of Kastro, from the SE.*

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<sup>1</sup>The Kavousi Project is directed by Geraldine C. Gesell (Executive Director) of the University of Tennessee, William D.E. Coulson (Field Director of the Kastro) of the American School of Classical Studies at Athens, and Leslie Preston Day (Field Director of Vronda) of Wabash College. The project is sponsored by the University of Tennessee under the auspices of the American School of Classical Studies at Athens. It is funded by the National Endowment for the Humanities, the Institute for Aegean Prehistory, Wabash College, other institutions and private individuals. We are especially grateful for the support and assistance of Costis Davaras, Metaxia Tsiopoulou, and Nikos Papadakis of the Ephoreia of East Crete. Additional financial support was provided by an Olivia James Traveling Fellowship from the Archaeological Institute of America. The pottery illustrated here was drawn by M.S. Mook, Donald C. Haggis, W.D.E. Coulson, Roxana Docsan and Lyla Pinch Brock, and inked by M.S. Mook; the plans and sections of the West Slope were drawn by D.C. Haggis, who is studying and publishing the stratigraphy and architecture of the West Slope, and whom we thank for the information on the West Slope stratigraphic contexts; the plans and sections were inked by R. Docsan; the photographs were taken by JoAnn Polley and printed by Marie Mauzy.



tigraphically isolated.<sup>2</sup> LM IIIC Phase III habitation remains have been identified on the northeast of the site, in Room 11, and in the Northwest Building, where a two-room LM IIIC house with Phase I and Phase III habitation levels was located below Rooms 1-4.<sup>3</sup>

Fig. 2. Plan of Kastro.

## The West Slope Stratigraphic Contexts

The most complete stratified sequence of LM IIIC habitation, however, was found on the steep slope to the west of the seven rooms on the hill-top excavated by Harriet Boyd (Fig. 2:1-7). This area, the West Slope, is characterized by deep natural bedrock terraces, which aided in the preser-

<sup>2</sup>A preliminary stratigraphic phasing for the West Slope was conducted by D.C. Haggis and W.D.E. Coulson in 1991.

<sup>3</sup>Mook 1993, 87-96, 141-169.





*Fig. 3. View of Kastro West Slope, from NW.*

vation of early levels (Figs. 3-4). The pottery presented in this paper came from specific West Slope deposits in Room 25/26, Room 24, Room 35, and the area west of Room 6, which contained some of the best preserved LM IIIC stratigraphy.

On the Upper Terrace, the areas of Room 25/26 and Room 24 were part of an LM IIIC house. This house was defined on the west by a long north-south wall built along the western edge of the bedrock terrace. In Room 25/26, the tall vertical bedrock face functioned as the eastern wall of the room. Extensive use was also made of the natural bedrock face on the eastern side of Room 24, where two courses of the stone-built wall which extended its height were preserved (Fig. 5). A short east-west cross-wall divided Room 24 from Room 25/26. The only other feature in this LM IIIC house was a clay hearth situated on the bedrock floor in Room 25/26. This hearth continued to be used after the first clay floor, Phase I, was laid down (Fig. 6). This was covered by a Phase II clay floor (sherd **102**: 19833), and subsequently by a stratum of Phase II habitation debris mixed with roofing material (sherds **89-93**, **101**: 19832).<sup>4</sup> The room apparently had gone out of use as a habitation area and was for a time used as a dump, indicated by a deep stratum of black ashy soil containing large quantities of animal bone and well over 1000 sherds (sherds **103-146**: 19831, 17931, 17929, 19828). Undoubtedly much of this debris came from other rooms in the vicinity. A cross-wall was constructed separating Room 25/26 from Room 24, and the ashy dump in Room 25/26 was sealed by a clay floor of Phase III (sherds **161-170**: 17930). In Room 24, the bedrock floor was covered by a stratum of habitation debris and a subsequent layer of clay (sherds **13-25**, **36**, **38**, **41**: 16023, 16022), also

<sup>4</sup>The five digit numbers occurring in this paper refer to excavation locus numbers. These numbers also occur with a period and a subsequent number or numbers, as for example 19832.1, subdivisions referring to specific "pottery pails" collected during the excavation of a particular locus. Sometimes pottery pails were also employed to identify stratigraphic differentiations. Pottery illustrated in this paper is identified by boldface type.



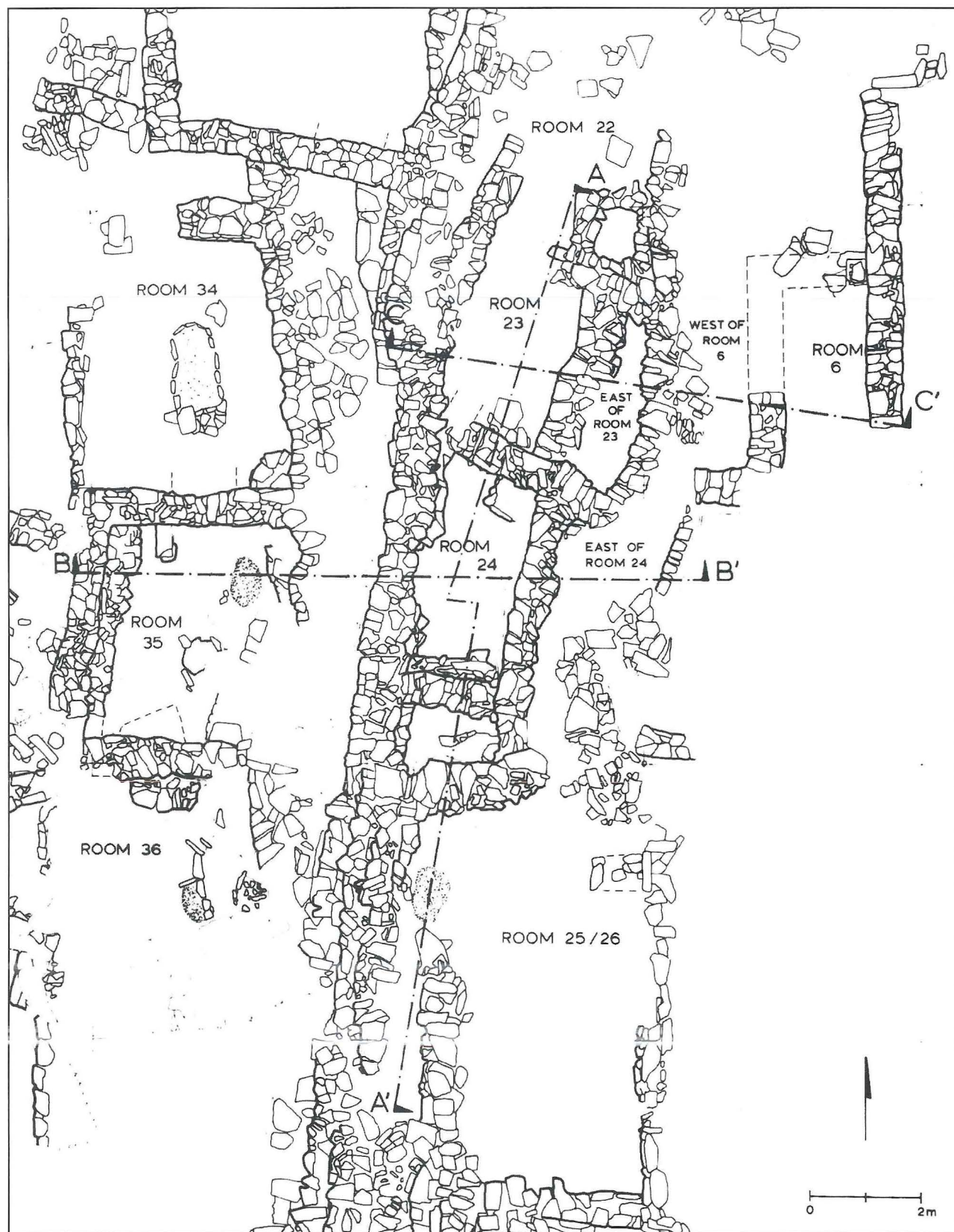


Fig. 4. Plan of Kastro West Slope with Section Lines.

Fig. 5. West Slope Section B-B<sup>1</sup>,  
E-W through East of Room 24,  
Rooms 24 and 35.

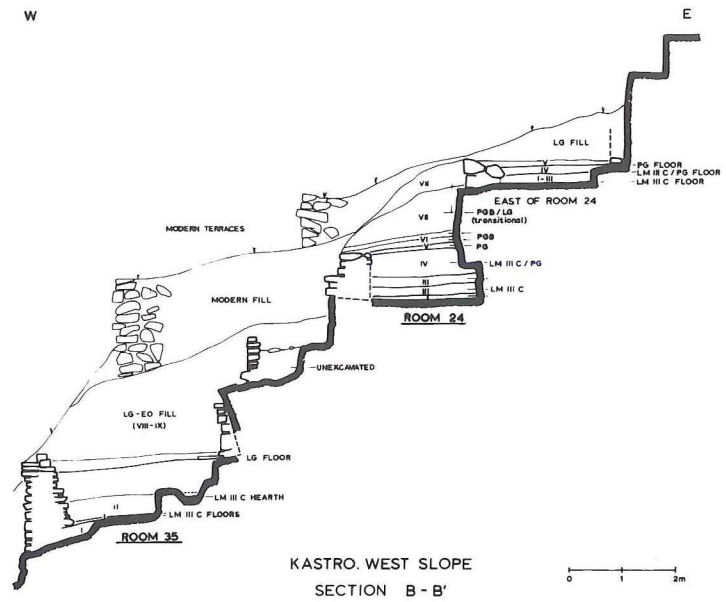


Fig. 6. West Slope Section A-A<sup>1</sup>,  
N-S through Rooms 23, 24,  
25/26.

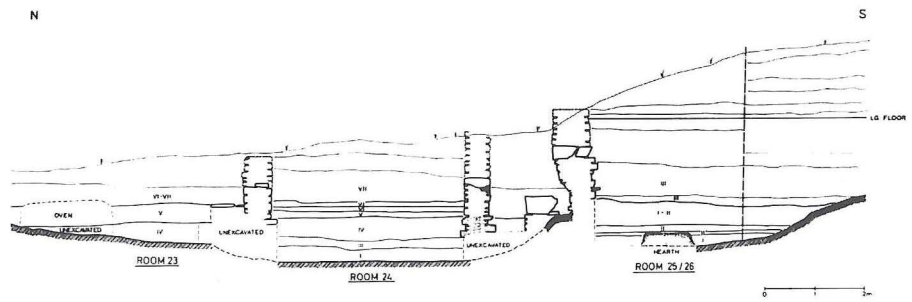
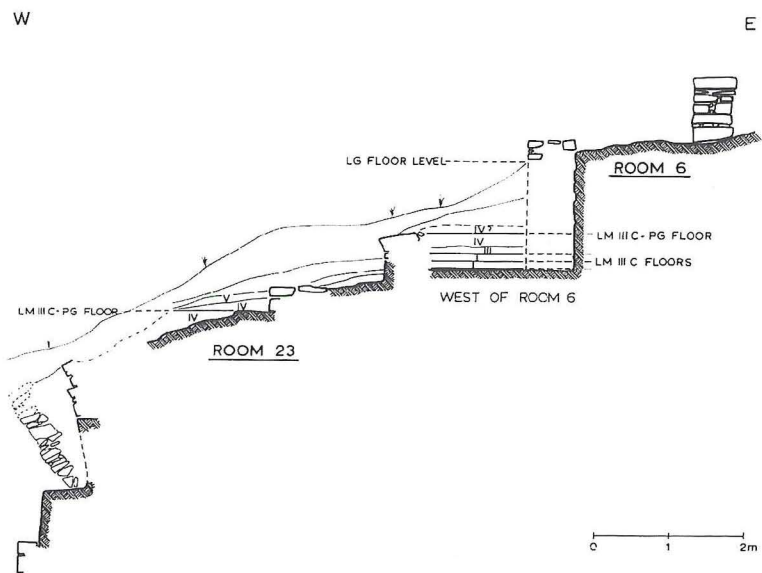


Fig. 7. West Slope Section C-C<sup>1</sup>,  
E-W through area West of Room 6  
and Room 23.



Phase I (Figs. 5-6). This was sealed by a clay floor, Phase III (sherds **147-151, 153-160, 171-173**: 16021). To the west of Boyd's Room 6 the first floor consisted of bedrock with clay packing in the depressions, Phase I (Fig. 7). Two successive clay floors, also Phase I, were above this (sherds **35, 39**: 13917/sherds **26-34, 40, 42**: 13916), and in turn sealed by still another clay floor, Phase III (sherd **152**: 13915).

On the middle Terrace of the West Slope, Room 35 (Fig. 5) contained a stratum of clay floor packing which levelled the uneven bedrock and created the first Phase I floor surface (sherds **1-12, 44**: 16118.5). This was then covered by a second Phase I clay floor (sherds **37, 43**: 16118.3-4), above which was a deep layer of habitation debris, Phase II, mixed with roofing material (sherds **45-88, 94-100**: 16118.1-2, 16115.1, 16113.1-.3).<sup>5</sup>

## The Late Minoan IIIB Style Pottery

Phase I is early LM IIIC, and strata of this phase typically contain a small percentage of pottery that is late LM IIIB in style. No pure LM IIIB deposits were excavated on the Kastro, but sherds with late LM IIIB characteristics were consistently a component of the LM IIIC Phase I and some of the Phase II occupation strata, and were well represented in the "dump" deposit in Room 25/26. The presence of these sherds in the Kastro deposits indicates that the site was first inhabited at the very beginning of LM IIIC. LM IIIB decorated pottery primarily consists of deep bowls and a few kylikes. Decorated cups are not readily identifiable in the Kastro LM III assemblage, as most are indistinguishable from deep bowls when the handles are not preserved. Size is also not a good indicator, since deep bowls may be very small.<sup>6</sup> Preserved handles also indicate that deep bowls were far more common than cups. Thus, bowl or cup rims have been identified as bowls throughout unless a preserved handle makes identification of a cup certain.<sup>7</sup>

The profiles of the Kastro LM IIIB **deep bowls** are essentially straight with plain rims (**2, 21, 27, 123**), occasionally with slight internal thickening (**119**).<sup>8</sup> Rim diameters vary from 10 to 17 cm., with 12 to 14 cm. being the most common. Bases are usually flat and raised, sometimes slightly depressed underneath, while a true ringed base is rare (**112**).<sup>9</sup> The

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<sup>5</sup>It should be emphasized that the pottery illustrated in this paper comes from particular deposits and therefore is not representative of the complete range of LM III shapes and decorative motifs from the site.

<sup>6</sup>This is well illustrated by two sherds with preserved handle attachments from the Northwest Building. Deep bowl P4.66 has a rim diameter of only 10 cm., while cup P4.43 has a diameter of 18 cm.; Mook 1993, 152-153, fig. 152, no. P4.66, fig. 150, no. P4.43.

<sup>7</sup>The exception to this occurs with monochrome and blob decorated sherds, which are identified as cups when handles are not preserved because the material indicates that these methods of decoration were far more prevalent on cups than on deep bowls.

<sup>8</sup>Kanta 1980, 258; Popham 1965, 318.

<sup>9</sup>Kanta 1980, 258.



round upswung handles spring directly from the wall at about mid-body. The LM IIIB fabrics are well-fired and hard, buff to pale pink in colour. Surfaces are usually slipped and polished, the decoration is glossy and usually brown or black in colour, occasionally red. The deep bowls mostly have monochrome painted interiors, sometimes with a reserved disk at the base (112).<sup>10</sup> The reserved disk, however, first occurs in central Crete from LM IIIA:2 onwards.<sup>11</sup> Occasionally the interior is unpainted except for double bands at the rim (2), a feature typical of the IIIB:2 bowls from Khania Kastelli.<sup>12</sup> The body is usually decorated with a single band at the rim and two, occasionally more, bands below the handles, although single body bands are also found.<sup>13</sup> Motifs include, but are not limited to, the following: quirks in the form of alternating semicircles (21); alternating diagonals with concentric arcs (27, 62, 119, 123);<sup>14</sup> quatrefoils with a central vein in each leaf (63);<sup>15</sup> bivalves with double outline (112);<sup>16</sup> the A-type iris derivative crossing Vs, both vertical (46) and horizontal (61);<sup>17</sup> and tricurved arches, including one with multiple arcs (107).<sup>18</sup> Occasionally the motifs are painted with thin spindly lines (2), and many are isolated and widely spaced in a manner anticipating the LM IIIC “open style”.<sup>19</sup>

No. 58 belongs to a **kylix** with rounded bowl and slightly everted rim, one of the types current in late LM IIIB.<sup>20</sup> It is decorated with a rim band on the interior and exterior, and groups of curved stripes.<sup>21</sup> Kylix 121 has a shallow rounded bowl with a flaring undifferentiated rim.<sup>22</sup> The interior has a double rim band and the lower band is significantly deeper,<sup>23</sup> while the exterior is decorated with a floral motif.

The material most closely resembling the Kastro LM IIIB pottery is from the North Platform pits of the Unexplored Mansion and the Little Palace and its two related deposits at Knossos. In the deposits from these

<sup>10</sup>Watrous 1992, 141; Popham 1984, 185; Kanta 1980, 258; Popham 1970, 196.

<sup>11</sup>Watrous 1992, 130; Popham 1965, 321.

<sup>12</sup>B. Hallager personal communication; Kanta 1980, 258; Tzedakis & Kanta 1978, 16.

<sup>13</sup>Watrous 1992, 141; Popham 1984, 185; Popham 1970, 196–197.

<sup>14</sup>Popham 1984, pl. 126a, top row, right, pl. 179, number 3; Popham 1970, fig. 2, no. 6, pl. 47a, top row, second from right.

<sup>15</sup>Popham 1984, pl. 127a, second row, second from left, pl. 181a, bottom row, far left; Popham 1970, pl. 47a, lower right; Popham 1967, 348, fig. 6, no. 14.

<sup>16</sup>Popham 1970, fig. 2, no. 12, pl. 47d, upper row, second from right.

<sup>17</sup>Popham 1970, pl. 49a, top row, fourth from right.

<sup>18</sup>Popham 1970, fig. 2, no. 4, pl. 47a, top right, pl. 52b, with various motifs within the arches.

<sup>19</sup>Watrous 1992, 145–146.

<sup>20</sup>Popham 1969, 302–303, fig. 11, pl. 64e; Watrous 1992, 140.

<sup>21</sup>Watrous 1992, 85, no. 1481, pl. 36.

<sup>22</sup>Tzedakis & Kanta 1978, fig. 14, no. 5.

<sup>23</sup>A feature found on deep bowls from Khania Kastelli; Kanta 1980, 259.

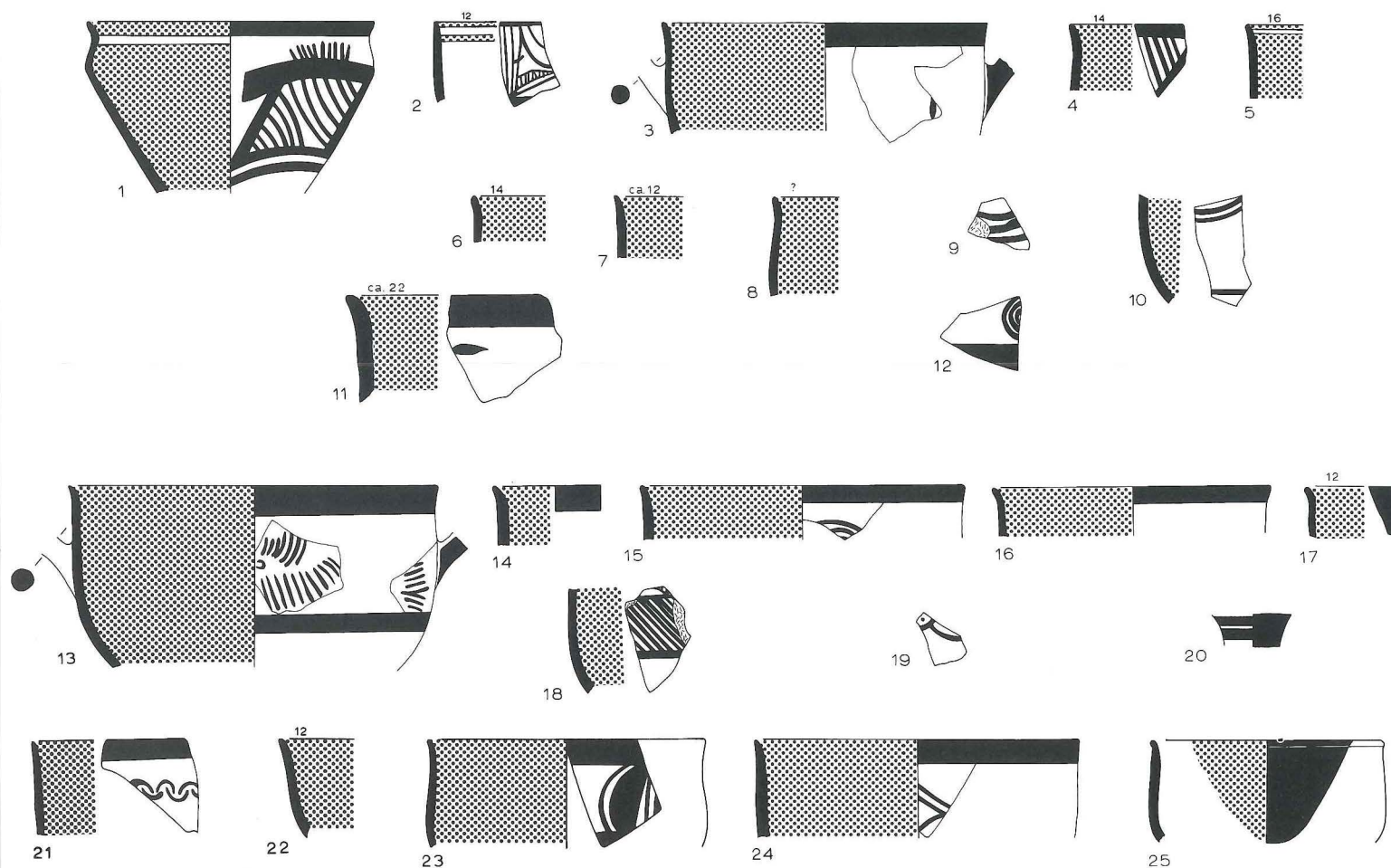


Fig. 8. Phase I Sherds from Room 35: 1-12 (16118.5), and Room 24: 13-25 (16022.1).

areas the deep bowl outnumbers the decorated cup, as it certainly does on the Kastro.<sup>24</sup> Motifs are frequently arranged with the open composition which characterizes the majority of the Kastro LM IIIB-type sherds, and many of the motifs found on the Knossos LM IIIB pots are also present on the Kastro LM IIIB sherds.<sup>25</sup>

### The Late Minoan IIIC Phase I Pottery (Figs. 8-17)

Among the LM IIIC Phase I fine wares the fabrics are generally softer than those of the IIIB sherds, although some continue to be as hard as that of the IIIB sherds; they range from buff to dark pink in colour.<sup>26</sup> Surfaces are frequently slipped, buff or cream in colour, and sometimes polished as in LM IIIB. The decoration, in red, brown, and black, is not as glossy as in IIIB, and, although sometimes lustrous, it is frequently matt. The dec-

<sup>24</sup>Popham 1984, 185.

<sup>25</sup>Popham 1984, pl. 126, pl. 127a-c, pl. 179.

<sup>26</sup>Sherds 10, 11, 12, 13, 20, 26, and 31 are exceptions with hard fabrics.



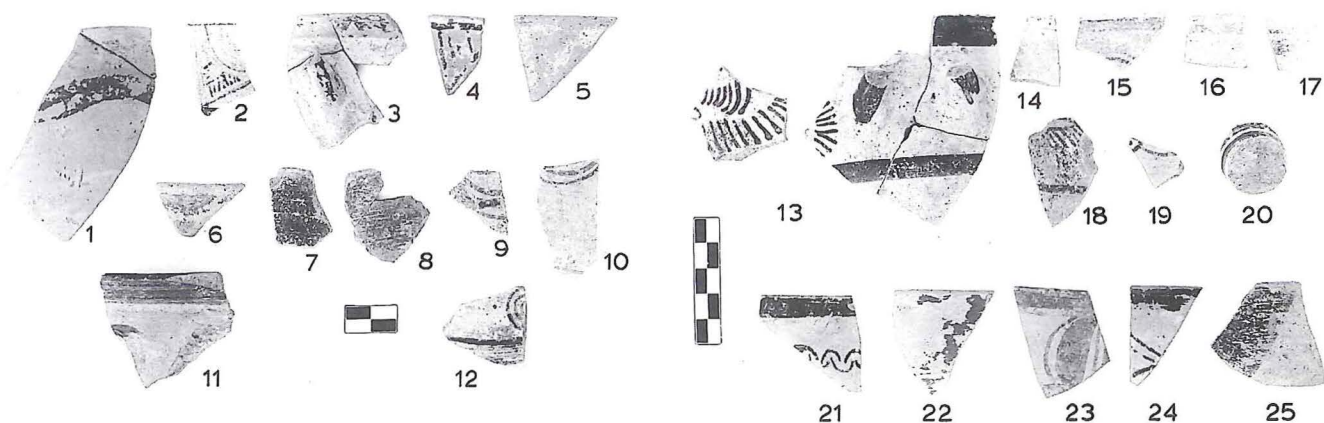


Fig. 9. Phase I Fine Decorated Sherds 1-12, Room 35 (16118.5).

Fig. 10. Phase I Fine Decorated Sherds 13-25, Room 24 (16022.1).

oration on vessels with softer fabrics tends to be worn. Open shapes are the most common and the deep bowl is predominant (Figs. 8-14).

Some Phase I **deep bowl** rims continue to have the straight profiles and plain rims of LM IIIB (5, 15, 24), others have straight walls with everted rims (4, 13, 14, 16), a number have gently curving profiles with flaring rims (3, 23), while a few have flaring profiles with everted rims (26, 28). Rim diameters vary from 10 to 18 cm., but approximately 70% of the deep bowl rims have diameters of 12 to 14 cm. Deep bowl bases continue to be flat and raised, frequently with a torus-type molding, as well as raised with a depressed underside; there are also a few ringed bases. Handles now typically run up the body of the vessel for some distance before turning outward. As in LM IIIB, the deep bowls mostly have monochrome painted interiors, sometimes with a reserved disk at the base.<sup>27</sup> It is in Kastro Phase I, however, that the reserved band is introduced on the interior of the rim.<sup>28</sup> Although not common, the reserved band is usually found on at least one vessel in every Phase I deposit, including deep bowls (5, 28), kylikes (1), and kraters (32). This appears to be a distinctive feature for identifying the **onset** of Late Minoan IIIC.<sup>29</sup> The reserved band is also rare on the LM IIIC pottery from the pits at Sybritos, but it is nonetheless present.<sup>30</sup> The LM IIIC deep bowls from Phase I onwards are usually decorated with a single band at the rim and

<sup>27</sup>Prokopiou 1991, 384; Sackett, Popham & Warren 1965, 283; Popham 1965, 320-321.

<sup>28</sup>Popham 1965, 320-321.

<sup>29</sup>Contrary to Kanta's observation that, "The reserved band makes its first appearance at a stage after the beginning of IIIC..."; Tzedakis & Kanta 1978, 15. Warren likewise suggests that this feature may indicate a date of post-initial LM IIIC, but the existence of LM IIIB sherds and LM IIIC sherds with the reserved band in Phase I deposits from the Kastro argues against it; Warren 1982-83, 71.

<sup>30</sup>It is found on one illustrated deep bowl, 384, 388, fig. 10, no. 4267. The deposits are not individually described, and it is pointed out that because of the lack of cross-joins these pits were unlikely to have been filled at the same time; Prokopiou 1991, 400. The question of whether or not the reserved band is a feature found on bowls that are associated with pits dated to the beginning of LM IIIC on the basis of other features remains unanswered, although the material was viewed as homogeneous and therefore treated as one group at the time of publication; Prokopiou 1991, 379.



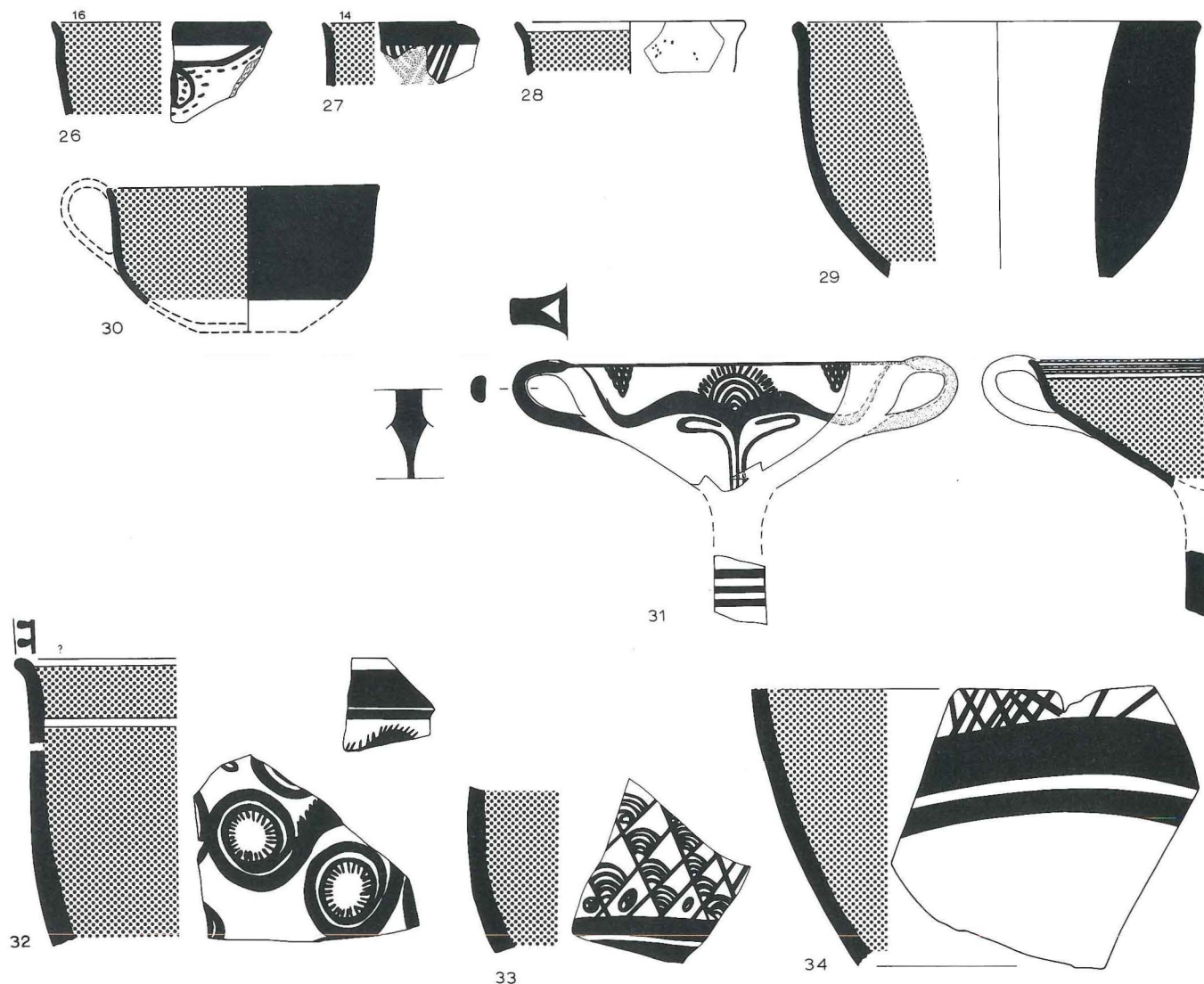


Fig. 11. Phase I Sherds from Area West of Room 6: 26-34 (13916.1-.3, .7-.8).

another on the body below the handles, both fairly deep. Only rarely is the characteristic LM IIIB double body band found on IIIC bowls (e.g. 103, which, with its interior reserved band, is certainly IIIC). The majority of Phase I deep bowls are decorated in the "open style," with isolated and widely spaced motifs (3, 10, 13, 24). Motifs include the following, amongst others: concentric semicircles and loops (9, 10), both pendent and accumbent;<sup>31</sup> spirals (15);<sup>32</sup> the Minoan flower motif (13), which on the Kastro deep bowls is usually horizontal and has multiple Us in the centre;<sup>33</sup> panel-type patterns (23);<sup>34</sup> and bivalve shells with double outline

<sup>31</sup>Popham 1984, pl. 182a, top row, third from left; Warren 1982-83, 79, fig. 41, right.

<sup>32</sup>Sackett, Popham & Warren 1965, pl. 77b, top row.

<sup>33</sup>Popham 1965, 327, 328, fig. 7, no. 42, pl. 82, middle row, second from left.

<sup>34</sup>Popham 1965, pl. 82b, lower right; Sackett, Popham & Warren 1965, 287, fig. 8q, pl. 77b, second row from bottom, second from right.



Fig. 12. Phase I Fine Decorated Sherds 26-30, Area West of Room 6 (13916.1, .3, .8).

Fig. 13. Phase I Decorated Krater Sherds 32-34, Area West of Room 6 (13916.7-.8).

(24 is probably a bivalve).<sup>35</sup> Some examples of “close style” decoration, particularly with hatched filling, are also found (4, 18). So too, some motifs are given a dotted outline (26),<sup>36</sup> as well as other dot embellishment (19, 28).<sup>37</sup>

A few sherds with handle attachments indicate that **cups** with a zone of decoration framed by bands above and below were being produced, but they are too fragmentary to identify the associated motifs. Nevertheless, a variety of profiles belonging to blob and/or monochrome decorated cups can be distinguished in the Phase I material. Flaring walls and slightly everted rims are the most frequent shape (22, 30), followed by cups with straight walls and slightly everted rims (7); some, however, have straight walls with externally thickened rims (6, 25), while others have straight walls and plain rims; there are also cups with curving walls and slightly everted rims (8) and examples with slightly curving walls and sharply everted rims (17, 29). Rim diameters vary from 10 to 18 cm., although ca. 65% have a diameter of 12 cm. Bases are usually raised and flat or slightly depressed underneath. Handles are oval or elliptical in section. Blob decorated cups are found in Phase I (25, 29),<sup>38</sup> and continue to be used throughout LM IIIC on the Kastro. They are decorated with black or red blobs, which are usually matt. Because the blobs cover more than 50% of the interior and exterior surfaces, small and even fairly large sherds which are monochrome coated may in fact belong to blob cups, for instance 6, 7, 8, 17, 22, and 30. It is possible, however, that these sherds do in fact represent monochrome coated cups, complete profiles of which have been found on the Kastro. Some of the rim sherds with monochrome or blob decoration may also belong to champagne cups; a frag-

<sup>35</sup>Popham 1970, 198, fig. 2, no. 12, pl. 47d, top row, second from right, is a IIIB example of the motif with double outline; Mook 1993, 145, fig. 84, no. P2.18.

<sup>36</sup>Sackett, Popham & Warren 1965, pl. 78a, bottom row, second from right.

<sup>37</sup>Popham 1967, 349.

<sup>38</sup>Tzedakis & Kanta 1978, pl. 4, no. 12, fig. 11, no. 6.



ment of a foot belonging to a champagne cup was found in one of the Phase I deposits under discussion (16118.5).<sup>39</sup>

Very few **kylikes** were found in Phase I levels. The most frequent shape has a shallow bowl with slight carination and a flaring rim (**31**); others have a deep bowl with a sharp carination and everted rim (**1**). The shape of **31** is more akin to IIIB examples,<sup>40</sup> but the carination is less sharp and the small handles are more typical of LM IIIC;<sup>41</sup> it is an early LM IIIC shape. Kylix **1** has the deep conical shape more typically associated with LM IIIC.<sup>42</sup> Rims are 12 to 16 cm. in diameter. All the kylix stem fragments have the Mycenaean-type solid stem (**20**, **31**), and the feet have diameters of ca. 7 cm. Kylix **31** has the most completely preserved decoration (Figs. 11, 14, inventory no. K89.114): the interior has a triple reserved band, while the exterior is decorated with tricurved streamers with fringed concentric semicircles as the central motif, flanked by pendent triangular net patches. The preserved portions of a kylix from Vrokastro are identical to **31**,<sup>43</sup> and fragments from at least two other kylikes with identical decoration on the exterior from the “dump” in Room 25/26 (but with only two reserved bands on the interior) may suggest a single workshop. Kylix **1** has a reserved band on the interior of the rim and the exterior motif, perhaps derivative from the bivalve, is fringed.

Large, finely decorated **kraters** are a hallmark of LM IIIC. Phase I kraters (**32**, **33**, **34**) have fairly straight walls with everted rims and diameters of ca. 30 to 57 cm., although large kraters with diameters of ca. 55 cm. are the most common (Figs. 11, 13). A monochrome interior is typical, and the two reserved bands on **32** are unusual. A narrow second rim band on the exterior is regular feature of Phase I kraters from the Kastro (**32**), a feature also found on a krater from Kastri<sup>44</sup> and a krater from an early LM IIIC pit at Knossos.<sup>45</sup> Kraters tend to be decorated in the “close style,” with fringing and filling ornaments.

Decorated closed shapes are not common in Phase I assemblages. Sherd **12** is from the shoulder of a closed vessel, probably a **jug**, decorated with concentric circles. Fine **stirrup jars** are generally not well represented in habitation deposits but are abundant in grave contexts, and a small straight sided stirrup jar with a nearly flat shoulder, **35**, is one of the few fine stir-

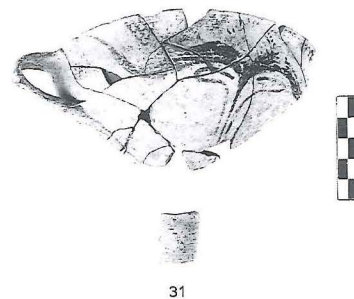


Fig. 14. Phase I Kylix **31**, Area West of Room 6 (13916.2).

<sup>39</sup>Prokopiou 1991, 385, fig. 8, no. 4255, 397, fig. 18, upper right; Sackett, Popham & Warren 1965, 295, fig. 15, no. P22, 298, pl. 73i; Tzedakis & Kanta 1978, fig. 14, no. 16; Kanta 1980, 265.

<sup>40</sup>Popham 1969, 302, pl. 64d; Watrous 1992, 140, fig. 57, no. 1574.

<sup>41</sup>Warren 1982-83, fig. 49, upper right.

<sup>42</sup>Popham 1969, 303-304, fig. 12, pl. 64f.

<sup>43</sup>Hall 1914, 92, fig. 49, no. 1; Kanta 1980, fig. 51, no. 4, 133 fn. 1; Kastro **31** confirms Kanta's early LM IIIC dating for the Vrokastro kylix.

<sup>44</sup>Sackett, Popham & Warren 1965, 292, fig. 13, pl. 74a.

<sup>45</sup>Warren 1982-83, 70, 79, fig. 43; see also another example of uncertain, but possibly Knossian, provenience in Popham 1965, 332, fig. 9, pl. 84. It must be noted, however, that a second rim band is also found on a krater from Karphi; Seiradaki 1960, 36, fig. 26a.





Fig. 15. Phase I Stirrup Jar 36, Room 24 (16023.1).

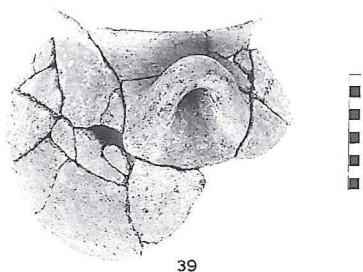


Fig. 16. Phase I Tripod Cooking Pot 39, Area West of Room 6 (13917.1).

rup jars recovered from the Kastro (Fig. 17).<sup>46</sup> It is very fragmentary with worn surfaces and only bands can be discerned. Here the false spout is attached to the body with a separate disk of clay (string-cut on the underside), and in LM IIIC both the false and real spouts are frequently attached to the body in this manner.<sup>47</sup> The medium-coarse stirrup jar, so common in LM IIIB, is comparatively rare in LM IIIC; only a few examples were found on the Kastro, including 36 and 37 (Figs. 15, 17).<sup>48</sup> Stirrup jar 36 may be an import from Knossos.<sup>49</sup>

The medium-coarse **basin**, 38, with a distinct groove and ridge below the rim is a typical LM IIIC shape that continues throughout the period, although it is not very common in Phase I.<sup>50</sup>

A variety of coarse cooking pottery was also recovered from Phase I strata (Fig. 17).<sup>51</sup> **Tripod cooking pots** are the most common cooking vessels on the Kastro in the majority of LM IIIC deposits (39, Fig. 16). These vessels have a globular body, an everted rim which is usually tall and pronounced, most frequently two horizontal handles on the shoulder, and three round-sectioned legs; this is a shape common in LM IIIB as well as in IIIC.<sup>52</sup> The rims from Phase I strata have diameters of 18 to 22 cm. The tops of the round-sectioned legs are found with three different types of decoration: a deep vertical slash, as on 39;<sup>53</sup> a deep "thumb" impression;<sup>54</sup> or, a deep slash further embellished with impressed circles on either side.

**Cooking dishes**, 41-44, have a rounded bottom which is always burnt<sup>55</sup> and are not to be confused with trays, which have a thick flat base.<sup>56</sup> The

<sup>46</sup>Kanta 1980, 248-249, fig. 55, no. 5 has a parallel shape.

<sup>47</sup>Birgitta Hallager identified this manufacturing technique and the use of a solid false spout as new in LM IIIC at Khamia Kastelli; personal communication. These features were also noted by Popham on fine stirrup jars from Katri and elsewhere; Sackett, Popham & Warren 1965, 284, Popham 1965, 319, fig. lm-n, 320.

<sup>48</sup>Sackett, Popham & Warren 1965, 293, 296, fig. 16, no. P6, is an example similar to the Kastro fragments.

<sup>49</sup>This observation was made by Peter Day, who is conducting the petrographic analysis of the Kastro pottery.

<sup>50</sup>Sackett, Popham & Warren 1965, 285, 290, fig. 11e; Prokopiou 1991, 381, 383, fig. 7, no. 4265.

<sup>51</sup>Many cooking vessels have phyllitic fabric Type IV, but micaceous fabric Type XVI and a granitic-dioritic fabric are also common; Haggis & Mook 1993, 274, 277. As yet, no chronological variation in the use of these fabrics on the Kastro within LM IIIC has been discerned.

<sup>52</sup>Betancourt 1980, 2-5, fig. 1; Watrous 1992, 144, no. 1346, fig. 50, pl. 32; Sackett, Popham & Warren 1965, 297, fig. 17.

<sup>53</sup>Sackett, Popham & Warren 1965, 285, 297, fig. 17, no. P17, pl. 76e; Prokopiou 1991, 381, 396, fig. 17.

<sup>54</sup>Sackett, Popham & Warren 1965, 285, 297, fig. 17, nos. P20, P19, P12, pl. 76f; Prokopiou 1991, 380, fig. 5, nos. 4273-4274, 381, 396, fig. 17.

<sup>55</sup>Sackett, Popham & Warren 1965, 290, fig. 11p-s, pl. 78d, upper right; Prokopiou 1991, 381, 382, fig. 6, nos. 4276-4278, 396, fig. 17, group in lower right.

<sup>56</sup>See Betancourt 1980, 5-7, for a discussion of the cooking dish.

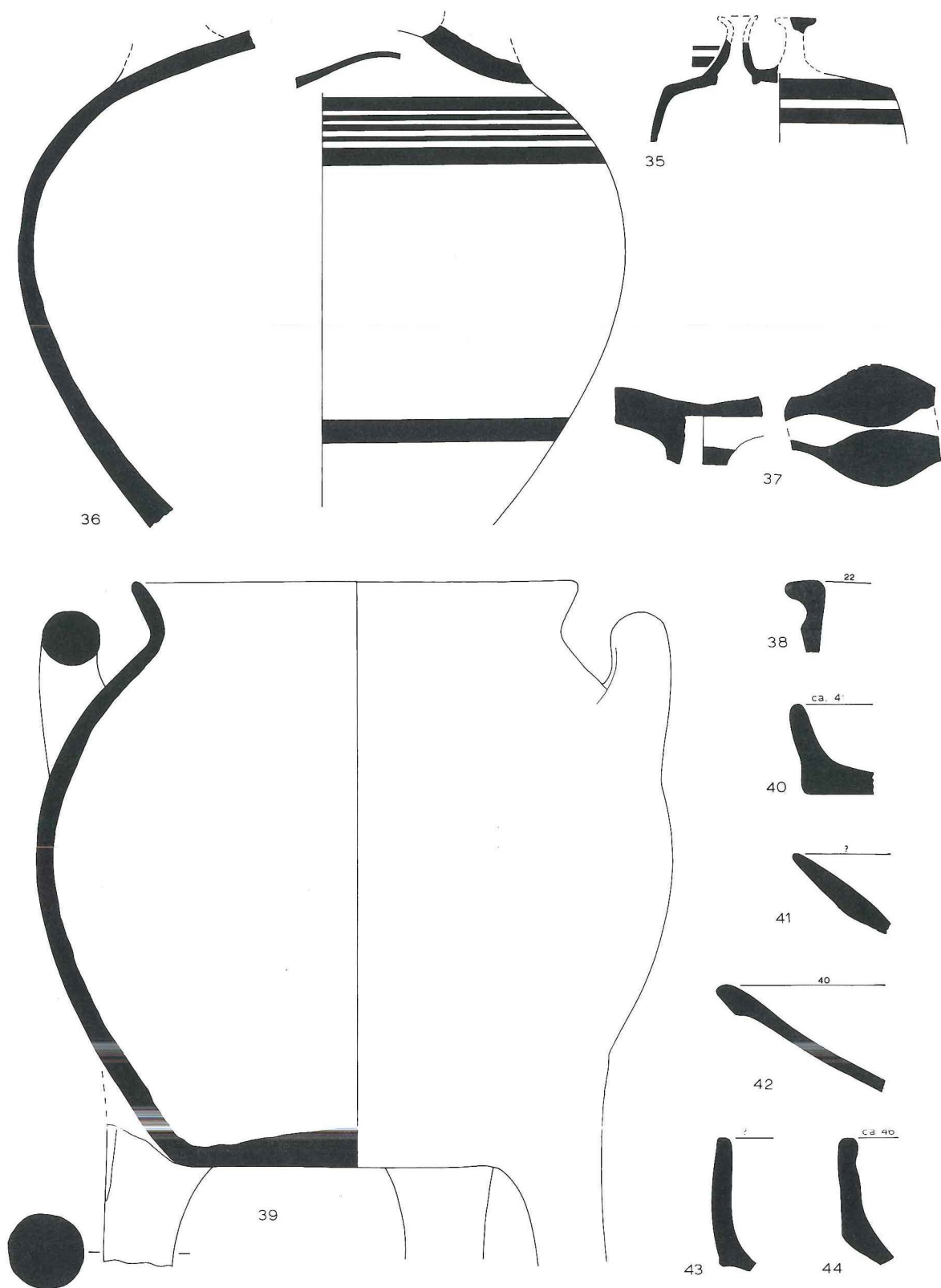


Fig. 17. Phase I Sherds from Room 24: 36, 38 (16023.1); 41 (16022.1), Area West of Room 6: 35, 39 (13917.1); 40, 42 (13916.8, 13916.1), and Room 35: 44 (16118.5); 37, 43 (16118.3).

rims of cooking dishes are usually tall (rarely as short as **42**) with a variety of shapes and a distinct demarcation between the rim exterior and bottom. Rim diameters are ca. 27 to 50 cm., most frequently greater than 40 cm.; they tend to be very uneven and may be pulled out or pushed in in various ways to form a spout. Some rim sherds are pierced, perhaps for suspension over a fire or for lifting with poles to remove from the fire and pour the contents. The interiors of cooking dishes and the exterior of their rims are always well smoothed, while the underside of the curved bottom is always rough, as if it were impressed into or over a rough-surfaced mould. The bottoms become very thin away from the rim, as thin as 0.2 cm., and are consequently very poorly preserved and usually broken near the rim. In Phase I the cooking dish is one of the most popular cooking vessels, outnumbering tripod cooking pots in some deposits.

Flat **trays**, such as **40**, are rare in Phase I deposits and never very popular on the Kastro.<sup>57</sup> These vessels are sometimes burnt on the underside and exterior, indicating that they were used for cooking.

As a stratigraphic assemblage, the Phase I pottery is early LM IIIC and most closely resembles that from Kastri.<sup>58</sup> The reserved band in Phase I is found only on a small number of vessels, but in any sizable assemblage of pottery it should be in evidence, and can be used to identify the beginning of LM IIIC. In addition, the Kastro material may shed some light on the development of this feature. Kanta has suggested that the reserved band developed from the double rim band, a late IIIB decorative scheme (although not all such bands have a deeper lower band as she states; see kylix **121** which does and bowl **2** which does not), in that the reserved space between the two bands, or the reserved space above a single rim band, supplied the inspiration for the true reserved band.<sup>59</sup> Kylix **31** with triple reserved bands, the double reserved bands on the two similar kylikes, mentioned above, and the double reserved bands on krater **32**, may rather support Popham's suggestion that the reserved band is intended to imitate the Mycenaean-type painted bands, while maintaining the Minoan tradition of coating vessel interiors.<sup>60</sup> Therefore, the reserved band of LM IIIC may not derive directly from the Mycenaean reserved band but be an independent development,<sup>61</sup> and one which may be taken to identify the onset of the period.

<sup>57</sup>Sackett, Popham & Warren 1965, 290, fig. 11m-o, 296, fig. 16, no. P13, pl. 76b; see also the discussion of the tray in Betancourt 1980, 7; and Prokopiou 1991, 381, 382, fig. 6, no. 4275.

<sup>58</sup>This agrees with Popham's placement of the Kastri pottery in the first part of LM IIIC; Sackett, Popham & Warren 1965, 281-282.

<sup>59</sup>Kanta 1980, 259.

<sup>60</sup>Popham 1965, 320-321.

<sup>61</sup>Kanta also believed that the reserved band was a local development at Khania Kastelli, Kanta 1980, 259.



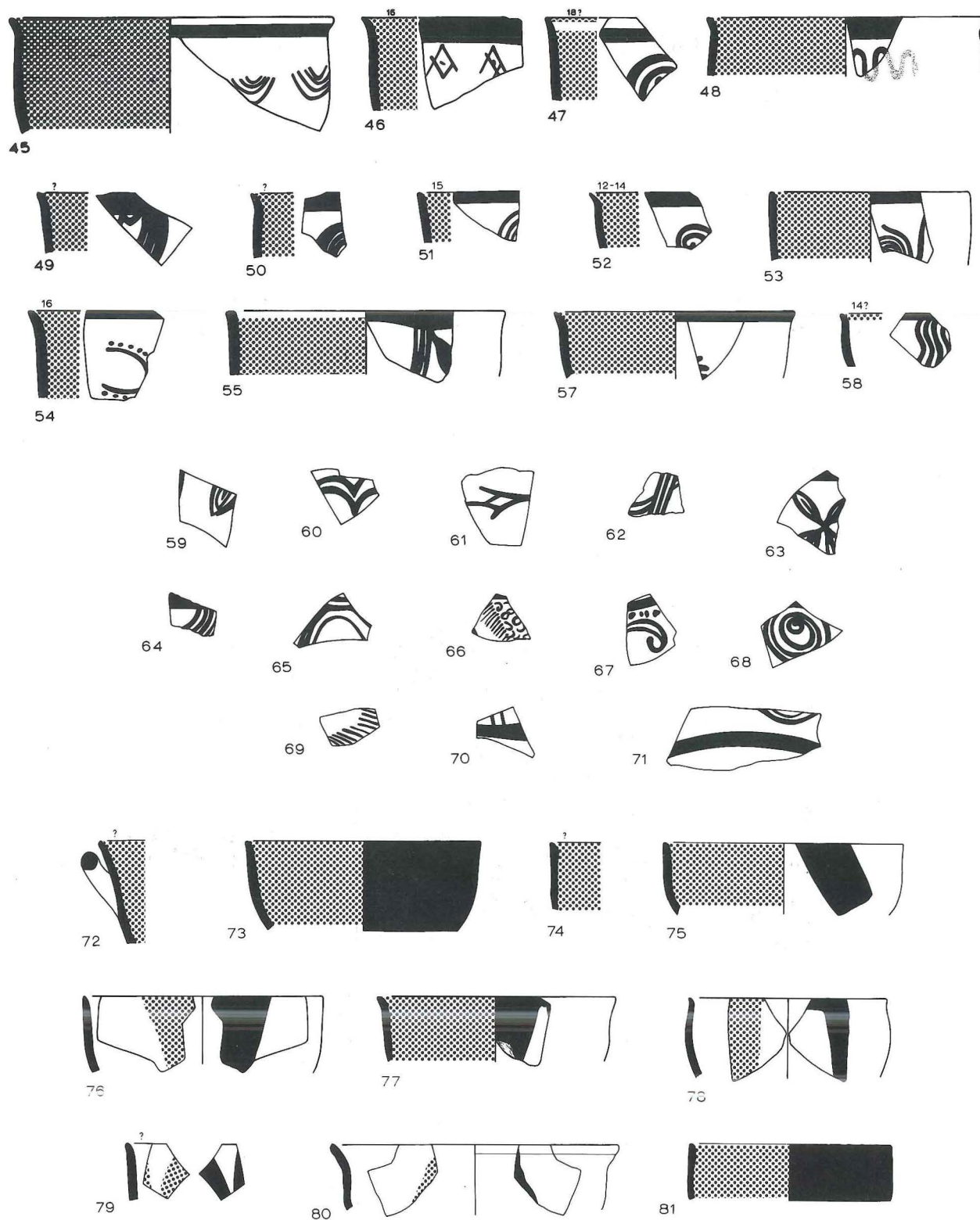


Fig. 18. Phase II Sherds from Room 35: 45-55, 57-81 (16118.1-2, 16115.1, 16113.1-3).

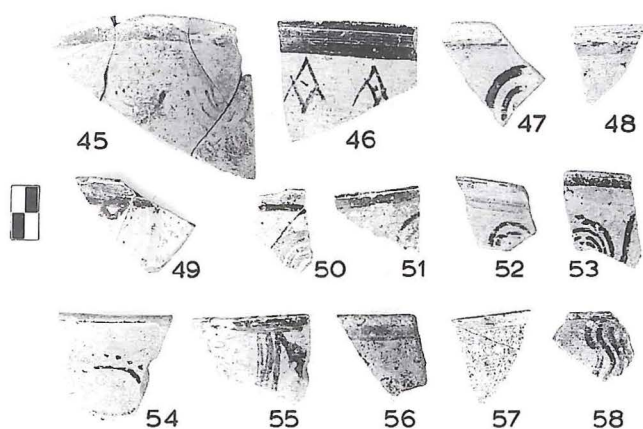


Fig. 19. Phase II Decorated Deep Bowl Sherds 45-58, Room 35 (16118.1-2, 16115.1, 16113.1-3).

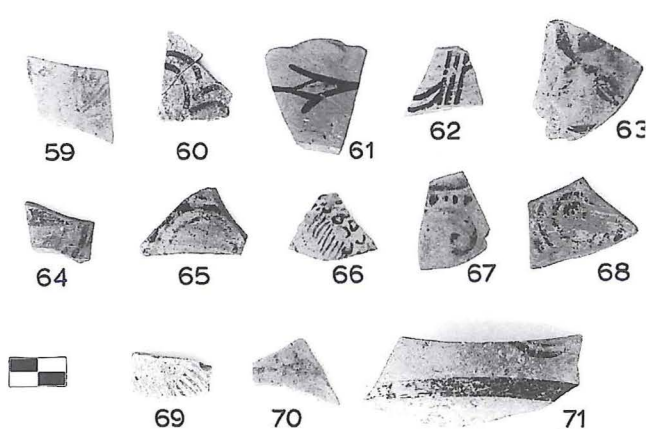


Fig. 20. Phase II Decorated Deep Bowl Sherds 59-71, Room 35 (16118.1-2, 16115.1, 16113.1-2).

### The Late Minoan IIIC Phase II Pottery (Figs. 18-25)

The pottery from Phase II is stylistically close to that of Phase I. Fine fabrics are not noticeably different and they have the same variations in hardness and colour as in Phase I. Red, brown, and black decoration continue; however, there appears to be a stronger preference for red in Phase II than in Phase I, and the black frequently has a metallic appearance not in evidence on the Phase I IIIC pottery.<sup>62</sup> Open shapes continue to be more numerous than closed. LM IIIB sherds were also present in Phase II levels, either because some of these vessels were still in use or because of depositional and post-depositional processes. Clearly Phase II is not far removed in time from Phase I.

In Phase II **deep bowls** remain the most common shape (Figs. 18-20, 22). Rims continue the forms of Phase I, but two new shapes are also found: an everted rim with a steep ledge on the interior (52), and a squared rim (55). Rim diameters vary from 12 to 18 cm., but about 70% of the deep bowls have rim diameters of 14 to 16 cm. Thus, they are generally larger than in Phase I. The bases are always raised and usually depressed underneath; the ringed base is rare. Most deep bowls have monochrome interiors; reserved bands (47, 55) and disks appear with about the same frequency as in Phase I. The decorative zone is usually framed by a band at the rim and one on the body, but a few bowls deviate from this scheme by having an upper band which is somewhat below the rim (45, 47). This scheme is also found on some bowls from Kastri.<sup>63</sup> The "open style" of decoration continues to be favored for deep bowls. Many motifs common in LM IIIB continue to be popular, but they are often painted in an im-

<sup>62</sup>Although, brown and dark brown decoration on some LM IIIB-style vessels has a metallic finish.

<sup>63</sup>Sackett, Popham & Warren 1965, 287, fig. 8e, f, i.



precise manner with elements merging and overlapping (49, 50, 65). A variety of motifs are current, including the following: pendent concentric semicircles (45);<sup>64</sup> spirals (47, 50, 51?, 52, 68), the exact forms of which are uncertain due to the fragmentary condition of the sherds; 71 appears to be a spiral of the type with a heavy outer circle;<sup>65</sup> wavy lines (48);<sup>66</sup> semicircles and loops (49, 64), perhaps components of more complex patterns as they are pendent from the rim band; solid quatrefoils in a panelled pattern (55);<sup>67</sup> hatched ovals (59), here arranged asymmetrically in a IIIC variation of the IIIB motif;<sup>68</sup> and vertical stacked chevrons (60). Sometimes thin lines (65), dots (54, 67), or fringes (66, 69) outline motifs. No. 66 is decorated in the "close style," which continues to be rare on deep bowls. Deep bowl 72 is one of the few certain monochrome examples.

**Cups** are more common in Phase II than in Phase I. No. 53 can be identified as a decorated cup on the basis of its slightly convex profile. Its running spiral has a very straight tangent.<sup>69</sup> The majority of cups, however, are blob decorated or monochrome (Figs. 18, 22, nos. 73-81.). Profiles and rim diameters are unchanged from Phase I. Nos. 75 and 80 have pronounced carinations and may belong to champagne cups. The lack of precision in decoration is also apparent on blob cups, where drips and runs are common (77, 78). Very few **kylikes** were found in the Phase II deposits, and **kraters** were very rare indeed.

Fine decorated closed shapes occur with a much greater frequency in Phase II than in Phase I (Figs. 21, 23, 25). **Jugs/amphorae** are common, but the fragmentary nature of the material does not allow for precise identification. The most usual shape has a rounded and flaring rim with a diameter of 10 to 12 cm. (82, 89) and a flat, or very slightly depressed, base with a shallow groove running around the edge of the underside (83, 93) and a diameter of 11 to 14 cm. Common decorative features include a band at the rim (interior/exterior), a band at the juncture between neck and shoulder, bands on the shoulder below the handle(s), and one or more bands at the base. The handle is usually decorated with a stripe down the exterior and a band encircling the point of attachment on the shoulder (84). These vessels have a variety of curvilinear motifs on the shoulder (90, 92), which are medium coarse with granitic-dioritic fabrics), including the "tassel" (91).<sup>70</sup> The spattering on the inside of base

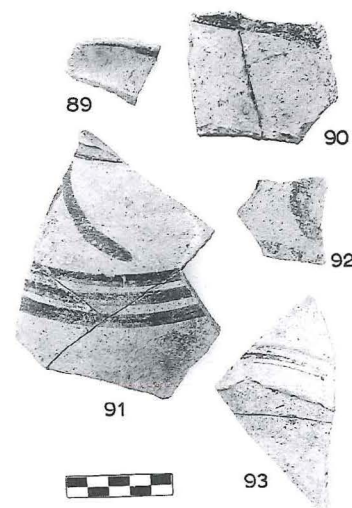


Fig. 21. Phase II Decorated Sherds 89-93, Room 25/26 (19832.1-.2).

<sup>64</sup>Sackett, Popham & Warren 1965, 295, fig. 15, no. P57.

<sup>65</sup>Sackett, Popham & Warren 1965, 287, fig. 8g.

<sup>66</sup>Sackett, Popham & Warren 1965, 287, fig. 8s, pl. 77b, lower row, fifth from right.

<sup>67</sup>Sackett, Popham & Warren 1965, 287, fig. 8m.

<sup>68</sup>Sackett, Popham & Warren 1965, 288, fig. 9q, pl. 77c, second row from the bottom, third from the left. For LM IIIB examples see Popham 1970, 200, fig. 3, nos. 45-46.

<sup>69</sup>Sackett, Popham & Warren 1965, 287, fig. 8g-h.

<sup>70</sup>Sackett, Popham & Warren 1965, 296, fig. 16, nos. P31 (this is mislabelled; it is actually no. KP28) and P25, 299, pl. 75a-b; Prokopiou 1991, 383, fig. 7, no. 4256, 397, fig. 18, lower right.



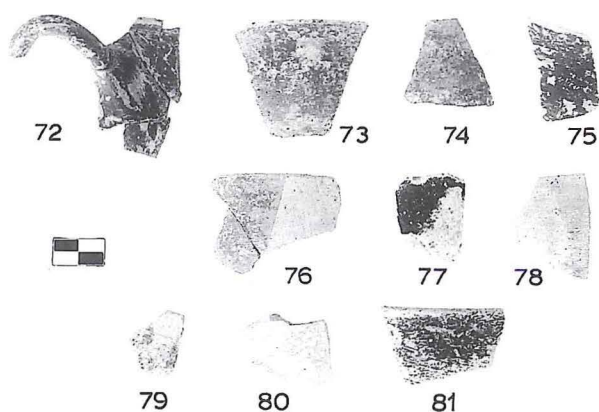


Fig. 22. Phase II Monochrome and Blob Decorated Bowl and Cup Sherds 72-81, Room 35 (16118.2, 16115.1, 16113.1-.3).



Fig. 23. Phase II Decorated Sherds 82-88, Room 35 (16118.2, 16115.1, 16113.2-.3).

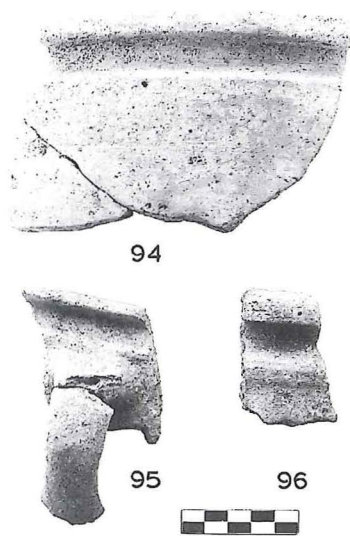


Fig. 24. Phase II Basin Sherds 94-96, Room 35 (16113.1-.2).

93 is unusual. Shoulder fragment 87 is decorated with a double-outlined bivalve, a motif found on a number of Phase I deep bowls. No. 88 is monochrome coated and appears to have been dipped; it has two oval areas where the slip has not adhered very well, perhaps indicating where the vessel had been grasped for dipping. This is a of method decoration usually restricted to cups and bowls. **Juglet 85** has very worn surfaces, but traces of a foliate-band type motif are preserved in shadow on the shoulder.

Shoulder fragment 86 is decorated in the "close-style" with concentric loops, curves and spirals, and dotted outlines; it is probably a fine **stirrup jar**.

The typical LM IIIC medium-coarse **basin** is more prevalent in Phase II deposits (Figs. 24-25, 94-96). It is just as common as the tripod cooking pot and the cooking dish, which, conversely, are less frequent than in Phase I levels. While some rims are squared, others are not. The groove and ridge below the rim are very prominent, partly because the rim itself is inset from the wall. The inset rim is a new feature in Phase II, also found on a basin from Kastri and several from Karphi.<sup>71</sup> Basin 95 has a vertical handle instead of the usual horizontal type.<sup>72</sup>

**Tripod cooking pots** are less predominant in Phase II deposits, but have essentially the same shapes as in Phase I (Fig. 25, 97-99). **Cooking dishes** occur with a similar frequency (Fig. 25, 100-102). It appears that the profiles of cooking dishes were never standardized and remained fairly idiosyncratic.<sup>73</sup> No **trays** were recovered from Phase II levels.

<sup>71</sup>Sackett, Popham & Warren 1965, 296, fig. 16, no. P11; Seiradaki 1960, 8, fig. 5, nos. 1, 3, and 4, pls. 3b-c, on the left.

<sup>72</sup>The basins are made in a variety of fabrics, including Type XIII with siltstones, and phyllitic Types IV and XI; basins from Vronda are frequently fabric Type XI; Haggis & Mook 1993, 274, 276, 281-282.

<sup>73</sup>Betancourt 1980, 5.

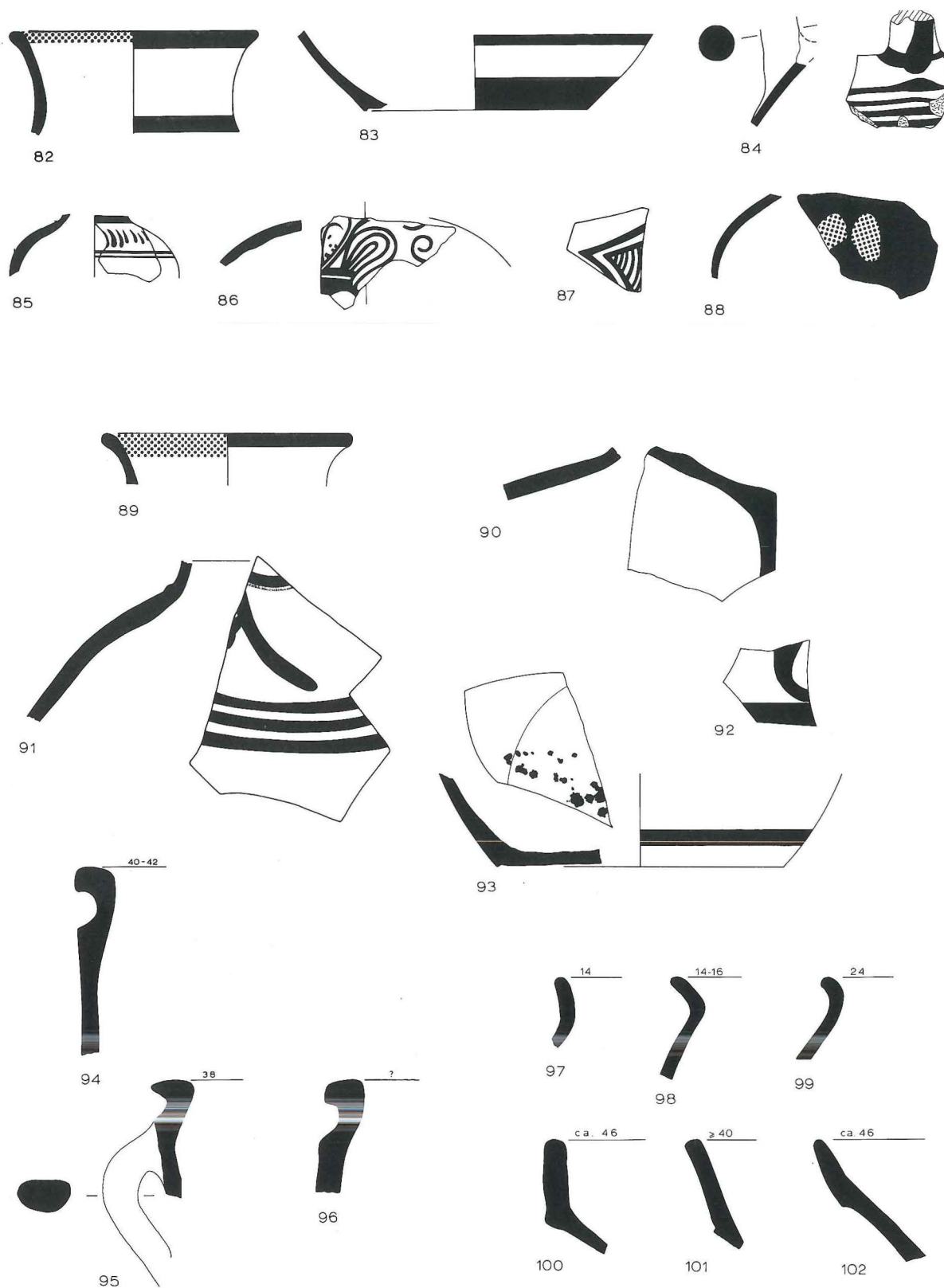


Fig. 25. Phase II Sherds from Room 35: 82-88, 94-100 (18118.1-2, 16115.1, 16113.1-3) and Room 25/26: 102 (19833.1); 89-93, 101 (19832.1-2).

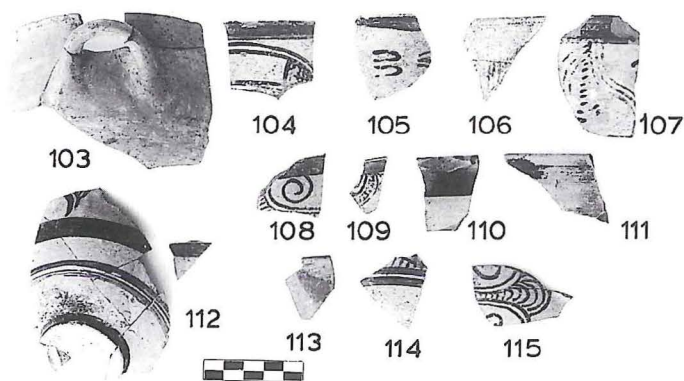


Fig. 26. Decorated Sherds **103-115**, Room 25/26 Dump (19831.8).

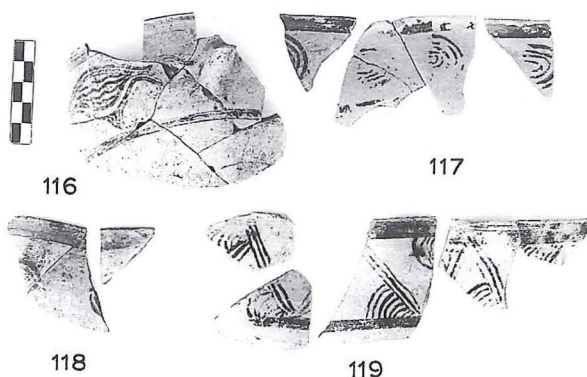


Fig. 27. Decorated Deep Bowl Sherds **116-119**, Room 25/26 Dump (19831.4).

The pottery from Phase II is not far removed from Phase I stylistically. Indeed, the majority of the shape and decorative parallels come from Kastro, which Popham has argued was inhabited throughout the first half of LM IIIC.<sup>74</sup> The general character of the pottery, however, is not dissimilar to that from the Stratigraphical Museum excavations, assigned by Warren to mid-IIIC.<sup>75</sup> The new metallic appearance of black decoration, the larger diameters of deep bowls, the greater frequency of cups and decorated closed vessels, and the new basin shape with inset rim indicate that some stylistic changes have taken place in Phase II. The relative stratigraphic positions of specific Phase I and II deposits also indicate chronological advancement. There may be a good deal of overlap, both chronologically and stylistically, between the complete Phase I assemblage and that of Phase II. Nevertheless, the beginning of Phase II should be placed specifically in the latter part of the first half of the LM IIIC period, probably continuing into mid-IIIC.

#### The Pottery from the Dump in Room 25/26 (Figs. 26-32)

The dump in Room 25/26 is a particularly interesting stratum because of the wealth of ceramic material it contained. It does not provide a stratigraphic basis for dating the pottery from the Kastro, nor does the pottery found here illuminate the stylistic development of the local sequence. The assemblage certainly includes material from both Phases I and II, and may also contain material from Phase III, although the latter is not obvious. The pottery from the dump does, however, provide additional information on the range of pottery shapes and decorative schemes that were in use in LM IIIC, and gives further evidence for the presence of LM IIIB-style pottery on the site, some of which was discussed above. For these reasons, a selection of the sherds is illustrated here.

<sup>74</sup>Sackett, Popham & Warren 1965, 282.

<sup>75</sup>Warren 1982-83, 74.



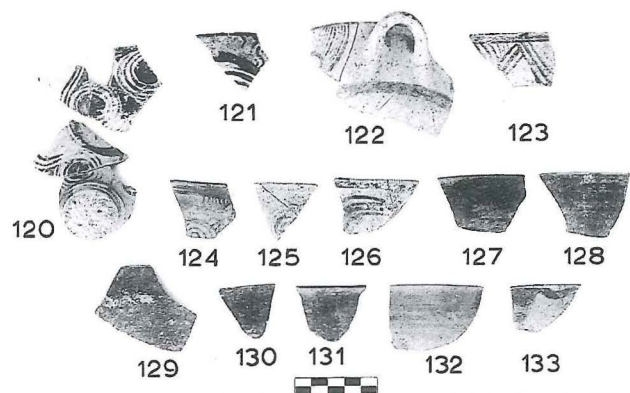


Fig. 28. Decorated Sherds 120-133, Room 25/26 Dump (19831.1).



Fig. 29. Decorated Kylix Sherds 134-139, Room 25/26 Dump (17931.1).

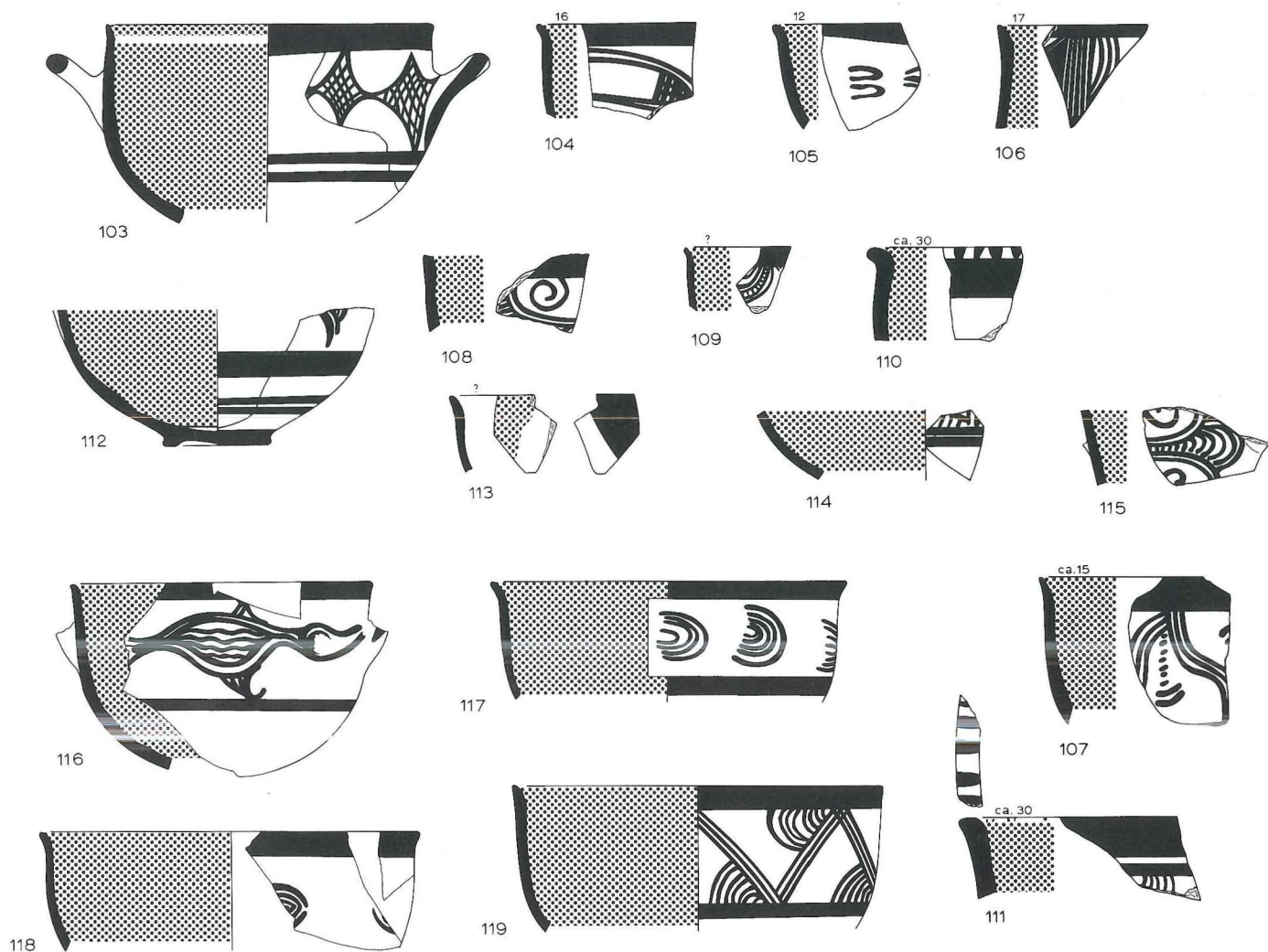


Fig. 30. Sherds from Room 25/26 Dump: 103-119 (19831.4, .8).

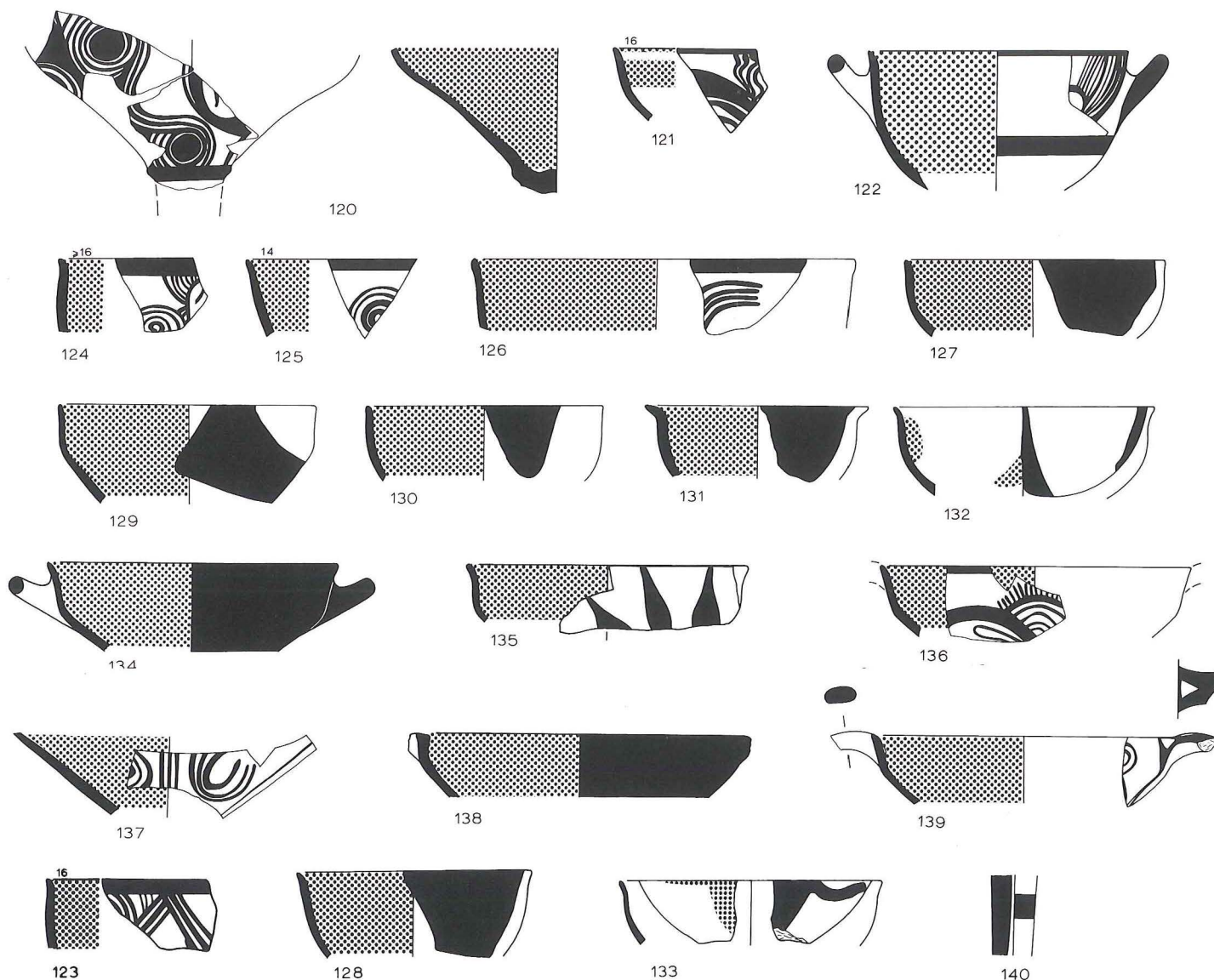


Fig. 31. Sherds from Room 25/26  
Dump: 120-140 (19831.1, 17931.1).

### The Late Minoan IIIC Phase III Pottery (Figs. 33-38)

Phase III is an advanced stage of LM IIIC. Fabrics are generally softer than in Phases I and II, surfaces are slipped but rarely polished, and the decoration is usually worn. Brown and black decoration is frequently very metallic in appearance, and a thick, almost vitreous, black to red mottled slip is a feature found only in this phase.

**Deep bowls** maintain the size of the Phase II examples, although the profiles are now either very straight with a plain (147, 162, 163) or slightly everted rim (148, 161), or flaring with an internally thickened and everted rim.<sup>76</sup> Reserved bands are more common in Phase III than in

<sup>76</sup>See Mook 1993, fig. 87, nos. P2.23-.38, figs. 146-147, nos. P4.1-.29, for Phase III pottery from the Northwest Building of the Kastro, including many examples of the second type of deep bowl.



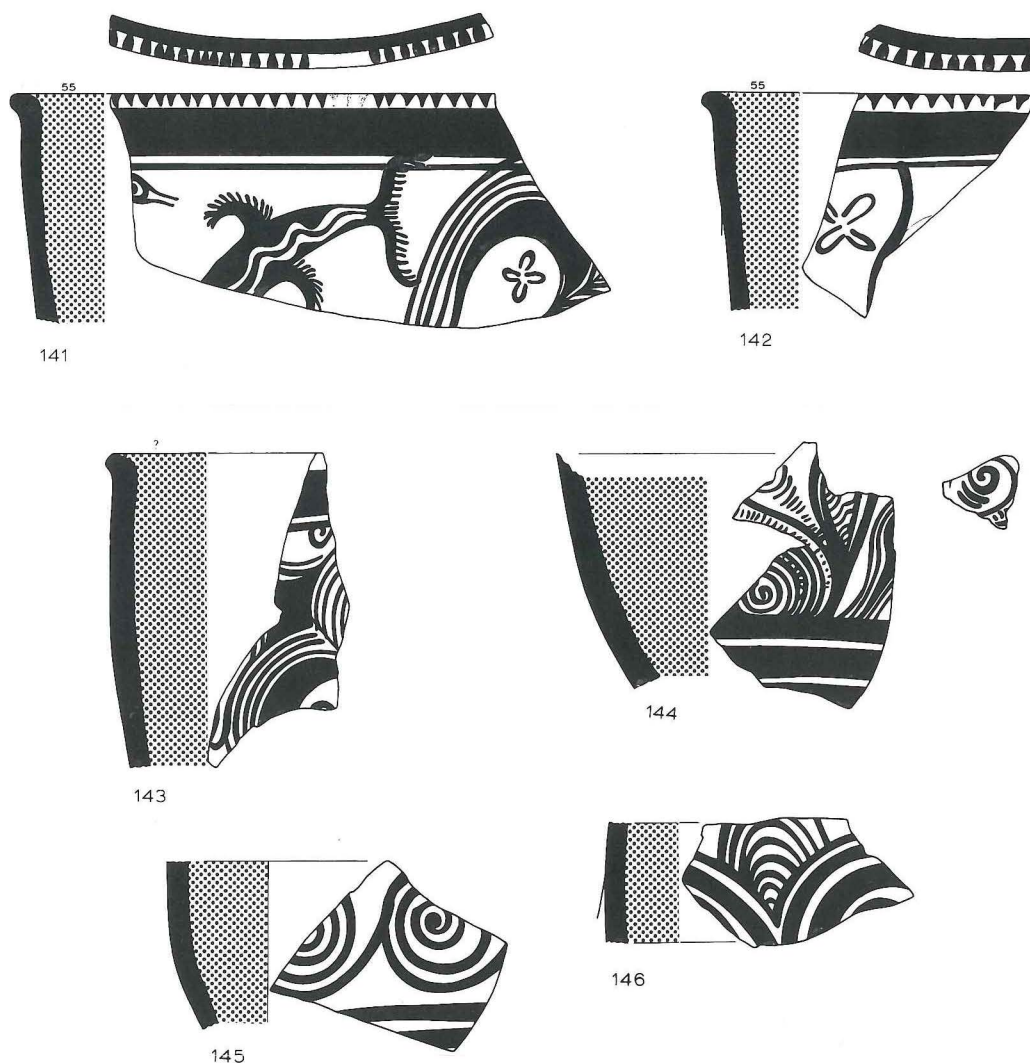


Fig. 32. Sherds from Room 25/26 Dump: **141-146** (19831.1-2, 17931.1, 17929.1-2).

Phases I and II (on cups as well as bowls now: **148, 162-164**). No. **148** is a large bowl with a reserved band on the interior of the rim which continues onto the rim top, and is decorated with strokes of paint in manner similar to krater rims. "Open style" decoration continues, with motifs such as accumbent concentric semicircles (**150**).<sup>77</sup> "Close style" decoration is much more prevalent than in the earlier phases (Fig. 33: **147, 146**). These close style patterns are characterized by extensive use of filling arcs and dotted elements, sometimes in a panelled arrangement.<sup>78</sup>

<sup>77</sup>Seiradaki 1960, 30, fig. 21c.

<sup>78</sup>Gesell, Coulson & Day 1991, 151, fig. 3, no. 3, 166, fig. 6, no. 6; Seiradaki 1960, 32, fig. 22c, 36, fig. 26a.



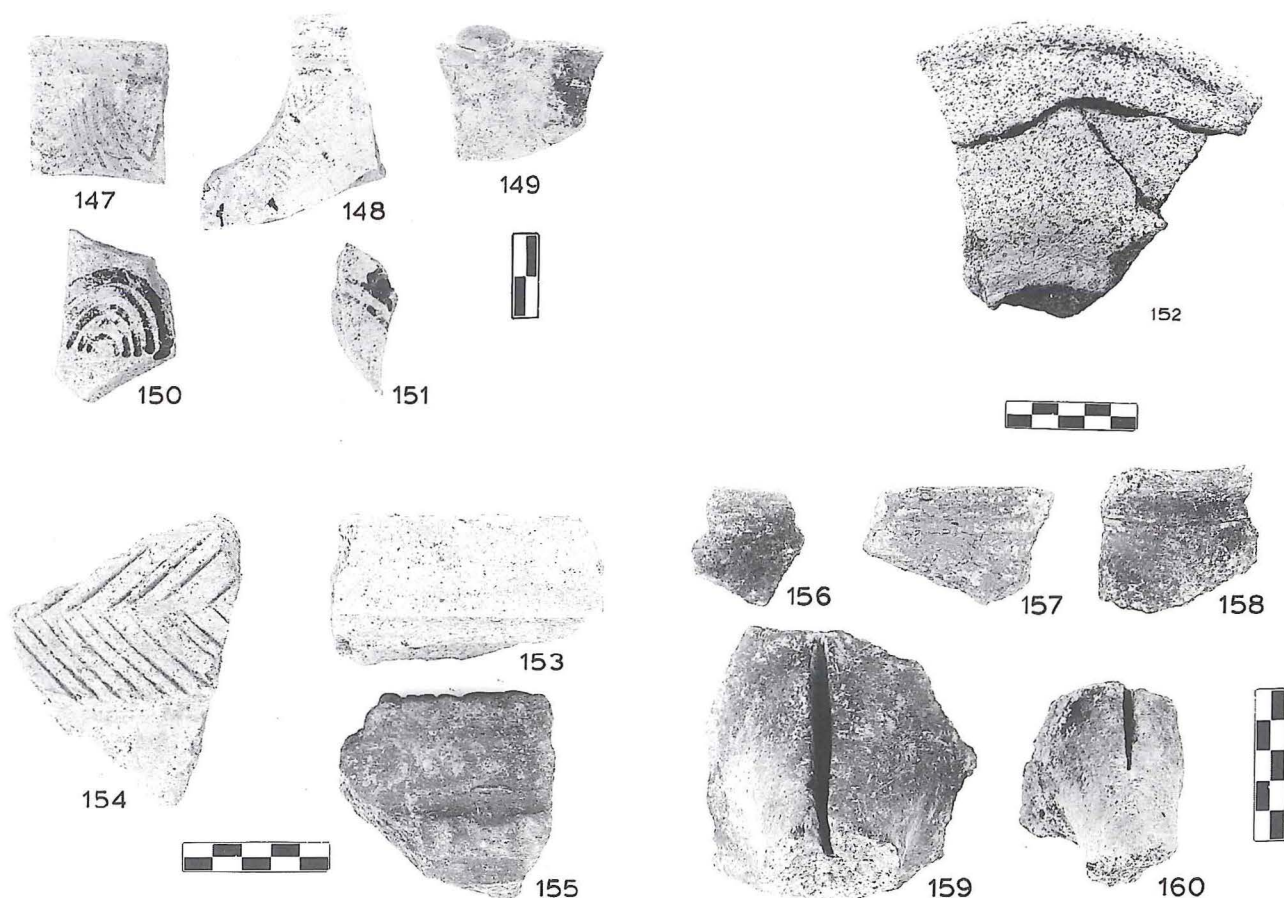


Fig. 33. Phase III Decorated Sherds 147-151, Room 24 (16021.1-.2).

Fig. 34. Phase III Decorated Lid 152, Area West of Room 6 (13915.2).

Fig. 35. Phase III Pithos Sherds 153-155, Room 24 (16021.2).

Fig. 36. Phase III Cooking Pot Sherds 156-160, Room 24 (16021.1-.2).

Decorated **cups** with reserved bands (164) and champagne cups (167) are present, but blob decorated cups with raised bases are the most common type (149, 166). **Kylikes** are more common in Phase III than in Phases I and II, and they usually have a pierced stem (168, 169),<sup>79</sup> although some are still solid (170). **Kraters** are not common in Phase III assemblages, but they continue to be large and decorated in the “close style” with outlined motifs (165), and filling ornaments.

Closed decorated shapes are just as frequent as in Phase II, but are often in medium coarse fabrics. **Jugs** are common (171, 172). They have flat bases and flaring everted rims, and appear to be decorated only with bands.<sup>80</sup>

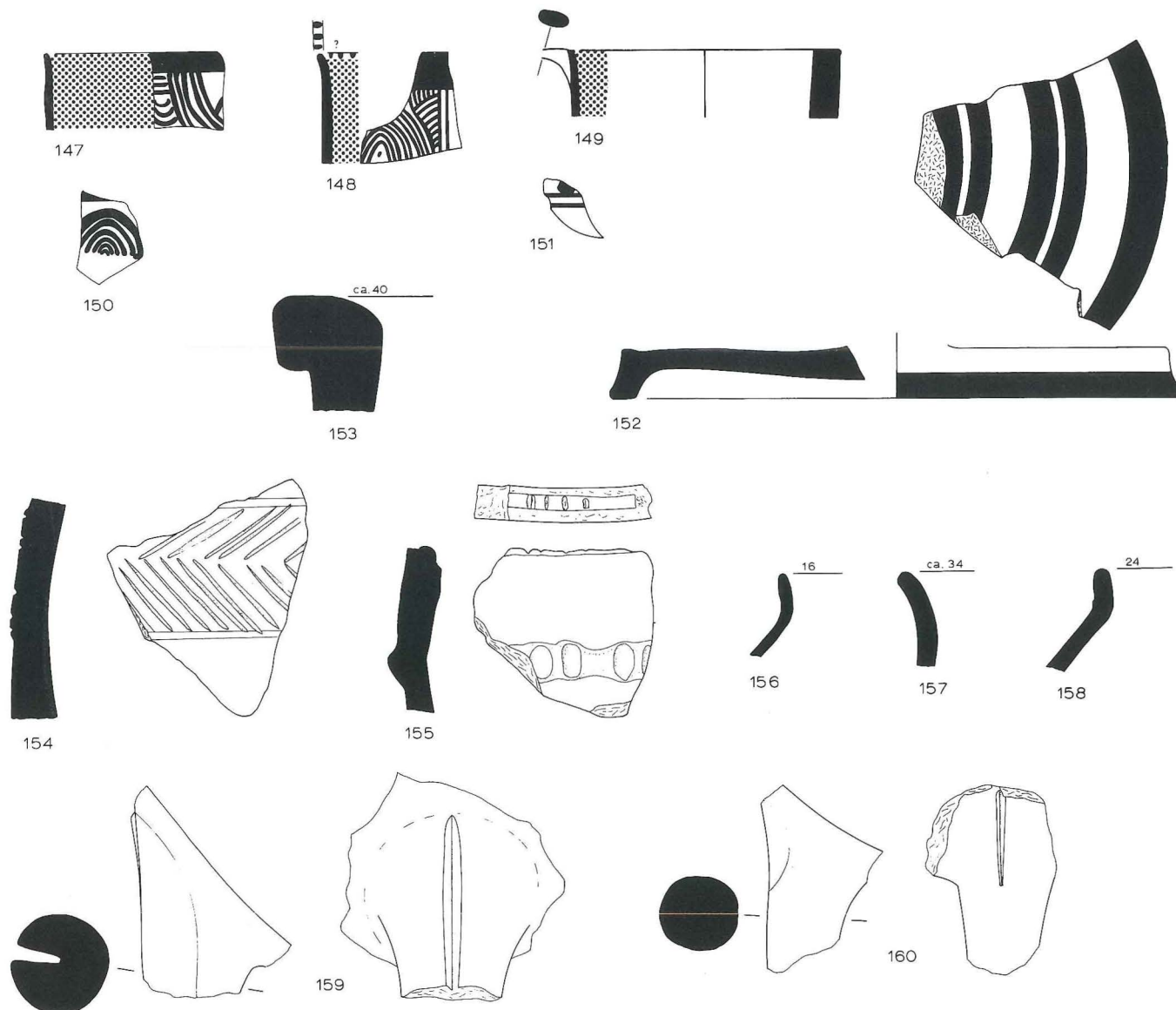
**Lid 152** is decorated with black bands and would have topped some sort of “jar” (Fig. 34).<sup>81</sup> The fabric of this vessel is a type that is very widely used at Vronda,<sup>82</sup> and is also popular on the Kastro in Phase III, when

<sup>79</sup>Day, Coulson & Gesell 1986, 367, fig. 7.

<sup>80</sup>Seiradaki 1960, 14, 15, fig. 9, nos. 3 and 7.

<sup>81</sup>Seiradaki 1960, 26-27.

<sup>82</sup>Phyllitic Type XI; Haggis & Mook 1993, 276, 281-282.



there is a dramatic increase in its exploitation. For instance, **basin 173** has the same fabric, as do similar basins from Vronda.<sup>83</sup> The basin is sometimes decorated, but it does not have the inset rim. The coarse version of this fabric<sup>84</sup> is often used for **pithoi** (Fig. 35: **153**, **154**), particularly those with incised chevron bands. Finger-impressed bands (**155**) are another common pithos decoration. Both schemes are current throughout LM IIIC, but the extensive use of this particular fabric occurs in Phase III on the Kastro and on Vronda.

**Tripod cooking pots** are again the predominant cooking vessel; the traditional shapes and fabrics established in Phase I continue to be em-

Fig. 37. Phase III Sherds from Room 24: **147-151**, **153-160** (16021.1-.2) and Area West of Room 6: **152** (13915.2).

<sup>83</sup>Day, Coulson & Gesell 1986, 369, fig. 8, no. 16, pl. 82b.

<sup>84</sup>Type X; Haggis & Mook 1993, 275-276.

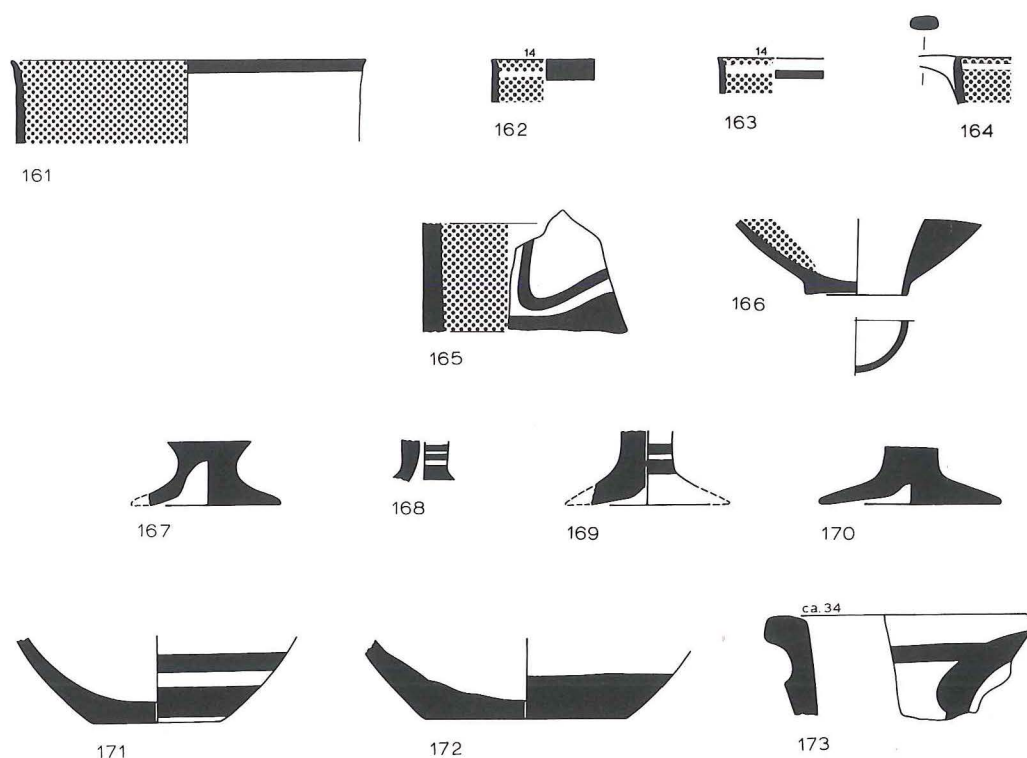


Fig. 38. Phase III Sherds from Room 25/26: **161-170** (17930.1-.2) and Room 24: **171-173** (16021.2).

played (Fig. 36: **156-160**). No. **157** is a particularly large example with a rim that is more flaring than usual. **Cooking dishes** and **trays** are rare.

Not surprisingly, there are certain close affinities between the pottery from Kastro Phase III and the pottery from the Vronda IIIC settlement.<sup>85</sup> So too the shapes and decorative motifs found in Phase III are also present at Karphi, which has been ascribed to the second half of LM IIIC by Popham.<sup>86</sup> Phase III likewise belongs to the second half of LM IIIC, and many living areas continue to be used up until and into the time when the Protogeometric style is introduced at the site. The absence of certain late IIIC features in the Phase III pottery, such as the kylix with bulging stem and the stirrup jar with a knob on the disk, is remarkable; however, no stirrup jar false spouts or complete kylix stems were found in any pure Phase III level on the Kastro. Study of the Phase III pottery is still underway, and the current impression of the material may change when it has been completed.

In conclusion, the Kastro Phase I pottery must be assigned to initial LM IIIC. The presence, on the Kastro, of sherds characteristic of LM IIIB implies that the site was first inhabited at the onset of LM IIIC, and, perhaps more significantly, that this new settlement was established by a population indigenous to LM IIIB Crete, which moved into the uplands at the

<sup>85</sup>See Gesell, Day & Coulson 1995, 68-92.

<sup>86</sup>Sackett, Popham & Warren 1965, 281-282.



beginning of LM IIIC.<sup>87</sup> Phase II has been stratigraphically isolated in only two areas of the site, and the differences in character between Phase II pottery and that of Phase I are subtle and not immediately obvious from single sherds. It is only in the examination of an entire deposit that significant distinctions can be made. Some Phase I stratigraphic deposits may chronologically overlap with the beginning of Phase II, which then continues into the middle of the period. Later LM IIIC is represented on the Kastro by Phase III, and is paralleled by material from both Karphi and Vronda. The relationship between the end of LM IIIC and the beginning of Protogeometric on the Kastro requires careful consideration, and it would be premature to address the issue at this time, before the material has been studied. The substantial Late Minoan IIIC stratified habitation deposits from the Kastro at Kavousi will provide a more precise stratigraphical basis for the entirety of this period on Crete.

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<sup>87</sup>See Haggis 1992, 294-317, for a discussion of the LM III and Early Iron Age settlement patterns in the Kavousi area.

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# Response and discussion

**Rethemiotakis:** Just a few points. I felt a little uneasy with the term “phase” because I think that “phase”, at least in pottery terminology, is something that has certain characteristics, distinguishable from earlier or later phases. I understood all this material as something more or less homogenous. I could not see many differences, at least regarding the first three phases. I suspect that this material is found in the whole of the LM IIIC period. But I also find some connections with my material from Kastelli: I have kraters with Close Style decoration and tri-curved streamers which are very similar – I am referring to the combination of loop and streamer. This tells me that your material – at least Phase II – is well into LM IIIC. I could not see the reasons for merging it into Sub-Minoan. This is a problem which must be discussed, with the Protogeometric. We used to think of SM in terms of Knossian pottery, which is something distinct. I would like to hear from the audience about this transition to SM and PG. Is there something that can be thus described?

**Mook:** In terms of our use of the word “phase”, at this point, we are using it to describe stratigraphic phasing, not stylistic phasing. The Phase I and II material could easily be lumped together. It is primarily the stratigraphic variation which caused us to separate it initially. As for the material in our Phase IV (omitted in the printed version), which is a transitional phase between IIIC and PG, I wonder what people think about SM in East Cretan settlement contexts. There is not very much of it. I do not think it exists in East Crete as a settlement chronological phase. The pottery styles go from IIIC immediately into PG.

**Warren:** Just on that one point: my mind is not fresh on SM from the Stratigraphic Museum Excavations at Knossos, but we have a great deal of it. From memory, one of the main differences from the preceding IIIC and before we get into true PG is what we call the bell-skyphos, which is a very bell-shaped type of skyphos with a conical or low foot. Some of these are quite nicely decorated in a rather distinct SM style, which is different from IIIC. Others are plain monochrome about two thirds of the way down and buff below that. The kalathos is another new form that appears then, with its own specific decoration which links quite well to the decorated bell-skyphos. These are two features which are quite distinctive for SM, not PG and not IIIC.

**Mook:** There are some shapes in our Phase IV that look like a bell skyphos. My question is, would these bell skyphoi and these small dipped skyphoi be a new shape or are they a development of the deep bowl and the stemmed goblet? The monochrome dipping is not something new. This is just something that I am thinking about. All of these elements can be seen in some form in IIIC. I wonder if it is really something different – the way it has always been made out to be – or not.

**Warren:** On the bell skyphos: it is possible that some of these could emerge – we need to think more about it, I agree – from the small form of the IIIC krater. It does not have the small conical foot which is very typical of PG, and which you showed here (Phase IV). But there is something new about the SM pottery development at Knossos, especially the decoration and also a distinct fabric, which tends to be rather pinkish/purplish with a buff slip and then paint on it.



**Coulson:** I have argued a number of times for the abandonment of the term "Sub-Mycenaean", especially when one gets outside of Attika, the Argolid, and the Corinthia. I have also suggested that we could use the same principle when we get outside of Central Crete into what is now being called provincial East Crete. It may well be true that we lack a SM phase there. The main problem is, of course, that some of the bell skyphoi – Coldstream, in his article on the PG from Knossos (Coldstream, N., "Knossos 1951-61: Protogeometric and Geometric Pottery from the Town", *BSA* 67 (1972), 63-98), called some SM, others PG – seem to be in a style which has a narrow conical foot. This seems to run throughout SM, if there is an SM phase, and PG. The other problem is that Vronda seems to be the equivalent of our Phase III. But in the tombs at Vronda there is something which we originally published in our preliminary reports as SM. I do not know whether we want to stick to that now or not. This is something that we have to get clear in our minds: what happens after the end of IIIC. There is basically no SM in the settlement at Vronda, but there is something that looks like SM in the tombs.

**Mook:** What is the situation at Khalasmenos?

**Coulson:** Khalasmenos is late IIIC.

**Macdonald:** Am I right in saying that in Phases I and II you have jugs and amphorae with tassels on the shoulder, and that they stop with Phase III?

**Mook:** We do not have any from Phase III contexts.

**Macdonald:** In general, with Phase III, I was a bit surprised by your comparison with Karphi because your Phase III is, in fact, a time of poverty in terms of range of shapes and decoration, is it not, whereas Karphi is very rich.

**Mook:** The shapes that we do have compare well with Karphi, but in terms of the general picture, we do not have nearly the range of shapes and decorations.

**Macdonald:** I was wondering whether your Phase III might not be, in fact, late. You probably think that it is late IIIC.

**Mook:** Yes, we do.

**Macdonald:** Yes, so that would work very well. So going back to the phases which cover the rest, as it were, Phases I and II, where you see little stylistic difference between them. There are some developments, or changes, at least. I am interested in one or two things. Firstly, the position of the very nice octopus stirrup jar which unfortunately came from the fill from the room.

**Mook:** It came from our dumped deposit.

**Macdonald:** So you cannot say whether it belongs to the very beginning or sometime after.

**Mook:** No.

**Macdonald:** That is a pity. So it is I or II.

- Mook:** Yes, it is I or II. That is the unfortunate thing about this rich deposit. Presumably, it came from another context and was dumped there.
- Macdonald:** I think that Phase II could be quite advanced. It was very interesting to see your tricurved streamer in Phase I, where, at that point, it looked very much like the derivative of the Mycenaean flower motif – the big Zygouries sort of thing. Definitely your Phase I is IIIC, with IIIB elements. I wonder whether you do have, perhaps, the very earliest phase of IIIC, and that this is one of the clearest instances that we have got, with the development into Phase II, which actually takes us into what one might call middle IIIC.
- Mook:** I am hoping that when we sit down with the drawings, that maybe something will come out in terms of shapes that will make things a little clearer.
- B.Hallager:** This material is quite refreshing: IIIC from one end to the other. I have no doubt that Phase IV, even if there are elements which perhaps somebody would call PG, is a phase where you have the latest features of IIIC. I think it involves also the SM period which seem to have more connections with the Bronze Age than with the Iron Age.
- Rethemiotakis:** Since I am the only one here who has seen the interesting material from Knossos – I talked about it in my paper – I think that the essential difference between LM IIIC and SM is the gradual transformation of curvilinear motifs, so characteristic of LM IIIC pottery – for example, the well-known pattern of elaborate triangles on the LM IIIC stirrup jar, into rectilinear motifs. There are some steps in this procedure. I think that this is the only point to make, as far as I know the material from the North Cemetery at Knossos. Regarding the transformation of the stirrup jars, which is the most characteristic vase of tombs: it is a change from the globular shapes of LM IIIC into the ovoid shapes of SM, and the gradual raising of bases from the discoid into the conical shape.
- Gesell:** One of the things which is so often talked about as SM is the bird vase, but Tsipopoulou has just told me that she has excavated a tomb at Kritsa which is full of IIIC pottery, but has bird vases in it. This might change our opinion on some of the things we called SM originally. If the bird vase actually moved into IIIC that is going to be another change.
- Watrous:** How can you be sure that you have a continuous habitation all the way through IIIC?
- Coulson:** One floor is directly upon the other. We did not have the situation that Rethemiotakis has of fill between the two phases. This is our strongest criterion.
- Mook:** We did have habitation debris on top of some of the floors, between successive floors, but that is what one would expect. In none of those do we have evidence, through Phase IV in certain areas, of collapsing roofs, things falling into disrepair, which suggests to us that there was continuous habitation. The type of construction we have on the site is with flat clay roofs – this sort of roof, if not maintained on a regular basis, will collapse very quickly and you would have the evidence clearly preserved inbetween the floors if the building had fallen into disrepair. I think that this is our best evidence, that we do not have, in some of the areas with deep stratigraphy on the West Slope, any evidence of ceiling collapse between the successive habitation layers.
- Warren:** That is a very good point. These observations of when can we recognize what looks like a



continuous sequence, whatever date we put on it are very helpful. Two other points. We did not really come here to have a serious discussion about SM. There is great deal to be said about SM. I have a considerable quantity of SM from the Stratigraphical Museum. And there are lots of others – the Fortetsa cemetery – in the Knossos area. It is a whole other topic. It is quite distinct from IIIC. I like Rethemiotakis' argument that there is a transition from essentially curvilinear to rectilinear motifs, and that it is fairly gradual but distinct. Certainly, the decorative forms in SM are largely rectilinear, though not completely. The point I wanted to raise is, once again, about the labelling. In your first phase, if we are going to say that quite a lot of this material is IIIB, or has characteristics of IIIB, and then there are some new elements which we are going to call IIIC, the implications made in that statement need to be spelled out a little because it implies that the material, which is the beginning of settlement on the Kastro, is, as it were, derived from a pre-existing IIIB background. It is not something that is essentially new, or that comes from outside, it is really deriving from IIIB with new elements in it. You can tell me whether you really do have IIIB occupation at Kavousi, either at Vronta or on the Kastro. I am not sure you do. So the implications need to be explored. This was a new settlement. If some of these things are really to be derived from IIIB, and can be shown to be present in IIIB without any IIIC elements elsewhere, fine; otherwise, once again I would feel happier, if we are looking for a term, calling it straight IIIC.

**Mook:** In terms of the deposit, I agree. The deposit is IIIC. You think that some of the sherds should not be identified as IIIB, but there are certainly sherds that are IIIB in style or have "IIIB characteristics". Presumably wherever these people were coming from, they did not come empty-handed. I look at this as an argument for indicating that we are at the very beginning of IIIC. If we had nothing but IIIC pottery on the site perhaps it would not be the very beginning of the phase. This is some of the evidence that helps support the idea that the site is established at the very beginning of what we could call IIIC.

**Warren:** Just to be totally speculative, this means that the first settlers on the refuge city of the Kastro, and my goodness, that is a refuge...

**Mook:** I do not think it is a refuge.

**Warren:** But it is a place of very difficult access.

**Mook:** I can get up there. See Haggis' *Journal of Mediterranean Archaeology* article (Vol 6:2, December 1993, 131-174) concerning accessibility and reasons for upland settlement.

**Warren:** It may not be difficult for you, but for most people it is a very dramatic situation! What it means is that the people who are going to live there are, as it were, old Minoans, they are IIIB people from the preceding Minoan tradition, they are not new Mycenaeans or anything like that. There is nothing specifically Mycenaean there. That is the implication behind the use of these terms.

**Tsipopoulou:** Concerning the latest IIIB material, I would like to point out that this must be a very important historical moment, at least for this area, as well as for part of the Mirabello area, because this settlement is founded at this moment, and from the tomb evidence, it is the same thing. I excavated two years ago a tomb in the Vasiliki area, very close to Kavousi and Khalasmenos: it begins at this time, the latest IIIB, earliest IIIC. I would like to ask Kanta



about the Vrokastro evidence because – it is not published, it is not studied, it is not stratigraphically clear – to me the earliest sherds from Vrokastro look earlier than this latest IIIB.

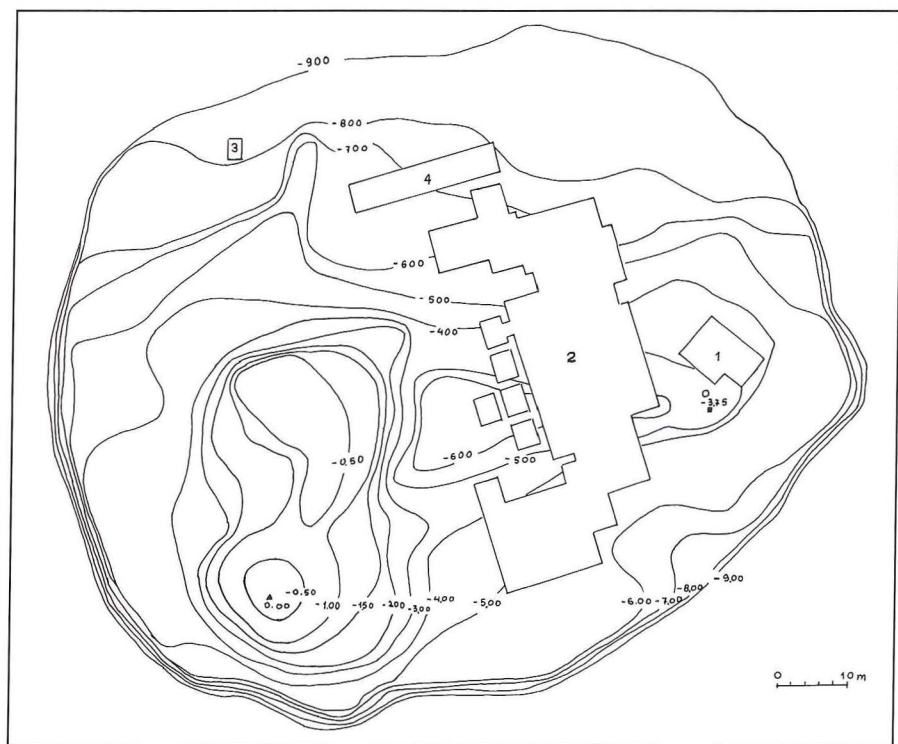
- Kanta:** I saw the sherds from Vrokastro a long time ago when I included some in my book. Their date was LM IIIC (Kanta 1980, 133, figs 50–51). If I should date them today, as I remember them, I would date them early into IIIC, with typological IIIB survivals. After all these discussions I would redate from late IIIB to early IIIC the Kastro–Kephala material. I have been thinking about that for a long time, but I think that on balance it is early IIIC.
- Betancourt:** I was just going to follow up to Warren’s suggestion that the pottery with its IIIB characteristics means that the people must have come from nearby. The alternative is that they simply acquired local pottery.
- Hood:** What is the proportion of kylikes to deep bowls in your material?
- Mook:** I do not have any absolute numbers right now, but the deep bowls are, say, 95%, the kylikes 5%.
- Hood:** Even in the earlier part?
- Mook:** Yes, even in the earlier part, from what we have preserved, the kylikes are a very small percentage of the assemblage. There are very few of them there.
- Hood:** What is the proportion of reserved bands on the deep bowls?
- Mook:** Less than half. I would say about a quarter. Maybe a quarter of the vessels have a reserved band.
- Vlasaki:** As I saw the material I had the idea that Phase I of Kavousi is a little later than Phase 1 of Kastelli–Pediada. It looks as if we have Kavousi in early IIIC, without the IIIB:2/IIIC stage.
- Coulson:** Are you sure you were not misled by the state of preservation? Rethemiotakis’ material is much better preserved than ours.
- Vlasaki:** Not only the state of preservation. The shapes, the motifs.
- Rethemiotakis:** The first phase of Kavousi – we have discussed the tricurved streamer – may, I think, be correlated with my Phase 2. It is, of course, well into LM IIIC.
- Mook:** If B. Hallager’s dating of Phase 1 to IIIB is correct all is well.
- Vlasaki:** No it does not mean this. It just means that it is an earlier phase, the one before it. Concerning the tricurved streamer, it is a flower, is it not. It is a flower in the antithetic idea of this period.
- Macdonald:** It is the Mycenaean IIIB flower transformed.

# LM III Pottery from the Greek-Italian Excavations at Sybritos Amariou<sup>★</sup>

*Niki Prokopiou*

## Introduction to the excavation<sup>1</sup>

The Greek-Italian excavations that began in 1986 at Sybritos Amariou, on the hill of Kephala, at an altitude of 500–618 m (Fig. 1), brought to light structural remains dated to the LM IIIC period and a considerable number of pits dated from an early LM IIIC phase, when some LM IIIB pottery was still in use, to PG together with later finds<sup>2</sup> (Fig. 2). The pits



*Fig. 1. Hill of Kephala. Excavation sectors 1-4 (Drawing A. Mancini).*

<sup>★</sup>Acknowledgements: My thanks go to Chr. Avronidakis who translated the text from the original Greek and to Dr Bill Phelps who corrected and improved the English manuscript; to A. Mancini for the plans, to Hel. Valerga Miller and Th. Kakarounga for the drawings; to V. Stamatopoulos for the photographs of the pottery; excavation photographs were taken by M. Petrarca and the author.

I would also like to thank Professor A. Kanta for commenting on the text.

<sup>1</sup>This excavation directed by Dr L. Rocchetti and the author is a cooperative effort on the part of the Department of Antiquities of the West Crete and the "Istituto per gli Studi Micenei ed Egeo-Anatolici" of the CNR.

<sup>2</sup>Prokopiou 1991, 373–401, Rocchetti 1994, 241–242, figs. 6–13.

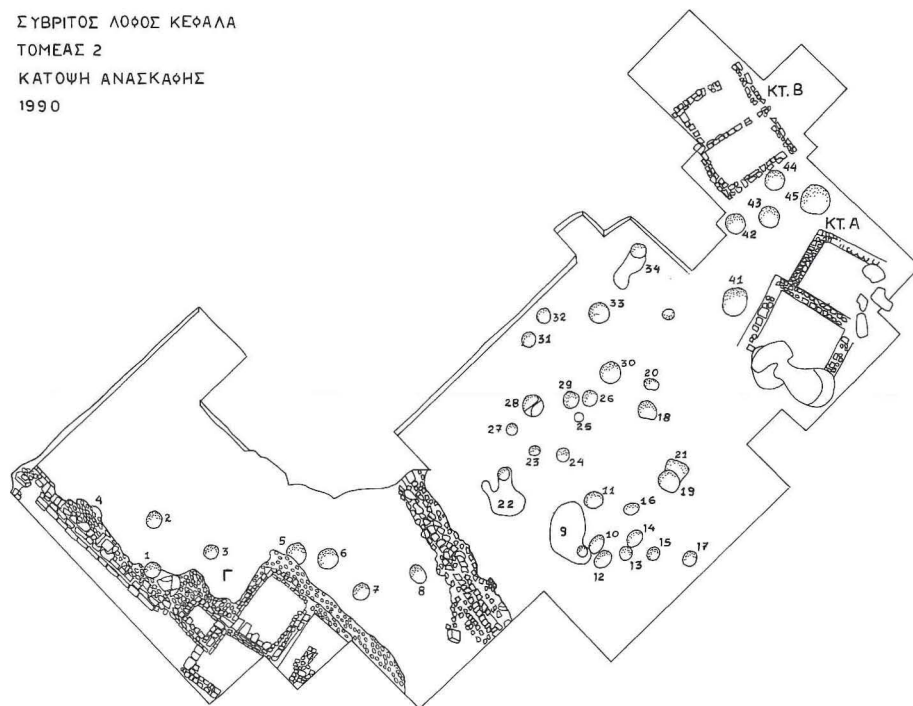


Fig. 2. Sector 2. Structural remains and pits. Buildings A and B.

are circular, oval or irregular in shape and extend over about 1200 square meters with North-South orientation. They were cut into the bedrock or earth and contained traces of burning, ash, stones, scattered pottery and animal bones. The pit surfaces consisted of earth mixed with a few stones and sherds or of rough stones of small to medium size.<sup>3</sup>

The pottery from the first eight pits discovered in the southern section of the excavation (Fig. 2) covered an early LM IIIC phase in which LM IIIB and IIIC decorative motifs were used, but the reserved band on the interior of the rim had not yet appeared on most deep bowls. Let us consider pit 5, for example, where the open style decoration included the tri-curved streamer, the tricurved arch with parallel arcs, antithetic spirals with filling ornaments in the loops and isolated semi-circles (Figs. 3-6), and the close style included antithetic outlined tentacles and a fringed shell or flower between them.<sup>4</sup> The fill of all the pits was uniform without substantial stratigraphical variations.

Stratified pottery identified the two-room building B discovered during the excavations of September 1993 at the Northern section of the site (Figs. 2, 7-9). Another two-room building, A, was discovered a short distance to the East of building B during the 1990 excavation (Fig. 2). Both buildings have a North-South orientation. Scattered pits were encountered in the area between them (nos 41-45). Their contents have already



Fig. 3. Pottery from pit 5, 4261.

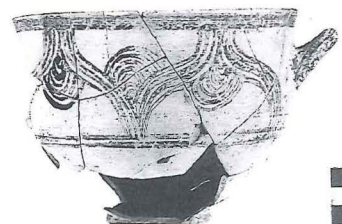


Fig. 4. Pottery from pit 5, 4258.

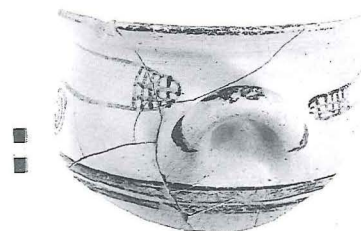


Fig. 5. Pottery from pit 5, 4260.

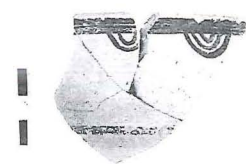


Fig. 6. Pottery from pit 5, 4262.

<sup>3</sup>Prokopiou 1994, 249, pl. 1.

<sup>4</sup>Prokopiou 1991, 393, fig. 14 no 4257.



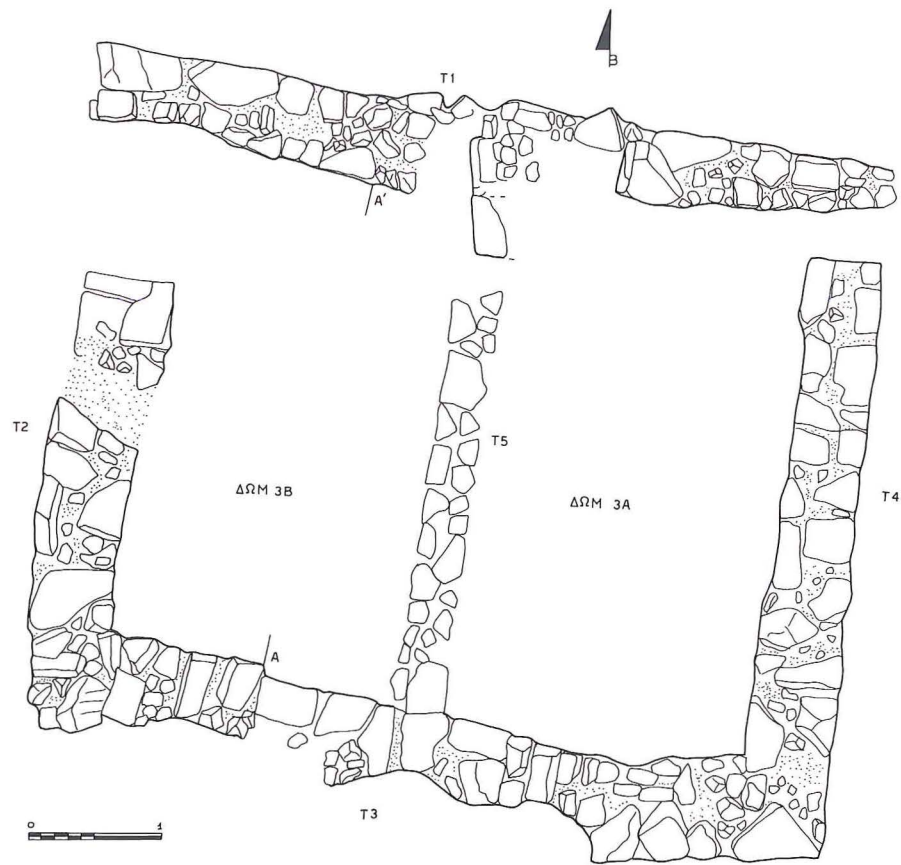


Fig. 7. Building B (Drawing A. Mancini).

been described. The largest pit (no 41) contained the head and horns of a bovine. Building B (Fig. 7), labelled Room 3, was 6.10x5.50 m and was divided into two sections (3A, 3B) by an interior wall running South-North. The walls of the building are 58 to 60 cm wide and are preserved to heights ranging from 18 cm to 1 m. They were constructed with roughly hewn and regular blocks and stone wedges between them, all joined with earth. Due to the incline of the ground from South to North, the South wall of the building rested on the bedrock, while the North wall on a fill of some 50-60 cm (Fig. 8). Room 3 was uncovered within trench 39 and its extensions.

Fig. 8. Two-room Building B. Double entrance. View from North.

Fig. 9. Two-room Building B. View from South.



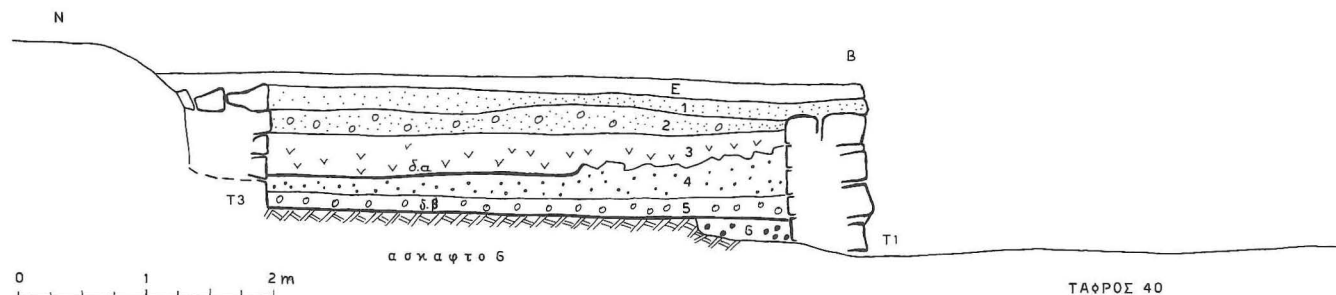


Fig. 10. Room 3B. Stratigraphical section A – A'.

The fill of trench 39 and Room 3B comprised six levels (Fig. 10). The surface layer consisted of loose, brown earth. It was 10 to 20 cm deep. Level 2 is a destruction level discernable throughout the excavation. It is composed of quite loose grey earth with many stones. The depth of the level was 8 to 40 cm. The surface of the walls of Room 3 appeared in levels 1 and 2.

In the fill of Room 3B two floors (a and b) of beaten yellowish earth were found (Fig. 10). The surface of level 4 was used as a floor corresponding to the later occupation phase of the building (Floor a). On this floor rest walls 5 (East), 3 (South) and 2 (West), except at its North edge. Only here, in the South part of the area, were found piled up pottery fragments (Fig. 11) with black earth and ash, around which were pieces of burnt mud brick and burnt hard earth. These may represent a makeshift hearth. The fill of level 4, consisted of brown-grey earth with scattered charcoal, sherds and bones. The level was 10 to 20 cm thick.

Level 5 represents fill and does not correspond to an architectural phase of the building.

The surface of level 6 was also used as a floor (Floor b) corresponding to an earlier phase of occupation (Fig. 10). No movable finds were found on it. Wall 1 and the north edge of wall 2 also belong to this phase. Level 6, itself, partly excavated in the north part of Room 3B included hard earth, many intense traces of burning, pebbles, sherds and bones. The removal of the fill, 10 to 20 cm thick, revealed the lower part of wall 1, which was continuous in depth under floor b, while the north edge of wall 2 lies on this floor. During this earlier phase the building's north entrance – a double entrance with a pillar in the centre – was in use (Figs. 8, 12). Soon after the west section of wall 1 was altered and a doorway was opened in the west part of the room.

During the room's later occupation phase, the north entrance was blocked and the area was used with the surface of Level 4 as a floor and an entrance in the west.

## The Pottery of Trench 39 and Room 3B

The pottery found in the successive levels of Trench 39 and Room 3B was abundant, fragmentary and consisted of cooking and household vessels as well as of decorated fine ware in approximately equal amounts.

The clay of the cooking vessels ranged in colour from light red to red

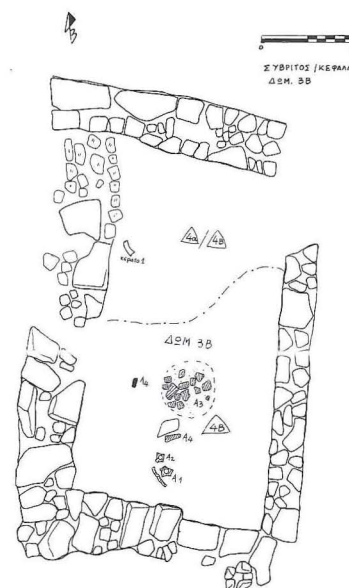


Fig. 11. Room 3B. Surface of level 4 used as a floor.



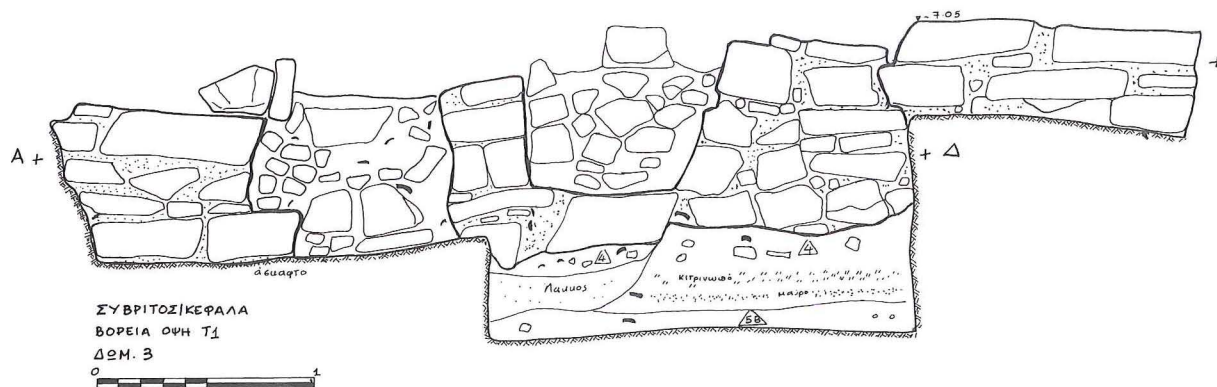


Fig. 12. North Entrance of Building B.

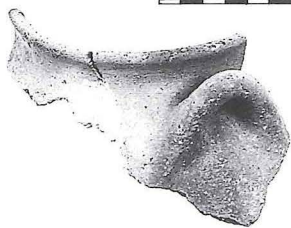


Fig. 13. Level 6. Coarse ware, 15901.

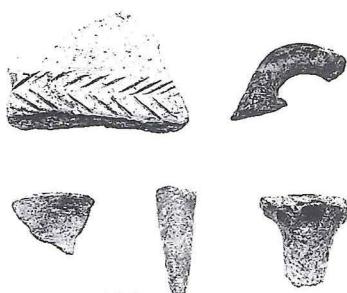


Fig. 14. Level 6. Coarse ware, 15985a-e.



Fig. 15. Level 6. Base fragments of basins (15914, 15913).



Fig. 16. Level 6. Fragments of stirrup jar (15916) and kalathos (15915).

and contained many large inclusions, mostly particles of white stone. In terms of the Munsell Chart the colour of the clay started from 2.5 YR 6/4 "Light Reddish brown" and 2.5 YR 6/8 "Light Red", 5 YR 6/6 "Reddish Yellow" to 2.5 YR 5/6, 2.5 YR 5/8 "Red" and 5 YR 4/6 "Yellowish Red".

The clay was friable and not uniformly fired with a grey or black-grey core. The sherds bore wheel marks and were worn. Several pieces preserved traces of a thin white slip, while some were decorated with brown and white paint. Many sherds were burnt.

The clay of the semi-coarse ware was brownish-pink in colour<sup>5</sup> with inclusions, often with a grey core. The slip was cream or yellowish. Only a very few sherds were made of yellowish-cream clay with black inclusions.

The clay of the fine ware pottery – preserved in good condition – was also brownish-pink<sup>6</sup> with small inclusions. The slip was light brownish-pink, brownish-yellow and often lustrous.

Although the pottery seems homogenous it will be examined by levels in order that stratigraphical differentiations can be detected.

## Level 6

**Coarse ware.** Large fragments of cooking pots (Figs. 17a, 15901, and 13) many of which were intensely burned, tripod legs of various sizes and sherds from the bodies of pithoi were discovered (Fig. 14).

**Fine and decorated ware.** The most popular shapes are the deep bowl and the krater. The basin (Figs. 15 and 18j, 15913), jug, kalathos (Figs. 16 and 19m, 15915) and stirrup jar (Figs. 16 and 19g, 15916) appear in fewer, if not single examples.

The deep bowl has a deep hemispherical (Fig. 20a, 15902) or slightly conical body (Fig. 20c, 15905), a slightly everted rim and a mouth dia-

<sup>5</sup>Munsell 7.5 YR 6/4 "Light Brown", 7.5 YR 7/4 "Pink".

<sup>6</sup>Munsell 7.5 YR 6/4 "Light Brown", 7.5 YR 7/4 "Pink".



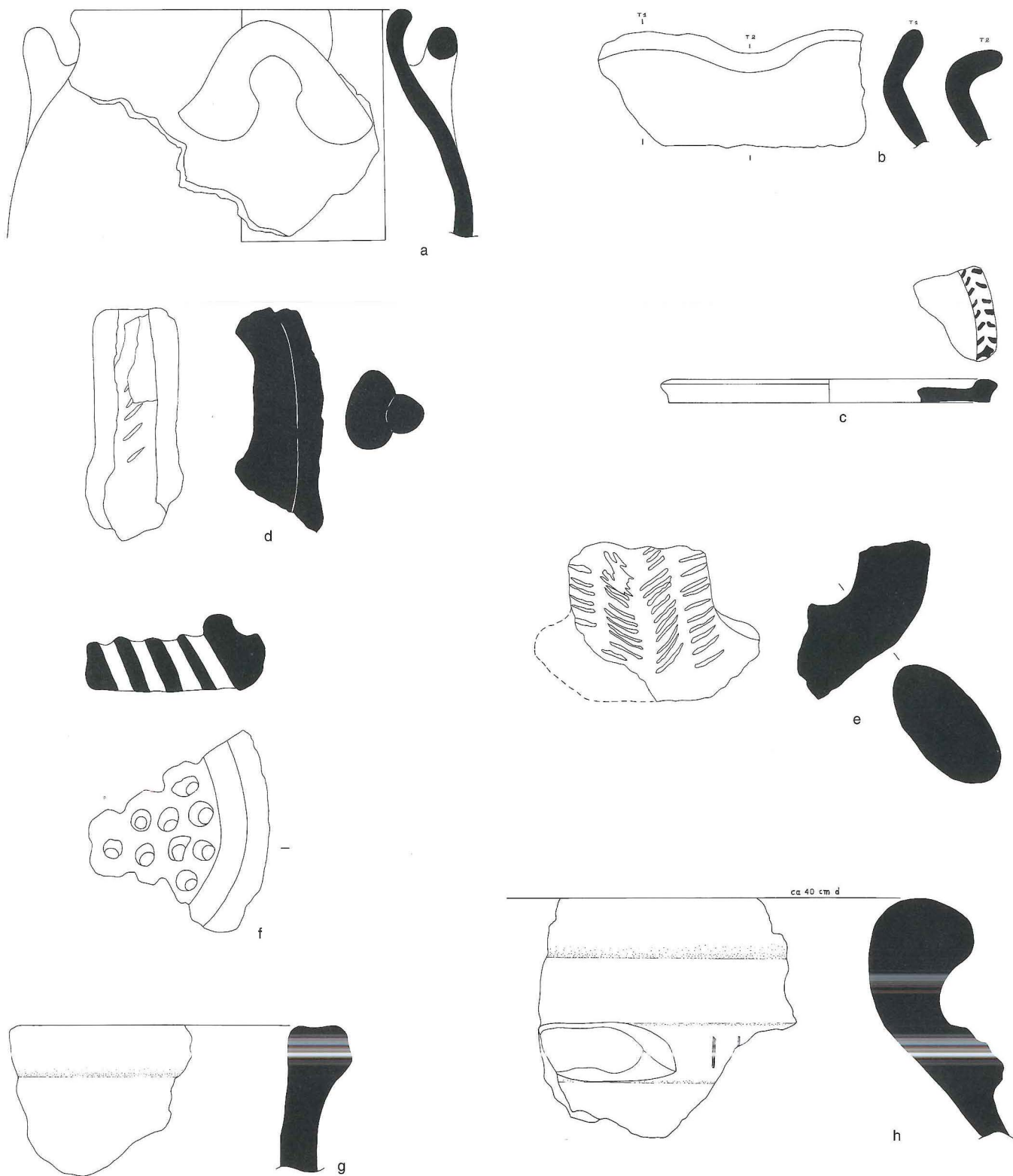


Fig. 17. Coarse ware. Level 6: **a**: 15901. Level 4: **b**:15933, **c**:15934. Level 3: **e**:15952. Level 1: **d**:15975, **h**:15973, **g**:15974, **f**:15976.



Fig. 18. Krater fragments. Level 6: **a**:15912, **b**:15911. Level 5: **c**:15923, **d**:15924, **e**:15925, **f**:15926. Level 4: **g-h**:15948. Basin fragments. Level 6: **j**:15913. Level 5: **i**:15927, **k**:15928.

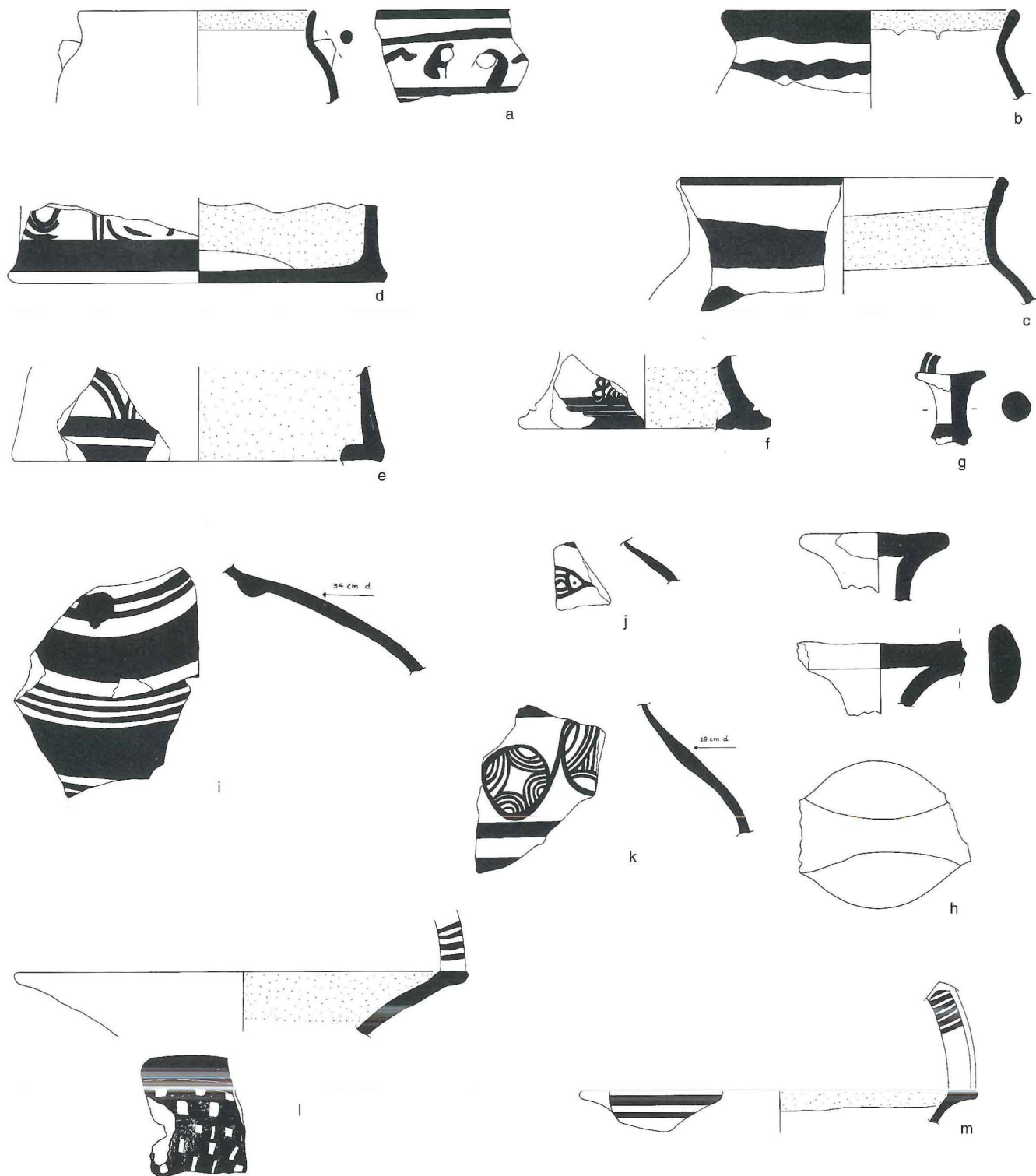


Fig. 19. Amphoriskos sherds. Level 5: **b**:15929. Level 4: **c**:15947. Level 2: **a**:15965.  
 Base and body fragments from mugs. Level 5: **f**:15932. Level 4: **d**:15949. Level 1: **e**:15977.  
 False necks from stirrup jars. Level 6: **g**:15916. Level 5: **h**:15931.  
 Body fragments from stirrup jars. Level 2: **i**:15971. Pit 44: **k**:15978, **j**:15979.  
 Kalathos fragments. Level 6: **m**:15915. Level 2: **l**:15970.



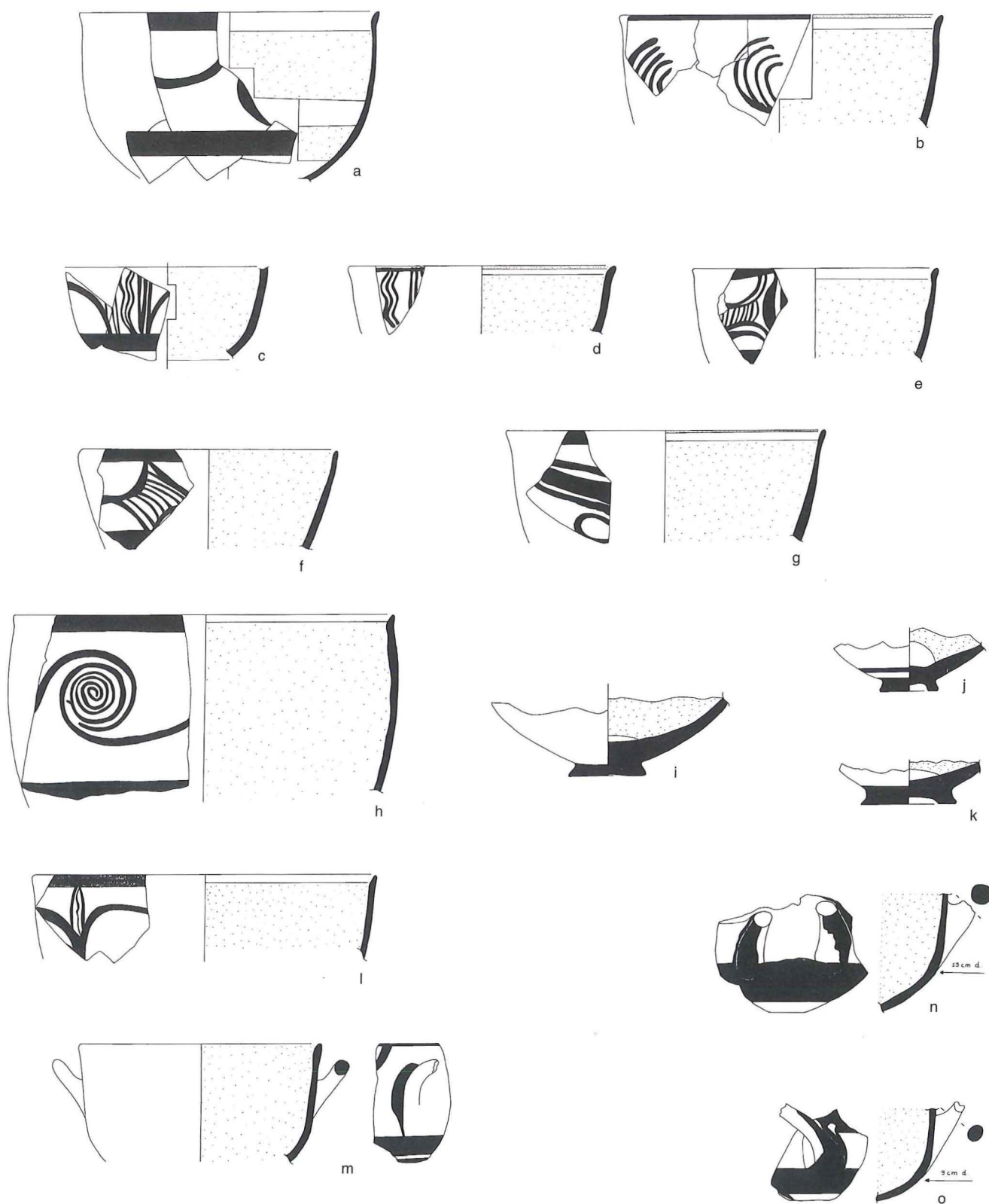
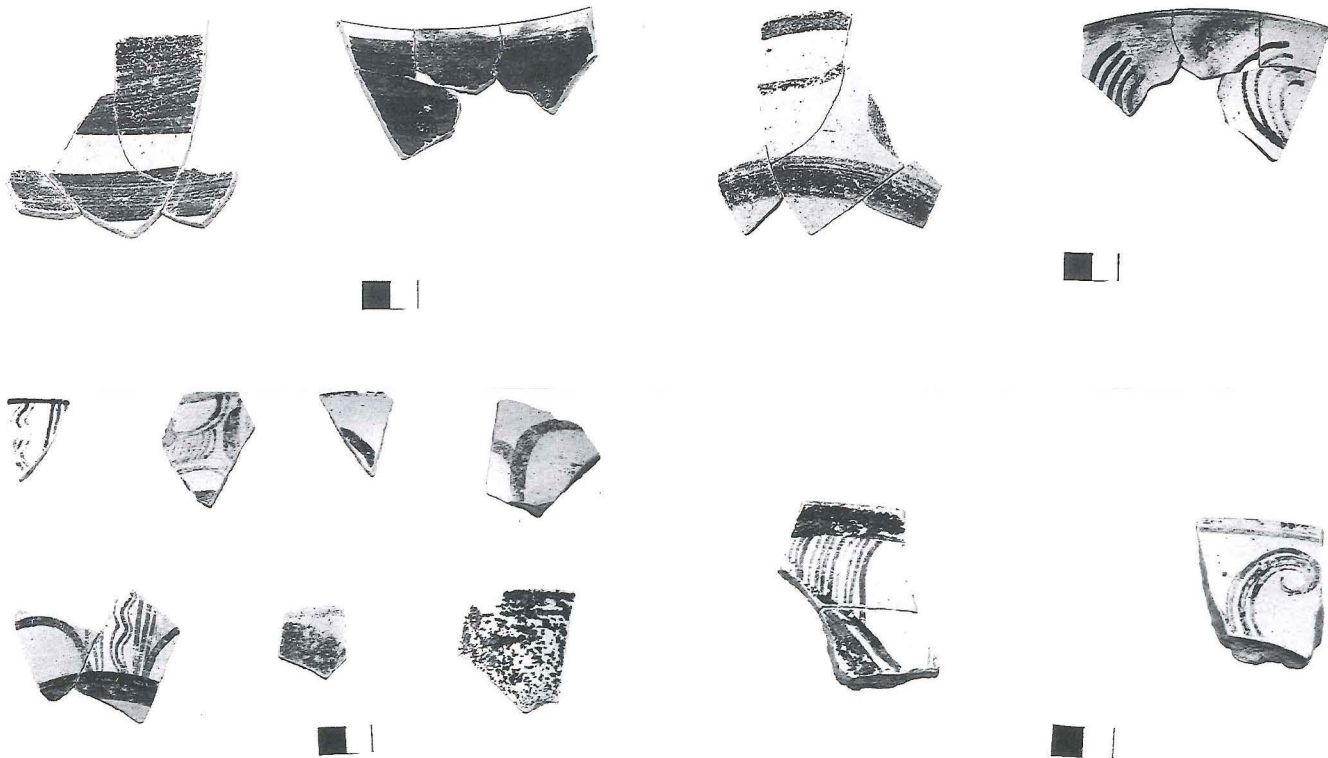


Fig. 20. Deep bowl fragments. Level 6: **a**:15902, **b**:15903, **d**:15904, **e**:15906, **c**:15905. Level 5: **f**:15917, **g**:15918. Level 4: **h**:15946. Raised and ring bases. Level 4: **i**:15938, **k**:15939, **j**:15940. Deep bowl fragments. Level 2: **l**:15955, **m**:15956, **n**:15958, **o**:15957.



meter varying between 13-17 cm. Its interior is monochrome or with a reserved band inside the rim. Such interiors, monochrome or with a reserved band, are encountered on early LM IIIC deep bowls from Kastro at Kavousi.<sup>7</sup>

On one example (Figs. 20a, 15902, 21) we have two broad painted bands which give the impression of three reserved bands inside the rim, on the belly and over the base. The body bears a single exterior band (Figs. 20a, 15902, 20c, 15905, 22-23) while the double body bands, common on LM IIIB and LM IIIC bowls, seem to be absent.<sup>8</sup>

The decoration is in the open style and consists of typical LM IIIC motifs showing Mycenaean influence, such as antithetic spirals<sup>9</sup> (Figs. 20e, 15906, 23) and tricurved streamer (Figs. 20a, 15902, 22, 23 top row, first and second from right). Vertical wavy lines arranged in a panel (Figs. 20d, 15904, 23) have LH/LM IIIC parallels<sup>10</sup> while the same motif on another sherd (Figs. 20c, 15905, 23) is flanked by two curves tending to develop into a close style decoration. The multiple stemmed curves, another Mycenaean motif, on a deep bowl (Figs. 20b, 15903, 22) are paralleled by

Fig. 21. Level 6. Interior of deep bowl fragments (15902, 15903).

Fig. 22. Level 6. Exterior of the same deep bowl fragments.

Fig. 23. Level 6. Deep bowl fragments (Top row from left 15904, 15906, 15907, 15908. Bottom row 15905, 15910, 15909).

Fig. 24. Level 6. Krater fragments (15912, 15911).

<sup>7</sup>Mook 1993, 147-48.

<sup>8</sup>Watrous 1992, 141, 147, Mook 1993, 148.

<sup>9</sup>Cf. Popham 1965, 323, fig. 4, 7, 8.

<sup>10</sup>Mountjoy 1993, 91, 229, Tzedakis & Kanta 1978, fig. 36.

examples from Knossos and Kommos.<sup>11</sup> Deep bowls or cups with blob decoration – still popular during this phase – also occur<sup>12</sup> (Fig. 23 bottom row, 15910, 15909).

The kraters, represented by two rim sherds (Figs. 18a-b, 15912, 15911, 24), have a rounded rim comparable to examples from Karphi.<sup>13</sup> The slightly incurving upper body of 15912 can be paralleled in a LM IIIC krater from Kavousi-Kastro.<sup>14</sup> Their rim diameter is ca 32 cm. Both have a rim band on the exterior, 15911 has a monochrome interior while 15912 has a reserved band inside the rim. 15911 with a hooked multiple stemmed pattern belongs to the open style. The motif common in LH/LM IIIB examples<sup>15</sup> continues into IIIC (FM 19,52). The decoration on 15912 may show how the close style began. Stirrup jars are represented by one solid false neck, 15916 (Figs. 16, 19g). LM IIIB stirrup jars have hollow false necks while the solid ones are a LM IIIC characteristic.<sup>16</sup> Two base fragments of large basins (Fig. 15) have banded decoration, while added white is used on one of them (Fig. 18j, 15913).

## Level 5

**Coarse ware.** Fragments of cooking vessels, particularly cooking pots and cooking dishes, legs from tripod cooking pots and fragments from pithoi bodies were identified. Many sherds belonging to closed shapes bore banded decoration.

**Fine and decorated ware.** In this level as well, the deep bowl is the predominant shape with a mouth diameter of 15–16 cm. The deep bowls with a monochrome interior coexist with those having a reserved band inside the rim (Fig. 20f-g, 15917, 15918). Their decoration belongs to the open style and consists of a limited number of motifs, characteristic of the period: antithetic spirals with broad painted stem enclosed by a line (Figs. 20g, 15918, 25), others with filling ornaments in the loops (Fig. 25, second row, left),<sup>17</sup> hatched lozenges (Figs. 20f, 15917, 25),<sup>18</sup> tricurved streamer (Fig. 25, bottom row, first, second and third from right).

The kraters, represented by two rim fragments and two body sherds, have rounded lips and a rim diameter ranging between 30–33 cm. The everted rim of 15923 (Fig. 18c) is comparable with an example from Kastro at Kavousi<sup>19</sup> while the slightly incurving upper body of 15924 (Fig.

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<sup>11</sup>Popham 1970, 199–200, fig. 3; 47, LM IIIB; Watrous 1992, 109, 147, fig. 68, 1920, LM IIIB:2–Early IIIC.

<sup>12</sup>Kanta 1980, 260.

<sup>13</sup>Seiradaki 1960, 23; 2, 24; 3.

<sup>14</sup>Mook 1993, 159, P4.35.

<sup>15</sup>Mountjoy 1986, 122; 3; Popham 1970, 200, fig. 3; 48, Kanta 1980, 89, fig. 142;6.

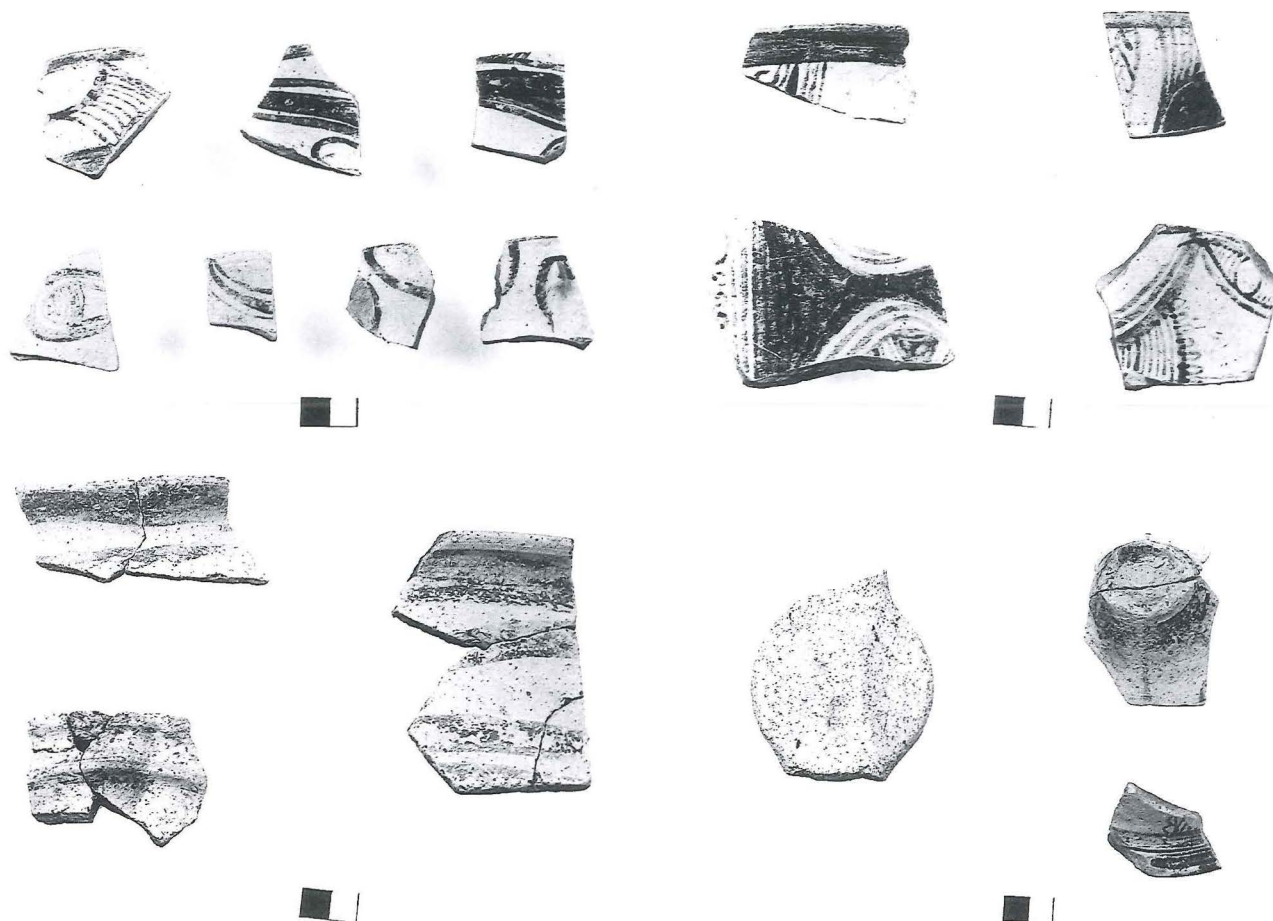
<sup>16</sup>Mook 1993, 162.

<sup>17</sup>Cf Popham 1965, pl. 86a, third row, second from right.

<sup>18</sup>Cf. Popham 1965, 326, fig. 6; 36.

<sup>19</sup>Mook 159, P4.5, fig. 146.





18d) has mainland affinities.<sup>20</sup> Both examples have a rim band on the exterior. 15924 is monochrome on the interior while 15923 has a reserved band inside the rim. Their decoration is arranged in panels or freely on the surface of the vase. A body sherd with a papyrus motif (Figs. 18f, 15926, 26) belongs to the close style.

The double axe or butterfly motif in a panel (Figs. 18e, 15925, 26) finds parallels on a krater of the middle LM IIIC from the excavations of the Stratigraphical Museum at Knossos,<sup>21</sup> while the subject itself is one of the characteristic decorative motifs of the late LM IIIC pottery of Karphi.<sup>22</sup> On one rim fragment the decoration is developed within a panel flanked by chevrons (Figs. 18d, 15924, 26).

With the exception of the basin, the jug, kalathos, amphoriskos, mug, kylix and stirrup jar are less commonly encountered shapes, occurring with the same frequency in all levels.

The basin, a typical shape of the period – with its characteristic moul-

*Fig. 25. Level 5. Deep bowl fragments. (Top row from left 15917, 15918, 15919. Bottom row from left 15920, 15921, 15922a,b).*

*Fig. 26. Level 5. Krater fragments. (Top row from left 15923, 15924. Bottom row 15925, 15926).*

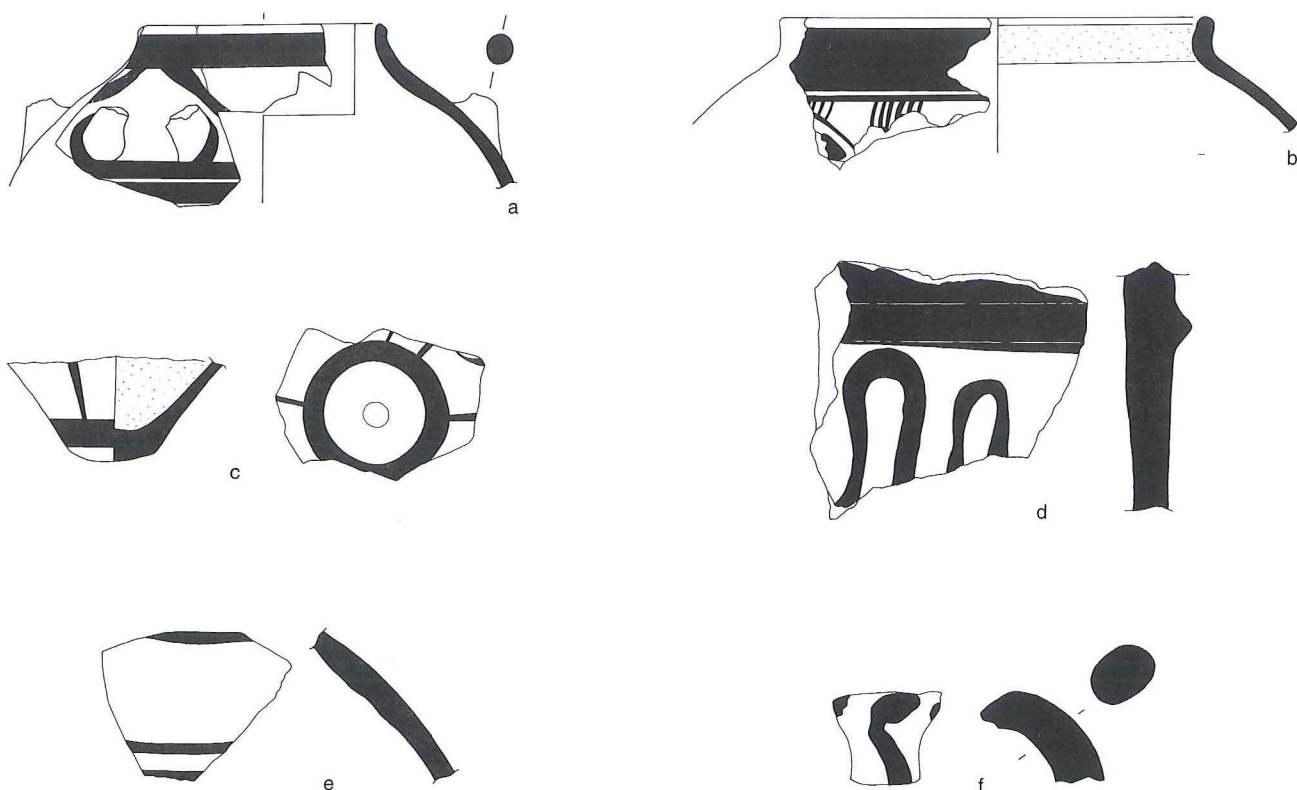
*Fig. 27. Level 5. Basin (15927, 15928) and amphoriskos (15929) fragments.*

*Fig. 28. Level 5. Stirrup jar (15931), kylix (15930), and mug (15932) fragments.*

<sup>20</sup>Mountjoy 1986, 172–4, 205, fig. 223,4.

<sup>21</sup>Warren 1982–1983, 70, fig. 43.

<sup>22</sup>Seiradaki 1960, figs. 21g, 22b.



*Fig. 29. Rim and body fragments from jars. Level 4: a:15935. Level 2: b: 15969.*

*Kylix fragment from Level 5: c:15930.*

*Fragment from a chest-shaped vessel. Level 4: d:15951b.*

*Handle and body fragments from jugs. Level 3: e:15953. Pit 44: f:15980.*

ding below the rim – occurs in various sizes either unpainted or with band decoration on the interior and exterior (Figs. 18i, k, 15927, 15928, 27), while the amphoriskos (Figs. 19b, 15929, 27) has a wavy line on the shoulder and is paralleled in examples from Kastri and Karphi.<sup>23</sup>

The mug (Figs. 19f, 15932, 28) with its pronounced concave profile, forms a groove at the junction of the body with the splaying flat base and bears a panelled decoration.<sup>24</sup> A disk and false neck fragment of a stirrup jar is preserved (Figs. 19h, 15931, 28). The false neck is hollow. The decoration with white on the flat disk of the handles is typically Minoan.<sup>25</sup>

We should also mention fragments of a kalathos and the lower part of the body of a conical kylix with whorl-shell decoration (Figs. 29c, 15930, 28). Although rare the whorl-shell motif is encountered in LH IIIC Early examples.<sup>26</sup> Two sherds of the Kastelli 1966 excavation, LM IIIB in

<sup>23</sup>Sackett & Popham 1965, 284, fig. 15, P23.

<sup>24</sup>On the shape, Seiradaki 1960, 19–20, fig. 13; 1, on the decoration Tzedakis & Kanta 1978, 22, fig. 17; 13.

<sup>25</sup>Kanta 1980, 136, fig. 120.1, Popham 1965, 319–20, fig. 1; 44, 46.

<sup>26</sup>Mountjoy 1986, 135–6, figs. 166, 2, 184, 1.

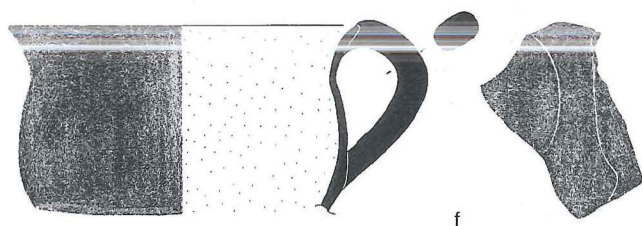
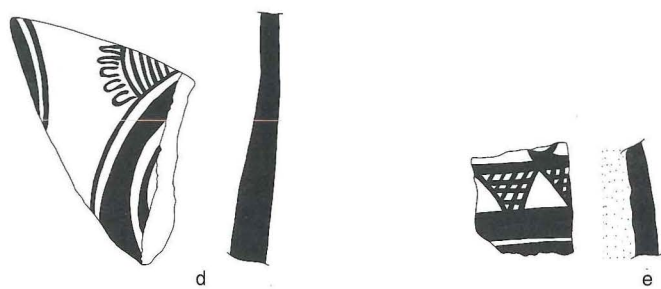
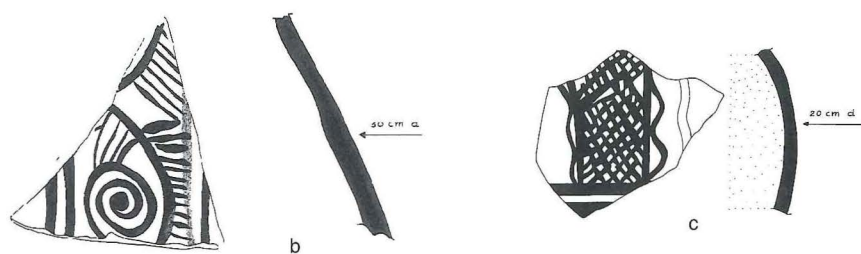
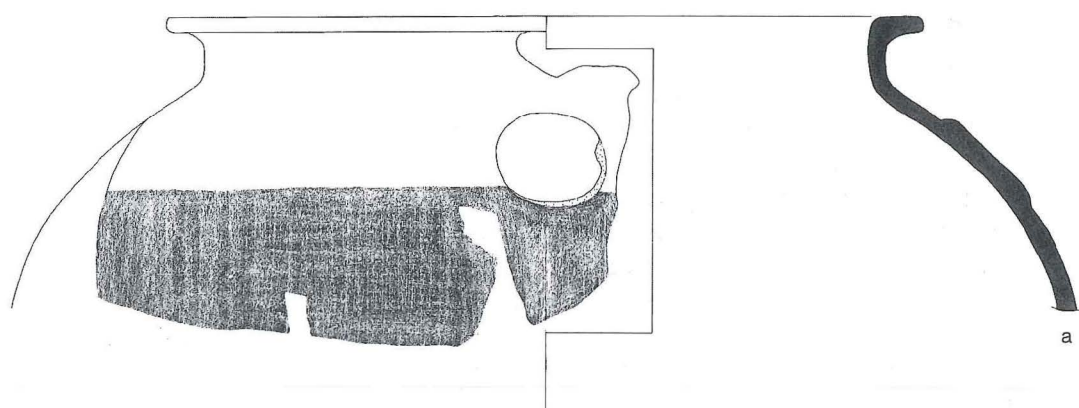


Fig. 30. Pithoid vase from Level 4:  
a:15937. Decorated pottery from  
Level 4: b:15950 and Level 2:  
c:15966, e: 15967, d:15968. Cup  
fragment from Level 2: f:15972.



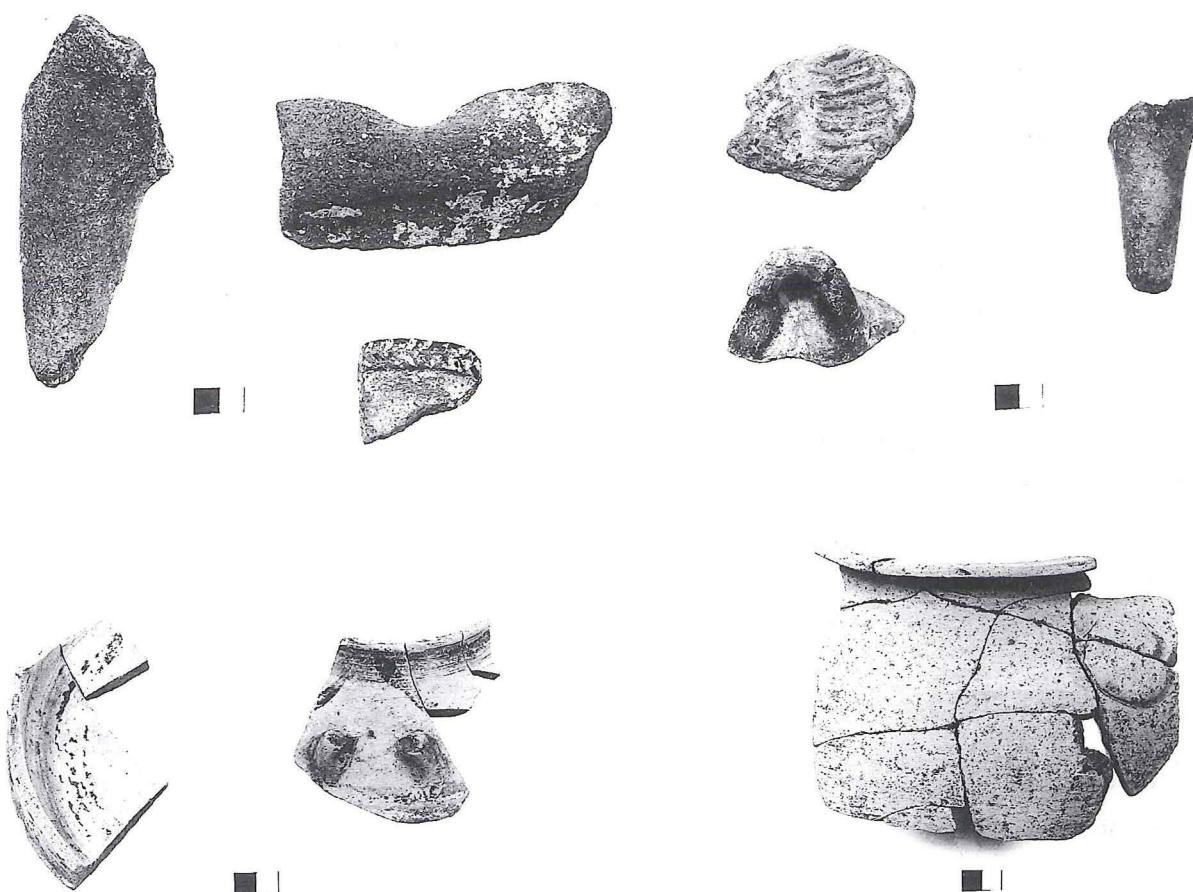


Fig. 31. Level 4. Coarse ware (15936, 15933, 15934).

Fig. 32. Level 4. Coarse ware (15982-84).

Fig. 33. Level 4. Mug (15949), and jar (15935) fragments.

Fig. 34. Level 4. Pithoid vase (15937).

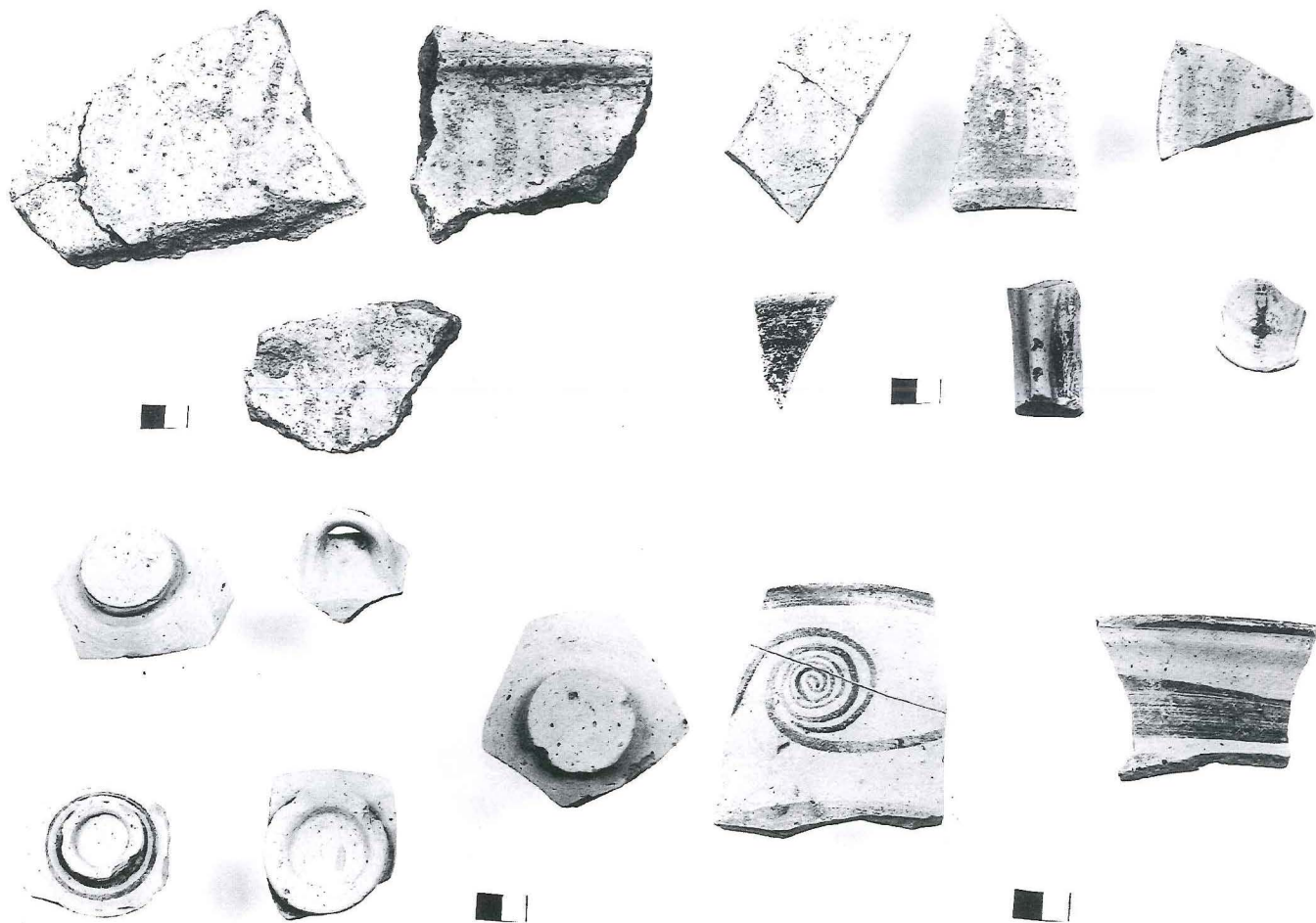
date, have a whorl-shell pattern but there are no similar examples from the LM IIIC levels.<sup>27</sup>

## Level 4

**Coarse ware** (Figs. 31-32). This level yielded a rim and body fragment of a coarse clay basin forming a raised rim border (Figs. 17b, 15933, 31), part of a flat-bottomed cooking tray with a short body and impressed herring-bone pattern on the rim surface (Figs. 17c, 15934, 31), the leg of a large tripod cooking pot (Fig. 31) and a sherd of a pithos decorated with a relief band of incised herring-bone pattern.

**Fine and decorated ware.** The deep bowl continues to be the most popular shape, while the krater sherds are fewer. The basin, jug, kalathos, amphoriskos, mug and stirrup jar occur in equal numbers as in the preceding levels. Other shapes include the jar (Figs. 29a, 15935, 33) and a pithoid vase with a flat rim, very short neck and an added clay disk on the shoulder (Figs. 30a, 15937, 34).

<sup>27</sup>Tzedakis & Kanta 1978, Numerical analysis of the decorated pottery from the LM IIIC levels.



The decoration with octopus tentacles is still popular.<sup>28</sup> Three fragments with octopus tentacles in two lines possibly belong to a chest shaped vessel (Figs. 29d, 15951b, 35). The same motif is preserved on the sherds of an octopus stirrup jar (Fig. 36, top row).

The deep bowls have the same features as those already examined. Their diameter varies between 10-20 cm and examples with monochrome interior coexist with others having a reserved band inside the rim. Raised or ring bases with a reserved disk inside are a feature of deep bowls (Figs. 20i-k, 15938, 15939, 15940, 37). Their decoration belongs to the open style. The tricurved streamer is less common. Two examples are decorated with running spirals (Figs. 20h, 15946, 38)<sup>29</sup> and another with pendant semicircles. Deep bowls with blob decoration also occur (Fig. 36 second row left).

The hind part of an animal, probably a roe deer, is depicted in solid paint on the fragment of a krater, a shape prevalent in pictorial style pottery. The dots on the animal's body are rendered in added light brown.

Fig. 35. Level 4. Fragments from a chest-shaped vessel (15951a-c).

Fig. 36. Level 4. Top row: three fragments of octopus stirrup jar (15942). Bottom row, from left: deep bowl fragment with blob decoration (15945), double handle, miniature cup from a kalathos (15943).

Fig. 37. Level 4. Raised and ring bases (15938-15941).

Fig. 38. Level 4. Deep bowl (15946) and amphoriskos (15947) fragments.

<sup>28</sup>Tzedakis & Kanta 1978, 30.

<sup>29</sup>Cf. Seiradaki 1960, 31, fig. 21a.



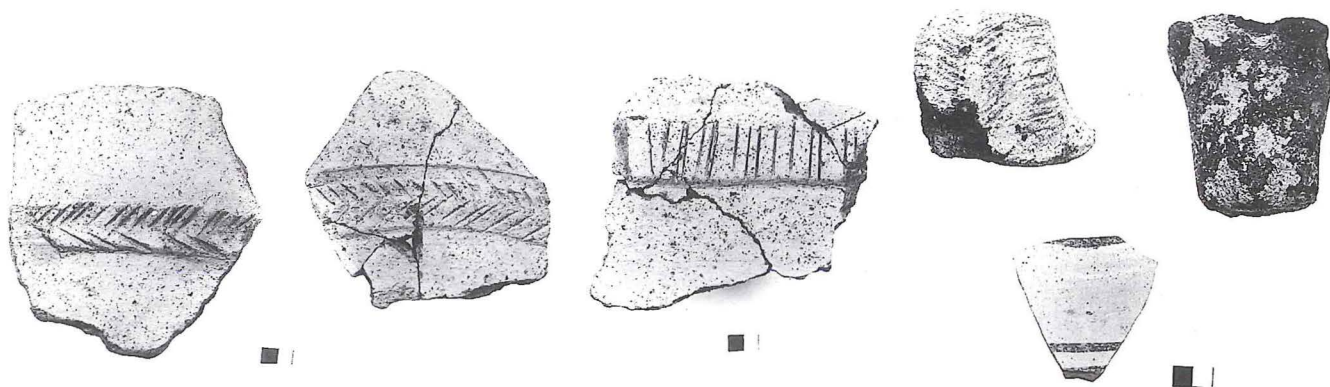


Fig. 39. Level 3. Pithos fragments.

Fig. 40. Level 3. Pithos fragment.

Fig. 41. Level 3. Handle of a storage vessel (15952), tripod leg (15954), jug fragment, (15953).

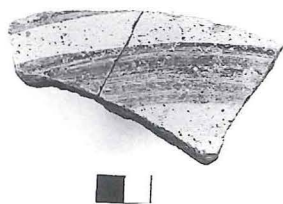
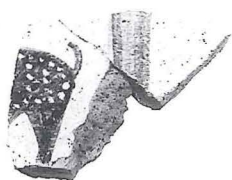


Fig. 42. Level 4. Krater fragments (15948a-b).

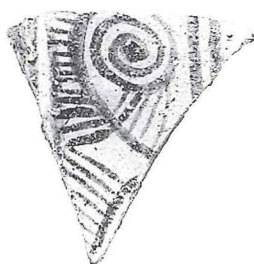


Fig. 43. Level 4. Fragment from a closed shape vase (15950).

The scene appears in a panel bordered on the right by a wide vertical band. A fragment with bands also belongs to this vase. (Figs. 18g-h, 15948a,b, 42).

The amphoriskos is decorated with a wavy line on the shoulder (Figs. 19c, 15947, 38). A miniature cup belonging to a kalathos is preserved (Fig. 36 bottom row, right) while a rim fragment of another kalathos has groups of bars across the rim. The body of a mug has a panelled decoration (Figs. 19d, 15949, 33). The fragment of a semi-coarse closed shape vase (Figs. 30b, 15950, 43) preserves a close style decoration of spirals filled with groups of alternating lines comparable to the pattern on a LM IIIC stirrup jar from Kritsa.<sup>30</sup>

### Level 3

**Coarse ware.** This level produced body sherds from pithoi with an applied band of incised decoration (Figs. 39-40). A pithos body sherd with circular depressions is comparable to examples from the Kastelli 1966 excavation and Karphi.<sup>31</sup> A broad handle of a storage vessel with herringbone pattern (Figs. 17e, 15952, 41) can be compared with an example from Karphi.<sup>32</sup> The leg of a large cooking pot has a thumb impression on its upper part (Fig. 41).

Among the semi-coarse and fine ware we should mention the shoulder fragment of a closed shape vase, probably a jug, with linear decoration (Figs. 29e, 15953, 41) and a small sherd with necklace motif.

### Level 2

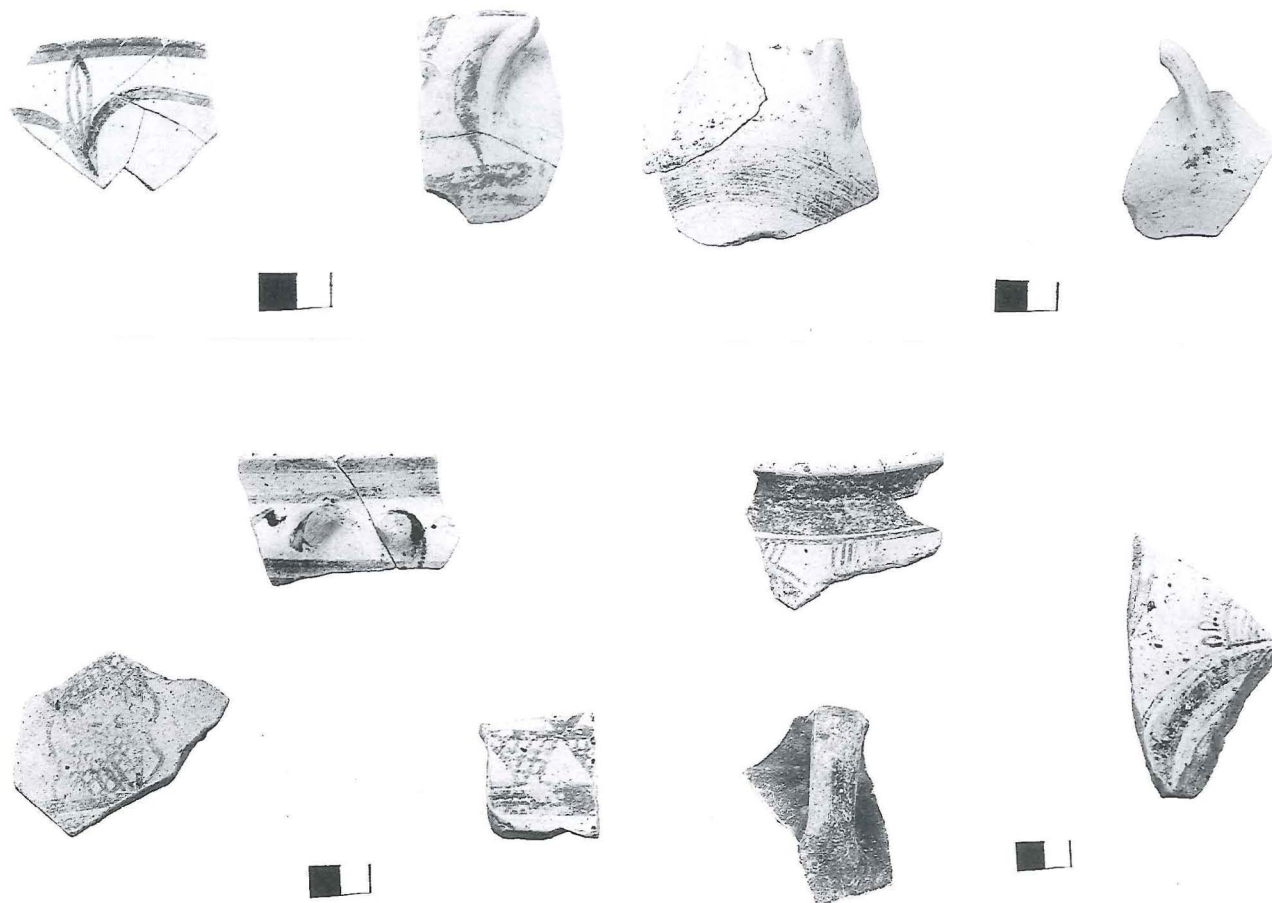
**Coarse ware.** Fragments from the rim of large pithoi were discovered as well as legs from cooking pots. The body fragments of the pithoi had relief bands with incised herringbone pattern or rope decoration.

<sup>30</sup>Kanta 1980, 138, fig. 134,1.

<sup>31</sup>Tzedakis & Kanta 1978, pl. 1; 3, Seiradaki 1960, pl. 12a, top row.

<sup>32</sup>Seiradaki 1960, pl. 12b, top row, second from left.





**Fine and decorated ware.** In contrast to the krater, the deep bowl remains the most popular shape. Its diameter varies from 13 to 18 cm. There are examples with a monochrome interior (Fig. 20m, 15956) and others with a reserved band inside the rim (Fig. 20l, 15955). The most common decorative motif is the tricurved streamer in different forms. (Figs. 20l-m, 15955, 15956, 44). A fragment is decorated with concentric arcs (FM 43).

Two sherds have a wide body band and a strip across the handles (Figs. 20n-o, 15957, 15958, 45). Fragments of such vessels were discovered in Kastro at Kavousi in a LM IIIC-PC context.<sup>33</sup>

Although the amphoriskos was not a very popular shape in Crete, it becomes steadily apparent in our pottery. Its decoration with a wavy line reveals Mycenaean influence (Figs. 19a, 15965, 46).<sup>34</sup>

Close style decoration is found on the sherd of a closed shape vase with

*Fig. 44. Level 2. Deep bowl fragments (15955, 15956).*

*Fig. 45. Level 2. Deep bowl fragments (15957, 15958).*

*Fig. 46. Level 2. Amphoriskos fragment (15965), decorated pottery (15966, 15967).*

*Fig. 47. Level 2. Jar (15969) and cup (15972) fragments, body sherd (15968).*

<sup>33</sup>Mook 1993, 266, P4.66, fig. 152.

<sup>34</sup>Sackett & Popham 1965, 284, fig. 15, P23. Cf. also Kanta 1980, 286.

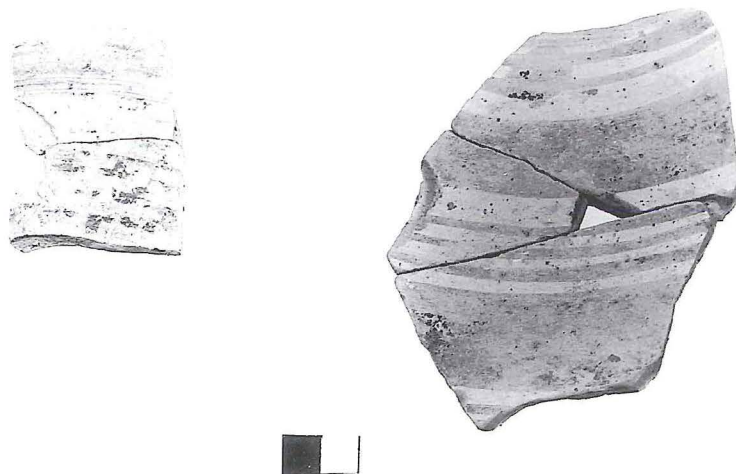


Fig. 48. Level 2. Kalathos (15970) and stirrup jar fragments (15971).

octopus tentacles and a papyrus motif (Figs. 30d, 15968, 47). The decoration on the shoulder of a jar uses groups of alternating lines as filler suggesting the close style (Figs. 29b, 15969, 47).

Decorative motifs that occur for the first time in this level are the chequers, on the exterior of a kalathos with a pronounced concave body (Figs. 19l, 15970, 48),<sup>35</sup> a panel with crosshatching flanked by two vertical wavy lines on the body of a semi-coarse closed shape vase (Fig. 30c, 15966, 46), band decoration with sets of narrow white bands on a light-brown ground on a stirrup jar (Figs. 19i, 15971, 48), and linked crosshatched pendent triangles between bands on a fragment from a large open-shaped vase (Figs. 30e, 15967, 46).

Crosshatched panels (FM 75,23) are encountered in IIIB and IIIC examples<sup>36</sup> and continue into PG.<sup>37</sup> The decorative arrangement with a central panel contained within two wavy lines on 15966 suggests a Sub-Minoan date.

The cup 15972 (Figs. 30f, 47) has a flaring rim, a vertical strap handle from lip to belly and is covered in black paint inside and outside. Its shape is comparable to Protogeometric cups from Kastro at Kavousi.<sup>38</sup>

The pendent triangles on 15967 can be paralleled with an example from Gortys, Sub-Minoan or Protogeometric in date.<sup>39</sup> A pendant cross-hatched triangle is represented on a PG sherd from Kavousi<sup>40</sup> and 15967 should be dated to this phase.

<sup>35</sup>On the shape: Seiradaki 1960, 12, fig. 7,2; for the decoration, idem pl. 8c.

<sup>36</sup>Tzedakis & Kanta 1978, 28, fig. 29,1; Kanta 1980, 290, fig. 134, 3, 9.

<sup>37</sup>Popham & Sackett 1980, 317, pl. 141,2.

<sup>38</sup>Mook 1993, 178, Pl.5, P3.83, figs. 57, 128.

<sup>39</sup>Rizza & Scrinari 1968,10, fig. 13; 12.

<sup>40</sup>Gesell 1985, 349, 344-5, fig. 11, K96.

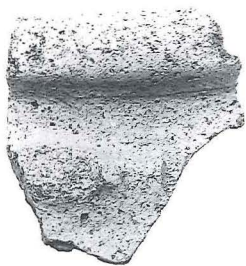


Fig. 49. Level 1. Coarse ware.



Fig. 50. Level 1. Coarse ware. Second row left: decorated handle.

## Level 1

**Coarse ware.** A relatively large amount of coarse ware was recovered. It included rims, handles and body sherds of different sized pithoi (Figs. 49–50). A vertical double handle bears incised bars on the outside (Figs. 17d, 15975, 49).<sup>41</sup> Legs of tripod cooking pots, made in various sizes, often preserve a thumb hole at their top.

There is one fragment of a perforated base with large circular perforations and traces of burning on one of its surfaces (Figs. 17f, 15976, 51).

**Fine and decorated ware.** Fine ware was less and extremely fragmentary. Rim and body fragments of deep bowls with a reserved band around the rim inside are decorated with a tricurved streamer and pendent semicircles. A base and body fragment of a mug with a pronounced concave body has a monochrome interior while the exterior preserves part of the decoration (Fig. 19e, 15977). Two examples of a thin elongated handle, circular in section, decorated on its exterior with two rows of dots are encountered in levels 1 and 2 (Fig. 50). A handle of this type was attached to the back of a double handle from level 4 (Fig. 36, second row, middle).



Fig. 51. Level 1. Coarse ware.



Fig. 52. Pit 44. Stirrup jar fragments (15978, 15979), jug handle (15980).

## Pit 44

Among the pottery from pit 44 three sherds with interesting LM IIIC decorative motifs are noted.

The shoulder of a stirrup jar is adorned with linked circles, within each of which appears an inscribed lozenge, simple or hatched, with concentric arcs in the quadrants (Figs. 19k, 15978, 52).

<sup>41</sup>Tzedakis & Kanta 1978, fig. 28; 9.



A fragment from the shoulder of a small stirrup jar is decorated with a fish (Figs. 19j, 15979, 52). The wavy line decorating the handle of a jug terminates in a painted snake's head (Figs. 29f, 15980, 52).<sup>42</sup>

## Conclusions

The preliminary examination of the stratified pottery of Trench 39 (levels 1-2) and Room 3B (levels 3-6) allows us to make the following observations:

A) The material under study presents features characteristic of LM IIIC pottery.

The deep bowl and the krater, popular LM IIIC shapes, are common in our pottery. The deep bowl is monochrome on the interior or with a reserved band around the rim inside. Closed shapes are relatively fewer.

Two styles are discernible, the open style decorating mainly deep bowls, and the close style commoner on large surfaces such as the krater. The pictorial style is depicted on one krater fragment. One sherd is decorated with fish.

LM IIIC decorative motifs of Mycenaean origin are popular, such as antithetic spirals (FM 50), antithetic loops (FM 50), panelled patterns (FM 75), tricurved streamers (FM 62). There are occasional examples decorated with the necklace motif. The use of thin lines as outlines for monochrome decorative surfaces is also a typical LM IIIC characteristic encountered in our pottery.<sup>43</sup>

Examples of fringed decoration are occasional while the advanced close style as we know it from Karphi,<sup>44</sup> Kritsa,<sup>45</sup> Moulana<sup>46</sup> and elsewhere is absent.

Appearing repeatedly in all six levels are some features which in LH IIIC typology appear in the first half of the Middle LH IIIC<sup>47</sup>: the reserved band on the interior of the monochrome deep bowls and the tricurved streamer.<sup>48</sup>

During this phase the reserved band occurs on more examples and tends to prevail over the monochrome deep bowl.

B) Compared to other material from Crete, ours can be considered more or less contemporary with the material from Knossos, Hagia Triada and Phaistos,<sup>49</sup> Palaikastro-Kastri<sup>50</sup> and Kastelli-Khania 1966.<sup>51</sup> These

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<sup>42</sup>Mountjoy 1986, 156.

<sup>43</sup>Warren & Hankey, 1989, 92.

<sup>44</sup>Seiradaki 1960, figs. 22-26.

<sup>45</sup>Kanta 1980, fig. 132,2.

<sup>46</sup>Kanta 1980, fig. 82; 2-9.

<sup>47</sup>Rutter Phase 4a.

<sup>48</sup>Mountjoy 1986, 155.

<sup>49</sup>Popham 1965, 316-42.

<sup>50</sup>Sackett & Popham 1965, 278-299.

<sup>51</sup>Tzedakis & Kanta, 1978.

groups are considered early LM IIIC in date. The first has been dated on stylistic grounds to an early LM IIIC phase and the second to the first part of LM IIIC. The third is roughly contemporary with the others.

Although there are references to the material from the stratigraphical Museum at Knossos and Karphi, our pottery is considered to date earlier, because the advanced phase of the close style is missing. This last stage is also missing from the pottery of the eight pits in the South sector of the excavation.

In the stratified pottery from Kastelli, Pediada district, Rethemiotakis<sup>52</sup> discerned two LM IIIC phases, one early, using LM IIIB motifs, and a second correlated to the Middle developed LH IIIC. In this second phase he classifies part of the pottery of other known groups from Crete such as Vrokastro, Karphi, Katri, Phaistos, Knossos, Arkhanes and Krania.

The bulk of our material, which does not present such distinct differentiations, is not very late and in LH terms does not date to after the first half of the Middle LH IIIC.

C) An examination of the structural and other remains, such as pottery, stone tools and animal bones, leads to the following conclusions.

According to the ceramic evidence, the occupation at Kephala hill seems to begin in an early Late Minoan IIIC phase, during which population movements to the upland interior of the island due to some threat are apparent.<sup>53</sup> The settlement, on the summit of a hill, has the character of a refuge site, but until now, except for two two-room buildings, no traces of a sizable settlement like those at Vrokastro,<sup>54</sup> Karphi,<sup>55</sup> Kavousi-Vronda,<sup>56</sup> have come to light.

No complete vases were found on the floors of Room 3B, but fragmentary vases like 15935, 15936, 15937, 15938, 15949 were found on the floor near the hearth. Most of the material comes from the fill in the levels and this makes it difficult to recreate the use of the floors. The pits, which occur over an extended area, seem to be located independently from the buildings and they are contemporary or later than them. Their use is not yet clarified. As we have already noted, there is limited evidence which might lead us to the idea that the pits contained material used in cult ritual. All the ceramic material is of a utilitarian nature, for every day use, but this does not mean that such vessels were not used in cult practices.

The pottery as well as the stone tools and animal bones present a picture of a robust community with developed means of stock raising. Although fragmentary, the pottery is abundant and of good quality. We observe a strong Mycenaean influence, which is also present in the other LM IIIC Cretan pottery groups and supports the view of renewed Mycenaean influence on the island during the 12th century.<sup>57</sup>

<sup>52</sup>Rethemiotakis 1991, forthcoming.

<sup>53</sup>Mook 1993, 10-11, Prokopiou 1994, 252, Nowicki 1994, 239, 266-7.

<sup>54</sup>Hayden, 1983, 372, fig. 3, 379, fig. 6, 380, fig. 7.

<sup>55</sup>Desborough 1972, 121; Pendlebury 1937-38, pl. 15.

<sup>56</sup>Gesell, Coulson & Day, 1991, 147, fig. 1.

<sup>57</sup>Warren 1982-1983, 74.

The animal bones, according to the information given by D. Mylonas, belong to various species: pigs, goats, sheep, cows, deer, horses and dogs.

The stone tools, querns and handstones, according to the information given by H. Prokopiou, may have been used for food preparation and / or industrial activities. They were used for a short time, and this can be correlated with the duration of the settlement occupation.

Although answers to the many questions cannot yet be given, the LM IIIC settlement on Kephala hill is of a great importance.

Together with the cave of Patsos, where the LM IIIC period appears to be the most important phase of the cult of the sanctuary,<sup>58</sup> the Kephala hill settlement gives us important evidence for the developments in the Amari valley during this disturbed period of Cretan history.

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<sup>58</sup>Kourou & Karetsoy 1994, 151.



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## Response and discussion

- Coulson:** I enjoyed your paper very much. Any stratified material from this period is very welcome, so what you have told us is of extreme importance. I have a few questions. Some are archaeological, some are ceramic. My first is about the use and the nature of the pits: you suggest that they may be of cultic nature, but you also say that the vessels are all of utilitarian type. Could they not be rubbish pits?
- Prokopiou:** They are not stratified, so they could also be for rubbish. But many of them are cut into the rock with great care, a difficult work. One other thing which I noticed – the observation concerns the eight pits in the south – is that each pit contained its own pottery, that is, sherds from one pit were not connected to sherds from another pit. If they were rubbish pits, some amount of connections could be expected. We do not really know exactly what happened with these pits, why they are so many. On the contrary, until now, the buildings are few. We have to proceed.
- Coulson:** I think that is a reasonable reply. You say that the settlement has the character of a refuge site; yet, you also say that it is a robust community where they developed means of stock raising. I do not think you can have it both ways.
- Prokopiou:** I say robust because of the amount of pottery, and the bones – we have many animals.
- Coulson:** This is what I was trying to articulate the other day. And I think it is what Mook was trying to get across today. Refuge sites are up on mountain tops, while yours is only between 500 to 600 m. It looks like you have all the hallmarks of a very developed settlement. Do you have any knife or cut marks on your bones?
- Prokopiou:** Yes.
- Coulson:** So you will eventually be able to determine whether the inhabitants were raising or herding of animals.
- Prokopiou:** Yes. But why did they come in that time and not before? Why did they come in LM IIIC? They were not there in IIIB. That is why I called it a refuge site. The abundance of pottery and bones induced me to call it robust.
- Coulson:** It seems that your site fits into the pattern of all the other sites we have been talking about: new foundations IIIC.
- Prokopiou:** Where?
- Coulson:** In general in Crete.
- Prokopiou:** It is, however, a quite high location that can also offer protection and security.

- Coulson:** You have six levels. You say your pottery group is homogenous. Is it possible to refine that? You say that your site does not date after the first half of middle IIIC, but you were speaking of LH IIIC. Here, again, we should not use the Helladic basis for dating your site. We should date it on the pottery at hand.
- Prokopiou:** The first thing I undertook was a comparison with other sites in Crete, for example Kastelli Khania 1966, Palaikastro-Kastri, etc. I spoke about LH IIIC because of the decorative elements. I do not base my dating on this. The comparison with various LM pottery groups gives a date in the first part of IIIC, not very late.
- Coulson:** Levels 6 and 5: would you call them early IIIC? Can you make a finer division, or is it not possible yet?
- Prokopiou:** It is not possible yet since this material came to light in September '93 and we had a lot to do. Further classification may be possible. I do not think we have a break within the sequence.
- Coulson:** Last comment: I agree with B. Hallager, I do not like the use of the word "Fringe Style". It refers more to a decorative motif. This brings me to a larger concern. I think that, just as we need more agreement and definition in area of shape, we also need this when we talk of decorative motifs. This is especially true in LM IIIC when motifs are changed, adapted, and new ones are introduced.
- Macdonald:** I did not quite understand at the very beginning, you had Levels 1 and 2 in Room 3...
- Prokopiou:** In room 3B I have Levels 3, 4, 5 and 6.
- Macdonald:** Were Levels 1 and 2 in the same place as...?
- Prokopiou:** Yes, in the same place in Trench 39, over Room 3.
- Macdonald:** So they are definitely separate stratigraphically. It seemed to me, at least stylistically, that Level 5 and Level 2 were identical. I was also impressed by the fact that in both of these you have this sort of simple octopus tentacle, as well as the more elaborate tentacle, although the octopus with the concentric arcs and the anthers on the arcs may still be relatively early. There is a feature which turns up again at Karphi, and – although I am not allowed to go to the mainland – it is a feature which turns up in IIIC at Perati and elsewhere: what I call negative concentric semi-circles. It has a negative effect because of the solid paint around the concentric circles. It is quite striking visually. It occurs at Karphi, at Sybritos in Level 2, and, first of all, in Perati Phase 2.
- Prokopiou:** It occurs at Sybritos in level 5. At Perati we have also the vertical wavy lines arranged in a panel which we encountered here in level 6. I should like to ask you something. You say that Levels 5 and 2 seem to you identical. Do you draw any conclusions?
- Macdonald:** Stratigraphically and therefore chronologically they may be different, at least from the material that you have shown us today, I am not able to see any useful differences that we can hang onto.



- Prokopiou:** I agree with you. Only some fragments in the material are of a later date.
- Borgna:** This was a beautiful repertoire of LM IIIC pottery with strong hints of Mycenaean influence or presence. Do you think the material you showed now fits well in all features with that published in *La transizione dal Miceneo all' Alto Arcaismo*? In that publication some features looked a little earlier. To all of you, a question: the larger globular jar with a distinct neck and a sort of a flat knob on the shoulder – is it common in Crete, or may it be considered a foreign, not Mycenaean in this case, influence?
- Prokopiou:** The other material of the pits appears to be earlier. Some of the sherds, if seen alone, would seem IIIB. But they were all together in a deposit which I believe was formed at one time.
- Warren:** Are the pits earlier than or contemporary with the buildings?
- Prokopiou:** We have of all kinds. Pit 44 appears to be a little earlier, because it is beneath. Perhaps the eight pits in the south, of which I was asked whether they are IIIB or IIIC, are a little earlier than the big ones. We also have contemporary and later pits.
- Warren:** The question I would like to develop a bit further is an interesting one which has been referred to, and that I think that we can promote a discussion, especially with our friends from Eastern Crete. The word “refuge site” has, of course, been used for a long time about very difficult places like Karphi and Kastro-Kephala. Maybe this is the wrong word, we need to rethink what we mean, and I would certainly agree with what Coulson has said, that the settlements are in areas where good agricultural land and water and so on is found. Sybritos, of course, is a nice example of that. However, we need to be careful. You do not go and live in Karphi if times are normal. Many of these sites are on hills, some of them high and inaccessible, some of them less high and more easily accessible. This struck me in contrast to Knossos, which is a flat lowland site, and that needs to be taken account of also. But the fact of the matter is that these sites have in general a very specific high location in which something more than just access to good agricultural land is operating. Surely protection and defence for many of them must have some sort of role. Vrokastro is a high and difficult hill. You could easily live down nearer the coast. The land was available then. Even at Palaikastro they lived on top of the hill of Kastri. It is not high but it is a definite hill. It has a very good natural defence. I still want to press the case that there is an element of insecurity, protection and defence which is working in this period, as well as, of course, access to cultivation and land.
- Coulson:** If you talk to Krzysztof Nowicki, he would say that these are defensible sites – against pirates. I am not quite sure that this is always the case. The sites are up high, but you have to remember that much of the settlement patterns in Crete throughout all periods was up into the mountains. Some of these sites may be seasonal, summer inhabitations. It has long been the practice to go up into the mountains in the summer. So, some sites may be seasonal, some may be defensible, but I am convinced that the primary reason for their existence is water. The good springs are up in the mountains. In the plains you do not have much available water. In the case of the Isthmus, you have to drill for water.
- Warren:** You are excavating Khalasmenos. We all know, though, that a little further in that cleft

there is a site, Katalymata, which no-one would go to live on for water. Never in my life will I go there because I would be terrified.

**Coulson:** I agree.

**Warren:** So we have that site, a most extraordinary one. Now, Arvi-Fortetsa, which, many years ago, when some of us were young... Arvi-Fortetsa, where Nowicki has now been and explored. Again, you do not go and live there if you are only worried about water. These are very difficult and inaccessible sites. This fact must have a major role in our understanding of what is going on.

**Coulson:** I will grant you Katalymata.

**Kanta:** On this very interesting point which Warren raised: Professor N. Stambolidis and I have recently written an article on this subject on the occasion of a new refuge site which we have discovered at Orné, district of Hagios Vasileios in Western Crete. The article has not appeared yet, unfortunately. We have reexamined all such sites. One feature is that most of those that are well investigated have reasonable access to water. I fully agree with Warren that you do not go there just for the water. You go there for other reasons. But not for water. I personally do not agree that the main fear was of pirates, and I do not agree with this complicated system of Nowicki, of frontier line refuge settlements, and second line of defense etc. It may prove to be like that, but at the moment some of them have not been investigated. We simply do not know. The one that we have discovered is situated at a very important crossroad. It is very high up. When you are up there you do feel like the king of the castle, as it were, and you wonder where you will pounce next. It has that sort of feel. Joking apart, another element which we have not explored enough and which we do not know enough about, is the element of defensive walls that some of these places have. The best documented proper defensive wall is that of Kastro-Kephala. Orne Hagiou Vasileiou also has a wall but we do not know its exact date. We suppose it is dated by the surface sherds. Recently a list has appeared of all these walls of possible defensive character. Unfortunately most of the walls in that list are not datable because they do not come from excavated contexts. At least we know that Kastro-Kephala dates from that period. You do not leave Hagia Pelagia by the sea to go up to Kastro-Kephala just for the water. Of course they had the cultivable land available, otherwise they could not live there. But they went up there for other reasons.

**Mook:** I suggest for people who are interested in that topic that they look in the recent *Journal of Mediterranean Archaeology* (Vol.6 Nr 2 December 1993, 131-174): Donald Haggis has an article which discusses the settlement patterns in Kavousi during the early Iron Age. He also addresses the issue of the location of Knossos. He has some interesting things to say.

**Rethemiotakis:** I have the idea that the problem that we have now relates directly to chronology, to dating. When were the lowland sites abandoned? When did the people move to the highland locations? From the material I have studied, I think that the crucial period is somewhere in the middle of IIIC. All these events happened in the mid-IIIC. This is another point I want to raise: I have heard a lot about the first half of the 12th century but nothing about the second half. Where is it? Does it exist? Can someone describe the characteristic pottery, the stylistic features of the second half of LM IIIC? Or is it that this period is very conservative and all the stylistic traits of the early period continue until the end? This is the



picture I get from the Knossos North Cemetery group. There the stirrup jars which we all call "Classic IIIC" appear to go on to the very end of the LM IIIC period. If this is the case, we have to reconsider all the things we have talked about here.

**Vlasaki:** At the same time that Sybritos was inhabited, so was Kastelli-Pediada, which is on the plain, also Khamalevri, which is on a small hill close to the sea. Not a refuge, not protected. Many years ago, I was thinking of the old theory of Carpenter about climate. We may consider that these places were connected with seasonal activities, and the climate would be such that they had to move up into the highlands to flee the heat.

**Tsipopoulou:** Pottery is insufficient to determine a seasonal occupation of a site. It is necessary to have archaeobotanical and palaeozoological data – which give us clear answers. The recent American studies have shown that the suggestion made by Harriet Boyd that the Kastro at Kavousi was seasonally occupied is not valid. Refuge settlements imply the existence of lowland sites from which the people moved – where are these lowland sites?

**Vlasaki:** The lowland settlement in Kastelli-Pediada has been found only now. Khamalevri is recent. We have exactly the same pits as Sybritos, which is exactly the same kind of installation.

**Watrous:** In order to understand these LM IIIC sites, I think it is helpful not just to focus on the sites themselves, but to try to consider the region of which they are a part. One of our problems is that we leap from Arkhanes to Sybritos to Kastro-Kephala, but we do not know anything about the areas around them. Systematic surveys tell you what is going on in these areas. In the Isthmus of Ierapetra the big decline does not come at the end of the Bronze Age. It comes at the beginning at LM III. In the area which we have surveyed, which is most of the northern Isthmus, there are two LM IIIA-B settlements in the valley. Gournia, and one near Episkopi. The pattern of settlement in the Mesara is completely different. There you get an initial drop-off at the very beginning of LM III, which is probably general throughout the island, but then in IIIA and IIIB the Mesara is a very populous area. We have to bear in mind that we are dealing with many different regional phenomena.

**Hood:** If I could return to the pottery. I have a feeling that you might be in quite advanced IIIC. You have no kylikes at all?

**Prokopiou:** Very few. The one I presented comes from Level 5.

**Hood:** Could you give any idea – I feel that this question of reserved bands inside rims may be quite important – in what sort of proportions do you have them in the deep bowls?

**Prokopiou:** They are used at the same time.

**Hood:** It is a question of proportions. At Knossos, in the pottery I studied, they were very rare indeed. I wondered what the proportions were.

**Prokopiou:** They are more with and less without. This fact shows that the reserved band tends to take over.

**Hood:** Could I just ask Watrous a question? Nowadays you still find in Crete a summer village,



distinct from the coastal village, which is abandoned in the summer and returned to in the winter. Is there any evidence of that in IIIC?

**Watrous:** I am not the person to answer this question. I think that the Kavousi excavators should answer it, or someone who has experience with summer villages today.

**Gesell:** One place where we might be able to find evidence for that is from the palaeobotanists, but that material has not been studied yet. So, I think you might have to wait for that evidence.

**Coulson:** The animal bones with cut-marks, and the study of wear-marks on the teeth are pieces of evidence which should be taken into consideration. I think that the zooarchaeologists believe that such animals are raised all year and that there are regular cycles of slaughtering, especially in the fall. This would mean that the sites were occupied all year long. I believe that the Kastro is an all year round site. It is huge. It is a big site. I just could not conceive of it as being a seasonal habitation.

**Macdonald:** I would like to ask you to clarify the point about the first eight pits in the south part of the site, which you think are earlier than the structures. Your Pit 5 is, at least. And with that, you pointed out that there are no reserved bands in the homogenous fill of Pit 5. Would you like to put that early in IIIC, the earliest that you have got?

**Prokopiou:** I should like to put it very early in IIIC. As I said, if I saw those sherds on their own, I would say that they are IIIB.

# General discussion

## Terminology

- Betancourt:** The first issue that E. Hallager suggests we discuss is the one we began with, the terminology. I understand that B. Hallager has volunteered to circulate a series of drawings plus names to the members of the conference very quickly, so that she can elicit comments on it before preparing a final document for inclusion, perhaps as an appendix, or as a chapter in the publication. So the first topic is: would people like to take their last opportunity to make their case for the champagne cup, or other favorites?
- Kanta:** Could I try and persuade you all that we should keep the name “champagne glass/cup” because it is simply easier to know what we mean. I would say, call them all kylix, and if we feel differently inclined, at least say “goblet-type kylix”. You might think this is too much, but when we got into goblets there was terrible confusion. These last few days I have been trying to understand what is meant with “goblet” in the various papers. With “kylix”, at least in Greek, the Ephyraean goblet is “efyraiki kylix”. If we say “Ephyraean goblet” we all understand, so it does not matter so much. It is when we come to the other goblets etc. that problems start.
- Warren:** I really do think that we will not agree this afternoon to use a standard terminology. What I would like to suggest in response to B. Hallager’s generous offer is that if there is circulated a simple sheet of drawings with the main shapes we are concerned about, there should simply be put under them the short list of names which are used for each. There may be three or four for each shape. Some will have only one name. In truth, everybody is going to use – and other scholars who are not here, the mainlanders – what is current. So you will write “goblet in LM II”, I will write “LM II kylix”. They can be very short lists. I am sure its the drawing, really, which will enable people to communicate. It is bound to have some different names. It is a splendid offer. Mountjoy has done it beautifully for many foreign languages in her Mycenaean pottery book.
- Gesell:** Particularly with things like goblets and so forth where people are using them for so many different things, that perhaps if we are absolutely determined to use our own, as opposed to finding the standard one, at the beginning of the book we should have a little drawing which says “goblet is this in this book” and so on. That is okay for people like us who are quite familiar with the pottery. We know that there are many possibilities. But there are other people who have to read these books, people in the sciences who are now working with us. They are going to be confused by all the different uses of “goblet” for different shapes. If people knew in the beginning what shape it is, that might help.
- B. Hallager:** I had an idea that I should collect the shapes very generally in “families”, as I did with the alabastra. Within each family I will list the commonly used names.

## Defining the beginning of new periods

- Betancourt:** The next issue that we have to wrestle with is that very serious problem of definitions for the beginning of new periods. First, there is a philosophical question: do we want to define periods now and go with a list of traits, one or more, that begin the period known as IIIC, for example? Or do we not want to?
- Hood:** I do not think it matters too much, agreeing about that. The important thing is knowing what we think about the correlations. Whether we call a horizon this or that is of secondary importance.
- Watrous:** I think on this one I have to disagree with Hood because I think the most important thing to do is what B. Hallager suggested we do in the first place, that is, we have to work out our own sequence. But I do think that we ought to be cautious about what we end up calling it because even though all of us in this room may realize what it is one of us means by what he/she is saying, there is a huge public out there. There are a lot of people writing many articles. As soon as something gets in print you find that someone else snaps it up. There is an endless literature based, not necessarily on misunderstanding, but on assumptions based on a certain term. Since we are the ones who are generating the terms, we have a responsibility to be cautious. I would say, until we have Cretan-mainland correlations, we ought to speak in terms of IIIB/C.
- Warren:** I think we can do two things here. One is the easy way. As I understand it, B. Hallager is setting the examination paper. Question One is already going to be circulated afterwards to us, and each of us will give our names to a set of drawings which she will produce. It would be possible to do the same with Question Two of the examination paper, which would be this: do you think it is useful to attempt a definition of IIIC or early IIIC in Crete? If yes, what would be your distinguishing criteria? It might be possible, in fact, briefly to do that now. I am prepared to throw something in, if only to start. I would say that when we have a pottery assemblage in which the predominant characteristics in decorated ware are deep bowls related to FS 284 – we have seen hundreds of them in these presentations – which has nothing to do with the beautiful deep bowls in LM IIIB (which I accept are Minoan deep bowls), plus substantial numbers of these large fine decorated kraters, it is proper to call the assemblage IIIC.
- Vlasaki:** I would propose another conference just on this, and for us to come ready with our material, and if it is possible, with imports, or something. If we do this, it will be easier to distinguish our periods. At this moment I confuse IIIB late with IIIC early. Do you agree to another conference?
- Warren:** In Khania?
- Vlasaki:** In Khania. Really. I do not know if you prefer IIIB and IIIC until the end, or IIIC alone.
- Gesell:** I just wondered how great an emergency this was? Are the Khania volumes about to come out and won't they settle the matter?
- B. Hallager:** Well, I am working on Volume II which covers the IIIB:2 and IIIC strata and I will do my best to finish it as soon as possible. I think it is a good idea to do as Vlasaki said. We have



got so many impressions now. It will be a good idea to go back and look at the material we have, think about what we have discussed, and then to have another conference.

**Borgna:**

In the definition of historical or chronological phases, based on pottery, it is also important to reflect on methodological criteria and to explore the methodological literature that we have at our disposal, for example, in the context of ethnoarchaeological studies. We have to consider, in order not to pass directly from strict pottery analysis to historical implications, behavioural implications, for example, exploring why pottery changes – it is an old discussion accepting some answers available from ethnoarchaeological studies, and bearing in mind, for example, that the decorated pottery is subject to greater variability than coarse ware pottery. On this basis we might perhaps better understand why I have a new decorated pottery in Phaistos, for example, at the end of IIIB:2, and why Warren still has globular kitchen ware in LM IIIC.

**Macdonald:**

A bit of a warning. I think that everyone would agree entirely with Warren that one has arrived at IIIC according to the criteria which he has just laid out. But this very difficult period end of IIIB/beginning of IIIC will become clear in the future, and it will become even clearer with the publication of Khania. But could I urge that nobody uses “IIIB:1” and “IIIB:2” unless they have the stratified material to indicate that there are two phases of what they are calling IIIB. Do not apply it to an individual pot in a tomb, or something like that, and do not bandy the phrase around unless you really do have it nicely stratified as B. Hallager does. Do have in the back of your mind the whole time that mainlanders will think that “LH IIIB:2 = LM IIIB:2”. It is a psychological link. If there is any possibility in the future that we might actually be shifting IIIB:2 into our early IIIC phase, we could be getting into some problems. I think things will become clearer, but just be careful about the use of the terms that Hallager really has introduced.

## West and Central Crete versus East Crete

**Betancourt:**

We have to move along and consider other issues. One of the issues that came up during the conference was the question between Central and Western Crete, and Eastern Crete, particularly in the later periods. That is to say, we have a line drawn somewhere east of Knossos and west of Siteia, which is dividing the parts of the island in terms of the pottery production. The first point is: where is that line? And the second point is: why is that line there at all?

**Tsipopoulou:**

The line should be placed just east of Malia, including the Gulf of Mirabello, but excluding, according to me, Karphi and the Lasithi. Thus, the eastern zone includes the Isthmus of Ierapetra, Siteia etc.

**Warren:**

Does that depend on what period we are in? We have had significant differences pointed out over time. Do you give the same line, Mirabello and eastwards, forming some kind of ceramic province, for IIIA and IIIB as for IIIC?

**Tsipopoulou:**

The material has not been studied for the earlier periods, IIIA and IIIB.

**Warren:**

We have the impression that IIIA:1 is quite extensive, and it is very Knossian. That is what is helping us to define it. Vlasaki has it perfectly in Khamalevri. Rethemiotakis has it in

Psari-Phorada. They are a long distance apart. There are other IIIA:1 sites. So a substantial part of the island, perhaps not the east, is a common province in IIIA:1, I am sure, centrally controlled from Knossos. It is mirrored in the tablets. In IIIA:2 nothing has changed much. Knossos cannot offer very much in IIIB – hence, it is a different story.

**MacGillivray:** IIIB is very rare in Eastern Crete.

**Gesell:** I would like to know how you would move Karphi into the central zone. Leslie Day is studying the pottery there and it seems to be that she said she thought that quite a bit of it was very much like the pottery of Vronda. But she is not here to speak for herself, and I cannot document it in any way.

**Tsipopoulou:** I contrast the pottery from Karphi with that from Khalasmenos, which I know well. I realize that once the Kavousi-Vrondas material is published, the situation may change. I can base my statement only on the available material.

**Macdonald:** We must not forget that in terms of dividing Crete in LM IIIA:2 and B, Karpathos is also part of this eastern zone, so that Crete extends, as it were, beyond its geographical limits, strictly.

**Kanta:** As far as East Crete is concerned, and if we put the line to the east of Malia in LM III as Tsipopoulou suggested – with which I agree, of course – I do not think that it is as isolated as has been made out. When I wrote my book I studied what was available then, and I think I mentioned many instances where what happens there is quite in accordance with what happens in the rest of Crete. Most of it was tomb groups, or chance finds, because that is what was available. But surely the people who died had lived, and they lived in settlements. The same is true for the “Sub-Minoan” *pace* Coulson: it is very strong there in many tomb groups. It has some significance. Presumably these people who died lived in settlements. The settlements will be found. It is a matter of time. I do not think that there existed a totally different style just for tombs. If you think of what happens in other periods of Cretan archaeology, and of the gaps in our knowledge which were subsequently filled, you will see that it is only a matter of time.

**Tsipopoulou:** The excavation of Khalasmenos was undertaken with exactly this problem in mind. In my dissertation I identified a SM stylistic phase, basing my analysis on tomb assemblages. Whether this has a chronological significance can only be verified through the investigation of a settlement. My co-director does not believe in the existence of a SM phase, although he has published material from Kavousi with this label. After four years of work (1992-1995), we can draw the following tentative conclusions: (1) Khalasmenos is dated to an advanced phase of the IIIC period; (2) it is probably a single-period site, even though some ‘PG’ sherds have been found; (3) there is no SM stratigraphical horizon. The tomb discovered in immediate proximity to the settlement produced late IIIC pottery, and appears to have been in use for a relatively short period of time. Three distinctive decorative styles are present: dipped; thick bands; fine lines and motifs. All three styles were found on pots deposited with a single individual. The dipped decor, usually considered PG on the basis of old excavations, is thus only a IIIC stylistic variant. The careful investigation of further tombs may provide the necessary evidence towards a solution of several of our stratigraphical problems.



## The nature of IIIC in Crete

**Betancourt:** Moving to the last topic, and one that perhaps this conference has underscored more than any other, is the nature of IIIC on Crete. It has emerged as an extraordinarily important period, mainly because of this conference, and because of the gradual appreciation that it is very important throughout the island. The question is: what is the nature of IIIC? Are we dealing with refuge sites? Are we dealing with something else? If so, what is it?

**Warren:** This is perhaps the most interesting question to emerge. What have we got? We have in some ways quite a strong degree of uniformity across the island. We have heard of Khama-levri, of Sybritos, Knossos and Phaistos and other places going right through to the IIIC as we now know it and understand it in Kavousi and Palaikastro-Kastri and many places in between. So there is a certain degree of uniformity. It appears politically to be at individual village level. I cannot detect any greater level of hierarchy or first-order settlements or anything like that. Although there still are important coastal sites, or sites near the coast, there is a strong degree of emphasis on inland sites, some high up in the hills, others less so, farming communities. I would urge that there is some degree of insecurity, and need for protection in the location of many of these sites. After all, we know that the 12th century is a period of very great instability and insecurity as a whole. So I think that there is some fear. Even if you take Vronta, I am sure that one of the reasons why you go to Vronta is that it is not easily visible for anyone arriving on the coast. It is tucked away in the fold of the hill. Kastri is even more difficult to get to. So I think that there is a fear and insecurity coming from the sea at this time. At the same time there is movement. There are interconnections with Cyprus. It is a period of instability with quite a degree of ceramic uniformity, an interchange of ideas and shapes, with some foreign influences from all of Greece, with some degree of Mycenaean influence; however we define it – it is present, having played some role. Whether one can go so far as to say that any new population elements are coming in is a more difficult question. If you think of the Italian characteristics up in Karphi which Pendlebury showed in his report long ago, and other things indicating foreign influences. So I would say that it is a predominantly Minoan island, still, in IIIC, but there are foreign influences, and there is a considerable degree of insecurity mirrored by the change of location of settlements, although some of the lowland sites still continue.

**Macdonald:** Warren did just touch on this, but we should not forget – and everyone should, although it is out of date, read Desborough on this because he had great insights into IIIC – that this is the period of the so-called “koine” in the Aegean. There are certainly many, many points of contact, vases moving around at least in the Aegean sea itself, from the islands to the mainland and vice versa. This must certainly be balanced against the aspect of insecurity which is being seen in Crete. One must try and take it as a whole, and also, of course, not only the pottery itself as Desborough points out. Warren has northern influence in metalwork. There are so many aspects to pull into this particular thing.

**Warren:** If you look at the wider history of Crete, it is in the period of central domination, as in the Neopalatial period, that you have settlements very easy of access. This mirrors some sort of higher order. The next period when we have something equivalent to LM I, is the Roman period, when the domination is external. But it is all very peaceful and everyone is living in lowland sites. When you have sites in the hills, this reflects the absence of an overall controlling system at this time. It is the individuality of villages and sites, not being controlled from some main centre.



**Kanta:**

This picture is somewhat simplified and detracts from the complexity of the situation. To follow along the lines of Warren's generalization, in EM IIA we have settlements at Debla and Myrtos Pyrgos but also at Stavromenos and Pachyammos (cf. Kanta & Prokopiou, forthcoming). Thus in times of instability and threat, in places, life continues along the established lines. To go back to LM IIIC I would like to focus our attention on sites such as Katsambas (Kanta 1980, 27-29), Tylissos, Khania, Phaistos and Amnisos. Phaistos and Khania have a good chance to be "first order" settlements for the period as Warren would call them. In some ways IIIC despite its instability was an exciting time, a time of change and transmission of culture. Mainland influence on Crete. Cretan influence on Rhodes and Cyprus. The time nearing the birth of Greek culture.

**Betancourt:**

I think it has been an extraordinarily successful conference. I want to turn the microphone over to William Coulson.

**Coulson:**

Every conference usually has a conclusion, or some kind of resolution that it makes as a body. Now, given the discussion, I do not think we can come to any resolution about IIIC, or about LM III in general. But I do think there is one resolution that we can come to very easily, and that is, first of all, to thank Birgitta and Erik Hallager, especially Birgitta, for organising this conference, for doing all the hard work, getting us all together, and providing us with this forum for discussion, which I think has been most valuable. In fact, I think that this is one of the most interesting conferences I have been to in a long time. And, last but not least, we would like to thank Søren Dietz and the Danish Institute for providing such wonderful hospitality over the past three days and for being so kind a host. Thank you very much.

## Appendix

# LM III Pottery Shapes and their Nomenclature<sup>\*</sup>

*Birgitta P. Hallager*

As will be apparent from this publication in some cases several different names are used by scholars for the same vase type and in others one name for different shapes. To provide the reader of this book with a key to understanding what the vases discussed look like, the following pages contain a chart of the most common vessel shapes in LM III. The chart may be seen as an extension of and supplement to what was presented by Philip P. Betancourt in his book "The History of Minoan Pottery". The suggested names are chosen from the ones suggested by the participants of the meeting in a combination with those which are most current.

In the index of shapes reference to the drawings on the charts is given in square brackets. It will thus, for example, be possible to see that "ogival cup", "rounded cup" and "bell cup" is one and the same thing, and that the term "goblet" covers two entirely different shapes: the footed cup/champagne cup and the low-stemmed kylix/goblet.

Within each vessel group, rims and bases vary from one period to another: these are not presented in the drawings. (For example different kind of bases exist on the small stirrup jars during different periods and the lids have more variations than the two given in drawings – the flat lid is also very common without handles).

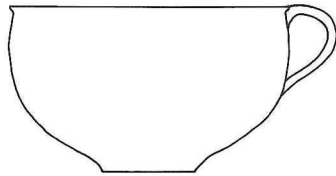
Shapes older than LM III mentioned in the papers in this symposium are not included in the chart as for example chalices, kernoi, tripod cups, hole-mouthed jugs and scoops. Also omitted from the chart are some rare LM III shapes mentioned in the text, such as basket vase and chest-shaped vessel, because they may vary from site to site, the cup-rhyton and strainer which are basically LM I-II shapes, the probably local East Cretan spouted jar and the odd "industrial vessel". Further references and, in most cases, drawings also are given in the papers where these shapes are mentioned. Larnakes and pithoi are also omitted from the chart, being well known shapes. The chart is thus far from completely covering all known LM III vessel shapes. This is obvious in the case of the coarse ware vessels which appear in many variants – still not studied.

It is my hope, however, that this chart together with the index of shapes may be a guide to find out what exactly is meant by each name used in this publication. At the same time it is intended to assist scholars and students in the future as to the most appropriate names to use for their pots. All drawings in the chart are in scale 1:4.

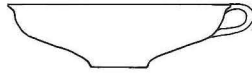
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<sup>\*</sup>A draft of this chart has circulated among the participants of the meeting. I am very grateful for all the comments I received which greatly improved its final appearance.

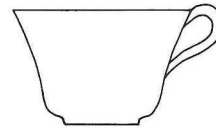
## A CUP



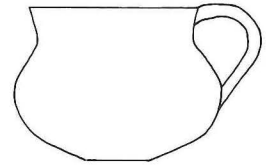
1. Deep



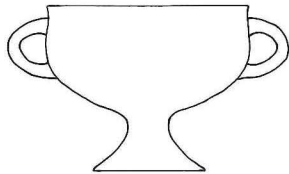
2. Shallow



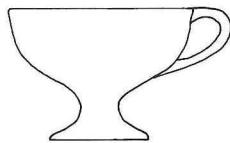
3. Straight-sided



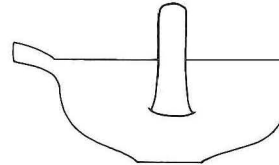
4. Globular



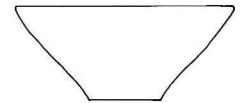
5. Footed two-handled



6. Footed one-handled  
or champagne cup

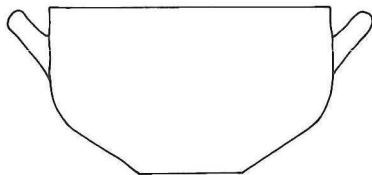


7. Spouted

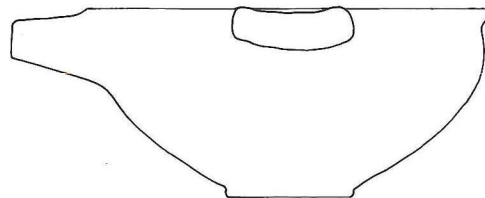


8. Conical

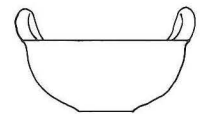
## B BOWL



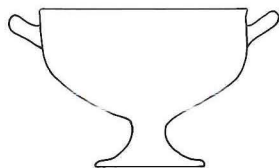
1. Deep



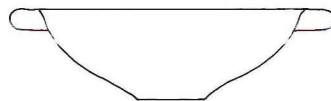
2. Spouted



3. Basket-handled



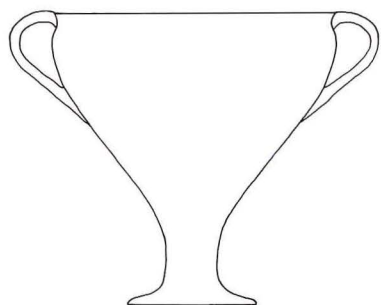
4. Footed



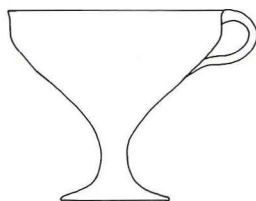
5. Shallow



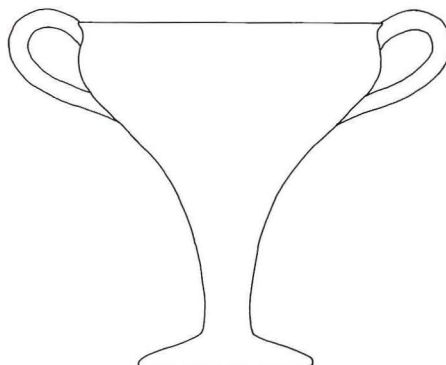
## C KYLIX



1. Goblet, large or  
kylix, low-stemmed



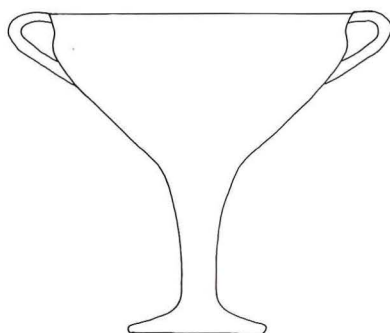
2. Goblet, small or  
kylix, low-stemmed



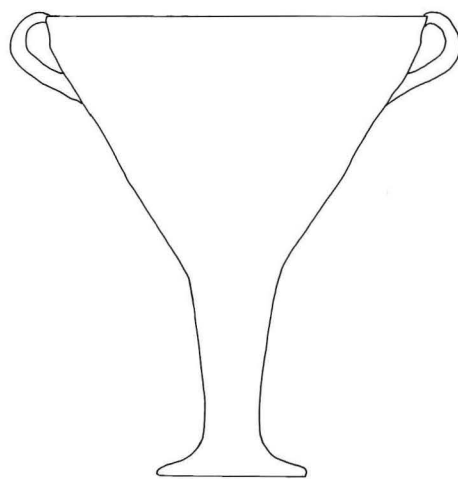
3. Loop-handled



4. Shallow

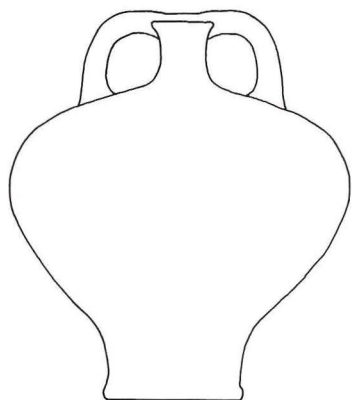


5. Carinated

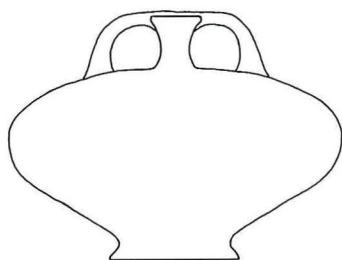


6. Carinated, conical

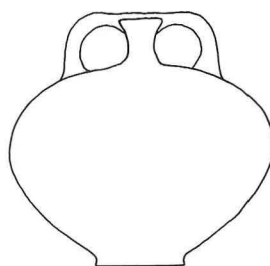
## D STIRRUP JAR



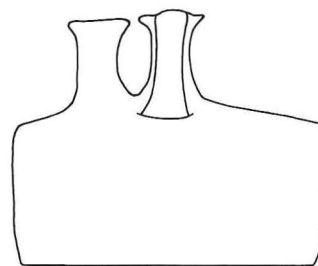
1. Medium sized



2. Squat

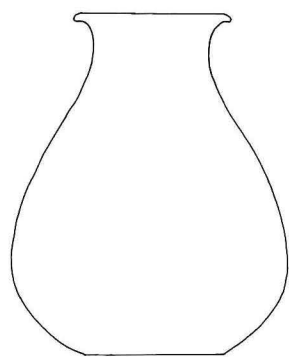


3. Globular

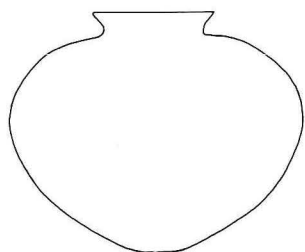


4. Straight-sided

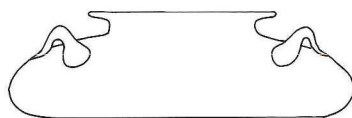
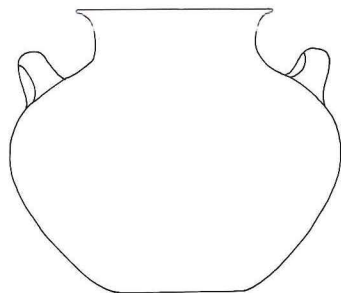
# E ALABASTRON



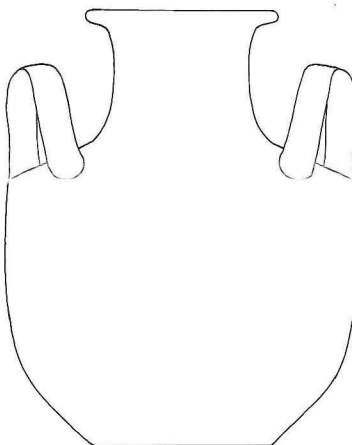
1. Baggy



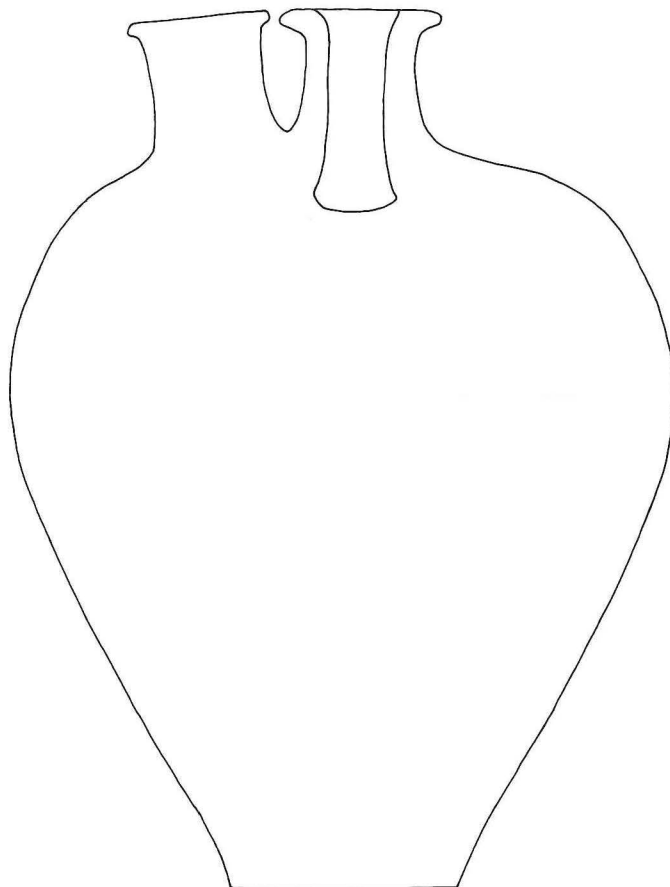
3. Globular



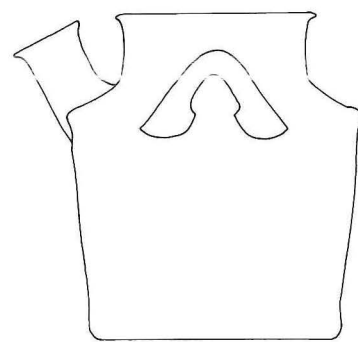
2. Flat



4. Straight-sided

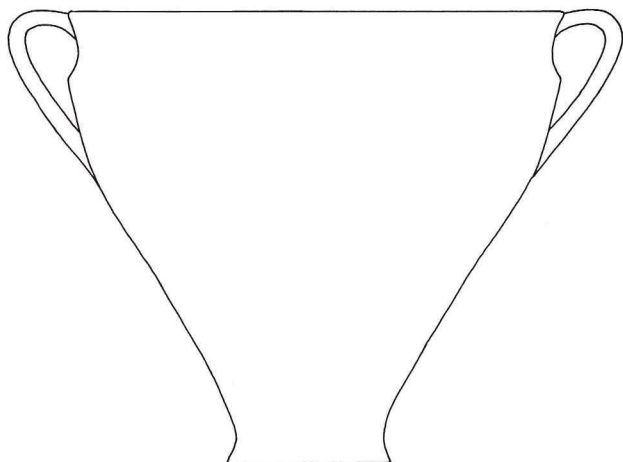


5. Storage/transport stirrup jar

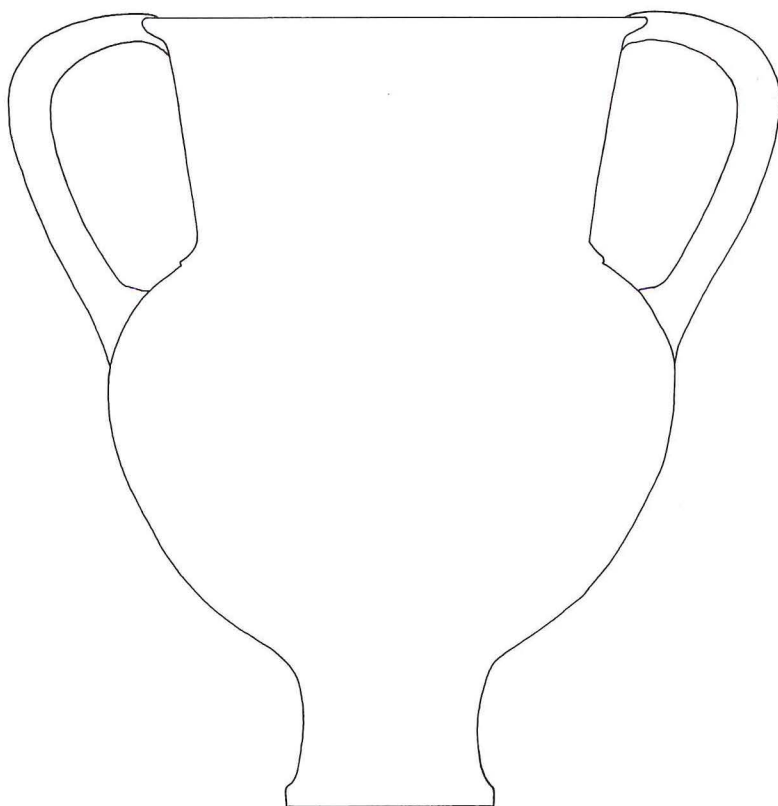


5. Spouted

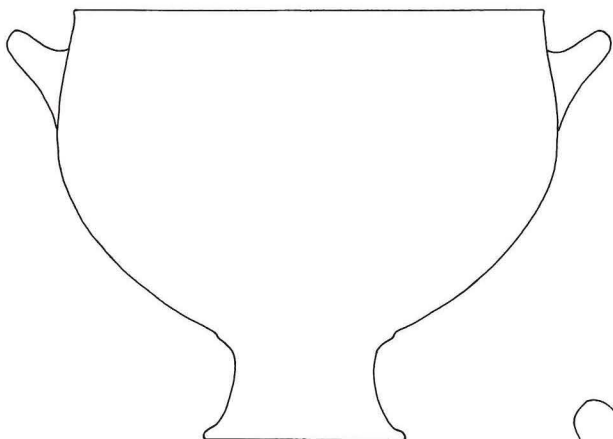
# F KRATER



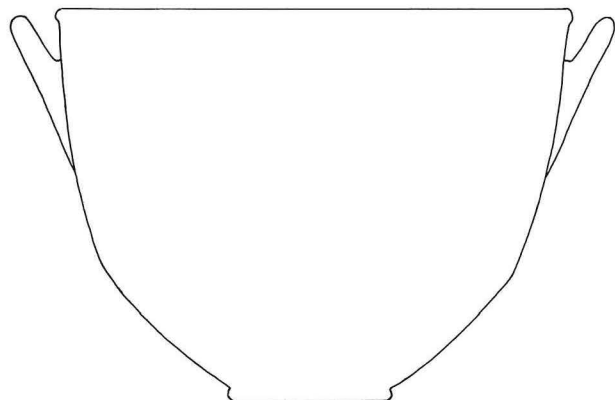
2. Conical



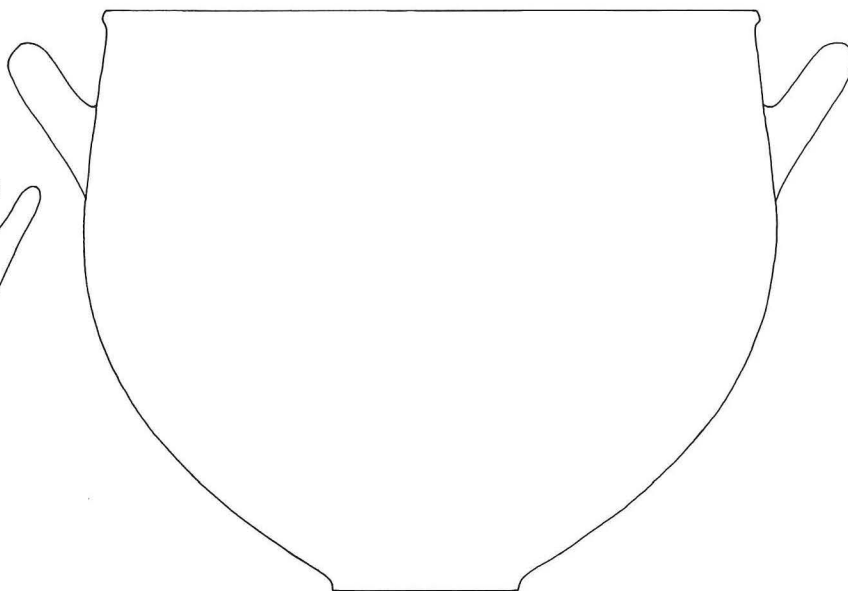
1. Amphoroid



3. Footed



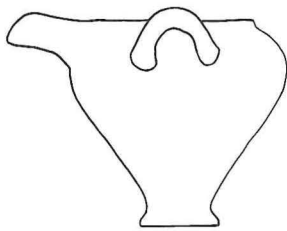
5. Carinated  
or straight-sided



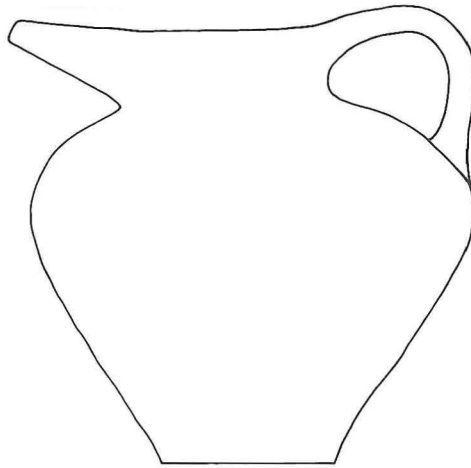
4. Globular



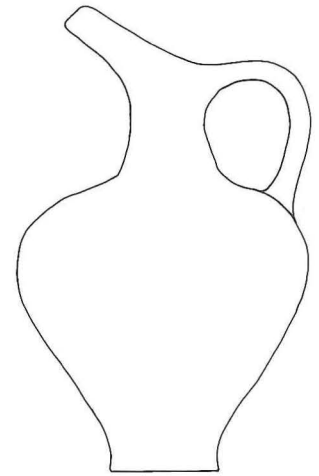
# G JUG



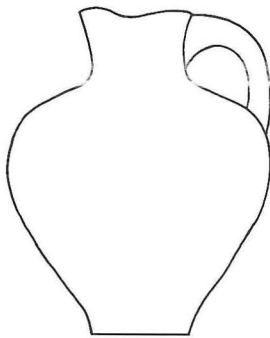
1. *Bridge-spouted*



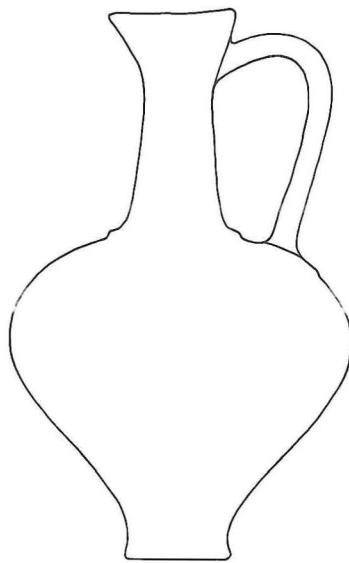
2. *Collared*



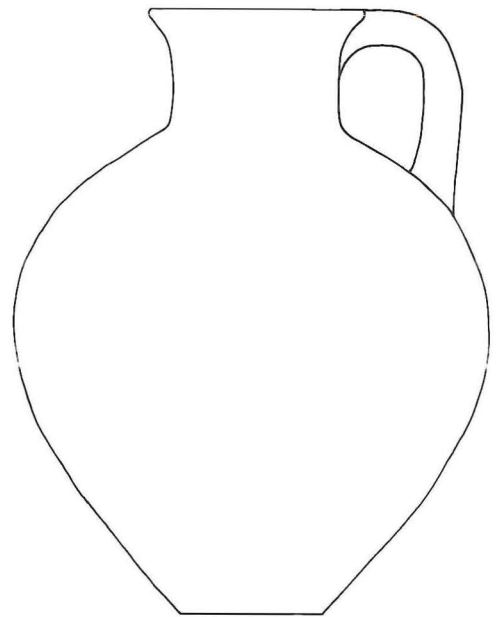
3. *Beak-spouted*



4. *Trefoil-mouthed*

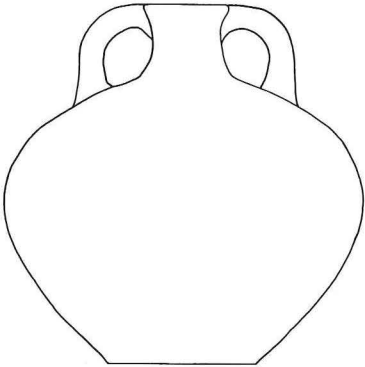


5. *Funnel-necked*

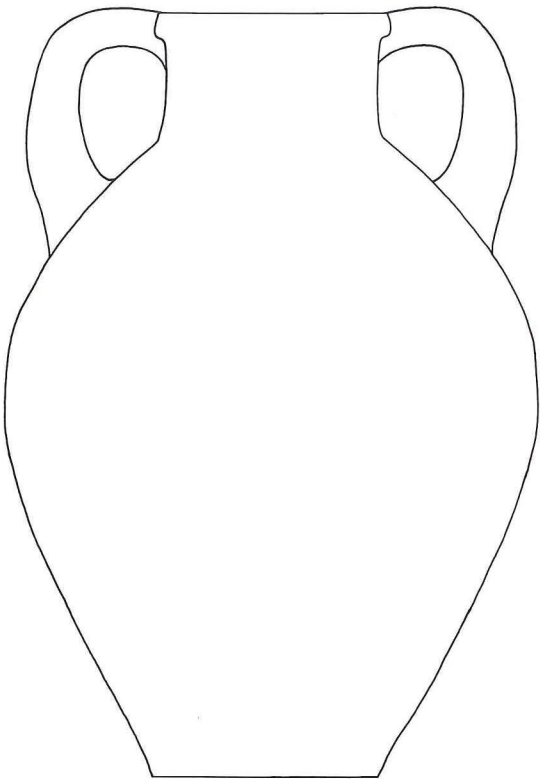


6. *Cylinder-necked*

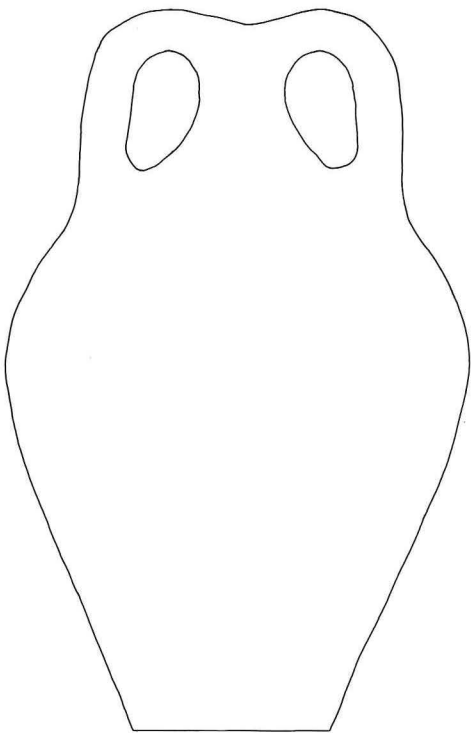
H AMPHORA



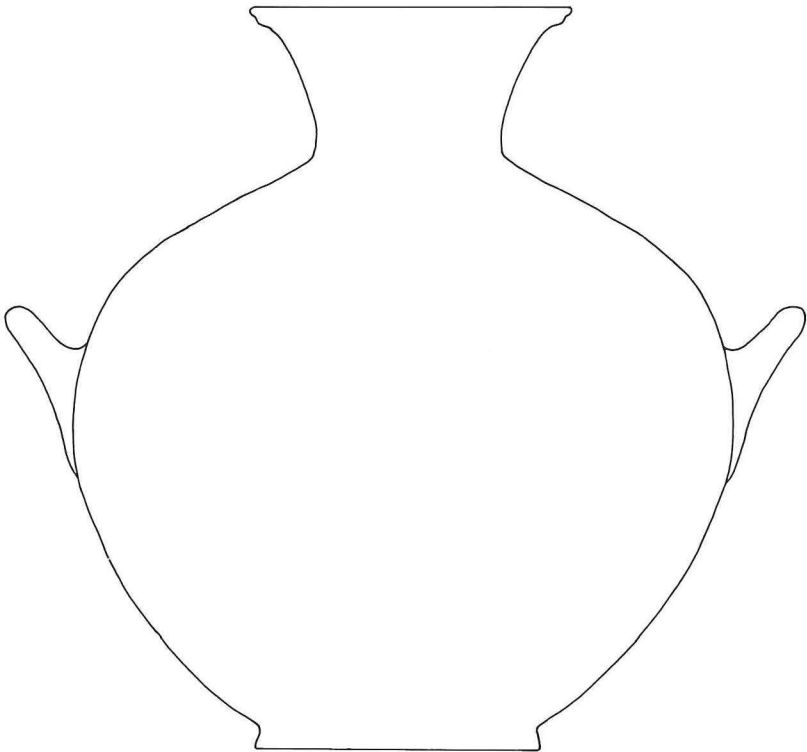
1. Small



2. Large

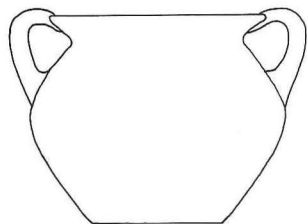


3. Oval-mouthed

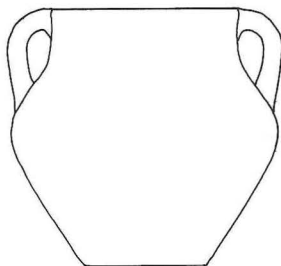


4. Belly-handled

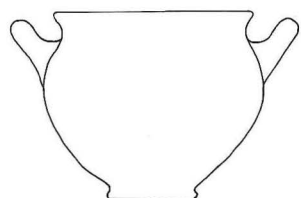
## I JAR



1. *Wide-mouthed*

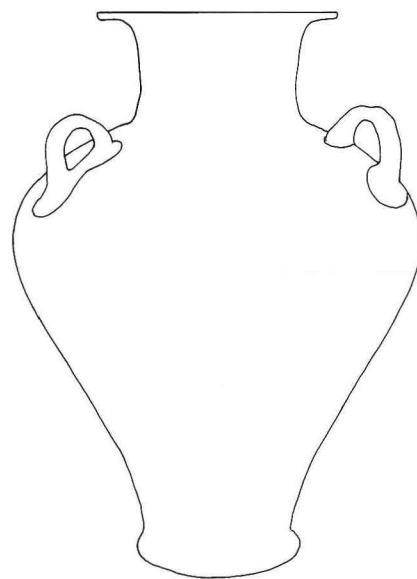


2. *Straight-necked*

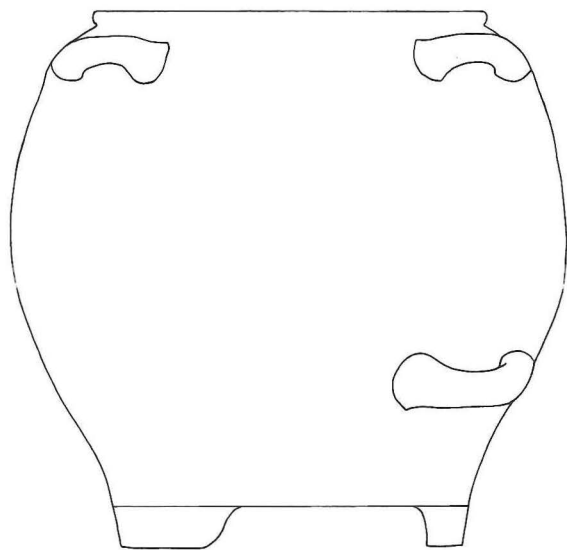


3. *Amphoriskos*

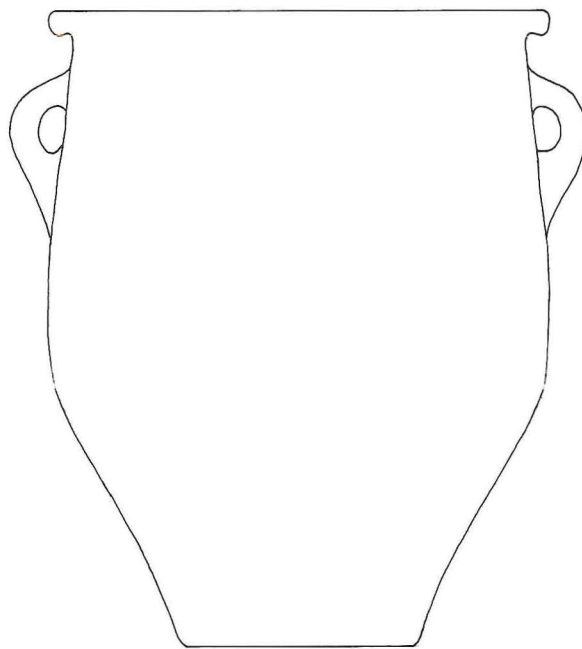
## K PIRIFORM JAR



## L STORAGE JAR



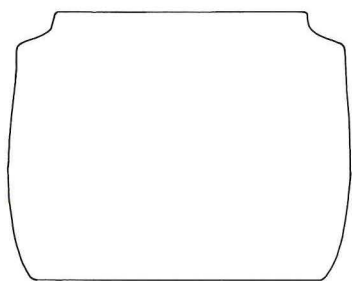
1.



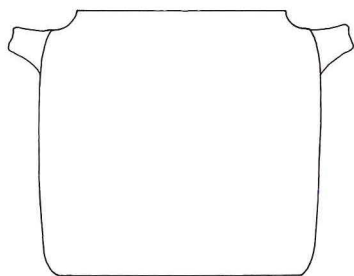
2. *Pithoid*



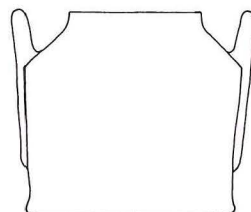
## M PYXIS



1. *Handleless*

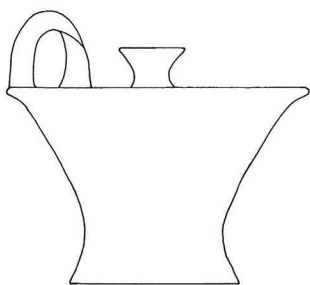


2. *Side-handled*

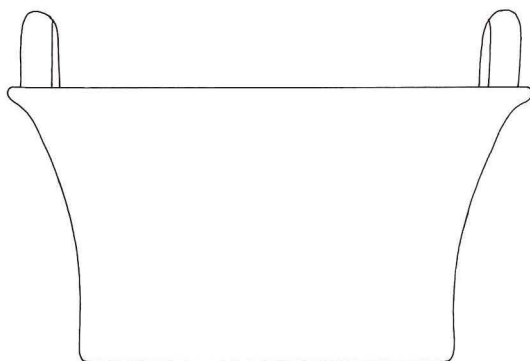


3. *Basket-handled*

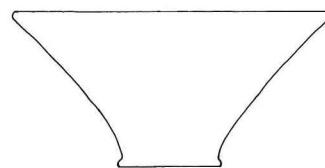
## N KALATHOS



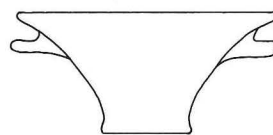
1. *Basket-handled*



2. *Basket-handled*

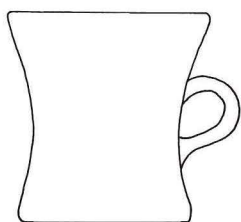


3. *Handleless*

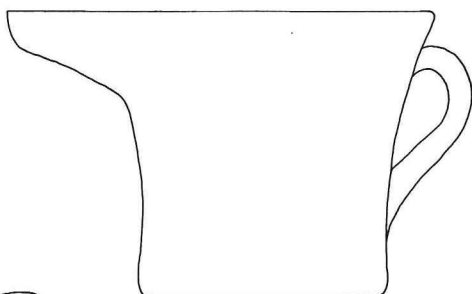


4. *Side-handled*

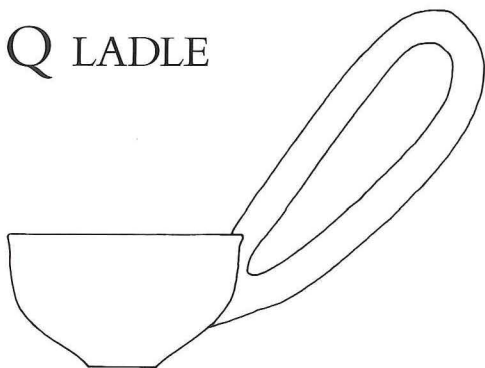
## O MUG



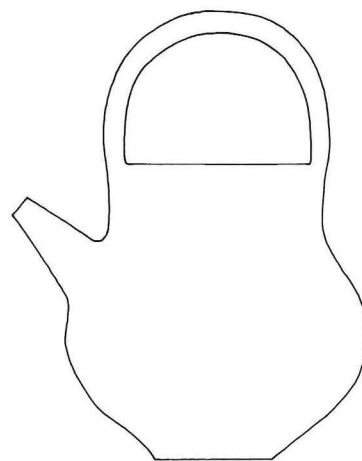
## TANKARD



## Q LADLE

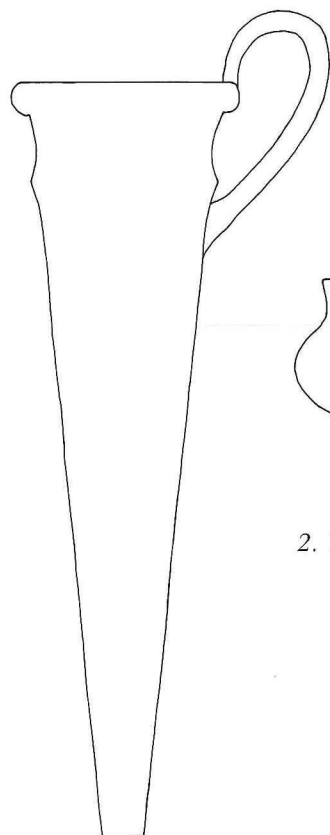


## P THELASTRON

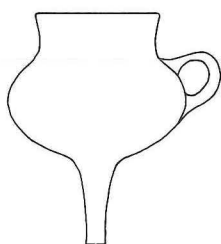


*Thelastron  
or feeding bottle*

## R RHYTON

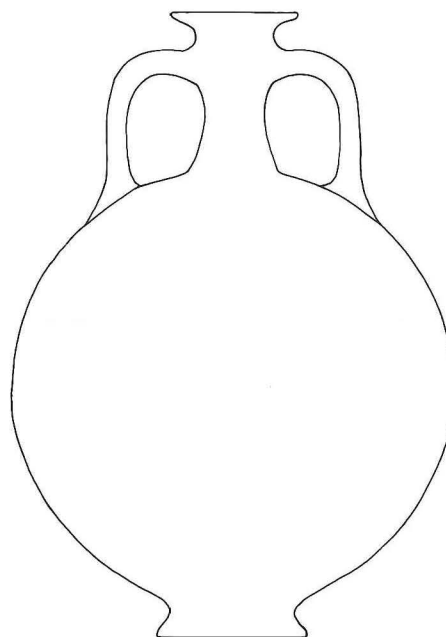


1. Conical

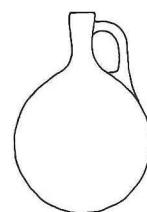


2. Wide-mouthed  
or funnel

## S FLASK

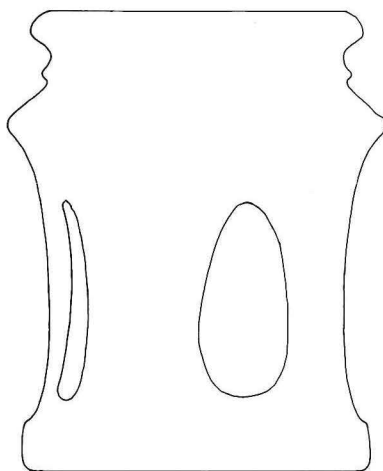


1. Minoan

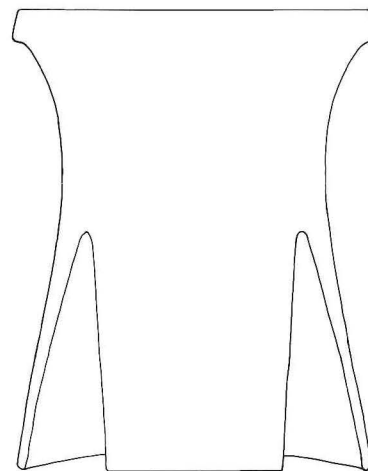


2.

## T STAND

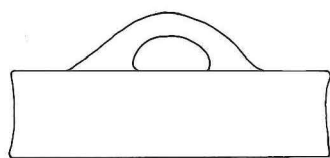


1. Fenestrated

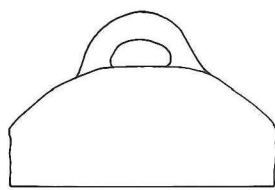


2.

## U LID



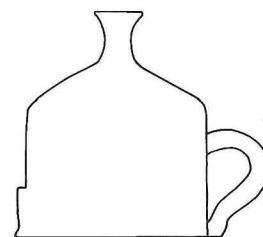
1. Flat



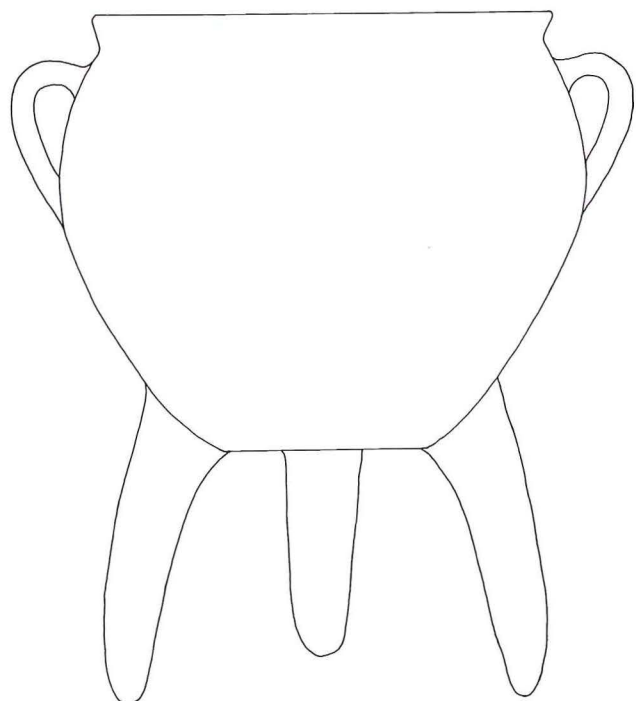
2. Domed

## V INCENSE BURNER

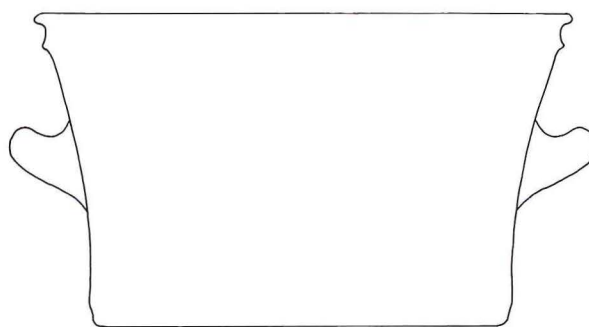
Incense burner  
or thymatirion



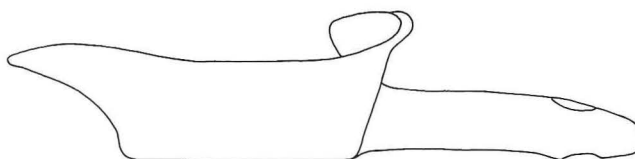
# X



2. Tripod cooking pot



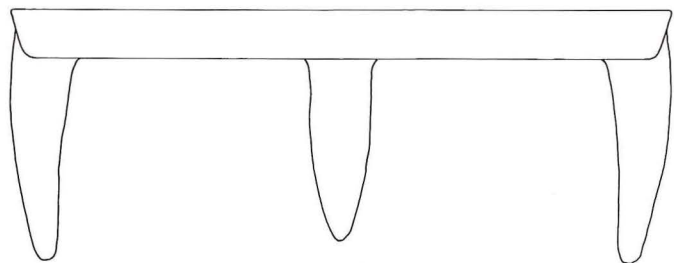
1. Basin



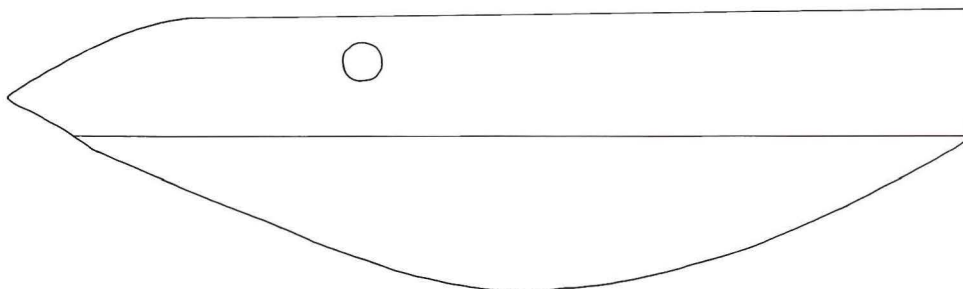
3. Brazier



4. Cooking tray



5. Tripod cooking tray



6. Cooking dish



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