THE MYCENAEAN AMPHOROID KRATER:
A STUDY IN FORM, DESIGN AND FUNCTION

Volume I: Text

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THE MYCENAEAN CHARIOT KRATER: 
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The focal point of this study is the distinctive group of Mycenaean clay vases known as chariot kraters, that is: amphoroid kraters decorated with scenes of chariot processions, which were produced in the 14th and 13th cent. B.C.

The chronological discussion considers the available stratigraphic and contextual information, which provides the basis for finer typological subdivisions of the material. The date of the introduction of the chariot krater, and the related questions of when both the amphoroid krater form and pictorial decoration in general first appear, is established.

Study of the origin of the vase form indicates that the Mycenaean form was derived from the Minoan clay amphoroid krater, which was itself indebted to a metal prototype. The typological development of the form is discussed and some refinements made to the existing classification.

A new method of design classification is proposed for the chariot scenes. The design element analysis provides a standardised descriptive vocabulary, which expresses the complexity, structure and range of variation of the scenes. The design analysis supplies the framework for an examination of two interconnected subjects: the stylistic and chronological development of the decoration, and the identification of individual painters.

The find contexts are the primary evidence for the exploration of the function of the amphoroid krater; this is supplemented by analysis of the character of the shape and comparative use of analogous shapes. The functional relationship of form and decoration, and its symbolic significance, is also considered.

The controversial issue of the production centres of the chariot kraters is addressed, reviewing both the archaeological and scientific evidence.

The two distinct but interwoven aspects of ceramic analysis, form and decoration, are considered in conjunction with the vase's function and the wider issue of provenance. By integrating these separate strands, it is possible to reach a clearer understanding of how and why this specialised vase form originated and developed within a broader historical context.
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"Making pottery should not be like climbing a mountain, it should be more like walking down a hill in a pleasant breeze" (Shoji Hamada).
ABBREVIATIONS

AK: Amphoroid Krater.
BM: British Museum, London.
BR: Base Ring.
CM: Cyprus Museum, Nicosia.
FM: Furumark Motif.
FS: Furumark Shape.
HM: Heraklion Museum.
LBA: Late Bronze Age.
LC: Late Cypriot.
LH: Late Helladic.
LM: Late Minoan.
SM: Stratigraphic Museum, Knossos.
WS: White Slip.
#: prefix indicating cross-reference to chapter of this study (e.g. #5.5 is Chapter 5, section 5).
*: prefix indicating cross-reference to catalogue entry in this study.
[ ]: square brackets enclose references to text, catalogue and illustrations within this study.
1. INTRODUCTION.

#1.1 SCOPE OF RESEARCH.

Mycenaean pictorial pottery, with its scenes of chariots, humans, animals and birds, has attracted much discussion, perhaps because, unlike the rows of Mycenaean pots with abstract decoration, these images do have the power to "ruffle the imagination" (Vermeule, 1964: 203). Such pottery was made throughout the Late Helladic III period, but this study takes as its focus an important and distinctive group of pictorial vases known as 'chariot kraters', the majority being amphoroid kraters bearing scenes of chariot processions. These vases were produced during the 14th and early 13th cent. B.C. and are found both in the Aegean and the Eastern Mediterranean.

My purpose in this introductory passage is not to present a 'history of research', but rather to sketch out the broad areas which have already been addressed in studies of pictorial pottery in order to set in context the scope of my own work and the themes I have explored. Specific contributions to the understanding of the various problems pertaining to pictorial pottery are given detailed consideration in the relevant chapters.

A fundamental part of any pottery study is typology, the analysis of the development of form and decoration, primarily as a tool for ordering the material and producing relative chronologies. Furumark's monumental study of this subject has provided a sound basis for Mycenaean pottery
studies (MP; CMP), and his framework has been subsequently modified and refined by new discoveries and new insights (e.g. French, 1964-67; MDP). The ordering and dating of pictorial pottery have built on Furumark's initial typology: the development of the shape (FS 53-55) and of the individual motifs (FM 1: man, 2: horse, 39: chariot, etc). What is perhaps surprising is that, despite recurrent disagreements in the dating of this material, there has been no full and detailed review of the archaeological contexts, the importance of which were clearly stated by Furumark (MP: 6), nor of the development of the amphoroid krater form in the light of the many new examples known. Nor indeed, has anyone ever seriously questioned the appropriateness of the system of classification by motif for understanding pictorial pottery.

These three basic aspects of the material are, therefore, considered here in detail. The evidence provided by archaeological context is presented as part of the discussion of the chronology of the material. The introduction of the chariot krater is considered as part of the larger picture of the early development of Mycenaean pictorial pottery [#2]. The origin and development of the amphoroid krater form is re-assessed [#3; #4]. For the third element, the decoration, a new method of design classification is proposed for the chariot scenes, though the same principles could be adapted for use with other complex iconographic images [#5]. The purpose of this design element analysis is to develop a standardised descriptive
vocabulary, and at the same time provide a means of expressing the complexity, structure and range of variation of the chariot scenes. This, in turn, supplies the framework for examining two interconnected subjects: chronological and stylistic development [#5.8-9], and the identification of individual painters [#A.1].

A major focus of interest has long been the iconography of the scenes, with numerous interpretations ranging from mythological and funerary to ritual, athletic and commercial activities; many of these ideas are usefully summarised by Vermeule and Karageorghis (MPVP: passim). This study is not primarily concerned with iconography, yet clearly the meaning of the scene — what it signified to producer and consumer — is integral to an overall understanding of the role of the chariot krater. For this reason the importance of considering pictorial imagery contextually is strongly emphasised.

By this I mean that a particular image should be analysed with reference to the range of contexts relevant to it; these are: the internal range and variation of the imagery within the ceramic repertoire; the relationship of images to one another; the broader relationship to images in other media; the possible relationships between form, function and content (i.e. between the use or uses of an artefact and its decoration); and finally, the problem of the significance of iconographic images when removed from their cultural idiom.

Keeping this concept of contextual analysis firmly in
mind, no separate chapter is devoted to the interpretation of the scenes, though some comments on individual scenes may be found in the catalogue. Indeed, it may be argued that the discussion of individual images or scenes devoid of context is inherently limiting. Thus, iconographic content is discussed within the contexts listed above: human gestures are analysed as an example of the use of design element analysis [#A.3]; the significance of the chariot scenes is considered in relation to the function of the krater form, with special consideration of the idea that the chariot krater was a "funerary product", and to its wide distribution to areas with different iconographic vocabularies [#6.4]; the strongly Aegean (as opposed to Eastern) character of the themes, motifs and conventions is drawn upon in the discussion of provenance [#7.2].

As well as providing a chronological frame of reference for the basic analysis of the material, the archaeological context can also shed light on another aspect of the amphoroid krater, its function [#6]. In asking this question: "what was the vase used for?", the focus of the study moves outwards, from producer to consumer. A coherent picture can be assembled of the use of the amphoroid krater in the preparation and consumption of liquids, but with the context of the activity varying according to geographical location.

The problem of the provenance of the chariot kraters, and by extension pictorial pottery in general, impinges upon both producer and consumer, since in a sense it addresses
the problem of the relationship between the two. This topic has attracted much scholarly attention; observations about the character of the material have been ranged against the evidence of fabric analysis in the dispute over Mainland versus Cypriot or Near Eastern production. The majority of scholars do now accept a Peloponnesian provenance on the basis of the chemical analyses. Yet there seemed still to be a place for a more synthetic review of the evidence, integrating the available scientific data both with basic archaeological evidence (the character of the material, patterns of distribution), and with more general models of ceramic production and mechanisms of trade in relation to the character of Mycenaean society [7]. On the one hand this serves as a response to the recent argument for more flexible production, which draws on the concept of itinerant craftsmen (MPVP: 8-9). More positively, it permits the presentation of an argument, supported by a nexus of evidence, for the existence of a highly organised ceramic industry producing and exporting specialised shapes, such as the chariot krater, to well-researched and receptive markets.

Specialist pottery studies have a reputation for being necessary but at the same time rather boring. But this is surely the result of the tunnel vision with which ceramics are often viewed, for pottery is not simply a pile of broken sherds to be dutifully catalogued and dated; it is, in common with all archaeological remains, a document of human activity and interaction, and thus an important source of
information about the societies which produced and used it. The scope of my study may best be expressed as radiating outwards, step by step, from very specific details to more general issues. Thus I have tried to combine a careful study of the form and decoration of the chariot krater with an understanding of how and why this specialised vase form originated and developed within a broader historical context.

#1.2 TERMINOLOGY.

The term "amphoroid krater" appears to have been coined by Furumark (MP: 26). The shape has been referred to by many different names. Myres called it an "amphora" (1914: 48), while Forsdyke described it as a two handled jar which is sometimes called a "Cypriote krater" (1927: 27). Evans called the clay versions kraters, but chose the term "hydria" for the bronze examples (PM II: 652; IV: 1016). The shape has traditionally been known as a "hydrie" in French (Vercoutter, 1956: 338; Ugaritica I: 98), although "cratère amphoroide" is also used (Karageorghis, 1965: 220). Catling's use of necked and neckless krater is equivalent to Furumark's amphoroid and open kraters respectively (Catling and Millett, 1965: 213). Note that the amphoroid krater must be necked (contra Anson, 1980: 109-27, and Lorandou-Papantoniou, 1974: 85-91, where it is used incorrectly with reference to open kraters). The metal version is usually referred to in the literature as either an amphora or a krater, though it is the same basic shape.
The name "amphoroid krater" has the advantage of precision and, like many of Furumark's vase names, it is in common usage. The combined use of the two words "amphoroid" and "krater" also succinctly describes the essential characteristics of the vase shape, which combines features of both the amphora and open krater.

The amphoroid krater (hereafter AK) is defined as follows: a necked vessel with two opposite rim to shoulder handles, and having a mouth with a diameter substantially greater than its base, but less than its maximum diameter.
#2. CHRONOLOGY.

#2.1 PREVIOUS WORK.

The first attempt to place pictorial pottery within a chronological sequence was made by Furumark as part of his much wider study of Mycenaean pottery (MP). There was little evidence available for external dating, and Furumark's sequence depends largely on a typological study of the AK shape, and on the development of both the pictorial and abstract motifs, the latter of which could be correlated with the non-pictorial sequence.

There was no further large scale study of the problem of the chronology of pictorial pottery until the publication of the Tiryns material (Slenzcka, 1974). Slenzcka set himself the tasks of solving the problem of the provenance of pictorial pottery and of establishing a secure chronology for it. The idea was to set up two chronological lines - one for Cyprus, the other for the mainland; his purpose was to test whether the sequences were stylistically similar and could therefore be said to have a common source.

The lack of stratified material and the fact that the Tiryns pieces only enter the picture during LH IIIB (i.e. there is relatively little early mainland material) must have been a severe hindrance to this approach. The eventual sequence, however, is based upon a small number of deposits and is by no means a complete corpus of the material. Some serious drawbacks in Slenzcka's approach - the dangers of
relying heavily on evidence from partially published deposits and of using the 'notoriously variable' piriform jar shape as a dating criterion - have already been pointed out by a reviewer (Rutter, 1975: 377-8). Slenzcka divides the pictorial pottery into fourteen 20 year phases, from 1420-1160 B.C. It should be noted that there is an inconsistency between the relative and absolute chronologies, since he dates the earliest pictorial to LH IIIA2 early, but assigns this the absolute date of c. 1420-1400, a date more usually associated with LH IIIA1 (Slenzcka, 1974: 152). The final ambitious classification depends more on stylistic assessment of the pieces, than upon the evidence from external dating [Appendix B]. Slenzcka fails to define the distinguishing features of his many sub-groups. Indeed it is arguable whether such fine dating is at all feasible for prehistoric material, unless the groups are defined strictly in terms of painters and workshops, and even then the chronological relationship between the groups need not be linear.

The most recent and substantial contribution to the study of this subject is Vermeule and Karageorghis' corpus of pictorial pottery (MPVP). Fully aware of the poverty of stratigraphic information, the authors state their intention to order the material according to "its own internal development", but to mention stratigraphic evidence where relevant (ibid.: 2). In practice, external dating evidence is rarely discussed, although it is said to support their stylistic groupings (ibid.: 26). Their groupings consist of
a tripartite division of both the LH IIIAl (Early I-III) and LH IIIA2 (early = Middle I; late = Middle II-III) periods into phases lasting between 15-30 years. The LH IIIB period (Ripe I-II) is not subdivided beyond the usual LH IIIB1 and IIIB2 phases, to which c. 30 and 50 years respectively are allotted [see Appendix B].

2.2 STRATIGRAPHIC AND CONTEXTUAL EVIDENCE.

A basic chronological framework can and should be provided by stratigraphic and contextual evidence. The subsequent study of the vase shape and decoration may lead to finer chronological subdivision of the material than can be inferred from the basic archaeological data. It is essential to be aware that the archaeological data available for dating pictorial material is restricted by a number of factors.

First, it is a sad fact that many pictorial vases have no specific provenance; about 25% of the complete chariot kraters have only a general provenance of 'Cyprus'. A high proportion of the Mycenaean vases in museums and private collections came from Cyprus, largely as a result of the extensive activities of antiquarians in the 19th and early 20th C., who collected large bodies of artefacts with scant attention to archaeological detail. Many of these antiquarians held consular posts in Cyprus - for example, Mr. Hamilton Lang, the manager of the Larnaca branch of the Imperial Ottoman Bank and subsequently British Consul. The best known of these antiquarians is undoubtedly General
Louis di Cesnola, American and Russian Consul for Cyprus from 1865. His energetic explorations of the island resulted in the large collection of Cypriot antiquities in the Metropolitan Museum of Art, New York.

The deposition of Mycenaean pottery in tombs heightened the problem, since antiquarians and tomb robbers alike were able to acquire complete vessels with little difficulty. The earliest organised excavations on Cyprus were themselves 'object orientated' and scarcely more scientific. Thus the material from the British Museum expeditions of the late 19th C. to Enkomi, Kourion, Klavdia, Hala Sultan Tekke and Maroni has no more specific context than a tomb number (ExCyp.).

The unfavourable condition of many of the tombs may thwart even the most careful excavator. Cypriot tombs were used for generation upon generation, and assemblages of artefacts belonging to particular burials are likely to have been disturbed by later interments. The tomb contents may also have been disturbed by flooding, or looting by robbers—often in antiquity. For example, the Kition tombs lay under a LC III house floor and had been plundered either before or at the time the floor was laid (Karageorghis, 1974: 16).

Relevant material from stratified settlement sites on Cyprus is limited; the most important evidence comes from Dikaios' work at Enkomi (1969-71). In dealing with evidence from Levantine sites one must beware of circular arguments, since these sites are not infrequently dated by reference to
the imported Aegean pottery. The majority of pieces come from old or incompletely published excavations.

The picture is hardly less gloomy for the Aegean where both amphoroid kraters and pictorial material of the 14th and early 13th C. are relatively uncommon finds. In the important Mycenae deposits published by French and her colleagues, the AK is not represented (although fragments are known from the site: *62, *179), and pictorial material is relatively rare. At both Mycenae and Tiryns pictorial material is not represented in any quantity until late LH IIIB and IIIC. The site of Berbati is a significant exception to this general pattern; many pictorial sherds and AK fragments, datable to LH IIIA2-B, were recovered during this excavation (Åkerström, 1987).

Despite the current limitations outlined above, the chronological structure for pictorial pottery should be established as far as possible on the basis of the archaeological evidence. This chronological framework takes priority over typological analysis, which is worked out with constant reference back to the admittedly limited external dating evidence. A proviso may, however, be inserted at this point - that the archaeological context may provide no more than a terminus ante quem for any single vase. An artefact may already be old at the time of its deposition; this is particularly the case, of course, for metal objects or seals, which might be treasured as heirlooms. Whilst pottery is inherently less likely to be kept in this way for a long period of time, it is possible that large and impressive
vessels, such as AKs with elaborate decoration, could have survived for longer than an often used domestic vase (1).

The AKs with contexts useful for dating are listed below, together with a description of the character of the deposit. The contexts of chariot kraters with wider dating parameters are briefly reported in the catalogue.

AMPHOROID KRATERS FROM DATABLE CONTEXTS.
(Note: The date given is that of the context.)

DHEKELIA (Koukoufoudhkia).
Panelled design with birds.

Context: Tomb 1. The presence of BR I beaked jugs is said to support a LH IIIA1 date for this vase (MPVP: 195; III.1)
According to Åström the tomb also contains later material; he mentions BR I and II, WS II, and LH IIIA2a. Only full publication of the tomb contents will clarify this.

Date: LH IIIA1-III A2 early (?).
SCE IV.1C: 685; MPVP: III.1.

ENKOMI, Cyprus.

Context: Tomb II (French)
This rich and intact tomb contained only 3 skeletons, which are considered to be roughly contemporary. The excavator dates the tomb no more precisely than LC IIa (1450-1350). The AK was found together with an open krater shattered in the NW corner of the chamber. The other vases in the tomb are BR I and II, WS II, and LH IIIA2a.

Date: LH IIIA2 early.

ENKOMI, Cyprus.

1) Bull; 2) Bird.

Context: Tomb 10:23, 200. Four burial layers, the two kraters in the second layer. The bird krater (200) lay with a group of material along the S.E. side of the S. part of the chamber (Group II), while the bull krater (23) lay with...
a mixture of vases and bones in the N. part of the chamber (Group III). The tomb was robbed and sealed in by the Ashlar building. The material in the tomb ranges from LH IIIAl-2, but it could not have been in use after LH IIIA2 late.

Date: LH IIIA1-III A2 late.

ENKOMI, Cyprus [*24].
Various small fragments.

Context: Settlement level IIA (early) according to the excavator. The following fragments from Area 1, room 142, between floors XII-XI: 2001/14, 2064/2 (chariot); 2064/1 (palm); 2001/5 (bull); 2001/1, 2001/10 (base); 2000/3, 2002/1 (body sherds).

Date: LH II B-III A2 early. Caution: these are small sherds from a limited area of excavation.

QATNA, Syria.
Running spirals.

Context: Shrine. Found in the Sanctuary of the goddess Nin-Egal in the "Salle de la Pierre Noire", together with a Mycenaean piriform jar and Cypriot BR ware. Recent research indicates that the sanctuary was destroyed during the reign of Amenophis IV, i.e. during the Amarna period, and not, as previously thought, in the preceding reign of Amenophis III (CMP: 111).

Date: LH IIIA2 late.
Du Mesnil de Buisson, 1928: 6-24;
Hankey and Warren, 1974: 142; MPVP: III.A.

ENKOMI, Cyprus [*25].
Octopus and chariot, "Zeus krater".

Context: Tomb 17:1. The tomb contained three burial layers. According to the excavators the first was LC I, the second early LC II, and the third and final single burial middle LC II. Åström, however, suggests that the first layer may continue into LC II on account of fragments of BR II. He does not, unfortunately, discuss the date of the middle burials, on the grounds that "attribution to separate burials is not certain". He dates the final burial to LC II B.
The krater was found with the final single burial, together with three Cypriot vases – BR II bowl (inside the krater), White Shaved bottle, and PWWM I bowl. In addition four precious metal objects were found: a gold bowl, a matching gold diadem and mouth-piece, and a silver pin.
The six Mycenaean vases in the earlier second burial layer are LH IIIA2, and thus offer a terminus post quem for the deposition of the krater.

Date: LH IIIA2.
SCE I: 541; SCE IC.1D: 688; MPVP: III.2.

ENKOMI, Cyprus [*118].
Various small fragments.

Context: Settlement level IIA (later). The following fragments from Area 1, room 142, on Floor X: 1987/1, 1987/2; under floor X to XI: 1986/1 (rim).
Date: LH IIIA2 late. Caution: these are small sherds from a limited area of excavation.

AYIA IRINI, Kea.
Bird (fragment).

Context: Domestic dump. From a large dump in the area of the N.E. Bastion of the fortification wall. The dump was overwhelmingly LH IIIA2 in character, containing much unpainted and red monochrome ware. From the same context came two small fragments of WS II and a body sherd of a second pictorial vase decorated with a row of shields.
Date: LH IIIA2.
unpublished.

IALYSOS, Rhodes.
Floral.

Context: Tomb III:3. Apparently nothing later than LH IIIA2 amongst the 8 preserved vases in the tomb.
Date: LH IIIA2.

IALYSOS, Rhodes [*78].
Chariot.

Context: Tomb LX. The tomb had been looted and only five vases remained. These were the krater, a knobbed piriform jar, a mug and two kalathoi. There was also a serpentine vase in the tomb.
Date: LH IIIA2 (as preserved)
Annuario 1923/4: 231-34; Mee, 1982: 11, 17, 134; MPVP : XII.3.
IALYSOS [*124].
Chariot (?local product)

Context: Tomb 27. The tomb contained a total of 12 vases, all dated to LH IIIA2.

Date: LH IIIA2.
Annuario 1923: 24: 151, figs. 74-75; Mee, 1982: 11, 128-129; MPVP: XII.6.

KITION (Chrysopolitissa), Cyprus [*52].
Chariot.

Context: Tomb with two burial strata, separated by a debris stratum. The upper stratum is dated LC III, the lower to LC IIb by the excavator. The vase comes from the lower stratum which contained WS II, BR II, Red Lustrous, much LH IIIA2 and some pieces dated LH IIIA/B. There were two pieces of LH IIIB date.

Date: LH IIIA2 (period of usage bordering onto IIIB).

TELL DAN [*57].
Chariot.

Context: Tomb 307 with two undisturbed burial phases (Hankey, pers. comm.), the details of which are unpublished.

Date: LH IIIA2-B (date range of the Mycenaean pottery), but full publication may permit closer dating.

ASINE, Argolid [*71].
Chariot (fragment).

Context: Settlement. Found in the Levendis Sector of the Barbouna area, Trench E, no. 65. Settlement debris with material of LH IIIA2 and IIIB, slightly more of the former.

Date LH IIIA2-B.

Numerous fragments of chariot kraters and other pictorial pottery were recovered on the Mastos settlement.
The contexts in which this material was found are as follows:

"COURTYARD": open area E. of the complex of rooms C-H, the eastern part of it sloping against the Terrace Wall. This area contained LH II layers associated with the period of use of the kiln, on top of which was considerable LH IIIA2 and some LH IIIB fill (Åkerström, 1987: 24-5, 49).

"DUMP": area beyond the Terrace Wall containing fill which had slid down from the "Courtyard". This was composed of much LH IIIB with some LH IIIA2 (Åkerström, 1987: 24-5, 49).

Åkerström notes that the "Courtyard" material is mainly LH IIIA2, that from the "Dump" mainly LH IIIB; this is a helpful guide to dating, but the disturbed and eroded nature of deposits should be kept in mind.

CORINTH [*145].

Chariot.

Context: Pit of "hard, clayey brown earth" in the area of the Julian basilica below the Byzantine fill. A selection of this material was published, with nothing later than LH IIIB1.

Date: LH IIIB. (probably LH IIIB1, but not fully published). Weinberg, 1949: 148-57; MPVP: IX.1.

TELL ESH-SHARI'A [*162]

Chariot (fragment)

Context: from Stratum X (the latest stratum with Mycenaean pottery) of an Egyptian residency, dated to the early 13th c.

Date: LH IIIB1 (i.e. early 13th C.) Oren, 1978: 14.

MYCENAE, Argolid [*179].

Chariot (fragment).

Context: Poros Wall deposit. South of the Perseia fountain House, between the tombs of Aegisthus and Clytemnestra, the Poros Wall is a well-built wall of well-cut and laid poros blocks. To the E. of the wall at varying depths (but above lowest level of blocks) were found the chariot krater fragment and inscribed stirrup jars.

Date: LH IIIB (not a closed context). Wace, 1953: 6, pl.1b; MPVP: IX.2.
ENKOMI, Cyprus [*169].
Chariot.

Context: Tomb 11:33 (Swedish). The tomb contained three burial layers, the krater being in the latest burial layer in the chamber. The layer is dated to "within LC IIC". It contained 15 IIIB vases, an RS bowl, and only one IIIA2 piece. A terminus for the use of the tomb is also suggested by a single burial in the dromos, which was accompanied by two LH IIIB vases.

Date: LH IIIB.  
SCE I: 510-25; SCE IV.1C: 691; MPVP: V.18.

ENKOMI, Cyprus [*119-121, *254].
Various small fragments.

Context: Settlement level IIB. The following fragments: 218/3; 5492/1; 5301/1; 1696/1; 2573/3; 3227/1 (abstract); 5493/1 (animal).

Date: LH IIIB. Caution: these are small sherds from a limited area of excavation.

SUDA, Crete [*176].
Chariot, loop-handled krater.

Context: destroyed tomb near Suda Bay. The pottery recovered was LM IIIB, and included other Mycenaean pieces.

Date: LH IIIB.  

ENKOMI, Cyprus.
Bull.

Context: Tomb 18, side chamber 6 (Swedish). The excavator suggested that the side-chamber was a secondary construction into which the earlier burials were moved before the deposition of the upper burial layer. The pottery in the side chamber is indeed similar in character to that from the lower layer in the chamber. The upper stratum in the chamber is dated to LH IIIC (LC IIC end) by French and Åström, the lower stratum (and the side chamber) to LH IIIB2. The lower stratum is characterised by the large quantity of Aegean pottery, a feature shared by the contemporary Kition Tomb 9. The upper stratum, by contrast, is distinguished the numerous gold and bronze finds.
Date: LH IIIB2.  
French and Aström, 1980.  
SCE I: 546-58; SCE IV.1C: 691; MPVP: V.40.

KITION, Cyprus.  
Abstract.

Context: Tomb 9: 122,A-F. Intact tomb containing two distinct burial layers (upper and lower). The krater fragments come from the lower stratum. The two layers have been correlated to the mainland sequence by French and Aström. They date the upper layer with its "Mycenaean IIIB" and absence of WS or BR to IIIC early (LC IIC end), and the lower layer to LH IIIB2 (LC IIC). In common with Tomb 18 (Swedish) the earlier layer is characterised by the presence of much Aegean pottery, but few examples of BR or WS. Although the majority of vases in the tomb clearly date to LH IIIB, fourteen pieces were identified as earlier. On stylistic grounds the AK should be numbered amongst this earlier, LH IIIA2 material.  
(Brief mention may be made of several other possible AK fragments from the same context. No.106, body sherd with an octopus tentacle: this could be an AK fragment, but neither profile nor decoration are especially informative. No. 103, body sherd: not an AK, but more likely a piriform jar to judge from the placement of the decorated zone high on the shoulder with a combination of bands and lines below.)

Date: LH IIIB2.  
Karageorghis, 1974: 55, pls. LVI, CXLV.  
#2.3 RELATIVE CHRONOLOGY.

In discussing the chronological framework for pictorial material, it is important to understand the relative chronological system by which Mycenaean pottery is dated and precisely how it relates to pictorial pottery. The pictorial material is considered within the dating system for Mycenaean pottery established by Furumark (MP) and refined by French (1964, 1965, 1966, 1967). These chronological phases of the Late Helladic or Mycenaean period (LH IIIA1, IIIA2, IIIB1, IIIB2) are based primarily on the observed development of the ceramic material from a series of deposits. Each of the phases is estimated to have lasted upwards of 40-50 years.

An important fixed point within this sequence derives from the Tell el Amarna pottery. The great value of the Mycenaean pottery from this site in Egypt lies in the fact that the deposit, although very fragmentary, is large and homogenous, and that in terms of absolute dating it must be placed within the reign of Amenophis IV (Akhenaten) c. 1375-1350/40 (2). Such precise chronology (at least in Aegean terms) is possible because of the unusual history of the Amarna site, which was built by the heretic pharaoh Akhenaten and was abandoned as a palatial centre early within the reign of his successor, Tutankhamen. (Hankey and Warren, 1974: 142-52; Hankey, 1980: 38-49). Given the character of Egyptian society, it is considered probable
that the Mycenaean pottery should be associated with the palatial occupation of Amarna, as opposed to the later use of the site by state workers (Hankey: pers. comm., 1984).

In terms of the Mycenaean pottery sequence the Amarna material falls into the LH II IA2 phase, which is well represented by the published deposits from Mycenae. (French 1965: 159-202). Both French and Hankey share the view that the material can be dated to late in the LH IIIA2 period, although Hankey has also noted the occurrence of features "which when found elsewhere, are usually called IIIB" (Hankey: pers. comm., 1984).

The occurrence of mature BR II and WS II at Amarna is also useful since this shows that these Cypriot wares are in use at the same time as LH IIIA2 late. The overall evidence for Cypriot chronology in the 14th-13th C. has been discussed by Åström (SCE IV:1C). Very briefly, the main characteristics noted by Astrom are as follows - LC IIA contains a wide range of Cypriot wares together with LH IIB-IIIA2 early, LC IIB corresponds at least in part to Amarna with LH IIIA2 late and mature BR II and WS II, while LC IIC is characterised by the presence of LH IIIB pottery, Rude Style, larger quantities of the Cypriot wheel made wares, and less BR and WS. It should be noted that Mycenaean pottery is an important element in dating the ceramic assemblages of the Late Cypriot period.
#2.4 THE EARLIEST PICTORIAL: LH IIIA1 OR IIIA2 EARLY?

A natural starting point for a chronological study is the evidence for when the AK was first produced in the Mycenaean repertoire. Furumark dated the earliest known AK transitionally between LH IIIA1/2 on both stylistic and archaeological grounds (CMP: 111). The krater, decorated with abstract spiral design, was discovered in a sanctuary dedicated to the goddess Nin-Egal at Qatna in Syria, in association with a Mycenaean 3-handled jar and Cypriot BR cups, all of which lay in a room containing a black aniconic stone or baetyl (Du Mesnil du Buisson, 1928: 21).

When Furumark wrote the Qatna sanctuary was thought to have been destroyed in the reign of Amenophis III, that is, during the period when LH IIIA1 or IIIA2 early pottery was current. Following more recent studies, the Qatna destruction has now been redated to late in the reign of Amenophis IV (Akhenaten) (Hankey and Warren, 1974: 142). According to this new date the material from the sanctuary now has a terminus ante quem of LH IIIA2 late rather than transitional LH IIIA1/A2 early. Thus, while the krater may appear stylistically early (Furumark placed it in a category of its own, FS 52), the archaeological context is rather less helpful than previously thought for dating.

With the exception of the Qatna krater, Furumark dated the first group of AKs (FS 53) to LH IIIA2 early. The same date is given to the earliest phase of pictorial designs, and of the 21 motifs classified as having a LH IIIA2 early...
version, 7 occur in pictorial contexts (FM 1,2,7,11,15,18,39). By contrast, Vermeule and Karageorghis have dated about 30 pictorial pieces, including a number of AKs and chariot scenes, to the LH IIIA1 period (MPVP: 11-25). Before turning to a discussion of the evidence for LH IIIA1 production, it should be noted that the discrepancy between Furumark's and Vermeule and Karageorghis' dating is at least in part due to the latter authors' treatment of chronology.

The chronological scheme offered by Vermeule and Karageorghis makes the important fixed point of Amarna (c.1375-1340) contemporary with their Early III and Middle I phases, which are respectively dated by them to LH IIIA1 and IIIA2 early (MPVP: 12). This is at variance with the widespread agreement amongst other scholars that the "Mycenaean pottery from Amarna is characteristic of the LH IIIA2 late phase, as discussed above (Hankey, 1973: 128-36; 1980: 38-49). Vermeule and Karageorghis further observe the occurrence of the bivalve shell design both in their Early phase and at Amarna, and suggest "that by this criterion Early III must overlap the start of the Amarna Period" (MPVP: 20, n.37). The examples they refer to from Amarna are not pictorial, indeed none is recorded from the site, but abstract designs on piriform jars. While the use of the bivalve shell in rows and groups is a typical early feature, which occurs only sporadically within later pictorial designs, the same cannot be said for abstract Mycenaean pottery where the motif continues in common use from LH.
III-A-C (MP: 312-4). The equation of Amarna with LH IIIA1 and IIIA2 early instead of LH IIIA2 late is, therefore, unconventional, and in the absence of new supporting evidence such a serious modification to Mycenaean pottery chronology must be regarded as unacceptable.

What then is the chronological evidence for LH IIIA1 production? Very few of the vases dated by Vermeule and Karageorghis to LH IIIA1 come from datable contexts. The context of the krater from the Qatna destruction has already been discussed. A LH IIIA1 date is also assigned to another AK from an accidentally discovered tomb at Dhekelia (Koukoufouthkia). The presence of BR I beak spouted jugs in the tomb is drawn upon as evidence for the early date of the krater (MPVP: 195). The preliminary reports on the tomb do not list the contents in full, nor do they mention the number of burials or whether the tomb had been disturbed (AR 1957: 25; BCH Chroniques, 1963: 531-2). Without this information it is not really possible to say anything conclusive about the chronology of the tomb. According to Åström's list of the unpublished contexts, the tomb also contained later material (SCE IV.IC: 685 mentions BR I-II, WS II, LH IIIA2 late).

The abstract pottery of LH IIIA1 is easily recognisable, consisting as it does of a uniform but limited range of shapes and motifs. A small number of pictorial vases can be dated to LH IIIA1 on the basis of vase shape or contextual evidence, but it is difficult to relate any of the typical motifs of LH IIIA1 to pictorial designs.
Although early pictorial material is known in only small quantities on mainland sites, it can contribute to the question of the date of the earliest pictorial pottery.

The type deposit for the period, the Atreus Bothros at Mycenae, contains only one small pictorial fragment depicting a fish (French, 1964: pl.69(c)1). The settlement material of LH IIB-IIIA1 from Asine includes a closed vessel with birds on the shoulder (Frizell, 1980: 113), and a LH IIIA1 destruction deposit at Ayia Irini, Kea has a large jug with a bird on the shoulder (unpublished). These isolated fragments acquire increased significance when considered in relation to the more plentiful pictorial material from Berbati. The LH IIIA2-B deposits from this site include a great number of AKs, many bearing chariot scenes. In contrast, amongst the LH IIIA1 material no fragments of AKs or complex pictorial designs were identified, but the pictorial material mirrors that from Asine, Mycenae and Kea, being restricted to three fragments with birds (Åkerström, 1987: 64). The limited stratigraphic evidence suggests then that the bird and fish motifs represent the earliest expressions of ceramic pictorial art, and it is perhaps no coincidence that it is precisely these pictorial designs which often appear on Minoan pottery.

Additional pictorial scenes are also assignable to LH IIIA1 on the criteria of context and/or vase shape. A beaked jug with octopus and fish from a tomb in the Athenian Agora may be dated to LH IIB/IIIAl, through both context and shape.
Two jugs from Thebes and Attica (?) are also datable to LH IIIA1 (MPVP: VII.5,6). Both are decorated with schematic birds, which might have been difficult to date on purely stylistic grounds. The Thebes piece is also unusual, but all the more securely datable, in that it combines a typical LH IIIA1 motif, a lily with spiraliform petals, with the bird.

Two other jugs with pictorial decoration may be LH IIIA1 or IIIA2 early. A jug with cut-away neck from Melathria, Laconia has an isolated human figure between curved stripes, the normal decoration for this shape. The piece has been dated to LH IIIA1 (Demacopoulou, 1971: 94-100) or LH IIIA2 early (MPVP: 79 with n.2). A body sherd of a jug from the Menelaion with a row of fish (MPVP: IX.117) has been identified as belonging to a LH IIIA1 ewer (Crouwel and Morris, 1987: 41-2).

Recent finds from a wealthy, intact tomb at Kalavassos, Cyprus may also add to the small corpus of LH IIIA1 material. An open krater with fish has been illustrated and reference is made to a second krater decorated with lilies (BCH Chroniques, 1984: 929 and fig.86). Assessment of this material must await the full publication, but if it is a closed LH IIIA1 group, this will be important for the early history of pictorial pottery. On the criterion of shape alone this krater, and several similar pieces from Mycenae and Tiryns, could belong to either LH IIIA1 or IIIA2e (3).

To sum up, the small amount of pictorial material securely datable to LH IIIA1 consists largely of fragments
decorated with fish and birds; no fragments with chariot designs or other complex scenes have been recorded. The assignment of examples of the latter material to LH IIIA1, as suggested by Vermeule and Karageorghis, is based solely on their stylistic assessment of the material. The evidence currently available suggests rather that bird and fish designs dominate the earliest phase (LH IIIA1) of Mycenaean pictorial painting, while the expanded range of pictorial scenes appears only in the subsequent phase. Concomitant with the increased complexity of pictorial design in LH IIIA2 is the use of a specialised and relatively uncommon shape, the AK. This represents a change from the preceding phase when pictorial designs were painted on shapes typical of the LH IIIA1 repertoire, such as the open krater and jug.

2.5 CHRONOLOGICAL DEVELOPMENT: LH IIIA2-B1.

The evidence suggests that the first group of chariot kraters belong, as Furumark believed, to LH IIIA2 early. The precise character of the pottery of this phase remains, however, somewhat elusive. The LH IIIA2 period was sub-divided by Furumark, who recognised that there was considerable stylistic development within the LH IIIA2 period. It is well worth recalling Furumark's own words on the subject:

"I wish to stress that this subdivision of a IIIA2 period must not be taken too literally. The development is steady and uniform, without real innovations, and in many cases the differences are rather subtle." (CMP: 101).

Nor have more recent finds and studies been able to shed further light on the overall character of LH IIIA2.
early. French points out that:

"some sort of intermediate stage in the development of individual types of pottery between LH IIIA1 and LH IIIA2 late must be postulated, but it is not yet obvious whether it formed a totally distinct phase. So far, no groups of habitation pottery from Mycenae can be assigned to it" (1964: 160).

More recently the same author has referred to the problem of a "lack of a well defined group of LH IIIA2 early" (1977: 137). In view of the rather uncertain nature of this phase it is important to emphasise that the dating of pottery, both abstract and pictorial, to LH IIIA2 early depends primarily not on archaeological but typological criteria—the development both of the vase shape and the decoration.

The LH IIIA2 late period is, by contrast, relatively well-known through the Amarna material and by a series of deposits at Mycenae, where French has identified developments within LH IIIA2 late. The AK is not represented in any of these deposits, although it has been referred to at Amarna by both Furumark and Hankey (CMP: 57; Hankey, 1973: 129). The identification may stem from the British Museum catalogue, where fragments A.993,1-4 are described as "two handled jars" and "pedestal bowls with necks", and are compared both for shape and decoration with an AK from Enkomi, BMC 387 (Forsdyke, 1925: 185). Study of the profiles of these fragments shows that they belong to a piriform jar (examined with V. Hankey in BM). What these LH IIIA2 late deposits do provide, however, is evidence for 1) the vase types which one might expect to find in association with an AK of the same date, and 2) the characteristic motifs of the phase, which can be compared with the subsidiary motifs in
pictorial scenes.

Distinctions between what may be and what must be LH IIIA2 late and IIIB1, and the main characteristics of LH IIIB1 and IIIB2 have been discussed extensively by scholars working in the Argolid (summarised in MDP: 67, 93, 121). Recent studies have also pointed to the regional character of the latter part of LH IIIB, emphasising the restriction of some IIIB2 features to the Argolid (Sherratt, 1980: 175-202). The AK seems not to have outlived the long LH IIIB1 phase, though one or two examples do occur in LH IIIB2 contexts [#2.2]. In addition the AK and its characteristic decoration, the chariot scene, become less common during LH IIIB1, with the loop handled krater (FS 281) gradually taking its place as the favourite vehicle for pictorial scenes (4). That the two shapes co-existed for some time is clear from the sharing of general stylistic traits, and perhaps by the attribution of both types to individual artists (MPVP: 176). Continuity of production is also attested by the results of fabric analysis [#7.5].

Like the AK the loop-handled krater type may initially have been a specialised product. In LH IIIB1 the majority of examples, especially those with pictorial decoration, come from Cyprus and the Levant. On the other hand, its distribution on the Mainland is never as restricted as the AK, and by LH IIIB2 it becomes relatively common shape, probably replacing the open krater (MDP: 115, 121).

Outside of the mainland Mycenaean tradition the AK form, often with pictorial designs, took on a new lease of
life during late LH IIIB-C. There is a new version of the shape, the 'Kos-Miletus' type, which has an Eastern distribution (5). On Cyprus too the AK is not completely forgotten; although a version of the loop handled krater is the primary shape of the Rude or Pastoral Style, there are also a few AKs in this style (6). In addition, the basic AK shape survives in various plain and simply decorated Cypriot fabrics [#6.3.2].

#2.6 CHRONOLOGY AND CLASSIFICATION.

As a final part of the discussion on chronology it will be useful to outline briefly the classification system used in this study and its raison d'être. I have not adopted a system, such as that used by Slenczka, and to some extent by Vermeule and Karageorghis, which divides the material into numerous sub-phases within the usual Mycenaean chronological framework [summarised in Appendix B]. Fine subdivisions of the material (such as Slenczka's groups occupying 20 year slices of time, or Vermeule and Karageorghis' division of LH IIIA1 into 3 phases) raise more problems than they solve. Is it really possible to justify such precise dating when in some cases we cannot even agree about the broader chronological ordering of the material? To classify material within 15-20 year blocks of time implies the identification of phases which are shorter than the probable working life of an individual, yet we have scarcely even reached the stage of being able to trace the output of the individual through time. In addition, the existence of a chronological
system with many phases and subdivisions invites us to try to accommodate every piece, indeed every tiny fragment within it, despite the fact that it may sometimes be more appropriate to offer a more general date range.

Within the context of the problems referred to above I have chosen to classify the pictorial material covered by this study in terms of the basic phases recognised for non-pictorial pottery, rather than to create yet another new framework. The overall characteristics of these phases are presented in #5.9 and the dating of individual pieces is indicated in the Catalogue. Direct comparison can be made with the dates suggested by Slenczka (1974), Vermeule and Karageorghis (MPVP), by referring to the Concordance.

Several advantages are presented by the chronological framework offered here. It emphasises the fact that pictorial pottery although a special and elaborate product, is an integral part of the Mycenaean ceramic repertoire. It also provides a more flexible framework for ordering the material. For example, a stylistic development is recognisable within LH IIIA2 late (here termed a and b). The development of pictorial pottery is such that many design elements continue or recur throughout LH IIIA2 late, while a few only are characteristic of one or the other part of it. Naturally, not all fragments can be precisely assigned, in which cases a more general date of LH IIIA2 late is offered. While there is no inherent reason why Slenczka or Vermeule and Karageorghis could not have adopted this approach within their systems, (e.g. dating a piece simply to Early, as
opposed to Early I, II or III), in practice, the lure of the subdivisions is too great, and every piece is precisely assigned. It seems that only explicit rejection of such fine subdivisions can encourage the use of a more flexible system, within which different levels of chronological precision can co-exist.

This is not to say that sub-groups of material cannot be recognised in the pictorial corpus. On the contrary, part of the fascination of pictorial designs is the wealth of detail available for such analysis. Small groups of work by individual painters are recognisable [#A.1], as well as a more general nexus of stylistic links between vases. Whether the placing of the material into a simple linear order on the basis of these links reflects ancient reality is another matter. For the moment it seems preferable to indicate groups of stylistically related material within the basic chronological phases; these are envisaged as clusters of material having flexible inter-relationships rather than existing in strict linear formation.
Suggestions as to the origin of the AK shape have been many and varied. They divide basically into two schools of thought, the one suggesting a metal prototype, the other understanding the shape in terms of a purely ceramic development.

The idea of a metallic prototype originated with Evans, who related the clay AK to the rims and handles of two bronze 'hydriai' found in Cyprus, which he reconstructed to form a similar shape (PM II: 652, fig.417). In his detailed study of bronzework in Cyprus, Catling argued that these bronze vessels belonged to a much later date (CBMW: 157-161). These important bronzes are fully discussed below [#3.2.1]. Catling does, however, advocate a metallic prototype for the clay kraters, believing it to be, as yet, unrepresented in the material record. (CBMW: 159). A connection with metalwork for both shape and pictorial decoration is one of several influences suggested by Vermeule and Karageorghis, who refer to the "silver krater" from Shaft Grave IV at Mycenae (MPVP: 12). The shape, with two horizontal loop handles on the shoulder, should more accurately be described as a two-handled jar. In an earlier work Karageorghis seems to suggest a circuitous route of transmission, with the AK having come to Cyprus ultimately from Syria and Egypt via Crete (1965: 223).

The main proponent of the purely ceramic derivation of the form, (while acknowledging a general metallic influence
on certain features), is Furumark. According to him the AK is derived from the pithoid or piriform jar (MP: 19). The piriform jar is a closed shape, its three handles neatly positioned for securing a cover. The AK, by contrast, is an open shape and cannot be said to be functionally derived from the piriform jar (7). The general similarity between the two shapes can be accounted for by the fact that they belong to the same "family" of shapes, Furumark's conical-piriform class (MP: 18-27).

The influence of the Palace Style has been mentioned as a contributing factor to both shape and decoration by several scholars (Immerwahr, 1945: 544; MPVP: 12). This viewpoint has recently been reiterated by Åkerström, who (while implicitly rejecting metallic influence) takes the Minoan AK to be part of a series of large vases, which were "conditioned by and grew up around the Palace vases" (1987: 46, 92).

A vase from a LM II deposit at Kommos has been referred to as a prototype AK (Watrous, 1978: 167-70, fig.2, C81; followed by Betancourt, 1985: 153, fig.133k). This is improbable, for unlike the earliest AKs, this fragmentary vase is small and the form poorly defined; although unusual, the piece is more closely related to other LM II bowls in the deposit than the stately AK.

Finally, Popham lists the Minoan AK amongst the new shapes of LM III (1967: 62), a slightly ambiguous statement which others have taken to mean that he regards it as a LM III creation (Kanta, 1980: 273; Melas, 1985: 109).
Elsewhere, he states explicitly that he considers both the Minoan and Mycenaean versions to be indebted to metallic prototypes (DPK: 76).

It seems to be generally assumed that both the Minoan and Mycenaean versions of the shape share a common origin, whether ceramic or metallic. There is, however, some evidence to suggest that the immediate inspiration for the Mycenaean AK was its Minoan ceramic counterpart. In order to understand the early relationship between the two series, it will be useful to have a clearer picture of the character of the Minoan AK.

#3.1 THE MINOAN CONNECTION.

The earliest known examples of the Minoan AK can be dated to LM II-IIIA on a combination of contextual and stylistic criteria. Two large and impressive examples of the shape were found at Tylissos. Standing to a height of nearly 60 cms., both vases have short concave necks, a distinct collar or ridge at the base of the neck, and a conical lower body. The main elements of the decoration are as follows:

Tylissos 1: neck: painted with reserved wavy band; repeated zones of opposed joined semicircles cover most of the body (Hazzidakis, 1934: pl.XXV,la).

Tylissos 2 [FIG.1]: neck, a row of simplified iris motifs with pairs of dots between; large "sacral ivy" motifs cover the upper two thirds of the body, and below a series of body bands is a zone of opposed joined semicircles (8).

Both the large size and stately decoration of the Tylissos vases link them closely with the Palace Style tradition. They are similar in size to the smaller Palace Style jars (c. 50-60 cms.). The structure of the decoration
and individual motifs are also comparable. Parallels are readily found for a repeated motif in horizontal registers (Niemeier, 1985: pl.8, XVIIIAl), and for an enclosing zone of decoration (i.e. the decorative zone extends below the maximum diameter, thus creating an enclosing rather than dividing effect) with additional narrower zones of decoration below (ibid.: pl.4). For the individual motifs, variations on the reserved wavy band commonly decorate the necks of Palace Style jars, and the joined semicircles, used on both the Tylissos kraters, are especially common in the lowest decorative zone of the jars (ibid.: 115, motif 32 "verbundene kreisbogen"). Like the Palace Style jars to which they have been compared, the Tylissos kraters are dated on stylistic grounds to LM II-IIIA.

A fragmentary AK from Knossos is well-known for its pictorial decoration of diving fish [FIG.2; HM 2599]. Part of the neck and upper body are preserved. There is a slight ridge at the base of the neck. On the neck a row of iris motifs with central dot and quirks in the interstices. On the body remains of four fish dive gracefully downwards against a background of marine vegetation. A basket rhyton painted with an almost identical scene and clearly by the same hand later came to light in an LH III tomb at Varkiza in Attica. Theocharis wrongly attributed both vases to the Marine Style of LM IB (1960: 266-9), a view corrected by subsequent studies of this special class of pottery, whose range of motifs include dolphins but not fish (Mountjoy, 1984: 213). Both the AK and the rhyton are datable to

A restorable AK and a second fragmentary example, dating to early LM III A, were found in the area of the South Propylaeum of the Palace (DPK: 56-7). The restored vase has a deep zone of lozenge chevrons with single foliate band above and double below, and a row of iris on the neck [FIG.3; HM 5184]; the fragmentary piece has filled tricurved arch on the body, and the neck is decorated with wave pattern [FIG.4; SM: Evans boxes 562, 781].

From the joint Swedish-Greek excavations at Kastelli-Chania the only evidence for the shape in an LM II context (Room A) is a possible neck fragment decorated with a foliate band. The shape is relatively common in LM III A contexts, with 30-40 examples. Of special interest are two complete monochrome AKs from a LM III A I pit (5.001). They conform to the basic shape of the examples already mentioned. These vases are notable for the fact that they are not elaborately decorated, but simply covered in a monochrome paint; in addition, they do not exhibit the "metallic" features of many other Minoan AK's, such as the moulded neck and elaborately ribbed and knobbed handles. Amongst the decorated AKs many of the features are familiar: for example, the wave pattern on the neck (and sometimes on the rim), and a foliate band or row of quirks on the shoulder. In other respects the Kastelli material is distinctive; in particular, the neck is often solid painted, the handle section consistently a flat oval, and the body banding is composed of groups of triple bands.
Two AKs, identifiable as Minoan imports on the basis of fabric, form and decoration, come from a tomb at Anemomiloi-Makelli on Karpathos (nos. 305, 427; Charitonides, 1961-62, AD 17a, 32-76; Melas, 1985: 109-114). They provide further examples of the typical LM IIIA1 form and range of decorative syntax [FIG.5; no.427].

Through this group of early examples the basic character of the Minoan AK begins to emerge. The two large kraters from Tylissos provide a direct link with the Palace Style. At the same time the shape is more usually found in a smaller version, though at an average height of 35 cms., it remains one of the largest fine ware shapes in use during LM III. Another thread in the development is provided by the monochrome examples from Chania. Regional variation is also suggested by stylistic comparison of the Kastelli material with that known from central Crete and East Crete. The existence of regionally distinct workshops, particularly in East and West Crete, has been suggested, primarily on stylistic criteria, by Kanta (1980: 288-93). Much more work is needed on this complex subject, but detailed study of individual shapes throughout Crete, combining analysis of style and fabric, might be profitable.

The early Minoan AK can be summarised as follows - form: conical or conical-piriform lower body, short, straight or slightly concave neck, handles set high on the shoulder, the handle section is typically grooved, often with additional knobs at the attachment points, moulded foot; decoration: especially characteristic is the use of
neck decoration, for example, a row of iris, rock pattern and wavy lines (either painted on a reserved ground or vice versa). A common decorative element is a narrow zone of foliate band or row of quirks or "letter" motifs immediately above the main frieze. The field of decoration frequently extends over much of the body, following the enclosing principle of decoration (MP: 124), though narrow or dividing zones of motifs are not unknown. The banding of the lower body and foot is typically a combination of bands and lines. The immediate precursors of many aspects of the decoration, most strikingly the neck decoration, are to be found in the Palace Style tradition.

The shape continues to be produced throughout the LM III period. The shape follows normal ceramic development: the lower body becomes more piriform above a narrow foot. The neck grows taller and the longer handles begin to splay outwards before joining the shoulder; these splaying handles are characteristic of the LM IIIA2-B form. The "metallic" features, neck moulding and elaborately ridged and moulded handles are not exclusively early; they recur sporadically throughout LM III. Most of the decorative features mentioned above continue in use: the joined semicircles and wavy bands on the neck; narrow zone of decoration, often "letter motifs", on the shoulder; deep decorative zone; band and line groups on the body.

The Minoan and Mycenaean AK's follow two independent lines of development, each an integral part of a separate, though related, ceramic tradition. Thus there are many
obvious differences between the two products; most importantly the fabrics are visually distinct. Mycenaean kraters are made from a fine, hard clay, usually buff to pink-buff, with few visible inclusions, while the clay of the Minoan krater typically contains numerous, easily visible inclusions and varies in colour from pink-buff to red. The differences in the character of the clays used by the Minoan and Mycenaean potters (especially for making large shapes) have technical implications which are discussed below [4.2].

Differences can also be observed in the treatment of shape, accessorial details, and decoration. In contrast to the Minoan features summarised above, a "typical" LH IIIA2 Mycenaean AK might carry a zone of pictorial decoration on each side; the decoration is restricted to the upper part of the body; on the rim are groups of parallel chevrons or strokes; the handles are curving or perpendicular, and ridged in section; the neck is solid painted, and groups of triple bands encircle the body; the lower body is piriform on a torus disc base.

Within the context of these separate lines of development, some close similarities between the earliest Mycenaean examples and the Minoan tradition is striking. Indeed, the dependence of the Mycenaean version on the Minoan AK is strongly suggested by certain features of shape and decoration which are typical of the Minoan examples. It should be emphasised that the features in question are retained in the Minoan AK throughout its period of
manufacture, but appear only in the earliest Mycenaean examples, after which the AK achieves its characteristic Mycenaean form.

A small number of Mycenaean vases serve to illustrate the suggested points of similarity with the Minoan version. There is a consensus that these vases belong to the beginning of the Mycenaean series, although there are differences of opinion as to whether they should be dated to LH IIIA1 or the beginning of LH IIIA2 [see #2].

It is appropriate to begin with the Qatna krater [FIG.6], which Furumark classified as FS 52 in recognition of its unusual features, so separating it from the other examples known to him (FS 53-55). In describing the running spiral on the shoulder Furumark noted its decorative affinities to the LM IIIA1 style (MP: 354, FM 46:6). This was reaffirmed by Hankey, who remarked on its "distinctly LM IIIA features" (1971: 108). The spiral motif, with central rosette, on a dark ground can indeed be paralleled in the Minoan repertoire, for example, on a LM IIIA1 larnax from Ayios Myron (Kanta, 1980: 15-16, pl.113:2). Also of Minoan character are the interlocking quirks on the neck and the arrangement of the body bands, a pair of bands flanking 3 lines. Both are found on a number of Cretan examples of LM IIIA1 and 2 date. In both size and proportions the Qatna krater is similar to the two LM IIIA1 Karpathos kraters (Charitonidis, 1961-2: nos. 305 and 427); all have a high centre of gravity and fall at the shorter end of the shape range, at a height of c. 31-33 cms.
Despite the features enumerated above, it is improbable that the Qatna vase could have been made in Crete, for it also displays features which are alien to the Minoan series. For example, the use of parallel chevrons on the rim is a common Mycenaean choice, but rarely found in Crete. More importantly, the fine, hard buff clay is characteristic of the Mycenaean product.

More recent excavations on Cyprus have yielded two early Mycenaean kraters with Minoan connections. The two vases, from Pyla-Verghi and Dhekelia near the S.E. coast of Cyprus, are similar in shape and decorative syntax. They are rather different from the Qatna example, but can also be well paralleled in the Minoan series. The Pyla-Verghi krater stands to an impressive 42.8 cms with a broad shoulder (max. d. 42.4 cms.) above a conical-piriform lower body [FIG.7; see also MPVP: III.B]. The neck is short with a prominent moulding at the base, and the handles are strongly ridged with additional knobs. The main decoration is arranged in vertical panels and extends over much of the body; it consists of cables, parallel chevron and foliate bands. The stiff and sombre tone of the decoration is reflected in the choice of accessorial details: a reserved wavy band on a dark neck, rim and handles solidly painted, foot and lower body painted except for two narrow zones of pairs of lines.

Again, many of these elements are well known in the Minoan repertoire. The restored krater from the South
Propylaeum at Knossos provides a good parallel for the sturdy shape (the max. d. almost as great as the height), the knobbed handle projections and the deep zone of rather stiff panelled decoration [FIG.3]. It has been observed that features such as panelled decoration and the reserved wavy lines on the neck recall the Palace Style (MPVP: 13). It is, however, important to bear in mind the general influence exerted by the Palace Style on LM III pottery, especially on larger shapes which offered greater scope for more elaborate designs. The syntactic arrangement of vertical panels is a popular mode of decoration in LM III on both AKs and piriform jars. To the Minoan elements on the Pyla-Verghi krater may be added the wavy banded neck and the band and line combination below the decorated zone.

Like the Qatna krater, the Pyla-Verghi vase exhibits features which suggest Minoan influence, but at the same time stands apart from actual Minoan products. Again, the finer, hard buff clay suggests a Mycenaean origin. A small, but significant detail is the perforations at the upper and lower attachments of the handles. The function of these holes is fully discussed elsewhere [#4.2]. Suffice to say here that they are often found on the handles, and to a lesser extent around the bases, of Mycenaean AKs, but never, to my knowledge, occur on the Minoan version.

The Dhekelia krater is closely related to the Pyla-Verghi example in form and arrangement of decoration, for which the same Minoan parallels apply (CVA Cyprus 1: pl.1; MPVP: III.1). The neck with reserved band, and the
band/line combination below the frieze similarly link the vase to Minoan prototypes, and separate it from the subsequent Mycenaean tradition of solid painted necks and triple bands below the frieze. The alternating panelled decoration is of special interest since it includes pictorial elements. The abstract panels contain rows of wavy zigzags, while in the panels between small birds perch amongst the foliage of stylised trees. Freely scattered in the field are the stemless flower (FM 18), bivalve shell (FM 25), and 'sea anemone' (FM 27), all of which are commonly used as subsidiary motifs in standard pictorial scenes. The flower motif appears on Minoan pottery in LM IIIA1, but is characteristic only at a later stage in the Mycenaean repertoire (French, 1965: 195). Although an isolated example, this vase perhaps offers a small insight into the transmission of the motif.

The occurrence of the motif of birds amidst foliage may also be considered significant, since this is one of the few pictorial themes found on Minoan pottery (cf. Hood and de Jong, 1952: fig.11; Charitonidis, 1961/62: no.21). It has been suggested that the appearance of the bird and fish motifs in the earliest stages of Mycenaean pictorial painting is linked to the use of these same motifs in the Minoan repertoire. On a fragmentary Mycenaean fish krater from Maroni, the bold motion of the fish, sweeping up and across the vase surface, and the concomitant use of a deep, enclosing zone of decoration recall the Minoan handling of the motif, in contrast to the horizontal movement of most
Mycenaean pictorial scenes (Crouwel and Morris, 1987: 40). Like the use of panelled decoration on the Pyla-Vergi and Dhekelia kraters, the use of the bird and fish motifs on early Mycenaean vases should perhaps be ascribed to Minoan influence.

Small details on other early vases also hint at Minoan influence. The "Zeus krater" [*25] is the most famous of all pictorial kraters, its unique combination of motifs having generated extensive discussion. The short neck, wide maximum diameter, and conical/piriform body all suggest it should be placed early in the AK series (as MPVP; contra FS 54:18 and SCE IV.1C: 687 for a LH IIIA2 late date). Around the base of the neck is a row of U-pattern in added white. The use of these 'letter' motifs above the main design is well paralleled in Crete.

It is suggested that the Minoan ceramic AK provided the immediate prototype for the Mycenaean AK. A number of points support this hypothesis. First, the Minoan AK has chronological priority over the Mycenaean in the material record. The earliest known Minoan examples are LM II/IIIA, the first Mycenaean are LH IIIA1 or LH IIIA2 early. Second, the earliest Mycenaean vases are demonstrably similar in form, and accessorial and decorative elements to the Minoan, as illustrated by the above examples. That this relationship is one of influence from the Minoan side to the Mycenaean is further borne out by the subsequent development of the two series. The features which are considered to be Minoan occur only on the earliest Mycenaean vases, while the bulk of the
corpus conforms rather to Mycenaean ceramic traditions. In the Minoan repertoire, by contrast, there is continuity of use of these same features, and it is also on Crete, particularly within the Palace Style tradition, that their precursors can be found.

Third, consideration of the broader relationship between Crete and the Mainland at this time seems to support the idea of the transmission of the shape from Crete, probably in LM IIIA1. Furumark observed that the Minoan influence on Mycenaean fine pottery peaked in LH I-IIA and again in LH IIIA1. In his words "the majority of the Minoan types included in the Mycenaean repertory in the IIIA1 period seem to have been copied from clay prototypes of Cretan manufacture" (MP: 101; also 504-5). Popham's preliminary study of the features common to Crete and the Mainland between 1450-1400 B.C. (LM II-IIIA) led to the conclusion that the two areas were in particularly close contact in this period (1976: 119-121). The vexed question of whether or not Knossos was controlled by the Mycenaeans at this time does not alter the basic observation that interaction seems to have been intensive, and the evidence of the artefacts suggests that "the innovator still seemed to be Crete" (ibid.: 119). Within this broader context it does not seem surprising that the Minoans should provide the prototype for the Mycenaean AK, which in the form of the chariot krater represents the finest qualities of the Mycenaean ceramic tradition.
3.2 METAL PROTOTYPES.

In a detailed study of the relationship between the earliest Mycenaean AKs and their Minoan counterparts, it has been suggested that the prototype for the Mycenaean version was the Minoan clay AK. It is more difficult to understand how such influences might be transmitted, but the suggestion is consistent with the general climate of Minoan influence on LH IIIA1 ceramics. The origin of the Minoan AK is another thread in the story, with its relationship to the bronze kraters meriting careful consideration.

It is frequently suggested that the prototypes for many ceramic shapes are to be found in metalwork, the potter's craft emulating work in the more precious material. Three categories of evidence may be brought to bear in assessing whether the Minoan AK is derived from a metal version of the shape:

1) actual metal examples of the shape;

2) iconographic representations of metal kraters, (identified primarily on the basis of colour conventions, e.g. yellow for gold, blue for silver).

3) elements of the ceramic examples, which are thought to be derived from a metallic original.

3.2.1 THE BRONZE KRATERS.

The case for a metallic prototype was first presented by Evans, who reconstructed a bronze AK on the evidence of two sets of rim and handle fragments found in Cyprus.
The details of his reconstruction, especially the heavy collars on the neck and upper body and the piriform lower body, owe much to other well-known metal vessels (e.g. PM II: 646, fig.411). An alternative simpler reconstruction, using Catling’s more accurate measured drawing of rim and handles, is suggested [FIG.9]. Confirmation of the basic correctness of the reconstruction of these fragments as AKs is provided by the fragments of two related vases, of which parts of the neck, body and foot are preserved (Kourion Tomb 40.11: Matthaus, 1985: no.525; Lefkandi: Catling, n.d).

Evans identified these bronze 'hydriae' as Minoan, and LM IB in style, and considered them to be "the prototype of a widely diffused class of Late Minoan and Mycenaean painted clay 'kraters'" (PM IV: 456). Subsequently, various dates have been suggested for these objects, ranging from the 15th-11th C. (9) The most sustained arguments for a date of late 13th-12th C. for these and other related fragments have been put forward by Catling (CBMW: 156-161; and n.d.) (10).

Rim and handle fragments from seven bronze examples are now known, six from Cyprus and a seventh from Lefkandi in Euboia. They are as follows:


[2] [FIG.11] Attributed to Kaloriziki T.40. Rim and handles with relief decoration. Rim: D. 0.393; seventy beak spouted ewers in high relief. Handles: pair of Genii confront a palm tree; each one raises
a paw to his forehead, the other arm hangs by his side. The design is repeated four and a half times. Roundel: a scene of marine life, three octopuses are shown amidst rockwork. The rim and the entire handle are edged by cable pattern.

Context (probable): LC IIIB, 11th C. B.C. Several precious objects, including this vase, were confiscated from tomb robbers. The objects were later attributed to Kaloriziki T.40 (12).

Bibl.: PM II: 653-4, figs.418-9; McFadden, 1954: 131-33, pl.22,13-4; CBMW: 158-9, pl.24; Gill, 1964: 17, no.18 with fig.2; Catling, n.d.; Matthaus, 1985: 228-9, no.526, pls.66-7.


Rim: D. 0.34; two parallel traced lines. Handles: vertical cable pattern divides handle into two zones, which are filled with dot and double scale pattern. Roundel: traces of double scale pattern. The body fragments confirm the AK shape and show that the body of this particular vase was made from a single sheet of metal. Torus base.

Context: LC IIIB, 11th C. B.C.


Context: LC III.

Bibl.: CBMW: 159 (referred to, but not illustrated).


Rim: incised circles bordered by cable; Handle: central vertical cable framed by punched dots, vertical cable close to either edge. Roundel: undecorated.


Context: Intact tomb of early 12th C.; found with two bronze jugs.


Rim: series of pursuit scenes with archers, bulls and lions; Handles: two vertical registers divided by bands of cable pattern, each register containing a lion attacked by a bull repeated three times. Roundel: stylised tree.

Context: 10th C. Cremation urn containing the bones of a warrior wrapped in cloth. Closed by a bronze phiale.

These bronze vessels are of great interest since they show that the AK shape existed in a metal as well as ceramic form. If, however, they are all to be dated to the later 13th-12th C., as suggested by Catling, then they cannot be drawn upon as evidence for the existence of a metal prototype for the LM II/IIIA ceramic version. The dating of the pieces depends on the following criteria: context, technique, and iconography.

CONTEXT.

The piece in the Cesnola collection and the fragment purchased in Episkopi are without context. The tomb in which the Lefkandi krater was found is of MPG/LPG date. The Evreti fragment comes from a tomb of early LCIIIA. One example was found in Kaloriziki Tomb 40, and a second, found by tomb robbers, was later attributed to the same tomb, which is dated on ceramic evidence to LC IIIB, the 11th C. B.C. The unpublished Teratsoudhia tomb, containing a bronze AK and two jugs, is dated to the early 12th C.

The very real possibility that such a precious object could be an heirloom has been pointed out by Baurain and Darcque; they refer to a scarab inscribed with the name of Amenophis III (1417-1379) in a tomb of 11th C. B.C. date at Palaepaphos-Skales (1982: fn.19). The survival of bronze stands into much later periods may be cited as a more appropriate parallel, both krater and stands being substantial bronze objects. Catling has suggested that some of the stands may have remained in use for three or four centuries (CBMW: 223; n.d.).
From examination of the contextual evidence it may be concluded that three of the Cypriot pieces [nos. 3, 4, 6], and probably a fourth [no. 2], were found in LC III contexts. The preliminary accounts indicate that the Lefkandi krater [no. 7] comes from a still later context. It is, however, closely linked to the other kraters through its distinctive function; like at least two of the Cypriot kraters [nos. 2, 3] it received the cremated remains of an important individual. The contextual evidence shows beyond doubt that bronze AKs were in currency during the 12th-11th C. and even later.

TECHNIQUE.

The manufacturing technique of the vases has been used by Catling to support a late date. He observed that the krater found in the Kaloriziki tomb [no. 3] had been constructed from a single sheet of metal, a technique which he suggests was not mastered until late in the Bronze Age (CBMW: 160). If this technical observation is correct, it provides support for the hypothesis that this particular krater was deposited in the tomb relatively soon after it was made. The body of the Lefkandi krater was similarly made from a single sheet of metal (Catling, n.d.). This technical argument cannot, however, be directly applied to examples which preserve only the rim and handle fragments [nos. 1, 2], for in the absence of the body of the vase it is impossible to know whether it was formed from a single sheet or from riveted sections.

The decorative techniques used on the rim and handles divide them into two groups. Three of the seven have
elaborate figured decoration in cast relief [nos.1,2,7]; the remainder are decorated with simpler incised designs. Catling has argued that the technique for producing the relief decoration on the kraters "must be associated" with that of the figured friezes of the Cypriot bronze stand and tripod workshops (n.d.). It is true that the best known and most elaborate Aegean relief scenes of the preceding centuries, such as the Vapheio gold cups and the silver Siege rhyton, are executed in the repoussé technique, primarily on the body of the vase. Cast relief decoration was, however, well known in the Aegean from LM I (CBMW: 159; Matthaus, 1980: 210-2). Rims, handles and masking collars of bronze vessels were embellished with cast relief decoration; the designs include continuous friezes of spirals, floral motifs, argonauts, tritons and bucrania. In addition, the simple slashed cable ornament which edges several of the krater rims and handles (Catling, n.d.: table 1) finds parallels on earlier Aegean material (e.g. Matthaus, 1980: nos.153, 184, 255-6, 285-6). Thus the kraters are no less at home with LM I metalwork, where cast relief decoration is well attested on bronze vessels, decorating, and at the same time strengthening, rim and handles.
Finally, the iconographic evidence must be considered. It was precisely on the basis of the decoration that Evans assigned the two elaborately decorated kraters [nos.1,2] to LM IB (PM II: 652-3). Catling, however, has argued for a date towards the end of the Late Bronze Age, despite drawing extensive parallels with earlier Aegean material (CBMW: 156-61). In his opinion these two pieces incorporate many features derived from Minoan iconography, but display a "lack of unifying elements", which he considers characteristic of the work of this period (CBMW: 161). Further study has led him to emphasise that a complex mixture of Aegean, Cypriot and Near Eastern features is symptomatic of the applied arts of Cyprus towards the end of the Late Bronze Age (Catling, n.d.).

The same author has drawn attention to the animal encounters as a linking factor between the bronze kraters and stands in a discussion of the iconography of the Lefkandi krater. He presents a convincing case for a close relationship between the animal pursuits of the Lefkandi krater and the Cypriot stands, whilst admitting that the elements of the cast relief decoration on the other two kraters are stylistically different and that they

"are all very much Aegean in flavour and raise the question (which the Lefkandi krater does not) 'could these be imported from the Aegean?'" (n.d.).

Catling concludes that the stylistic range of the Cypriot workshops is "broad enough for all our craters to find a
place within it" (n.d.). I argue that these two kraters [nos.1,2] belong to 16th C. Crete, as Evans first suggested. The case for an early date rests not so much on the similarity of individual elements of the iconography with other works, but rather on the thematic unity of the decoration within the Minoan iconographic framework.

Catling has argued that the iconography of the two kraters displays a lack of unity, which is typical of 12th C. Cyprus, and derived from, rather than an integral part of, earlier Aegean art. In a more recent discussion he has drawn attention to the contrasting decoration of the handle strap and the roundel below as a feature common to all three of the relief examples (n.d.). It is surely not entirely surprising that the two areas should be differently decorated, given that the vertical strap and circular roundel present quite different compositional opportunities and restrictions. Catling recognises, but does not explore, the possibility that "there may well have been a perfectly obvious connection in the minds of maker and user" (n.d.) between the contrasting decorative elements of the handles.

That there is in fact a thematic relationship between the iconographic elements depicted on the rim and handle sets from Cyprus can be demonstrated, and it is this underlying unity, understandable only within the framework of Minoan iconography, which offers the best defence for the early date and Minoan origin. The handle straps of the
Kourion-Kaloriziki krater [no.2] show four pairs of confronted genii, and part of a fifth, while the roundel below contains a marine scene of octopuses amongst rockwork. The two themes - genii and the marine world - are associated on a stone triton shell found at Mallia [fig.13], which has been the subject of a detailed publication by Baurain and Darcque (1983: 3-73). The marine element is represented by the form of the shell itself and the marine rockwork which frames the main subject, a pair of genii, the one pouring something from a beaked jug onto the upheld paws of his partner. Thus the association of genius and marine world on the Kourion krater can no longer be considered baroque or fortuitous.

Further examination of the bronzes suggests a greater degree of thematic unity than has hitherto been noticed, a unity in which the genius operates as the linking factor. In a study of the Minoan genius Gill isolated three iconographic elements which are repeatedly associated with the genius: the libation jug, vegetation, and hunting and sacrifice of animals (1964: 6). The marine association remains restricted to the Kourion handles and the Mallia triton. On the Kourion handles the genii confront one another, one hand is raised towards the forehead, the other held stiffly at the side. A pair of genii similarly posed appear on a prism seal from Kalyvia (ibid: pl.4,1). The gesture, the Minoan salute, is best known from Minoan bronze figurines.
Between the genii is a stylised palm trunk; the genii seem to salute the sacred tree. The tree introduces the theme of vegetation, represented by a tree or branch in many genius compositions. With the vegetation element is usually (though not always) found the beaked jug, an object associated par excellence with the genius (13). The rim of the Kourion krater provides this object, 70 beaked jugs in high relief. The elements assembled on the Kourion vase can, therefore, be seen to form a thematic unity: the linking of the genius and the marine world is paralleled by the Mallia triton, and the two themes most often associated with the genius, the jug and vegetation, are represented by the rim decoration and the palm trunk on the handle strap.

The relationship of the themes on the Cesnola krater [no. 1] is perhaps less obvious. The confronted genii are posed in a conventional manner; each holds a beaked jug (14). On the roundel are three bucrania, on the rim lions pursuing bulls. The popularity of the bull and lion motif on the Cypriot stands has been noted by Catling, but the two animals, both separately and in pursuit and attack scenes, are also very common in earlier Aegean art (15). Moreover, it cannot be purely coincidental that the third subject typically associated with the genius is that of animal offerings. Specifically, examples of the genius in association with bulls, lions and deer are noted by Gill (1964: 10-11). The bulls and lions on the Cesnola handles do not interact with the genii, but both animals are strongly associated with the "world" of the genius in Minoan
iconography (16). The scenes on both the Kourion and Cesnola kraters do, therefore, embody a thematic unity focused on the genius.

Catling has rightly warned against mere "identikit" matching of individual iconographic elements. General parallels for most of the motifs could undoubtedly be produced over a wide chronological range. Nevertheless, it would be perverse not to turn to the wealth of iconographic detail for help; possibly some motifs may be more susceptible to dating than others.

As the focal point of the thematic cycle, the genius is a natural first witness. This is not the place for a discussion of the origin and development of the genius, far less its function (Gill, 1964; Baurain, 1985). The genius appears first on Protopalatial sealings (CMS II:5, nos.321-2), and is attested as late as LH IIIB by a series of glass paste plaques from Mycenae (PM IV: 454-5, figs.379a-380). The familiar attributes: libation jug, vegetation, and animal offerings, are present in the earliest representations, while the latest depictions are largely restricted to the genius with jug. Some general stylistic developments can be observed, in particular, the change from the rounded abdomen to narrow belted waists. The range of variation both in style and details of execution is great; compare, for example, two seals with genii from the Vapheio deposit (CMS I, nos.231 and 232).

In an extended discussion of the genius on the Mallia
triton Baurain and Darcque consider it to be closely related to the Kourion handles, having similarities which "rend ce bronze se proche du triton qu'il est impossible de ne pas voir deux réalisations parfaitement contemporaines" (1983: 52). The triton is datable to LM I on the grounds of both context (terminus ante quem), and parallels for the decoration and triton form. Although Baurain and Darcque concentrate their comparison on the Kourion bronze, the Cesnola bronze is no less relevant to their discussion. Each of the three genius depictions - the triton and the two bronze kraters - has its own individual character, but they also share a number of features, which do not recur collectively on later representations. The leonine character of the head and paws is strongly marked; the snout is squarish, the lower jaw bearded (on the bronzes), the jaws are slightly parted. The paws and the joints of the limbs are carefully shown. The ears either lie close to the line of the head or are pricked up, quite different from the "long pointed ear jutting horizontally from the back of the head" (Gill, 1964: 4) shown on many examples. Nor do any of these genii have the exaggerated "Minoan waist", de rigueur in later depictions. The Cesnola genii seem not be belted, and the abdomen profile remains rather portly. Both the Mallia and Kourion genii are belted, but here too there is no hint of the elegant narrow waist.

More loosely connected with the bronze handles are three finds from the mainland, the two Vapheio seals (LH IIA) and the Tiryns gold ring (LH I-II) (17). The ring is
particularly reminiscent of the Kourion handles for the scale pattern on the carapace and the leonine character of the paws. All three, however, have the backward pointing ear and narrow waist mentioned above, though the impression of a narrow waist is created as much by the sharp inward curve of the carapace as by the belt. Like the Cesnola genii the carapace of the confronted Vapheio genii (CMS I, no.231) is edged with a row of dots. This is, however, far less significant than the features mentioned above, since this method of showing the back of the carapace recurs throughout the iconographic life of the genius.

The genii on the bronze kraters with their magnificent leonine heads, portly waists and gently curving carapaces, seem to be a natural stylistic development from the earliest Protopalatial examples; they are clearly different from later depictions and must, as Baurain and Darcque have suggested, stand stylistically close to the LM I Mallia triton (18).

Beaked jugs are carried by the Cesnola genii, and they form a continuous frieze around the rim of the Kourion krater. The vase shape has a long history in Minoan iconography, of which its association with the genius is but a part (Sturmer, 1985: 117-134). Catling observes that the best in corpore parallels for the jugs are provided by bronze examples from LC IIC-III contexts (n.d.). No actual examples survive from the Aegean to balance this comparison, but the numerous representations of the shape attest its Aegean pedigree and suggest that the shape was a
conservative one; thus the parallel drawn by Catling is by no means an exclusive one, and does not compel a late date.

The marine ornament on the roundels of the Kourion krater was discussed by Evans, who compared it with other non-ceramic marine scenes of MM III-LM I date (PM II: 504-5). The roundel shows two complete octopuses, while the tentacles of a third peep out from the rockwork setting. Evans rightly drew parallels with the lurking octopus on a fragment of a steatite rhyton from the Throne Room (ibid.: 503, fig.307), to which other stone relief fragments with marine decoration can be added (Warren, 1969: 181). The similarities in style and composition, (closer, for example, than the later and more stylised Dendra octopus cup), suggest that the Kourion scene belongs to the same chronological horizon as the stone relief vases.

While both the genii and the marine design can be convincingly paralleled by LM I material, it must be admitted that the animals on the roundels and rim of the Cesnola krater are more ambiguous in their testimony. Catling has collected a number of parallels for the bucrania on the roundels (CBMW: 158); they cover a wide date range and none are so close stylistically as to suggest contemporaneity with the roundels.

The animal pursuit on the Cesnola rim is, according to Catling, "much closer to the animal friezes of some tripod and wheeled stand ring-supports than anything significantly earlier" (n.d.). He seems to be proposing a more generalised
relationship than that suggested in his earlier study, where the Cesnola fragments were associated with the same "workshop" as several of the bronze stands (CBMW: 197-8).

The condition of the rim, which has suffered from restoration and is partly oxydised, makes it difficult to see the details of the work (19). I would not dispute the fact that the friezes on some of the bronze stands are similar to the Cesnola rim in terms of general composition: they are animal pursuits and they occupy a continuous frieze. The krater rim and the stands are not, however, stylistically close, and the possibility remains that the relationship need be no more intimate than the shared use of a theme, which was popular and long-lived throughout the Aegean and Near East; indeed, it is this very fact that makes these animal motifs so hard to pin down stylistically. On the Aegean side there is a lack of compositionally similar work available for comparison. The moment of attack rather than the excitement of the chase is the preferred lion-bull theme in earlier Minoan and Mycenaean art, a theme which lent itself well to the restricted fields of seals or ivory inlays. Unlike the genius and marine motifs discussed above, parallels for the animal pursuit are not restricted in place and time. Nevertheless, earlier Aegean parallels can be produced which seem to me to be stylistically, though not compositionally, no less close than the scenes on the stands (20). They cannot help us date the krater, but they do strongly underline the "fragility" (Catling, n.d.) of the association between krater and stands.
The positive iconographic evidence: the Minoan character of the thematic cycle, and the close stylistic relationship of the genii and the marine ornament to LM I works, lends strong support to the suggestion that these kraters are products of LM I Crete. The other elements in the iconography are in themselves less susceptible to close dating, though they can be accommodated within the Minoan repertoire. Conversely, it is extremely difficult to see how the genius and the marine style roundel could have been produced in 12th C. Cyprus. The style of these motifs and the iconographic world to which they belong are purely Minoan, and they stand apart from the works with "Aegeanising" elements with which they have been compared.

In conclusion, I suggest that the two bronze kraters from Cyprus with relief decoration should be dated to LM I. These bronzes are closely related to Minoan work of this period, both in stylistic details and use of theme. Nor does the evidence available about technique preclude such a date; the argument about the construction of the body must remain open, and the use of cast relief decoration, especially on rims and handles of bronze vessels, was already highly developed in 16th C. Crete.

How then do these two kraters relate to the growing corpus of similar vessels from Cyprus and Lefkandi? I suggest that the Kourion and Cesnola kraters should be viewed separately from the other bronze fragments; the former to be regarded as precious heirlooms, the others as later Cypriot products. Amongst these other examples only
the Lefkandi krater has pictorial relief decoration on the rim and handles. Catling's careful analysis of the decoration indicates that it, unlike the other two relief examples, can be closely related to the bronzework of 12th C. Cyprus. The other fragments do not aspire to the relief technique, but have only simple traced decoration. This, together with their smaller size, sets them apart from the relief examples.

Following Evans, Baurain and Darcque regard the relief handles as evidence for contact between Crete and Cyprus in the 16th C. (PM II:654; Baurain and Darcque, 1982). There is no evidence to support such an idea, since the vases could have travelled to Cyprus any time between the time of manufacture and deposition (for the Kourion vase, the 11th C.). I regard it as more probable that the vases reached Cyprus, as heirlooms and precious links with the past, in the hands of Aegean people who came to Cyprus, and perhaps to the Kourion area where the shape is concentrated, late in the LBA. It was this which provided the stimulus for the production of a local series of bronze kraters within a thriving bronze industry, and which prompted the appearance of metallic features on the local ceramic version, itself based on the Minoan and Mycenaean clay imports.

Accepting McFadden's deduction that the Kourion krater came from Tomb 40 at Kaloriziki, it is not improbable that this vase provided the immediate model for the much simpler example [no.3] found during excavation. The general interest in the shape is further emphasised by a clay AK from the
same tomb, on which the applied "rivets" at the handle attachment closely mimic the rivets of the metal version (McFadden, 1954: fig.22).

Nor is the survival of the amphoroid krater without parallel, since at least one other Aegean shape, the beaked ewer, is also known in Cyprus in LC IIIC-III contexts. Like the AK, the ewer occurs in bronze and there are obvious clay copies of the metal version (CBMW: 150-1; Matthaus, 1985: 253-4). The survival of these two shapes and their clear association through the decoration of the bronze kraters is highly suggestive, but that is rightly a separate subject [#6.3.5]. Amongst the examples of the bronze jugs is one from a Cypro-Geometric burial; yet another reminder of how precious vases could survive as heirlooms (CBMW: 150-1).
#3.3.2 REPRESENTATIONS: THE EGYPTIAN TOMB PAINTINGS.

Possible representations of the shape provide a second source of evidence. Some vessel shapes appear in Minoan iconography, but they seem not to include the AK. The earliest representations of vase shapes appear on seals, where the beaked ewer and kantharos are commonly shown (21). Only a limited number of vase shapes, usually coloured to suggest precious metals, are found on frescoes (22). Although they postdate the earliest kraters, Linear B ideograms are another valuable source of information about vase shapes, their names, and functions. There are, however, no obvious parallels for the AK amongst the schematic ideograms (23).

Numerous metal vases including kraters are shown amongst the objects offered by foreign nations in the tomb paintings of Egyptian high officials at Thebes. Is it possible to identify the amphoroid krater shape in association with figures of Aegean type in these paintings? The value of the tomb paintings as records of Aegean people and their products is by no means straightforward, so before attempting to identify the AK amidst the offerings it is essential to give careful consideration to the character of the evidence.

The presence of Aegean type figures in a number of the tomb paintings, in particular those of Senmut, Useramon, Rekhmire and Menkheperreseneb, has long been recognised. The identification rests on three classes of evidence 1) the
physical characteristics and dress of the figures, 2) the objects they bring, and 3) the associated textual evidence. Regarding the physical appearance of the figures, characterised by red-brown skin, absence of beards, and distinctive hairstyle and costume, there is a consensus that Aegeans, and most probably Minoans, are depicted in some of the paintings. Among the sceptics, Wainwright admitted to the presence of Minoans in only the two earliest tombs, Senmut and Useramon, while defending the thesis that the Keftiu named in the other tombs (from Rekhmire on) were to be equated not with Minoans but Cilicians (1914). Many of his arguments, especially regarding details of the iconography, have been convincingly countered by other scholars (Pendlebury, 1930: 75-82; Kantor, 1947: 41-9), though a recent study of the texts has revived Wainwright's idea that the "people of the isles" and the Keftiu are not identical (Strange, 1980). Furumark firmly opposed the use of the tomb paintings as "historical" documents and relegated all the depictions to the status of "quasi-Minoans" with the single exception of the tomb of Senmut (1950: 223-9).

The objects, the second category of iconographical evidence, comprise vessels of precious metals, bolts of cloth and beads, raw material (ingots and tusks), and exotic animals (e.g. giraffes, monkeys). In the same way as the Aegean character of the figures was quickly recognised, the Aegean origin of certain shapes, such as the Vapheio cup and the conical rhyton, was immediately obvious. For many other
shapes, however, the picture seems more confused. An understanding of the character and function of the scenes from the point of view of the Egyptians helps to explain how such confusions could have arisen and provides guidelines for using the paintings as evidence.

The tomb paintings followed a standard scheme: a procession of envoys, a display of objects, scribes inventorying the offerings, and the deceased presenting the envoys with their offerings to Pharaoh. These elements were repeated in horizontal registers, each register representing a different group of people. The purpose of the scenes was to demonstrate the power of Pharaoh, as illustrated through the many different peoples coming as envoys and the richness and quantity of their offerings (Merrillees, 1972). Since the function of the scenes was the glorification of Pharaoh, the overall impression of tribute coming from all corners of the world mattered more than the accuracy of individual elements. For example, the artist did not hesitate to fill the hands of the envoys with Egyptian bowls if he was unable to finish the scene with exotic, foreign objects of the appropriate type, or to use standard Egyptian motifs as textile patterns on the Keftiu kilts (Kantor, 1947: 43).

The authenticity of particular details may also have been affected by copying from earlier works. Thus, as records of peoples and products the individual tomb paintings cannot be treated as equal in value. The earliest of them, the tomb of Senmut, is therefore regarded as the
most reliable representation despite its fragmentary nature. In the later paintings the figures and the objects became stylised and were less accurately depicted, while the copying of elements from earlier paintings resulted in lapses of consistency.

Clearly, any search for Minoan shapes amongst the offerings of the Aegean-type figures should be tempered with caution; earlier depictions are to be preferred, since the components of the scene are less likely to have been distorted by copying. The use of purely Egyptian details to fill out a scene is another complicating factor. On the positive side, however, it can be seen that there is a strong thread of consistency, at least in the earlier scenes. Pendlebury has remarked on the Egyptian ability to caricature foreign peoples (1930: 82), the bearded, robed Syrian , being instantly distinguishable from the Aegean or the African. On a general level there also seems to be some consistency in the kinds of objects brought by different peoples. Thus, only Nubians bring the exotic animals, giraffes and monkeys. More importantly, the greatest number of vases are brought by Aegeans, indicating that this was the product which characterised them in the eyes of the Egyptians. The prominence given to the vases in the Senmut scene bears this out; the two Vapheio cups, elaborately decorated with bucrania and spirals, are very large and the eye is immediately drawn to them.

Senmut was, an architect and favourite of Queen Hatshepsut and his tomb is the earliest with Aegean figures.
Unfortunately, the tomb was badly damaged and only fragments survive in the N.W. corner of the forehall. No text is preserved and the Aegean figures are identified by their physical appearance and by the objects they carry, which do not include the amphoroid krater. The three surviving figures carry the following Minoan vase shapes: two Vapheio cups, a pithoid amphora (painted red, perhaps ceramic), and two ewers (PM II: fig.470). A total of six figures are recorded in a much earlier drawing by Hays c.1837, adding a ewer with a fluted lower body, a sword, and a large, pedestalled bowl (Furumark, 1950: 225, fig.22). The bowl seems to belong with a series of Egyptian pedestalled bowls (with and without handles), which are commonly shown in all the tomb paintings. This suggests that the artist, while depicting the Minoans and their vases with considerable authenticity, was already, at this early stage, inserting local elements into the scene, a recurrent feature in later paintings. A possible explanation is that, even with repetitions, insufficient Minoan products were known to them to complete the scene.

Slightly later is the tomb of Useramon, vizier of Thutmosis III (1504-1450). The text associated with the Aegean figures identifies them as from "the islands in the heart of the great Green". Vases are shown in the two standard parts of the scene: carried by envoys and heaped up for inventory. A wider range of shapes is preserved; in addition to a Vapheio cup and a ewer, the offerings include
other forms known in the Aegean, such as animal head rhyta and bull figurines (PM II: fig.413). An amphoroid krater is also preserved.

The amphoroid krater [FIG.14a-b] is carried by the twelfth and thirteenth Aegean envoys. Vercoutter provides a photograph and brief description of the vase (1956: 338, frontispiece and pl.L:368). He describes the vase as large, made of plain silver (represented as white paint), with simple handles rising a little way above the rim. In overall shape and size it compares well with the suggested reconstruction of the LM I bronze kraters from Cyprus, to which it would be broadly contemporary [FIGS.9-11].

A second, very similar krater [FIG.15a-b] is depicted in the tomb of Rekhmire, who also served under Thutmosis III, and died soon after Amenophis II became Pharaoh. The text associated with the Aegean figures in this tomb reads "Keftiu land and the islands which are within the Great Sea". Pharaoh's power over the known world is expressed through the four registers, which purport to show people from the four points of the compass. The amphoroid krater is shown amongst the rows of precious vases and ingots awaiting inventory in the Aegean register. Like the Useramon krater it is made of silver. It also seems to have been decorated, although the details are indistinct (Vercoutter, 1956: 338, frontispiece and pl.L:369; also Furumark, 1950: 227, fig.24). In common with many elements in the Rekhmire scene, the amphoroid krater may perhaps have been copied from
Useramon.

A fourth tomb may also depict the same shape. Menkheperreseneb, a priest of Amun, served, like Rekhmire, under Thutmosis III and died in the reign of Amenophis II. The scenes, usually considered to be derivative of Rekhmire and Useramon, are full of inconsistencies; for example, the figure described as "Chief of the Keftiu" is of Syrian type. Two almost identical vessels [FIG.16] shown amongst the heaps of Aegean tribute may, as Vercoutter suggests, be copied from the amphoroid kraters discussed above, to which they are generally similar in shape (1956: 339, nos.370-1; also Furumark, 1950: 228, fig.25). As evidence for the amphoroid krater shape, they are less significant than the earlier examples in Useramon and Rekhmire.

It is clear too that these vases are distinct from a series of more elaborate vases, which also fit the basic definition of the amphoroid krater shape: that is, a necked vessel with two, opposite rim to shoulder handles, and having a mouth of greater diameter than the base. This latter group, (briefly discussed below), seem to have more in common with a range of Egyptian krater and bowl types, which are part of a general stock of shapes drawn on to complete the scenes. The two large kraters from Useramon and Rekhmire, and less convincingly, the Menhkeperreseneb examples, are morphologically distinct from the frequently used Egyptian types, a factor which lends support to the idea that they represent a genuine Minoan shape. I suggest then that the LM I metal form of the Minoan amphoroid krater
shape, preserved in fragmentary form in Cyprus, is also represented in the Aegean tribute in the tombs of Useramon and Rekhmire.

Brief comment is required on the other vases shown in the paintings, which fulfil the general criteria for an amorphoid krater shape or have been offered as comparisons with the Aegean form. A series of kraters, referred to earlier, are related to general krater/bowl types commonly shown as offerings; they include the following:

1) Useramon, heaped tribute (Furumark, 1950: fig.27; Vercoutter, 1956: no.376).
2) [FIG.17] Rekhmire, carried by Aegean envoy 9 (PM II: fig.473b; Furumark, 1950: fig.24; Vercoutter, 1956: no.377).
3) Rekhmire, heaped up tribute (PM II: fig.339; Furumark, 1950: fig.24; Vercoutter, 1956: no.378).
4) Menkheperreseneb, heaped up tribute (Furumark, 1950: fig.25 upper; Vercoutter, 1956: nos.379-80).

Characteristic of these vases is a ovoid body above a pedestal base. In terms of relative size they are considerably smaller than the Aegean kraters. This is well illustrated by the two Rekhmire examples: the one is held up by the porter, the other is in the heaped up tribute in the same row as the Aegean krater and is no more than half its size [FIG.15b]. The same basic vase shape is shared by another group of vases, which have elaborate handles in the form of rampant animals (Vercoutter, 1956: pl.LVII). The pedestal base of all these vases, as well as the palmette decoration on the body of one of the Rekhmire kraters, further links them to the series of Egyptian bowls (Vercoutter, 1956: pls.LII-LVI). Such bowls and kraters are illustrated under manufacture in Egyptian workshops, and are usually thought to be wholly Egyptian in character (PM II:
Furumark, however, suggested an Asiatic origin for these shapes, despite the evidence of the workshop scenes (1950: 234). Although clearly non-Aegean in character, the appearance of such vases in the paintings is of interest. The numerous depictions of vessels of amphoroid krater type amongst a relatively limited repertoire of vase shapes are indicative of the widespread use of the shape and of its value as an offering. The prestige aspect of this impressive shape is considered further in a discussion of function of the amphoroid krater [see #6].

Several other vases shown in the tomb paintings have been compared with the Aegean amphoroid krater. Vercoutter suggested that a vase carried by the eighth envoy in the tomb of Menhkeperreseneb was very similar in form to the LM I bronze kraters, as reconstructed by Evans (Vercoutter, 1956: 334, no.351). The comparison is, however, based on his inaccurate reproduction of Evans' drawing; the neck of the vessel has been made narrower, turning it wrongly into a closed vessel, which bears some resemblance to the amphora in the tomb painting.

Vercoutter also illustrates (very schematically) a clay amphoroid krater from the Temple Tomb, Knossos, which he compares with kraters from the tombs of Houya at Tell el Amarna and Horemheb (1956: 339, nos.373 and 375). These documents are not, of course, pertinent to the vases carried by the Aegean porters in the Theban tombs, as they are later in date. Both depictions are indeed similar to LM III clay
kraters, although they do not appear in obviously Aegean contexts. The Horemheb vase is carried by a porter, who holds it out by one handle while supporting the base with his other hand [FIG.18]. If any accuracy of scale can be assumed, the vase could be similar in size to the typical LM III krater, at an average height of c.35 cms. Illustration of the Houya vase in its broader context shows that it is a much larger vessel [FIG.19]. A series of LM III amphoroid kraters of larger size, known from Crete, Cyprus and Lachish, are broadly comparable [see #6.3.4]. Although Aegean parallels can be tentatively suggested for these later depictions, there is nothing especially Aegean about their contexts (unlike the earlier Theban tombs). It may, therefore, be more prudent to note only that these documents attest the continuing popularity and wide geographical currency of the amphoroid krater shape.
#3.2.3 METALLIC INFLUENCE ON CERAMICS.

The existence of a metal version of the AK is supported by the two classes of evidence so far examined. It has been argued that fragments of two bronze AKs should be dated to LM IB, and that the same vase shape is shown in association with contemporary Aegean figures in the Theban tomb paintings. The mere existence of a metal version of a given shape should not be taken as sufficient evidence that the clay shape must be copied from it; such an assumption needs to be tested. In the case of the AK the metal version, both in corpore and in representations, is first attested in LM I, while the clay counterpart subsequently makes its appearance in LM II-IIIA, a pattern which does indeed suggest that the shape was taken over from metalwork.

A third category of evidence, the occurrence of "metallic" features, is often cited in support of the existence of metal prototypes for ceramic products. The identification of such features would further suggest a relationship between the metal and ceramic shapes. In this context a brief discussion of the broader question of the relationship of ceramics and metalwork is relevant.

The idea that ceramics are strongly influenced by metalwork has a wide currency. Thus many important changes in shape, surface treatment and painted decoration have been attributed to the influence of metalwork; to give just a few examples: for shape - the angular shapes of Minyan ware, and the sharply articulated forms of Classical pottery; for
surface treatment - the mottled surfaces of Early Minoan II wares, imitating the sheen of copper (Hood, 1978: 31); the grey and yellow surfaces of Minyan mimicking silver and gold (Vickers, 1985: 121, fn.129); for painted decoration - Middle Minoan III tortoise shell ripple, perhaps imitating the "shimmering flutes of metal vases" (Hood, 1978: 36), and elements of the LM II Palace Style (PM IV: 299-303).

A controversial contribution to the general problem of the relationship between the metal and ceramic media has been made by Vickers (1985). His basic argument is that potters were humble craftsmen who were dependent on the more prestigious craft of the metalsmith for shapes and decoration in the Classical period. Many of the points raised by the study are applicable beyond the specific frame of reference of Attic painted pottery, and indeed Vickers draws upon data from other periods and places to support the more general thesis that metalwork was highly prized in antiquity, and that ceramic dependence on metalwork is a widespread phenomenon (1985: 120-1). His position is an extreme one, and some of his arguments have already been countered by Robertson (1985). Nevertheless, it represents a serious attempt to understand the interrelationship of different crafts, though much its value lies in its provocativeness.

Undoubtedly, metalwork could and did influence ceramics. On the other hand, the frequency with which "metallic influence" is hauled out to explain diverse features of shape and decoration could suggest that in some
cases we are dealing here not with substantiated associations but "factoids", that is, "mere speculations or guesses which have been repeated so often that they are eventually taken for hard facts" (Maier, 1985: 32).

A detailed study of the influence of metals on ceramics in the prehistoric Aegean would be interesting, though beyond the brief of this study. The interconnections between the two may be "well recognised" (Catling, n.d., referring to the LBA), but are they well understood? The criteria for identifying metallic influence need to be more rigorous. Nor should the possibility of mutual influence between other media be overlooked. Warren, for example, has discussed the interaction between Minoan stone vases and both metals and ceramics (1969: 168-73). If, unlike Vickers, we do not precondemn the poor potter to a state of continuous, slavish dependence on metalwork, it may be possible to recognise fluctuations in the character and intensity of such influence, and to place it in a broader social context.

A modest contribution can be made towards such a study by examining the evidence for metallic influence on the AK. The metallic features relevant to the AK shape are the neck ridge, the laid on handle, and added rivets or knobs on the handle attachments. All these features are integral to the construction of a metal vase, but have no practical function for a clay vase. The neck moulding masks and strengthens the join between separate pieces of metal. The neck and body of the clay vase are also made from separate pieces, but the join is
strengthened on the inside by the thicker, double layer of clay; this thickening is clear in some section drawings, and in sherd material a pocket of air is sometimes visible between the two layers. The relatively insubstantial neck ridge on the clay AK could not have served as a strengthening feature (contra Hankey, 1968: 29, fn.8).

Two methods of handle attachment are described by Furumark, ceramic and laid-on (MP: 93-4). A ceramically attached handle forms a smooth join with the body of the vase, whereas a laid-on handle creates an additional roundel or disc at the lower attachment. On metal vases the area of the roundel was rivetted or soldered to the vase body. In the case of the bronze kraters from Cyprus the relief decoration on the roundel turned it into a decorative feature [§3.2.1]. Rivets are also sometimes plastically represented in clay by additional knobs at the top and bottom of the handles.

According to Furumark the torus base originated as an imitation of metal vessels. Unlike the other metallic features it also has a function in the ceramic form, and continues to be used after other non-functional features have passed out of use. The protruding, ringed base (torus disc) provided much needed stability for tall vases with contracted or stemmed lower bodies (MP: 95-100).

The pattern of use of these features can be traced both in the Minoan and Mycenaean ceramic repertoire. In the Mycenaean series there is a steady typological development from metallic to more ceramic features, the "ceramicization"
indicating greater distance from the original metallic influence (MP: 106). The development of the Mycenaean form is discussed in #4, but the relevant metallic features are briefly reviewed here. The neck ridge appears on some but by no means all early vases; that is to say, its presence is a chronological indicator, its absence is not. The earliest handles have a laid-on attachment (some more pronounced than others), and the transverse section is ridged. There is a clear development towards a more ceramic form — a smooth handle attachment and a flat section. Additional knobs on the handles are not common, but they too are found only on early vases. It was suggested earlier that the Mycenaeans adopted the AK shape from the Minoan ceramic repertory [#3.1]; these metallic features are also characteristic of the early Minoan AK, and could have been copied from it.

Unlike the Mycenaean, the Minoan series does not display a consistent linear development towards a more ceramic form. Most of the early examples of the shape (LM II-IIIA1) have some of the metallic features. A neck ridge is usual. The laid on handles and knobs are particularly well illustrated by the krater from the South Propylaeum [FIG.3], though they are not found on all early examples.

Both the neck ridge and, to a lesser extent, the handle elaborations continue to appear on some Minoan AKs throughout the period of production. An excellent example of these metallic features is provided by two AKs in the Giamalakis Collection dating to LM IIIA2 (Kanta, 1980: 95).
Both have a neck ridge. The handle is painted with a band at either edge and a row of dots down the centre, which emphasise the ridged handle section. The laid-on lower attachment is also emphasised by a series of lines which follow the shape of the handle. The torus base has an additional moulding above.

Later in the series is an AK from Milatos (LM IIIC: Kanta, 1980: 125-6, 274-6; LM IIIB/C: Popham, 1967: 349). The handle treatment is similar to the Giamalakis examples; it is strongly ridged with the central rib further emphasised by strokes of paint. A plastic knob protrudes from the lower attachment, which is elaborately painted. There are two moulded rings above the substantial torus base. A second AK from the same tomb is decorated with an octopus and is of similar size, but shares none of these metallic features (Evans, 1906: fig.105). The two Milatos kraters reflect the more general picture of a selective use of metallic features on some vases (24).

The Minoan series does not follow the development suggested by Furumark for Mycenaean pottery, that of a steady development towards a more ceramic form and a greater distance from the metallic influence. Is it possible to understand why the metallic features continue to appear on some Minoan kraters? Two contributing factors may be the overall character of LM III pottery and the existence of regional differences. In comparison with the "truly remarkable uniformity" (MF: 16) which characterises Mycenaean pottery, the greater flexibility of the Minoan
tradition is striking. There seems to have been a greater range of variation in individual details of shape and decoration; a handle might be grooved, ridged or flat, while the neck might be painted with wavy bands or lines, wave pattern, or solid paint. Similarly, the use of metallic features (or not) might be seen as part of this relatively flexible tradition. Fuller study of regional variation in LM III might show that certain features were introduced or retained in one area but not another.

The use of metallic features on a clay vase is usually regarded as imitative of a metallic original and by extension indicative of the existence of the precious prototype. Closer examination of the later Minoan vases (i.e. LM IIIA2-C) on which these features are prominent suggests that they represent more than simply the sporadic memory or influence of a metal original. The vases in question are all elaborately decorated. The Giamalakis and Milatos examples are also taller than the average AK. Within this context the incorporation of metallic features, themselves picked out by painted decoration, could be understood as an additional form of elaboration. Therefore, in the Minoan series of AKs the recurrent use of metallic features need not indicate a continuing, close dependence on a metal original. Rather, the evidence suggests that metallic features continued to be used, perhaps with general connotations of value, in combination with elaborate painted decoration, as a means of enhancing the appearance of the vase.
Examination of one vase form, the AK, suggests that the use of metallic features is more complex than sometimes supposed. Closer study of the metallic features on other forms might reveal further subtleties of usage (25).

§3.3 CONCLUSIONS.

Discussion of the origin of the AK has followed two main strands of thought, ceramic and metallic prototypes. It is suggested that the Mycenaean AK was copied from the Minoan clay version of the shape. Detailed comparison of the characteristics of the earliest Mycenaean AKs with their Minoan counterparts supports this idea. The transmission of the shape in LM IIIA1 is also plausible within the wider context of a degree of renewed Minoan influence on Mycenaean ceramics. The mechanisms of transmission remain unclear, but movement of both pots and potters are possible. Minoan examples could have been copied, or potters trained in Minoan traditions may have been working in Mycenaean centres of production (26).

Several classes of evidence are drawn on to demonstrate the existence of a metallic prototype in the Minoan repertoire. As Evans originally suggested, it is argued that the two bronze rims and handles found in Cyprus are datable to LM I. Catling's hypothesis that the bronzes are three centuries later in date is rejected. In particular, a fresh look at the decoration on the bronzes shows that the combinations of motifs: Genii, beaked jugs, marine world, vegetation and animal pursuit, are thematically related in
Minoan iconography. These vessels should be regarded as heirlooms, while the other five bronze examples represent later versions of the shape.

The AK shape can also be identified on the Egyptian wall paintings in connection with Aegean figures. The examples are similar in shape and scale to the actual bronze fragments. The numerous examples of other vases of general AK type in the paintings is indicative both of the wide currency for the shape and of its prestige value as an offering. Finally, the use of metallic features on clay vases as evidence for a metal prototype is discussed. It is likely that the ceramic Minoan AK is derived from an earlier metal version of the shape, but it also seems that the equation of metallic features on ceramics with a direct dependence on metalworking is oversimplistic, given that the use of such features differs in the Minoan and Mycenaean series.
Furumark subdivided each vase form according to changes in its shape. Thus the Mycenaean AK was classified as FS 52-55 (27). So few Minoan examples, classified as FS 56-7, were known to Furumark that this part of the classification fails to characterise the Minoan form.

The criteria for the Mycenaean series, FS 52-55, are clearly stated by Furumark in the Catalogue of vessel types (MP: 593). The Qatna krater was classified as a singleton, FS 52 [FIG.6]. The Minoan influence on this and other early vases is discussed in #3.1. These vases are linked together both by the common occurrence of Minoan features in their shape and decoration, and by the fact that they stand outside the mainstream development of FS 53-55, rather than by their typological similarity to one another. Thus it is not really meaningful or accurate to classify them as FS 52.

The development of the shape from FS 53 to FS 55 is characterised on the basis of changes in the body profile and in the accessorial parts: the lip, neck, handles. Despite the discovery of many new examples, Furumark's analysis of the shape has received no further study. The development of the shape can be more precisely described and some additional criteria offered as a guide to dating, both by incorporating newer examples and by considering the morphological development in association with concomitant changes in the decoration of the accessorial parts. Furumark does not consider accessorial decoration in association with
the vessel form, although it is sometimes referred to in the analysis of decoration. The development of the shape is presented here in the form of a brief verbal description together with FIGS. 20-22, a series of representative profile drawings.

PROFILE:
In common with the other vase types in the conical-piriform group, the AK follows the standard Mycenaean development from conical piriform (FS 53), through advanced piriform (FS 54) to advanced to heavy piriform (FS 55). Complete or almost complete vessels can be classified according to this criterion. Height range: 35-50 cms.

BODY BANDING:
The standard arrangement is groups of three (or rarely two) bands below the design and on the lower body. This arrangement is typical for open shapes, whereas combinations of bands and lines are found primarily on closed shapes. The use of band and line combinations on the earliest Mycenaean kraters may be the result of Minoan influence [see §3.1].

The number of body bands is dependent on the lower curve; thus two sets of bands give way to a single set in LH IIIB, as the lower body contracts sharply to a heavy piriform shape. Above the painted foot there is usually one band, sometimes two on later examples (mainly FS 55). The depth of frieze enclosed by the bands varies from between 30-45% of the body height; it is not a useful guide to date. The frieze depth is, however, related to choice of primary motif. Thus the chariot motif is often provided with a
deeper zone than bird or abstract motifs.

LIP: begins as a well-defined, horizontal rim, later tending to slope and be less defined. There is, however, considerable variation, which may make it difficult to date individual pieces on rim form alone. The rim is painted with a limited range of simple designs; most common in all phases are groups of transverse strokes, followed by continuous or groups of parallel chevrons. Greater elaboration is especially characteristic of the rim decoration in LH IIIA2 late (b) and IIIB1: for example, transverse strokes and chevron groups may be edged with hooks or semicircles, or alternate with lozenges. Rim width (average): c.2-2.5 cms; D.mouth (average): c. 26-28 cms.

NECK:

As observed by Furumark, the short, concave neck grows taller and straighter through time. The height of the neck increases from c. 20% (FS 53) to 25-35% (FS 55) of the total vase height. The taller neck and the increasingly piriform lower body also leads to an increase in the total height of the vase.

The neck is generally solid painted, but a few early examples have simple reserved designs (bands, wave pattern) on the neck, a feature more characteristic of the Minoan repertoire. The inside of the neck is also painted, the depth of the band varying from half to the whole height of the neck in all phases.

A neck moulding, i.e. a ridge at the junction of the neck and shoulder, is found on some early examples. It is,
therefore, as Furumurk notes, primarily a feature of some but not all the vases of the first main phase, FS 53.

HANDLES:

Furumark describes the development of the handles in terms of: 1) the profile (his longitudinal outline): curving - perpendicular; 2) the handle section (transverse): ribbed - flat; 3) the form of the lower handle attachment at the shoulder: laid on - ceramically attached.

Other features intimately connected with the handle, but not mentioned by Furumark, are the related painted decoration and the groups of holes pierced at both upper and lower points of attachment to the body; both are useful chronological indicators.

The change from curving (FS 53) to perpendicular (FS 54-5) outline is dependent on the increasing height of the neck; the handles lengthen and straighten out as the neck grows taller.

The handle section starts off ridged or ribbed, and later becomes flat in section. According to Furumark all except the earliest group (FS 53) have flat sections. This should be modified as follows:

FS 53, strongly ridged handle section;
FS 54, lightly ridged handle section (intermediate);
FS 55, flat handle section.

The flat or ribbon handle, which tends to be wider than the ridged handles, is thus primarily a feature of LH IIIB (FS 55). In addition, many ridged handles (both lightly and strongly ridged) are perforated by two or three small holes
at the points of attachment with the vase body. Conversely, perforations are rarely found in the FS 55 flat handles [for further discussion see #4.2]. The painted decoration along the outer surface of the handle takes the form of vertical bands. Typically there are three bands along the ridged handles, the central band emphasising the ridge, but only two bands, sometimes framing a central zigzag line or joined circles, along the later, flat handles. Handle width range: c. 4.5-6 cms.

Furumark drew a distinction between "laid-on" and "ceramically attached" handles. The term "laid-on" refers to the roundel or disc-like lower attachment, which Furumark considers a reproduction of the disc through which the handle was rivetted onto a metal vase (MP: 94). A "ceramically attached" handle, on the other hand, runs smoothly into the vessel wall. The changes in the form of the handle attachment are associated with corresponding changes in the accessorial decoration, a useful guide to date if the portion of the vase near the handle is preserved:

FS 53: disc attachment with small circle of paint around the disc;

FS 54: disc (less defined or "atrophied") or ceramic attachment, but with semicircular loop of paint sweeping around the attachment and up to the neck band;

FS 55: ceramic attachment with semicircular loop of paint up to neck band.
FOOT:

Torus base, either flat below or turned to form a disc; both variants seem to be equally common in all phases. The foot is invariably painted, with one (occasionally two) bands above. The presence of perforations around the base indicate a LH IIIA2 date, although they are much less common than the handle perforations. Incised or painted marks are sometimes located on the underneath of the base; they are at present known primarily from the LH IIIB period, a pattern which fits well with their occurrence on other shapes [see #5.7.5]. Average diameter of an AK base is 0.12-14m.
#4.2 PERFORATIONS.

Perforations are found at the upper and lower attachment points of the handles, usually in groups of two or three, and in some cases 5-8 evenly spaced holes around the torus base (28). They are discussed here as an integral part of the vase form, although there is some overlap with the question of vase function arising out of previous interpretations of these holes [#6.1].

Perforations are characteristic of the LH IIIA2 form of the AK, that is, FS 53-54, and are thus associated with strap handles of ridged or intermediate type [FIGS. 20-21]. They do not normally occur on the LH IIIB form, FS 55, which has wider, flat strap handles, with the exception of one example from Ras Shamra [*146]. As a general rule, however, the presence of perforations on AK fragments is indicative of a LH IIIA date.

Various functions have been suggested for these perforations. Schaeffer offered several suggestions as to the purpose of the perforations on the AK: to facilitate fixing on a lid or tying on a cloth cover, for fastening on ornaments, or for attaching a seal (1936-7: 214). The idea that these were "string holes" for fastening on a cover was later taken up by Immerwahr in her detailed publication of the three AKs in the Metropolitan Museum. She regards these string holes as an indication that the vessel had a "useful function in the shipping or storing of produce" (1945: 538). Noting that it is now often impossible to pass anything
through the holes, she suggested that they had originally been pierced through, but later became blocked by accretions (ibid.: fn.8). In a general review of the use of holes or perforations in ceramics, Yon (1981: 240-1) distinguishes between holes made before and after firing; the latter could be holes drilled for the attachment of clamps to repair ancient breaks, or represent adaptation of the piece for re-use. The function of holes made prior to firing are listed as follows: exit holes for liquids (rhyta); filtering devices (strainers); circulation of air in activities or processes involving heat (brazier, incense burner); suspension and the securing of a lid or cover. All but the last are clearly inapplicable to the AK.

Careful examination of the perforations shows, however, that many of them are definitely not pierced through the clay. The holes, measuring c. 3-4 mms at the point of penetration, were made from the outside inwards, and the clay was pushed back, often forming a blister on the back of the handle. This shows that the piercing took place before firing (i.e. the holes are not drilled), and that no attempt was made to remove the surplus clay and make a true hole. Strictly speaking, the term perforation is inaccurate for describing these holes, implying as it does that the clay was pierced right through. The fact that the holes often do not go through the clay, together with their placement both at the top and bottom of the handle (and occasionally around the base) renders improbable the suggestions that they were used for attaching lids, ornaments or seals.
The pattern of use of the perforations on AKs is informative. As stated, they occur primarily on FS 53-4. They are associated then with handles which are laid on at the lower attachment and/or ridged, appearing where the clay is thickest. Similar perforations also occur in the handles of a number of other shapes, including the open krater, jugs, amphorae and hydriae, that is, shapes which all have relatively thick and substantial handles. This suggests that the piercing is connected with the process of making the pot rather than with its subsequent use.

The function of the perforations can be more clearly understood by consideration of the technical characteristics of clay, which affect its workability and firing properties (Shepard, 1956: 24-5, 72-5, 81; Rice, 1987: 54-79). The properties of clays are complex, but in general those with few inclusions result in a stronger end product, although they may be more difficult to work, and they also shrink more with greater risk of cracking either in drying or firing. The use of a clay with more inclusions has several advantages, although they also tend to weaken the clay body. The inclusions serve to decrease plasticity, and lessen the compactness of the clay, enhancing water loss.

Piercing of the clay at a thick point allows water to be lost more evenly, decreasing the risk of the exterior losing water much more quickly than the interior and thus cracking. Shrinkage of the clay occurs both in the drying and firing stages. During drying most of the free water (not chemically combined) is lost. Shrinkage at this stage is
considerable, ranging from between 8-15%. In the early stages of firing further dehydration takes place; first any remaining free water is driven off at a low temperature to avoid a build up of water vapour (resulting in cracking or explosions). Great care is taken with this stage of "water smoking" in modern commercial establishments. Then the chemically bound water, or water of crystallisation is lost at a higher temperature. At this point the destruction of the crystal lattice takes place and the clay is irreversibly transformed into a fired ceramic body. Shrinkage in firing is approximately 1-3%. Both the drying and firing processes involve shrinkage and water loss which could cause damage to the vase. The perforations in handles and bases may have been considered helpful for preventing mishaps during both of these important stages in the production of the vases.

The use, or not, of perforations seems to have been a matter of choice – many AKs do not have them. Where small groups of vases can be assigned to a workshop or painter on stylistic grounds, such vases tend to have a shared pattern of perforations. As well as being chronologically characteristic of LH IIIA, the use of perforations may also then be associated with particular workshops. Further studies would show whether this observation could be more widely applied and whether perforations are a feature of all Mycenaean pottery or more typical of one area than another. Study of the distribution of such a technical (as opposed to stylistic) feature might prove useful, but would require fuller documentation of the occurrence of perforations on
Mycenaean pottery. If, for example, Sherratt's observation about the increased use of perforations in LH IIIC is correct (1986: Oxford Seminar), this could imply a change in manufacturing techniques or a decreased confidence in control of the production process at this time.

In discussing the differences between the Mycenaean and Minoan AKs [§2.1], it was noted that the fabrics were quite distinctive. Mycenaean AKs have a relatively standardised fine clay and in macroscopic examination the inclusions are few and small. Minoan AKs appear to be made in a range of visually distinct fabrics, probably reflecting regional production, but most of them are coarser than the Mycenaean product and have numerous, easily visible inclusions. The use of perforations is an exclusively Mycenaean feature. Minoan AKs are never perforated on the handles or base, and Minoan pottery in general does not include this feature, although vertical slashes occur on the lower attachment of handles of large jars from Zakro, which may well have fulfilled the same function (HM, pers. obs.). The relative fineness of the clays and the use of perforations may be related factors, and they strongly suggest technical differences in pottery production. The Minoans favoured a coarser clay for the AK, and the greater size and number of inclusions would have decreased the risk of drying and firing accidents through water loss; perforations were, therefore, not needed. The Mycenaeans utilised finer clays, which could have occurred naturally or have been more carefully prepared. The greater difficulties involved in
drying and firing such clays could have led to the use of perforations as a precautionary measure by some Mycenaean potters.
5. DESIGN ELEMENT ANALYSIS.

5.1 METHOD.

The study of vessel form and decoration represents two distinct but interwoven aspects of ceramic analysis. In the case of pictorial pottery the highly elaborate decoration necessitates careful and detailed study. The fundamental analysis of Mycenaean ceramic decoration was made by Furumark, who classified the material according to 78 motifs (MP). The development of each motif is illustrated by a series of representative examples from successive chronological phases. The use of this orderly system by subsequent researchers has resulted in an efficient and relatively standardised method of description for Mycenaean pottery; in particular, reference back to Furumark's motif charts ensures a consistent frame of reference, thus avoiding many of the problems of inconsistency and ambiguity of description encountered in other ceramic studies.

There is, however, a negative side to the use of motif charts. With the passage of time, Furumark's types have taken on a life of their own. The author himself states quite clearly that his system "must not be dogmatically employed or be given a greater significance than that of a convenient working hypothesis" (MP: 112, fn.1). Nevertheless, there has been a strong tendency to match motifs with Furumark's charts (almost as if the Mycenaean artist had his copy of Furumark propped up before him as he painted!), rather than to use, and adapt, the classification
The success of Furumark's system can be measured by its continuing applicability to new examples. At this point pictorial and abstract designs must part company, since it is not possible to describe and analyse pictorial designs adequately in terms of Furumark's motifs. The problem lies essentially in the complexity of pictorial designs.

The majority of Mycenaean vases are decorated with one or two motifs, most commonly a linear series of repeated motifs, or sometimes an alternating series of two motifs, such as the flower and whorl shell (FM 18 and 23). Thus both the structure of the design and the choice of motifs are straightforward and are concisely described in terms of the "Furumarkian" system.

Using this system the most common and the most complex of pictorial designs, the chariot scene, would be described in terms of a chariot (FM 39), horses (FM 2), human figures (FM 1), and several abstract motifs (e.g. palm, FM 15; flower FM 18; parallel chevrons FM 58). Several key features of the design are not analysed by this method. First, the complex structure of individual pictorial elements — a chariot, bird, or human figure, cannot be fully expressed by a simple choice between examples a, b, or c on a motif chart. Each pictorial motif is itself composed of a number of smaller, decorative units, all of which may exhibit several different forms. Thus, the chariot consists of a box, a wheel, a traction system, each of which has its own
range of variation. The overall appearance of the chariot depends, therefore, on the particular combinations of these smaller units. In this sense pictorial motifs can be defined as complex.

How then are complex motifs described and classified? This question takes us back to the method mentioned above of "matching" motifs against a master chart. Only rarely does a given example match one of the chariots on the chart or indeed any other known example in every respect. Most descriptions of pictorial motifs tend, therefore, to refer back to other broadly similar depictions for classification and dating. A number of problems are created by this approach to the study of pictorial designs. The verbal descriptions are unstandardised and often idiosyncratic; there is little consistency either in what should be described or in how to describe it. The expression of similarities between motifs largely overlooks their complex character, for by its very nature such a motif may share some characteristics with several other examples, yet itself have a unique combination of characteristics. Clearly it would be valuable to introduce a method of design analysis through which the complex character of the motifs could be expressed. Central to this the question of human cognition of complex images, an important point to which I shall return shortly.

The description of a scene at the levels of motifs (man, chariot, horse) fails to analyse their construction; beyond that it also fails to express the relationships
between the motifs in the scene. Furumark was not unaware of this difficulty, and in his separate chapter on pictorial pottery he does discuss the overall composition of each of the pictorial themes. Thus he recognised differences in the disposition of human figures in relation to the chariot, and also classified five categories of accessorial elements according to their relationship with the chariot (MP: 434-5). Beyond the simple observations that accessorial motifs vary and become fewer through time other scholars have paid little attention to the overall structure of the scenes.

The question of visual responses to complex images is important for the two features of pictorial pottery referred to above: 1) the complexity of individual elements within the scene, and 2) the complex structure of the scene itself. Patter recognition is a well-known and accepted human ability. Thus, without difficulty we are able to distinguish a table from a chair, to distinguish one type of chair from another, etc. It has been demonstrated, however, that perception is selective, and that it may differ between individuals. These two factors have significant consequences when complex images are involved.

The results of some experiments in this field eloquently illustrate this point. In one study the decoration of a group of ceramics was analysed by three individuals. Their results differed in two respects; first, in the number of elements identified for study, and second, in the number of recorded occurrences of these elements
(Plog, 1980). A similar situation is recorded in a study of La Tene brooches, where the sample objects were grouped by numerical analysis, and by four individuals. The individuals differed widely in their assessment of the relationships between the brooches (Hodson, Sneath, and Doran, 1966: 320, figs. 5-6).

Since individuals are, in fact, largely in agreement about classifications (archaeological or otherwise), it would be ridiculous to suggest that cognitive selectivity and variations, as a general rule, seriously impair the ability to recognise and evaluate morphological patterning. On the other hand, it is clear that the effects of differences in perception increase significantly in relation to the complexity of the image. Thus, with a complex image, that is, one which is composed of a combination of smaller, decorative units, there is greater scope for variation in individual perception, both of what constitutes a design unit within the image, and how similarity between images is evaluated. As a result, conflicting groupings have been suggested for pictorial pottery (or La Tene brooches), whereas relatively speaking, there is widespread agreement over classification of Mycenaean pottery painted with abstract designs.

I have stressed this point about variations in perception since it directly influences the classification of pictorial designs. From the viewpoint of the present research, awareness of possible differences in perception is an important factor in planning a method of design analysis.
suitable for Mycenaean pictorial pottery. The design analysis must then examine both the individual motifs and the relationships between them (the structure of the scene) in such a way as both to express their complexity and to minimise selectivity of perception.

In addition, the units of variation upon which the design analysis is based must be explicitly stated. Previous studies of this material have not declared the criteria which form the basis for their results. This makes evaluation of the differing groupings which have been suggested difficult, since statements concerning the procedure of the design analysis are couched in very general terms.

There is no single method of design analysis which can be magically applied to all classes of material. The details of the analysis, such as the number of variables and the expression of their relationship, naturally depend on the character of the designs, but a useful analysis should be built around certain basic requirements: 1) the analysis should describe the design in terms of a consistent, standardised vocabulary; 2) the vocabulary should express the complexity and structure of the design.

Studies in ceramic design variation, emphasising the methodology of classification and codification of data (usually for statistical manipulation), have been focused on ceramics from the New World (Hardin, 1977, 1983; Hill, 1977; Plog, 1980), with more recent forays into the Middle East (Hole 1984) and the Aegean (Washburn, 1983). These studies
dealt primarily with geometric designs and their arrangement over the vessel's surface. The spatial structure of such designs has been successfully analysed by symmetry analysis (Shepard 1956: 267-76; Washburn, 1983: 138-64), a technique which might fruitfully be applied to Aegean geometric designs.

While this study is indebted to many of the stimulating ideas expressed in the above studies, the techniques used in these analyses are, not surprisingly, not directly applicable to the particular structure of Mycenaean pictorial pottery. Therefore, a method of analysis has been evolved specifically for use with the chariot design. The method can be adapted without difficulty for use with other pictorial themes, either on pottery or in other media. The procedure is most easily explained by direct reference to the material.

The decoration has been broken down into design elements. A design element is defined as a minimum cognitive unit of expression. The term is largely synonymous with motif; thus, a man, chariot, horse, spiral, rosette are all design elements. Pictorial motifs or design elements present a special situation since, as has been discussed above, they are complex. The chariot motif, for example, consists of a box, wheel and traction system. These are component units or sub-design elements. Continuing with the chariot as the example, each component unit may have two or more attribute states. It is at this level that the variation between different examples of the same motif is
described. In order to express complexity at this level of the analysis the classification of attribute states is hierarchical.

The chariot box is described in terms of its shape, choice of outline, and its surface decoration [FIG.24]. Thus the box may be square or rounded, the outline single or double, while the surface may be painted with motifs such as spots, oxhide, or scale. The various combinations of shape, outline and surface fill determine the appearance of the chariot box. The choice of whether the box is rounded or square is one between alternative attribute states or variables. The choice of shape, outline and surface fill each represent a series or hierarchy of decisions made by the artist. In this way the complex structure of a motif can be described and analysed through the hierarchical definition of its variables.

The structure of the scene is described in terms of relationships between motifs. Design elements are classified as primary or secondary. A primary design element is one which plays a dominant role in the scene. Consequently, the element which defines the theme - chariot, bull, bird, etc, is always classed as primary. All human figures are also considered primary, whether they occur alone or within another theme; this is an arbitrary rule imposed for consistency.

With the exception of the human figure, any element could be classified as primary or secondary, depending on its role within a particular scene. For example, if a series
of birds occupy the frieze of a vase, the birds are clearly primary design elements. On the other hand, a bird drawn under the handle or perched on a chariot is a secondary design element. A secondary design element, therefore, is one which is described in terms of its relationship to the primary element. Even simple expressions of relationships between motifs, that is, that a secondary element is located above, below, between, behind, etc. the primary element, can bring a degree of precision to the description of a scene. Furthermore, changes in the structure of a scene (variation in location, choice of secondary elements) can be analysed more exactly through use of such a standard vocabulary.

The fundamental aim of the design classification proposed here is to provide a standardised vocabulary for describing the chariot scenes. Through this vocabulary variation between motifs and scenes can be formally expressed. A clear understanding of the range of possible variation is the key to further analysis of the material, whether that be relative dating, identification of workshops and artists, or study of the iconography. A simple, hypothetical example serves to illustrate this point. In identifying the works of an individual painter certain features may be called upon to support the theory of their common authorship. For example, attention might be drawn to the striped traction system as a distinguishing mark of a particular painter. Whether or not this is a useful criterion depends on knowing both how many different ways the feature can be drawn and how often each way is used. So,
if most or all traction elements were striped, then this feature could not be given much weight in defining the character of an artist's work. Classification of material, whether for dating or for separating workshops, is based on the collective occurrence of many variables, but only through defining the frequency and range of variation of individual variables can their significance be gauged.

Design analysis provides a tool, then, for further study of pictorial decoration. These studies follow two main paths; first, the chronological development of pictorial designs [#5.9], and second, the identification of individuals or groups of painters [#A.1]. The two topics are clearly interconnected, since the works of a single painter will be chronologically close on an archaeological timescale. In this connection the notion of style is important.

Morgan has pointed out that the term 'style' has been used loosely to refer to technique, typological and regional differences, and chronological periods (1985: 9). For the purpose of her study of frescoes and seals, Morgan introduces the term 'idiom' to describe the 'mode of expression peculiar to a particular culture', while reserving the term 'style' to refer to the performance of an individual artist. Style is more usually defined as the 'collective characteristics of decorative methods proper to a person, school, period or subject' (Oxford English Dictionary), or "co-participation in an artistic system" (Muller, 1977:25).
The overall style (i.e. the collective characteristics, or Morgan's 'idiom') of pictorial decoration is described through the design element analysis. This expresses diachronically the form (the appearance of the motif) and the structure (the relationships between motifs) of the decoration. The overall style is composed of the works of individuals, yet the style of the individual or the microstyle exists within, and must be defined with reference to, the overall style. Microstyles may be identified through variations in form and structure of designs in a given period, but they are most easily isolated through a third factor in design variation - that of technique.

Technique may be simply described as the execution or performance of the decoration. The isolation of an individual's technique, his motor habits, is discussed below [#A.1]. For the immediate purpose, that of defining how design element analysis may be applied to the study of style and microstyle, it is sufficient to make the point that technique, unlike form and structure, is not defined through design analysis.
#5.2 CHARIOT.

The primary design elements of the chariot scene are the horse, chariot, and human figures — each of these being a complex motif. The general principles of the analysis of complex images have been outlined above; the design is broken down into its component parts, each of which may have a range of attribute states. The analysis provides the data for a basic, consistent description of the main characteristics of the motifs. Qualitative description may be introduced at a later stage to supplement this data when dealing with questions of style and individual technique, but a clear distinction is maintained between the two modes of description.

An understanding of the technical side of chariotry is important for the study of the chariot as a design element in pictorial pottery. Several special studies have been made of the construction of the chariot, although vase painting has played a minor role beside the information provided by the more detailed and accurate depictions on frescoes and the Linear B tablets. Of particular help in this technical subject is the thorough survey of Aegean chariotry by Crouwel (1981). His technical discussion and terminology is followed here [FIG.23].

#5.2.1 CHARIOT BOX [FIG.24].

The chariot depicted in pictorial scenes of the 14th and early 13th C. is invariably the Dual type. This
comprises a main box of roughly rectangular shape with a rear extension or wing. It is clear from fresco representations that, whatever the function of the wing, it did not form part of the floor space of the chariot, since the occupants of the chariot are always positioned side by side in the box, but in front of the wing. This detail is rarely portrayed accurately in the ceramic medium, where the driver usually occupies the box, while the passenger is placed in the wing. The square sides of the box, clearly shown both in fresco and in the Linear B tablet ideograms, are sometimes retained on the vases. More often, however, the box has a straight front edge and curving sides, so that the box and wing appear similar in shape.

The outline of the box and wing could be rendered either in double or single outline. The same convention was also applied to robed figures. The surface decoration of the chariot could take a number of forms. Rows of small spots, conveniently applied with the dab of a brush, are most common. Oxhide fill, drawn as trefoil or leaf shaped designs, is also used; the use of the same convention to depict the hides of actual bulls confirms the oxhide identification (e.g. MVV: IV.4-5). Other forms of surface decoration, such as lozenges, T-motifs, scale, panel patterns, are occasionally employed. The layout of the surface decoration could also vary. The wing was sometimes bisected by a horizontal line, and this might be emphasised by placing spots only around the edge of the wing and on either side of the bisecting line. The same feature is also
shown more schematically by the same layout of spots, but without the bisecting line.

5.2.2 SPUR [FIG. 23].

This part of the chariot is a triangular projection located at the rear of the floor of the box. It is usually drawn in outline, though it can occur as a solid form. It appears on fresco depictions, a few Linear B tablets and some vase paintings. On vase paintings the spur can also be shown in an incorrect position, both behind and below the wing. The rapid disappearance of the spur from the chariot design is related to changes in the depiction of the relationship between the wheel and the chariot box; that is, the spur is generally only shown when the box is drawn behind the wheel.

5.2.3 WHEEL [FIG. 25].

The chariot wheel is uniformly depicted with four spokes in Aegean iconography. This is a characteristically Aegean feature, since the use of a six-spoked wheel seems to have become standard by the later 15th cent. B.C. in the East. The spokes of the wheel are most commonly represented as a simple cross. This formula could be elaborated on in a number of ways. The spokes could be drawn as a double cross. The nave might also be shown at the centre of the wheel as a circle or solid disc. Another variation could occur at the point where the spokes join the felloe. If shown, the triangular widening of the spokes is drawn either as a solid
wedge or as a forked outline.

Special mention should be made of the fact that two vases show wheels with more than four spokes. One is a tantalisingly small fragment from Ashdod, which preserves only part of a wheel with more than four spokes [*210]. The other is the Pyla Verghi krater [*2]. One of the four chariots on this vase has a six spoked wheel and the same chariot is also differentiated from the other three in other respects. The significance of this intra-vase variation is discussed later [#A.2].

#5.2.4 RELATIONSHIP OF BOX AND WHEEL [FIG.26].

The design details of the chariot box and the wheel have been discussed separately, but the way in which the box and wheel are related also requires comment. Some vase paintings show the correct technical relationship between the two elements, with the lower part of the box appearing behind the upper part of the wheel. More commonly, however, this relationship is not maintained and the box perches precariously along the upper edge of the wheel. A further variation may be identified, in which the box perches on the wheel rim but the upper (and rarely the lower) quadrants of the wheel are completely filled with spots, which are schematically suggestive of the presence of the box. Any of the otherwise unoccupied quadrants of the wheel might be filled with a small subsidiary design element.
5.2.5 TRACTION SYSTEM [FIG.27].

The technical details of the traction system of the Aegean chariot have been described in detail by other scholars (Åkerström, 1978: 19-38; 1987: 123-8; Crouwel, 1981: 90-6; Littauer and Crouwel in MPVP: 184-5). Familiarity with the elements of the traction system is necessary to the understanding of how the traction system was depicted in the ceramic medium. Evidence for the technical details is best provided by the frescoes and Linear B tablets. The variations in the drawing of the traction system in the ceramic medium have limited value for technical studies of chariotry, but they are important for the study of the chariot as a design element in vase painting. The essential elements of the Aegean traction system are (after Crouwel, 1981: 90-6):

1) POLE - the draught pole runs from below the floor of the chariot to the yoke, thus connecting horse and vehicle.
2) POLE STAY - a pole which runs from the top of the chariot box to the point where the draught pole joins the yoke.
3) POLE BRACE - a complex element running immediately below the pole stay and connecting it to the draught pole. This is essentially an L-shaped object with additional vertical members which depend from the long arm of the L and connect with the pole. The short arm of the L joins with the pole immediately in front of the chariot box. The combined use of the pole stay and brace is peculiarly Aegean.

The essential connecting element between the horse and
The pole stay and brace present a much more complicated picture. Despite their varied appearance the depictions of these traction elements can be classified into three distinct and chronologically significant groups, which embrace the majority of vases. It should be emphasised that this classification is intended to reflect the varying ways in which the artists chose to paint the traction system; there is no implication that different types of traction systems are depicted.

TYPE 1: the first group is that which is most clearly related to the fresco depictions, although the two media are never very close in technical details. In this group the pole stay and brace stretch from the front of the chariot box and above the horses' backs, disappearing downwards to the pole and yoke near to the withers. A key feature of this group is that the pole stay is shown just above the horses' backs. It may be helpful to describe a particular example in detail [FIG.27: Type 1]. The L-shaped arm of the pole brace appears as a triangle between the horse and box, and the pole stay extends towards the yoke area. Halfway along the horses' backs a second pendant element disappears down behind (in reality between) the horses. This can be precisely paralleled by a fresco fragment from the Megaron frieze at Mycenae (Crouwel, 1981: W1, pl.82), where a
similar triangle dips down to the pole, making it clear that this is intended to indicate a vertical member from the pole brace to the pole, forming the arcade. While the pole is consistently shown just above the horses' backs, this group displays considerable variation in the appearance of the pendant elements - the arcades. They may vary in number, and while some descend behind the horses' back, others resemble rather the hanging ends of thongs. Chronological range: typical of LH IIIA2 early (with occasional LH IIIA2 late examples).

**TYPE 2:** The structure of the second and largest group is much simpler. Only the portion of the pole stay and brace between the chariot box and horses' rump is shown; no traction elements are drawn over the horses' back. Within this group the section of the pole brace immediately in front of the chariot takes two main forms. It may be L-shaped and hang just in front of the box, that is, similar to the fresco representations, or else be more triangular and hang down midway between the horses' rumps and the box. This section of the traction system is often embellished by decorative fill, such as parallel lines, spots, and wavy lines. Chronological range: typical of LH IIIA2 late.

**TYPE 3:** The simplified form of the second group stands in contrast to the third and final group. The pole stay and brace generally continue to be shown between the box and rumps, the L-shaped or triangular element sometimes being transformed into a meaningless series of lines. In addition, a series of pennant shaped motifs, similar to a row of
Flags, occupy the area between the reins and the horses' backs. The origin of these arcades is to be found in the V-shaped members running between the pole brace and the pole, but far from being shown as a strengthening element in the construction, the arcades in this third group have been raised high above the horses' backs as decorative elements. The essential feature of the group is this pennant or arcade design above the horses' backs. Within the group certain variations are possible. The arcades may hang below the reins or directly from them, and the traction system may be represented by the arcades alone or by a combination of the arcades and the pole brace between the chariot box and rumps. Chronological range: typical of LH IIIB1.

5.2.6 HARNESS [FIG.23].

The technical details of the harness elements have been studied by Crouwel (1981: 97-101). As with the traction system the primary evidence for harnessing comes from other media. The more eclectic evidence from vase painting can, however, be understood in the light of these other representations. The following harnessing elements appear on vase paintings:

1) YOKE - a wooden element crossing the necks of animals and so connecting them to the draught pole; the Bronze Age yoke was a neck yoke not a dorsal yoke.

2) YOKE SADDLE - inverted Y shaped object with handle lashed to the yoke and with the legs lying across the animals' shoulders in front of the withers. The legs turn upwards and
end in knobs.

3) NECKSTRAP - strap placed around the horse's neck and attached to the yoke.

4) GIRTH - strap passing under the belly and attached to the yoke.

On many vases the elements of the harness system - yoke, yoke saddle, neckstrap and girth, are simply not depicted. The yoke is sometimes shown as a projection in front of the withers, that is, at the base of the horse's neck. These projections vary greatly in shape, but they must represent either the yoke itself or the part of the yoke saddle which was lashed to the yoke. The yoke projection and the terret [*5.2.7] sometimes merge together.

The other elements, the neckstrap and girth, are sometimes shown, in which case they are picked out in added white paint [FIG.27: Type 1]. The fugitive nature of this white paint makes it difficult to assess what proportion of vases were so treated. One vase is unique for the use of incision to show the harness [*2]. The most detailed renderings show the neckstrap, girth and the upwardly curving yoke saddle leg [*6]. More often, however, the harness details are somewhat inaccurate, and while the added white is largely restricted to the harness area, the details are more abstractly decorative than realistic.

#5.2.7 CONTROL [FIG.28].

Control over the horses was maintained by use of the reins, bit and headstall. On more detailed renderings the
cheekstraps, cheekpieces and possibly the blinkers are delicately picked out in added white [e.g. *6]. As with the harnessing, the general idea of the headstall can be suggested by the use of added white along the muzzles and around the eyes.

Four reins extend from the driver to the horses' bits; they are usually held by the driver in pairs. The arrangement of the reins at the muzzle is also varied, sometimes two reins are clearly shown at each one, otherwise two at the nearer muzzle and one at the further, or only one at each muzzle.

The reins passed through a leather loop or terret, which kept them in order and increased the driver's control over the team through a pulley effect. Rather surprisingly, the use of terrets is best attested in vase painting (Crouwel 1981: 108). Terrets are rarely identifiable on the tablets and the pertinent area of the surviving frescoes is not preserved, hence the evidence of vase painting, despite its unreliability over technical details, best illustrates the use of the terret in Aegean chariotry.

The terret is not always shown; sometimes the reins run directly to the neck without an intermediate element. The shape and location of the terret varies. The majority of vases show a single terret, although in two cases two and four loops respectively are shown [*29, *57]. This provides a slender indication that a series of terrets might be used.

The terret is located either at the base of the neck or at mid-neck. The location at the base of the neck can be
paralleled in Egyptian representations and is also compatible with a fastening onto the yoke or harness element on the shoulder. The practicalities of attaching the terret to some part of the harness system suggest that the mid-neck location is not technically accurate, but rather a stylistic convention.

The terrets can be classified into three shapes [FIG.28]. The oval shaped terret is probably closest in shape to a real leather terret. This careful depiction of shape tends to be combined with the more accurate location of the terret at the base of the neck in the vicinity of the yoke elements. The second type is a semicircular loop. This varies in size from a small loop to a large and elaborate semicircle. It is often located at mid-neck. The third group includes a greater variety, but all are essentially a curving projection - such as a hook, spiral or S-shape.
#5.3 HORSE.

The normal draught animal of the chariot scene is the horse. Each chariot was pulled by a pair of horses. The conventions by which the two animals are depicted is essentially the same in the various media of Mycenaeans art. The body of one horse is shown, but the two heads, two tails, and eight legs clearly indicate two horses, one behind the other. From representational evidence the chariot horses of the Late Bronze Age seem to have had small heads with high carriage, slender legs and well set on tails. (Crouwel, 1981: 37). The high carriage of the neck is often emphasised by a strongly curving chest. The general and very striking tendency through time in vase painting is for the body of the horse to become unnaturally elongated; compare the proportions in an accurate drawing of a horse [FIG.23].

#5.3.1 HEAD.

The vase painter's convention of showing two entirely separate heads was dictated by the restrictions of the ceramic medium. The simple silhouette technique could not otherwise distinguish the two overlapping animals, which wall painters achieved through use of outline and colour, and seal engravers with depth of field. The two heads and eyes recall a Picasso painting and early scholars, unfamiliar with Aegean conventions, were uncertain as to whether one or two animals were intended. It was Evans who correctly observed that "in every case the nose of the second animal is given" (PM IV: 374).
To accompany the two heads the earliest depictions provide the horses with a full complement of four ears. Most depictions, however, show only two, and the ears can be difficult to see in cases where they overlap with the painted neck band.

The variation in the treatment of the mane can be paralleled in other media, particularly the Linear B ideograms of horses' heads, which have been studied by Vandenabeele and Olivier (1979: 63-76). In both vase painting and the ideograms three main categories can be identified—oval tufts, line tufts and line mane.

A series of oval tufts occurs most commonly, either solid painted or less often drawn in outline. The number of tufts varies from two up to five. The binding of each tuft at the root of the mane with cords, shown in fresco depictions, is shown with added white paint on one exceptionally detailed vase painting [*6]. The binding of the tufts was also represented by a short stroke across the lower edge of each tuft [*16]. A similar convention appears in the Linear B ideograms (ibid.: 70, Id). The ideograms also depict the oval tuft bisected by a vertical line; this detail is paralleled on a single fragment from Tell abu Hawam [*266].

The mane may also be represented as groups of lines or line tufts [e.g. *70-71, *82]. Other media use the same convention; line tufts appear on the ideograms (ibid.: 70, II), a seal from Astrakous (Crouwel, 1981: pl. 14a) and a
This convention could represent an alternative method of dressing the mane.

The mane is sometimes shown as a series of lines [e.g. *78; *174-175: combined with oval tufts]. Unlike the oval tufts, which seem to be a specifically Late Bronze Age convention, the depiction of the mane as a simple series of lines is often to be found wherever silhouette or outline techniques of drawing are used.

There are a few exceptions to the types of mane treatment described above and these merit special comment. Instead of small oval tufts, the manes of the horses on the Bird Chase krater [*26] are dressed in five large striped plumes. The plumes seem to be an additional poll decoration and they are strongly reminiscent of the ostrich plumes worn by the horses on Egyptian royal chariots (Anderson, 1961: pl. I, II - Rameses III and Seti I). An artist of a second chariot vase [*27] may also have intended to depict a poll decoration rather than simple oval tufts.

5.3.2 LEGS.

The most detailed drawing show eight legs - four front (straight or curving) and four back (bent at the hock). On later vases the design is simplified and only four legs are drawn, though there is also a tendency to show four at the front but only two at the rear. Sometimes both hoof and fetlock are shown, more often only the hoof. The frequent overlapping of the lower legs with the body bands of the
vase often obscures these details. On earlier vases the legs are distinctly separated at the junction with the body, later the division is lower down and more arbitrary. In all but the earliest depictions the rear set of legs tends to be shown either in outline, or with a roughly triangular reserved area at the top. It has been suggested that this reserved patch represents the paler colour of the inner hind leg (MPVP: 17).

#5.5.3 TAILS.

Two tails usually spring from the rump. Each tail is drawn as a single swathe of paint. A short bar is drawn across the top of the tail on one or two examples; it probably represents a binding or sheath for holding the tail neatly [*77-79].

#5.5.4 GENITALS.

Occasionally a horse is explicitly characterised as a male by the depiction of the genitals, indicating the use of stallions as draught animals [e.g. *2, *44, *92, *169]. In the Near East, where the chariot was frequently engaged in warfare, the stallion was preferred for its bold and aggressive qualities. On the other hand, both stallions and mares are used in the chariot race at the funeral of Patroclus in the Iliad (xxiii.375-7). While it is interesting, then, that the male sex is explicitly indicated on occasion, the vase paintings do not provide compelling evidence concerning the use of mares and stallions in chariotry.
#5.4 HUMAN FIGURES.

The majority of human figures appear in association with chariot scenes, while a smaller number of scenes depict various human activities. Following the normal conventions of Aegean art, figures are depicted in profile or three-quarter views. Human figures can be classified according to their location - charioteers (driver and passenger(s) in a chariot) or independent (outside of a chariot), and according to their mode of dress - either robed or silhouette (non-robed). Like the chariot design the human figure is a complex motif, which can most easily be analysed by breaking the design down into smaller units. The main units for discussion are the facial features, hairstyle, details of body or costume: robed and silhouette. The more complex subject of gesture is treated separately, since description and interpretation can usefully be discussed together [#A.3].

#5.4.1 FACIAL FEATURES.

The highly variable nature of facial features on pictorial pottery makes this a particularly difficult subject, for the individuality of the features is often more apparent than any consistent pattern of variation. Broadly speaking, the portrayal of the facial features shows an increasing simplification through time, leading to bold caricature (as FM 1). This process of simplification is most easily described by reference to the important design variables.
In the most detailed drawings forehead, nose, mouth and chin are clearly articulated in the facial profile. The large oval or almond shaped eye with central dot is a striking feature. A reserved area set into the hairline delineates the ear. The almond shaped eye gives way to a circular or semi-circular shape which has a tendency to merge into the hairline, while later still a circular eye placed well back in the middle of the head is usual. The nose, drawn in a continuous line from the forehead to the nose tip, is always well defined. The lengthening of the nose until it resembles a hanging or dripping beak is characteristic of LH IIIB depictions. The lower profile is shown in varying degrees of detail; both chin and mouth or only the chin might be indicated, and the combination of a prominent nose and jutting chin can seem to form the frame of an open mouth. Most schematically, the nose may be the only well articulated feature in the profile.

The majority of human figures can be described in terms of these increasingly simple variations and their absence; that is, oval eye, circular/semicircular inset eye, independent circular eye, reserved ear, straight/sloping nose, mouth and chin (often receding).

Most heads are drawn in outline, but mention should be made of the small number which are 'black headed', that is to say, the head is solidly painted with a reserved, staring eye. Sometimes the entire head is painted, or the lower face and neck can be reserved, thus separating the dark upper face from the silhouette body. These seem to be most common
in LH IIIB, although there are also earlier occurrences of these 'black-headed' figures [*27].

A second noteworthy feature on a number of vases is the habit of painting the neck of the figure with solid paint, spots, or most often, stripes. Such decoration of the neck occurs on both robed and silhouette figures. The striped necks of figures from the later LH IIIB-C periods have been identified as neck armour (Kilian, 1982: 205-6). Striped and spotted necks also appear sporadically in a range of earlier scenes, none of which are overtly military in character [*16, *27, *47; MPVP: III.29, IV.32], and the same convention is also found on the Tanagra larnakes (e.g. figure between large confronted birds on a small, gable roofed larnax; unpublished, Thebes Museum). It seems improbable that neck armour is intended in any of these scenes, and reopens the question of the identification within later admittedly military scenes. This example highlights a more general point, that is, the importance of examining the whole corpus of available material, with careful enquiry into how often, in what contexts, and with what degree of variation a given element occurs, before coming to conclusions about its identity or function [see also #A.3].

#5.4.2 HAIR AND HEADGEAR.

In common with other aspects of pictorial decoration the depiction of hair tends to be subject to increasing simplification through time. Short hair, to the nape of the neck, is shown with a curly or wavy outline, or as a smooth
cap, sometimes ending in a peak or restricted to the crown of the head.

Long hair provides more scope for discussion. The long wavy locks of the independent figures on the Window krater [*1], coupled with their distinctive clothing, mark them out as female. The presence of long hair is not otherwise indicative of sex, since there is ample evidence in Aegean art to show that both men and women could have long hair. While not sex-linked, long hair is largely found on robed figures [e.g. *70-71, *78]. The hair may appear to be worn loose down the back, or divided into tresses or pigtails. Subtle distinctions in Aegean hairstyles have been detected in frescoes (Davis, 1986: 399-406), but the only relatively clear distinction in vase painting is that between short and long, the latter more commonly associated with robed figures [see #6.4 for further discussion].

Some figures appear to wear hats or head-dresses. A number wear a fillet or hatched band around the head [*1-4; *70-71]. Similar headbands are known from other media: an elaborate band on a fragment of a Palace Style jar (Niemeier, 1985: pl.21, XVII.B.8); a hatched headdress on a Vapheio seal (CMS I: 220), and a plain band by spear carriers on a Tiryns fresco (Rodenwaldt, 1912: pl.XI:II). Comparison with helmets worn by the Sea Peoples' is unnecessary, and based on inaccurate drawings of the head-dresses on the vases (contra Borchhardt, 1972: 118, pl. 16:4).

The large figures in the Ship krater scene clearly wear
helmets (MPVP: V.38). The conical form is paralleled by both bronze and boars' tusk helmets (Hood and de Jong, 1952: pl. 50:2). The depictions show a plumed helmet, for which there are corresponding sockets in the archaeological remains. The curved lower edge of the helmet follows the outline of the wearer's head; the artist has avoided the difficulty of showing overlapping elements by suspending the helmet above the figure's head, thus the relationship between the two is clear without the one obscuring the other. Perhaps the curving outline with pointed ends also recalls the actual shape of the helmet with its projecting cheekpieces.

It is possible that helmets or conical caps are intended by the peaked hairstyle in other scenes [*86, *173, and that other types of hats are also represented [e.g. *172]. Note the contrast, however, with later LH IIIB-C scenes, where armed and helmeted warriors are vividly rendered. The schematic nature of the head-gear in earlier scenes, coupled with a lack of parallels, makes it difficult to be sure whether these are decorative creations of the artist, or actual types of headgear.

#5.4.3 COSTUME.

Two distinct modes of dress are represented in most of the scenes: robed and non-robed/silhouette. The latter appear only outside the chariot, while robed figures appear both in the chariot and outside. The robe is depicted as a full-length, loose-fitting garment; the general type is known from many scenes in Aegean representational art. It seems originally to have been a "sacerdotal and oriental"
form of dress (PM IV: 397).

The outline drawing of the robe does not encourage further analysis, although it might be suggested that it follows similar lines to examples shown in greater detail in other media; these show that the robe was cut in two pieces, bound together with a contrasting braid, and sometimes gathered together at the neck by a cord (Lang, 1969: pl.120; Marinatos, 1974: pl.VII). In the vase paintings the robe, like the outline of the chariot box, can be drawn in single or double outline. A similar range of surface decoration is also used; most often rows of spots, or other simple designs such as T-motifs or stripes. The lower edge of the robe could be elaborated with bands, which are usually hatched. Similar hem borders are found in other media (e.g. Lang, 1969: pl.126).

The shorter robe or tunic probably represents a less formal mode of dress. In terms of status it is not obviously differentiated from the silhouette type, since both types carry sticks. It is infrequent in early pictorial, but common in later LH IIIB-C scenes, which make explicit reference to hunting and military activities. This harmonises with the evidence of the mainland frescoes, where the tunic is associated with active scenes of fighting and hunting (Lang, 1969: pls.121-2), while the long robe is reserved for scenes of ceremonial aspect.

Special mention should briefly be made of the clothing worn by the few obviously female figures in the scenes. The panelled figures of the Window krater [*1] wear a top,
separated from the horizontally striped skirt by a wide belt. The complete figure, profile and dress, is elegantly paralleled by the ladies on the miniature Grandstand fresco from Knossos, and suggestively, the closest parallels are with the figures standing beside the pillars (PM III: 46-7). Another later convention for a female figure is stylised breasts in the form of linked spirals above a horizontally or spotted striped skirt [*142; and MPVP: V.3]. A group of silhouette figures have also been tentatively identified as female by Åkerström (1987: 31-2, pl. 19:1-3, 5-6). The figures are distinguished by outline torsos and emphasised buttocks, which he interprets as a convention for a female figure (29).

Most of the human figures are not explicitly rendered as male or female. The assumption, for such it is, that most of the figures are male is made on the basis of the display of weapons and the absence of obviously female characteristics and costume. The long loose robe is most familiar as a male costume, but there are also examples of females wearing similar robes. For example, both a male and female on the Ayia Triada sarcophagus wear a long robe (Hood, 1978: 70, fig.53), and robed women are shown driving a chariot in the Tiryns boar hunt fresco (Rodenwaldt, 1912: pl.XII); in both examples the sexes are clearly differentiated by skin colour.

An element of ambiguity in the use of the long robe is well illustrated by the Homage krater (MPVP: III.29). Here a seated figure is identified as a goddess, while the figures
standing before her, both robed and silhouette, are assumed to be male. The identification of a goddess seems probable on a number of counts: the known existence of a dominant female figure in sacred contexts from iconographic sources, and the striking thematic parallel with the Tiryns gold ring (CMS I: no.179). The sex of the seated figure in the vase scene is understood only by external referents since the figure is distinguished from the other robed figures not by dress or hairstyle but only by its posture (i.e. seated as opposed to standing).

Non-robed figures are termed silhouette figures. This is descriptive of their general appearance and preferred to "groom" with its implications of function. The silhouette figure is always independent, often accompanying the chariot procession, sometimes carrying objects, or engaging in another activity such as boxing or archery. Within the immense variation in the drawings, there is, in common with other Aegean representations of the human body, a consistent emphasis on certain physical features, narrow waist, long muscular legs, sturdy buttocks, and a exaggerated curve to the upper torso as if the shoulders are held well back with the chest puffed out. In relation to costume it often seems to be assumed that these figures are naked (MP: 238, "unclad"; MPVP: "naked" passim, used interchangeably with "groom"). In most cases there is no obvious indicator of nudity, such as genitals; indeed, explicitly nude figures are somewhat rare in Aegean art, and seem to have had a special significance (Marinatos, 1984: 37) (30). The
integration of even a simple loincloth onto the small and monochrome silhouette figure would have been rather difficult. This point may be illustrated by reference to the procession of males in the Thera miniature fresco; here, working on a small scale and with one colour, the artist has not always succeeded in clearly delineating the kilt from the outline of the figure (ibid.: 60, fig.38). For the ceramic depictions a parallel case is presented by the majority of Geometric silhouette figures, who are neither specifically clothed nor naked.
#5.5 OBJECTS.

A range of objects appear in pictorial scenes, primarily in the hands of the human figures. Some, swords for example, occur regularly and are easily identifiable, others are more enigmatic and have provoked considerable
discussion.

#5.5.1 SWORD.


These appear mainly with robed figures, though there is one certain depiction of a silhouette figures wearing a sword [*168]. The swords are worn slung in a scabbard, shown fringed with three tassels, and hanging from a baldric. Although schematically drawn the main features of the sword are often emphasised, particularly the crescent pommel and the horned or barred crossbar.

Several of the depictions have been identified as the Naue II type sword (Karageorghis, 1958b: 64; MPVP: 39). As Crouwel has pointed out, the schematic nature of the drawings does not permit such specific comparisons, particularly with a sword type, whose introduction is thought to postdate the vase representations (1972a: 28).

#5.5.2 SPEAR.

See: *176; also MPVP: III.29.

In the period under discussion the spear is relatively rare. It is carried by silhouette figures. The blade of the spear is leaf-shaped. In later LH IIIB-C the spear is frequently shown, an essential piece of equipment for the
major themes of warfare and hunting (e.g. MPVP: XI.77.1-2
deer impaled by the weapon).

#5.5.3 STICK.

The stick is carried by both silhouette and tunic figures (rhabdophoroi). It is held in an awkward pose with
the arm bent up and behind the figure, who is regularly
positioned in front of the chariot, as if leading it [for
discussion of the gesture see #A.3]. This is typical of LH
IIIB.

#5.5.4 BOW.
See: MPVP: V.28.

One representation of a procession of silhouette figures, two of whom carry bows. The objects identified here
as folding stools [#5.5.5] have sometimes been described as
bows (MPVP: 43-4).

#5.5.5 FOLDING STOOL
See: *2, *25, *44.

This object, in the shape of a double triangle or
hourglass, is shown on three separate occasions in
association with a chariot scene. Amongst the many
interpretations (see MPVP: 15) the most persistent are that
of an oxhide ingot and a folding stool.

The ingot theory was put forward by Dikaios in an
ingenious interpretation of the whole scene (1969-71:
918-25). This idea has been revived by Knapp in a study of
the relationship between copper production and ideology in
Cyprus (1986). His inclusion of these images from pictorial
pottery as evidence of ideological symbols is highly problematic, both because the identification of the objects as ingots is dubious, and because of the grave difficulties of attributing precise symbolic significance to an image from another culture (31).

The interpretation favoured here is that of the folding stool (as suggested by Crouwel, 1981: 139; Crouwel and Morris, 1985: 91; Åkerström, 1987: 100-2; and at considerable length by Rystedt, 1987: 49-55). This makes better sense of the outline shape (ingots are solid) and the manner of carrying (heavy ingots are elsewhere shown carried on the shoulder). The provision of a footstool for the occupants of chariots is depicted in the Near East, but it is unnecessary to call upon such distant parallels as the inspiration for pictorial pottery (contra Åkerström op.cit.), as the use of footstools for persons of high rank is also widely attested in Aegean art (PM IV: 387-95).

5.5.6 PARASOL.

See: *8.

Confident identification of the object held by the silhouette figure in this scene is hampered by the fact that it is without precise parallel in general appearance. The suggestion that it is a parasol (drawn in section for clarity), intended to shade the important robed figure, gains some support from the occurrence of parasols in chariot scenes, both painted scenes and terracotta models (Crouwel, 1973: 343-47). Like the wearing of a robed garment and a sword, the use of a parasol and folding stool emphasise the
demarcation of status within the scenes.

5.5.7 VASES


Vases appear in several scenes, usually scattered in the field (free field design element), though on one occasion a silhouette figure holds a shallow bowl. The shapes shown are: jug, dipper, conical rhyton, kylix, bowl. Their significance is discussed in #6.4.
Subsidiary elements, otherwise known as accessorial or filling motifs, are described in terms of their relationship to the primary design elements, in this case the horse and chariot. Furumark briefly discussed the composition of the different pictorial themes and classified five categories of "accessorial elements" according to their relationship with the chariot (MP: 434). This useful method of description has not been taken up by subsequent scholars in their discussions of pictorial pottery.

Since the subsidiary elements must, by definition, be drawn in relation to the primary element (the chariot), they can be consistently described according to this relationship. The possible relationships between chariot and subsidiary elements are expressed through the location code, as follows [FIG.29]:-

(a) Main frieze; in front of and behind the chariot; occupying part or the full depth of the frieze.
(b) Below the handle.
(c) Detached/free field; small elements floating in otherwise unused space.
(d) Pendant; hanging from the top of the frieze or rising from the base line.
(e) Above and/or below the horses' reins.
(f) Below the horses' belly.
(g) Between tail and rear legs of the horse (and the back pairs of legs).
(h) Within the wheel quadrants.

These eight positions provide a framework for describing the relationships between subsidiary and primary elements, that is, part of the structure of the scene. This method has a number of advantages. From the point of view of individual scenes, the subsidiary elements may be more succinctly described against this standard code. For the overall assessment of the character and development of the chariot scene it is equally valuable, since information is readily available about the choice, location and number of subsidiary elements in every scene.

The importance of changes in subsidiary elements as a guide to dating pictorial pottery is well known. The use of the location code allows us not only to monitor changes in choice of motifs, but also the use and changes in motifs in each separate location. The importance of the location of motifs within the design is further explored in the computer analysis of the chariot scenes [#5.8].

Some of the requirements of design analysis, in particular, that the vocabulary should be standardised and that it should express the structure of the design, are met by the use of the location code. Thus, rather than simply describing a scene as "cluttered with" or "suffocated by" a series of subsidiary elements, the disposition of the motifs within the scene is precisely described and the information available for further analysis.

The third vital component of the subsidiary design elements is their typological development. Just as some
motifs have a more restricted lifespan than others, so too
different motifs exhibit greater or lesser stylistic change
which may be indicative of chronological phases. A good
example of this is the stylisation of the Mycenaean flower
(MP: 284-94; French, 1965). The usefulness of individual
motifs as chronological indicators depends then on these
three interacting factors: 1) the choice of motif
(absence/presence); 2) the location of the motif
(structure); 3) the stylistic development of the motif.

The design analysis requires that the subsidiary
elements themselves be consistently and precisely described
or named. Each subsidiary element and its uses in the
chariot scenes is listed in brief below. Furumark's
terminology, (with some modifications for the sake of
clarity), is followed, as is his order of presentation. The
chronological range and stylistic development of each
subsidiary element is considered in sections #5.8 and #5.9,
and the lifespan of the most important motifs is expressed
in tabular form [FIG.30).

BIRD. FM 7.

Usually a primary design element, the bird rarely
occurs as a subsidiary motif in a chariot scene.
Location: b, e.

BIRD DERIVATIVE.

No Furumark equivalent. This unique motif is not
dissimilar in shape to the body of some LH IIIB birds (e.g.
FM 7.14-17).
Location: b [*172].

PAPYRUS. FM 11.

Open work tuft type, both voluted and unvoluted. The majority of the examples given by Furumark belong to pictorial scenes (FM 11:31-43).

Location: a,b.

"SACRAL IVY". FM 12.

Accessorial types FM 12.41-5 are all from pictorial scenes. According to Furumark these motifs are derived from the "sacral ivy" or cordiform leaf. Such spiraliform elements, ranging from a simple pair of spirals to elaborately linked spirals, are consistently used to occupy the area below the horses' belly.

Location: f.

PALM. FM 15, Palm II.

A distinction may be drawn between the different versions of the motif, as used in pictorial compositions through time:

1) naturalistic depictions of the motif, where the hatched trunk of the tree is shown (FM 15.1,8);
2) simple type (e.g. FM 15.10-11);
3) a more elaborate and stylised version, typically with filled top leaves and more upward turned pendant leaves. (e.g. FM 15.15-17);

It should be noted that the simple palm (FM 15.11) is used not only in LH IIIA2 but also in LH IIIB.

Location: a,b.
ROSETTE. FM 17.

Used occasionally in chariot scenes.
Location: b,c,f.


This complex series of floral designs is very common on both abstract and pictorial pottery. Furumark has discussed the complex origins and development of the motif in detail (MP: 284-96). He subdivided the motif into three groups - voluted, hybrid, and unvoluted. Despite the considerable variation exhibited by this motif, certain basic types are repeatedly used in the pictorial repertoire.

Voluted (Type A).

The basic variants are:
-radiating bars above U-shaped or horizontally joined volutes with stamen and anther (cf. FM 18.3-4).
-concentric arcs, sometimes with dotted border, above U-shaped or horizontally joined volutes, without stamen/anther (FM 18.13-16).
-concentric arcs segmented by radiating anthers, above horizontally joined volutes (FM 18.18-19).
Location: a,b,f.

Hybrid (Type B).

This form of the motif is composed of a combination of the voluted flower and the cuttlefish (FM 21) or the palm (FM 15). It occurs much less commonly in pictorial scenes than the voluted and unvoluted forms of the Mycenaean III flower.
Unvoluted (Type C).

The popularity of this form of the motif must in part be due to its flexibility. The stemmed version could be used in much the same way as the voluted flower or the palm, while the smaller, stemless flower is compositionally interchangeable with the bivalve shell and the parallel chevron group.

The basic features are as follows: more solid petals later replaced by parallel lines; the upper arc is normally composed of radiating bars, less often of concentric arcs; separately rendered stamen (line, dots) and anther later disappear (stamen) or converge (petal/anther, hooked anther/stamen).

Location: (stemmed) a,b,f.
(stemless) b,c,e,f,g.

FISH. FM 20.

There is only one example of the fish motif being used as part of a chariot scene (FM 20:7). A monstrous fish emerges from below each handle, giving the appearance of pursuing the chariot groups [*169].

Location: b.

CUTTFISH. FM 21.

Strictly speaking the cuttlefish or octopus is never used as a subsidiary element, but mention should be made of the well-known "Zeus krater", which combines an octopus (FM 21.6) on each side with other pictorial designs, notably a chariot. No one part of the design can be confidently
identified as the primary design element. The decorative structure of this vase is unique [*25].

WHORL SHELL. FM 23.

As Furumark has pointed out, the use of this motif is compositionally identical to the floral motifs, the palm and Mycenaean flower (MP: 309). Both the oblique and vertical versions of the whorl shell are found, though it is much less common than the flower.
Location: a,b.

SHELL: (Bivalve shell). FM 25.

This motif occurs in groups or rows. It has a more restricted chronological use in pictorial compositions than in abstract pottery [#5.9.1].
Location: a,b,c,e,f.

DOTTED CIRCLE: ("Sea Anemone"). FM 27.

This design consists of various combinations of circles with dots. In the chariot design it is particularly common within the quadrants of the chariot wheel.
Location: c,h.


This motif is made up from combinations of interlocking or concentric C- or U-shapes. Like the "sea anemone" interlocking pairs of this motif often occupy the quadrants of the chariot wheel (FM 29.16-18). Occasionally the interlocking pairs are set in rows, in which case they are closely related to the quirk (FM 48). Location: c,e,g,h.

ROCK PATTERN. FM 33-34.

Both types II and III are represented in the pictorial
repertoire, III being differentiated from II by the presence of interior fill within the wavy bands. Type II is closely related to the isolated tricurved arch (FM 62). By definition the rock pattern is attached to the borders of the design. It may hang down like a cloud or project upwards. The following variants are all closely connected compositionally, although they are not all classed as rock pattern by Furumark:

- wavy outline without fill - FM 33
- arched outline (with or without fill) - FM 62
- wavy outline with interior fill - FM 34
- semicircular loops, usually hatched - sim. FS 33.8; 43.4.

In some examples the rock pattern motif is attached to both borders, in which case it acts as a compositional divider (FM 34:2).

Location: a (divider), b,d,f,g.

U-PATTERN. FM 45.

Used as a repeat pattern or in isolation. Note that interlocking pairs of U-shaped motifs are classed by Furumark as trefoil rock-work. Other "letter patterns", such as V- and N-pattern are used in the same way (FM 59,60).

Location: c,e.

QUIRK. FM 48.

The most common form of this much used motif is a continuous row of interlocking S-shapes. Rows of circles and oval loops are also found. Such quirks are used most commonly to frame the reins.
Location: a, b, c, e, f, g.

STEMMED SPIRAL. FM 51.

The standing row of stemmed spirals is used below the horses' belly. It is compositionally similar to other spiraliform ornaments categorised by Furumark as isolated "sacral ivy" (FM 12).
Location: b, f.

PARALLEL CHEVRONS. FM 58.

Parallel chevrons occur in isolated groups or in rows. In groups the motif can used in the same way as the bivalve shell and the stemless, unvoluted flower, while in rows it is syntactically similar to quirks or parallel strokes. A stemmed version of the motif, a "chevron flower", is related to the series of floral motifs, FM 18.
Location: a (stemmed), b, c, e, f, g.

V-PATTERN. FM 59; N-PATTERN. FM 60.

Both motifs are used similarly to the U-pattern and row of quirks.
Location: c, e.

TRICURVED ARCH. FM 62.

The isolated type is closely related to Rock Pattern II and functions in the same way.
Location: see Rock Pattern (FM 33-4).

LOZENGE. FM 73.

Compositionally similar to the "sea anemone" (FM 27). A stemmed version also occurs.
Location: a (stemmed), c, e, h.
STIPPLE. FM 77.2.

Better known as an overall surface design on cups and handleless jars, stipple is sometimes used as a surface fill in pictorial designs [#5.7].

Location: surface fill on a pole stay [*14].

PARALLEL STROKES.

This simple but very common element has no Furumark equivalent.

Location: b,c,e,g.
#5.7 TECHNIQUE.

Certain topics relating to the decoration of the vases remain to be considered briefly, although they stand outside the structure of the design analysis. The first is the decorative techniques used to execute the designs, the second is the phenomenon of painted and incised signs, which may be rather loosely classed as secondary decoration.

#5.7.1 MONOCHROME PAINT.

The primary technique, common to the vast majority of Mycenaean vases, is the application of a lustrous oxide rich slip or clay suspension, conventionally referred to as paint by archaeologists, to a prepared (usually slipped) clay surface. The paint colour ranges from orange through red to brown and black, often with considerable variation within one pot due to firing conditions. There is a general tendency in decorated and monochrome pottery towards red tones in LH IIIA2 as opposed to browns and blacks in LH IIIB; this applies also to the pictorial material, and, in combination with other criteria, may be useful for dating. Variations and embellishments on this basic technique are few but of some interest for the chronology and relations of pictorial pottery.

#5.7.2 INCISION [2].

The harness of the horses on this early chariot krater is shown by incision instead of the usual technique of added white. Vermeule and Karageorghis suggest that the incising
took place after firing (MPVP: 19). This is the only recorded example of such use of incision on pictorial pottery. Incision played a prominent role as the surface decoration on burnished and monochrome fabrics from the Neolithic to MBA. A specialised type of incision, slashed rope decoration, also has a long history on domestic storage vessels.

It seems unlikely, however, that our isolated example could be connected with such conceptually different traditions. It could be suggested that the painter was influenced by the engraving techniques of other media, stone vases or seals. A better parallel is perhaps provided by fresco painting, where incision was also occasionally used in the same way as on the chariot krater, as an embellishment on painted decoration rather than as a primary technique. A good example of this is a female crocus gatherer from Thera, whose hair is elaborated with incised spirals (Marinatos, 1974: 35, pls. B-C) and the Knossos miniature fresco, where incised lines are used to show the details of the architectural facades (HM, pers. obs.).

DILUTE PAINT (MPVP: III.9; Crouwel and Morris, 1987).

Dilute paint does not seem to have been used as a regular controlled technique, as it was, for example, in Attic red-figure painting. Streaky effects can be observed, but they are not obviously deliberate, being perhaps rather the result of hasty coverage of large areas or unintentional differences in the paint load or pressure of the brush. More
calligraphic effects - deliberate variation in line weight and thickness are more noticeable in Late Minoan I pottery, and the later Pastoral Style of Cyprus (e.g. MPVP: VI.1-4).

One possible example of deliberate application of dilute paint has been noted by Crouwel and Morris on a fish krater from Maroni (1987: 37-46). The bodies of the fish and the wavy lines trailing from the chin (?barbels and/or seaweed) are shown in thinner paint. The fish are tentatively identified as red mullett or "barbouni", with the shaded paint representing the marbling of the fishes' bodies by night (ibid.: 45).

**5.7.4 STIPPLE.**

Stipple (FS 77.2) is used as a design filler on two pictorial vases: on the bodies of prancing goats from Maroni (MPVP: III.26), and inside the pole stay of a chariot [*14]. Furumark, following Evans, suggests that this form of stipple was taken over from fresco painting, where it probably represented sand (MP: 423; "sea-shore pools" - PM IV: 305-6). Not surprisingly, an early example of its use as a surface design is in direct association with LM Ib Marine Style decoration: stipple covers the lower body of the S-handled jug, which has tritons on the neck (PM IV: 215, fig.165; Mountjoy, 1984: 188, no.84).

As a surface filler it subsequently appears as a background to designs on Palace Style jars, most often the octopus, but also with floral motifs, and a boars' tusk helmet (Niemeier, 1985: pls.1-3, 8). Use of the motif is extended to both background and design filler on the Argos
amphora, where the fill of the birds' bodies includes stipple (ibid.: pl.8), providing a good parallel for its use on the AKs (32).

The occurrence of stipple on these two pictorial vases raises a chronological question. Stipple is a characteristic feature of LH IIIAl deposits. Should these AKs be similarly dated on this criterion? I have argued on other grounds that the AK shape together with complex pictorial decoration is characteristic of LH IIIA2 early and not LH IIIAl [#2.4; and more briefly in Crouwel and Morris, 1985: 97].

It should be noted that Furumark suggested that stipple, although typical of LH IIIA1, did continue into LH IIIA2 early (MP: 422). This possibility is kept open by French, who suggests on stylistic grounds that mugs combining stipple and ridged rims and bases could be LH IIIA2 early (1965: 160). Only the discovery of discrete or stratified deposits of this elusive phase could confirm this suggestion, but for the present it remains possible that stipple was also used in LH IIIA2 early, the date assigned to the two AKs (33).

#5.7.5 ADDED WHITE.

A technique commonly used to elaborate pictorial scenes is white (or more often creamy white) applied on top of the basic monochrome paint. The white is often poorly preserved (sometimes surviving only as a shadow), making it difficult to assess frequency of use.

Added white was popular as a ceramic embellishment in LH I-II, especially as dots on spirals. It seems to have
been rare in LH IIIA1, becoming commoner again in LH IIIA2-B, and then profusely used in later LH IIIB-C (MP: 13-4). In pictorial painting added white is used in several distinct ways: 1) additional details or embellishments; 2) surface design, usually on animal bodies; 3) complete design executed in light-on-dark technique.

The addition of details in white paint is best known from the harness of chariot scenes [*5.2.6). This occurs on one early chariot scene [*6], becoming common, and sometimes expanding into a general decorative effect [e.g. *27, *86] in the latter part of LH IIIA2, while perhaps less frequent in early LH IIIB. Within chariot scenes white was also sometimes used to enhance other details—chariot and wheels [*26] and even human figures [*27].

Many other motifs were also embellished with added white. The octopus, for example, sometimes had white dots or lines on the body and tentacles (on AKs: Crouwel and Morris, 1985: 94). Added white is cleverly used in combination with delicately reserved areas on an open krater from the Athenian Agora depicting horns of consecration on an altar. In discussing the piece Immerwahr is surely right in noting that superimposed white was "a mark of quality in all periods" (1971: 249, no.425, pl.60). Lavish use of white, in particular, the edging of motifs with closely spaced dots and the use of wavy lines, is, however, characteristic of later LH IIIB-C.

Added white surface designs on a silhouette animal body seems to be more characteristic of LH IIIB. Earlier
animals were drawn in outline with surface fills, ranging from naturalistic dappled hides to abstract chevrons, dashes etc. Internal details of silhouette bulls and their calves are shown by rows and rosettes of white dots (MPVP: V.40), and the silhouette body of a fish is lined with the white wavy stripe (MPVP: V.42), typical of LH IIIB and IIIC. A fragmentary scene with bivalve shells in added white on the animals' bodies might also be more at home in LH IIIB (contra MPVP: IV.37, Middle), where there are extensive parallels for silhouette animals other than horses, as well as the use of white paint as surface fill (e.g. MPVP: V.58-60, 107) (34).

The third use of white paint, the depiction of an entire scene in white on a dark ground, i.e. a reversal of the normal technique, is known on only one AK with birds confronted over a nest of chicks (MPVP: IV.38). The scene is securely dated to LH IIIA2 late by the vase form and the character of the design, both the birds and the subsidiary elements. This technique is better known in LH IIIC, when a fine pictorial example shows (by uncanny coincidence) griffins feeding their young in a nest (MPVP: XI.91). Although it does not seem to have been a commonly used technique, earlier parallels can be found within the Mycenaean repertoire. On piriform jars from Amarna bivalve shell/floral motifs occur in white on a dark ground (Forsdyke, 1925: 185). At Berbati a fragmentary monochrome bowl preserves traces of a pictorial design in added white (Åkerström, 1987: 38, no.203, fig.8), and white designs on
monochrome goblets are referred to by French at Mycenae in LH IIIA1 (1964: 249).

5.7.5 PAINTED AND INCISED SIGNS.

These signs, one or two in number, occur on the handles or base of some AKs. More unusual are four dipinti on the body of an AK [*173]. They appear on many other shapes; the greatest number are known from Cyprus and the Levant, but they are also recorded in Greece (Crouwel, 1972a: 28 for refs.). Their significance is not clearly understood, indeed no large-scale study of the range and distribution of the signs has been undertaken.

For the AKs the evidence points to the signs being executed independently from the forming and decorating of the vase; most of the incised signs were made after firing, and the painted signs use a matt paint (ranging from orange to purple) which is different from the lustrous paint of the decoration (Daniel, 1941: 265-66).

The occurrence of the signs on the AK is relevant here for its chronological significance. Both the painted and incised types on handles and bases date primarily to LH IIIB. It may be noted, however, a sign has been mentioned on the base of the early 'Window Krater' [*1], and that large painted signs (again in a matt paint) occur on the interior of two AKs, both of which are clearly LH IIIA2 in date [*16, and BMC 377: octopus].

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5.8 CLUSTER ANALYSIS.

The application of cluster analysis, that is, the use of numerical procedures to divide a group of units into sub-groups, to the chariot designs was undertaken as an extension of the design analysis. The benefits of using quantitative methods in the study of archaeological artefacts have been cogently argued by Doran and Hodson:

"We do not believe that intuitive classifications by archaeologists are necessarily invalid. On the contrary, the visual appreciation of complex morphological patterning is a major human ability which it would be perverse to discount. It is certainly naive to suppose, as several archaeologists have done, that a relatively simple numerical technique will provide a better classification in this difficult context. However, it is also clear that the innate abilities for pattern recognition that archaeologists may possess are rarely controlled sufficiently for consistent, communicable classifications to result" (1975: 186).

Thus the use of quantitative methods in no way implies a rejection of the techniques used in previous work; rather the same basic approach, the skill of "pattern recognition", can be more powerfully applied to the material. The example of the chariot scenes presented below illustrates that the application of quantitative methods can significantly improve both the organisation and presentation of the information in addition to facilitating complex analysis of it.
The application of cluster analysis to pictorial data, although essentially experimental, may be considered useful for a number of reasons. First, the complexity of the chariot design has resulted in diversity and inconsistency in the published descriptions and analyses of the scenes. Second, the process of organising this visually complex data into a form acceptable to the computer, that is, suitable for translation into quantitative terms, necessitates clear and precise description of the designs. Although familiarity with the elements and the structure of the chariot design was a prerequisite for coding the data for quantification, the clarity and specificity exacted by the quantification in turn enhanced intuitive perceptions of the data and sharpened the consistency of the design analysis.

As a result of the design element analysis the chariot scenes can be presented in terms of a simple but standardised vocabulary. Comparison of vases, study of the range of variation within the material, and incorporation of new material are all greatly facilitated by such a consistent and easily communicable vocabulary. Furthermore, the explicit presentation of the data means that conclusions can be more easily evaluated and, if need be, modified. Coded and quantified data also has the advantage of being easily manipulated to produce clear and informative tables and diagrams; this being particularly beneficial where larger bodies of material are involved. The preparations for quantification thus introduce a greater degree of precision to the study of material, but beyond these immediate
practical benefits the actual cluster analysis of the data was undertaken in order to explore certain hypotheses concerning the classification of chariot designs.

The data used for the study was drawn from the forty extant complete or near complete chariot kraters. Although a larger sample would have been preferable, it was decided to restrict the study to largely complete examples for which all the information was available and therefore directly comparable. The design analysis of the chariot scenes provided a basis for the choice of variables.

The variable sets chosen for three separate analyses were 1) the elements of the chariot system; 2) the subsidiary design elements (filling motifs); 3) the subsidiary design elements considered together with their location. The choice of variable sets was deliberately selective. Inclusion of all or even most of the elements of which these complex designs are composed would have been highly impractical as well as statistically invalid - the number of variables far outnumbering the number of units (vases). In addition, certain details of the design proved more amenable to quantification than others. The chariot and the subsidiary design elements exhibited variation of a quantifiable type; they could be adequately and concisely described in terms of discrete variables, that is, presence/absence attributes. Other undoubtedly important features, in particular the human figure, display rather a continuous and more fluid range of variation, less susceptible to coding.
The purpose of the computer analysis, then, was not to produce groupings on the basis of all available data. Rather it was to examine the groupings formed by the selected variable sets. On the basis of preliminary ('intuitive') study of the material, it was thought that these variable sets, the chariot system and the subsidiary design elements, were significant for the classification of the material. Cluster analysis, with its powers of simultaneous comparison of variables, was therefore used to test this hypothesis. The object was to ascertain whether coherent and sensible groupings formed using this selected data. The groupings or clusters could be compared with one another and with previous classifications of the material. The results could then be further studied to find out which variables had contributed most strongly towards the cluster formation; in other words, to identify the most significant variables. The cluster analysis might also be expected to throw light on the classification process, and perhaps to reveal previously unknown structure in the data; for, in the words of its creator, "cluster analysis is a tool of discovery" (Wishart, 1978: 1).

The complexity and the structure of the chariot system is expressed through the variables, which are equivalent to the component units and the attribute states of the design analysis. The coded variables are listed in FIG.31. The chariot system is described by a total of 39 discrete variables. The maximum number of variables required to describe any one vase is 17, since many of the variables are
mutually exclusive.

Following the structure of the design analysis some of the variables operate hierarchically. The traction system may serve as an example. If a unit is identified as having a Type 2 traction system (variable 21), then it will be either L-shaped or V-shaped (variables 22 and 23 respectively), and may be decorated in one of a number of ways (variables 24-7). Variables 22-27 are conditional; they can exist only in relation to variable 21. Thus codification of the traction system reflects the complexity of the design - the traction type, its shape and its surface decoration - through a process of hierarchical decomposition (Doran and Hodson 1975: 102). In this way degrees of similarity between complex elements can be distinguished in the cluster analysis.

The codification of the subsidiary design elements is shown in FIG.32. Initially every different motif on the vases used in the analysis was recorded. A small proportion of these elements proved to be unique; in order to reduce the number of variables these were not included in the final analysis. The rationale behind the definition of the variable set was straightforward, in that morphologically similar elements were grouped together as one motif or variable. Variation within the basic shape at the level of execution, e.g. the angle of the motif, line thickness, was not taken into consideration. Furumark's classification of motifs formed the starting point. Some elements were defined as morphologically distinct at the level of a Furumark
motif. For example, the parallel chevron, FM 27, was coded as a single variable. Other motifs which exhibit greater typological variation were subdivided further. This was particularly the case with the wide range of flower motifs, where definition of the variable at the level of FM (eg. FM 15 or FM 18) would have ignored obvious and consistently distinguishable variation. In this way the subsidiary design elements, including unique examples, were described in terms of about 50 variables.

The third and final cluster analysis was performed on the same subsidiary motifs, considered in conjunction with their location within the designs. The eight location codes defined in the design analysis were used [FIG.29]. In this case each data entry had three fields - object no., location code, motif code (e.g. 1,a,8). Every combination of location and motif code was then recoded in order to reduce the data to two fields (e.g. 1,a,8 = 1,1; 1,a,9 = 1,2 etc.)

For each of these data sets the degree of similarity between each pair of objects was calculated using the Jaccard similarity coefficient, which counts only agreements and ignores negative matches (Doran and Hodson, 1975: 141-2). Similarity is expressed as a percentage figure.

Cluster analysis was performed on the similarity matrix, using the CLUSTAN IC package (Wishart, 1978). Several different clustering procedures were used - single linkage, double linkage, average linkage and Ward's method. The results of each method were produced in the form of a tree or dendrogram. The most satisfactory (i.e.}

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archaeologically sensible) results were produced using Ward's method. The results were not, however, obtained in accordance with the method as published, since the coefficient was not equivalent to a euclidean distance metric (Wishart 1978: 28).

The three sets of results were considered in relation to previous non-quantitative classifications (including that suggested by the author), and were also compared with one another. The groupings produced by the computer analysis were of considerable interest. The main features of each dendrogram are briefly reported below with a further separate discussion.

The results are also presented graphically in FIGS. 33-35. A series of symbols, which represent the dates suggested by the author for each vase on the basis of stylistic and stratigraphic data, is added to each diagram. Groups of vases assigned to individual painters are also indicated.

a) CHARIOT DATA SET [FIG. 33].

Using this data the procedure successfully distinguished the majority of LH IIIB pieces. The grouping of the earlier material was somewhat less clear, with some unexpected juxtapositions of vases [e.g. *13 with *146, and *44 with IIIB material]. Pairs of vases, previously identified as individual hands, were placed together in three instances [*57, *64; *77-78; *142-143].

b) MOTIF DATA SET [FIG. 34].

This data set produced clearer groupings than the chariot
data. Again much of the LH IIIIB material was grouped together, with some admixture of the second phase of LH IIIA2 late. The small number of pieces identified as LH IIIA2 early [*6, *13-15] were grouped together. Pairs of vases from three hands were placed together on the dendrogram [*28-29; *77,*79; *161,*163].

c) LOCATION/MOTIF DATA SET [FIG.35].

This third data set produced good results, with fewer anomalies than the previous two analyses. The LH IIIA2 early pieces were again isolated. The LH IIIA2 late and IIIB material was also well sorted. Five groups of vases, each identified as the work of individuals, were placed together [*28-29; *57,*64; *77,*79; *141-143; *161,*163].

DISCUSSION.

Each of the three data sets produced reasonably sensible results, thus showing that the data could, in most cases, be classified on the basis of the selected variables. Further study of the results indicated that in the case of the chariot data set the differences in the renderings of the traction system were particularly significant in the clear separation of the LH IIIB vases from earlier material.

The difficulties in sorting the earlier material serves to emphasise an aspect of the character of the chariot design, for the variation of the elements which make up the chariot design (e.g. box shape, box fill, wheel) cannot be said to follow a simple linear progression. For example, a square box is characteristic of many earlier pieces, but it also recurs on chariots which, on other reliable criteria,
must be considerably later. Sporadic recurrence of such variables in different chronological phases is an integral part of the character of the chariot design, and indeed of other pictorial themes.

This is reflected in the ordering of the material using the chariot data set; it is also a major factor in the difficulties often encountered in trying to relate the fragmentary designs on sherd material to complete designs. Similar difficulties can even occur, though to a lesser extent, with individual complete vases, thus imposing an element of ambiguity on their dating.

The results produced by the two data sets using motif variables confirm the importance of the filling motifs or subsidiary design elements for ordering the material. These motifs do, in general, display a linear development. Unlike the more complex pictorial motifs, subsidiary motifs do not on the whole recur sporadically in different periods. Each motif has its own lifespan, that is, it remains in use for a given period of time. Some motifs carry on in use through several archaeological phases, while others appear to have a more limited chronological horizon. The shorter the lifespan of the motif, the more useful it is in the ordering or seriation of the material. Study of the computer results proved useful for clarifying which motifs were susceptible to precise dating, and equally important, which were not. This is visually presented in the form of a bar chart, which indicates the suggested lifespan of the commonly used motifs [FIG. 30].
The best results were obtained in the third analysis. This used the combined data of the motif and its location within the design. The success of the clustering procedure further emphasises the importance of the structure of the design, that is, the use and distribution of filling ornaments in relation to the primary design elements.
# 5.9 STYLISTIC DEVELOPMENT.

The classification of the chariot design is based on the combined evidence of stratigraphic data [#2], the vase form [#4], and its decoration [#5]. The limited nature of the stratigraphic information and the fragmentary state of much of the material increases the importance of the evidence of the painted decoration. Fortunately, the complex character of the decoration means that it can often provide sensitive criteria for dating.

Working within the chronological system for Mycenaean ceramics, four main phases of development are identifiable within the chariot material. This includes a recognisable stylistic development within LH IIIA2 late (here termed a and b), which corresponds broadly to Vermeule and Karageorghis' Middle II and III, and to French's identification of typological development within LH III2 late at Mycenae (1965: 184).

(1) LH IIIA2 early;
(2) LH IIIA2 late (a);
(3) LH IIIA2 late (b);
(4) LH IIIB1.

Where very fragmentary material is concerned, there may be insufficient evidence upon which to assign individual pieces to these phases, in which case a less precise date may be suggested. This applies particularly to the subdivision of LH IIIA2 late.

The basic characteristics of each phase and the changes
between them are defined. In this way the overall stylistic
development of the chariot design is described. This
discussion is reserved for an analysis of the overall style
as opposed to individual style or microstyle. The study of
microstyle - the identification of individuals and workshops
- can provide a means of defining smaller groupings of
material within the basic ceramic phases, but the microstyle
must be defined with reference to the overall style, and is
therefore discussed separately (#A.1 and Catalogue).
Similarly, idiosyncracies of particular vases are best
understood within the framework of the collective
characteristics of the style; for this reason such unusual
features are discussed in the catalogue.

The complex nature of the pictorial scenes must always
be kept in mind. On the positive side this complexity
provides a special opportunity for analysing the
combinations of motifs in use at any one time, and for
understanding how individual design elements (and sub-design
elements) change and come in and out of use differentially
through time. The reverse side of the coin is the fact that
the complex character of the variations within the designs
means that one cannot lay down rigid stylistic rules,
although it is possible to describe the general development
of the design elements in each phase. It should be
emphasised that the process of dating and assessing the
relationships between vases is based on the cumulative
evidence of all the design elements. Thus, while any one
element may occur through time either too frequently or too
sporadically to be analytically useful, clearer criteria may be provided by other elements.

#5.9.1 LH IIIA2 EARLY.

The earliest chariot kraters appear to be datable to LH IIIA2 early. There is at present no positive evidence, either stylistic or stratigraphic, to support the idea that they begin in LH IIIA1 [#2.4]. As was clearly recognised by Furumark, the development of all Mycenaean pottery, including the pictorial material, is one of increasing stylisation and conventionalisation. The earliest chariot scenes show many points of agreement with depictions in other media, most notably frescoes. The use of common themes and, more importantly, of common conventions in different media is indicative of a shared artistic framework.

Two chariots on each side of the vase are characteristic of this phase. The two chariots, usually separated by a single subsidiary motif, amply fill the decorative zone. By contrast, in the next phase only one chariot, now framed by subsidiary ornaments, is painted on each side.

As well as changes in composition, the phases of stylistic development are distinguished by significant changes in the proportions of some elements, especially the horse and the chariot wheel. The wheel starts off in LH IIIA2 early by occupying approximately 50% of the depth of the frieze; through time it tends to become proportionately smaller. The earliest horses are about equal in height and
body length; through time the body becomes increasingly elongated, thus filling a larger portion of the frieze. Both changes exemplify the process of stylisation - the movement away from the correct or realistic proportions.

Another important aspect of the stylistic development of the chariot scene are the characteristics of the individual design elements - the chariot system, horse, human figures, and the subsidiary motifs. In the design analysis it was established that the appearance of the chariot box is characterised by the combined variables of shape, outline and surface fill. Of these features the use of oxhide pattern as the surface fill, being confined to this phase, offers the best guide to date. The same naturally dappled hide forms the sides of the chariot box of the Ayia Triada sarcophagus, datable to LM IIIA (Long, 1974). Another interesting feature found only on a few early vases, is the use of different surface fill on the box of one of the four chariots [see #A.2]. Thus, on the Cesnola krater from Maroni [*6] oxhide fill is used on one box, spotted fill on the other three. This example succinctly demonstrates that both types of fill were in contemporary use. Simple spotted fill - the most common surface decoration for as long as chariot kraters were produced, is not in itself a datable feature. Large spots, however, occur primarily in this early phase, perhaps stylistically intermediate between the oxhide and small spotted fill. The shape and outline of the box present a more complicated picture, since both square and rounded boxes with single or
double outline can recur in all phases. Such recurrence of individual features through time is typical in pictorial pottery, and makes it all the more important to understand the pattern of usage of the design elements. To judge from the relatively small number of vases assigned to this phase, there seems to be a tendency towards the use of single outline and a square box.

The relationship of the chariot box and the wheel undergoes clear changes through time. Essentially the correct technical relationship shown on early vases, with the floor of the box lying across the axle of the wheel, later disintegrates so that the box appears to perch on the wheel rim. In LH IIIA2 early the box is characteristically depicted in its correct position behind the wheel, sometimes with the triangular spur. In addition, the pole, the essential connecting element between the horse and chariot, is usually depicted. It appears as a line projecting from the lower edge of the box.

The traction system, particularly the pole brace and stay, undergoes distinctive changes. This important part of the chariot is not discussed by Furumark, who considers the horse and chariot separately (FM 2 and 39 respectively). The complex structure of the traction system is fully discussed in the design analysis [#5.2.5]. In brief, three phases of development can be identified in the traction system. The classification of three traction types (1-3), on the basis of the appearance of the pole brace and stay, denotes stylistic changes in traction elements, which correspond
broadly to the chronological phasing; there is no implication that technically different systems are depicted.

The type 1 traction system is found on early examples of the chariot design, primarily (although not exclusively) those of LH IIIA2 early date. There is considerable variation amongst the ceramic depictions, but in all cases the pole stay and brace project from the front of the chariot box and continue over the horses' backs. They are easily distinguishable from the second traction group, where the pole stay and brace are drawn only between the chariot box and horses' rumps, and not across their backs.

The depiction of the elements connected with the harness system (yoke, yoke saddle pad, neckstrap, girth) varies greatly in all phases. As might be expected, the most technically accurate depictions occur in this earliest phase, with the yoke or yoke saddle appearing as a projection in front of the withers, and the neckstrap and girth added in white paint, or in one case [*2] incised into the vase fabric. In all phases, however, the artist sometimes omitted the harness elements. Absence of any of these features is not a reliable criterion of date.

A similar pattern can be discerned for the control elements: the headstall and the terret. Like the harness elements they seem to be an "optional" part of the design, and when they are included, the accurate renderings of the early examples soon give way to increasingly stylised versions. In this phase the terrets tend to have an oval shape and be placed near the base of the neck.
The horses are well proportioned in this phase. The distinction between the two horses, one behind the other, is carefully maintained - the two muzzles are clearly separated, although the impression that it is one horse looking the viewer squarely in the eye is never entirely absent! The eight legs are carefully separated, and the rear set are usually solid painted, the convention of outlining them becoming typical only in subsequent phases. Hooves and fetlocks are drawn, and the chariot team is poised on the ground-line of the body bands.

The human figures undergo the same stylisation as the other chariot elements. The general process is well described by Furumark, who drew attention to the similarity of early ceramic depictions to the typical Minoan physiognomy (MP: 237-9). The oval eye, a reserved ear set into the hairline, and carefully drawn profile are all characteristically early. Both robed and silhouette independent figures are represented in this earliest phase.

The usefulness of the subsidiary motifs as a guide to the classification of the material has already been noted by other scholars (MP: 435; MPVP: 12). The results of the quantitative analysis of the design elements relating to the chariot scene has further emphasised the importance of the choice, number, and location of these subsidiary motifs [§5.8]. Typical of this early phase is the use of the various forms of rockwork (FM 33-34); the rockwork, often with hatched fill, is pendant from either the upper or lower border of the design, although it may also be attached to
both borders, in which case it acts as a frieze divider. The motif is highly versatile, since changes in size and shape allow it to occupy different locations within the design.

Also characteristic of the same phase is the small motif, which Furumark termed the 'bivalve shell' (FM 25). This motif is a useful indicator of date since it is not common in later phases, although small isolated examples and related shell/flower derivatives do occur. While the abundant use of the shell in rows and groups is chronologically restricted on pictorial pottery, the same is not true of abstract Mycenaean pottery, where the motif carries on in use from LH IIIA-C (MP: 315). Thus although the motif enjoyed a long lifespan on abstract pottery, it came in and out of fashion more rapidly in pictorial designs, being replaced by other syntactically equivalent motifs such as parallel chevrons or unvoluted, stemless flowers.

Flower motifs are particularly characteristic of the succeeding LH IIIA2 late phase, but early forms of the papyrus and palm motifs are used in LH IIIA2 early. Characteristically early are the knobbed stem of the papyrus and the naturalistic palm with hatched stem. In association with these motifs, which are a hallmark of this phase - rockwork, shells, early papyrus and palm types - several other small motifs begin to appear, which come to be increasingly used in the following phase. These are parallel strokes and chevrons, trefoils and quirks.

At this point it is relevant to clarify how my
classification of this material relates to that proposed by Vermeule and Karageorghis (MPVP: 3). The vases classified here as LH IIIA2 early are spread amongst their Early I-III and Middle I groups, i.e. from LH IIIAl to IIIA2 early. My points of disagreement are two. First, the earliest group of chariot kraters belong not to LH IIIAl but to LH IIIA2 early (as argued in #2.4). Second, the implication of their classification system is that the change from Early III to Middle I represents a significant development in the material. Their primary criteria for Middle I are changes in the choice and location of filling motifs: the introduction of stemmed flowers, and the placing of small, detached motifs throughout the composition (MPVP: 26).

This is a classic example of the differential development of individual elements, which is typical of the chariot scenes. The features mentioned by Vermeule and Karageorghis are indeed new, and they do represent a recognisable stylistic development. They appear, however, in combination with numerous other elements which are characteristic of LH IIIA2 early: the same vase form, FS 53; two chariots per side; rock pattern and shells as subsidiary motifs. In other words the element of continuity outweighs that of discontinuity. By contrast, far more obvious changes take place between LH IIIA2 early and late, that is, their Middle II and III. These changes are

1) vase form: FS 53 to 54 [see #4.1]; 2) design structure: two to one chariot per side; 3) sub-design element: the common use of the type 2 traction form; 4) subsidiary design
elements: use of floral motifs (FM 15 and 18), parallel chevrons and strokes, but not in combination with the shells and rock pattern of the preceding phase.
5.9.2 LH IIIA2 LATE (a, b).

A large number of chariot kraters can be assigned to LH IIIA2 late, a period when large quantities of Mycenaean pottery are found in the Eastern Mediterranean. The identification of phases within LH IIIA2 late is made entirely on stylistic criteria. These phases correspond in a general way to the Middle II and III periods of Vermeule and Karageorghis, with the proviso that their absolute dates are not accepted [see #2.4]. Stylistic development within LH IIIA2 late has also been detected by French at Mycenae (1965: 196), and some of the changes observed there find parallels in the subsidiary motifs of the pictorial material. The features which are characteristic of the whole of LH IIIA2 late are described first, followed by a discussion of the specific criteria by which the two sub-phases, (a) and (b), may be distinguished.

The vase form is FS 54 [#4.1]. One chariot is painted on each side and framed by independent figures and/or subsidiary motifs. The relationship of the chariot box and wheel is varied: floor of box shown behind the wheel, upper quadrants spotted, and box perched on wheel. Furumark identified this feature, the chariot perched on the wheel rim, as a "quite reliable chronological criterion" (MP: 334); he considered it to be restricted to LH IIIB, and dated only one such example, FM 39:12, to LH IIIA2 late [64]. His analysis needs, however, to be modified in the light of more recent evidence. New examples show that, in
addition to being typical of LH IIIB scenes, the chariot box also perches on the wheel rim (as opposed to appearing behind it) in LH IIIA2 late.

Throughout LH IIIA2 late the box is usually spotted, while the fill of the wing can exhibit variation in layout, being bisected either by a horizontal line framed by dots or simply by lines of dots. This variation could be related to the structure of the wing, perhaps representing a wooden strut. If so, it is interesting that it occurs only once in the earliest phase, on the Pyla-Vergi krater [*2].

The traction system of several vases must be classed within the range of the Type 1 examples, but the vast majority are of Type 2, which is characteristic of LH IIIA2 late. To recap briefly on the design analysis, in Type 2 the pole brace and stay appear only between the chariot box and the horses' rump [*5.2.5].

The depiction of the horses and human figures tends to be very varied and is more difficult to describe consistently and objectively. With one chariot per side now the norm, the horses' body begins to lengthen in relation to its height, a characteristic which becomes most pronounced in LH IIIB. Although some horses continue to be poised on the ground line of the encircling bands, the horses do frequently sink down into the bands - the design being painted over the bands. The heads of the human figures have undergone a degree of stylisation. Almond-shaped eyes continue to appear, but more often a circular eye is attached to the hairline, the ear is often not shown, and
the profile is simpler, with the nose often upturned and pointed, and the mouth and chin receding.

The chariot design is typically surrounded by a wide array of subsidiary motifs, especially the palm (FM 15) and Furumark's 'Mycenaean III flower' (FM 18) in locations (a) and (b). Also popular and generously used are chevron groups, parallel strokes and quirks. Typical of LH IIIA2 late and less usual in LH IIIB is the use of small motifs, especially the dotted circle (FM 27 'sea anemone') and quirks, within the quadrants of the chariot wheel (location h).

While the chariot kraters produced throughout LH IIIA2 late share many features, it is possible to distinguish two phases of development within the period. A similar division has been made by Vermeule and Karageorghis and it is, therefore, appropriate to consider their classificatory criteria. They differentiate Middle III from Middle II as follows:

"The third and final stage may betray signs of degeneration, but it also represents a genuine shift in style. Exuberant filling ornaments are still used, but they slowly die out. The long-stemmed flowers become more schematic than ever, then gradually give way to the new decorative motif of the whorl shell. The shape of the amphoroid krater also undergoes certain changes: the neck becomes higher and the handles flat, discarding the old metallic knobs and midribs and thus breaking the last faint links to the Palace Style. The reversion to emptier, clearer compositions, through distaste for Middle II excesses, permits once more a clarity of drawing and design that at times is almost like bas-relief (IV.49,50). The new space brings back an interest in subsidiary human figures, which will continue in the Ripe phase". (MPVP: 26-7).

Taking the reference to the changes in shape first, the increasing height of the neck through time does indeed offer
a guide as to date, but this is primarily useful as a
distinction between LH IIIA2 late and LH IIIB, when the neck
is both taller and straighter, having lost the concave
profile of earlier phases. Vermeule and Karageorghis' statement that the latter part of LH IIIA2 late is
distinguished by flat handles which have discarded "the old
metallic knobs and midribs" requires revision. "Metallic
knobs" occur only on a few vases, and these of early date.
Nor does the transition from ribbed to flat handles separate
Middle II from III. Strongly ridged handles, i.e. with
"midribs", are typical in LH IIIA2 early and sometimes occur
in the earlier part of LH IIIA2 late. The flat handle, however, is specifically a characteristic of LH IIIB, for
throughout LH IIIA2 late the handles generally retain a less
pronounced central ridge. In addition, most ridged handles
(both strongly and lightly ridged) are perforated at the
points of attachment with the vase body. Conversely,
perforations are rarely found in the flat handles of the LH
IIIB phase [§4.2].

Given that the greater proportion of the material is in
a fragmentary state, distinctions made according to
developments in the form and use of the design elements take
on an added importance. The subsidiary motifs provide the
best criteria for distinguishing between the two phases,
although attributions to individual painters also offers a
very useful basis on which to assemble smaller groups of
material. Flower motifs occur throughout LH IIIA2 late;
elaborate (and often unique) stemmed flowers only in the
early part, while later vases tend to have simpler flower types, including large versions of the stemless flower. A similar process is noted in the LH IIIA2 late deposits at Mycenae, where "the simplification of the flower patterns and the widespread use of the vertical whorl shell" are identified as innovations later in LH IIIA2 late (French, 1965: 184). In pictorial scenes the flower motif, found in almost every scene, is only rarely replaced by the vertical whorl shell, which is nevertheless a new feature in LH IIIA2 late (b).

The parallel chevron motif is not in itself closely datable, but the liberal use of the motif in many design locations is restricted to the first phase of LH IIIA2 late. Also chronologically undiagnostic are parallel strokes, but they are located between the horses' legs and tails, apparently only in LH IIIA2 early and LH IIIA2 late (a). A further small but chronologically significant motif is the lozenge; this is used only in LH IIIA2 late (b) and in LH IIIB. It should be noted that Furumark considered the lozenge to be a motif which appears first in LH IIIB (MP: 410-11, FM 73). In fact the lozenge is introduced as a subsidiary motif in both pictorial and abstract pottery in LH IIIA2 late (b) (for the latter, see French, 1965: 181, 190).

In summary, there are design features which distinguish phases (a) and (b) within LH IIIA2 late, but it must also be remembered that many features remain constant throughout. The Type 2 traction system, to give just one example, is
typical of all LH IIIA2 late chariot scenes. It is not, therefore, always possible to assign sherd material to one or other phase of LH IIIA2 late.
The amphoroid krater with stately chariot scenes does not survive beyond the early part of the LH IIIB period. A few chariot scenes are painted on the loop handled krater, which replaces the AK as the primary pictorial shape. Stylistically similar chariot scenes on both amphoroid and loop handled kraters illustrate the overlap in the use of the two shapes within LH IIIB1. Chariot designs of this phase, both whole and fragmentary, are readily distinguishable from earlier vases on a number of criteria.

The LH IIIB vase form is FS 55, with a tall, straight neck, heavy piriform lower body, and flat strap handles [4.1]. Cypro-Minoan signs, either incised or painted onto the vase, are also characteristic to this phase. Stylisation of the design elements continues. While the spotted fill often decorates the chariot box and wing, there is a new fashion for different types of surface fill, including scale pattern, T-shapes, lozenges, and panel patterns. The chariot box perches, often awkwardly, on the wheel rim.

A new way of depicting the traction system is an important and easily recognisable characteristic of LH IIIB. This Type 3 system is characterised by a row of "pennants" or arcades above the horses' backs, which may hang directly from the reins or below them. The section of the pole stay and brace visible between the chariot box and horses' rumps may be omitted, but if shown it often hangs down as far as the ground line in contrast to the shorter triangular or
L-shaped elements of LH IIIA2 late.

The horses are also characterised by increased stylisation, the elongation of the body and long, thin muzzles. The front legs tend to split into pairs rather squarely around the knee and often only one set of rear legs is shown. Another innovation is that three figures (and in one case four) ride in some chariots. The facial features of the LH IIIB figures are often distinctive with their angular heads, long, beak-like noses, and the eye either set against the profile or drawn as a circle. Furumark's description of the heads of this phase as "chicken-like" emphasises the non-human qualities of the features.

Subsidiary design elements are fewer in both number and range. The spaces immediately in front of and behind the chariot (location a) are often occupied by independent human figures, either drawn in silhouette or wearing a knee-length tunic instead of the long robe of earlier scenes. An interest in human figures independent of the chariot design is further emphasised by the depiction of rows of figures on a range of shapes (MPVP: V.31-36).

The whorl shell continues to be used, as do flower motifs, such as the palm (FM 15) and the elaborate hybrid flowers (FM 18, Type B). Characteristic of LH IIIB are a range of spiraliform motifs, usually under the handles or the horses' belly (FM 12 and 51 in locations b and f). Parallel strokes, chevron groups, and stemless flowers, all typical of earlier phases, have virtually disappeared. The lozenge, which appeared first in the preceding phase, is now
in widespread use: as a free field motif, flanking reins, occupying the wheel quadrants, as chariot box fill, and even decorating the vase rim. Also typical are a range of shapes composed of combinations of interlocking and concentric U-shapes (trefoil rock-work, FM 29.7-24).

The features of the primary design elements, in particular the traction system of the chariot, the facial features of the human figures, and the small number of subsidiary motifs are so distinctive than even rather fragmentary scenes can often be securely assigned a LH III B1 date.
FUNCTION

As part of a study of a particular shape it is natural to ask the question - what was it used for? The study of function also "has the appeal of human interest" (Shepard, 1956: 224), since it attempts to understand the object in terms of its users. In general, it is difficult to reconstruct a picture of how any given shape was used; it may have had multiple functions, and other vases may have served some of the same purposes. The wide range of highly differentiated forms in the Aegean Bronze Age does, however, indicate that vases may have had fairly specific functions.

Special studies have, for example, been presented on the rhyton and the stirrup jar. Koehl has discussed the function of the rhyton, emphasising that a practical domestic use is indicated by the filler type and by the evidence of contexts, in addition to the more obvious ritual associations (1981: 179-88). The use of the stirrup jar as a container for oil and wine has been demonstrated at Pylos by study of the evidence of the Linear B tablets, and by the physical distribution of the shape in relation to other finds (Haskell, 1984: 97-107).

No thorough study of the function of the AK has been undertaken, though a number of different possible uses have been suggested. Casson offered the rather extreme view that the shape had no useful function (1937: 50-1); this was countered by Immerwahr, who suggested that the shape could
have had a dual value, as an attractive object through the elaborate decoration, and as a container (1945: 538). Vermeule and Karageorghis refer to the AK as a vessel "mixing or storing liquids" (MPVP: 12).

The term function here encompasses both utilitarian use (e.g. transport and storage containers, vessels for preparation and consumption of food and drink) and symbolic use (prestige or ritual artefacts). The function of an object can be explored indirectly through the following classes of evidence:

1. residue of contents.
2. written evidence.
3. iconographic evidence.
4. the characteristics of the shape.
5. comparative evidence of analogous shapes.
6. find context and associated finds.

The evidence for the use of both the Mycenaean and Minoan AK is examined in turn, and the two compared to see if there is evidence for similar or contrasting patterns of usage. The small corpus of bronze kraters is also discussed.

From the categories of evidence listed above study of the contents can immediately be excluded. At present no AK has been recovered containing an obvious sediment or layer. Such sediments do occur in other vase shapes, and various commodities, such as beeswax, fish and wine, have been identified through analysis (GCP: 839-47; Rice, 1987: 233-4).
Written records sometimes reveal the names and functions of vases. For example, scholars of the Chinese Bronze Age are in the relatively fortunate position in knowing the names and functions of many Shang bronze vessels from the dedicatory inscriptions on them, and, less reliably, from the later Sung encyclopaedic catalogues (Rawson, 1980: 61; Chang, 1980: 23). Knowledge of classical Greek pottery has also been augmented to some extent by collecting information from literary sources (Richter and Milne, 1935; Kanowski, 1984). For the Aegean Bronze Age the Linear B tablets provide the only written records as yet deciphered. The names of a small number of identifiable shapes are known from the combined evidence of the text and the ideograms; indeed, confirmation of the correctness of Ventris' decipherment was provided by the subsequent discovery of a tablet at Pylos, on which the self-evident ideogram for a tripod vessel went with a text which read ti-ro-po-de following Ventris' system (Chadwick, 1958: 81-3). On some tablets reference is made to the contents; for example, amphorae at Knossos contain honey (Vandanabeele and Olivier, 1979: 260), and at Pylos stirrup jars are associated with oil (Haskell: 1984: 97, Fr1184). Unfortunately, none of the Linear B ideograms can be convincingly identified as an AK, so this class of evidence is inapplicable (35).

Although the Aegean Bronze Age is rich in iconographic representations on frescoes, seals, ivory and stone reliefs, these are of limited use for understanding the function of
vases. Relatively few types of vases are shown, and the AK is not among them. The function of a vase can rarely be inferred from the numerous static scenes. Performative or interactive scenes, which show a vase or other object in use, are potentially more useful. For example, the collection of blood and the pouring of liquids on the Ayia Triada sarcophagus (Long, 1974: 36), the sharing of a drinking cup on the Camp Stool fresco (Hood, 1978: 68), or the genius pouring a liquid onto the upturned hands of his partner on the Mallia triton (Baurain and Darcque, 1983). The majority of these scenes seem to depict a range of ritual activities, while having little to communicate about the other ways in which vases were used.

#6.1 CHARACTERISTICS OF THE FORM.

Some inferences can be made about the probable use of a vase shape from its basic character, that is to say, form and function are intimately related. More specifically, the following functional properties are related to aspects of the form: capacity, accessibility, transportability, closure and stability (Rice, 1987: 225-6).

The AK presents an interesting problem of classification, which is also relevant to its function - is it an open or a closed shape? Yon observes that the krater form is situated "à la limite que sépare les vases fermes des vases ouverts", and classifies the AK as closed and the open (neckless) krater as open (1981: 64). By the criterion of the restricted orifice, i.e. the maximum diameter is
greater than that of the mouth, the AK would be a closed vessel. On the other hand the AK has two other characteristics which Yon (ibid.) associates with open shapes: an interior which is easily accessible and relatively well-finished (smoothed and sometimes partially slipped). This harmonises with the simple but eminently practical division between open and closed shapes suggested by Cook for later ceramics; if the interior of the vessel is easily visible it is open, if not, it is closed (1960: 219). Using this criterion the AK may be classed as an open shape.

The main characteristics of the AK are: its large size, the wide mouth for relatively easy access, and the two substantial vertical handles by which the vessel could be firmly grasped. Certain limitations are also inherent in the shape: a wide mouth is useful for access but the probability of spillage and evaporation are also increased. The opening could be covered by another vase of suitable size, such as an inverted bowl, or by a flat piece of wood or stone—a practice observable in modern Greece for covering jars containing oil. It would, however, have been relatively difficult to fasten a lid on securely, in contrast to the very practical three handled arrangement on alabastra and piriform jars. It has been suggested that the groups of two or three perforations found on the upper and lower attachments of some AK handles were associated with the securing of a lid (Schaeffer, 1936/7: 214; Immerwahr, 1945: 538). Study of these perforations indicates that they should rather be associated with the manufacturing process, serving
to enhance water loss from the thicker parts of the clay during drying and firing [#4.2].

Stability is also a significant factor. Large size, combined with a broad shoulder and a narrow base are features which make vases less stable (Shepard, 1956: 237). Indeed, the general development towards a more exaggerated piriform shape in Mycenaean pottery can only have increased this problem. To some extent the heavy torus foot and the disc cutting on the underneath helped to combat it. An advanced piriform shape could also be stabilised by placing it in a clay stand (FS 336), a form known both in Crete and on the mainland in LM/LH III. It is not a common Minoan shape and there is considerable variation in shape and size (Kanta, 1980: 280-1). In most cases its use is unclear, but one or two examples confirm that it was sometimes used to steady an AK. Evans found an AK in a stand in an undisturbed tomb at Milatos (1906: 96, fig.105) [FIG.36]. A composite vase from Armenoi, Tomb 8 is at present unique, but it reinforces the association between the two shapes, by physically combining an AK with a three sided stand (unpublished, Rethymnon Museum). The equally small number of Mycenaean examples are associated not with the AK, but with the open krater (FS 7-9), which must have had similar problems of stability. At Ialysos, for example, a tomb assemblage included a stand and an open krater (MP: 643). The two forms were also sometimes more permanently associated in a composite vase, FS 11, that is, FS 9 attached to FS 336 (MP: 586). The popularity of these stands
in Rhodes is attested by the fact that all three examples of FS 11 cited by Furumark come from that island, as do the majority of the separate stands.

With reference to the use of stands to stabilise the open krater, Furumark observes that "claims of a practical nature" did not govern the evolution of the shape (MP: 70, fn.7). A similar point is more explicitly made by Shepard. In a discussion of the constraints placed on vessel proportions by functional needs, she notes that "a vessel made for decorative or ritual purposes is subject to fewer hazards, and a certain extravagance may therefore be expressed in its proportions" (1956: 237).

Several conclusions can be drawn from the characteristics of the form. It is unsuitable for the transport of commodities because of the problems of securely closing the mouth, and because the shape is relatively unstable and not obviously easy to stack (in contrast to the transport amphora, an unstable shape, but well adapted to stacking). Spillage or evaporation are a danger with a wide mouth, and breakage likely if such a large and fragile shape is frequently handled and moved. On the positive side its capacity is considerable and access to the contents easy. The impressiveness of the shape together with its exaggerated instability raise the further possibility of a symbolic element in the function [see #6.3.2 and #6.4].
6.2 ANALOGOUS VESSELS.

Examination of the use of similar shapes elsewhere can suggest possible uses for a given shape, though such general analogies should, of course, be treated with caution. The very term "krater" immediately calls to mind the Classical forms of the shape, which are synonymous with the mixing of wine and water, and indeed it is in such contexts that the krater shape is repeatedly illustrated. Scenes of symposia show the krater, and functionally similar forms such as the dinos and lebes, in which the wine and water is mixed, and from which the drink is drawn by ladles or jugs into drinking vessels. Broadly comparable sets of drinking equipment catering to similar needs are a widespread phenomenon. The symposium or drinking party is, for example, illustrated in some detail in Etruscan wall paintings of c. 520-330 B.C., with the relevant vessels displayed on a sideboard or kylikeion (Van Der Meer, 1985: 298-304). The essential equipment consisted of the amphora and hydria (storage), krater (mixing and presentation), ladle and/or jug (pouring), and the drinking vessels themselves (kylikes, cups, bowls). Additional items might include a strainer and a cooling basin (psykter).

A similar display of drinking equipment forms part of a scene inside a silver bowl of Cypro-Archaic II date (Matthäus, 1985: no.424, pl.34). On a sideboard is a hydria, pairs of jugs and ladles, and to the right a huge amphoroid krater. Scenes with the same key elements, combined with
those of music and libation, are also to be found in Iron Age Cypriot art. They appear together on the Hubbard amphora, and in a shorthand form represented by the lyre and an amphoroid krater with jug on less elaborate scenes (Morris, 1983: 220). Such depictions indicate the widespread use of krater shapes as mixing vessels used for drinking parties or ceremonies. They also illustrate the range of associated equipment, and highlight the element of display involved in this activity.
6.3 ARCHAEOLOGICAL CONTEXT.

Study of the archaeological contexts in which the shape is found provides important evidence for how the AK was used, while bearing in mind the pointers offered by the examination of the character of the shape and the use of analogous vessels. In examining the evidence of the contexts and associated finds, several problems are involved. Such a study is hampered by the large number of Mycenaean pictorial kraters bearing only the most general provenance, usually Cyprus. The same problem afflicts chronological studies of the material [2.2]. A second factor to be taken into consideration is the wide geographical distribution of the Mycenaean AK (and, indeed, the Minoan), which encompasses a number of distinct cultures [MAPS 1-4]. Although certain functions are suggested by the character of the form, it would be rash to assume that the shape found a uniform usage from Mycenae to Atchana. It will be prudent then to consider the evidence for each area separately. Thirdly, it is important to keep in mind the fact that the archaeological record by its very nature tends to preserve the results of human activity. The recovery of a partially completed activity frozen in time, such as the dramatic ritual in progress at Anemospilia in Crete, is exceedingly rare (Sakellarakis, 1981: 204-23). In most cases only the use of an object at the time of final deposition is preserved, and this may provide a very incomplete or partial picture of its use.
The Mycenaean AK has a wide distribution: mainland Greece and the islands, Asia Minor [MAP 1], Cyprus [MAP 2], and in the Levant from Atchana in the North to Tell el Ajjul in the South [MAP 3]. Relatively few examples of the shape are known from the mainland, though it occurs in a variety of contexts. LH III tombs are numerous, but the AK is attested with certainty only in two unpublished tombs at the Palamidi, Nauplion (AR, 1978/9: fig.22; Åkerström, 1987: 118-9). A possible AK fragment is also reported from the dromos of a Dendra tomb (Åström, 1977: 72), and a Berbati tomb produced two small fragments of a chariot krater (unpublished). The open krater (FS 6-9), a much commoner shape than the AK on the mainland, is also rarely found in tombs, being rather a typical settlement shape (Blegen, 1937: 450-1). Fragments of pictorial AKs have been identified on the settlements of Asine, Mycenae and Tiryns. Only at Berbati have numerous fragments of pictorial pottery, both AKs and other shapes, been found. A specific use is indicated for only one pictorial vase, a loop-handled krater decorated with bulls. Åkerström describes the vase as being sunk into an earth floor with its base intentionally pierced; he suggests that it is a ritual installation (1987: 118).

A few examples are known from the Aegean islands. At the settlement site of Ayia Irini, Kea, a fragment of an AK was found in a dump deposit of LH IIIA2 date. The character
of the pottery, a predominance of open shapes and much monochrome and unpainted ware, suggests settlement refuse, perhaps associated with renewed building activity in that area of the site (Hershenson and Morris, in press). In the Dodecanese the Mycenaean AK is known from tomb contexts at Ialysos on Rhodes, while the Minoan AK is known from the Serraglio on Kos and from many examples in tombs on Karpathos. The later "Kos-Miletus" version of the AK occurs in both tomb (Astypalaia) and settlement contexts (Kos). Only a few small fragments are known from Asia Minor (Miletus, Troy). At present no distinctive pattern of use for the Mycenaean AK can be reconstructed in these areas.

6.3.2 CYPRUS.

The shape is best known from Cyprus where numerous examples are well preserved in funerary contexts during LC II. There is some limited evidence for contemporary use of the shape in other contexts: settlements and sanctuaries. Small fragments were meticulously recorded in the settlement levels at Enkomi, and sherds have also been reported from Hala Sultan Tekke and Maroni. There is a strong possibility that they should be associated with the debris of looted tombs rather than settlement activity (36). At Myrtou Pighades rim and handle fragments are recorded from the sanctuary (Du Plat Taylor, 1957: 42-3, nos.188-190). The use of pictorial pottery and specialised shapes as cult equipment has also been suggested in Temple 2 at Kition (Karageorghis and Demas, 1985: 240-1). The material on Floor
IV included fragments of a krater with a human figure [*5], two chalices and a rhyton. The restricted use of the Mycenaean (and Minoan) AK can be contrasted with wider use of the shape in local fabrics on settlements as well as in tombs from LC IIC onwards.

For the tombs the quality of evidence available concerning context and associated finds is uneven. The practice of multiple burial, subsequent looting and damage from flooding, all contribute to disturbance of the tomb contents. In many tombs the groupings of the objects and their original location within the tomb is unknown. Detailed evidence is, however, available for some tombs, which were relatively undisturbed and where distinct burial layers could be identified.

Swedish Tomb 17 at Enkomi contained the "Zeus krater" [*25]. The vase belonged with a final, single burial and the offerings were in situ around the skeleton (SCE I: 541). There were four pots: the AK, with a BR bowl inside, was placed near to the head, while a PWWM bowl lay partly on the left femur and a White Shaved juglet at the feet. There were also four precious metal finds: a gold bowl in the right hand, a silver pin, and a gold diadem and mouthpiece with matching decoration. In this case it is certain that the ceramic assemblage was an AK, a juglet, and two bowls.

Another tomb of interest at Enkomi was discovered by Schaeffer (1952: 110-35). French Tomb 2 contained only three burials and the entrance was intact. The excavator suggested that these were three contemporary burials and that the
pottery should all be dated to LH IIIA2 early. That the tomb did, indeed, contain "personnages de marque" is illustrated by the rich offerings: gold jewellery, alabaster vases, and a silver cup delicately inlaid with bulls' heads in gold and niello, and, perhaps, by the fact that the tomb was not reopened for further use. The AK was found in the NW angle of the chamber together with an open krater; both vases were shattered (?deliberately), but were completely restorable. With them were two BR jugs, a BR bowl, and two WS bowls [FIG.37]. Numerous other vases, many of them Mycenaean, were also found in the chamber, but they were separate from this group. The assemblage from the NW angle is similar to that of the "Zeus krater" burial - kraters (AK and open krater), jugs and cups/bowls.

The same basic assemblage is repeated in local wares in Enkomi Tomb 22 (SCE I: pl.XXIV:4). This small tomb contained a single male adult burial together with a child. The vases had been placed round the skeleton; a PWWM krater containing a cup lay close to the left shoulder, while cups and jugs made up the majority of the other vases.

Unfortunately, published tombs with such clearly defined groups of material are not numerous. Swedish Tomb 3, for example, contained at least 15 burials and many rich offerings (SCE I: 139). A large number of AKs were recovered from the tomb, but they all came from a disturbed layer. In addition to ten Mycenaean AKs, there were also a Minoan AK and locally produced variants on the shape in PWWM and WPWM ware. Together these AKs seem to span the entire period of
usage of the tomb. Although the disturbed conditions prevent the reconstruction of offering groups associated with individuals, the broadly similar number of diadems (at least 11) and kraters could suggest that both items were important offerings in each main burial.

Swedish Tomb 11 contained three burial layers (SCE I: 510-25). Two Mycenaean AKs were found in the third layer, a chariot krater [*169] and an abstract krater (11-58), the latter containing a BR II bowl. Numerous PWWM kraters were also found throughout the three layers of the tomb; these too repeat the familiar pattern of a bowl or cup inside a krater.

A good idea of the typical ceramic assemblage of a Late Cypriot II tomb can be obtained from the photographs of the Swedish Cyprus Expedition publication, where the ceramic contents of the tombs are illustrated in groups. While there is much variation in numbers and types of vases, the AK is regularly represented and jugs and bowls/cups are very numerous. The photographs also show another very striking feature - the relatively small size of most of the ceramic offerings. Most of the other popular Mycenaean vases are small - small piriform jars, globular and piriform stirrup jars, square sided alabastra, and shallow cups. The much larger AK visually dominates the assemblage.

Some suggestions can be made about the function of the Mycenaean AK in Cyprus on the basis of the evidence presented above. The two undisturbed tombs at Enkomi, Swedish Tomb 17 and French Tomb 2, show an assemblage of
Mycenaean AK, jugs, and bowls; the same assemblage is represented in local wares in Tomb 22. The theme is continued in several other tombs, where groups of finds are not identifiable, but where the krater often contains a bowl of BR, WS, or Mycenaean IIIB fabric. The importance of the krater shape to the Cypriots is unequivocally shown by the similar use of locally produced examples of the shape in various wheel-made wares (Sjoqvist, 1940: 57-8). Sometimes the shape is very close to the Mycenaean, but it is a far less standardised product, varying considerably in size and proportions. Such local products appear alongside the more elaborate Mycenaean and Minoan examples in LC IIB, and continue to be made later.

This pattern of usage is distinctive to Cyprus, where the Mycenaean AK is found repeatedly in tombs, with evidence for only limited use in settlements and sanctuaries. By contrast, the shape is rarely found in mainland Mycenaean tombs, and the pattern of usage in the Levant [see #6.3.3 below] is far more varied. While it does not explain how such a demand came about, the desirability of the AK as a tomb offering should account for its popularity on Cyprus.

The association of the AK with jugs and bowls/cups clearly indicates equipment used for the manipulation, i.e. the preparation and serving of liquids: the AK for mixing or presentation, the jugs for pouring, and the cups and bowls for drinking. Thus the archaeological evidence harmonises well both with the inferences drawn from the characteristics of the shape, and with the range of uses attested for
analogous vessels.

The precise use of such vessels within the funerary context is more problematic. Were the vessels used in a funerary ritual or were they provisions for the deceased? Some evidence for the former interpretation is indicated in one case, Enkomi French Tomb 2, where the drinking service, which included two kraters, was found shattered in situ. A broken PWWM jug near the head of the skeleton in a Shaft Grave at Hala Sultan Tekke is comparable (Åström, 1987: 214). A more general parallel is the well-known Mycenaean practice of smashing kylikes, following a final toast or libation, just outside the tomb door in the dromos (Blegen, 1937: 237-8). Åström has calculated that at least 40 kylikes were represented by the fragments in the dromos of Dendra Tomb 13 (1977: 72). In other cases it is difficult to be sure whether breakage took place as part of the funerary rites, or was the result of sweeping up of earlier burials or even roof collapse. The phenomenon of breaking objects, especially ceramics, as part of the funerary rite is, however, widespread in space and time (Åström, 1987: 217, fn.26 for further refs).

The continued use of the shape in Cypriot tombs in the form of local wheel-made kraters indicates that the shape had become an indispensable item for many Cypriots. In addition, its use is now extended to both tomb and settlement contexts. Unlike the imported kraters, these mostly plain or simply decorated vases are unlikely to have functioned primarily on the level of a luxury, prestige
item. It can, however, be suggested that there is a prestige element in the function of the Mycenaean AK. In the discussion of form as a determinant of function, it was pointed out that the impressive size of the vase and its physical instability might point to a non-utilitarian or symbolic element in its function. This idea may be further supported by the general observation that the use of drinking vessels, whether for rituals in life or death, or for ceremonies and symposia, involves a strong element of social display.

The concept of a prestige element in the function is difficult to substantiate archaeologically, but some supporting points from the Cypriot evidence may be briefly summarised. The tall and relatively unstable Mycenaean AK seems not to have been in common domestic use; it was used primarily as a tomb offering. Note that the local versions of the shape are smaller and without the piriform curve; in short they are more "practical". The AK visually dominates the ceramic assemblage in the tombs, a feature that can hardly have escaped the notice of the users, and would have been of some importance if display of the offerings were part of the funerary rites. In the case of the pictorial examples the striking decoration could only have added to the effect. Within this framework the chariot motif, with its overt connotations of status (regardless of specific interpretations of meaning), must have seemed particularly appropriate.
In the Levant the Mycenaean AK is known, mostly from sherd material, from Tell Atchana (Alalakh) in the North to Tell el Ajjul and Tell esh Shari'a in the South. Details of context and associated finds are often unavailable; in some cases the material comes from old excavations, often fuller publication is pending. Enough evidence is, however, forthcoming to show that, in contrast to neighbouring Cyprus, the AK found a variety of uses on Levantine sites.

Levantine sites with Mycenaean pottery have been discussed by Hankey (1967: 107-147), and more recently a useful index of Mycenaean pottery in the Levant has been compiled by Leonard (1985). The sites with AK fragments are: Tell Atchana (Alalakh), Ras Shamra (Ugarit) and its port Minet el Beida, Amman, Ras Ibn Hani, Tell Sukas, Tell Kazel, Byblos, Hazor, Tell Abu Hawam, Gezer, Ashdod, Ains Shems (Beth Shemesh), Tell ed Duweir (Lachish), Tell el Ajjul (Gaza), Tell Dan, Tell esh Shari'a, Megiddo, Beth Shan, and Qatna.

The use of the AK as a tomb offering is attested from only two sites, Tell Dan and Ras Shamra. Hankey has already observed that the AKs in the Levant tend to not to be placed in tombs, and suggests they were used more for personal display or temple offerings. (1985: 93). The chariot krater from Tell Dan [*57] was found in a chamber tomb used for many burials. The contents of the tomb have not been published, though it is reported as containing much
Mycenaean pottery (Biran, 1970: 92-4).

A wealth of Mycenaean pottery has been found at Ras Shamra, but publication is uneven, and it remains true that "one can only nibble at the edges of what seems to be an inexhaustible store of material" (Hankey, 1967: 112). At Minet el Beida an AK decorated with tricurved arch was found on the threshold of the door of Tomb III, together with a skull, and an alabaster vase (Ugaritica I: 18, pl. VIII, 1). The tomb had been robbed through the roof, but the dromos goods appear to be part of the original deposition. Many other AKs, including two restorable chariot kraters [*70, *146], come not from tombs, but from the settlement.

Fragments of AKs are known from the settlements listed above. Many fragments, often small, of chariot scenes and human figures have been published. It is difficult to be sure if the lack of other scenes, especially abstract compositions, is related more to what is identified and selected for publication, or an actual reflection of ancient patterns of distribution. Quantities of material are also difficult to estimate, but larger numbers are known in particular from Atchana, Ras Shamra and Tell abu Hawam. Restudy of the pictorial material from Atchana has, for example, shown that at least eighteen pictorial vases, probably all AKs, were represented (Crouwel and Morris, 1985: 85-98). All the pictorial fragments came from the settlement and not from the associated tombs. Excavations at Tell abu Hawam also produced a wide range of LH III pottery, which included numerous sherds from LH IIIA2-B AKs.
At some sites the AK also found its way into more specialised contexts, that is, temples and shrines. The relevant sites are Qatna, Lachish, and Amman. The Qatna AK has been much discussed with reference to absolute chronology [§2.2], but the interesting context in which it was found tends to be overlooked (Du Mesnil du Buisson, 1928: 9-24). It was found in the Salle de la Pierre Noire, in the shrine of Nin-Egal. As the name implies, a black stone or baetyl 0.55m. high stood in the room. Close to a column base the excavators found the AK, together with a Mycenaean piriform jar, two BR cups, a plain juglet, and a bronze sheep's head rhyton (ibid.: pl.XVII). The pottery was smashed and lay amidst burnt debris. The only other finds from the room were another plain jug, two coarse conical bowls, and a bronze clamp or pin. The finds are surely to be associated with the activity which took place in the room prior to its destruction. The assemblage of objects - rhyton, krater, jar, and pairs of cups, bowls and jugs, is suggestive of an activity involving preparation and serving of liquids.

Mycenaean pottery was found in a small temple at Amman, on the site of the airport (Hankey, 1974: 131-59). It included fragments of a restorable chariot krater, and sherds of several other AKs. The temple was associated with a fire cult, and Hankey plausibly suggests that the kraters may have formed part of the temple furniture. At Lachish
pictorial sherds came from a blackened layer in the same area as many other remarkable finds (Hankey, 1985: 88-99). Renewed excavations nearby have revealed a Late Bronze Age temple; the new finds from the temple also included sherds from a pictorial krater. No direct connection between the finds from the old and new excavations can be established, but it seems likely that the old material, which includes a Minoan as well as Mycenaean AKs, may have come from a public building, and the nearest candidate is the temple.

Among the Mycenaean pottery found in the Levant four shapes are most frequently represented: the piriform jar, square sided alabastron, stirrup jar, and pilgrim flask (Hankey, 1970: 18). All four are closed, utilitarian shapes and it is probable that they were containers for commodities such as oils and perfumes. The AK is also widely found, but its unsuitability as a container makes it unlikely that it was traded for its contents.

On Levantine sites as a whole the use of AKs as tomb offerings is uncommon, a striking contrast to typical Cypriot usage. The majority of pieces are found on settlement sites, most notably Ras Shamra. The evidence of Qatna, Amman and Lachish shows that AKs were also put into service in shrines and temples. The shape is not represented amongst the excavated Mycenaean finds in Egypt, although one fragment, now in a private collection, with a provenance of Tel el-Muqdam has been published [*209].
#6.3.4 THE MINOAN AK.

The Minoan AK is found on Crete, in the Dodecanese, Cyprus, the Levant and probably Italy. The numbers of Minoan AKs found abroad are small compared to the Mycenaean, but the shape is known in correspondingly larger quantities on Crete itself.

It has been suggested that Mycenaean AKs, and especially the chariot kraters, were made specifically for tombs (Lorimer, 1950: 48), or that they "satisfied a demand for funerary symbolism" (Vermeule, 1964: 205). A similar idea had earlier been suggested by Evans, with reference to the two Minoan AKs from the Temple Tomb at Knossos, the finds from which he interpreted as remains of a funerary cult (PM IV: 1017). Many of the best known Minoan AKs do come from tombs. In the publication of the pottery from the palace of Knossos, for example, Popham restored only one example and illustrates fragments of a second (DPK: 49, 56-7) [FIGS.3-4]. In fact, the shape is also well represented in LM III settlement deposits. Recent excavations at Kastelli-Chania and Kommos have yielded numerous examples in domestic contexts, the full publication of which may shed light on the use of the shape on settlements. Fragments of more examples can also be identified at Knossos: for example, amongst the Evans' material and from Hood's Royal Road excavation.

Evidence for the function of the AK in tomb contexts is limited, primarily by a lack of detailed publication. An
undisturbed tomb excavated by Evans at Milatos provides valuable information about the use of the AK (1906: 93-103). According to Evans the contents of the tomb were intact; it contained two larnakes with bones, and 2 separate groups of vases stood on the floor. A tall AK formed the centre-piece of each vase group. Group 1 consisted of an AK, with a cup inside it, set inside a stand, two stirrup jars, a kylix, a spouted bowl, and a miniature jug [FIG.36]. The discovery of the AK actually in the stand illustrates how the problem of instability could be counteracted. The Mycenaean evidence, in contrast, shows the use of a stand for open kraters rather than AKs. Group 2 was formed by an AK with a miniature jug inside, two stirrup jars, bowls, kylikes and a dipper. There is a strong emphasis on vessels connected with the serving and consumption of liquid - krater, ladle, jug, cup/bowl and kylikes. The stirrup jar, represented in both groups, is one of the most popular shapes in LM III tombs (Kanta, 1980: 134).

The two AKs from the Temple Tomb, Knossos were found together with goblets, bowls, and cups, which have a date range of LM II-IIIA (PM IV: 1016-7). The vases were found in two groups: by the Entrance Platform of the building, and outside the entrance to the inner chamber; the precise arrangement and groupings of the material are not described in the Palace of Minos. The AKs and one kylix form the latest element in the material, being LM IIIA2 in date (DPK: 75). Whatever the interpretation of the building and its material: a continuing memorial cult (PM IV: 1016-7), or a
shrine rather than a tomb (DPK: 74), the concentration of drinking vessels over a period of time is at least highly suggestive of a repeated ritual involving the manipulation of liquids.

A tomb at Ligortyno contained three AKs, now in the Louvre Museum. The arrangement of the vases in the tomb was described by Evans in his notebooks (Kanta, 1980: 84). Two of the AKs were found inside a larnax (one of two in the tomb), while the third AK stood on a tripod table on the floor. The remaining vases in the tomb were either under the second larnax or in it. Unfortunately, no conclusions can be drawn about the function of the offerings since it is not possible to associate vases with particular burials, nor indeed it is clear how many burials are represented.

Kanta (1980) has usefully collected most of the information available about LM III tombs, but much of this material remains unpublished. In the absence of details concerning the position of individual finds and their relationship to one another, the function of the Minoan AK within the tomb assemblage cannot properly be studied. The assemblage in the Milatos tomb points to an emphasis on vessels needed for the preparation and consumption of drink. The Temple Tomb is a special case, since the material seems to represent something other than normal funerary offerings, but the concentration on drinking vessels is again suggestive. It is not possible to say whether a similar pattern of usage is attested in other Minoan tombs containing AKs, although it would not be surprising. Some
very general observations can be added to this limited picture. The AK is found in a relatively small proportion of LM tombs; it was not a very common offering. There is no obvious regional variation in its use, it is found in both tombs and settlements throughout Crete.

Outside Crete the Minoan AK is well represented in the Karpathos tombs, where there is some additional evidence for association with vessels for pouring (jugs) and drinking (cups and kylikes). The contents of the Vonies chamber tomb included 5 AKs, one of which was found together with a spouted cup inside the larnax (Melas, 1985: 39). The other incomplete kraters were made up from fragments, and no specific context is recorded. The dominant shapes in this tomb were the AKs, jugs, cups and kylikes, and stirrup jars.

At Tou Stavrou to Kefali eight small vessels, miniature jugs, cups and kylikes, were reportedly found (not in excavation) inside a larger vessel, which Melas identifies with the AK found with them; he further suggests that the krater could have also contained a cremation or inhumation, but it is unclear whether there is any evidence to substantiate this (Melas, 1985: 169).

At the Serraglio on Kos examples are recorded in settlement deposits, as are the fragments reported from Italy (37). Further East in Cyprus and the Levant the Minoan AK appears in small numbers beside the Mycenaean examples, and there is nothing to indicate that it was differently used. The AK is prominent amongst the increasing number of Minoan imports recognised in these lands (38).
One group of Minoan vases classed as AKs is, however, distinctive and may have been functionally different from the main corpus. These are the large vessels first discussed by Catling and Karageorghis (1960: 108-27). The form is that of an AK - necked with two opposite rim to shoulder handles, but at up to 0.75m. in height, its sheer size separates it from the standard, smaller version. The present distribution of these kraters is rather limited. Catling and Karageorghis identified several examples, including one with a well preserved pictorial scene, at Pyla-Kokkinokremmos, as well as fragments from Akanthou-Moulos, and possible fragments from Hala Sultan Tekke and Enkomi. Subsequent excavation at Pyla-Kokkinokremmos has produced a further well-preserved example decorated with an octopus (Karageorghis and Demas, 1984: pl.XXXIV). Further examples of these large AKs, also decorated with octopuses, are known from within a built platform at Lachish [FIG.38] (Hankey, 1979: 150-2), and on the settlement at Ras Shamra (Ugaritica VII: 346, no.2). The similarity of the coarse fabric to that of Minoan larnakes and other large containers has been noted (Catling and Karageorghis, 1960: 116; Hankey, 1979: 152). Although the fabric and decoration identify these vases as Minoan, such large AKs are not well known on Crete. There is, however, at least one unpublished example from Kommos, while there is also a looser connection with the series of tall necked AKs with octopus decoration, best known from Western Crete; these are much smaller but share the distinctive triple handle form of the large version (unpublished examples from
Both stylistically and contextually these huge kraters are datable to the 13th C. The Lachish example was found with other LM IIIB pottery, and the site of Pyla-Kokkinokremmos was occupied only in LC IIC (with LH and LM IIIB pottery, but no Mycenaean IIIC:1b). Functionally they differ from the more usual smaller version. I argued earlier that the standard AK is poorly suited for use as a container either for transport or long-term storage, but this argument is far less applicable to the larger version, where size and weight minimise the problem of instability and common sense suggests an essentially stationary function. At Pyla-Kokkinokremmos, where the buildings clearly combined defensive and storage purposes, the concentration of other storage vessels, such as pithoi and stirrup jars, indicates a similar function for the large AKs. Hankey's suggestion that these and the coarse stirrup jars represent "house-moving rather than trade" (1979: 154) provides a possible explanation for the presence of these vases at Pyla-Kokkinokremmos.

Evidence for the function of the Minoan AK is relatively limited, with the most detailed information coming from Evans' work at Milatos and the Temple Tomb. In these cases the association of the shape with other vessels needed for some sort of drinking activity is clear. The regular use of the shape on settlements as well as in tombs is characteristic throughout Crete. The widespread use of the AK in Crete in contrast with its rarity on the Mycenaean
mainland is an additional, though circumstantial argument, for suggesting that the AK as "at home" in the Minoan repertoire, but that the Mycenaean copied the shape and used it as a vehicle for pictorial decoration, yet found no regular use for it themselves.
#6.3.5 THE BRONZE KRATERS.

The use of at least two of the bronze kraters as containers for cremated bones well illustrates the point that a given shape may have a range of uses. Seven bronze examples are known [#3.2.1], although detailed information about context and associated finds is available for only four.

Tomb 40 at Kourion-Kaloriziki was excavated by MacFadden, who convincingly attributed to the tomb a group of precious objects recovered from robbers by the police many years earlier (see #3.2 with fn.12). The objects were a sceptre, two bronze tripods and fragmentary remains of a bronze AK. A second, plainer AK found in the tomb contained a cremation and was covered by a strainer, a fact which strengthens the robbers claim that the looted AK also contained a burial and was covered by a strainer. It cannot be proved that the bronze strainers had any association with the kraters prior to their deposition in the tomb, but they could have served to strain liquid into the krater, an echo back to the drinking assemblage.

Details of the context of the Lefkandi krater are available only from preliminary reports (Popham et al., 1982: 169-74). In the centre of a building, identified by the excavator as a Heroon, was found a shaft with two compartments. One contained the skeletons of three or four horses, the other two human burials, a man and a woman. The inhumed body of the woman was extended and she was richly
attired with gold jewellery, bronze and iron pins and an iron knife with an ivory hilt. The man, by contrast, had been cremated and his remains placed within a roll of cloth inside the bronze AK, the mouth of which was closed by a bronze bowl. Beside the krater were an iron sword, spearhead, and whetstone.

The use of the bronze krater as a cremation urn both at Kaloriziki and Lefkandi can hardly be coincidental, despite the difference in the dates of the two burials. Both burials were clearly those of important individuals, as indicated by the precious objects offered - some explicitly indicative of status like the sceptre, and in the case of Lefkandi, the associated building. Catling has shown that the Lefkandi krater came from the Cypriot workshops which produced other bronze kraters, tripods and stands (n.d.).

The iconography of the two Minoan bronze AKs, in particular the genii and their ewers, indicates that they were designed as libation vessels, with the one found at Kourion later used as a cremation urn. A burial at Teratsoudhia containing an AK together with two jugs has recently been reported (BCH, Chroniques 1985: 872). The discovery of the two shapes together suggests a continuing functional association in a drinking assemblage, similar to their clay counterparts, to which a secondary use as a burial container was later added.
16.4 ICONOGRAPHIC REINFORCEMENT.

The function of the AK can also be explored from another angle – iconography. I refer here not to the depiction of the AK in other scenes, but to the pictorial scenes painted on the AK, and the possibility that they could be functionally linked to the vase shape. The term function encompasses both the practical use of the shape and its possible symbolic significance. On the practical level the regular association of the shape with other drinking vessels points to its use as a vase for the mixing and/or presentation of liquids. A prestige element is often to be found in such vessels – they are large and imposing, and the concept of display is closely associated with eating and drinking activities, which may serve to mark out ritual and social relationships.

It is suggested then that form and content often have a meaningful relationship, that is, decoration serves to enhance or reinforce the message or function of an object. Such a relationship between form and content may be flexible and operate in many different ways. It may on the one hand be rather trivial, or it may be an significant and powerful component in the meaning.

With reference to the AK a spectrum of relationships between form (vase shape) and content (decoration) can be defined. The first applies to all pictorial motifs, which appear primarily, though not exclusively, on kraters. Compared to other contemporary Mycenaean decoration, usually
restricted to one or two motifs, the painting of pictorial scenes is labour intensive. Additional effort to "individualise" the designs may be recognised in variations in the use of subsidiary motifs and the differences between the two sides of each vase [A.2]. Thus within the context of Mycenaean ceramic production these vases must have represented the luxury end of the market. Since decoration can serve to concentrate attention, these relatively elaborate designs should be understood as an integral part of the intended visual impact of the vase.

Amongst the pictorial themes the chariot scene is by far the most common throughout the history of the shape's production. What relationship then, if any, can be posited between the krater shape and the chariot scene? The "chariot krater" has been traditionally interpreted as a specifically funerary product, showing the funeral cortege or games (e.g. Vermeule 1964: 205, and 1979: 60-2; Hooker 1976: 90; MPVP: 22; but most fully in Benson 1970: 20-6). While Benson's observation that the use of horses and chariots in funerary procedures is a widespread cultural phenomenon, represented in the archaeological record by the deposition both of actual chariots and their representations, is perfectly valid, there are, nevertheless, serious flaws in his application of this observation to LBA material. Most importantly, he fails to distinguish between objects and iconography which are explicitly funerary, and those which can have a funerary dimension. Thus a scene in which the corpse is laid out or
conveyed to the tomb, or mourning figures are shown, can be defined as having an explicit funerary symbolism. The chariot itself may have had a funerary dimension by virtue of its association with the funeral, but this is only one aspect of its use. Benson does not discuss the considerable evidence for the contemporary use of the chariot in warfare, hunting, competitive sport, and on ceremonial occasions as illustrated by the frescoes, sealstones and Linear B tablets (Crouwel, 1981: 119-45). It should be noted too that the terracotta chariot groups, like other classes of Mycenaean figurines, are as common on settlements as in tombs and should not be understood as explicitly funerary in concept (contra Benson, 1970: 20-1).

The same line of reasoning may be applied to the vase shape, for, like the chariot motif, the AK is neither explicitly nor exclusively funerary, as is clear from the examination of its function. This can be contrasted with other objects where the dominant symbolism is clearly funerary. The Tanagra larnakes, for example, are objects made to receive the body, and the depictions on them include numerous mourning women and at least one example of prothesis (laying out). Within this context it seems reasonable to infer that the scene with chariots and duelling men (with prothesis on the reverse) has a funerary frame of reference, although the activity itself could have occurred in other contexts (Crouwel, 1981: 138). Late Geometric kraters and belly-handled amphorae with scenes of prothesis and ekphora illustrate the same point. These
themes are exclusively funerary and the vases, too large for practical use, seem to have served as rather pretentious grave markers (Coldstream, 1977: 110).

In addition to the absence of explicitly funerary iconography, a further obstacle to this interpretation of the chariot krater is the fact that the relationship between form and content is not exclusive. The chariot procession is the most common AK theme, but it is by no means the only one - bulls, birds, humans, octopuses, and abstract motifs are also to be found. The relatively large body of material available from Cyprus permits the further observation that there is no difference in usage between AKs with different pictorial motifs, between Mycenaean and Minoan, or indeed the simpler local versions. This, together with the fact that it was the shape but not its decoration which survived in local wares in Cyprus, indicates that the shape had a function which could operate independently of its decoration. The idea that the chariot krater was specifically designed and used as a funerary product is not, therefore, substantiated by the evidence, although it should be stressed that this does not exclude the possibility of such a response to the object within a funerary frame of reference.

The precise intent of the chariot scenes on the vases in relation to the range of activities depicted in broadly contemporary media - primarily hunting, warfare and ceremonial/ritual, continues to be elusive. Yet we might turn this elusiveness to our advantage by looking at the
chariot motif from a different perspective. Whatever the context in which the chariot is used, it is always a prestige vehicle. It is a practical and valuable piece of military and hunting equipment, but also an important processional vehicle, allowing the occupants to be viewed, while at the same time raising them physically above the viewers. The great value of sidestepping the problem of the precise iconographic content of the scenes in favour of the general symbolism of the chariot lies in the distribution of the AK over a wide geographical area. For whatever the "meaning" or intent of the scene at its place of origin, it cannot be assumed that the same meaning would have been understood throughout the wider area of its distribution, given that iconographic systems operate within specific cultural contexts. It can, however, be argued that the more general connotations of the chariot as a prestige object would have been immediately apparent wherever the chariot was known or used (39). Indeed, the effectiveness of the chariot as a symbol could be seen to reside precisely in the fact that it has the potential to recall a range of significant and prestigious activities.

In this light the chariot design can be understood as enhancing the prestige aspect of the AK shape. This idea finds further support in the details of the chariot scenes and the treatment of human figures, all of which reveal considerable interest in expressing status. First, in the earliest scenes, which show two chariots per side, some effort is made to differentiate the chariots from one
another [#A.2]. On the basis of such a small number of examples any conclusions must remain tentative, but at the very least this differentiation may be considered part of the more general tendency to "individualise" vases.

Status, the demarcation of roles or activities within society, is clearly indicated through the clothing, accoutrements, and, less consistently, the hairstyles of the human figures. The two main figure types are robed and silhouette. Robed figures ride in chariots, they wear sheathed swords; silhouette figures do neither. These latter accompany the chariots, carrying a variety of objects, including spears and sticks. The identification of other disputed objects as folding stools and parasols, provided for the comfort of the robed figures, harmonises well with this picture [#5.5 for discussion of the objects]. Less consistent, but generally similar, seem to be distinctions in hairstyles, in that long tresses and fillets/headbands seem to be more characteristic of robed figures.

The same distinctions are maintained in other scenes of human activity where both robed and silhouette figures occur independent of the chariot scene. Thus on the Ship krater (MPVP: V.38) large figures flank the ship and smaller figures stand on the deck; they wear robes and helmets, bear swords, and have long tresses of hair. Below deck, by contrast, are the rowers: they are silhouette and have short hair. One of the large figures outside the ship does not conform fully to this general pattern since he is not robed but silhouette; note, however, that in keeping with other
silhouette figures he is without a sword and has a short cap of hair without tresses. A similar picture is presented by the Homage krater (MPVP: III.29). Here robed and silhouette figures approach a seated robed figure; the convention of robed figure with sword, and silhouette figure with spear is continued. The chariot scenes offer the same pattern of variation, with the added suggestion from the larger sample that these careful differentiations tend to break down through time. In LH IIIA1 independent robed figures no longer appear, but figures in tunics are introduced and the silhouette figure is occasionally equipped with a sword [*168], though the stick remains the most common attribute. The expression of status through distinctive dress and hairstyle is one of the many conventions which vase painting shares with other Aegean media [#7.2]. A good example is provided by the "meeting on the hill" in the Thera miniature fresco; here the differences in clothing and hair are reinforced by the physical hierarchy of the figures: at the top of the hill figures in long fringed robes with a long curl, behind them and lower down figures in knee-length tunics with short hair (Marinatos, 1974: colour pl.7).

It is suggested that pictorial decoration, especially the chariots and the differentiated human figures, complemented the prestige aspect of the vase form. The chariot is in itself a prestige object, and could be understood as such without reference to a specific iconographic system. Similarly, the obvious differences in dress, accoutrements and hairstyle need not have gone
unnoticed outside the cultural context which produced them, given that they are universally used to mark out roles or positions within society.

Returning to the practical use of the shape as part of a drinking assemblage, another aspect of the iconography, the depiction of vases on vases, can be understood as a visual pun, referring back to the function. At least four kraters incorporate other vases within their scenes. *8 has five vases, which act as free field subsidiary motifs within a chariot scene. The vases are a jug, conical rhyton, cup with high swung handle (dipper), chalice, and a two handled bowl/kylix (40). A second fragment from the other side of the same vase preserves part of another jug and a cup. Vermeule and Karageorghis have made the important observation that all the vases were connected with pouring and drinking liquids, and by extension, "ceremonial libation" (MPVP: 22).

Examination of the other examples of depictions of vases shows that vessels used for the manipulation of liquids are the linking factor. A silhouette figure behind a chariot holds a shallow bowl [*7], which is striped in a similar manner to several of the vases on *8; the two pieces are the work of one painter. The other two examples do not occur until LH IIIB. A large loop-handled krater found at Suda Bay has a single silhouette jug in the field [*176]. Also early in LH IIIB is a recently published AK from Enkomi (Karageorghis, 1983: 164-7). On each side of the vase two pairs of silhouette figures raise schematic kylikes.
Karageorghis has compared them with the Camp Stool fresco (PM IV: 388, fig.323). Closer in date and perhaps repeating a similar theme are partially preserved pairs of male figures seated at tables on the Pylos frescoes (Lang, 1969: 80-1).

A conical rhyton from Rhodes (MPVP: XII.17) provides a further illustration of visual punning; it shows a row of creatures, almost certainly Genii, with vessels in their outstretched paws. Given the association of the Genius with libation, and the function of the rhyton as a vessel for manipulating liquids, it need not surprise us that the vessels are a jug and a kylix with high swung handles.

Each of the scenes discussed depicts vessels used for the pouring and drinking of liquids. They have been variously interpreted as tomb offerings or prizes at games (e.g. MPVP: 22). Since study of the contexts and finds associated with the AK clearly point to its use in drinking activities in a range of contexts, it seems more likely that the vessel motifs recall the general activity rather than a particular type of occasion (41).

Finally, the two bronze kraters, identified here as Minoan and 16th C. in date [13.2.1], also contribute to the general idea of a meaningful relationship between form and content. The beaked jug, a vessel for pouring liquids, appears on both vases; on the one it decorates the rim, on the other the jug appears in the hands of the Minoan genius on the handle panel. Here the association with libation through the person of the genius is explicit (42). The fact
that these two shapes, AK and jug, are adopted into the Cypriot bronze repertoire towards the end of the LBA may perhaps be connected with the continuing special relationship between them as expressed by the form and content of the Minoan bronze kraters. Indeed, in Iron Age Cyprus the krater and jug continued to symbolise the libation or drinking ceremony, just as a single musical instrument (lyre) could represent music; this is represented in ceramic pictorial art where elaborate scenes of libations and music and dance are also paralleled in shorthand by the key objects (Morris, 1983: 220).

There is considerable scope for a more general exploration of the applicability of a form/content relationship to ancient artefacts, a phenomenon recognised in anthropological studies (Braithwaite, 1982: 80-8). Viewed from this perspective the decoration can be understood as acting as a symbolic prompt, reinforcing at different levels the function of the artefact. Thus the general connotations of prestige are enhanced through the chariot scene, while a single motif, a drinking vessel, or indeed a theme, a toasting scene, sometimes evoked the specific function of the AK, a display vessel used in the preparation and consumption of liquids.
6.5 CONCLUSIONS.

The evidence for the function of the AK comes primarily from examination of context and associated finds, backed up by consideration of the practical constraints and advantages presented by the shape, and the more clearly documented uses of analogous shapes elsewhere. The evidence in different areas is uneven, yet a surprisingly clear and coherent picture of the vase's function emerges.

The shape is best documented in Cyprus, where it occurs almost exclusively in tombs. Where the material is undisturbed the AK is seen to be associated with jugs and cups/bowls; together they form the basic equipment of a drinking assemblage or service. The Levant yields a different picture. AKs occur rarely in tombs, but more on settlements, where their function is unclear, and in shrines and temples. In the Qatna shrine a libation activity is indicated by the assemblage of vessels found on the floor - an AK, pairs of cups and jugs, and a rhyton.

The Greek mainland, disappointingly, provides little evidence. There are few AKs and their contexts are relatively uninformative. Many LH III tombs are known, yet the AK occurs in only one or two. Indeed, even the much more common open krater is a characteristic settlement shape and infrequently found in tombs. Thus in contrast to Cyprus, a funeral on the Mycenaean mainland did not require kraters, whether for performing rituals at the grave or for offerings. The primary evidence for the enactment of a
drinking ritual at mainland Mycenaean tombs comes rather from the smashed kylikes in the dromoi. On the islands the examples are too few and too scattered to draw any firm conclusions. Individual pieces come from both settlement (Kea, Kos) and tomb (Rhodes) contexts, with some hints of associations with drinking vessels (Karpathos).

Crete too provides a distinctive pattern, with the Minoan AK being regularly found both in tombs and on settlements. Publication of major LM III sites, such as Kommos and Kastelli-Chania, where AK fragments are relatively numerous, may provide some indications of function. Details of tomb assemblages are largely unavailable, and the best evidence still comes from Evans' tomb at Milatos published early this century. The finds from this tomb, together with the special assemblage from the Temple Tomb (which need not be funerary), are primarily vases associated with the preparation and serving of liquids. The clay AK is nowhere attested in shrines or cult storerooms with other vessels connected with libations, though the iconography of the Minoan bronze kraters provides the conceptual and functional link with libation in the form of the Genii and their jugs.

A different use, that of storage, can be suggested for the corpus of large Minoan AKs, known mainly from Cyprus. While sharing the same form as the smaller examples, the large capacity of these vases points to a stationary, storage function; this is further indicated by the examples from Pyla-Kokkinokremmos, which were found together with
pithoi.

The archaeological evidence indicates that the prime function of the AK was as a vessel for the preparation or mixing of liquids. This harmonises well with the characteristics of the shape: a wide mouth for access with a jug or ladle, a relatively large capacity, and two easily grasped opposite handles for lifting. Analogies can be drawn with later vases with the same basic features, whose use in drinking services is well documented. The example of the bronze kraters containing burials demonstrates that other uses can always be found for any given vase type; yet even here the iconographic content strongly suggests that these vases too had been made with libation rather than cremation in mind.

While the function of the AK seems to have been relatively uniform throughout the area of its distribution, the same cannot be said for the context within which that activity took place. In Cyprus it occurred in a specifically funerary context; in the neighbouring Levant in settlements and shrines, but rarely in tombs. In Greece itself the AK seems hardly to have been used at all [see #8.2], while as is perhaps appropriate for its suggested place of origin, the shape was used in both settlements and tombs in Crete.

Study of the function of the AK also casts a new perspective on the traditional interpretation of the "chariot krater" as a specifically funerary product. I have suggested instead that the function of the vase could have been enhanced or reinforced by the decoration, but that it
was unlikely to have been symbolically dependent on it. While the evidence does not support the idea that the chariot krater was produced as a specifically funerary product, the possibility of a funerary element in the Cypriot response to it need not be excluded, given that the use of chariots and images of chariots within a funerary context is such a widespread phenomenon. On the other hand the chariot procession, unlike, for example, a scene of prothesis, is not explicitly or uniquely funerary, and in common with many symbols, its "meaning" is likely to have been have been plural and interactive.

Co-existing with the practical function is the prestige aspect of the shape. This is difficult to substantiate archaeologically, but fragments of evidence can be drawn upon to support the idea: the large size of the vessel in relation to other fine wares (very striking within the Cypriot funerary assemblage), the instability of the shape, the elaboration and choice of decoration. All these served to draw attention to the vase and its function. The iconographic content too has been drawn on as evidence: a prestige element could be reinforced by depicting a prestige object, the chariot. The chariot krater also links two major elements of ritual - libation and procession, through form and content respectively. The practical function of the AK is also alluded to through the depiction of sympotic vases within the decoration.

Study of the function of the AK leads to the conclusion that it was in widespread use in connection with drinking
activities. The vase shape cannot be categorised as funerary, ritual or purely domestic; rather it fulfils a function that might take place in many different circumstances. This serves to underline the pervasive importance of drinking activities in many aspects of life. The offering and exchange of food and drink play an important structural role in all societies, for "like sex, the taking of food has a social component, as well as a biological one" (Douglas, 1975: 249).
#7. PROVENANCE.

The provenance, the place or places of manufacture, of the Mycenaean AK has been the subject of scholarly debate for many years. The conflicting views are as follows: the one, that chariot kraters and various other Mycenaean forms commonly found in Cyprus were made there by Mycenaean potters, the other that this material was all made on the Greek mainland and exported to Cyprus and the Near East. More recently, Vermeule and Karageorghis have adopted the new position that production was more flexible and potters more mobile than previously suggested (MPVP : 9).

There is some general agreement that the earliest Mycenaean pottery (LH I-II) on Cyprus is imported, and that much of the latest (from the later 13th C.) was locally produced. It is the origin of the intervening material (LH IIIA-B1) which is so hotly disputed, a period of time which corresponds exactly to the production span of the chariot krater. Clearly, any discussion of the broader historical circumstances within which the chariot krater developed and thrived must first come to terms with these opposed theories. This chapter reviews the evidence for the different points of view, examining both the archaeological and scientific contributions.
The view that chariot kraters were a Cypriot product was mooted early in the study of the archaeology of Cyprus. Myres argued that these vases were peculiar to Cyprus and inferred Mycenaean colonisation from the presence of large quantities of Mycenaean pottery on the island (1914: 48). Gjerstad countered this by observing that the fabric of the vases found in Cyprus was visually indistinguishable from those found on the Mycenaean mainland, in contrast to later obvious imitations of Mycenaean pottery which differed in fabric and paint. He argued too that quantity of pottery does not equal colonisation, and further suggested that the pictorial designs were derived from the fresco paintings of the Mycenaean mainland (1926: 219-220). At this early stage in the discussion several of the major themes had already emerged: the "peculiar" nature of Mycenaean pottery on Cyprus; the argument that increased quantities of Mycenaean pottery in LH IIIA2 represent an influx of people or at least craftsmen; and the question of the artistic influences observable in the themes and design elements of pictorial pottery.

The terms "Cypro-Mycenaean" and "Levanto-Mycenaean" were coined by Swedish scholars working in Cyprus to refer to Mycenaean pottery found in, and peculiar to, Cyprus and the Levant; the terms are unsatisfactory, not least because it is not always clear whether they are intended also to imply that the vases were made there. In addition Furumark
used the terms "Levanto-Mycenaean" and "Hellado-Mycenaean" to describe the styles of pictorial pottery found primarily in the Eastern Mediterranean and in mainland Greece respectively (MP: 431). Subsequent studies have shown that the differences in character between the mainland and Eastern pictorial series resulted largely from the chronological disparity of the material under comparison. Most of the pieces known in the East ("Levanto-Mycenaean") date to LH IIIA-B1, while the bulk of fragments recovered from sites such as Mycenae and Tiryns are later. Where earlier fragments are known on the mainland most of the stylistic and thematic trends are in harmony with the better preserved material from the East.

This observation is in direct contradiction to the view presented by Vermeule and Karageorghis, for throughout the corpus they allude to the separate traditions of the East and the Greek mainland (e.g. MPVP: 7,9). This point of view is strongly reinforced by their presentation of the material according to geographical distribution. While there can be no one correct way to present such a large and complex body of material, the separation of Cyprus and the East from other areas: Rhodes, Asia Minor, and the Greek mainland, does serve to disguise the stylistic homogeneity of the material. The existence of individual mainland pieces (e.g. the Melathria jug, MPVP: VIII.8) which do not conform in style or theme to the general characteristics of the pictorial repertoire can hardly be regarded as evidence for separate geographical traditions. While these (at present)
unusual pieces hint at a greater variety of artistic expression within Mycenaean art, they do need to be considered in relation to the growing corpus of mainland material which exhibits the same stylistic development as the examples found in the East. This is nowhere better expressed than through the relatively large corpus of chariot scenes, which follow a common pattern of development, and do not exhibit regional variations, which might be indicative of diversified and localised production centres (43).

#7.2 THEME AND CONVENTION: THE CHARACTER OF THE DESIGNS.

The content of the pictorial designs has been drawn upon as evidence in the provenance dispute. In support of Levantine production it has been suggested that certain elements of the pictorial designs exhibit Eastern influence. For example, Karageorghis has written of the mixture of Aegean and Eastern elements in the designs, a result of their production by "artisans égéens installés dans les pays du Levant" (1959: 193-205). For example, the Eastern origin of robed figures is put forward as evidence of this Eastern dimension. Karageorghis correctly records the fact that Evans and Nilsson were agreed upon the oriental origin of the long robe, and collects examples of similar robes in Near Eastern art. The depiction of robed figures in Aegean art was, however, established before the earliest pictorial pottery (LM I-II: PM IV: 403-5); their appearance in pictorial scenes attests, not to a direct link between the
East and pictorial pottery, but to the fact that in iconographic content the ceramic scenes are an integral part of a general Aegean artistic tradition.

The statement that pictorial pottery belongs entirely to an Aegean and not a Cypriot or Levantine milieu can be substantiated by the two complementary parts of the design, the pictorial themes themselves, and the subsidiary elements. Furumark's analysis firmly integrated pictorial pottery into the wider Mycenaean repertoire, showing that the subsidiary motifs and their development followed the same basic pattern as abstract pottery (MP: 435). Apart from the obvious structural difference that on the one they act as "filling motifs", while on the other they are the primary motifs, these elements follow the same stylistic development, indeed they are the common link between pictorial and abstract pottery decoration. Similarly, the clay larnakes from Tanagra combine pictorial themes with subsidiary motifs well known from the vase painter's repertoire (for examples see Vermeule, 1965: 123-148; Spyropoulos, 1970: 184-97).

Without entering into a detailed discussion of each theme and the parallels for it, it can be seen too that the main themes are all well known within the other representational media of Aegean art, such as fresco painting, seal carving, metal and stone work. Numerous scholars have suggested a special link between the themes of fresco and pictorial pottery as evidence of mainland production; for, if the vase painters were inspired by the
frescoes then they must have lived in a major centre where scenes such as chariots and hunting graced the walls. The most persuasive link with the frescoes is the popularity of the chariot scene, but although the wall-paintings provide the most memorable images, it should not be forgotten that a more widespread existence for the same stylised chariot is also attested through terracotta models as early as LH IIIA1 (French, 1971: 185; Crouwel, 1981: 161-3). Conversely, the chariot motif is rare in LBA Cyprus, and acceptance of a Cypriot provenance for the chariot kraters would require them to have been made over a considerable time period in an iconographic vacuum (44).

The possibility of influence from other sources should not be overlooked, especially on the general level of shared themes and combinations of elements. It is, for example, to seal carving rather than frescoes that we should look for the use of animal designs: bulls in a setting of plants, and birds (Younger, 1983: 222-3), though the needs of the glyptic form predispose it to single, confronted and interlocking images, in contrast to the linear structure of pottery designs. Pictorial pottery need have had no unique bond with any one of these media either in theme or technique. Examination of the designs does show, however, that the motifs, themes, gestures [#A.3], etc. are wholly Aegean as opposed to Eastern in outlook.
"PECULIARITY" AND DISTRIBUTION.

The "peculiarity" of the Mycenaean pottery in Cyprus and the Levant is manifested by the existence of a few imitations of Cypriot forms in Mycenaean technique, and more importantly, by a concentration of certain Mycenaean shapes in the Levant.

Several cups made in Mycenaean technique but with elements of BR or WS shapes are well-known (45). The origin of these pieces is arguable, and none of the pieces has been submitted for chemical analysis. Cypriot pottery did find its way to the Aegean, albeit in very small quantities, where a potter working in a Mycenaean centre could have copied it. Note too that the pieces are not so much copies as adaptations, which is suggestive of a relatively distant knowledge of the types. For example, the Kition cup is BR in its angular shape, but the low wishbone handle is more typical of WS, while an unprovenanced hemispherical cup has a Mycenaean ring-base. A parallel phenomenon of Mycenaean influence on Cypriot ceramics is also seen in the occasional incorporation of Mycenaean features, both shapes and motifs, into Cypriot wares (46). In neither direction are the influences so frequent or so precise as to necessitate actual interaction between Mycenaean and Cypriot artisans (contra MPVP: 8).

The "Levanto-Mycenaean" shapes form a much larger category. A full list of such shapes was compiled by Furumark, and more recently emended by Karageorghis (47). A
distinction must be drawn between LH IIIA-B1 and the later part of the 13th C.; some of the shapes from the latter period, referred to as "late Mycenaean IIIB" or "Decorated Late Cypriot III", differ from their Aegean counterparts in both fabric and shapes and are generally thought to have been produced in Cyprus (GCP: 595). For the earlier period it should be emphasised that the material designated "Levanto-Mycenaean" is visually indistinguishable from mainland pottery, and that, although more common in the East, the types are also represented within the Aegean.

Karageorghis' suggestion that certain shapes are oriental in inspiration, and therefore more likely to have been made in the East, needs to be evaluated for each shape (1965: 201-30). Study of the origins of the AK has shown that the shape developed in Crete, from where it was introduced into the Mycenaean repertoire [#3]. The existence of vases of AK type in the East may have made the Aegean version more marketable there, but this is no argument for Eastern production. A second example, the chalice, presents a similar picture; it is popular both in local Levantine and Mycenaean fabrics, but its Aegean history clearly goes back at least to Neopalatial Crete (48).

Geographical concentrations of certain types, such as pictorial kraters on Cyprus, have often been put forward as evidence for localised production centres. While it is true that pictorial kraters were extremely popular as funerary offerings in Cyprus, the high visibility of the Cypriot material, both its completeness and the high standards of
publication, creates a somewhat unbalanced picture of the distribution of the material. Just as the organisation of Vermeule and Karageorghis' corpus plays down an essential unity in the stylistic development of pictorial pottery, so too its actual distribution is lost within the method of presentation. Levantine sites are subsumed into the Cypriot material under the heading "Cyprus and the East", although a separate, small section "Asia Minor and the Near East" includes the later pieces from some of the same sites (e.g. Ras Shamra). The complete examples from Cypriot tombs naturally take pride of place, overwhelming the numerous but fragmentary pieces from the Levant. The presentation of the Levantine material is inevitably less complete because of the unevenness of publication. Restudy of the Atchana material has, for example, shown that approximately 18 pictorial vases are represented by fragments from the settlement (Crouwel and Morris, 1985: 85-98), only six of which appear in Vermeule and Karageorghis (MPVP: III.8, III.15, IV.11, IV.25, IV.75-76). Tantalising glimpses of the partially published Ras Shamra material indicate that it ranks beside Enkomi both in quantity and range of Mycenaean pottery. Thus the influx of Mycenaean pottery into Cyprus should be viewed as part of the wider development of relations between the Aegean and the Eastern Mediterranean in general (as emphasised by Hankey, 1967: 145; Catling, 1980: 14).

That the concentrations of pictorial pottery in Cyprus and the Levant are the result not of local production but
rather of well-informed and organised trade has been eloquently argued by Catling (in GCP: 599-603). He has drawn attention to the potentially comparable phenomenon of certain types of 6th-5th C. Attic pottery found primarily in Italy. The existence of specialised export lines is evidenced by the Nikosthenic amphora, which copies an Etruscan bucchero shape, while other forms such as the head-vase owe their survival in large numbers simply to the fact that they were popular offerings in Etruscan tombs. In the same way the regular use of kraters in Cypriot funeral customs, a practise not typical on the Mycenaean mainland or in the Levant, ensured the survival of many complete or restorable AKs in Cyprus. Taking the analogy a step further Catling notes that the pattern of imports from Athens followed by local production in Italy is not an inappropriate model for LBA Cyprus: first pictorial pottery is imported, then a local version (Rude Style) produced. A general similarity in changes in historical circumstances may also be noted, since in both cases a breakdown of trading networks seems to have acted as a stimulant to local production. In Classical Athens this was the result of the Peloponnesian war, while in the Mycenaean period it may have been the initial stages of the breakdown, however caused, of the centralised palatial system (49).

The overall distribution pattern of the AK is highly suggestive [MAP 4]. The mainland sites from which the shape, primarily with chariot scenes, has been recorded are: Mycenae, Tiryns, Berbati, Asine, Nauplion, Dendra(?),
Corinth (50). All except the last are in the Argolid, the
heartland of Mycenaean civilisation. The obvious inference
is that this striking distribution reflects directional
trade, with the AK produced for export at one or more
Argolid sites, one of which was clearly Berbati. The
distribution pattern can then interpreted as follows:
1) main concentration in the primary export areas, Cyprus
and the Levant;
2) secondary concentration in the vicinity of its
production, the Argolid;
3) a few examples filtering through to other sites within
the Aegean: Aegina, Kea, Crete, Rhodes.

Differential distribution of shapes other than the AK
lends strong support to the existence of the sophisticated
system of well organised production and distribution implied
by this interpretation of the distribution map. In export
terms the rhyton form, conical and theriomorphic, has
several points in common with the AK. It is relatively
fragile and, not being a storage or transport container,
must have been traded for its own sake. Directional trade in
this shape is strongly suggested by the large numbers
recorded at Ras Shamra, many more than are known on any
other individual Eastern or Aegean site (Contenau et al.,
1975: 39, fn.26). Note that an Argolid provenance has been
assigned to one conical rhyton from Ras Shamra with
pictorial decoration on the basis of chemical analysis

Within the Aegean too, concentrations of certain shapes
of Argolid provenance are attested. This is well illustrated by the chemical analysis programme of Mycenaean pottery on Rhodes (Jones and Mee, 1978: 461-74; GCP: 501-8). Among the LH IIIA-B pottery sampled were a number of shapes, including the knobbed piriform jar, which were known in greatest numbers from Rhodes, and hence commonly thought to have been locally produced. To the surprise of the authors the results showed that these so-called "Rhodo-Mycenaean" shapes were of Argolid composition.

It is clear then that the differential distribution of certain shapes, including the AK, reflects the preferences and needs of the inhabitants and not differing patterns of local or regional production. Any attempt to define regional production or styles of LH IIIA2-B1 pottery should keep this point firmly in mind. Since the material remains on Rhodes also suggest Mycenaean occupation, it would appear that the ceramic industry of the Argolid catered both to home and foreign markets.
MECHANISMS OF CERAMIC PRODUCTION.

The idea that the potter was a mobile, entrepreneurial character, plying his trade across the Aegean, recurs throughout the archaeological literature. It is the view followed by Vermeule and Karageorghis as part of their historical picture of flexible and varied production and exchange. It is important to note that this represents a significant move away from Karageorghis' previous position that most pictorial pottery was produced on Cyprus by immigrant Mycenaeans (e.g. 1959: 205; 1969: 172). Vermeule and Karageorghis say:

"The view adopted in this book is that trade between Greece and Cyprus, manifested in pictorial vases and many other spheres, occurred on a variety of levels, with all kinds of channels and private adventures. Ships surely came from Greece with cargoes of painted pottery; potters may have roamed abroad as freely as architects and metalsmiths, some spending a few months and some settling overseas permanently. The simplicity of a potter's equipment makes him exceptionally mobile. He needs only a supply of clay he is happy working with; he makes his wheel, builds his kiln, fires his pots, sells them, and moves on or settles in as he wishes. Some of the pictorial vase makers may have used local clays, some may have had sacks of clay brought from the mainland or one of the islands, as potters today often import clay." (MPVP: 9).

The potential importance of the mechanisms of ceramic production to the study of provenance was long ago recognised by Casson, who was highly critical of the archaeologist's lack of attention to the practical aspects of pottery production and to modern ethnographic parallels (1938: 464-73).

Clearly the possibility of travelling potters making their wares in a variety of places, either with local clays
or their own transported materials, could seriously complicate our understanding of the production of pictorial pottery, adding an extra dimension to the existing theories of production. The presence of individual craftsmen in other countries, making their products and working to local markets, need not be excluded, but the crucial question here is whether the production and distribution of pictorial pottery in the 14th and early 13th C. B.C. can reasonably be understood as operating primarily in the way Vermeule and Karageorghis suggest. As so much has been made of the "itinerant potter", the phenomenon deserves careful consideration.

First, it is insufficient to draw attention to the simple phenomenon of the itineracy of craftsmen (51). Two major factors can be identified as fundamentally affecting the mobility of the skilled individual. The first is the historical context, that is, the structure of a particular society, and the status and relationship of different crafts within it. The second is the constraints of the occupation itself, such as the availability of the relevant materials and equipment. There is considerable evidence that the highly organised societies of the LBA exerted control over certain crafts; workshops might be physically located in the Palace, access to materials might be controlled, and even the movements of some classes of skilled individuals subject to restrictions (52).

The fact that pottery cannot in general be considered a prestige product, as for example, metal or ivory objects,
does not rule out the theoretical possibility that parts of
the ceramic industry could have been subject to regulation.
Athenian control of miltos (red ochre) supplies from Kea
from the 6th cent. B.C. illustrates this point (GCP: 805).
Potters are named as a professional group both in the Linear
B tablets (Chadwick, 1973: 133-4, 250 "ke-ra-me-we") and in
the Ugaritic archives (Heltzer, 1979: 488 "ysrm"). Although
there are no explicit references to control over or
interference in the occupation, the references in the Pylos
tablets certainly suggest a degree of dependency on the
palace for some potters; Eo371 mentions the private plot of
Brithawon, the king's potter, and An26 records the location
of various skilled artisans: potters, goldsmiths, tailors
and bow-makers. Indeed, by its very existence, a centralised
palatial economy generates conditions conducive to
specialised modes of production. To give just one example,
the organised production of oils and perfumes at Pylos has
received much discussion (Shelmerdine, 1984: 81-95). But no
mention is made of the provision of clay containers for
these commodities in adequate numbers and in the right
shapes and sizes. Is it not probable that this part of the
production process was equally well organised?

Availability of, rather than access to materials is a
major factor in the mobility of the potter. Vermeule and
Karageorghis' comment that the potter "needs only a supply
of clay he is happy working with" takes us right to the
heart of the matter. For although workable clays are
prolific in the Mediterranean, it should be emphasised that
Potters do not generally find it easy or desirable to work with unfamiliar resources, for their understanding of their materials is empirical, based on tradition and experience. Some of the difficulties encountered by potters forced to use unfamiliar clays are documented in the ethnographic literature. Potters who left Lapithos after the 1974 invasion of Cyprus had to find suitable clays in the southern part of the island; some adapted their techniques and repertoire in order to make a living, others are said to have experimented unsuccessfully (personal observation, 1984; GCP: 879, fn.42). Further afield, potters in Melanesia were obliged to search for alternative clay sources in response to being charged high fees for their usual clay, but the new sources proved to be unsuited to their traditional working methods (Arnold, 1985: 22). It is not simply the physical availability of materials which is important, but also the investment of time needed to experiment with the working and firing qualities of different clays, and indeed fuels.

Thus, it is not surprising to find that the itinerant potter, as known from ethnographic literature, does not "roam freely", but has the following characteristics: he makes a specialised product, works within known geographical limits, and returns regularly to the same places, thus repaying the investment of finding suitable materials (clay and fuel, and if necessary, temper and pigments), and repairing and building kilns (53). Certain factors may motivate the potter to produce in dispersed centres rather
than to distribute the objects from fewer fixed centres. Most common is the difficulty of transport of large or bulky objects, which may make it more cost effective to make items such as large storage vessels or bricks closer to where they will be needed. On the other hand, choice of clays may be more important for production of fine or specialised pottery.

The suggestion that potters might travel with materials is also problematic. Comparison with the modern movement of clays is anachronistic, given that many potters now purchase commercially processed clays, instead of collecting and preparing their own materials. Casson (1938: 471) refers to the Siphniot potters loading clay onto boats when they set off on their annual circuit of pottery production. It should be noted, however, that he did not personally observe this, and that potters regard "the transport of clay as an unnecessary and dubious exercise" (Jones, 1985: 26). The idea that clay might have been shipped as ballast has also been mooted with reference to the Chiot type pottery found at Naucratis in the Archaic period. Boardman made this suggestion in response to the results of the fabric analysis which showed that the vases were made from Chiot clay (1956: 56; in GCP: 663). Such a dilemma in the basic interpretation of the scientific results could perhaps be resolved by further consideration of the typological and stylistic evidence, and by asking whether there are any positive reasons for preferring the (speculative) movement of clay rather than transport of finished products.
Peacock (1982: 12-51) has emphasised the importance of balancing the factors which influence the effectiveness of pottery production, the most significant of which are 1) the availability of resources and 2) access to markets. In terms of markets, the fragility of wares in transport (an objection raised by Casson, 1937: 49) is rarely a problem; more important is "access to markets", that is, the existence of mechanisms, such as merchants or agents and known trading ports, through which the products can be reliably distributed. On the Mycenaean side little is known about trading mechanisms, but the rich textual evidence of Ras Shamra certainly points to the existence of a complex and well-organised system conducive to international trade in the LBA (Heltzer, 1978).

Examination of the mechanics of ceramic production fails to support the idea that travelling potters were responsible for the production and distribution of LH IIIA-BI pictorial pottery. First, the constraints of the occupation, that is, practical difficulties a potter could encounter working in many different places with unfamiliar materials are not insubstantial; nor, according to ethnographic analogy, is this how itinerant potters work. Second, the palatial economies of the LBA may have exerted some control over ceramic production, but more certainly created the conditions which were conducive both to the production of specialised shapes, and to their distribution. The potter, especially one making specialised and high quality products, is not "exceptionally mobile" (MPVP: 9),
but rather is dependent on tried and trusted materials and reliable means of disposing of his products.
#7.5 THE CONTRIBUTION OF FABRIC ANALYSIS.

Several projects involving fabric analyses of the Mycenaean pottery found in Cyprus and the Levant have been undertaken with the aim of providing an objective means of settling the question of provenance. The results of this work have recently been fully discussed by leading researchers (in GCP: 542-609). The points relevant to pictorial pottery are briefly reported here, and considered in relation to the preceding archaeological discussion (54). The results for individual pieces are reported within the Catalogue.

25 samples of pictorial pottery from Cyprus were submitted for chemical analysis (optical emission spectroscopy) (Catling and Millett, 1965: 212-224). This study concluded that all but three pieces "matched" or had a similar chemical profile to a group of Mycenaean material from the mainland, which was termed Peloponnese Type A. Re-examining these results Catling has more recently acknowledged that the pictorial samples matched the Peloponnese A control group unevenly, but nevertheless stood by the original conclusions, pointing particularly to the fact that the material did not match with the much improved databank of Cypriot control groups (Catling, et al., 1978; in GCP: 574-5).

Mycenaean pictorial pottery formed part of an analytical programme initiated by Anson, who included some canonical pictorial material in order to make direct
comparisons with the main focus of his project, pottery of the Rude Style (1980: 109-27). Taken in conjunction with Jones' re-evaluation of the same data, a Peloponnesian origin is suggested for most of Anson's Mycenaean pictorial samples. By contrast, the Rude style samples proved to be of Cypriot origin, a result which strongly reinforces the stylistic and typological distinctions between the two series (GCP: 548-53).

Pictorial pottery was included in Asaro and Perlman's programme of neutron activation analysis, currently the most powerful technique available for provenance studies (1973: 213-24). Although the results have received only summary publication, they are of some interest, not least for the technique's potential for characterising material by site rather than by area. Mycenaean sherds from Tell abu Hawam, for example, were matched precisely with the control group for a specific Argolid site, Tiryns. Asaro and Perlman also reported, however, that many of the LH IIIA-B samples from Cyprus, which included three (unspecified) chariot pieces, did not match element by element with their Argolid control groups; they were "different, but not grossly so". Given the greater sensitivity of the technique, with its ability to identify centres of production as opposed to the more general Peloponnesian origin indicated by optical emission spectroscopy, this result is open to various interpretations. It is possible, for example, that the precise centre(s) of production were not represented by the control groups, or that clay mixing or natural clay bed
variation might have affected the results. Note that Asaro and Perlman at no time suggest that the samples are not Peloponnesian, but only that a specific match for them within that area had not been found. The conclusion drawn by Vermeule and Karageorghis, that "some pictorial pottery seems to come neither from Greece nor Cyprus" (MPVP: 8, fn.5), is in no way warranted by the evidence.

Indeed neither the theory that pictorial pottery was made in Cyprus, nor the more recent suggestion of flexible production by itinerant potters finds support in the analytical results. In Catling's and then Anson's work very few of the pictorial samples failed to match, albeit unevenly, the Peloponnesian group, and these did not match any other known control group, Cypriot or otherwise, but remained unclassified (55). Only one fragment, an AK decorated with a bull (Anson no.77), had a chemical profile which allowed it to be grouped with the Enkomi RS group. Finally, Asaro and Perlman's samples seem to have formed a reasonably well-defined though unidentified group, which could be accommodated within the general Peloponnesian profile.

It is well worth emphasising that the samples chosen for analysis provide good coverage of the range of material: the primary pictorial themes (e.g. chariots, bulls, birds), the main periods of production (LH IIIA2-B1), and most of the Cypriot sites where pictorial pottery has been found, with the important addition of Ras Shamra by Anson. Both the AK and the loop handled krater, which replaced it as the
most popular shape with pictorial designs, were represented in the analyses, which indicated continuity of production for both shapes. Indeed, even a LH IIIB shallow bowl by the Protome Painter B, an artist for whom scholars on both sides of the provenance dispute have allowed the possibility of an Eastern workshop, has been shown to be of Argolid origin (Anson, 1980: no.86). This result indicates the continued predominance of the mainland workshops, and also highlights a potential area of interest for further fabric analysis, the examination of the works of known individuals.

# 7.6 CONCLUSIONS.

The picture presented by the fabric analyses is that the majority of pictorial pieces were produced in one or more centres in the Argolid, with only tentative evidence for production elsewhere. This emphasis on Argolid manufacture is repeated in the results of other fabric analyses on LH III pottery both in the Aegean and the Eastern Mediterranean (56). The archaeological evidence in favour of such centralised production has been presented above, and may be summarised as follows:

1) geographical concentrations of a number of Mycenaean shapes suggest directional trade;

2) the distribution pattern of the AK: in Greece limited mainly to the Argolid, and then widely dispersed through the Eastern Mediterranean suggest both that the AK was made in the Argolid and that it was an export product;

3) the importance of considering ceramic production in terms
of both the constraints of the occupation, and the character of LBA palatial economies;

4) the wholly Aegean character of the design elements and themes.

Both the archaeological and scientific data dovetail to provide a strong case for the existence of a highly organised ceramic industry, located at sites such as Berbati in the Argolid, producing and exporting specialised shapes such as the chariot krater to well-researched and receptive markets.
CONCLUSIONS: THE HISTORICAL CONTEXT.

This concluding chapter draws together the different aspects of the AK discussed in previous chapters with the purpose of placing the material within its broader historical context. By considering the AK as an interactive part of the societies which produced and used it, we can reach a fuller understanding of how and why this specialised vase form with its elaborate decoration originated and developed.

8.1 THE MINOAN AMPHOROID KRATER.

The origin of the AK in the Aegean has been traced to the Neopalatial period of Minoan Crete in the form of the rim and handle fragments of two large bronze AKs found in Cyprus; they are datable on stylistic grounds to LM I [*3.2]. The question may very reasonably be asked: why does a new vase shape come into use, particularly one for which no predecessor can be identified? (57). The answer to this question may lie in the social and political processes of Neopalatial Minoan society. It has been argued that the 1st Palace period differs substantively from the 2nd Palace period (MM III-LM I), the latter being marked out by increased control over resources and prestige artefacts and activities by the palace elite. The introduction of the AK into the Minoan repertoire at this time can be understood as a small material expression of this process, through which the elite tightened their control over economic and
religious affairs.

A preoccupation with religious affairs is expressed through the centralisation of the peak sanctuary cult, and the restricted access to urban shrines, but also through the sudden increase in "religious paraphernalia", objects produced for use in ritual display and activity (58). The most splendid of these "artefacts" was the cycle of pictorial frescoes on the walls of the 2nd palace at Knossos, a permanent record of enacted rituals (Cameron, 1987: 321). There is also an abundance of specialised vessels, often in precious materials, in the Palaces; these include stone libation tables, stone rhyta and chalices, clay conical and theriomorphic rhyta, and large bronze basins and jugs, such as those found in the North-West Treasury hoard (PM II: 623-59).

The feature which many of these objects have in common is that they are shapes connected with the manipulation of liquids. Note too that the lustral basin, an architectural form connected with ablution also has its main period of use in MM III-LM I (Rutkowski, 1986: 131). The material remains all point to the manipulation of liquids playing an important role in the rituals of the time, and it is within this context that the bronze kraters take their place.

Like many other bronze vessels of the period they are large (c.0.75m. in height) and impressive, if not a little impractical. Catling has observed that large metal vessels, such as cauldrons and kraters, are largely restricted to LB I (CBMW: 187). The vessel form, following my general
analysis of the function of the AK, is most likely to have been used in connection with drinking activities [6.5]. The link with such activities is convincingly provided by the iconography. A relationship between form and content, the decoration reinforcing the function of the artefact, is nowhere more clearly expressed than in the LM I iconography, which alludes to the manipulation of liquids. In a detailed discussion of the decorative elements on the kraters I argued that the animal pursuit, vegetation, and beaked jugs all formed part of an iconographic cycle, at the centre of which stood the Genius [3.2.1]. The special connection between the Genius and liquid offerings is explicit in a contemporary object, the Mallia triton, where the Genius is shown in the act of pouring [fig.13]. Other aspects of this object further reinforce the association with liquids, in particular the sea: through both the shape—a triton shell, and the decoration—the net pattern, a convention used by the Minoans to represent the sea. The marine motifs on the roundels of one of the bronze kraters may have operated similarly.

The bronze AKs were part of the increased production of specialised shapes in precious materials during the Neopalatial period. This, plus the evidence of the iconography, suggests that in their original use these vessels played a role in one or more rituals or ceremonies which incorporated the manipulation of liquids (59). As in an earlier period, Early Minoan II, the appearance of vessels for eating and drinking in the Mesara tombs suggests
ritual and perhaps social changes, so too the bronze AKs are a material expression of the changing character of Minoan society in the Neopalatial period.

The next stage in the history of the AK is its production in a ceramic form. On present evidence this seems to have taken place within the LMII-IIIA horizon [#3.1]. The large size of the two early examples from Tylissos may be related to the bronze prototypes, but there is also a link with the grandiose Palace Style vases, a connection strengthened by shared decorative elements.

The smaller, canonical Minoan AK was produced throughout LMIII. It has a wide distribution over Crete and is found both on settlements and in tombs. In the relatively few cases where contexts are available the AK is associated with other drinking vessels. There is, however, nothing to suggest that the shape retained the overtly ritual associations of its bronze predecessors.

THE MYCENAEAN AMPHOROID KRATER.

The transmission of the shape into the Mycenaean repertoire cannot be more securely placed than early in LM/LH III. A small group of Mycenaean AKs (from Dhekelia, Pyla-Verghi, Qatna) demonstrates the link between the two ceramic traditions; they precede the mainstream typological development (FS 53-55), and have features of form and accessorival decoration which link them to the Minoan series. The nature of the relationship between Minoan and Mycenaean cultures at this time is much debated, but close contacts are attested by the sharing of artefact types, of which the
AK was only one (MP: 504-5).

The adoption of the AK shape into the Mycenaean ceramic repertoire is an important part of the early development of pictorial vase painting. I have argued that the use of complex pictorial motifs such as the chariot scene, together with the introduction of the AK shape, represent the second stage of this development [#2.4]. The first stage took place in LH IIIB/IIIA1 and is characterised by the use of bird and fish motifs painted on shapes typical of the period, especially open kraters and large jugs. Numerous features of the decoration suggest a link with Crete, where birds and fish were the primary scenes on pictorial pottery. Minoan influence is suggested by 1) the shared themes; 2) similarities of syntax, that is the free use of a deep decorative field as opposed to the tectonic, narrower zones of horizontally arranged motifs typical of most Mycenaean pottery; 3) continued association of the themes with motifs appropriate to their surroundings; thus, birds are associated with floral, fish with marine type motifs. These points are presented in more detail as part of a discussion of an early AK decorated with fish from Maroni (Crouwel and Morris, 1985: 43-4). Two Minoan pictorial vases of LM II-IIIA1 date found in tombs at Varkiza in Attica and in Nauplion provide evidence of one way in which Minoan influence could have been transmitted to the Mainland (60).

The incremental nature of pictorial development is strongly supported by stratigraphic evidence. Examples of bird and fish motifs, but not chariots, are known from the
major LH IIIA1 deposits of the Argolid: Mycenae, Asine, and Berbati. On the last site there is also a striking contrast between the LH IIIA1 and IIIA2 deposits, for it is only in the latter phase that AKs and chariot scenes are found. Thus the second stage is marked by the widespread use of the AK for complex pictorial themes.

This early development of pictorial pottery can be understood within a broader historical framework, for there are important changes between LH IIB/IIIA1 and IIIA2 (Catling in GCP: 593, 597). The former is marked by destruction deposits and by numerous dumps of material, suggestive of widespread disruption. The sites include Mycenae (Atreus Bothros: dump), Athens Acropolis (Acropolis Wells: dump), Menelaion, Sparta (destruction), Ayia Irini, Kea (destruction). The subsequent LH IIIA2 period is distinguished by changes in component parts of the material culture (61), and a significant expansion of Mycenaean activities in the Mediterranean, as reflected in quantities and distribution of pottery, occurs in LH IIIA2 early (Åström, 1973: 122-7, for numbers of Mycenaean pots in Cyprus by period).

The number of Mycenaean vases in Cyprus continues to increase throughout LH IIIA2 and IIIB (ibid.: 123), attesting further consolidation of Mycenaean interests abroad. The chariot kraters of LH IIIA2-B1 form part of this pattern. Further developments in pictorial production are observable within LH IIIB early. It is well-known that the chariot krater is joined (and eventually ousted) by the loop
handled krater with animal designs, but the contemporary expansion into new motifs (e.g. human themes) and the more regular use of a wider range of shapes is often overlooked. At the same time the geographical distribution of the material remains relatively constant, suggesting intensification rather than expansion into new markets [#7.3].

In discussion of this period we tend to speak in a general way about Mycenaean expansion, while remaining rather vague about who was responsible for it. In the case of pictorial pottery many different strands of evidence dovetail to point to the Argolid as the major, if not the only, source of chariot kraters [#7]. Most importantly, the majority of pictorial pieces submitted for chemical analysis have had the Peloponnesian Type A chemical profile, and conversely, very few have been matched with the profiles of other areas. Other classes of evidence reinforce the hypothesis that this material was produced in centres which were limited in number and geographically restricted. The relatively small number of chariot kraters known on the Mainland are clustered within the Argolid. This pattern can be contrasted with earlier and later pictorial, which has a wider distribution and for which some localised production has been attested by fabric analysis (62). Attribution studies also lend support to the hypothesis of the existence of relatively few production centres [#A.1], since it appears that relatively few individuals produced these vases, and on the basis of the continued sharing of many
conventions within these complex designs through time it may further be suggested that the individuals were interactive.

Seen within this context one somewhat puzzling aspect of the AK is explicable, that is, the fact that the AK was only rarely used on the Mainland. The open krater, which could have served a similar function as a vessel for mixing and serving liquids, is common on settlements. Kraters of any type are rare in tombs, the implication of the latter being that this type of vessel had no role in Mainland funerary customs, a strong contrast with Cypriot practice [§6.3.2]. It is not easy to imagine the widespread production of a vase shape which had no regular function. If the arguments in favour of centralised production in the Argolid are accepted, then the puzzle has a solution: the AK was a specialised export line, as at first was the loop handled krater which replaced it.

The evidence presented above supports the suggestion that the production of pictorial pottery from LH IIIA2 to IIIB early was primarily an Argolid monopoly. The results of fabric analyses of Mycenaean pottery from sites both in the Aegean (Melos, Kea, Rhodes) and in the Eastern Mediterranean further indicate that this area dominated the production of a wide range of fine, decorated wares. The breakdown of this pre-eminence in the later part of LH IIIIB is also documented, both by fabric analyses, which show increased local production, and by regional variation in ceramic styles (Sherratt, 1980:175-202). The other end of the story, at what point the Argolid began to dominate ceramic
production is much less clear, in particular, whether Argolid wares were dominant within the Aegean at a yet earlier date. One means of answering this question would be a series of diachronic fabric analyses of LBA fine wares from given sites, to test when Argolid imports begin to outnumber or replace local or geographically close products.

Certain changes in the ceramic industry of the Argolid are suggestive of increases in the level of organisation during the LBA. Particularly interesting is the observation made by Asaro and Perlman that the fabric profiles of LH IIIA-B pottery from Argolid sites were more homogenous than those of the preceding periods (1973: 215). This could suggest that by LH III the potters began to use fewer, more homogeneous sources, or that clay preparation became more uniform, in other words, greater standardisation at a basic level of ceramic production. That the LH IIIA2 period, in particular, was one of general innovation is shown by the number of new shapes and motifs (MDP: 67). Among the most distinctive of these innovations was the creation of a specialised product, the AK with complex pictorial decoration. The implication is that ceramic production in the Argolid had reached a level of organisation, at which vases were produced with a specific market, the Eastern Mediterranean (already known through less intense contacts in earlier periods), in mind. The outstanding success of this directional production is reflected by the large quantities of pictorial pottery, and especially chariot kraters, found throughout the Eastern Mediterranean.
#A.1 ATTRIBUTION STUDIES.

Attribution studies, the identification of hands and workshops, has long been a popular and productive area in the study of pictorial pottery. The earliest attempt to collect and characterise the works of a prehistoric vase painter was made by Heurtley in a pioneering article on 16th C. Palestinian vase painting (1939: 21-34). The possibility of recognising distinct workshops, though not individuals, in Mycenaean pictorial pottery was suggested by Schaeffer (1936/7: 232), but it was some years before Stubbings took the important step of assigning vases to individual painters (1951: 168-76). The work of attribution has been continued by a number of scholars, Immerwahr (1956), Benson (1961b), and most notably Karageorghis (1956ab 1957, 1960), while Vermeule and Karageorghis have recently produced a list of painters, bringing together old and new attributions (MPVP: 173-7).

The grouping of material through attribution to an individual or a workshop is useful and interesting for many reasons. The isolation of distinct artistic personalities may be thought to be reward enough in itself (Stubbings, 1951: 176). The identification of the work of individuals is valuable in the construction of a secure chronological sequence, since the works of each painter are by definition confined to his lifespan. The question of the relationship between the work of the individual and the broader pictorial
style is also important. Vermeule and Karageorghis have suggested that comparison of the works of different individuals leads to a better understanding of the overall style (MPVP: 173), but Morgan has argued, I think rightly, that their statement should be reversed, and that, while the two are intimately related and interdependent, it is the overall style (Morgan's "idiom") which elucidates the work of the individuals (1985: 9-10, fn.8). Thus the overall style is composed of the works of the individual, but the individual styles or microstyles exist within, and are defined with reference to, the overall style. The overall style is studied through the design element analysis, which records the variation in form and structure of the components of the design [§5]. The related areas of ordering the material into a chronological sequence and identifying hands build on that primary analysis.

The potential applications for attribution studies are far wider than this. The question of the organisation of workshops, interaction between individual and workshop, and the relationship between individual/workshop production and vase distribution are all worthy of discussion. But unless the individuals or workshops are convincingly and carefully identified, the role of attribution studies seems condemned to the realms of archaeological quicksand, with the modern individuals, the archaeologists, unable to pin down with consensus that elusive entity, the prehistoric individual.

I propose here to review the state of attribution studies in the field of pictorial vase painting, and to
discuss the central problems: how are attributions made? which aspects of the designs allow us to isolate the work of the individual? how applicable and useful are attribution studies to this body of material?

The methods used for the identification of hands were formulated within the discipline of art history. In the 19th C. A.D. Giovanni Morelli laid down the principles by which works could be attributed to individual artists. He suggested that the execution of small and insignificant details, which the artist often repeated, were the key, since they tended to be peculiar to the individual and as such were unlikely to be shared or copied by another artist. Perhaps influenced by his earlier training as a doctor, Morelli found that anatomical features, such as ears and hands, were particularly well suited to this method of study. Berenson soon followed up Morelli's work on Renaissance painting using similar techniques. The identification of individuals and the reconstruction of their relationships with other artists is an important aspect of art history, enabling scholars to identify forgeries and even to separate the work of several hands on a single large painting. This method of study, the meticulous examination of small details combined with familiarity with a corpus of material, is an important part of connoisseurship.

The greatest connoisseur in the field of Classical vase painting was Sir John Beazley. His work illustrates how the Morellian method was adapted to the study of hands in
the Archaic and Classical periods, in this case to Black- and Red-Figure vase painting. His identifications of individuals, workshops, schools, imitators, etc. all employ the very same method of looking at small details, although Beazley never referred to Morelli or his method in print (Kurtz and Beazley, 1983: 12, fn.14). The method is implicit throughout his work, but is described only in his earlier studies. For example, he describes the identification of artists as consisting of

"drawing conclusions from observations of a great many details: it involves comparing one vase with another, with several others, with all the vases the enquirer has seen .... However, obscure he may be, the artist cannot escape detection if only sufficiently delicate tests be applied" (Beazley, 1918: v-vi).

His article on the "Citharoedus" also illuminates his approach to his work, for "it is actually an essay on connoisseurship" (Kurtz and Beazley, 1983: 13).

The methods used to identify individuals and workshops in Aegean prehistory are broadly similar to those used in Renaissance art and Attic vase painting, although discussions have scarcely touched upon the methodology or the criteria upon which attributions are based (64). Stubbings simply refers to the example set by the studies of Attic vase painting (1951: 170), while Benson enters into a brief discussion of the acceptability of using attribution techniques for prehistoric material; he concludes that the

"same principles of connoisseurship used for later periods apply here also and under the proper scrutiny yield results", with the reservation that the individuality of the Mycenaean artist remained "at an elementary stage" (1961b: 338).

Karageorghis does not discuss the technique of attribution
in his numerous articles concerned with pictorial vase painting, but there is a strong echo of Morelli and Beazley in many of his statements, such as "individuality revealed by treatment of detail such as ears, eyes ..." or "these peculiarities of this painter's style which he could not easily abandon" (1956b: 143-9).

In the context of Classical vase painting Robertson has discussed the arguments put forward by scholars who remain sceptical about attribution (1985: 26-9). Stahler and other German scholars have suggested that attribution is only really applicable to high quality works, while Bruneau contends that the assumption that two artists cannot produce indistinguishable work is false. Although there is some truth in both arguments - perhaps good artists are easier to characterise, and it is often difficult to distinguish between the work of a master and pupil, or even that of a skilful forger, they do not invalidate the general method. To the empirical evidence of the success of attribution in art history and Classical archaeology may be added the evidence of the scientific basis behind our ability to distinguish individual works.

The small details which Morelli considered idiosyncratic to individual Renaissance painters exist precisely because "individuals are always somewhat different from one another in their motor habits or motor performances" (Hill and Gunn, 1977: 2). Attribution studies are so well established and successful in the fields of art
history and Classical art that "motor habits" may sound like jargon for a well-known phenomenon, nothing more than a fancy theoretical backdrop to the practical business of attribution. An understanding of the mechanics of attribution, how and why it does work, is, however, important, for it counters the arguments of the sceptics, and provides strong theoretical evidence that it is possible to isolate the anonymous, prehistoric individual. Motor habits have received extensive study in other disciplines where, for various reasons, study and recognition of the individual is extremely important: criminology, espionage, education and medical studies.

Such studies indicate that motor habits have certain fundamental characteristics (Hill, 1977: 56-7):

1) they exist below the level of elements (whether that be a letter of the alphabet or a decorative motif);
2) they are at least partly subconscious;
3) they are not copiable;
4) they do not change drastically through time, although they can be modified by trauma and old age.

What is crucial for the fields of criminology and espionage is the idea that a man's handwriting or even the morse transmission of coded messages embodies motor habits which he cannot completely eliminate, even though his task depends on not being identified. A series of experiments using painted pottery and handwriting seems to bear out the characteristics of motor habits enumerated above, as well as highlighting other relevant points (65).
These characteristics are equally relevant to the identification of individuals in other fields, including Mycenaean vase painting, since they provide a guide as to what is theoretically possible in attribution studies. Thus, it should be possible to distinguish the individual, as opposed to a workshop or the style of the period, since motor habits are not transmittable by teaching or copying. Hill's pot experiment [see fn.65], where the artists copied a template design, also has important implications for prehistoric art, for even if the artists were copying from "sketch books" (as is often suggested), their work would still be distinguishable below the level of the design elements. In addition, the work of an individual should, in theory, remain recognisable through time since motor habits are said not to be subject to temporal variability.

It is clear then that motor habits or peculiarities of style are important for the identification of the individual. But what sort of details are useful for this task? A review of two specific individuals, the Protome Painters A and B, whose work is recognised in pictorial pottery, can shed light on this question. Stubbings placed five vases with bulls or bull protomes in his Group I, and suggested that the two vases in Group II were by a different craftsman, but from the same workshop (1951: 170-1). Immerwahr then modified and added to these groups to identify the career of an individual, whom she called the Protome Painter (1956: 137-41). This analysis was
immediately revised by Karageorghis (1956b: 143-9); he identified two separate painters, A and B, deleted two of the pieces listed by Immerwahr, and added a new fragment. Benson subsequently upheld Karageorghis' attributions to the two painters (1961b:339-40).

Various classes of evidence proved useful in making the attributions: vase shape, relationship of shape and design, the general character of the drawing, the shape and execution of the motifs. Combinations of any of these features may be suggestive of the work of an individual, although it should be remembered that many of them are not necessarily unique to one person, since they could be copied or be part of a shared repertoire. It is the traits below the level of the design element which represent the motor performance of the individual and as such should provide the most reliable guide for attributions.

The techniques of attribution can be applied to any graphic rendering — from a Renaissance painting to handwriting or simple geometric designs. Traditionally attribution has tended to concentrate on scenes which include pictorial elements, especially humans and animals. One reason for this may be that the complexity of such scenes, both in overall composition and in individual elements, is more conducive to analysis. There may also be an element of cultural bias, that we find it easier to recognise similarities and differences in the relative familiarity of pictorial designs or even handwriting, than in more abstract (but not necessarily less complex) designs.
Recalling too that Morelli recognised that anatomical features were well-suited to his method of examining insignificant but repeated details, it is hardly surprising to find a similar emphasis on the renderings of the eye, ear, and horn of the bull in all the discussions of the Protome Painters. Immerwahr refers to the oval eye and naturalistically drawn muzzle of the bull as characteristic of the early work of her Protome Painter (1956: 138). There is, however, no specific discussion of how these eyes and muzzles differ from or relate to those on other vases either in general form or in execution, despite the fact that it is the isolation of such details which is the distinguishing mark of the individual. Just as the value of a design element as a chronological indicator depends on it either changing perceptibly or being restricted in time, so for attribution the usefulness of a detail depends on clearly defining what is distinctive about it.

Beazley makes precisely this point in the Citharoedus article; he says:

"I lay no stress, of course, on the rendering of the nipple as a circle of dots with the centre marked; for this is an extremely common rendering of the nipple." (1922: 76).

He continues by carefully describing the points of resemblance between the works which he does consider to be significant, and which comprise the "system of renderings" by which a painter can be identified. In Mycenaean vase painting this approach is best represented by Benson's article about pictorial painters (1961b: 337-47); he carefully enumerates the significant characteristics of each
The connoisseurship of the researcher is a combination of critical judgement and close familiarity with all the relevant material, but it is also important that the process by which attributions are arrived at is clearly presented. The inherent difficulties in demonstrating the common authorship of two or more pieces of work are often amplified by the failure to produce precise and consistent descriptions of the material, and by the confused use of observable design details and personal qualitative assessments as criteria for attribution. I do not suggest that personal appraisals have no contribution to make, but rather that they should be clearly separated from the fundamental observation of mechanical details of the drawing (66). The very different assessments of the Protome Painters' works illustrate the desirability of this proposal (67).

Design element analysis provides a framework for explicit and consistent presentation of the criteria, and for expressing the similarities and differences between designs, whether at the level of scene or motif. While the principles of design analysis are always the same, the precise form it takes must be moulded to the character of the material. Thus Kurtz's detailed studies of human anatomy have provided an excellent means of describing the most important element in Attic vase painting, the human figure (Kurtz and Beazley, 1983: 18-33). In contrast, the
codification of elements or symmetry analysis may provide a useful framework for the study of abstract motifs. Each in its own way offers a sound approach for a particular body of material.

The limitations of a given body of material are another important factor in attribution studies. The evidence from other fields of study that motor habits are unique to individuals, cannot be copied, and do not change through time, seems very encouraging, yet many practical difficulties remain. There is disagreement about attributions and many vases are unattributed. Why is there then a gap between practice and theory? To help answer this question it will be useful to make comparisons with other bodies of material, where the works of individuals have been isolated.

Comparison with Attic Black- and Red-Figure vase painting helps to place in perspective some of the difficulties in recognising the prehistoric vase painter. The corpus of Mycenaean pictorial pottery, even if every tiny fragment with a possible leg or wing is included, is relatively small. The total corpus of chariot scenes presently known numbers less than 300. Set that beside the fact that Beazley has assigned over 200 vases to a single artist, the Berlin Painter, and the difference in scale becomes apparent. Many fine Attic vases were decorated with a wide range of pictorial themes, most of them involving human figures. Mycenaean pictorial pottery, by contrast, forms only a small percentage of the ceramic repertoire, and
its thematic range is extremely limited.

Turning to the actual details of the designs, there is an almost inexhaustible wealth of detail in the Attic scenes. To detect his artist Beazley could call upon a great many details in each drawing, from the fold of a garment to a lock of hair, and most usefully, to the rendering of the anatomical details, which could be analysed for tell-tale variations in size, shape, location, and brush strokes. The character of Mycenaean pictorial designs precludes the use of such details, which are otherwise particularly sensitive indicators of individuals. The complex human form appears either as a silhouette or cloaked in a voluminous robe, with the heads of the figures providing the most distinctive range of variation. In addition to the high level of detail in the designs, the different techniques used in Attic vase painting also help with attribution. An artist can be characterised not only by the form of his details, but also by the actual technique he chooses to execute them with: incision, relief lines, dilute paint, added colours. Of these techniques only added white is regularly found in Mycenaean vase painting [§5.7], and its use is mostly limited to picking out harness details in chariot scenes. In short, many of the features which facilitate attribution in Attic vase painting - the large and well-preserved corpus with an extensive repertoire of complex and elaborately executed motifs - are lacking in its Mycenaean counterpart. Thus the lower level of complexity of the overall design and of its component parts forces us to place greater reliance
on fewer criteria than would be necessary in Attic vase painting; consequently, we have correspondingly less confidence in our resulting attributions.

Although they share a medium, the sophisticated phenomenon of Attic vase painting is a world apart from Mycenaean pictorial pottery. Yet the comparison starkly illustrates the differences in the quality of information available in the respective fields. In Attic vase painting attribution studies can be stretched to their full capacities, not only can artists be confidently identified, but the development of their careers traced, together with their artistic influences and relationships. The more modest success of attribution studies on pottery of other periods brings us closer to Mycenaean vase painting. Attributions in Geometric art, as in Mycenaean, have concentrated on pictorial designs, such as humans and birds (Coldstream, 1968: 29-82). In Hellenistic art too the possibility of attribution has been explored on vases where the characteristic brushwork of relatively simple motifs is thought to be diagnostic of individual hands (Rotroff, 1984: 173-7).

Within Aegean art workshops and individual hands have been identified in several media: pottery, fresco painting, glyptic, and the Linear B tablets. The varying degrees of success relate in no small part to the nature of the material. Identification of scribal hands on the Linear B tablets has been successful: at Knossos Olivier has attributed 71% of the tablets to 75 hands (1967: 101).
Equally importantly, the criteria by which the different hands are identified are clearly presented, using Bennett's discussion as a starting point (ibid.: 27-33). The primary criterion is the shape and construction of the signs, with the shape and size of the tablet and the findspot serving as supplementary evidence. Bennett notes that the work of the individual (on a single tablet) may show considerable variation, which may have a specific cause such as irregularities in the working surface, restrictions of space, or simply reflect the natural variation within his style. Although the differences between individuals should be greater than those within the individual's work, this does highlight a problem which applies to all attribution studies, the fact that it is not always easy to isolate the variants which "signify a difference in hand" (Bennett, quoted in Olivier, 1967: 28). As a class of material the tablets offer many advantages for attribution studies. Problems of temporal variability are minimal since most of the documents on each site are considered to be contemporary with one another. Comparison of hands is also facilitated by their common use of many elements (script) so that the problem of how to recognise the hand of an individual behind different motifs, such as chariots and bulls, is largely avoided.

Different constraints are imposed on attribution studies by other classes of material. In glyptic and vase painting time and place may operate as unknown factors to be
elucidated by the identification of hands. In contrast to the groups of tablets, which are assumed to be contemporary, students of glyptic may use attribution to try to establish a more secure chronology for the material (Betts, 1981: 1-16). Similarly, the production centre of the tablets is assumed to be the administrative complex in which they were found, with the distribution of the tablets further suggesting functions within the building. For seals the identification of an individual's work and where it is concentrated may hint at the otherwise unknown centre of production (ibid: 16).

Having ranged widely, from Beazley to motor habit theory, various points which have emerged from the discussion can be applied to the chariot kraters, and, by extension, to other pictorial pottery (68). The empirical evidence from other fields, taken in combination with the scientific evidence for motor habits, permits us to say that the identification of the prehistoric individual is a viable proposition.

Comparison with other groups of material has on the other hand clearly highlighted the limitations inherent in the material. Seen beside the Classical vases, the small and fragmentary nature of the Mycenaean pictorial corpus is immediately apparent; so too is the much greater complexity and sophistication of the former material, providing far more criteria on which to base confident identifications.

Similarly, consideration of the attribution studies in other LBA media shows how strongly the character of the
material affects the potential for identifying the individual or workshop. Both Linear B and glyptic, for example, share the advantage of having technique (the angle and depth of the engraving), in addition to the form of the design elements, as a criterion. The corresponding feature in vase painting is the brushstrokes; on the analogy of calligraphy, these should be susceptible to such analysis, but I have, as yet, had only limited success in applying this to pictorial pottery. It is perhaps more relevant to material where variation in brush pressure is a more significant component in the style, as on some LM I pottery and the Cypriot Rude Style.

Another important factor is whether the group of material is known to be homogenous in time and space. The Linear B tablets and the Zakro sealings are good examples of how much can be achieved with such material (69). Despite the scientific assurance that motor habits remain stable with the passage of time, the identification of a prehistoric individual's work over a timespan is still largely beyond present capabilities, with the most common kind of attribution remaining that of pairs of vases which are near duplicates and therefore contemporary.

A third factor is the character of the design set, for attribution is greatly facilitated if elements are repeated many times both within and between items. The relatively small character set of a script (either Linear B or our own alphabet) and its repetitive nature is well suited to attribution, since it allows both assessment of the
individual's natural variation range and provides adequate data for attribution. Note too that Hill's tests with ceramics met these needs since they used a single set of designs copied by several artists. Such ideal conditions are only partially met by most ceramics. Comparison of the two sides of the vase (assuming they are indeed the work of one person!) helps with natural variation [A.2], and many elements are necessarily repeated in the chariot scenes. The real problem comes when we try to attribute different themes to one painter, for if no or few elements are shared, then there are no criteria for attribution. It is almost certainly incorrect to write of artists who "specialize in birds, some in bulls, some in chariot processions" (MPVP: 9), for these are surely categories created by our inability to envisage how a certain painter, recognisable through his distinctive execution of one theme, would have treated other themes (70).

Some basic guidelines along which to conduct attribution studies can be suggested; they emphasise the need to be rigorous and consistent with the material:

1. The primary means of identifying the individual is by isolating characteristic traits below the level of motif, and preferably repeated many times. Other classes of evidence such as vase shape, choice of motifs etc., can be drawn on as supporting evidence, while remembering that such features may be shared or copied.

2. It is important to establish the relationship of these traits to the overall style; for in order to be regarded as
significant for attribution or dating the feature must have a restricted use and/or have a definable range of variation.

3. A separation should be maintained between mechanical features of the drawing and personal assessment of material; the latter should not be introduced as a primary argument.

4. The importance of communicating the criteria on which attributions have been made cannot be overemphasized. Attributions to individual artists are made in the Catalogue, following the guidelines suggested above.

Where the identification of a single artistic personality is not an end in itself, but an aid to chronology for example, then the concept of the "analytical individual" may be a useful one (Muller, 1977: 25; Redman, 1977: 41-53). Disputes may arise over whether a group of works are actually the work of one or more hands, while it is at the same time agreed that the works are closely related. By defining such a group as belonging to an "analytical individual" we are agreeing that the pieces are similar enough that one person could have made them, and that the degree of similarity indicates an intense level of artistic interaction; that is, that the individuals were aware of the others' work and that, on an archaeological timescale, the works are contemporary.

Vermeule and Karageorghis have expressed themselves amazed that "most pictorial vases do not easily lend themselves to attribution" (MPVP: 9). But is this really the case? The limitations of pictorial pottery for the purposes of attribution have been presented above. Two additional
factors need to be kept firmly in mind when considering the percentage of attributions for pictorial pottery; these are the state of preservation of the material, and the number of works assignable to each chronological phase. The discussion is restricted to the chariot design.

The corpus of chariot kraters numbers c.270, but of these only a fifth are either complete or large fragments. Obviously these offer more criteria for attribution than small sherds, though in some cases the latter may preserve a particularly distinctive portion of the design, permitting attribution or indeed precise dating of the piece. In general, however, where few design features are preserved it is difficult to assess whether or not a piece is the work of a known painter.

Given that chariot krater production spans about a century, it is relevant also to consider how many pieces are datable to each phase, and what proportion of these can be attributed. Using this information it is possible to estimate, albeit crudely, the possible number of individuals producing chariot kraters in each phase. The minimum is the number of identified artists, the maximum that number plus the remaining examples, of which enough is preserved to be reasonably sure that they are all by different hands and none are the works of recognised painters; small or broadly datable fragments are, therefore, excluded from the calculation (i.e. *97-140: IIIA2 late; *171-209: small IIIB1 fragments; *210-271: IIIA2-B1).
Some tentative conclusions may be drawn using this information. It appears that relatively few individuals were involved in the production of chariot kraters in all phases. This, coupled with the lack of identifiable regional variations in the character of the chariot scene, and the continued sharing of conventions in the execution of complex elements and themes, further suggests interacting individuals; in other words, specialised production in few places.

The distribution is also interesting, since the spread of each individual's works is, from the beginning, geographically wide, taking in both Cyprus and the Levant. This is visually presented in MAPS 5.1-9. This pattern of wide distribution is diachronically constant, with no indication of shifts in modes of production, i.e. changes in the pattern in any phase, or of localised production and distribution.
#A.2 INTRA-VASE VARIATION: OF BACKS AND FRONTS.

Although the most ambitious product in the Mycenaean ceramic repertoire, pictorial pottery is still regarded as being composed of "fixed, often stereotyped images" (MPVP: 2). It is true that unusual themes such as the naval scene (MPVP: V.38) or confronted, toasting figures (Karageorghis, 1983: 164-7) are the exception amongst dozens of vases repeating a limited number of stock themes: chariot processions and friezes of bulls or birds. But while the overall impression is one of endless repetition of formalised themes, close examination of the corpus, using different levels of design analysis, reveals much interesting variation.

On the most general level no two vases are identical. Even vases which are thought to be by the same painter and potter differ in many details. More interesting is the fact that the two sides of each vase are often not identical; the primary theme is repeated, but the details vary. Such differences in internal detail provide valuable information about the range of motifs and design variations in use at any given time. In the case of the two sides of a single vase "time" means a precise chronological moment, while the recognisable works of one artist are likely to be at least as close to one another in time as a stylistically identifiable phase.

The appearance of many different motifs on each
pictorial vase offers a special opportunity for such analysis. Indeed, any complex decoration, such as the Palace Style or the LH IIIC Close Style, could be similarly treated. The possibilities of this avenue of study have scarcely been explored, though Popham has made an isolated, and thought provoking, contribution to the subject of "intra-vase" variation. An amphora from the Minoan Unexplored Mansion bears an octopus on each face: one has loosely undulating tentacles, the other a more stylised arrangement. In addition, one octopus has blob suckers on its tentacles, the other has none; a typologist's nightmare! (1984: 171-2, pl.70).

As a facet of design analysis such variation helps to highlight which features of the design are reliable indicators of date (i.e. show consistent change through time), and which were treated as interchangeable by the artist. For example, features of the chariot design which vary on one pot include: the shape and outline of the chariot box and the shape of the wheel spokes at attachment to the felloe. Another feature shown in different ways by one artist is the terret: on two vases with many significant similarities the terret appears as a semicircular loop on one, but is S-shaped (curvilinear) on the other [*77 and *78]. In addition, the use of several subsidiary elements within each scene helps with assessment of which motifs were in contemporary use.

Another aspect of the study of intra-vase variation is the use of different themes on the two sides of the vase.
Only one example depicts completely different themes (MPVP: V.28); on one side are two sphinxes, on the other a row of silhouette figures, two with bows, and two with one arm raised (perhaps holding a small object), while under one handle runs a dog. Hunting is perhaps suggested by the archers and the running dog, a theme repeated more explicitly on a LH IIIB bell krater (MPVP: V.60). By analogy with later vase painting the scenes could be intended to be complementary, but the lack of iconographic parallels for the elements, as well as the static nature of the scene, hinders interpretation.

On the majority of vases the primary theme is repeated with variation occurring between the two sides. The chariot scenes, forming the largest group of pictorial material and having a greater number of variables, provide the best illustration of this point. The evidence for the existence of such variation is presented below, and its significance considered both in terms of the function of the design and the artist's method of working.

Three types of variation are observable:
1) differentiation of one of four chariots.
2) the use of a human figure on one side of the design, but an abstract (usually floral) motif on the other.
3) extra features on one side.

The first kind of variation is well illustrated by the large open krater from Pyla-Verghi [*2]. Within a framework of undulating rockwork four chariots process to the right, accompanied by two small silhouette figures who carry
folding stools [see §5.5.5]. While none of the four chariots are exactly identical, that to the right on Side A differs from its companions in a number of respects: the wheel has six spokes instead of the normal four, and the pole stay is solid painted with a row of arcades hanging from it, whereas the other three chariots have a striped pole stay with few or no arcades, and the large box is divided into two sections [FIG.40].

A similar differentiation may be observed on the Cesnola chariot krater [*6]. Three of the four chariot boxes are painted with small spots, the most common surface fill; the fourth is distinguished by its oxhide fill [FIG.44]. In addition, the oxhide chariot is set apart from the others by the greater elaboration of the subsidiary motifs: six instead of four bivalve shells under the horses' belly, and the rock-work (above and in front of the chariot, and between the horses' back legs and tail) is striped with solid painted wide bands alternating with line groups. The corresponding rock-work associated with the other chariots is filled only with lines. Closely comparable is *14, where three of the chariots are again spotted, but the fourth has oxhide fill.

Only one other complete AK with four chariots survives [*15]. Portions of the design are missing, but the four chariots seem in this case to be essentially similar, though there is a minor variation in the choice of subsidiary motif under the horses' belly: three have a spiraliform design (FM
12), while the fourth has a palm. Although fragmentary exhibits an exceptional degree of variation, since all three preserved chariots are different, being filled with oxhide, large spots, and small spots, respectively.

The picture is sadly limited by the small number of extant pieces, yet there is enough evidence to show that one of the four chariots was regularly differentiated from the others, either by details of the actual chariot and/or by choice or detail of subsidiary motifs. One possible explanation is that the special treatment of the chariot was intended to mark some real difference between the chariots within the procession. The idea is not unattractive given the care with which status is otherwise marked out in the dress and accoutrements of the human figures. On the other hand, the figures in the chariots exhibit no corresponding differentiation, and no comparable distinctions can be traced on later, two chariot vases.

A different kind of explanation emerges if the design is examined in relation to its position on the vase surface (Shepard, 1956: 261-2). If the vase is viewed with the handles in profile the eye falls naturally to the central portion of the frieze rather than the areas close to the handles. When four chariots (facing right) are depicted the chariot to the right of each side tends to dominate the field, while the left-hand chariot, being close to the handle, is less conspicuous. On all the vases discussed above the "special" chariot is always that in the more prominent position to the right of the design. This
suggestion is further supported by the physical space occupied by the whole design. On the Pyla-Vergi krater [*2] it is clear that the design was executed from left to right with the right hand chariot painted first; note how it is neatly separated from the handle area by a vertical striped band, whereas the left hand chariots are uncomfortably squashed up against the second handle. The same pattern of execution is repeated on the Cesnola krater [*6], where the left chariot box runs into the handle loop.

The idea that this variation is related more to the artist's method of working than a specific component of "meaning" within the scenes can be followed through on the larger corpus of two-chariot vases. The depiction of one chariot on each side had many advantages for the artist: considerably less work and planning of space was needed for one chariot, and the remaining space could more easily be filled with smaller, flexible motifs. The change also meant that the two chariots no longer jostled for position in the field, but, perhaps more satisfactorily, occupied centre-frame.

With the one chariot firmly placed in the centre the variation between the two sides relates primarily to the other motifs around it. Most common is the inclusion of a human figure on one side, with the equivalent space on the reverse filled by an abstract motif. An early example of this is the Window Krater [*1], where on one side the panels framing the chariot contain three large and carefully drawn female figures, whereas on the other side the panel to the
left contains smaller (half-size) figures, that to the right abstract motifs. Other examples of a human figure on one side, an abstract design on the other are: *27, *44, *49, *84, *86, *142.

Such variation seems to have a chronological dimension in that it is largely restricted to LH IIIA2. In LH IIIA1 human figures tend to be repeated on both sides, and a different level of variation is observable on some vases, that is, the inclusion of extra elements on one side. Examples of this are *146: three in chariot (2 on reverse); *168: silhouette figure with sword; *170: 3 independent silhouette figures (2 on reverse); *176: four figures in the chariot (three on the reverse) plus a figure with a spear, and a jug in the free field.

On the basis of the variations described above many, though not all, chariot kraters can be thought of as having a front (A) and a back (B) side, the front being defined as the one with the greater elaboration. But what is the significance of such a distinction? First, it should be noted that there is no evidence for the two sides being the work of different painters, for the differences are in choice of motifs not in style and execution (71). Since this pattern of variation has not previously been commented on, it might also be supposed that the differences would not have been obvious to the user, particularly since the vases ended up far away from the cultural context in which they were produced [#7]. Thus, a comparison with some later Greek pottery, where the front and back are so strongly
differentiated as to indicate that the vase was intended to be viewed primarily from one side, is probably inappropriate (72). Since the variations form a repeated pattern (they are not random) they can, however, be understood as meaningful in terms of how the pictorial artists worked. From the artist's point of view (if not the consumer) the two sides were differentiated, with one side painted more elaborately or with extra elements (73). The execution of a design on a pictorial vase was labour intensive compared to the majority of vases with abstract designs, given that many more design elements and decisions were involved. The intra-vase variation might be understood as a way of further individualising a product, which must have represented the top end of the Mycenaean ceramic market. The shared pattern of such variation through time by different artists also indicates a high degree of interaction and shared conventions, a point which further favours the view that these vases are the specialised product of a few closely related workshops.
The gestures of the human figures have been reserved for discussion as part of the applications of design element analysis, since description of the gestures leads naturally to consideration of the larger question of their meaning.

Gestures are an important non-verbal means of communication between individuals and groups. They may be defined as a "significant movement of limb or body" (Oxford English Dictionary). A wide range of gestures are captured in the representational evidence, and it is perhaps surprising that relatively little attention has been paid to the overall use of gesture within Aegean culture, although individual gestures, such as "upraised arms" and the "Minoan salute" have received discussion. Within the ceramic pictorial repertoire there is repetition of relatively few conventionalised poses, but these form an important part of the design.

The most common theme, the chariot design, clearly illustrates the economy of gesture in vase painting. The charioteer may be provided with hands and/or arms with which to grasp the reins, whereas the passive passenger frequently has no hands at all. Similarly, independent robed figures often have no hands, for they have nothing to hold (their common accoutrement, the sword, being slung from a baldric), and they make no explicit hand gestures.

Silhouette figures, both by virtue of their physical appearance and because they are shown holding objects and
engaging in activities, have a greater range of gesture. Given the static, conventionalised nature of the basic pictorial themes, variation in gesture provides a useful tool for approaching an understanding of the activities represented.

Despite the formalised nature of the scenes gesture can be studied in a variety of ways. Easily recognisable and distinctive gestures may be related to the wider use within the culture. A variety of gestures within a single scene and the repetition of a gesture in the same or different contexts provide further insights. Where vases of different date are discussed the possible effects of the passage of time should always be kept in mind, for while gesture is culture specific, it is, at the same time, not necessarily diachronically static.

When objects are held or carried the choice of gesture is to some extent conditioned by that fact, and the need to depict both figure and object with clarity. For example, the torsos of the spear carriers on the Homage krater are not shown, probably to make the stance of man with spear clearer (MPVP: 24). In a different medium, and much later, the painters of the Pylos frescoes solved this difficulty by painting the figures, but incising the spear (Lang, 1969: 68-70). In most cases clarity is preserved by holding the object away from the body: thus, archers hold their bows out in front (MPVP: V.28); a man holding two fish is shown with profile head and lower body, but frontal or three-quarter chest and arms so that the fish in both hands are clear.
These and other conventions reflect a conceptual element in the art, a concern to show what is there and to show it clearly, rather than what is really visible from a given viewpoint. The depiction of the arcaded traction (type 3) above the horse is a good example of this; so too are the helmets floating just above the men's heads on the Ship krater (MPVP: V.38).

Silhouette figures also appear without accoutrements, most often in combination with a chariot scene. They may be confronted in pairs, or one or more figures may move in the same direction, either facing towards or away from the chariot. The arm gestures exhibit considerable variation, some are repeated many times, others are known only from single examples.

Two recent studies are relevant to the current discussion since they have offered interpretations of some of these silhouette figures, primarily on the basis of their gestures. An extended discussion of these studies is presented here, arguing that their respective interpretations fail to come to terms with the fundamental characteristics of pictorial pottery.

Rystedt (1986: 103-16) has argued that the majority of silhouette figures without objects represent runners in footraces. A number of general objections may be lodged against the method of analysis. First, no account is taken of the different dates of the vases discussed, although they span at least a century. Second, since gesture is an element of the design it should be analysed by the same methods as
other motifs: the range of variation must be established, the contexts in which each gesture occurs must be considered, both, of course, within a chronological framework.

The author puts forward several arguments in support of the identification of footrunners on one vase [*174], then goes on to suggest that other more or less similar figures represent the same theme. The initial identification is, however, not without difficulty. Rystedt's suggestion that an athletic activity might be expected to "correspond" to the boxing match on the reverse of the vase takes no account of the structure of pictorial vase painting. The two sides of each vase often differ in details, but there is no recognisable pattern of "correspondence" such as Rystedt suggests; in fact, the most common intra-vase variation is a silhouette figure on one side, with a floral motif on the other [#A.2].

The characteristics of the actual figures - that they are two, they face in the same direction, and display a distinctive arm pattern - arms bent, one forward, the other back - are then interpreted as being "compatible with running". Further examples of the "class of runners" are adduced on the strength of this interpretation, although they often have little more in common than the fact that they are silhouette figures not obviously engaged in any other activity. The method of argument is linear and non-referential; that is, the interpretation is made on the basis of the features of one vase, to which others are then
added in a linear fashion, with variations explained or dismissed on an individual basis. At no time is reference made to the overall use of the silhouette figure and nor is its gesture range considered.

One or two examples will serve to illustrate my point. The gesture of both arms bent at the elbow, one back one forward is not exclusive to the figures cited in the article. It is also the typical gesture of the stick-bearer (rhabdophoros) found in a number of LH IIIB scenes. Such a figure is even shown on one of the vases discussed [*167], together with a second figure without a stick; both are interpreted as runners. According to the author:

"The vertical line beside the second figure need not alter the case. It is not connected to the hand of the figure in the manner of a staff......it may simply be an additive with no obvious meaning" (Rystedt, 1986: 106).

But the stick cannot be so summarily dismissed. It is as clearly held in the hand of the figure as any of the other sticks, in addition to which the posture is absolutely typical of the series of stick-carriers. Yet another of the stick-carriers is identified by Rystedt as a spear thrower:

"Everything in the way he holds it - arm bent behind the body, staff obliquely inclined, fingers spread for a broad grip - argues that he is a spear thrower represented in the most distinctive attitude".

Suddenly, the arm bent backwards is no longer the posture of a runner but that of a spear-thrower. Note that the so-called "broad grip" is the claw-like hand seen on many figures of this date.

The convention for drawing the hand highlights an important methodological point, the need to understand the
features within the context of the material. If a feature (an element or part of it) is determined to be meaningful (chronologically, iconographically), its range of use in the material must be assessed. Is the feature typical of an (analytical) individual, a stylistic phase, or used in all periods? Does it have a distinctive pattern of use: for example, is a particular element restricted in location or time; is it associated primarily or exclusively with other elements (other gestures, objects, design structure)? None of these important questions are addressed in Rystedt's article.

Åkerström's analysis (1987: 79-83) of confronted pairs of silhouette figures, usually identified as boxers, illustrates the contrasting results of iconographic studies of pictorial vase painting. While Rystedt identifies an athletic cycle of footraces, boxers, and chariot races in the Homeric style, Åkerström suggests that the motif of the confronted silhouette figures is an image adapted from Near Eastern iconography, where it represented figures saluting a sacred tree. The discussion is valuable because it does take the wider use of the motif of confronted figures into consideration. Åkerström rejects the boxing theme on two grounds; one, that the depictions do not compare well with those in other media (fresco, stone vases), and two, because the same image of confronted men with outstretched arms appears in a context which is clearly not that of a boxing contest, below deck on a ship (MPVP: V.38).

Re-examination of this series of images provides a good
opportunity for illustrating my own approach. Central to this are the diachronic aspect of the material, the range of use and variation of any design element (in this case gesture), and cross-reference to other relevant Aegean depictions.

Furumark classified all the known examples of confronted figures as boxers. Most of the examples are LH IIIB, but one is certainly LH IIIA2 (contra MPVP: V.29,30). What these images all have in common is that they consist of one or more pairs of confronted silhouette figures. What we need to analyse is what else they do or do not have in common with each other and with other figures. One image can immediately be separated out from the others (MPVP: V.31). It depicts confronted pairs, but they display a very distinctive arm gesture: within each pair both figures hold the outer arm down at the side with the hand clenched in a fist but the thumb sticking out, the other arm is bent upwards from the elbow in front of the face, but the exact hand gesture is not preserved. This distinctive pose is not otherwise known in the ceramic pictorial repertoire. The remaining examples all have arms bent or outstretched towards one another. Within the group the main variations are in leg stance and hand gesture; these, together with the arm gesture and the confronted arrangement may be examined within the broader context of the pictorial corpus.

Let us begin with the earliest example from the LH IIIA2 late phase (MPVP: V.29-30). The arms are outstretched, the hands form a loop, and the legs are bent into a forward...
stance. Comparison with broadly contemporary depictions of silhouette figures reveals no close parallels for either the arm or leg stance, though the looped hand also appears in connection with figures holding objects [*2, *44].

In LH IIIB the arm gesture is that of two arms bent forward (the bend in the elbow is shown), the leg stances may be described as either standing (both legs straight or almost so) or walking (the two legs further apart, the rear one bent), the hand gestures are variations on two-pronged claws or hooks. More examples of silhouette figures are known from this phase, so comparisons may readily be drawn within contemporary material, and also between the works of one artist and the figures on a single vase [for intra-vase variation see #A.2].

The arm gesture: as Åkerström rightly observed the gesture is not restricted to the "boxing pairs". He mentions the confronted figures in the Ship scene (1987: 81 with fig. 46.1; MPVP: V.38). Note too that the single larger silhouette figure outside the ship shares the same pose. He is differentiated by size and by his helmet, not by his gesture. The gesture also appears in other scenes which do not involve confronted figures at all, but one or more figures facing in the same direction [*79; *176].

The two different leg stances mentioned above are also in no way restricted to the paired figures. The standing stance is typical of many silhouette figures, both contemporary and earlier. The walking stance, though seemingly related to the more emphatic earlier depiction of
a forward stance, is also not restricted to the pairs. Again it also occurs on one or more figures moving in the same direction, some of whom hold objects (bow, stick).

More interesting, however, is the comparison of figures both within single compositions and those from the identifiable works of one artist. All the vases referred to are LH IIIB. The painter of two AKs [*170 and MPVP: V.32] shows both confronted and serial figures. All are shown in the walking stance, but the confronted figures have both arms bent while the other figures have both arms loosely by their sides. The figures are, therefore, differentiated both by their relationship to one another (confronted, serial) and by arm gesture. Compare this, however, with the works of another artist [*161, *163, *165]. Confronted figures appear on one vase, one or more figures facing in the same direction on the other two. Although fragmentary, sufficient is preserved of the figures for comparison. The confronted figures are in the walking stance, their arms are bent forward. The same stance and gesture is preserved on the other two vases. Thus, in this case the figures are not differentiated by gesture, but perhaps by another feature: the confronted figures seem to be tied together. The silhouette figures on the Suda Bay krater [*176] all have the same forward arm gesture (as indeed do the occupants of the chariot), and walking stance. One figure carries a large spear, but it is the spear which makes him different from his companions not his gesture.

These examples illustrate a basic point about the
elements of the pictorial design. In the period under discussion (LH IIIB1) the gestures and stances available to the artists were not consistently associated with figures engaged in specific activities. For example, a gesture used by one artist for his confronted figures, but not the serial figures, was used by another for both types. It must be concluded then that a single gesture cannot be interpreted as always referring to a specific activity: arms bent, one forward, one back does not equal a runner in a footrace, and, as Åkerström has said, confronted figures are not necessarily boxers.

How then may the confronted figures be understood? Let us return to the diachronic aspect. One example is identifiable as LH IIIA2 late (MPVP: V.29-30). Note that apart from the obvious difference in the subsidiary motifs, the figures differ in other respects from the later examples; one small but significant feature is the ear reserved within the hairline, a detail no longer found in LH IIIB figures. Although Åkerström considered that the ceramic images were not well paralleled by scenes of boxing in other media, the forward stance on these fragments is significantly close to that on earlier Minoan scenes of boxing (PM I: 688-93). Given that a comparable image existed in Aegean iconography, it is surely unnecessarily complicated to suggest that the Mycenaean artist adapted an Eastern motif, which was meaningless to him, and occasionally "pictorialised" it into a boxing scene (Åkerström, 1987: 81).
All the other confronted pairs are datable to LH IIIB. As we have seen, the varied use of gesture and stance does not permit generalisations about activities. On the other hand it was observed that figures both within scenes and within the repertoire of the individual painter are differentiated by various means. Thus while the gestures themselves seem to have become conventionalised through time, (and perhaps disassociated from original meanings?), the internal variation may indicate differentiation of activity. Boxing may reasonably be identified in the following scenes:

MPVP: V.32. Criteria: confronted figures with arms forward, differentiated from other figures by arm gesture. Note that figures on the reverse do in two cases face one another, but have arms at their sides and the two figures facing right are drawn a little above the ground line. The variation suggests a different activity.

[*161]. Criteria: the two figures are tied together, which is suggestive of a specialised form of personal combat, such as belt wrestling. Note that it is this feature which suggests the activity, not the gesture or stance which is repeated on other serial figures by the same painter or workshop.

[*174]. Criteria: forward arm gesture in contrast to the gesture of the serial figures on the reverse (arms bent, one back, one forward).

MPVP: IX.17. Criteria: possibly boxers. The figures are confronted, they have outstretched arms, and only a filling motif (parallel strokes) is visible between them.

Three other scenes show that not all confronted figures are boxers (MPVP: V.31, 38; Karageorghis, 1985: 164-7). Therefore, where small fragments only are preserved, it is not safe to assume that boxing is intended (74).

In conclusion, using the "boxing pairs" as an example, I have argued that the key to understanding the activities depicted lies in the internal pattern of use of the
different gestures within the overall context of the scenes, in combination with consideration of gesture in other media where relevant. What becomes clear using this approach is the simple but varied ways in which the figures within the scenes were differentiated from one another. Furthermore, even if the exact roles of many of the figures cannot be 'decoded', the observation that roles (i.e. activity, status) were indicated is important in itself as an aspect of the pictorial art.

A separate set of problems is raised by the occurrence of gestures which are without parallel within the ceramic corpus. Examination of the degree by which they differ from the other material (in terms of theme, image, element) is useful, but they defy the kind of analysis presented above. In these cases comparison with the use of gestures in other media is the main avenue of approach.

The Minoan style ladies of the Window krater offer an example of how gesture can be studied as a cultural phenomenon. Vermeule and Karageorghis' description gives a good idea of the range of roles attributed to these figures:

"The ladies watch from their houses, raising their hands in subdued gestures of farewell... or sniffing flowers and talking. Scholars have thought of a farewell to soldiers as on the Warrior Vase, or of Homeric "teichoskopiai", women watching their defenders from the walls, or of mourning, even of an "act of adoration" (of what one wonders). Of course the scene may be pure genre, a sketch of how the two sexes spend their time, the women gossiping, the men driving about" (MPVP: 19).

At this level of analysis no one interpretation seems more probable than another, all are plausible either in
terms of general parallels or our own experience of the use of gesture. Morgan has, however, emphasised the value of approaching iconographic elements in terms of their own system (1985: 14-16). The example given is of a woman standing with one arm raised in the Thera miniature fresco. Her gesture is often described as "waving" to the ships. Morgan points out that the gesture is in fact directed towards the horns of consecration in front of the figure, and that the same gesture is made in association with horns of consecration in many other scenes. Thus the gesture is 'decoded' within the framework of the Aegean iconographic syntax. Although pictorial pottery does not present such an elaborate iconographic cycle for analysis as frescoes and sealstones, the importance of perceiving the images within their own cultural context is none the less valid. In the case of pictorial pottery this can be achieved by analysis of the internal associations and variations within the designs, supplemented by comparison with images in other media.

Returning to the Window krater, the similarity of the ladies to earlier Minoan figures is striking, both in physiognomy and costume (MP: 239; Karageorghis, 1957: 269-71). A closer look at the gestures reveals that they too have a Minoan origin. Two related gestures are used: in one both arms are bent upwards from the elbow in front of the upper body, the second is similar but a flower is grasped in one or both hands. The gesture of a female figure holding a flower is well-known from cult scenes on gold
rings; such a woman stands before horns of consecration (CMS I: no. 279), and another woman and a small figure make the same gesture towards a seated figure (goddess) in a more complex scene (Hood, 1978: 225, fig. 228D). Note that the vase painter not only reproduced the gesture but also in a simplified form the exact flower, the lily.

Within the broader context of other depictions the gesture is clearly one of respect or adoration, and it is the same conventionalised gesture which is reproduced on the Window krater. In fact, Evans long ago identified the gesture of the ladies as one of adoration; more speculatively, he suggested that the gesture was directed towards sacred pillars, represented by the striped panels framing the figures (1901: 111).

While the observation can be confidently made that this image comes from a cultic frame of reference, it is much more difficult to take the next step and come to any understanding of how the different images (in this case the Minoan ladies and a chariot) operated within the context of the vase painting; whether they were disparate elements combined into a design or whether the iconographic associations between them simply defeat our present 'decoding' abilities. This is a recurring problem in the study of pictorial vase painting, and one that is reflected in the differing interpretations of the scenes, ranging from Furumark's emphasis on the ornamental aspect of the designs (MP: 430) to identifications of mythological scenes (Karageorghis, 1958a: 383-7). The problem of interpretation
can to some extent be resolved by careful analysis of the elements both within the scenes and as part of the wider iconographic system. Thus the Window krater ladies are shown in two related poses, both drawn from the cultic repertoire. The elements which in other scenes give the context to the gesture: cult paraphernalia or an important female figure, are not shown in the vase painting. The question must be left open as to whether the gesturing females on the vase could be "read" as a shorthand version of the complex image, or whether they should be understood as having been excerpted, and perhaps separated, from their proper iconographic context (75).

The stick-carriers (rhabdophoroi) provide a second example of how consideration of a design element both within the corpus of pictorial pottery and in a broader context can be illuminating. As already noted, the stick carriers are always shown in the same pose: the stick is held up and behind the figure. The awkward pose may simply be a convention repeated by contemporary artists, being restricted in time to the final production phase of the chariot krater, LH IIIB. Study of the gesture within the corpus shows an internally consistent pattern of use: the gesture is not exclusive to stick carriers, as it occurs also on some silhouette figures without objects. But all stick carriers are drawn in this distinctive pose, whereas other objects could be held in front of the figure.

The broader use of gesture in Aegean culture may be usefully introduced at this point in support of the
tentative suggestion that the stick-bearer was shown grasping the stick behind him because a stick held in front had another, well-known meaning within Aegean iconography, and one which was inappropriate to these scenes. This gesture is, for example, depicted on the Mountain Mother sealing, the Chieftain cup, and on the Chania Master impression (Hallager, 1985: 22-24). Analysis of the gesture in these contexts has led to the conclusion that it is one of authority, perhaps embodying legitimisation of power (Peatfield, 1983: 278-9) or even the presence of a male deity (Warren, 1987: 49). The complex scenes on which such interpretations are based are, of course, dated to LM I-II and are considerably earlier than the rhabdophoroi on the pictorial vases. Later, less elaborate scenes such as an LH IIIC seal from Naxos (CMS V, no. 608) do, however, suggest that the gesture continued to have the same connotations.

The above discussions have highlighted the use of gesture as a significant element within the pictorial scenes. This section is by no means intended as an exhaustive analysis of gesture as part of the iconographic content of the scenes. The general principles are, however, applicable to themes and elements other than those discussed. The discussion of gesture illustrates how the methods of design analysis can be fruitfully applied to all elements used in the scenes, providing a diachronic and contextual framework on which to build an understanding of the structure and imagery of pictorial pottery.
APPENDIX B.

Classification systems used for LH IIIA-B1 pictorial pottery.

<table>
<thead>
<tr>
<th>Late Helladic</th>
<th>Absolute dates</th>
</tr>
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<tbody>
<tr>
<td>Slenczka, 1974.</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>IIIA</td>
</tr>
<tr>
<td>II</td>
<td>&quot;</td>
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</tr>
<tr>
<td>IX</td>
<td>&quot;</td>
</tr>
<tr>
<td>X</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

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Vermeule and Karageorghis, 1982 (MPVP).

CYPRUS AND THE EAST:

| EARLY I | III.1-9 | IIIA1 early | 1410-1390 |
| " II | III.10-15 | IIIA1 early | 1400-1370 |
| " III | III.16-28 | IIIA1 late | 1375-1360 |
| Transition | III.29-31 | | |
| MIDDLE I | IV.1-11 | IIIA2 early | 1365-1340 |
| " II | IV.12-47 | IIIA2 late | 1345-1325 |
| " III | IV.48-78 | IIIA2 late | 1330-1300 |
| RIPE I | V.1-72.1 | IIIB1 | 1300-1270/60 |
| " II | V.73-142 | IIIB2 | 1275-130/20 |

GREEK MAINLAND:

| EARLY | VII.1-12 |
| MIDDLE | VIII.1-34 |
| RIPE | IX.1-124. |
RHODES AND THE DODECANESE:

EARLY  
XII.1-2

MIDDLE  
XII.3-16

RIPE  
XII.17-18

ASIA MINOR AND THE NEAR EAST:

EARLY/MIDDLE I  
XIII.20-21

MIDDLE/RIPE  
XIII.22-23

RIPE  
XIII.2-4

*******

MORRIS.

Absolute dates follow Hankey and Warren 1974 (see below).

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<td>IIIA2 late (a)</td>
</tr>
<tr>
<td>*70-96</td>
<td>IIIA2 late (b)</td>
</tr>
<tr>
<td>*97-140</td>
<td>IIIA2 late</td>
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<td>*140-210</td>
<td>IIIB1</td>
</tr>
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<td>*211-273</td>
<td>IIIA2-B1</td>
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</table>

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ABSOLUTE DATES after HANKEY AND WARREN, 1974: Table 3.

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<tr>
<td>LH IIIA1</td>
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<td>c.1405-1375/70</td>
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<tr>
<td>LH IIIIA2</td>
<td>c.1385-1350/40</td>
<td>c.1375/70-1335/25</td>
</tr>
<tr>
<td>LH IIIB</td>
<td>c.1350/40-1190</td>
<td>c.1335/25-1190</td>
</tr>
</tbody>
</table>

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FOOTNOTES

#2. CHRONOLOGY.

(1) A salutary, if extreme, warning in this respect comes from Alaas, Tomb 15 in Cyprus, where a LH IIIA2 piriform jar of the 14th C. was found together with 11th C. Proto-White Painted pottery (HST 1: 89, n.3); equally curious is a LH IIIA2 piriform jar in a Protogeometric grave on Kos (Desborough, 1952: pl.22; I owe this reference to Professor J.N. Coldstream).

(2) The exact length of the Amarna period remains uncertain, depending as it does on whether or not there was a co-regency between Amenophis III and his son Akhenaten and on the location of the astronomical observations on which the dates are based (Warren and Hankey: 1974; Hankey 1980: 44).

(3) On the basis of the evidence of the Atreus Bothros, FS 7 is now considered to be the typical LH IIIA1 krater form (as opposed to IIIA2 early according to Furumark), with FS 6 being a rather rare variant (French, 1964: 248-9). While the advanced conical-piriform shape of FS 8 is typical of LH IIIA2 late, the character of the shape in LH IIIA2 early is not clear and at present it seems that it cannot be distinguished from the LH IIIA1 form without the criterion of decoration (MDP: 84).

(4) FS 281, is described here as a loop handled krater, a term which clearly distinguishes it from the open and amphoroid krater types, both of which have vertical strap handles. The same form is also referred to by the following names: deep rounded bowl with horizontal handles (MP: 633); krater with two horizontal handles (French, 1967: 190); ring based krater (MDP: 115, 128); bell krater (MPVP: 35 and passim); open krater (Akerstrom, 1987: 69; confusingly, he uses this term to refer to FS 281 as well as FS 6-9).

(5) 'Kos-Miletus' type: an LH IIIB-C version of the AK, its wide neck making it a more obviously open shape. The traditional association of the AK with pictorial themes is continued, together with abstract panel designs. For a discussion of this class of material, Courtois, 1973: 137-65. It is known at the following sites: MILETUS: Istanbuler Mitteilungen, 1957: pls.32-3. ASTYPALAEA: AAA, 1973: 120, fig.14. KOS: Annuario, 1972/3: figs.73, 176, 255-6, 355-6, 369. IASUS: Annuario, 1969-70: 484, fig.27. RAS SHAMRA: Ugaritica VII: figs. 41.1, 47.9, 49. KOUKLIA: Ko Pit 33.2. unpublished (information courtesy of F. Maier).

(6) Rude or Pastoral Style on Cyprus: MPVP: VI.8,9, and perhaps VI.38 (wrongly described as a bell krater); Anson, 1980: no.59 (abstract); Karageorghis and Demas, 1984: pl.v.5.
13. ORIGIN OF THE FORM. 

(7) A similar origin was earlier suggested by Forsdyke, who derived the AK from a MM storage jar by a process of widening the neck and altering the number and position of the handles (1927: 27-8). Using this line of argument it would be possible to derive almost any given shape from any other shape!

There are, however, one or two Minoan examples where the distinctions between the AK and the piriform jar become blurred. It should be stressed that these are exceptional and that the two shapes are normally morphologically distinct. A vase from Karpathos has three vertical handles on the shoulder like a piriform jar, but a wide neck like an AK. Another similar vase is known from Myrsini. It has been plausibly suggested that this hybrid form, or "three handled krater" was an East Cretan invention of LM III (Kanta, 1980: 277; Melas, 1985: 116).

(8) This vase is mentioned by Kanta, who dates it without explanation to LM I (Kanta, 1980: 273). The similarities between the two Tylissos kraters and their relationship to the Palace Style make such an early date improbable.

Karageorghis has illustrated this vase with a provenance of Knossos (1965: 223, fn.3), as has Åkerström (1987: 46, fig.12.1). The vase, in Heraklion Museum, is uncatalogued, but the provenance is not in doubt since Hazzidakis illustrated it in a Tylissos report (Ausonia VIII, 1913: 76-89, fig.7 right).


(10) I am most grateful to Dr Catling for allowing me to read and refer to his discussion of the Lefkandi krater, in which he presents his current views on the bronze kraters (Catling, n.d.).

(11) Kition first appears as a possible provenance in Cesnola's Atlas. There is no evidence at all to support Gill's suggestion of Tekke as a more plausible provenance than Kition (1964: 17).

(12) Briefly, the details are as follows: several precious objects, a gold enamelled sceptre, two bronze tripods and the krater fragments were seized by the police in 1903. They were later deposited in the Cyprus Museum, and the krater fragments were published (Markides, 1911/12: 95-7). The location of the field near the church of Ayios Armenis, the site of ancient Kourion, was given at the time. Kaloriziki, Kourion Tomb 40 was excavated many years later and amongst the finds from an undisturbed bench deposit was the rim and
handles of a bronze AK [no.3], which contained cremated remains. The top of this krater was covered by a fragmentary bronze strainer. McFadden records the looter's statement that the stolen krater [no.2] was also covered by a strainer (1954: 133).

(13) The genius' most common attribute is the beaked jug, often with associated vegetation: Gill, 1964: nos. 7; 8 (branch in the jug); 23 (genii confront a branch set in horns of consecration on an altar); 26 (branch below each jug). A similar association of jug and branch is shown on the talismanic seals (Stürmer, 1985: 128-31).

(14) Confronted genii with jug: Gill, 1964: nos. 19-23. Add Crouwel, 1970: 23, no.2 (cylinder seal), and Baurain and Darcque, 1983: 3-73 (Mallia triton). Only the scene on the Mallia triton is performative, i.e. the action of the figures shows the jug in use.

(15) e.g. Evans, PM IV: 527-40 (lion attack and pursuit); Pini, 1985: 153-166 (on the motif of lions attacking bulls).

(16) Genius with animals: most commonly the bull. Bulls and stags are carried (Gill, 1964: pl. 5), or sometimes led along (ibid.: pl. 4, 4-5). Lions appear in a variety of poses: the genius carries pelts on a pole, or lions in heraldic compositions flank the genius (ibid.: nos. 40-45).

(17) The problem of distinguishing Minoan and Mycenaean workmanship and iconography lies outside the scope of this discussion. The evidence for a Mycenaean version of the Minoan genius is discussed by Crouwel, who draws attention to the curl on the head (found only on the mainland), and to some iconographic differences on one or two representations (1970: 23-31).

(18) The genius is shown on seals in Cyprus (Gill, 1964: nos.9, 46). These representations are not closely comparable with the bronze handles either stylistically or thematically; the schematised genius holding a jug is a later version of the earlier leonine creature and its rich iconographic world.

(19) I have not studied the krater in corpore, and therefore hesitate to draw firm conclusions about the style and details of the iconography on the basis of the published descriptions and photographs. For example, Gill (1964: 17), and more recently Matthäus (1985: 229), refer to boars as well as bulls and lions; these are not mentioned by Catling, and are not distinguishable in the photographs. New drawings of the decoration, to match Gill's drawing of the Kourion handles, would be most welcome.

(20) The bulls are most easily visible in the photographs: they charge with lowered heads and their tails streaming behind. The folds of skin on the neck, the male sex and the hooves are carefully rendered. The bulls' posture is
paralleled in Aegean scenes of bull sports; comparison has already been made with the Knossos bull fresco from the North entrance of the palace (CBMW: 158). A charging bull with carefully rendered details is, for example, shown on an elongated amygdaloid seal from Mycenae (CMS I, no. 152).

(21) For seal representations: CMS II:2, e.g. nos. 2 (amphora) 76 (jug, pithos), 80, 171 (jug), 86 (jug, kantharos), 182, 241 (amphora). There is, of course, no indication of the material of which the vases are made.

(22) The vases shown on frescoes seem to be coloured to indicate various metals. They include: Camp Stool Fresco, Knossos: kylix and chalice (PM IV: 388-90); Cup-Bearer, Knossos: conical rhyton (PM II: pl.12 facing 707); Pylos: large tripods (Vandenabeele and Olivier, 1979: 229, fig.155); Tylissos: large amphora (ibid: 263, fig.181a-b).

(23) Catling has already noted that di-pa and a-pi-po-re-we are not good parallels for the AK (CBMW: 160). The vases of the ideograms are fully illustrated by Vandenabeele and Olivier, 1979: 181-301. Their series of amphorae show that it is a narrow necked vessel, and the texts refer to it containing honey (ibid.: 259-63). Two "vases amphoroides" are also related by them to the amphorae series (ibid.: 263-6). An ideogram from Pylos looks more like a schematic AK, but the association is still tenuous (ibid.: 240, fig.164 pa-ko-to). There is evidence to suggest that many of the vessels listed on the tablets are metal; the bronze ideogram accompanies some vases, and like other precious objects, they are often counted in small numbers. Clay vessels are suggested where larger quantities are listed, as in the case of the 1800 amphorae on Gg700 (Chadwick, 1973: 323-9).

(24) Other Minoan AK's with strongly metallic features are less impressive in size than the Giamalakis and Milatos examples, but their decoration is relatively elaborate. Kritsa 130: panelled decoration of octopus and bivalve shells, quatrefoils and lozenges; this small but exquisitely decorated vase has a neck ridge embellished with a row of dots, a prominent knob at the lower handle attachment, and most strikingly, a handle which arches elegantly up over the rim. (Kanta, 1980: 135). Sarkhos (HM 1575): octopus; neck ridge embellished with vertical strokes, laid-on lower handle attachment and triple grooved handle. Many vases retain only the neck moulding, which is usually undecorated.

(25) The appearance of non-ceramic features has been discussed by Walberg in her study of the Kamares pottery (1976: 34-9). She concludes that some features are more obviously or necessarily metallic than others and observes a tendency to "metallize" certain features of originally ceramic types in Classical Kamares. In this case it would seem that metal vessels had a general influence on ceramic fashions. This further suggests that the basic equation of
metallic feature with metallic prototype is sometimes too simplistic.

(26) Movement of pots or potters could account for the Minoan features in the earliest Mycenaean examples, before the vase shape was fully assimilated into the Mycenaean repertoire. It is relevant here to note the existence of an AK with an alleged provenance of Mycenae which is strongly Minoan in style (CVA Mainz, ZentralMuseum I: pl.1:1-2). I hesitate, however, to include it as evidence to support my argument that the Mycenaean AK is indebted to a Minoan ceramic prototype for two reasons: first, the provenance is not secure; second, from a photograph alone it is impossible to be sure whether the piece is 1) actually Minoan or 2) Mycenaean, but strongly Minoanising.

Movement of potters (and by that I mean persons trained to work in a particular ceramic tradition, irrespective of ethnic origin) is more elusive. Jones and Rutter have suggested that Minoan potters resident in Laconia may have been responsible for production of Minoan style pottery (1977: 211-219). The potential impact of movement of potters trained in a different tradition can be underlined by a historical example: under Hideyoshi the Japanese invaded Korea in 1592 and 1597. They brought back Koreans as captives and immigrants, among them potters. These potters brought with them many skills, including the ability to make the noborigama (stepped chamber kiln), an important technical improvement (Impey, 1982: 26-33).

#4. DEVELOPMENT

(27) The following emendations can be made to Furumark's examples of FS 53-55:
FS 53.2 [*27], FS 53.23 [*53]: should be FS 54;
FS 54.2: this vase does not conform to the FS 53-55 series, and seems to be a local product [see *124].
FS 54.7: Minoan not Mycenaean;
FS 54.8 and 18: should be FS 53;
FS 54.11,16, 18a: should be FS 55.

Other probable female figures include: MPVP: VIII.6, jug: outline breasts (?); XII.18, pilgrim flask: circle breasts.

Possible nude figures: MPVP: V.32 — it has been suggested that the genitals are shown on one of the confronted pairs of figures (MPVP: 44); *50 — the small central figure has a reserved torso (perhaps intended to be frontal) filled with spots (as does the independent figure on the Pierides krater, *69). The projection between the figure's legs is usually identified as genitals; the ends of a garment made from animal skin are another possibility.

An image, which at least looks like an oxhide ingot, is repeated four times on both short sides of a LM III larnax from Gazi (Alexiou, AE 1972: pl.36). The object is rendered solid and on the long side of the larnax is a ship.

Another related example is a bird on a LM IIIA1 piriform jar from Rhodes. The chest of the bird is painted with short "scribbled" lines, similar in overall effect to stipple (Niemeier, 1985: 127, fig.61.5).

The use of stipple as a design (and background) filler is syntactically distinct from its use as a surface design. Apart from the examples discussed here it is also used as the fill for rows of large figure-of-eight shields, replacing the more naturalistic dappled effect of earlier examples. Two very similar examples are known: fragmentary open kraters, one without context from Cyprus (CVA Cyprus I: pl. 16.4), the other from a largely LH IIIA2 dump at Ayia Irini, Kea (Hershenson and Morris, in press).

It is important to distinguish the frequent use of rows and groups of bivalve shells as a subsidiary design element in chariot scenes, which is characteristic of LH IIIA2 early, from the recurrence of the same motif in isolated cases, as on these animals' bodies or even in chariot compositions [*209: a tiny shell tucked between the handle loop and the chariot passenger; *258: shell immediately in front of the front legs of the team]. This is not surprising given the common use of the motif in non-pictorial scenes over a long period (LH IIIA-C).
(35) See #3, fn.23.

(36) This is particularly clear at Maroni, where fragments of pictorial pottery have turned up in the area of robbed tombs and the related settlement buildings are of later date (G. Cadogan: pers. comm.)

(37) I am indebted to Vronwy Hankey and Lucia Vagnetti for references to unpublished Minoan Aks from Italy.


(39) The chariot was widely used throughout Egypt and the Near East by elite groups for military purposes, ceremonies, and prepared hunts (battues), the latter being the prerogative of royalty and the aristocracy (Littauer and Crouwel, 1979: 90-6).

(40) There is some disagreement about the shapes. Furumark (MP: 435-6) suggests that they are metal vessels of "eastern" character. The jug is considered eastern on account of its pointed base. The fifth vase is called a two handled rhyton. The chalice is now known to exist in the Aegean, in clay as well as stone, and need not be Eastern. Vermeule and Karageorghis argue that that they are all Aegean types, identifying the fifth vase as a two handled kylix (MPVP: 22).

(41) A similar phenomenon may be remarked upon briefly in connection with drinking sets in the Geometric period. A number of kraters have lids whose knob comprises a miniature vessel from the symposium set; thus a hydria forms the knob on the lid of the Cesnola krater, alluding to the dilution of wine with water, while another krater lid is surmounted by the drinking vessel itself, the skyphos (Coldstream, 1983: 204).

(42) A significant form/content relationship is also expressed by the Mallia stone triton (Baurain and Darcque, 1983) [FIG.13]. Like the bronze Aks the triton dates to LM I and its iconography is concerned explicitly with libation, so emphasising the currency of this imagery in the Neopalatial period. The shape is a rhyton, for manipulating liquid, while the scene shows a Genius pouring liquid from a beaked jug onto the upturned paws of his companion, thus the act of libation or ritual washing is embodied in the iconography. In the same way the triton shell recalls another form of liquid, the sea; this is further invoked in the net pattern which forms part of the decoration.
A chariot krater from Rhodes [*124] may, however, have been regionally produced. It differs from the mainstream chariot kraters in all respects: fabric, vase shape, and details of design. It might be regarded as "the exception that proves the rule", since its very unusualness serves to emphasise the homogeneous stylistic character of the corpus of Mycenaean chariot kraters.

The inconsistency between Cypriot production of pictorial pottery and its obvious stylistic connections with Aegean fresco painting is obliquely recognised in Vermeule and Karageorghis' statement: 'how such strong connections with Minoan wall painting were maintained in the absence of known frescoes in Cyprus is a present mystery' (MPVP: 18).

Maroni, Tomb 5: angular cup, shape imitating BR. Datable by context to LH IIIA1, and a unique piece of evidence for imitation of a Cypriot form at this early date. It is unusual for having a solid painted interior, a feature better known in Crete (BMC 624).


Cyprus (no provenance): hemispherical cup with wishbone handle. Shape imitating WS, though the ring base is a Mycenaean feature. LH IIIB (Buccholz and Karageorghis, 1973: 153, no. 1637).


Klavdia: hemispherical cup with wishbone handle, decorated with bulls by the Protome Painter A. LH IIIB (BMC 623).

Minet el Beida, Tomb VI: hemispherical cup imitating WS (MPL: 73, fig. 24).

Mycenaean influence on Cypriot wares: piriform jar in BR ware (CVA BM I, pl.1.32); copy of an open krater in White Painted ware (BMC 415); piriform jar decorated with scale pattern in BR fabric (Ashmolean Museum, 1953.232).

Levanto-Mycenaean shapes listed by Furumark are: FS 36, 46-7, 95, 116, 139, 191, 210, 223, 228-9, 232, 235, 243-4, 296, 310.


The chalice is known in stone in the Neopalatial period (MMIII- LMI) in Crete. Warren (1969: 36-7) lists 22 examples, as well as depictions of the type on the Camp Stool fresco and on the later Tiryns gold ring. Many more stone examples have been found in the excavation of the spring sanctuary of Kato Syme (AR 1978/79: 38).
The shape also exists in gold, silver and clay (GCP: 599; Hiller, 1978: 91-102).

(49) Another culture with a highly developed ceramic industry, China, offers excellent evidence for specialised export lines. One of the most striking is perhaps the production from the 17th cent. A.D. of pottery decorated with patterns based on verses from the Koran for Islamic consumption. The export of Chinese porcelains made for European markets from the 17th-19th cent. A.D. provides another general but useful analogy, since it was primarily the introduction of Chinese ceramics which stimulated European potters to develop the skills for producing their own porcelain (Medley, 1976: 261-3).

(50) Chariot scenes:
Asine:*71.
Corinth: * 145.
Nauplion:*143, *262.
For other themes:
Dendra: AK (handle fragment).
Mycenae: Bull (MPVP: VII.4); Human (MPVP: IX.17); Stag hunt, ?AK (AR, 1973/4, fig. 12; MPVP: XI.77.2, where it is dated to the Late or LH IIIC phase. The piece was found with other pictorial fragments, at least one of which, MPVP: IX.30.1, is LH III B.)
Tiryns: stag (Slenzcka, 1974: no.245, fig. 36.2a).

(51) Kardara (1968: 222-7) collects numerous examples of itinerant arts, both ancient and modern, but places none of them in either an historical or practical context. In the subsequent discussion Karageorghis suggested that the existence of travelling craftsmen might be applicable to the problem of Mycenaean pottery in Cyprus. Merrillees has also been attracted to the possibility of travelling potters, mentioning the travelling smith as an analogy, while conceding that the idea is "pure speculation" (1979: 128-9).

(52) Control over personnel and materials is recorded in the Linear B tablets (Hooker, 1976: 188-9). At Ras Shamra artisans belonged to the king; they collected their raw materials from the royal stores, to which their finished products returned (Heltzer, 1979: 495). That the skilled person was also considered a prestige resource is shown by Near Eastern texts, where gift exchange involved specialists. The Mari archive evens records chases being organised to bring back fleeing craftsmen (Zaccagnini, 1983: 245-64). According to the same author the mobility of specialists in the Near East reflects not an itinerant way of life but a controlled flow of resources either from palace centres to dependent outlying areas or between centres of power.
(53) Well-known examples are the pithos makers of Thrapsano (Crete) and Phini (Cyprus); both travel within limited area. The Thrapsano potters each travel annually to only one location to make pottery (Peter Day, pers. comm.), while the Phini potter travelled only to nearby villages. (Further refs.: Thrapsano: Voyatzoglou, 1984: 130-42; GCP: 864-7; Phini: GCP: 869-70).

The potters of Siphnos travelled widely throughout the Aegean producing domestic vases, especially cooking pots (tsoukali). Although documentation is sparse, the potters do seem to have been well organised with permanent installations at regular ports of call (GCP: 861). A careful examination of the historical circumstances within which this mode of working arose and was maintained would be of considerable interest.

(54) Vermeule and Karageorghis do no more than touch on the contribution of the fabric analyses (MPVP: 8-9). Their implicit dismissal of the scientific results, which do not harmonise with their theory of "flexible" production, lacks authority given their incorrect reference to thermoluminescence, a technique used not for provenance work but for dating (see also GCP: 623, fn.176).

(55) The unassigned ("aberrant") pieces in the Catling and Millett analyses were their nos. 3 and 20; in addition, the chemical profiles of 2 and 4 were less canonical than other members of the group. Another fragment by the painter of 3 was also analysed and classified as Peloponnesian A. The data was later re-assessed by Jones using multi-variate analysis with a limited group of controls: Mycenae, Knossos, Enkomi, Arpera Chiflik, and Kouklia (GCP: 545-47 with Table 7.1). The problematic pieces of the Catling and Millett analysis, 3 and 20, were assigned to the Argolid (for which Mycenae acted as the control marker). Jones observes, however, that neither piece was a firm member of the group and that ?Argolid, might be a more appropriate reading of the results (Richard Jones, pers. comm.). Several other pieces (2,4,14,24~25) were also unclassified in the multivariate analysis. Note, however, that none of the pictorial pieces matched satisfactorily with the Cypriot controls at any stage in the study (GCP: 545). It should be emphasised too that the fact that the pictorial samples matched the Argolid composition "unevenly" does not mean that they are not from the Argolid, since this area still provides the best match for the material.

In Anson's analysis three pictorial fragments (75-77) were given a provenance of Enkomi, two were unassigned (78-9) and two were "rogues" (80-1). The data was re-examined by Jones, who assigned 76, 79, 80, and 81 to the Peloponnesese, leaving 78 (a chariot krater fragment) unassigned, and 75 and 77 with a provenance of Enkomi. Catling excludes 75 from the pictorial classification on the grounds that the octopus is not strictly speaking pictorial (in GCP: 604); the fragment is not directly relevant to the discussion of AKs, but it does highlight the desirability of
sampling identifiable and representative material rather than pieces of uncertain shape and date. 77 is more problematic; it is an AK fragment with a bull, which is placed by Anson with his Enkomi RS group. On stylistic grounds the piece fits well with other bulls of LH IIIA2 late, and it is quite unlike the known series of RS bulls, yet the clay analysis does suggest a Cypriot origin for this particular piece.

(56) In the Aegean: Phylakopi, Melos: a high proportion of the Mycenaean pottery sampled was assigned to the Peloponnesian (GCP: 498-9); Rhodes: the majority of samples of LH IIIA-B1 proved to be from the Argolid, including a number of types which were best known from Rhodes and for which local manufacture had been suspected (Jones and Mee, 1978: 461-74; GCP: 518). For the Peloponnesian origin of Mycenaean pottery in the Eastern Mediterranean, see GCP: 589-625.

#8 CONCLUSIONS: THE HISTORICAL CONTEXT.

(57) The elaborate stemmed krater with its matching jug from Phaistos might have been a functional predecessor (Levi, 1964: fig.20a-b). Its form is, however, unique, and the AK is not typologically derived from it.

I am much indebted to Alan Peatfield for stimulating discussion about historical developments in the Neopalatial period and the subject of "the manipulation of liquids". My observations about the use of artefacts and iconography in this period are complementary to his broader analysis of religious and political developments.

(59) I follow Turner's useful distinction between ritual and ceremony, as referring to transformative (initiation, burial) and confirmatory events (feasting), respectively (1967: 95). The "manipulation of liquids", such as pouring libations, purification, toasting, could occur at both kinds of events.

(60) Varkiza basket rhyton with diving fish: MPVP: VII.J; Nauplion basket rhyton with goat in a rocky landscape: MPVP: IX.77 (but not 13th c. B.C. or Mycenaean). For a comparable theme early in the Mycenaean pictorial repertoire, see an AK from Maroni (MPVP: III.26; Crouwel and Morris, 1985).

(61) For an account of the changes between LH IIIA1 and IIIA2 on one site, especially in the character of the ceramic assemblage, see Hershenson, C.R. and Morris, C.E. (in press). "Aya Irini, Keos: The Late Helladic III period", in the Proceedings of the colloquium, The

(62) As evidenced both by the wider distribution of such material on the Mainland and by fabric analysis results; for the latter see Demakopoulou and Crouwel, 1984: 37-48. Fragments of seven vases were analysed: nos. 1-5, dated to LH IIIB2, had a Boiotian provenance; note they were inferior in fabric, and different in style from standard Argolid pictorial; by contrast, nos. 6-7, dated to LH IIIB1, were a shallow bowl and a stemmed chalice; both were of excellent technique, and comparable with standard examples. They had a Peloponnesian provenance.

(63) There is considerable resistance to the idea of specialised export lines; e.g. both Stubbings (MPL: 70) and Vermeule and Karageorghis (MPVP: 9) consider it an anachronistic concept. Sherratt cautiously accepts that pictorial pottery was made on the Mainland, but leaves open the possibility of Eastern production of some LH IIIB shapes best known in the East rather than export lines (1980:195-6). Given the huge quantity of LH IIIB pottery known in Cyprus, it would be interesting to known whether it represents the period of greatest Mycenaean expansion in terms of exports, or a change to a combination of export plus local production.

Two pieces of evidence seem to me to point to the former remaining the primary mechanism. First, the pieces of LH IIIB pottery submitted for fabric analysis continue to conform to Mainland profiles. These include an example of a shape (shallow bowl) common in the East, which is the work of the Protome B Painter, an artist who decorated other 'Eastern' shapes, like the stemmed chalice [17.5]. Note too a Peloponnesian origin for a shallow bowl and chalice found in Boiotia (see fn.62 above).

Second, the obvious change to locally produced versions or derivatives of Mycenaean pottery occurs in the latter part of the LH IIIB period. In general, these products, such as the Rude (Pastoral) Style kraters, are clearly different in fabric, paint, and style from the Mycenaean pottery of the earlier part of LH IIIB. The change is explicable in terms of a breakdown in the flow of exports, but if potters working in a Mycenaean tradition had already been making pots indistinguishable (in fabric and style) from the Mainland originals, it is difficult to believe that they suddenly lost that ability.

#A.1 ATTRIBUTION STUDIES.

(64) The fullest contribution on this subject is Betts' discussion of the principles of attribution with regard to seal-engraving (1981: 1-15).

(65) Hill (1977: 55-108) commissioned five artists each to copy a number of designs onto fifteen pots from a template pot, which was painted with geometric patterns regularly.
used within their local repertoire. The pots were then broken and labelled, and sherds of reasonable size were chosen for analysis. Variables relating to each of the design elements were measured; these included line width, and angles, spacing and shape of parts of the elements. This data was processed using a number of statistical techniques with the result that less than 5% of the sherds were attributed to the wrong painter. The test showed that variation below the level of the design element was idiosyncratic and non-random. Since the painters were copying the same template the variations were not deliberate; furthermore, the works of related individuals (brothers) having a common teacher did not display greater similarity to one another than to other works, thus implying that motor habits are not more similar (or indeed indistinguishable) as a result of shared heredity or learning context.

The effect of the passage of time on motor habits was tested by a separate experiment, using examples of the handwriting of four British novelists taken from dated correspondence over a period of time. Variables relating to the combined lowercase letters -th- were submitted for analysis. Despite the chronological factor the writing of each author was successfully differentiated, but the test was less successful in discriminating between the early and late examples of each author's writing. The results suggest that, even through time, inter-individual variation is more highly differentiated than intra-individual variation.

(66) A similar point is made by Muller with reference to the subjective approach to attribution in classical archaeology (1977: 26-7). The main thrust of his argument is that subjectivity should be minimised and levels of variation more carefully defined. His criticism of Beazley, however, suggests only a superficial acquaintance with his work, mistaking reticence about his method for an absence of method.

(67) Immerwahr characterises the Protome Painter (A) as having "an extremely sure hand" and being "casual but never sloppy", in contrast to a "rather untalented imitator" (later the Protome Painter B) (1956: 139-40), while Benson characterises the Protome Painter A as "a man of no consistent inspiration. However, his drawing always has a masculine force." (1961b: 339). Two distinct problems are raised if material is characterised primarily on such criteria. First, the highly personal nature of the characterisations and the lack of agreement between them is self-evident. Secondly, it is difficult to define the presence of a characteristic such as "masculine force" or to see how it separates that artist from his colleagues.

(68) This discussion applies equally to other groups of Aegean pottery, which have proved susceptible to attribution; Kamares: state of research summarised in papers by MacGillivray and Walberg in The Function of the Minoan


(70) Vermeule and Karageorghis, in fact, make a similar point elsewhere in the study (MPVP: 174), thus contradicting their earlier statement.

#A.2 INTRA-VASE VARIATION.

(71) The collaboration of two painters on single vases is referred to by Cook (1960: 271).

(72) The Proto-Attic Eleusis amphora depicts the blinding of Polyphemus by Odysseus on one side, while the back is cursorily painted with an abstract floral motif (Mylonas, 1957: 16-22, figs. 12-13). Compare too the routine decoration on the backs of red-figure pelikai and bell-kraters "disfigured by the inevitable trio or pair of cloaked youths, always (if possible) more degenerate than before" (Cook, 1960: 187).

(73) The substantial differences between the two sides at the level of choice of motifs (e.g. human figure/flower; number of figures in chariot) must have been deliberate. This can be contrasted with some classical vases, where a scene was duplicated on both sides with minor differences and omissions in details (Noble, 1966: 69).

#A.3 GESTURE.

(74) MPVP: V.33: only one figure; MPVP: IX.18: theme unclear, one figure wears a robe or tunic and may hold an object. Note too the examples of robed confronted figures, which lack gestures or other hints of function [e.g. *13].

(75) the theme of a figure within a frame is also repeated on a larnax from Tanagra (Tomb 6, n.10: PAE 1969: pls. 4a, 6b, 13b). In contrast to the krater only the profile head and shoulders appear above the frame and one arm is bent upwards in front of the face, but without a flower. The figures on the larnax could be thematically related to the images discussed here, but a gesture of farewell might also be appropriate in view of the explicitly funerary context.
CONCORDANCE with classifications proposed by MP, MPVP, and Slenzcka, 1974.

Abbreviations:

HST: Hala Sultan Tekke
TAH: Tell Abu Hawam

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CATALOGUE

The catalogue provides basic information about each item. The details of each piece are presented using a standard format which follows the order and vocabulary used in the design analysis [#5]. Although the data could have been further condensed into a tabular form, I have chosen to retain the more traditional verbal format in order to make the information more easily accessible. A similar format could usefully be followed in publication of new fragments, enabling easy and direct comparison with the material presented here.

Characteristic features of the AK form [as defined in #4.1: the development of shape] are not repeated for each entry; other typical features, such as the solid painted neck and foot, are also assumed to be present unless otherwise stated. Optional or variable features, such as a neck ridge or perforations, are described if they are present.

The majority of chariot scenes are painted on AKs, which form the bulk of the catalogue. The much smaller number of contemporary chariot scenes (i.e. not the later LH IIIB-C series) on other shapes are also included. The relevant shapes are the open krater (FS 7-9), the loop handled krater (FS 281), and possible fragments of jugs.

Each catalogue entry contains the following information:

PROVENANCE.

PRESENT LOCATION with museum or excavation number.

BIBLIOGRAPHICAL REFERENCES.
As a matter of principle this is restricted to primary publications, significant discussions, and/or outstanding illustrations; the exhaustive listing of every passing reference to a particular artefact serves no useful purpose.

CONTEXT: settlement/tomb/shrine; date of context.

STATE OF PRESERVATION: complete vase/fragment.

BRIEF FABRIC/SLIP AND PAINT DESCRIPTION:
Precise (and therefore meaningful) fabric descriptions are hampered by variations in museum lighting, plaster restoration, and cleaning treatments; detailed descriptions using Munsell Colour charts were not attempted. All vases examined were of good quality, hard Mycenaean fabric with the usual colour range of buff through pink-buff to pale orange. The lustrous slip may be the same colour as the clay body or lighter (usually more buff). The lustrous paint may be orange-red-brown-black (the latter often crackled), with much variation within one vase.
**DIMENSIONS:** Ht; D. rim; D. base; W. rim; W. handle.

**FORM:** Furumark Shape 53-55 [as defined in #4.1, Development of Shape].

a) Rim: decoration.
b) Neck: assumed solid painted unless otherwise stated; ridge at base of neck, if present.
c) Handle: form: ridged, lightly ridged, flat; decoration both on (e.g. vertical bands) and framing handle (circle of paint, semicircular loop to neck); perforations at top and bottom of handle attachments, if present.
d) Base: assumed torus unless otherwise stated; flat/disc below; perforations, if present; decoration: assumed solid painted foot with single band above unless otherwise stated.
e) Body: body shape defined by FS classification; number and distribution of body bands, e.g. 3 bands below frieze.

**DESIGN:**

Theme as defined by the primary design element: CHARIOT.
Design structure or syntax: no. of chariots, facing l./r. or confronted.
Details of design described in terms of the variables used in the design analysis [#5]:
BOX/WING; TRACTION; CONTROL; HORSE; Ground-line: relationship of design to encircling bands (set on or overlapping the bands); CHARIOTEERS; INDEPENDENT FIGURES: together with their accoutrements [#5.5] where relevant; SUBSIDIARY DESIGN ELEMENTS (S.D.E.): classified according to location (a-h), and Furumark motif names [#5.5.6]. Cross-reference with Furumark is given, indicating the level of similarity with his types (e.g. FM x.y; cf. FM x.y; FM x: IIIB types).

**ATTRIBUTION** [see #A.1]: the works assigned to an individual (or at least an "analytical individual") are listed. Criteria for the attribution, together with discussion of previous groupings, are given under the first entry of the group.
Some vases are also more loosely classified as related to the attributed groups, either because there are insufficient criteria for secure attribution or because the piece is less similar than the other members of the group; in the latter case the pieces should be chronologically close, but the nature of their relationship is ambiguous: perhaps the work of an individual through time, the work of a close associate, or common use of features typical of a stylistic phase.

**FABRIC ANALYSIS:** results and reference. For discussion of the chemical analyses see #7.5.

**PAINTED OR INCISED SIGNS:** if present.

**COMMENT:** this section, commenting on specific features of individual pieces, should be read as complementary to the overall picture presented in the main text and is
DATE: the basic criteria for dating are provided in #2.2 (context), #4.1 (form) and #5.9 (design). Where a date for an individual piece is in disagreement with that suggested by other scholars, further discussion is provided.

ILLUSTRATIONS.

In discussing a complex body of material such as the chariot kraters illustrations clearly have an important visual role in complementing and elucidating the text. For practical reasons I have elected not to illustrate exhaustively every vase or sherd, though many vases merit a higher standard of illustration. Ideally this should take the form of a profile drawing (to show details of form and accessorial decoration); a roll-out drawing of the design and a series of photographs to show the relationship of shape and decoration and nuances of the drawing often lost in line drawings.

Less ambitiously, I have tried to illustrate examples and features relevant to the points and ideas presented in the text and catalogue. The illustrations provided here can be supplemented easily by consulting a few basic publications of pictorial pottery, in particular:

1) for good photographs of the examples from Cyprus, and at least adequate illustrations of a high proportion of other pictorial pottery, see E. Vermeule and V. Karageorghis, 1982. Mycenaean Pictorial Vase Painting. (MPVP). 2) for the Berbati material, see Å. Åkerström, Berbati Z. The Pictorial Pottery. 1987. (photographs and drawings of a high standard).
SPECIAL ABBREVIATIONS USED IN THE CATALOGUE:

A: Side A of a vase
B: Side B of a vase
Bibl.: bibliographic references
D.: diameter (of rim or base)
d.o.: double outline
Ht.: height
1.: left
max.: maximum
p.: parallel (as in parallel chevrons or strokes)
pres.: preserving/preserved
r.: right
S.D.E.: subsidiary design element
s.o.: single outline
W.: width (of handle)

#: prefix indicating a reference to the main text [e.g. #5.5: Chapter 5, section 5].

*: prefix (followed by a number) indicating reference to an entry in the catalogue of chariot scenes.

[ ]: square parentheses are used to indicate a reference within the present study.
Kourion, Tombs 53 and 102 (British Museum) and Tombs 17 and 17A (Benson); "Window krater" [FIG.39a-b].
CM 1971/XII-6/1 (formerly BMC 391), and B1067 (additional sherds from re-excavation).
Bibl.: ExcCyp : 73; CVA BM I: pl.6:9; Karageorghis, 1957: 269-71; Benson, 1972: 20-21, with frontispiece (showing rim fragment with female figure); MPVP: III.12;
Context: plundered tomb with probable range of use of LCIIA-B.

Restored from fragments; large parts missing. 35 new fragments found by the University of Pennsylvania re-excavation of the tomb, and incorporated into the vase (Benson, 1972). Buff, red paint.
Large open krater, FS 7 [FIG.39a].
Ht. 0.435; D. 0.432.
Rim: tall, everted; band in and out.
Handle: flat, strap handle; vertical wavy band along either edge, crossed by two horizontal bands, and ending in a loop which extends through the body bands.
Bands: 3 below frieze.
Foot: painted with a line and band above; perforations: 5 preserved, probably 3 more in the plastered area.
Sign painted on base (see below).

Chariot facing r. framed by female figures set within hatched panels ("windows").
BOX/WING: s.o., square, spotted fill; floor shown behind wheel; spur. Large wheel with spokes widening at felloe.
TRACTION: Pole. Type 1, striped pole stay.
CONTROL: 4 reins.
HORSE: line-tuft mane, 4 back legs with hooves and fetlocks, rear leg solid painted. 2 tails.
CHARIOOTERS: 2, obliquely striped robes. Features: large oval eye, straight nose, jutting chin above a thick neck, carefully reserved ear in curly hairline.
S.D.E.:
No subsidiary motifs.
INDEPENDENT FEMALE FIGURES (FM 1.2) set within striped panels either side of chariot team:
A: to left, female figure facing l., occupying full height of frieze [FIG.39b]. Features: as charioteers, but with three long tresses of hair hanging down back. Costume: plain upper garment (in outline), wide belt, skirt with horizontal stripes. Gesture: arms held vertically in front of chest, bent at the elbow; Right hand holds a flower.

    to right, pair of confronted female figures, occupying full height of frieze and separated by a striped panel. Features and costume as above. Gesture: as above; the right figure holds a flower, the left one (only the arms pres.) may not.
B: to left: frieze divided into four rectangular,
hatched panels, which contain two smaller pairs of confronted figures. Features and costume as previous figures; lower left figure has a striped upper garment. Gesture as before but without flowers.

to right: frieze divided into four hatched panels; the corners of each panel contain a solid triangular shape framed by a fringed semicircle.

ATTRIBUTION: *1-5.
*1-4 as MPVP: 175, Painter 1; their III.12-15).

Characteristics of the painter:
1) Use of large open kraters [*1-2, perhaps 5].
2) The physiognomy of the figures is very distinctive: large oval eye, Grecian profile, jutting chin, carefully reserved ear in curly hairline; on some figures the reserved band in the hairline suggests a headband or fillet.
3) Subsidiary motifs: fondness for hatched elements (panels, undulating rock pattern).
4) the heavy bodied horse with line tufts, details of chariot [*1-2 only].

Distribution of work: MAP 5.1.

PAINTED SIGN: sign in matt red paint on the base; BMC: 78; Stubbings, 1951: 47, no.18.

COMMENT: Note the strong similarity of female figures to Minoan fresco figures, especially the Knossos and Thera miniatures [*5.4.3]. Gestures of the female figures are paralleled in ritual scenes [*A.3].
The hatched panels framing the ladies were first suggested to be architectural by Evans, who interpreted the scene as adorants before sacred pillars (1901: 111). The interpretation of the panels as a simplified architectural facade is supported by 1) general parallels with the facades of buildings or shrines in fresco painting (as MPVP: 18 with fn.30); 2) the appearance of other elements in the work of this painter, which may also represent architectural features [see *4-5]. The more obvious role of the panels as structural dividers of the scene [cf. also *2] should not, however, be overlooked (Karageorghis, 1957: with reference to the vertical hatched band demarcating the beginning/end of the scene on the Chieftain Cup).

Intra-vase variation: A has large female figures in panels, while B has small female figures, abstract motifs [*A.2].

Note the wide distribution of this painter's work, i.e. the market range already established at this date [*7.3; MAP 5.1].

DATE: LH IIIA2 early.
Contra LH IIIA1 date proposed in MPVP ; see #2.4 for discussion of the date of the earliest chariot kraters.

This group of vases [*1-5] is important for the early development of the chariot krater: the artist used an enlarged version of the open krater (a form already in use in LH IIIA1), and the AK. Since this large version of the
open krater does not appear again this may mark a period of experimentation, the modification of an existing vase form for the new decoration, followed by its placement on a new vase shape.

In design terms this artist's figures are stylistically close to other media (esp. the Minoan ladies). Note too the development in the use of filling motifs: none on *1, rock pattern on *2, and rows of p. strokes on *4.

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*2. Pyla-Vergi, Tomb 1 [FIG.40].
CM 1952/IV-12/1.
Context: LC IIα-B; plundered tomb from which 112 vases were recovered.

Restored from fragments, large parts missing.
Large open krater: similar to *1.
Ht. 0.446.
2 chariots facing r.
BOX/WING: s.o., square box, large spots; floor shown behind wheel; spur. Large wheel with disc centre, spokes widening at felloe. Note that one chariot has a box subdivided into two portions and a wheel with 6 spokes [see #A.2].
TRACTION: Pole. Type 1, pole stay striped with few or no tassels (3), solid painted with row of pendant tassels (1).
CONTROL: harness, the neck and girth strap shown as an incised, hatched band. At the withers a solid projection may represent part of the yoke. 4 reins (merging into 3 in places).
HORSE: 2 overlapping heads separated only at lower end of muzzle, 4 ears, 4 line-tufts. Stocky body, male sex indicated. 4 legs front and back with hooves and fetlocks; rear pair solid painted. Tails: two (2), one (2), the latter overlapping with wheel.
CHARIOTEERS: 2, obliquely striped robes. Features: oval eye, straight nose, jutting chin above a thick neck, reserved ear set into curly hairline. Long hair extending down back, reserved, hatched band/fillet around hair (1 figure).
SILHOUETTE FIGURES:
A: a small figure facing r., about one third the height of frieze, hovers between the two chariot teams. Features: similar to charioteers. Gesture: he grasps by two opposite corners an object of hourglass shape (i.e. two opposed triangles); the upper corners only are curved. It is drawn in outline and is held across the upper body.
B: a larger silhouette figure, standing on or near the undulating ground-line, occupies about two-thirds of height of frieze in front of both chariots. Features: similar to charioteers. Gesture: he grasps the same...
object as the figure on the reverse.

S.D.E.:
a: vertical hatched band at the extreme r. of each side separates the scene from the handle area (but not on the l. where the artist had run out of space).
d: hatched rock-work: at the upper edge "clouds" (FM 34.2); at the lower edge an undulating band, forming an irregular groundline for the horses.

ATTRIBUTION: *1-5.

COMMENT: Object carried by silhouette figures can be reasonably identified as a footstool [#5.5.5]. Use of incision for the harness [#5.7]. Intra-vase variation: esp. the one chariot to right of scene with box with two sections, six spoked wheel, and elaborate harness system [#A.2].

DATE: LH IIIA2 early.
LH IIIA-B date is suggested by Åkerström (1987: 91-2). His main criteria are the "disintegrated" nature of the traction system; the large almond eye, which he compares to a fragment from Ras Shamra [*70].
First, the traction system is of Type 1, where the pole stay with a few pendant tassels appears just above the team's back; this should be distinguished from the later type 3 form with its triangular arcades, and frequent reduplication of the system (i.e. the pole stay/brace appear both between the box and horses' rumps, and above their backs).
Second, although the almond eye and hatched head-band are indeed paralleled on the Ras Shamra example, the facial features of the latter figures also display different and later characteristics: a sloping forehead and receding mouth and chin.

Among the numerous details which support the LH IIIA2 early date for this vase are the vase shape: the rather conical lower body is closer to FS 6-7; the design structure: depiction of two chariots per side; the design details: the solid painted rear set of horses' legs, the use of rock-work; and the combined evidence of the other vases from the same workshop [*1-5], especially the links with fresco painting.

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*3. Atchana (Alalakh) [FIG.41]
Context: reported to be from Level II, but "not properly stratified" (Woolley, 1955: 371). Levels III-II are dated to c.1365 to the first quarter of the 13th cent. B.C., though all dates from Atchana need to
be treated with caution due to the disturbed nature of the site (Crouwel and Morris, 1985: 86).

Fragment, broken at the neck junction; probably an AK. Pink, orange paint.

Human figure facing r. (?part of a chariot scene). Preserves part of head of figure, similar to *1-3 above; note the large oval eye, reserved ear set into hairline, hatched fillet around head and zigzag hairline. Behind the figure parts of two similar motifs; the larger left-hand motif consists of a series of vertical, curving lines, taller at the centre and shorter at the edges, rising from a rectangle filled with vertical stripes; the latter is set on a narrower rectangle filled with horizontal stripes, and the edge of a further, even narrower element of the design is preserved at the break. Of the smaller motif, immediately behind the human head, only the curving lines and edge of the rectangle survive.

ATTRIBUTION: *1-5.

COMMENT: the two motifs behind the head are unparalleled, but it has been suggested that they may represent an architectural structure, possibly a shrine (Crouwel and Morris, 1985: 91). Architectural elements also occur on *1 and *5, the work of the same artist.

DATE: LH IIIA2 early.

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*4. Enkomi [FIG. 42].
Enkomi 1947 no. 2362.
Bibl.: Coche de la Ferté, 1951: 11-13, 57, pl. 1.7; MPVP: III.14.
Context: not specified.

Fragment preserving turn for neck and upper frieze. Buff, red paint.

Chariot facing r.
CHARIOTEERS: 2, head of driver and part of passenger only. Features: oval eye, straight nose, jutting chin, reserved ear set into hairline. Hair: wavy/zigzag outline with reserved, hatched band/fillet around head.

S.D.E.:
e: 3 rows of p. strokes.

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ATTRIBUTION: *1-5. Note that the driver's head is very close to the driver of the right-hand chariot on Side B of *2.

DATE: LH IIIA2 early.

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*5. Kition [FIG.43].
Area II/no.2512.
Context: Temple 2, Floor IV. This is the earliest floor of the temple and was abandoned at the very end of LC IIC; the sherd in this level included LH IIIB and "Late Mycenaean IIIIB".

Body sherd: open krater, preserving turn for everted lip, which is painted with a line below; probably similar to *1-2. Pinkish-buff, red paint.

Primary motif uncertain: ?chariot or other human activity.
FEMALE FIGURE facing r. with frontal torso. Preserves back of head, jutting chin, thick neck, reserved ear set in curly hair, with long lock down to upper arm. Three bands around neck, the lowest set with beads, may be necklaces or the upper edge of a transparent bodice, through which the bosom with circular nipple is visible; a band around the wrist may be a bracelet. The rather formless arm curves backwards. To the left of the figure the edge of a chequerboard panel, suggesting a framed setting similar to *1.

ATTRIBUTION: *1-5.

DATE: LH IIIA2 early.

MPVP: 17-18 suggest a LH IIIA1 date, which links the piece with *1-4 (their III.12-15), but they also retain the option of a much later date (late 13th cent.) for this fragment and a much discussed piece from Kouklia (their III.11). The Kouklia piece is problematic: the dress style is not Minoan and fabric analysis places the piece with a local composition group (GCP: 604-5).

*5 is, however, more clearly related to the work of the painter of *1-4 both in style (esp. the reserved ear, jutting chin, hairstyle), and design structure (combination of female figure with framed setting).

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*6. Maroni [FIG.44].
Metropolitan Museum, New York. 74.51.964 (formerly CP 1403).
Bibl.: Myres, 1914: 48, no. 436; Immerwahr, 1945: 544-9, figs. 8-10; MPVP: III.16.
Context: unknown.

Complete and unbroken. Buff, brownish-black paint with added matt creamy-white for harness details.
Ht. 0.367; D.rim 0.275.
Form: FS 53:7.
Rim: groups of p. chevrons.
Handle: ridged, 3 vertical bands joining at the roundel attachment, no loop around back of handle; perforations: 3 top, 3 bottom.
Bands: 2 below frieze and on lower body.
Base: not known.

2 chariots facing r.
BOX/WING: rounded box, d.o., spotted (3), oxhide (1); chariot floor shown behind wheel. Wheel: single cross.
TRACTION: type 1, plain.
CONTROL: harness shown in added white: neck and girth strap with chevron fill, joined at upper edge by a loop; harness on muzzle and blinkers (?) above eyes. 4 reins held in pairs, the lower two running through an oval terret, which is attached to a solid projection (part of yoke system) at withers.
HORSE: well separated muzzles, 2 pairs of ears, 3 tufts shown bound at the root (with white paint). 4 front and back legs with hooves and fetlocks, rear legs in solid paint; 2 tails.
Ground-line: scene neatly placed on upper band.
CHARIOTEERS: 2, s.o., spotted robes. Features: eye set into curly hairline, reserved ear, beaky nose and jutting chin, solid painted neck.

COMMENT: Intra-vase variation: elaboration of right hand chariot on Side A, i.e. oxhide box; rock pattern striped differently from other three; six (instead of four) shells below horses' belly [see #A.2].

DATE: LH IIIA2 early.

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PAGE 354
Enkomi, Tomb 12 [FIG. 45].

BMC 344 and 348 (2 sides of one vase).

Bibl.: ExcCyP: 38-9; CVA BM 1: pl.11.14; MPVP: III.17
(only 344 illustrated).
Context: LC II.

BMC 344: fragment, pres. part of neck and full depth of frieze.
BMC 348: fragment of rim, neck and frieze.
Buff, red paint.
Form: FS 53.
Rim: groups of p. strokes.
Neck: slight ridge at base of neck.
Bands: 3 narrow bands below a narrow frieze.

BMC 344: 2 chariots facing r.
BOX/WING: square box, s.o., fill of large spots (1),
small spots (1); floor shown behind wheel; spur. Wheel:
single cross (centre not pres.).
TRACTION: pole. Type 1, striped.
CONTROL: 4 reins held in pairs. Part of yoke: edge of a
curving element rising from withers.
HORSE: 2 ears, 4 tufts. 4 front and back legs with
hooves and fetlocks, rear legs in solid paint. 1 tail.
Ground-line: scene set on upper band.
CHARIOTEERS: 2, s.o., plump, spotted robes. Features:
large oval eye set against hairline occupies upper part
of face, beaky nose, short wavy hairline.
SILHOUETTE FIGURE: facing r. behind the 2 chariots.
Features: as charioteers. Gesture: arms held loosely
either side of a short, frontal torso, in one hand a
shallow, striped bowl.

S.D.E.:
a: vertical row of shells (FM 25.4,6).
d: rock-pattern: 2 hatched arcs (FM 33.8).
e: row of shells (FM 25.4).
f: rock-pattern: as d.

BMC 348: chariot facing r.
BOX/WING: square box, s.o., oxhide fill (one only
pres.); floor shown behind wheel; spur. Wheel: single
cross.
TRACTION: pole. Type 1, striped.
CONTROL: part of yoke shown as a curving line rising
from the withers and the traction system. 4 reins in
pairs attached to a semicircular terret on the neck.
HORSE: 2 ears, 4 tufts. Short body, 1 tail.
CHARIOTEERS: 2, s.o., oxhide robes. Features: as BMC
344 above.

S.D.E.:
a/c: vertical row of shells (FM 25.4).
e: row of shells (FM 25.3,4).

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ATTRIBUTION: *7-9.*
(*7-8 = MPVP: 175, Painter 2; their III.17, 21-2*).
Characteristics of the painter:
1) similarity of facial features; 2) similarity of chariot and horse; 3) shared choice and execution of subsidiary elements: rock pattern (hatched arcs), vases.

FABRIC ANALYSIS: BMC 344. "equivocal results" (Catling and Millett, 1965: 219-22, no.4); and remained unassigned after multivariate analysis of the data by Jones (GCP: 545-47, with table 7.6).

COMMENT: Intra-vase variation: i.e. differentiation of the four chariots [see #6.2].

DATE: LH IIIA2 early.

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*8. Enkomi, Tomb 67 [FIG.46].
BMC 339 and CM A2024 (2 sides of one vase).

Bibl.: ExcCyp : 37; CVA Cyprus I: pl.3.4 (b); MPVP: III.21-22.

Context: LC II.

BMC 339: 9 fragments, joined and plastered, pres. turn for neck and full depth of frieze. Pink-buff, red.
Bands: band framed by lines below frieze.
CM A2024: small fragment pres. turn for neck and part of frieze. Pink-buff, red.

BMC 339: Chariot facing r.
BOX/WING: square box, s.o., oxhide fill; spur; floor shown behind wheel. Wheel: single cross (centre not pres.), spokes widening at felloe.
TRACTION: pole. Type 1 (possibly 2, small section only pres. in front of box), L-shaped, solid painted.
CONTROL: 4 reins held in pairs.
HORSE: rear part only pres; rump, rear pair of legs solid painted, 1 tail.
Ground-line: scene set on the upper line.
CHARIOTEERS: 2, s.o., spotted robes.
Features: oval eye, pointed nose, reserved ear, wavy hair with traces of pigtail/tress at shoulder. Driver shown with arm crossing body to hold reins.
ROBED FIGURE: (FM 1.1) facing r. behind chariot.
Features: as charioteers. Long robe with hem border of three horizontal bands, feet below. The figure wears a sword, with crescent pommel, crossbar, and three tassels at the end; it hangs from a baldric.
SILHOUETTE FIGURE: (FM 1.21) facing r. behind the robed figure. Features: as other figures, hair ends in a curl on shoulder. Rectangular torso, muscular front leg (rear one not pres.). Gesture: 1. arm bent up and forward, holding a sickle shaped object, the r. arm crosses the body at the waist and holds a short stick.
S.D.E.:
c: five vases, a jug and chalice in front of the robed figure, a rhyton, cup and bowl(?) behind him.
d: rock pattern: 2 hatched arcs (FM 33:8).

A2024: small portion of reverse side pres. turn for neck and part of frieze. ROBED FIGURE: head and shoulders of an independent robed figure with baldric across shoulder. Details as (a).

FABRIC ANALYSIS: BMC 339. Peloponnese (Catling and Millett, 1965: 221-22, no.2); unclassified following multivariate analysis of the data (GCP: 547, Table 7.6). In the original analysis of Catling and Millett the chemical profile was slightly odd, but still considered a reasonably good member of the group (Richard Jones, pers. comm.).

COMMENT: Object held by silhouette figure: see #5.5.6. Depiction of vases discussed in #7.4.

DATE: LH IIIA2 early.

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*9. Ashdod [FIG.47].
Context: large public building in Area B, dated to LBA II.
Small fragment pres. part of frieze with turn for neck. Prob. chariot facing r. pres. part of head of figure with large, oval eye set against forehead, reserved ear in hairline.
S.D.E.:
Although a small fragment the remaining facial features and the distinctive form of the rock pattern suggest a common painter.

DATE: LH IIIA2 early.

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*10 Aigina [FIG.48].
Context: settlement
Body sherd; ?AK.

Primary theme uncertain, perhaps a chariot scene.
ROBED FIGURE: facing r. Features: round eye set between forehead and reserved ear, pointed nose and jutting chin, short wavy hair. Costume: s.o. robe filled with large circles.

COMMENT: The features of the figure are closely related to *7-9.

DATE: LH IIIA2 early; presence of rock-work and similarity of facial features to *7-9.

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*11. Maroni ('Vournes') [FIG.49].
Context: from one of the trenches adjacent to Tomb 4, where Mycenaean sherds are reported as being more frequent.

Body sherds from frieze. Buff, red paint.
Bands: part of 2 bands pres. below frieze.

Chariot facing r. pres. part of horse.
TRACTION: type 1.
CONTROL: 4 reins attached to a small semicircular terret on the neck.
HORSE: short body, 4 front legs, bent at knee, fetlocks and hooves.
Ground-line: scene set on upper band.
e: row shells (FM 23)
f: edge of 2 curving lines, perhaps rock pattern (cf. FM 33.6-7).

COMMENT: The short body of the horse strongly suggests that there were 2 chariots on each side, as is characteristic of this phase.
Cadogan suggests that the motif under the belly could be a running dog by analogy with later (LH IIIB-C) chariot scenes (1983: 160). The two thin lines are much more likely to be the beginning of rock pattern (cf. *13, De Clercq).

DATE: LH IIIA2 early.

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*12. Enkomi [not ill.].
Musée de Cinquantenaire, Brussels A 1248 (given by BM
in 1904).

Bibl.: CVA Belgique 3: pl. 3.6,7.
Context: unspecified tomb.

2 non-joining fragments, pres. part of rim, neck and beginning of frieze. Pink, red-brown.
Form: FS 53.
Rim: groups of transverse strokes.

Primary design element not preserved; filling motifs indicate a pictorial design belonging to this phase, possibly a chariot.
S.D.E.
a: papyrus (FM 11).
c: vertical row of shells (FM 25:4);
   U-pattern (FM 45);
   N-pattern (FM 60).
d: rock-pattern: hatched arc (sim. FM 33:8).

COMMENT: Use of subsidiary motifs, esp. the hatched arcs, links it to *7-9.

DATE: LH IIIA2 early.

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*13. Cyprus (?), unprovenanced [FIG.50].
Louvre Museum AO 22 293 (acquired by the De Clercq collection from the Barre collection in 1878).
Context: unknown.

Complete. Buff, orange to brown paint, decoration worn in places (esp. chariot box and wheel).
Ht. 0.385; D.rim: 0.27; D.base: 0.122; W.handle: 0.042.

Form: FS 53:9.
Rim: groups of p. chevrons.
Handle: ridged, 3 vertical bands, circular loop around handle; roundel attachment; perforations: 3,2 top, 1,3 bottom.
Bands: 3 below frieze and on lower body.
Base: flat.

Chariot facing 1.
BOX/WING: rounded box , d.o., spotted; floor shown below wheel. Wheel: single cross, disc centre, spokes widening at felloe.
TRACTION: type 1.
CONTROL: 4 reins held in pairs.
HORSE: muzzles almost horizontal, 4 ears, 2 large tufts; 4 front, 2 back legs with hooves and fetlocks; the back legs stretched back as if in motion, rear set solid painted. 1 tail.
Ground-line: scene set on and just above (wheel) upper band.
CHARIOTEERS: 2, s.o., spotted robes. Features: dotted eye, reserved ear, striped neck, hair to shoulder.

ROBED FIGURES:
Side A: pair of confronted robed figures in front of chariot; figure facing r. behind chariot. Features: oval eye set in hairline, reserved ear. R. of pair has long hair hanging over shoulder, r. has hair swept upwards and ending in a curl. Single figure: long hair. Costume: long robe, upper part spotted, lower part with horizontal stripes (l. of pair) or p. chevrons (r. of pair and single figure); along the front edge of robes a dotted line. Gesture: none.
Side B: pair of confronted figures in front of the chariot, plus a single figure facing r. behind the chariot.

S.D.E.:
a: (between confronted figures and between chariot and single figure) 'chevron plant' (FM 11.41; 58.9).
b: shells (FM 25.6);
   p. strokes.
c: shells (FM 25.6);
   p. chevrons (FM 58);
   U-pattern (FM 45);
   p. strokes.
e: shells (FM 25.6);
   row of N-pattern (FM 60).
f: rock-pattern (FM 33.7);
   shells (FM 25.6).

DATE: LH IIIA2 early.

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*14 Enkomi or Psemmatismeno (nr. Maroni) BM 1911/IV-28/1 (also registered as 1925/11-1/3) [FIG.51].
Context: unknown.

Restored from fragments, almost complete and in excellent condition. Buff, red paint.
Ht. 0.425; D.rim 0.31; D.base 0.133; W handle 0.05.
Form: FS 53:8.
Rim: U-pattern (FM 60).
Handle: ridged, 2 vertical bands, roundel attachment, circular loop around handle; perforations: 2 top, 3 bottom.
Bands: 3 narrow bands below frieze and on lower body.
Base: flat; perforations: 5.

2 chariots facing r.
BOX/WING: square box, s.o., spotted (3), oxhide fill (1 on Side A); spur; floor shown behind wheel. Wheel: single cross, spokes widening at felloe.
TRACTION: pole. Type 2, stippled pole stay.
CONTROL: 4 reins (3), 3 reins (1), all attached to an oval terret on a yoke saddle at the base of the horses' neck.
HORSE: 2 ears, 4 tufts, well proportioned body with 4 front and back legs.
Ground-line: hooves and wheel slightly overlap upper band.
CHARIOTEERS: (FM 1.13) 2, s.o. spotted robes. Features: round eye, pointed nose and jutting chin, reserved ear set in short wavy hair. Driver has hands.
S.D.E.: a: papyrus with knobbed stem (FM 11.31); palm (cf. FM 15.11 but with cross bars on top of stem and no top leaves).
b: rock pattern (sim. FM 33.7, but with fill of row U-pattern);
   p. chevrons (FM 58.8).
c: p. chevrons (FM 58);
   p. strokes;
   shell (FM 25);
   U-pattern (FM 45).
d: p. chevron (FM 58.8);
   shell (FM 25).
e: shell (FM 25).
f: shell (FM 25).
g: p. strokes.
h: dotted circle (FM 27.24).

COMMENT: See §5.9.1 for discussion of stylistic development. While the use of floral motifs and of small, detached motifs throughout the design does, as Vermeule and Karageorghis observe (MPVP: 27), represent stylistic development, it is argued that a more significant development, both of form (FS 53-54) and decoration takes place at a later point, that is between LH IIIA2 early and late (MPVP: Middle I to II). As well as the new filling motifs, the use of the Type 2 traction system (between box and horse) is indicative of stylistic development. Strong links with the other vases of this phase (as opposed to the next) are, however, provided by: the shared form: FS 53; shared design structure: two chariots per side, and the differentiation of one of the four chariots; shared filling motifs: continued use of bivalve shell beside the floral motifs.
A strong stylistic link is provided with several other vases through the use of the papyrus with knobbed stem: a bull krater (MPVP: IV.4), and a bird krater (MPVP: IV.6). Furthermore, a common workshop for these two is suggested by the unusual banding (band framed by
lines), and handle decoration: wavy edged bands. The bull krater gives a useful chronological peg for FS 53, since it comes from an LH IIIA2 early context [see #2.2].

The use of stipple on the pole stay is unusual. Compare the goats with stippled bodies (MPVP: III.26). For discussion of use of stipple in pictorial designs, and its implications for dating, see #5.7.

DATE: LH IIIA2 early.

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*15 Enkomi, Tomb 3.257 [FIG.52a-c].
Bibl.: SCE I: 483; Sjoqvist, 1940: fig.19.1; MPVP: IV.3.
Context: LC II.

Restored from fragments. Pink-buff, brown paint, much faded in parts.
Ht. 0.48; D.rim 0.35; D.foot 0.15; W.handle 0.028.
Form: FS 53:4.
Rim: running spiral (FM 46.55) [FIG.52c].
Handle: ridged, 2 vertical bands, roundel attachment and semicircular loop to neck; perforations: 2 top, 3 bottom.
Bands: 3 below frieze and on lower body.
Base: flat; perforations: 7.

2 chariots facing r. [FIG.52]
BOX/WING: rounded box, s.o., spotted; spur (A only); floor shown behind wheel. Wheel: single cross with outline disc centre, spokes widening at felloe.
TRACTION: pole. Type 1, from front of box to yoke projection at base of team's neck.
CONTROL: harness in added white: headstall, neck and girth strap shown as double lines with rows of dots between; 4 reins held in pairs attached to oval terret above solid yoke projection.
HORSE: round eyes, no ears, 4 tufts. Well proportioned body, 4 front and back legs, the rear set drawn in outline; 2 tails.
Ground-line: design elements set on upper band.
CHARIOTEERS: 2, s.o. spotted robes. Features poorly preserved: round eye, prominent nose, smooth cap of hair on top of head [FIG.52b]. Driver shown with arm crossing body to hold reins (A only).
b: as a;
   papyrus (FM 11:33);
   shell (FM 25);
   U-pattern (FM 45).
c: dotted circle (FM 27:18).
d: rock-pattern (related to FM 33:8).
f: as a;
linked spirals (FM 12:41).
g: p. strokes;
rock pattern (sim. FM 34:1-2).

COMMENT: The vase form is FS 53, but note that the circle of paint around the handle has now been replaced by a new feature, a semicircular loop extending up to the neck band.
Like *14 the subsidiary decoration is characterised by the use of many different motifs in all possible locations throughout the design.
This is an early example of the rear set of legs being drawn in outline (rather than solid painted), hereafter the regular convention.

DATE: LH IIIA2 early.

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*16 Kourion (alleged provenance)
CM A2025 a,d [FIG.53].
Bibl.: CVA Cyprus I: 5-6, pl.6.2,4; MPVP: IV.2 (one frag. only illustrated).
Context: unknown.

2 large fragments pres. part of neck and frieze. Pinkish-buff, brown paint.

2 chariots facing 1.
BOX/WING: wing only pres., s.o. spotted, bisected by 2 horizontal lines; spur; combination of spotted box/ spotted fill behind upper quadrants of wheel. Wheel: single cross, widening at felloe.
TRACTION: pole. Pole stay/brace not pres. but must have been Type 2, since no elements are visible over horses' back.
CONTROL: 4 reins.
HORSE: round eyes, muzzles almost horizontal, 2 ears, 4 tufts each crossed by a short stroke at the base, thin neck. Well-proportioned body, 4 front and back legs, rear pair in outline, 2 curving tails.
CHARIOOTEER: 1 only in the pres. chariot. S.o. spotted robe, body sharply indented at back. Features: round eye, pointed nose, wavy hair, striped neck.
S.D.E.:
a: p. chevrons (FM 58).
c: rock pattern (cf. FM 34:1-2);
   shell (FM 25);
   U-pattern (FM 45);
   p. strokes.
e: rock pattern (cf. FM 34:1-2);
   p. strokes.
   row p. chevrons (FM 58:16);
   row shells (FM 26:18).
f: elaborate spiral (related to FM 12:41-5);
p. strokes;  
p. chevrons (FM 58);  

PAINTED SIGN: vertical bar from a painted sign on interior shoulder; matt purple paint. Another AK with two signs painted on the interior body is BMC 377 (MPVP: III.7), an octopus krater painted by the same hand as the "Zeus krater" [*25]. Note that, in general, painted and incised signs occur on handles and bases, and are primarily LH IIIB in date [#5.7].

COMMENT: The single charioteer is unusual; cf.*69 (Amman), *127 (Kourion).  
Note the use of rock pattern and shells together with p. chevrons and strokes [for further discussion see *14; also #5.9.1].

DATE: LH IIIA2 early.

********

*17 Troy [FIG.54].  
Context: Squares J-K6, between House VIE and the fortification wall. Troy Late VI, Earthquake stratum, dating to the 14th cent. B.C.

Body sherd.  
Chariot facing r.  
CONTROL: 4 reins.  
CHARIOTEERS: torso of driver only pres. with s.o. spotted robe, curving shoulder, front line of thick neck.  
S.D.E.:  
e: shell (FM 25).

DATE: LH IIIA2 early.  
See *6-7, *16 for shells in location (e).

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*18 Troy [FIG.55].  
Context: 6) Squares J-K6, between House VIE and the fortification wall. Troy Late VI, Earthquake stratum, dating to the 14th cent. B.C.; 6a) surface find on South side of citadel.

Two non-joining body sherds, perhaps from one vase.  
Chariot facing r.  
6a [FIG.55]:  
CONTROL: 4 reins, not shown at muzzles.  
HORSE: round eyes, ears overlap neck-band, 3 tufts.
S.D.E.:  
c: p. chevrons or strokes.  
e: shells (FM 25:4);  
p. strokes.  
6 [not ill.]:  
HORSE: forepart with harness elements shown in added white paint.  

DATE: LH IIIA2 early (or the following LH IIIA2 late (a) phase; the latter date suggested by MPVP: 167).  
6 is dated by its suggested association with 6a. The closest parallels for 6a, especially the use of shells together with p. chevrons and strokes are from LH IIIA2 early, cf. *16 above. Although the execution is not similar, *16 and *18 share another feature, in that the reins are not shown at the muzzles.  

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*19 Enkomi, Tomb 10/12 [not ill.].  
CM 1958/I-10/7.  
unpublished.  

Several fragments of rim, neck, one handle, part of frieze. Pinkish-buff, red.  
FS 53.  
Rim: N-pattern (FM 60).  
Handle: ridged, solid painted; roundel attachment; perforations: 2 top, 1 bottom (through side).  

Chariot facing r.  
HORSE: forepart only. 4 legs, the front set bent forward.  
CONTROL: harness in added white, neck and girth strap shown as row of circles framed by double lines.  
S.D.E.:  
c: shells (FM 25).  
f: as c.  

DATE: LH IIIA2 early.  
Criteria of handle form, use of shells.  

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*20 Maroni [FIG.56].  
Cyprus Survey 649.  
Context: surface.  

Body sherd.  
Chariot facing r. pres. neck and withers of horse.  
CONTROL: part of 4 reins attached high on neck.  
S.D.E.:  
e: row shells (FM 25).  

DATE: LH IIIA2 early.  

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Criterion of row of shells.

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*21 Maroni [FIG.57].
Cyprus Survey 649.

Body sherd. Buff, red paint.
Chariot facing r. pres. team's belly; male sex shown.
S.D.E.: f: rock pattern (FM 34:2)

DATE: LH IIIA2 early.
Criterion of rock pattern.

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*22 Enkomi [FIG.58].
Excavation no. 3681/1.
Context: Level IIA, Area III, between floors VI-V.

Body sherd. Pink-buff, red to brown paint.
Chariot facing r.
BOX/WING: part of an oxhide box with spur; box shown behind wheel. Wheel: single cross.

DATE: LH IIIA2 early.
Criteria of context and chariot form.

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*23 Enkomi [not ill.].
Excavation no. 2001/14.
Context: Level IIa early, Area I, room 142, floors XII-XI.

Body sherd.
Chariot pres. part of single cross wheel, box behind with spotted fill.

DATE: LH IIIA2 early.
Criterion of context only.

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*24 Enkomi [not ill.]
Excavation no. 2064/2.
Bibl.: Dikaios, 1969-71: pl. 61.10, 87.5.
Context: Level IIa early, Area I, room 142, floors XII-XI.

Body sherd.
Chariot facing r. pres. part of wheel: single cross,
disc nave, widening at felloe. In front two irregular lines, could be part of a filling motif or horses' legs.

DATE: LH IIIA2 early.
Criterion of context only.

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*25 Enkomi, Tomb 17/1, "Zeus krater" [FIG.59a-b].
Bibl.: SCE I: 541-46; Dikaios, 1969/71: 918-25; Karageorghis, 1965: 221, fig.51; MPVP: III.2.
Context: terminus post quem of LH IIIA2 for deposition [see #2.2].

Complete.
Ht. 0.375; D.rim 0.264;
FS 53 (contra MP: 54.18) [FIG.59a].
Rim: p. chevron groups.
Neck: reserved band; row of U-pattern in added white at base of neck.
Handle: flat, centre slightly convex; 2 vertical bands, row of horizontal strokes along centre; circular band around handle; perforations: 2 top, 1 lower.
Base: flat.

Primary design elements: Octopus (FM 21:6) on each side; under one handle a chariot facing r. [FIG.59b]
BOX/WING: rounded box, s.o., spotted; box perched on wheel, but wheel quadrants filled with spots, recalling the true position of the box. Wheel: single cross, spokes widening at felloe.
TRACTION: Type 2, triangular.
CONTROL: 4 reins held in pairs pass through a projecting yoke element at the base of the team's neck.
HORSE: 1 head only, 3 ears, 3 tufts. 4 legs, 2 tails.
CHARIOTERS: '2, s.o. spotted robes; driver has hands.
Features: eye set in hairline, irregular profile, short cap of wavy hair.
ROBED FIGURE: (FM 1.7) facing chariot, s.o. spotted robe. Features: as charioteers. Gesture: one arm in front, which holds an object resembling a set of scales.
SILHOUETTE: below belly of horse, facing r. and standing on the ground-line. Features: as charioteers. Slim silhouette body, bending forward.
Gesture: by opposite corners he grasps an object of hourglass shape (i.e. 2 opposed triangles), drawn in outline; this object is identified as a folding stool [#5.5.5].
S.D.E.: because of the unusual structure of the scene these cannot be described in terms of the location code used for other chariot scenes. In association with chariot scene:
Bull: above head of robed figure, close to the upper edge of the frieze. Silhouette body covered in white.
spots (as the octopuses), outline head and ear with dotted eye. Pair of horns pointing forward. Tail composed of two lines (as horses).

Palm: (FM 15:8) one above team; naturalistic with freely curving leaves.

Papyrus: (FM 11:39) in front of silhouette figure, on ground-line.

Lozenge-type motif: behind silhouette figure.

Under second Handle:

Birds: (FM 7:12 reversed) two similar birds in flight (unusual) towards the r. Outline body and tail, fill of U-pattern; curving hatched neck, double line for beak.

Palms: (FM 15:8) twice perched on the upper octopus tentacle, once on the ground line. Same as palm on other side.

Rock pattern: (FM 34:8) pendant from upper edge of design.

Fringed, wavy line: immediately below rock-pattern, extending horizontally from the handle loop, above the head of the bird; added white spots as octopus body (ill. with FM 34:8).

ATTRIBUTION: the same potter/painter was responsible for another AK with octopuses (BMC 377; MPVP: III.7). Similarities are both the size and proportions of the vase, and the shape and details of the spotted octopuses.

COMMENT: The unique combination of motifs has prompted much discussion about the meaning of the scene. Nilsson suggested that it depicted Zeus with the scales of destiny, while Dikaios came up with the ingenious idea that the central theme was the copper trade with ingots being weighed and carried, and that each design element contributed to the meaning of the scene (MPVP: 14-5 for discussion and refs; also Åkerström, 1987: 100-102). The object carried by the silhouette figure is now widely believed to be a footstool rather than an ingot [see #5.5.5]

The most striking features of the scene are: the strange design structure, with the chariot scene tucked under the handle between large spotted octopuses, the apparently jumbled mixture of pictorial motifs, and the unusual execution of some of the motifs (e.g. the strange octopuses, the bull with two tails, the team of horses with one head and one set of legs but 3 ears and two tails). While the artist's intention remains unclear - a random selection of motifs, a bold experiment in use of space, or less likely, a narrative or mythological scene - precise interpretations must remain purely speculative.

DATE: LH IIIA2 early.

There is extensive disagreement about the date of the vase: Furumark classified the vase as FS 54.18, i.e. LH
IIIA2 late, a diagnosis followed by Åkerström (1987: 102); Slenczka (1974) assigns it to his Group V, that is c.1340-1320, his last phase of LH IIIA. Vermeule and Karageorghis place it in their Early group (LH IIIA1).

The shape provides the clearest criteria for dating the piece, despite its uncanonical decoration. It is FS 53, with its short, concave neck, conical-piriform body, circular loop painted around the handle (the slightly concave handle section is unusual).

The deep zone is a result of the octopus design on the main faces, and not in itself an indication of an early date (Åkerström, 1987: 100-101). An unusual feature is the row of U-motifs in added white at the base of the neck, best paralleled in the Minoan repertoire. Early elements in the design are the rock pattern, naturalistic palm, and perhaps the papyrus motif, uncannily similar to LM Ib forms.

The important observation that the drawing of the chariot uses conventions established within the ceramic repertoire (MPVP: 14) suggests that the vase should be placed within the early series of chariot scenes, rather than classified as one of the very first scenes (as MPVP: III.2). Åkerström (1987: 102), on the other hand, mentions the terminus post quem of LH IIIA2 late provided by the tomb context as evidence for a later dating of the vase, but this is the date of the deposition of the vase, not necessarily its date of manufacture.

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*26 Enkomi Tomb 7.4784; "Bird Chase" krater [FIG.60].
Context: LC IV.

Restored from fragments, parts of rim, handle and body missing.
FS 7: open krater with everted lip, flat strap handles and conical-piriform body.

Chariot facing r. with large bird behind.
BOX/WING: square box with scale pattern (cf. FM 70.2) framed by solid paint (A), or solid painted with added white dots and edging (B); rounded wing is solid painted with added white arcs (B only). Wheel: large wheel outlined with white paint, single cross widening at felloe, disc nave (B only).
CONTROL: 4 reins framed by spiral at horses' neck. Two groups of parallel arcs in added white on the neck and chest of the horse may be stylised harness elements.
TRACTION: ?type 1, solid painted pole brace extends from driver's body to base of horses' neck; immediately above is a pin-shaped projection (?part of the yoke).
HORSE: one horse rather than a team, with small round
eye, 5 oval hatched plumes.2 front legs, 2 back legs, the rear part of each drawn in outline. 1 tail: a line with knob near end (A), a line fringed at the end (B). Ground-line: scene set neatly on and slightly above upper band.

CHARIOTEERS: 2 with silhouette bodies (?robes). Features: face framed by a smooth cap of hair extending across neck, large silhouette eye, profile drawn as a zigzag line roughly indicating nose and chin. Gesture: (A) the driver holds one arm, slightly bent, forward, with which he appears to hold the reins, his other arm, behind and bent down towards his waist, holds a whip; the passenger raises both arms upwards. Both have hands with five fingers. (B) part of the passenger only, his back arm bent down with the wing of the bird close behind.

BIRD: on both sides a large bird with raised wings seems to pursue the chariot group. The bird has a small head with dotted eye and double line beak; its long neck curves down to a large rounded body narrowing down to a squarish tail (i.e. water bird type); two bent legs with forked feet. Details of the body and wings differ on the two sides: (A) thick outline of solid paint within which a reserved area: along the centre a band of p. chevrons, framed by curving dark bands with white dots; the wings are three rows of fringed lines; (B) solid outline with row of white dots; larger reserved area divided into narrow strips filled with short strokes or rows of dots; the large "batlike" wings are drawn in outline with fill of short strokes, U-pattern, and p. chevron panel framed with dots.

(Note: since the bird occupies about one third of the frieze and interacts with the chariot group, it is classed as a primary design element).

S.D.E.: a: occupied by large bird, see above;
   series of wavy arcs attached to edge of handle band.
d: varied forms of rock-pattern: "cloud" filled with alternating solid bands and hatching (FM 34); tricurved arch with solid blob framed by arcs (cf. FM 33 and 62).
f: (A) double arc filled with solid bands and lines, from its upper edge a set of joined p. chevrons.
   (B) rock-pattern: tricurved arch type, as d.

COMMENT: this is one of the few scenes on pictorial pottery where the separate design elements (chariot group, bird) appear to interact, lending support to the idea that some of the scenes incorporate a narrative element. In this case the raised arms of the passenger, the presence of whip, and the flying bird pursuing the chariot all animate the scene. Vermeule and Karageorghis give some examples of stories from the East involving monstrous, predatory birds (MPVP: 16, fn. 24).

See *146 (LH III1) for a more static example of a
chariot group with a large bird, while the combination of human figure and a huge bird on the Tanagra larnakes indicate a wider currency for the general theme (Vermeule, 1972: pl.XXXVb).

DATE: probably LH IIIA2 early. Like *25, the "Zeus krater", the date of this vase is disputed. It has been placed both at the beginning of the pictorial series (LH IIIA1 by MPVP: III.6; LH IIIA2 early by Slenzcka, 1974: his Group I), and much later (LH IIIB by Åkerström, 1987: 106-107).

It should first be observed that the difficulty in placing this krater securely within the chariot series is a result of its many unparalleled features (especially the details of the chariot group). Thus Vermeule and Karageorghis class it as "Early II", while acknowledging that "some of the later conventions are present" (MPVP: 17), and Åkerström has pointed out that certain elements of the design, the gesticulating charioteers and the increased use of solid paint with added white paint, can be more easily paralleled by later examples (1987: 106-7).

The main arguments in favour of an early date are as follows:

1) the shape is FS 7, which has a date range of LH IIIA1-IIIAs early. The LH IIIB open krater has a strongly piriform or stemmed lower body; therefore on the criterion of shape the piece cannot be as late as Åkerström suggests.

2) the choice and use of subsidiary motifs: rock-pattern, especially, is characteristic of early chariot scenes and the "cloud" type with alternating solid bands and lines is paralleled by *6. By LH IIIBI subsidiary motifs are fewer in number and different in range.

3) Note that the traction form is more similar to the type 1 examples (extending just above the back; eg. *2, *13), than to type 3 with its larger triangular arcades.

Problematic or unusual features of the design are: the chariot perched over the wheel instead of shown behind it; the single draught animal; the hatched plumes; the relatively lavish use of white paint.

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Enkomi, Tomb 70 [FIG.61a-b].
BMC 340.
Bibl.: ExcCyp: 47-49; CVA BM I: pl.9.6; MPVP: IV.12.
Context: LC II.

Restored from frags., parts of Side B very worn. Buff, red to brown paint with added white.
Ht. 0.377; D.rim 0.28; D.base 0.125; W.handle 0.057.
Form: FS 54 (contra Furumark's classification as 53:2) [FIG.61a].
Rim: pairs of p. chevrons alternating with shells.
Handle: lightly ridged, 3 vertical bands; vertical bands of paint from neck to body bands enclose handle area (instead of the usual semicircular loop); perforations: (probably) 3 top, 3 bottom.
Bands: 3 bands below frieze and on lower body.
Base: flat; perforations: 6.

Chariot facing r.
BOX/WING: s.o., spotted, bisected by triple horizontal lines; box placed to the side of the wheel (totally inaccurate relationship with the driver over the wheel, and 2 passengers in chariot). Wheel: single cross.
TRACTION: type 1, solid painted with short tassels.
CONTROL: pole brace/stay attached to part of yoke shown as a small spiral at withers. 4 reins held in pairs.
HORSE: thin muzzles, 2 ears, line mane combined with two large crests; The body is liberally covered with added white: a row of strokes flanked by spots along body, a spiral on the chest. The male sex is shown. 4 legs front and back with hooves and fetlocks, rear pair solid painted. 2 tails.
Ground-line: the team's legs and wheel cut through all 3 bands, with the result that the team's belly and the box/wing rest on the upper band.
CHARIOTEERS: 3, s.o., spotted robes. Driver has arms crossing body. Features: black-headed with reserved, dotted eye, beaky nose; semicircular row of spots follows curve of head. One long pigtail trails down onto their shoulders. Rows of spots on necks.
SILHOUETTE FIGURE [FIG.61b]: Side A, facing r. behind chariot. Profile head, features as above. Frontal torso with p. chevrons in added white. Gesture: arms held away from body, the back one slightly bent at the elbow, the front one hangs down; the artist attempted this arm twice: once short (a perspective view?), once long. Posture: the front leg is raised slightly off the ground and stretched forward, suggesting movement. Added white spots on limbs.
b: p. strokes.
c: quirks (FM 48:8);
   p. chevrons (FM 58:15);
   N-pattern (FM 60);
DATE: LH IIIA2 late (a).

Note that elaborate flowers are a feature of this phase [cf. *44, *49].

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*28 Cyprus (provenance unknown) [FIG.62].
CH A1645.

Bibl.: CVA Cyprus I: 7, pl.7; MPVP: IV.19.
Context: unknown.

Restored from fragments, almost complete. Buff, red varying to brown, where more thinly applied.
Ht. 0.468; D.rim 0.29; D.base 133; W.handle 0.056.
FS 54.
Rim: undecorated.
Handle: lightly ridged, 2 vertical bands; roundel attachment; semicircular loop to neck; perforations: 3 top, 3 bottom.
Bands: 3 bands below frieze and on lower body.
Base: flat; perforations: 4.

Note that the interior of the body is rough, less well smoothed than usual.

Chariot facing r.

BOX/WING: rounded box, s.o., spotted fill around edges, wing bisected by a horizontal line also edged with spots; floor shown behind wheel (on B the spotted fill is omitted); spur. Wheel: single cross, spokes widening at felloe.

TRACTION: pole (A only). Type 2, L-shaped pole brace, horizontal wavy line.

CONTROL: harness in faded added white; 4 reins in pairs attached to an oval terret, set on a yoke projection at the base of the neck.

HORSE: oval eyes, ears overlap neck band, 1 tuft, 4 legs front and back, reserved triangle at top of rear pair. 2 tails.

Ground-line: hooves slightly overlap the upper band (note that the heads of horses and charioteers overlap with neck-band).

CHARIOTEERS: 2, s.o., spotted robes. Features: round eye, simple profile with straight nose and receding mouth/chin, short hair overlaps with neck-band. One figures seems to have a pigtail.

S.D.E.:
a: voluted flower (FM 18:16);
   palm (FM 15:11).
b: unvoluted flowers (FM 18:69);
   dotted circles (FM 27:18, 24).
c: p. chevrons (FM 58);
   dotted circle (FM 27:18);
   vertical row quirks (FM 48:5);
e: unvoluted flowers (FM 18:70).
f: as e.
g: quirks (FM 48:5);
p. strokes.
h: dotted circle (FM 27:24).

ATTRIBUTION: *28-38; Distribution of work: MAP 5.2.
Previous work:
1) Karageorghis (CVA Cyprus I: 7) lists four other vases by this hand, and mentions two other unpublished examples [*28-33].
2) MPVP: IV.19-24, Painter 6 repeat the same list.
3) Karageorghis (1983: 164) describes the general style of the painter, mentioning the neatness of execution and the use of flower motifs and many smaller motifs. Note, however, that many of the other details referred to (such as the team's 2 heads and 4 pairs of well separated legs, or the dual chariot in correct relationship with the wheel) are features shared by many chariot scenes and by no means typical only of this painter.

Characteristics of the painter:
1) Vase form (where preserved).
2) Design: simple facial profile with round eye, straight or pointed nose and receding mouth/chin;
3) chariot and traction form (e.g. curving pole, triangular spur set neatly in wheel quadrant);
4) horses' heads, esp. the oval eyes, shape and angle of muzzles, and long stemmed tufts.
5) Choice, location and execution of subsidiary motifs: motifs in all locations except (d); repeated flower (sometimes with wavy stem) or simple palm in locations (a) and (b), with smaller motifs between them and placed closely around the chariot, especially oblique p. chevron groups, dotted circles, trefoils and short rows of quirks; motifs between tails and legs (and sometimes pairs of rear legs).

DATE: LH IIIA2 late (a).

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*29 Enkomi, Tomb 3.163 [FIG.63].
Bibl.: SCEI: 475-85; Sjoqvist, 1940: fig. 19.2; MPVP: IV.21.
Restored from fragments, parts of body missing. Buff, red.
Ht. 0.459.
Rim: not known.
Handle: lightly ridged, 2 vertical bands; semicircular loop to neck;
Bands: 3 bands below frieze and on lower body.
Base: raised.

Chariot facing r.
BOX/WING: s.o., rounded, spotted fill mainly around edges; wing divided by horizontal line (B); floor shown behind wheel; spur (A). Wheel: single cross.
TRACTION: pole. Type 2, L-shaped, horizontal wavy or straight line.
CONTROL: 4 reins held in pairs, each rein attached to neck through terret in form of 4 small circles (pres. A only).
HORSE: 2 ears, 2 thin tufts, elongated body, 4 legs front and back with hooves, reserved triangle at top of rear set. 2 tails.
CHARIOTEERS: 2, s.o., spotted robes. Features: circular eye, pointed nose, short rounded or conical cap of hair (overlaps with neck-band). Driver has hands.
S.D.E.:  
a: palm (FM 15:11).
b: unvoluted flower (FM 18:72 but without hook).
c: as b;   
trefoil (FM 29:16-19).
e: (A) quirk (FM 48);   
(B) p. chevron groups (FM 58).
f: (A) as b.   
(B) p. chevron groups (FM 58).
g: p. strokes.
h: dotted circle (FM 27:24).

ATTRIBUTION: *28-38.

DATE: LH IIIA2 late (a)

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*30 Pyla-Vergi tomb, no.35 [FIG.64].
CM 1952/IV-12/1.
Context: LC II1.

Restored from frags., most of one side missing. Buff, orange to brown faded paint.
Dimensions not specified.
FS 54.
Rim: groups of transverse strokes.
Handle: lightly ridged, 3 vertical bands; roundel attachment, semicircular loop to neck; perforations: 2 top, 3 bottom.
Base: flat.

Chariot facing r.

BOX/WING: s.o., rounded, spotted fill; spur; box floor shown behind wheel. Wheel: single cross.
TRACTION: pole. Type 2, triangular, plain.
CONTROL: 4 reins.
HORSE: only tail, edge of tuft and legs pres.
Ground-line: scene set on upper band.
CHARIOTEERS: 2, s.o., spotted robes. Driver has hands.
Features: circular eye, angular nose in a simple profile; line across neck.
S.D.E.:
a: palm (FM 15.11).
b: as a.
c: p. chevrons (FM 58);
    row quirks (FM 48);
    trefoil (FM 29.16-18).
d: double row of trefoils (FM 29:18).
e: stemmed spiraliform motif;
    p. chevrons (FM 58).
g: p. strokes.

ATTRIBUTION: *28-38.

DATE: LH IIIA2 late (a).

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*31 Enkomi, Tomb II (French) [not ill.]
Excavation no. 3578.
Bibl.: Coche de la Ferté, 1951: 11-13, 57, pl.1.2
    (?incomplete drawing); MPVP: IV.22 (not ill.).
Context: plundered tomb 2, Quartier Nord.
Fragments of rim, neck and shoulder. Buff, red to black paint.
Rim: p. chevrons.
Neck: reserved central band.

Chariot facing 1.
BOX/WING: rounded, s.o. (?fill).
TRACTION: type 2, L-shaped, striped.
CONTROL: 4 reins attached in pairs to 2 small circular terrets on neck.
HORSE: oval eyes, ears overlap neck band, one outline tuft (?body incomplete in drawing).
CHARIOTEERS: 2, s.o. (?fill) robes. Features: rounded eye set against hairline, angular nose, short wavy hair.
S.D.E.:
    c: p. chevrons (FM 58);
    p. strokes.
    e: row p. chevrons (FM 58).

ATTRIBUTION: *28-38.
Criteria: facial features [close to *30]; looped terret [as *29]; horses' heads with single long tuft.

DATE: LH IIIA2 late (a)

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*32 Cyprus (provenance unknown) [FIG.65].
CM 1958/V-20/3 (Larnaca).
Bibl.: CVA Cyprus I: 8, pl.8.5-6; MPVP: IV.20.

2 non-joining sets of fragments, pres. large portion of frieze. Buff, red to dark brown.

Chariot facing 1. (A), r. (B).
CHARIOT: not pres. Wheel: single cross; spotted upper
quadrants.

CONTROL: harness: added white neck and girth straps with loops. 3 reins, the lower one attached to a semicircular loop at the base of the horses' neck.

HORSE: muzzle, forepart, belly and legs pres. 4 legs front and back, the former with a knob to indicate the knee.

Ground-line: legs overlap upper band.

S.D.E.:  
a: rock pattern divider, with wavy double outline filled with horizontal line groups alternating with rows of p. strokes (cf. FM 34:2);  
   unvoluted flowers (FM 18:56)

b: flowers, as a;  
   p. chevron groups (FM 58);  
   trefoil (FM 29:16-19).

c: p. chevrons, as b.  
   trefoil, as b.

e: quirk chain (cf. FM 48:18, but not LH IIIB).

f: unvoluted flower (FM 18:69-70);  
   p. chevrons, as b;  
   trefoil, as b.

g: p. strokes

h: trefoil, as b.

ATTRIBUTION: *28-38.

Note the similar layout of the motifs: repeated flowers with small motifs between and clustered close to the chariot. The absence of key parts of the design (human figures, most of horses' heads, chariot) makes the attribution less secure, and the vase also has some unusual features, including the chariots facing in opposite directions, and the knobbly knees of the horse.

DATE: LH IIIA2' late (a)

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*33 Maroni [not ill.].

BMC 363.

Context: unspecified tomb.

2 joining sherds pres. turn for neck and part of shoulder. Pinkish-buff, red paint.

Chariot facing r., pres. forepart of horse.

HORSE: 2 ears, 5 tufts. Angular neck/body junction.

CONTROL: 4 reins attached to an oval terret at the base of the neck.

S.D.E.:  
a: voluted flower (cf. FM 18:5);  
   unvoluted flower (FM 18:102).

c: p. chevrons (FM 58).

e: p. chevron row (FM 58).
FABRIC ANALYSIS: Peloponnese (Catling and Millett, 1965: 219-22, no.18; Argolid (GCP: 547, Table 7.6).

ATTRIBUTION: *28-38.

DATE: LH IIIA2 late (a).

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*34 Enkomi, Tomb 12 [not III.].
BMC 346.
Bibl.: ExcCyp : 48-49; CVA BM I: pl. 11.7; MPVP: IV.29.
Context: plundered tomb, LC II.

4 joining sherds pres. turn for neck and full depth of frieze. Buff, orange to brown paint.

Chariot facing r.
BOX/WING: s.o., rounded, spotted fill, which edges and horizontally bisects wing; floor shown behind wheel.
Wheel: single cross widening at felloe. Spur: forms a rectangle with edge of box and wing.
TRACTION: pres. only pointed end of pole brace hanging down between box and horse.
CONTROL: pole.
HORSE: pres. 4 back legs, rear pair in outline; 2 tails.
CHARIOTEERS: 2, passenger only pres., s.o., spotted robes. Features: circular eye, receding lower profile, short cap of hair.
c: p. chevrons (FM 58);
    trefoil (FM 29:16-19).
f: p. chevrons (FM 58).
g: p. strokes.

ATTRIBUTION: *28-38.
Criteria: closely similar to *28 in human features, chariot form, curving pole, choice and layout of subsidiary motifs (groups of trefoils, p. strokes between tails/legs and pairs of legs).

COMMENT: see *35 below, possibly the reverse of the same vase.

DATE: LH IIIA2 early.

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*35 Cyprus (given by the BM) [FIG.66].
Otago Museum, E.35.166.
Bibl.: Betts and Green, 1964: 70-72.
Context: not known.

Body sherd, Buff, worn brown paint.
Chariot facing r.
BOX/WING: s.o., box spotted, wing has double row of spots around edge and horizontally across the centre; floor shown behind wheel. Triangular spur. Wheel: single cross, widening at felloe. 
TRACTION: trace of pole at extreme right.
S.D.E.: 
c: shell (cf. FM 25:15).

ATTRIBUTION: *28-38, and perhaps from the reverse of *34, as suggested by Betts and Green (1964).
DATE: LH IIIA2 late (a).

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*36 Arpera Chiflik [FIG.67].
Bibl.: Catling and Millett, 1960: 223, no.21, pl.61.4.
Context: surface find.

Small body sherd. Pinkish-buff, red paint.
Chariot facing r.
BOX/WING: partly pres., s.o., spotted fill; floor shown behind wheel. Wheel: single cross, widening at felloe. Spur: forms a rectangle with edge of box and wing.

ATTRIBUTION: *28-38.
Although the sherd is small the execution is closely similar to *34 above; cf. especially the position of the box/wing is relation to the wheel and the rectangular (as opposed to the more usual triangular) shape of the spur.

FABRIC ANALYSIS: Peloponnese (Catling and Millett, 219-223, no.21; Argolid (GCP: 547, Table 7.6).
DATE: LH IIIA2 late (a).

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*37 Ras Shamra [FIG.68].
Bibl.: Annales Archaeologiques de Syrie, 1975: 57, pl.IV, fig.1a.
Context: "Maison aux Fours".

Body Sherd.
Chariot facing r. pres. forepart of horse.
HORSE: oval eyes, beginning of one tuft pres..
S.D.E.: 
a: unvoluted flower (FM 18).
c: p. chevron group (FM 48);
trefoil (FM 29:16-19).

ATTRIBUTION: *28-38.
Criteria: oval eyes, long stemmed tuft, and angle of muzzle; choice and layout of subsidiary motifs (flower...
with p. chevrons and trefoil).

DATE: LH IIIA2 late (a).

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*38 Atchana-Alalakh [FIG.69].
BM (Western Asiatic) 136462b.
Bibl.: Crouwel and Morris, 1985: 89, no.7.
Context: settlement, unspecified location.

Body sherd. Pink-buff, brown.
Chariot facing r.
BOX/WING: s.o., spotted fill, but note that the artist has left the area of the box behind the wheel blank; spur; floor shown behind wheel. Wheel: single cross, centre not pres.

ATTRIBUTION: *28-38.
Criteria: execution is closely similar to *28, note the neatly drawn chariot, and the omission of the spotted fill behind the box.

DATE: LH IIIA2 late (a).

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*39 Cyprus, ?Enkomi [FIG.70].
Ashmolean Museum 1964.550; given by the BM.
Bibl.: unpublished.
Context: Turner trust excavations in Cyprus, probably Enkomi.

Fragment pres. turn for neck and part of frieze. Pale orange, orange to brown paint.

Chariot facing r.
HORSE: head and part of chest.
S.D.E.:
a: part of flower
c: p. chevrons.
   p. strokes.

DATE: LH IIIA2 late (a).

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*40 Cyprus, ?Enkomi [FIG.71].
University College, Dublin no.33 [813].
Bibl.: unpublished.
Context: unknown. Sherds given by the BM and labelled 'Amathus', but perhaps from Enkomi.

Body sherd.
Chariot facing l. pres. rear part of horse.
TRACTION: pole.
HORSE: 4 back legs with fetlocks and hooves, the rear legs in outline. Tails partly pres.
Ground-line: team's legs set neatly on upper band.
S.D.E.:
e: edge of curvilinear motif.
g: p. chevrons; also p. strokes between back sets of legs.

DATE: LH IIIA2 late (a).
Stylistically related to *28-38. Note the subsidiary motifs located between the pairs of back legs and the legs and tails.

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*41 Atchana-Alalakh [not ill.].
Context: either Level II, or the ground surface of Level III, on the Temple site. Date range is c.1365 to the first quarter of the 13th cent.; the disturbed nature of the site makes dating uncertain.

Restored from fragments, base restored in plaster. Buff, dark brown paint with added white. 
Ht. 0.413; D.rim 0.246. D.base (rest.) 0.14.
Form: FS 54.
Rim: groups of p. chevrons.
Handle: (one preserved) ridged, two vertical bands, semicircular loop. Perforations: top not pres., 3 bottom.
Bands: 3 below frieze and on lower body.
Foot: restored.

Chariot facing r.
BOX/WING: d.J., rounded, spotted fill, wing bisected by pair of horizontal lines; floor shown behind wheel.
Wheel: single spoke, centre not pres.
TRACTION: pole. Type 2, triangular, vertical and horizontal stripes.
CONTROL: 4 reins held in 2 pairs; curvilinear terret from base of neck.
Harness: in added white, cheek strap on each muzzle, ending in a hook (?blinker) above the eye; two hatched neck and girth straps, with wavy lines either side of the latter.
HORSE: forepart, rump and tail pres. Two outline ears, 4 tufts, rear leg reserved.
CHARIOTEERS: s.o., spotted robes, strongly curved. Eyes drawn as two curved lines with a dot between, reserved ear set in short, curly hair, pointed nose, lower face drawn as two reverse c’s. Driver has arms/hands on one side only.
S.D.E.
a: flower (FM 18:19,63)
b: as a.
c: p. chevron group (FM 48).
DATE: LH IIIA2 late (a).
Typical of this phase is the use of filling motifs in location g (between tail/legs).

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*42 Atchana-Alalakh [FIG.72].
Museum of Classical Archaeology, Cambridge (drawer 54).
Bibl.: Crouwel and Morris, 1985: 89-90, no.9.

Body sherd. Pink-buff, red-brown.
Chariot facing r.
Part of hind legs of team; four legs, reserved area on rear ones.
g: p. strokes (FM 48).

Date: LH IIIA2 late (a).
Typical of this phase is the use of p. strokes in location g (between tail/legs).

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*43 Ras Shamra [FIG.73].
Bibl.: Ugaritica VII: 296-7, fig.34.8-9.
Context: RS 1966, sector 110 W, -0.60-0.90m; date range not specified.

2 non-joining sherd (assigned to the same vase in the publication). Buff, brown; one pres. the turn for the neck (no.8), the other is a body sherd (no.9).

Chariot facing l.
CONTROL: 4 reins attached to an oval terret at the base of the horses' neck. HORSE: oval eyes, 3 wavy tufts.

S.D.E.:
a: palm (FM 15).
c: edge of two parallel lines (?).
e: quirks (FM 48:8);
unvoluted flower (FM 18c).

DATE: LH IIIA2 late (a).
Date suggested by the combined features of oval eyes, oval terret at base of neck, closely spaced subsidiary motifs.

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Enkomi, Tomb 45 [FIG.74a-b].

BMC 341.

Bibl.: ExcCyp: 44-45; CVA BM I: pl.10.8.; MPVP: IV.16.

Context: LC II.

Restored from fragments. Pinkish-buff, red-brown paint.
Ht. 0.259; D.rim 0.19; D.base 0.095; W.handle: 0.27.
FS 54 (small).

Rim: unpainted.
Neck: reserved band.
Handle: one slightly ridged, one flat; solid painted with reserved triangle at top; perforations: 2,2 top; 2,3 bottom.
Bands: 3 below frieze, 2 on lower body.
Base: raised.

Chariot facing r. [FIG.74a]

BOX/WING: rounded box, s.o., spotted fill; upper quadrants of wheel spotted. Wheel single cross.

TRACTION: type 2, L-shaped, striped.

CONTROL: 2 or 3 reins attached through a small semicircular terret on the neck.

HORSE: 2 ears, 3 tufts, short body, 4 front (separated mid-way), 2 back legs with reserved triangle. 2 tails. Male sex indicated.

Ground-line: team's legs overlap bands, silhouette figures legs cut through and below bands.

CHARIOOTEERS: 2, s.o., spotted robes. Features: circular eye, receding lower profile, short wavy hair.

INDEPENDENT SILHOUETTE FIGURE [FIG.74b]: (A only) facing l., in front of chariot. Features: as above, but with a curl at the nape of the neck. The figure tilts backwards and the legs are very long. Gesture: arms bent forward across torso; an object in the form of two opposed triangles also crosses the torso, but the figure does not actually grasp it. cf. *2 where the triangles are vertical (hourglass), here they are roughly horizontal (like a double axe).

S.D.E.:
a: (B) papyrus (FM 11:36);
   unvoluted flower (FM 18:63).
b: p. strokes.
c: unvoluted flower (FM 18:63).
e: p. chevron row (FM 58).

ATTRIBUTION: *44-45.

MPVP: IV.16-17, Painter 5.

Characteristics of the painter:
Vase form and its unusually small size.

Design: facial features, use of subsidiary motifs (large papyrus or flower in front of chariot, p. chevrons above reins), chariot box extends down in front of wheel, short horse with arching back.

FABRIC ANALYSIS: unassigned (Catling and Millett, 1960: PAGE 383
219-221, no.3); cf. Argolid (GCP: 547, Table 7.6). The sample was assigned to the Argolid group in a multivariate analysis of the material in which Mycenae acted as a control group for the Argolid, but it was a looser member of the group. (Richard Jones, pers. comm.).

COMMENT: The object carried by silhouette figure may be identified as a footstool, as on *2 and *25 [#5.5.5].

Intra-vase variation: human figure on one side only [#A.2].

DATE: LH IIIA2 late (a)

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*45 Enkomi, Tomb 94 [FIG.75].
CM A2027a-b.
Bibl.: CVA Cyprus: 5, pl.6.1; MPVP: IV.17 (a only ill.).
Context: LC II.

A2027a: Fragment pres. rim, neck, upper stump of handle, shoulder.
A2027b: small frag. of frieze, pres. turn for neck and edge of handle loop to neck.
Pinkish-buff, red.
D.rim c 0.17; W.handle 0.025.
FS 54 (small).
Rim: groups of p. chevrons.
Handle: flat, two vertical bands; semicircular loop to neck; perforations: 2 top.

Chariot facing r.
BOX: rounded, s.o., spotted; edge of wheel only.
TRACTION: type 2, L-shaped, wavy edging.
CONTROL: 2 reins.
HORSE: 2 ears, 2 tufts pres.; upper part of legs and tail, rear set of legs in outline.
Ground-line: team's legs overlap.
CHARIOUTEER: driver only pres, s.o., spotted robe; rounded eye set in hairline, reserved ear, short wavy hair.
S.D.E.:
a: flower (cf. FM 18:18-19)
b: as a, edge only pres.
e: p. chevron row (FM 58);
quirk (related to FM 48:4).

ATtribution: *44-45.

DATE: LH IIIA2 late (a)

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*46 Enkomi, unspecified tomb [FIG.76].
Musée de Cinquantenaire, Brussels A 1255 (given by the
BM in 1904).
Bibl.: CVA Belgique 3: pl.3.20.
Context: unknown.

Body sherd, from a small krater.
Chariot facing r.
HORSE: part of head with 3 tufts.
CONTROL: reins attached to a loop terret on the neck.
S.D.E.:
e: p. chevrons;
quirks.

COMMENT: related to *43-44 by the general style and the small size of the vase.

DATE: LH II IA2 late (a).

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*47 Enkomi, Tomb 12 [FIG.77a-c].
BMC 345.
Bibl.: ExcCyp: 48-49; MPVP: IV.13 (frags. a-b); frag. c) is ill. as IV.60, but wrongly listed as BMC 350.
Context: plundered tomb, LC II.

3 non-joining groups of frags., pres. part of neck and frieze (here a-c).
Buff, red-brown paint.

(a) Chariot facing r.
BOX/WING: rounded box, d.o., spotted fill; floor shown behind wheel. Wheel: single cross. At front of box an additional curving line, to which pole stay/brace is attached.
TRACTION: Type 1, pole stay/brace with small pendant triangles and wavy lines curves up from front of box.
CONTROL: 4 reins held in pairs, which are divided by p. strokes.
HORSE: not pres.
CHARIOOTEERS: 2, s.o., spotted robes. Features: large eye set in hairline, beaky nose, short wavy hair.
SILHOUETTE FIGURE: facing r., behind chariot. Head and torso only. Features: as above, but with a thick, banded neck. Gesture: one arm bent up and forward from the elbow and (towards chariot), the other curves round at waist level.
S.D.E.:
c: p. chevron group (FM 58);
trefoil (FM 29);
U-pattern (FM 60).
e: p. chevron row (FM 58);
p. strokes.

(b): Chariot facing r.
BOX/WING: d.o., rounded, spotted fill, at front of box.
a curving line, to which traction is attached, forms an extra section; floor shown behind wheel (of which front edge only pres.).

TRACTION: pole. Type 1, pole stay/brace with pendant triangles or tassels, curving up from box.

CONTROL: 4 reins held in pairs, and separated by p. strokes (as frag. a).

HORSE: 2 ears, 2 elongated tufts, short body, 4 legs front with hooves and fetlocks; 4 back with rear pair solid painted. 2 tails.

Ground-line: team's legs drawn on or slightly overlapping upper band.

CHARIOOTEERS: 2 (part of robe only of passenger), s.o., spotted robes. Features: part of head overlaps with neck-band, and no eye is shown; pointed nose and mouth/chin formed by a zigzag line, reserved ear.

S.D.E.: 
b: rock pattern: p. lines framed by pairs of wavy lines (cf. FM 34:2).
c: p. chevron group (FM 58).
e: p. chevron row (FM 58);
   p. strokes.
f: p. chevron group (FM 58).
g: U-pattern (FM 45).

c) Chariot facing r.

BOX/WING: rounded box, d.o., spotted fill; floor shown behind wheel. Wheel: single cross.

TRACTION: pole. Traction type uncertain: wavy line of pole brace only.

CONTROL: not pres.

HORSE: part of 2 tails.

Charioteers: 2 (passenger only pres.), s.o., spotted robe. Features: dotted eye, pointed nose and mouth/chin formed by zigzag line, reserved ear.

S.D.E.: 
b: edge of double curving line extends under handle; ?rock pattern as frag. b).

c: p. chevron group (FM 58);
   p. strokes.

FABRIC ANALYSIS: frag. (b).

Peloponnese (Catling and Millett, 1960: 219-222, no.5);
Argolid (GCP: 547, Table 7.6).

COMMENT: Similarity of fabric and design features indicate that all three frags. belong to one vase. Significant similarities are: the extra curving line at the front of the chariot box from which the type 1 traction curves up (a,b); facial features (b,c); choice and location of filling motifs: the row of strokes between pairs of reins, trefoil motifs, many p. chevrons (a,b).

Since the edges of both handles are pres. the arrangement of the sherds must be: a) Side A; b) r. of
Side B and c) 1. of side B. It is clear that Side B had 2 chariot teams. Side A may, however, have had only 1 team since it has an additional silhouette figure and the scale of the team is larger; note esp. the more detailed heads on a). Comparable differences in scale and facial features occur on the Homage krater (MPVP: III.29): cf. the larger heads have an eye set into the hairline, the smaller ones, especially the seated figure, only a dot for an eye and a rough zigzag profile.

DATE: LH IIIA2 late (a)

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*48 Enkomi [not ill.].
CM 1965/VIII-17/3.
Bibl.: BCH 90, 1966: 305, fig. 16b; MPVP: IV.14.

Body sherd.
?Chariot facing r.
To l. a figure with profile head and frontal body.
Features: large teardrop eye in the middle of the head, beaky nose. Costume: outline torso filled with 3 p. chevrons just above waist; hatched lines on arms may indicate a long-sleeved garment; part of a flaring skirt with spotted fill. Gesture: one arm curves up and forward, the other (partly pres.) up and behind.
To r. a partially pres. figure in a spotted robe, perhaps the chariot passenger. Features poorly pres. but similar to l. figure.
S.D.E.:
c: p. strokes (above and below arm of l. figure).

COMMENT: The costume of the l. figure is unusual, with the bodice, "waist and flaring skirt indicative of a female figure [§5.4.3].

DATE: LH IIIA2 late, probably (a).
The depiction of a single figure behind the chariot (usually on one side only) seems to be characteristic of this phase. The bold style has no close parallels.

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*49 Cyprus [not ill.].
Pierides Collection no.33.
Bibl.: Karageorghis, 1956: 3-5; CVA Cyprus II: pl. 1;
MPVP: IV.15.
Context: unknown.

Restored from fragments with modern additions to complete the design (for details see Comment).
Pinkish-buff, red to dark brown paint.
Ht. 0.425; D.rim 0.31.

PAGE 387
Rim: groups of tranverse strokes.
Neck: reserved band; ridge at junction with body.
Handle: ridged, 3 vertical bands; semicircular loop to neck (1 handle only); perforations: 2 top, 2 bottom.
Bands: 3 below frieze and on lower body.
Base: flat.

Chariot facing r.
BOX/WING: shown as 2 independent units, roughly rectangular or triangular in shape, s.o., oxhide fill in each corner, circle at centre of rectangular section. Box perched directly on large wheel. Wheel: single cross, widening at felloe (B). A large loop filled with a dotted circle attached to the wheel behind the box could be a spur (A).
TRACTION: type 1, band from front of box to withers, plain (A), hatched and curving down more sharply (B).
CONTROL: 4 reins.
HORSE: muzzles almost horizontal; 2 ears; line tuft. Side A: horse in normal standing posture, 4 front and back legs with round hooves, rear legs in outline. Side B: horse shown in galloping posture: front legs separated, back legs extending backwards. 2 tails.
Ground-line: scene set on or slightly overlapping upper band.
CHARIOTEERS: 2, s.o., spotted robes. Features: eye set in hairline, reserved ear, large, prominent nose, short wavy hair.
INDEPENDENT FIGURE (A): facing r. behind chariot. Features: as above. Costume: torso drawn in outline with spotted fill, lower body and legs in silhouette. Gesture/posture: one hand curves up behind head, the other hangs loosely down in front; front leg slightly bent, the rear leg bent at right angle from the knee. The figure also leans forward.

S.D.E.: a: voluted papyrus/flower; complex motif combining FM 18.18 above an inverted FM 11, on the volutes of which perch the radiating bars, anther and stamen of FM 18: unvoluted;
  ?papyrus with knobbed stem and foliate leaves (FM 11);
  palm (cf. FM 15:2);
  voluted flower with 3 spiraliform volutes and hatched stem.
b: rock-pattern; two vertical "ladders" with groups of transverse strokes (related to FM 34).
c: shells (FM 25:5-6);
  p. chevrons (FM 58);
  irregular wavy line (cf. FM 53:6);
  dotted circle (FM 27:19);
  unvoluted flower (FM 18:63);
  V-pattern (FM 59).
d: p. chevrons (FM 58);
  p. strokes.
COMMENT: Several parts of the design are restored. On A: part of chariot, torso of chariot passenger, horses' heads and front legs, upper part of silhouette figure and motifs around him. On B: chariot box and charioteers, horses' heads (CVA Cyprus II: 1). The unusual combination of a spotted torso and silhouette lower body on the independent figure is paralleled by *50 below. The representation of the horse in motion is also unusual. The use of many different motifs in all locations is typical of the early part of LH IIIA2 late; the very elaborate and idiosyncratic floral motifs (location a) may, however, be from the imagination of the restorer rather than the repertoire of the Mycenaean artist.

DATE: LH IIIA2 late (a).

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*50 Klavdia [fig.78a-b].
BMC 342.

Restored from fragments, part of one side missing, foot chipped. Buff, red to black.
Ht. 0.426; D.rim 0.31; D.base c.0.13; W.handle 0.053.
Form: FS 54.
Rim: p. chevrons interrupted by a short wavy line opposite the handles.
Handle: lightly ridged, solid painted; semicircular loop to neck; perforations: 3,1 top, 3,2 bottom.
Bands: 3 below frieze, 3 on lower body.
Base: slightly raised.

Confronted chariots (A) [FIG.78a]; chariot facing r. and 3 figures (B).
BOX/WING: rounded box, d.o., spotted fill; box perched above wheel. Wheel: double cross.
TRACTION: Type 2, sloping steeply down from box, triangular, plain. (note it is omitted from 1. chariot (A), where the painter ran out of space and the horses' tails overlap the box).
CONTROL: 4 reins held in pairs, attached to a hook-shaped terret on the neck.
HORSE: 2 ears, 2 wavy tufts, 4 front legs split at knee, 4 back legs, the rear pair in outline; rounded hooves. 2 tails.
Ground-line: legs of team and of central figure (A)
overlapping second band.

CHARIOTEER: 2, s.o., spotted robes. In each case the passenger is smaller and squashed against the handle loop. Features: upper part of head solid black with reserved eye; angular nose and neck is outline. Short spiky hair.

INDEPENDENT FIGURES:

Side A [FIG. 78b]: 1 figure facing r. between the confronted chariots. Profile head and frontal torso. Features as above. Costume: torso in outline with spotted fill, lower body and legs in silhouette [cf. *49]. A projection between the legs could be genitals or the hanging ends of an animal skin. Gesture: one arm held out in front and is very short (?perspective), the other behind and bent up from the elbow. Both hands appear as a circle with six spiky projections; either the artist has given him an extra finger or he holds a small object in each hand.

Side B: three figures, 2 full length confronted, with a third smaller figure between them; most of the lower part of all the figures is missing or worn. Features: as above, but the 2 confronted figures have outline heads. Costume: 2 confronted figures have outline torso with cross-hatch fill; the silhouette legs of the l. figure show that he does not wear a long robe, but is probably dressed like the figure on A. The small figure, of whom only the head and torso remain, is drawn in silhouette.

Gesture: the arms of the 2 confronted figures are similar to the figure on A; the shortened front arms appear to support the small figure at waist level, the other arm is bent behind and up from the elbow. The small figure stretches his arms out to either side.

S.D.E.:

b: p. chevron groups (FM 58).
c: as b.
e: p. chevron groups with U-motifs between.
f: as e.
h: dotted circle (FM 27:24).

ATTRIBUTION: *50-51; Distribution of work: MAP 5.3.

Characteristics of the painter:
1) distinctive facial features;
2) lavish use of p. chevrons in many locations;
3) design structure: on both vases the chariot is squashed up against the handle loop with a chevron group above the wing, so that the driver is pushed out of the chariot.

COMMENT: Note that the the p. chevrons are drawn close together and completely fill each of the above locations. The cluttered effect of the filling motifs is more intense than usual since one motif is repeated many times.

The possibility of a mythological episode has been discussed (Karageorghis, 1958a: 385; MPVP: 30 and
fn. 5). It has been suggested that the triple group is a family, though the two large figures are not obviously differentiated to show male-female.

The very short arm of the 3 larger figures may be an attempt to show perspective. Cf. the silhouette figure on *27 where the artist had 2 attempts at the front arm: one long, the other perhaps foreshortened.

DATE: LH IIIA2 late (a).

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51 Rhodes [FIG. 79].
Louvre A277-285.
Bibl.: MPVP: XII. 5.
Context: unknown.

Restored from fragments, large parts missing.

Chariot facing 1.
BOX/WING: rounded box, d.o., spotted; box perched above wheel. Wheel: single cross with disc nave and widening at felloe.

TRACTION: type 2, spotted band below which a hooked triangular element; note that the driver is perched over this band.

CONTROL: 4 reins held in pairs.

HORSE: oval eyes, 2 ears, 3 tufts; parts of body and legs, rear set in outline.

CHARIOTEERS: 2, d.o. spotted robes. Features: circular eye set against hairline, angular nose, receding mouth/chin. Passenger has short cap of hair, driver hatched or loop hair. Driver has arms and hands.

S.D.E.:

a: voluted flower, pres. anther and part of volute.

b: dotted circle (FM 27:17);

c: dotted circle (FM 27:17);

p. chevron groups (FM 58).

e: p. chevron groups (FM 58).

f: large 'sacral ivy' (cf. FM 12:32, but single);

vertical quirk (FM 48:5).

g: vertical quirk (FM 48:5);

p. chevron group (FM 58);

dotted circle (FM 27:17).

ATTRIBUTION: *50-51.

DATE: LH IIIA2 late (a).

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52 Kition, Chrysopolitissa [FIG. 80].
Context: tomb containing 14th-13th cent. pottery.

Restored from fragments, large parts missing.

Handle: (1 pres.) lightly ridged, ?solid painted;
semicircular loop to neck; perforations: 2 bottom.

Chariot facing r.
BOX/WING: square box, d.o., spotted fill on box and around edges of wing, which is bisected by a horizontal line; box perched on wheel.
TRACTION: pole. Type 2, triangular, striped.
CONTROL: 4 reins; harness in added white: hatched neck and girth-band with traces of curving loops.
HORSE: 1 eye only, ear area overlaps neck-band, 1 tuft.
Short body, 4 front legs, 2 back legs, rear pair solid painted; hooves and fetlocks. 1 tail.
Ground-line: team's legs overlaps upper band.
CHARIOTEERS: poorly pres., 2, s.o., ?spotted robes.
Features: circular eye, beaky nose, short wavy hair.
S.D.E.:
a: unvoluted flower (FM 18:67).
vertical quirks (FM 48:5).
b: p. chevrons (FM 58).
c: as b.
e: quirks (FM 48.5).
g: confronted spirals joined by arcs (related to FM 12:41-43).

DATE: LH IIIA2 late (a).

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*53 Klavdia [not ill.].
BMC 343.
Bibl.: CVA BM I: pl.10.11; MPVP: IV.27.
Context: not known.

Restored from frags., foot chipped.
Buff, brown to black paint, streaky and worn in places.
FS 54 (contra Furumark's classification as FS 53:23).
Ht.0.435; D.rim 0.26; D.base 0.13; W.handle 0.054.
Rim: groups of p. chevrons with a hook at each r. edge.
Handle: lightly ridged, 2 vertical bands; semicircular band to neck; perforations: 2 top, 2 bottom.
Bands: 3 bands below frieze, 2 bands on lower body.
Base: slightly raised.

Chariot facing l.
BOX/WING: rounded box, s.o. (wing in d.o. on one side), spotted fill; box perched above wheel. Wheel: double cross.
TRACTION: type 2, sloping band, wider at box end, wavy edging.
CONTROL: 4 reins held in pairs.
HORSE: 2 ears, 2 tufts, elongated body with arcing rump; 4 front and back legs with hooves, rear legs have reserved triangle, 2 tails.
Ground-line: team's legs slightly overlap upper band.
CHARIOTEERS: s.o., spotted robes. passenger (on one side) small and squashed under handle loop. Features: circular eye, only nose articulated in profile. Driver
has arms and hands.

S.D.E.:

a: voluted flower (cf. FM 18: IIIA2 types); palm (FM 15:11).
b: voluted flower (cf FM 18:62 but with volutes.
c: dotted circle (FM 27:24).
e: quirks (FM 48:5).
f: voluted flower (cf. FM 18:63 but with volutes and wavy stem);
  voluted flower, as b.
g: p. chevrons (FM 58).
h: as c.

DATE: LH IIIA2 late (a).

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*54 Enkomi, Tomb 3/II [FIG.81].
Medelhavsmuseet, Stockholm.
Bibl.: Karageorghis, 1960: pl.VI.3-5; MPVP: illustrated as IV.30 (wrongly listed in their catalogue as 3/I).

Part of neck and frieze, with smaller non-joining frags. Buff, pinker at core, brown paint.

Chariot facing r.
BOX/WING: d.o., spotted fill (edge of wing pres. on small frag.)
TRACTION: pole.
HORSE: 4 ears, 3 tufts. 4 front legs split at knee, rear pair in outline. 2 tails.
CHARIOTEERS: 2 pres., part of heads only. Features: eye set in hairline. Passenger slightly overlaps driver.

S.D.E.:
b: as a. 
c: p. chevrons (FM 58);
  unvoluted flower (cf. FM 18.106 but hatched).
e: p. chevron groups (FM 58).
f: unvoluted flower (non-joining frag.; see below).

COMMENT: A varying no. of fragments have been assigned to this vase. Karageorghis (1960: pl.VI.3-5) illustrates one large piece plus two small frags. More recently (MPVP: IV.30) the large frag. is illustrated, but it lacks a previously joined frag., showing the horse's chest and hooked flower motif. Two more non-joining fragments show a team's rump and belly are added, though they do not certainly belong.

DATE: LH IIIA2 late (a).
*55 Enkomi, unspecified tomb [FIG.82].
Musée de Cinquantenaire, Brussels A1247 (given by the BM in 1904).
Bibl.: CVA Belgique 3: p.1.3:18,21; MPVP: IV.31 (not ill.).
Context: unknown.

2 groups of fragments: part of shoulder broken at the turn for the neck, with stump of lower handle attachment; fragments of shoulder preserving turn for neck and full depth of frieze, with stump of second lower handle attachment.
Handle: scar with loop of paint around handle but not to neck.

Chariot to r.
Both sets of fragments preserve only the horses' heads and the motifs in front. HORSES: round eyes, 4 ears, vertical muzzle.
S.D.E.:  
a: palm (cf. FM 15:11, but top leaves are angular and pendant leaves more sharply upturned).  
b: oblique stems, probably similar to a.

DATE: LH IIIA2 late (a).
Note that the absence of a U-loop around the handle up to the neck is usually a feature of the preceding phase.

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*56 Maroni, Tomb 2 [FIG.83].
BMC 356.
Bibl.: Johnson, 1980: 16, no.36, pl.XI; MPVP: 404 say '=?355'.
Context: LC II.

5 joining fragments pres. part of neck and frieze. Buff, orange to red paint.

Chariot facing r.
HORSE: round eyes, ears overlap neck-band, 3 tufts; 4 front legs, the front two bent forward.
CONTROL: 4 reins pass through an oval terret at the base of neck.
S.D.E.:  
a: voluted flower (cf. FM 18:8-10).  
e: unvoluted flowers (FM 18:86).  
f: as e.

COMMENT: contra BMC: 70 and MPVP: 404, this fragment cannot belong with *88 (C355), which is stylistically later.

DATE: LH IIIA2 late (a).
Tell Dan (Tell el-Qadi), Tomb 387 [FIGS.21, 84].


Context: tomb containing LH IIIA2-B pottery [see #2.2].

Restored from fragments, almost complete.

Pink-buff, red varying to black paint.

Ht. 0.393; D.rim 0.28; D.base 0.123.

Form: FS 54 [FIG.21 type example].

Rim: transverse stroke groups.

Handle: ridged, 3 vertical bands; roundel attachment, semicircular band; perforations: 2 top, 3 bottom.

Bands: 3 bands below frieze and on lower body.

Type: flat.

Chariot facing 1.

BOX/WING: rounded box, d.o., spotted fill; box shown (A only, with floor) behind wheel; spur (A). Wheel: single cross, outline disc nave, spokes widening (solid or forked) at felloe.

TRACTION: Pole (A). Type 2: L-shaped, striped.

CONTROL: 4 reins (held in pairs on Side B), attached to terret in the form of two small loops on the team's neck.

HORSE: round eyes, ears overlap neck band, 2/3 tufts. Well proportioned body, 4 front legs bent at knee, 4 back, the rear pair in outline. 2 tails with bar across top.

Ground-line: team's legs overlap upper band.

CHARIOTEERS: 2, d.o. (driver on A only) or s.o., spotted robes. Facial features: round eye set against forehead, reserved ear, pointed nose, receding mouth/chin, short wavy hair.

S.D.E.:

a: voluted flowers (cf. FM 18:62 but with volutes);

unvoluted flowers (cf. FM 18:63-64);

p. chevron group (FM 58:15 plus hook).

b: unvoluted flowers (FM 18:70);

p. chevrons (FM 58);

quirks (FM 48:5);

trefoil (cf. FM 29:22).

c: unvoluted flower (FM 18:70 plus hook);

p. chevrons (FM 58);

trefoil (FM 29:17-18; cf. 27:22);

dotted circles (FM 27:18).

e: p. strokes;

U-pattern (FM 60).

f: (A) p. chevrons (FM 58);

(A) trefoil (cf. FM 29:22);

(B) confronted spirals (cf. FM 12:41-44).

g: trefoil (as c).

h: (B) trefoil (FM 27:17-18).

ATTRIBUTION: *57-65; MPVP: 175, Painter 9, i.e. IV.49=x57, 63=60, 64=x59, 74=x66 (related), VIII.1=x58, 5=x62, XIII.2=x63; to which add *61, *64,
Characteristics of the painter:

1) facial features: round eye set against forehead or hairline, sloping (or straight) forehead/nose with receding mouth/chin, short wavy hair, often with inset ear. This is the key feature, given that a number of the pieces are fragmentary.
2) preference for chariots facing left.
3) preference for p. strokes above reins (location e).
4) execution of stamen of flower motifs on *57-58.

COMMENT: MPVP: 32 date this vase to Middle III, i.e. the equivalent of LH IIIA2 late (b). Their criteria are:

1) split legs of horse: the legs do tend to split lower down and more squarely later, but there is considerable variation and other early examples exhibit the same feature (e.g. *32 and *50, their IV. 20 and 18 respectively). 2) the motif under the belly: no close parallels, but broadly similar motifs occur in both phases of LH IIIA2 late (e.g. *52, *88).
3) the pole brace with "downward prong": this seems to refer to the angle of the brace, which depends on the relationship between box and rump (i.e. distance and difference in level); it is not chronologically restricted (e.g. *44 and *50 as well as *77 and *88).
4) the team's legs sunk into the bands: the overlap of design, especially the horses' legs, with the bands, is rare only in the earliest phase (LH IIIA2 early), but thereafter recurs sporadically.

The main criteria for an earlier date are: ridged handles with roundel attachment; choice and location of filling motifs: use of several floral types and p. chevrons, wide range of small motifs in all locations.

DATE: LH IIIA2 late (a).

*58 Berbati [FIG.85].
Bibl.: Akerstrom, 1987: no. 1 with pl.1; MPVP: VIII.1.
Context: "Courtyard" [ see #2.2].

Fragment pres. rim, neck, one handle and small portion of frieze.
Pink, red paint.
D.rim: 0.26; W.handle 0.047.
FS 54.
Rim: p. chevron groups.
Handle: ridged, 2 vertical bands; semicircular loop to neck; perforations: 2 top, ? bottom.

Chariot facing r.
CHARIOTEERS: 2, s.o, spotted robes, with edge of chariot box pres. below the driver. Features: round eye set against forehead, pointed nose, receding chin, short hair.Indented back. Driver has hands.
S.D.E.:  
a: upper part of voluted flower (cf. FM 18.3-4; but probably similar to *56, location a).  
b: upper part of voluted flower (FM 18.15).  
e: quirks (FM 48:5).  

ATTRIBUTION: *57-65.  

DATE: LH IIIA2 late (a).  

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*59 Maroni [FIG.86].  
BMC 358.  
Bibl.: Johnson, 1980: 33, no. 239, pl. LXV (inaccurate drawing); MPVP: IV.64.  
Context: unspecified tomb.  

Fragment pres. part of neck and frieze with edge of handle loop. Buff, red to black paint worn in places.  

Chariot facing 1. pres. charioteers, 4 reins, and rump of horse.  
CHARIOTEERS: 2, s.o., spotted robes. Features: round eye set against forehead; reserved ear, pointed nose, receding mouth/chin; short wavy hair.  
S.D.E.:  
e: p. strokes.  

ATTRIBUTION: *57-65.  

DATE: LH IIIA2 late (a).  

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*60 Maroni [FIG.87].  
BMC 359.  
Bibl.: Johnson, 1980: 33, no. 232, pl. LXV (inaccurate drawing); MPVP: IV.63.  
Context: unspecified tomb.  

Fragment pres. part of neck, lower stump of handle and small area of frieze immediately in front. Buff, red paint.  
Handle: lightly ridged, 2 vertical bands; semicircular loop to neck; perforations: 2 bottom.  

Chariot facing 1.  
CHARIOTEERS: 2, pres. passenger and head of driver only. s.o., spotted robe. features: round eye set against forehead, reserved ear (driver), pointed nose, short receding mouth/chin; short, wavy hair.  

ATTRIBUTION: *57-65.  

Perhaps the reverse of *59 above: similar fabric and paint, same design structure (charioteers immediately in front of handle loop).
FABRIC ANALYSIS: Peloponnese (Catling and Millett, 1960: 219-223, no.15; Argolid (GCP: 547, Table 7.6).

DATE: LH IIIA2 late (a).

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*61 Maroni [FIG.88].

BMC 360.


Context: unspecified tomb.

Fragment pres. part of neck and frieze.

Chariot facing r.

BOX/WING: s.o., ?rounded, spotted fill. Edge of wheel visible.

CONTROL: 4 reins held in 2 pairs.

CHARIOTEERS: 2, s.o., spotted robes. Features: oval eye set against forehead, reserved ear, receding mouth/chin, short wavy hair. driver has hands.

S.D.E.: c: unvoluted flower (cf. FM 18:82);
      p. strokes;
      p. chevrons (FM 58).

e: p. chevron row (FM 58).

ATTRIBUTION: *57-65.

DATE: LH IIIA2 late (a).

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*62 Mycenae [FIG.89].

Nauplion Museum 14685.


Context: Citadel House, Area 2, Trench A, level 3. A terminus ante quem of LH IIIC was suggested for the find context at the time of excavation.

Fragment pres. part of neck and frieze. Pink-buff, worn brown paint.

Chariot facing l., pres. driver holding 4 reins in hands.

CHARIOOTEER: driver only pres., s.o., spotted robe. Features: oval eye set against forehead, reserved ear, pointed nose, receding mouth/chin. short wavy hair overlapping with neck band.


ATTRIBUTION: *57-65.

DATE: LH IIIA2 late (a).
Miletus [FIG. 90].
Bibl.: Weickert, 1939: pl. 24; MPVP: XIII.2
Context: settlement.

Body sherd.
Chariot facing 1., pres. head of ?driver and edge of second figure behind.
CHARIOTEER: d.o. robe. Features: round eye set against forehead, reserved ear, pointed nose, receding mouth/chin.

ATTRIBUTION: *57-65.
Cf. especially *57 from Tell Dan.

COMMENT: Vermeule and Karageorghis list this piece as the work of Painter 9 (MPVP: 166, 175), remarking on similarities with fragments from Berbati and "the Enkomi Middle series (IV.49)"; the latter vase is indeed strikingly similar to the Miletus piece, but comes from Tel Dan. Note that the piece is wrongly listed under "Ripe" (ibid: 166). MPVP: 166, 228: "charioteer or boxer"; the former identification is confirmed by the presence of 2 closely spaced figures.

DATE: LH II IA2 late (a).

Rhodes (?Ialysos) [FIG. 91].
Munich 6028.
Bibl.: Sieveking and Hackl, 1912: 6, fig. 7; MPVP: XII: 4.
Context: unknown.

NOTE: description incomplete, design studied only from available museum photo with additional information courtesy of Dr. M. Maas.
Restored from fragments.
Ht. 0.44-45.5; D.rim 32.5; D.base: 0.135.
FS 54.
Rim: not known.
Handle: ridged, 2 vertical bands; semicircular loop to neck; perforations: 2 top, 2 bottom.
Bands: 3 below frieze, 3 on lower body.

Chariot facing r.
BOX/WING: (FM 39:12) d.o. rounded box, s.o. wing, both spotted; line of pole extends behind wheel in position of chariot floor, but area not spotted. Wheel: single cross.
TRACTION: pole. Type 2: band with wavy inner edging, and terminating in a papyrus shape arches from rump; a horizontal line links it to the front of the chariot box.
CONTROL: 4 reins held in pairs attached to a ?terret on
neck.
HORSE: head not visible in photo. 4 front and back legs, rear set in outline; 2 tails.
Ground-line: team's legs overlap bands.
CHARIOOTEERS: 2, s.o. robes. Features: rounded eye set against forehead, straight line forms forehead and nose, from which a receding wavy line forms mouth/chin, wavy hair to nape of neck. Driver has hands.
S.D.E.:
a: unvoluted flower (FM 18:63).
b: as a.
c: as a, but stemless.
  p. strokes.
e: p. strokes.
f: "sacral ivy" (FM 12:42);
  p. chevron group (FM 58).
g: p. chevron, hooked.
ATTRIBUTION: *57-65.
Note the similarity of facial features, cf. especially *59, and the use of two motifs under the belly as *57.

DATE: LH IIIA2 late (a).

*******

*65 Tell el Ajjul (Gaza) [FIG.92].
Palestine Archaeological Museum.
Context: settlement.

Fragment pres. turn for neck and part of frieze immediately in front of the handle.
Handle: edge of semicircular loop to neck.

?Chariot facing r.
ROBED FIGURE: d.o. robe, fill not pres. Features: round eye, straight nose, receding mouth/chin, reserved ear set in short wavy hair.
S.D.E.:
a: flower (FM 18c).
c: p. strokes;
  dotted circle (FM 27:24).
ATTRIBUTION: *57-65 on the criterion of the distinctive facial features.

COMMENT: Too little is pres. to be sure whether the primary theme is a chariot scene or some other human activity. The figure is reasonably positioned in relation to the handle band for a chariot passenger. Note that subsidiary motifs between chariot occupants are unusual but not without parallel [cf. *50, *202].

DATE: LH IIIA2 late (a).
Tell el Ajjul (Gaza) [FIG.93].
Palestine Archaeological Museum; LAZ 1060.
Bibl.: Petrie, 1934: 2, 13, pl.XLVI:34-5; MPL: 85, fig.33; MPVP: IV.74. Further information courtesy of V. Hankey.
Context: settlement; scattered over the wall LAZ and adjoining roadway.

FS 54.
Fragments of rim, handles, shoulder with frieze, and base.
Ht. (reconstructed) c.0.43; D.rim 0.26; D.base: 0.132; W.handle 0.053.
Rim: groups of transverse strokes edged by triangles.
Handle: ridged, 3 vertical bands; semicircular loop to neck; perforations: 2 top.
Base: flat; perforations: 1 pres.

Chariot facing r.
BOX/WING: d.o., spotted; box shown behind wheel, upper edge of which pres.
TRACTION: Type 1/2, i.e. extends over rump: joined to box by a horizontal line, roughly L-shaped, striped.
CONTROL: 2 reins pres.
HORSE: rump, upper part of rear leg and tail.
CHARIOTEERS: parts of 2 pres., d.o., spotted. Features: round eye set close to forehead, pointed nose, wavy hair. Driver has hands.
S.D.E.:
 a: palm with elaborate top (cf. FM 15. 5-7).
 b: similar to (a).
 c: unvoluted flowers (FM 18:70).
   trefoil (FM 29:17-18).
 e: p. chevron groups (FM 58).
 g: dotted circle (FM 27:24).

ATTRIBUTION: related to the *57-65 group.

DATE: LH IIIA2 late (a).

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Maroni [FIG.94].
BMC 361.

2 non-joining body sherds. Buff, brown to black crackled paint, streaking to orange where more thinly applied.
Bands: 3 below frieze.

Chariot facing l.
BOX/WING: d.o., spotted; floor shown behind wheel. wheel: single cross, forked spokes.
TRACTION: pole. ?Type 2, between box and rump, a larger L-shaped and smaller triangular element, each edged
with a wavy line.
HORSE: rump, rear pair of legs painted solid, 2 tails.
Ground-line: team's legs and wheel overlap upper band.
CHARIOTEERS: passenger only pres. s.o., spotted robe, back strongly indented. Features: rounded eye set against forehead, pointed nose, receding mouth/chin. back of head not pres.

FABRIC ANALYSIS: Peloponnese (Catling and Millett, 1965: 219-222, no.16); Argolid (GCP: 547, Table 7.6).

DATE: LH IIIA2 late (a)
MPVP: Middle III, i.e. the latter part of LH IIIA2 late. The fragments are more comfortable in the preceding phase; the facial features are related to the Tel Dan group [*57-65], as is the left facing composition. Another indication of the earlier date are the depiction of pole and chariot floor behind chariot. Note that the date is suggested by the combination of these design elements, rather than any single one, which could also occur later.

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*68 Enkomi, Tomb 12 [not ill.].
BMC 350.
Bibl.: ExcClE: 38-39; CVA BM I: pl.11.5; MPVP: not included; it is listed as IV.60, but this is actually frag. c) of BMC 345 [see *47].
Context: plundered tomb, LC II.

Body sherd. Buff, red-brown paint.
Chariot facing r.
BOX/WING: edges not pres., spotted fill; upper quadrants spotted. Wheel: single cross.
TRACTION: pole. No space for traction elements between box and horse, since team's rump and tail overlap with spotted box.
HORSE: rear leg solid painted; 1 tail.

DATE: LH IIIA2 late (a).

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*69 Amman [FIG.95].
Amman Museum 6261.
Context: from above the paved floor of a Temple associated with a fire cult. The pottery in use at the time the building was abandoned belonged to LH IIIA2, IIIB1, and the Simple Style.

Restored from fragments, large parts missing. Buff, brown to red paint.
Ht. 0.45; D.rim 0.26; D.base 0.13; W. handle 0.05.  
FORM: FS 54.  
Rim: groups of transverse strokes.  
Neck: ridge.  
Handles: ridged, 3 vertical bands, semicircular loop to neck.  
Body: 3 below frieze and on lower body.  
Base: flat.  

Chariot facing r.  
BOX/WING: box poorly defined, the upper edge runs as far as rump and tails, and this area is spotted; wing: d.o., spotted. Wheel: single cross, all four quadrants spotted.  
TRACTION: none shown since box extends up to horse.  
CONTROL: hatched neck-strap in added white; 4 reins held in pairs.  
HORSE: 2 front legs pres., 4 back legs, the rear set shown as two lines set at a diagonal from body. 2 tails.  
CHARIOTEER: one only, s.o. spotted robe of roughly triangular shape. Features: schematic, showing only a dotted eye framed by a semicircle, a line for the nose, and a smooth cap of hair.  
S.D.E.:  
a: stem of flower.  
b: unvoluted flowers (FM 18:70, 126).  
c: p. chevrons (FM 58).  
e: quirks (FM 48:5).  
g: (A) dotted fill;  
(B) as b.  

The presence of a neck ridge is unusual since stylistically the vase is not of the earliest phase.  
As noted by Hankey (1974: 147) a single charioteer is unusual; parallels are a fragment from Kourion [*16], and a vase from Ialysos [*124], though this latter is probably a local imitation.  
Note the presence of other AK fragments from the same site, some of which may be from chariot scenes (Hankey, 1974: 148-8, nos.17-27).  

DATE: probably LH IIIA2 late (a), though a slightly later date cannot be excluded.  

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Ras Shamra [FIG.96].
Bibl.: Schaeffer, 1961: 1915, figs. 8-9; Ugaritica II: 300, fig.34 bis; MPVP: IV.50;
Context: southern part of settlement.

Restored from fragments. Buff, red-brown paint.
Ht. 0.43; D.rim 0.376.
Form: FS 54.
Rim: transverse strokes.
Handle: slightly ridged, 2 vertical bands.
Bands: 3 below frieze and on lower body.
Base: not known.

Chariot facing r.
BOX/WING: rounded box, d.o., spotted fill; floor shown behind wheel. Wheel: single cross.
TRACTION: related to type 1 (not type 3), pole stay/brace extend over horses' back, wavy line edging; the curving traction element joins a triangular yoke element at the withers, and 4 pairs of vertical lines are drawn between the traction and the team's back.
CONTROL: 4 reins held in pairs. Harness in added white: headstall, neckstrap and girth straps shown as lines edged with wavy line.
HORSE: 2 ears, 2 groups of line tufts. Thin body, 4 front legs split at knee, 4 back legs, rear set in outline. 2 tails with binding at root shown in added white.
Ground-line: team's back legs, tails, wheel overlap upper band.
CHARIOTERS: 3, tall figures in d.o., spotted robes.
Features: large oval eye, reserved ear in hairline forehead slopes down to a pointed nose, mouth/chin shown as a receding wavy line. Short hair with pigtail, hatched headband.
INDEPENDENT ROBED FIGURES: 1 facing r. (behind chariot), 3 facing 1. (in front of chariot). Features: as above, except that the hair has two pigtails. Robes in double outline extending to groundline, hatched border below which feet are shown. Sword worn obliquely across the body, crescent pommel, V-shaped cross-bar, three tassels at the lower end indicate that the sword is sheathed.
S.D.E.:
b: voluted flower (FM 18:19).
c: dotted circle (FM 27:18);
vertical quirks (FM 48:5);
unvoluted flower (FM 18:70).
e: unvoluted flower (FM 18:70).
f: as b, but horizontal.
g: as e.

ATTRIBUTION: *70-73; Distribution of work: MAP 5.5.
Contra MPVP: 32 'very close to the Ialysos krater' [*78]; 175, Painter 10. *70 is indeed similar to *78
(Ialysos) in design structure (robed figures with swords flanking the chariot), but not in the manner or details of execution.

Åkerström (1987: 113-4, fig. 81.1-2) associates the Ras Shamra and Asine pieces [*70-71].

Characteristics of the painter:
- 3 tall charioteers; the facial features, and the hatched hairband and pigtail; the traction system (esp. the interior wavy edging); the line tuft mane [*70-71]; the use of the unvoluted, stemless flower in several locations (c,e,g).

DATE: LH IIIA2 late (b).

Several features of the design recall earlier pieces, esp. the hatched headbands of the figures [cf. *1-5], and the traction system (extending over the back of the horse). Certainly later features, however, are the vase form, facial features, and choice and use of subsidiary motifs.

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*71 Asine [FIG.97].
Leonardo Storerooms, Nauplion.
Bibl.: Frizell, 1978: 74-5, no.65 with figs.57, 60.
Context: LH IIIA2-B [#2.2].

Fragments of rim, neck and upper part of frieze. Pink, worn red paint.
D.rim 0.26.
Form: FS 54.
Rim: groups of tranverse strokes.

Chariot facing r.
WING: d.o., spotted fill, edge of wheel visible.
TRACTION: small portion with wavy line edging preserved below reins; as *69.
HORSE: part of 2 line tufts.
CHARIOTEERS: 2 pres. in wing (space for the driver in the box). Features: identical to *70.
S.D.E.:
- a: flower; edge of curving lines, prob. same flower type as *70: FM 18:19)
- c: unvoluted flower (FM 18:70);
  dotted circle (FM 27:19).
- e: as c.

ATTRIBUTION: *70-73.
The Asine fragments are almost identical to *70.

DATE: LH IIIA2 late (b).

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*72 Ras Shamra [FIG.98].
Bibl.: Ugaritica VII: 296, figs.34.1-2 (RS 1966).
Context: RS 1966, Tr. 101 Est; date of context not specified.

2 non-joining body sherds. Buff, dark-brown to black. Chariot facing r.
BOX/WING: rounded, d.o., spotted fill; box shown behind wheel. Wheel: upper edge pres. with horizontal spoke/floor of chariot. TRACTION: part of pole brace with wavy inner edging between box and tails.
HORSE: 2 tails.
CHARIOTEERS: 3, d.o., spotted robes. Features: pres. only the chin, reserved ear, wavy hair ending in a pigtail. Edge of a fourth robed figure at extreme l., who must be outside and immediately behind the chariot [as *70].

ATTRIBUTION: *70-73.

COMMENT: Note that Ugaritica VII: fig.34.2 is illustrated at the wrong angle.

DATE: LH IIIA2 late (b).

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*73 Maroni [FIG.99].
Cyprus Survey 649.
Bibl.: Johnson, 1980: 37, no.282, pl. LV.
Context: surface.


ATTRIBUTION: *70-73. Although the fragment is small it shares several important details of execution with *70, which indicate the same hand: the way in which the box overlaps the wheel, and the double vertical but single horizontal edge of the box; the downward pointing flower between tail and legs.

COMMENT: Johnson (1980: 37) dates the piece to LH IIIA2 early (her IIIA2a); her criterion seems to be a comparison of the chariot form with FM 39.4. This is a good example of the difficulties of "matching" complex motifs [see #5.1].

DATE: LH IIIA2 late (b).

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*74 Atchana-Alalakh [FIG.100].
BM (Western Asiatic) 136525b.
Bibl.: Crouwel and Morris, 1985: 89, no.5.
Context: settlement, unspecified location.

Body sherd. Pink-buff, orange.
Chariot facing r.
TRACTION: part of pole stay/brace with wavy inner edging, below which rump and tails of team.
CHARIOTEEER: extreme front edge of driver in a s.o., spotted robe (one spot pres.), hands grasping reins in two pairs.

DATE: LH IIIA2 late (b).
Related to *70-73 through the wavy line fill of the pole stay/brace, and perhaps the same form (i.e. closer to type 1 than 2; note also how close the traction system is to the reins).

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*75 Maroni [FIG.101].
BMC 362.
Bibl.: Johnson, 1980: 33, no.233, pls. XLVII, LXV; MPVP: IV.54;
Context: tomb not specified (but see *75 below).

Body sherd. Buff, brown paint.
Chariot facing r.
BOX: front edge only, s.o., spotted fill.
TRACTION: type 2, V-shaped, wavy line edging.
HORSE: rump and two tails.

COMMENT: probably from the same vase as *76 below: similar fabric and paint, flower motifs above reins.

FABRIC ANALYSIS: Peloponnese (Catling and Millett, 1965: 219-222, no.17); Argolid (GCP: 547, Table 7.6).

DATE: LH IIIA2 late (b).
Related to *70-73 though the wavy line fill of the pole stay/brace.

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*76 Maroni, Tomb 2 [FIG.102].
BMC 336.
Bibl.: Johnson, 1980: 16, no.37, pls. XI, LXI; MPVP: IV.53;
Context: LC IIA-C.

3 joining fragments pres. part of neck and shoulder.
Buff, reddish-brown (shading to orange on interior neck band).
Chariot facing r.
CONTROL: 4 reins held in pairs.
CHARIOTEERS: 3, of whom heads of two and part of the third pres. Features: round dotted eye, forehead sloping to a pointed nose, below which an s-shaped line forms mouth and chin, short cap of hair with wavy outline.
HORSE: part of neck and two tufts.
COMMENT: *75 (BMC 362), from an unspecified Maroni tomb, may be the reverse of this vase.

DATE: LH IIIA2 late (b).
Note that 3 figures in the chariot is paralleled by *70 and *72.

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*77 Kourion, Tomb 34 [FIG.103].
BMC 338.
Bibl.: ExcCyp: 72-73; CVA BM I: pl.7.6; MPVP: IV.48.
Context: not known.

Restored from fragments, almost complete.
Buff, red to black paint.
Ht. 0.435; D.base 0.127; W.handle 0.056. Form: FS 54.
Rim: p. chevron groups.
Handle: slightly ridged, 2 vertical bands; semicircular loop to neck; perforations: 3 top, 2 bottom.
Bands: 3 below frieze and on lower body; 2 above painted foot.
Base: flat; perforations: 6.

Chariot facing 1.
BOX/WING: rounded box, d.o., spotted fill; on wing one row of spots around edge, and two horizontal rows across the middle; box perched above wheel. Wheel: single cross with outline lozenge nave, spokes widening at felloe.
TRACTION: type 2, L-shaped, spotted; attached to box by an additional striped band.
CONTROL: 4 reins held in pairs, attached to a curvilinear (S-shaped) terret on neck.
HORSE: 2 ears, 3 tufts, elongated body with heavy rump; 4 front legs, front pair curving, 4 back legs, the rear pair in outline. 2 tails with bar across top.
Ground-line: team's legs and tail cut though the bands, wheel overlaps upper two bands.
CHARIOTEERS: 2, d.o., spotted robes. Features: round eye, pointed nose, below which a zigzag line forms a jutting chin (the nose and chin thus seem to frame an open mouth), short wavy hair. Both figures have arms and forked hands.
S.D.E.: a: voluted flower (FM 18:15);
whorl shell (FM 23:2).
b: flower, as a;
   tricurved arch (FM 62:6).
c: double lozenge (cf. FM 10a:8, FM 73).
e: (A) row of curving p. strokes;
   (A) lozenge chain (cf. FM 73a);
   (B) "  "
f: tricurved arch, as b.
h: dotted circle (FM 27:17).

ATTRIBUTION: *77-80; Distribution of work: MAP 5.6.
MPVP: 175, Painter 10, but delete IV.50 [*70 which is
the work of another painter. i.e *70-73].
Characteristics of the painter:
1) Vase shape, note the perforations around the base
   [*77-78];
2)facial features, forked hands of charioteers (not
   only driver);
3) traction form: the L-shaped element combined with
   striped band; bar across horses tails.
Note, however, the varied choice of other design
elements: e.g. tuft and line manes, a varied range of
subsidiary motifs

DATE: LH IIIA2 late (b).
Note the introduction of the lozenge as a subsidiary
design element in this phase.

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*78 Ialysos, Tomb LX/2 [FIG.104].
Rhodes Museum no.4960.
Bibl.: Annuario 6-7, 1923/4: ??90-2; Mee, 1982: 11,
   134; MPVP: XII.3.
Context: plundered tomb, remaining 5 vases were LH
   IIIA2.

Restored from fragments, half of neck and parts of
lower body restored in plaster. Buff, reddish-brown to
black paint; design much faded in parts
Ht. 0.425; D.rim 0.30; D.base 0.13; W.handle 0.048.
Form: FS 54.
Rim: p. chevron groups, each edged to form a shell.
Handle: slightly ridged, 2 vertical bands; semicircular
loop to neck; perforations: 3 top, 2 bottom.
Bands: 3 below frieze and on lower body.
Base: flat; perforations: 5.

Chariot facing 1.
BOX/WING: rounded box, d.o., spotted fill (B); wing
with one row of spots around edge, two horizontal rows
across middle (A). Upper quadrants of wheel spotted.
Wheel: single cross with outline disc nave, spokes
widening at felloe; wheel and spokes outlined in white.
TRACTION: type 2, L-shaped, spotted; attached to box by
an additional striped band.

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CONTROL: harness in added white: lines and rows of dots in general areas of neck and girth strap; 4 reins held in pairs, attached to small semicircular terret on neck.

HORSE: 2 ears, line mane, short body, 4 front legs, front set curving; 4 back legs, the rear set reserved. Rear legs angled sharply forward, almost meeting the front legs, which overlap with the first robed figure. Hooves and fetlocks carefully drawn. 2 tails, bar across top.

Ground-line: team's legs and tails cut through the bands, the legs of two of the independent figures overlap 2 bands.

CHARIOTEERS: 2, d.o., spotted robes. Features: as *77. Both figures have hands.

INDEPENDENT ROBED FIGURES: 2 facing 1. in front of chariot, 1 facing r. behind (A); 3 facing right in front of chariot (B). Features as charioteers, but with an additional longer tress of hair to shoulder. Costume: d.o., spotted, with one or two sets of bands with interior loop edging, and band at hem. Feet shown. Each figure has forked hands. Diagonally across body each figure has a weapon, the lower end fringed with three tassels, the upper part ends in a V-shaped point. The tassels are identical to those shown on sheathed swords in other scenes, so the pointed, spear-like end could be intended for the pommel of the sword.

S.D.E.:  

a: palm (cf. FM 15:11);  
whorl shell (FM 23:2).  
b: palm, as a.  
c: dotted circle (FM 27:24).  
e: row of dotted circles (FM 27:24).  
f: rosette (FM 17:22).

ATTRIBUTION: *77-80.

FABRIC ANALYSIS: Peloponnese (Jones and Mee, 1978, no.28); Argolid: subsequent multivariate analysis of the data using Mycenae as the Argolid control (GCP: 501-507).

DATE: LH IIIA2 late (b).  
Note that the slightly more elaborate rim decoration is more common this phase: p. chevron and p. stroke groups are now often edged with hooks or arcs.

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*79 Enkomi, Tomb 3.277 [FIG.105].  
Medelhavsmuseet, Stockholm.  
Bibl.: SCE I: 484; Karageorghis, 1960: 136-9, pl.1;  
MPVP: IV.51; Rystedt, 1986: 110, fig.19.  
Context: LC II.

Restored from fragments, one handle, parts of frieze and all of lower body missing.  
Pinkish-buff, orange to red paint.
Ht. (rest) 0.46; D.rim 0.285/29; W.handle: 0.05.
Form: FS 54.
Rim: p. chevron groups, each edged with an arc to form a shell [as *74].
Handle: slightly ridged, 2 vertical bands; semicircular loop to neck; perforations: 3, not pres., top; 4, 2 bottom.
Bands: 3 bands below frieze (lower body not pres.).
Base: not pres.

Chariot facing 1.

BOX/WING: rounded box, d.o., spotted fill; box perched above wheel. Wheel: double cross.
TRACTION: type 2, 2 triangular elements, striped.
CONTROL: harness in added white: traces of lines and dots in area of neck strap.; 3 reins (pres. B only). Driver seems to hold a whip (Karageorghis, 1960: 137).
HORSE: large ringed eyes, 2 ears, 2 outline tufts. Elongated body with arching rump, 4 front and back legs, rear set in outline. 2 tails with bar across top.
Ground-line: Team's legs overlap bands.
CHARIOTEERS: (pres. A only) 3, s.o. spotted robes. Features similar to *73. Rear figure only without arms.
SILHOUETTE FIGURES: 2, facing 1. in front of chariot.
Features: as charioteers. Strongly curving upper body, rather thick legs, the back leg of the rear figure stretched backwards. Gesture: both arms bent forward across the body at waist level.
S.D.E.: 
   a: voluted flower (cf. FM 18:15).
   b: as a, but horizontal.
   c: lozenge (FM 73b,h);
      dotted circle (FM 27:16).
   e: quirks (FM 48:5);
   h: (B) dotted circle (FM 27:17).

ATTRIBUTION: *77-80.
Karageorghis (1960: 138-9) made this association, suggesting, after a careful enumeration of the similarities, that it was the work of an apprentice. This is not, however, mentioned in Vermeule and Karageorghis, where it is suggested that the piece could be 13th cent. (MPVP: 32). The link with the above pieces is, however, good: compare the details and execution of the facial features, independent figures, horses' legs and tails with cross-bar; also the choice and execution of the subsidiary motifs: double outline lozenges, voluted flower with hatched arc, tricurved arch with hatched outline under belly.

DATE: LH IIIA2 late (b).
Enkomi, Tomb 3.IIIa [FIG.106].
Medelshavsmuseet, Stockholm.
Bibl.: Karageorghis, 1960: 144, pl.VII.1-2; MPVP:
IV.58.
Context: LC II.

Fragment pres. rim, neck, and shoulder with stump of
lower attachment; to this add a body sherd
(Karageorghis, 1960: pl.VII.4).
Buff, faded brown paint.
W.handle c.0.05.
Form: FS 54.
Rim: groups of transverse strokes.
Handle: (lower stump) slightly ridged, semicircular
loop; perforations: 1 bottom.

Chariot facing r.
BOX/WING: rounded box, d.o., spotted fill; wing has
spots around edge and two horizontal rows across
middle; box perched above wheel. Wheel: double
horizontal and single vertical spoke, double outline
circle at nave.
TRACTION: type 2, L-shaped, striped, attached to box by
an additional striped band.
CONTROL: 4 reins held in pairs.
HORSE: rump, reserved rear leg, 2 tails.
CHARIOTEERS: 2, d.o. spotted robes. Features: badly
worn, but rounded eye set in hairline, short cap of
hair. Driver has arms.
S.D.E.: b: unvoluted flower; stems and upper arcs joined,
hooked anther/stamen.
c: shell/flower (see e below).
e: p. strokes;
row of shell/flower (cf. FM 23:20 but with dotted
"stamen").
h: U-pattern (FM 45).

COMMENT: Karageorghis, 1960: pl.VII.1-2 (3/IIIa), and 4
(3/IIIb) are assigned to this vase.

ATTRIBUTION: *77-80.
Cf. especially the traction details with *77-78; the
features are worn but seem similar to *78.

DATE: LHIIIA2 late (b).

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Enkomi [FIG.107].
CM A2041.
Bibl.: CVA Cyprus I: pl.6.3; MPVP: IV.57 (not
illustrated).
Context: not known.

Fragment, pres. part of rim, neck, upper handle
attachment, and frieze. Buff with greyer core, brown to dark brown paint, worn in places.
D. rim 0.30; W. handle 0.06. 
FS 54.
Rim: groups of transverse strokes. 
Handle: slightly ridged, 2 vertical bands; semicircular loop to neck.

Chariot facing 1. 
BOX/WING: rounded box, s.o., spotted; perched above wheel, of which edge only pres. 
TRACTION: type 2, L-shaped, filled with transverse strokes and circles with dot, wavy line. 
CONTROL: 4 reins in pairs attached to a semicircular terret on neck. 
HORSE: 2 ears, 3 tufts; rear set of legs in outline, 2 tails with bar across top. 
Ground-line: team’s legs and tails cut through the bands. 
CHARIOOTEER: 2, d.o., spotted robes. Features: circular eye, beaky nose, wavy hair with tress to neck. Driver has hands. 
S.D.E.: 
a: upper part only of ?palm motif, pres. the antithetic tongues. 
c: dotted circle 
e: unvoluted flower 
trefoil 
f: p. chevron group (FM 58). 

ATTRIBUTION: related to *77-80. 
Karageorghis has noted general stylistic affinities with *77 (CVA Cyprus I: 6). 
Compare the following features: chariot facing 1.; charioteers, tall, d.o. robes with curving shoulder, forked hands; horse: bar across tail, rear legs overlap bands just below knee joint. Differences are the facial features and the choice of subsidiary motifs. Note the presence of a chevron group below the belly, a motif more typical of the previous phase. 

DATE: LH IIIA2 late (b). 

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*82 Enkomi, Tomb 12 [not ill.]. 
BMC 349. 
Context: plundered tomb, LC II. 

Chariot facing r, pres. front part of horse with robed figure in front. 
CONTROL: harness in added white: lines and dots show neck and girth straps; 4 reins held in 2 pairs. 
HORSE: muzzle horizontal, 3 line tufts. Front set of legs in outline and curving forward.
INDEPENDENT ROBED FIGURE: spotted robe in combination of s.o.(shoulder)/d.o. back. Features: round eye set in hairline, short wavy hair, profile worn (prob. similar to *77).
S.D.E.:
e: row of strokes, lozenge chain.

ATTRIBUTION: broadly comparable to *77-80, though not certainly by the same hand.

FABRIC ANALYSIS: Peloponnese (Catling and Millett, 1965: 219-222, no.7); Argolid (GCP: 547, Table 7.6).

DATE: LH IIIA2 late (b).

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*83 Cyprus [not ill.].
CM 1958/II-20/13.
Bibl.: unpublished.

Body sherd. Buff, brown-black paint.
Chariot facing r.
HORSE: belly and legs of team; 4 front and back legs, rear set in outline.
S.D.E.:
a: vertical whorl shell (stem pres.).
f: flower motif.

DATE: LH IIIA2 late (b).
Criteria: whorl shell. The curve of the horses' front legs is similar to *77.

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*84 Enkomi, Tomb 3.261 [FIG.108].
Medelhavsmuseet, Stockholm.
Bibl: SCE I: 483-4; Sjoqvist, 1940: fig.19.3; MPVP: IV.62.
Context: LC II.

Restored from fragments, half of one side missing. Buff with pink core, brown paint.
Ht. 0.44; D.rim 0.25; D.base 0.12; W.handle 0.046.
Form FS 54.
Rim: groups of transverse strokes, each edged by a hooked triangle.
Handle: slightly ridged, 3 vertical bands, semicircular loop; perforations: 3 top, 2 bottom.
Bands: 3 bands below frieze.
Base: flat.

Chariot facing r.
BOX/WING: rounded box, s.o., spotted fill; upper quadrants of wheel spotted. Wheel: single cross (double vertical on A).
TRACTION: type 2, triangular, zigzag band, plain below.
CONTROL: 4 reins held in pairs.
HORSE: oval eyes, 2 ears, 3 curving tufts; 4 front and back legs with hooves shown as loops, rear legs in outline. 2 tails overlapping box and wheel (A). Ground-line: legs of team and independent figures overlap upper band.
CHARIOTEERS: 1 (A), 2 (B), s.o., spotted robes. Features: round eye set against forehead, long straight nose, jutting chin, thick necks, one spotted. Spiky hair on crown with a row of spots below. Drivers have hands. The passenger's place in the wing on A is taken by rows of spots topped by a motif shaped like a sword pommel.
INDEPENDENT SILHOUETTE FIGURE: A only; facing l. in front of chariot. Features: as above, but with an extra line along the back of the head, fringed with a zigzag and topped by a curl. The neck and arms are framed by a row of spots. Gesture: one arm forward, one back, giving the impression of a puffed out chest with shoulders held well back. Both arms slightly bent (the back one back-to-front), one hand and both feet shown as an outline loop. Standing stance.
S.D.E.:
a: voluted flower (FM 18A);
palm (FM 15:11).
b: voluted flower, as a.
c: unvoluted flower (sim. FM 18:67, but stemless and with a dotted circle tail).
e: unvoluted flower (cf. FM 18:91).
f: confronted spirals (FM 12:44)
COMMENT: Intra-vase variation: independent figure on one side only [see #A.2].

DATE: LH IIIA2 late (B).

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*85 Moutti tou Marathou, nr. Gastria [FIG.109].
Georghiades Collection, Nicosia.
Context: unknown.

Restored from fragments, large parts missing.
Pinkish-buff, orange to red.
Ht. 0.46; D.rim 0.28.
Form: FS 54.
Rim: not known.
Handle: ridged, 2 vertical bands; semicircular loop.
Bands: 3 below frieze, 3 on lower body.
Base: raised.

Chariot facing r.
BOX/WING: d.o., rounded, spotted box; wing with spots round edge and in two horizontal rows across middle; box perched above wheel. Wheel: double cross.
TRACTION: type 2, triangular, striped band across top,
vertical stripe on triangle.
CONTROL: 4 reins attached to semicircular terret on neck.
HORSE: ears and top of head overlap neck-band; 1 tuft (on one side); thin muzzles; elongated body with arching rump; 4 front and back legs partially pres., rear pair in outline; 2 tails, one shown as a thinner wavy line.
Ground-line: team's legs cut through the bands; wheel overlaps upper band.
S.D.E.:
a: palm (FM 15:11);
large unvoluted flower (sim. FM 18:108, but with hooked tail).
b: diagonal whorl shell (FM 23:3).
c: trefoil (FM 29:18).
e: quirks (FM 48:5).
f: as e.

DATE: LH IIIA2 late (b).
MPVP: 198 place this in Middle II, but the motifs: whorl shell, and large stemless flower are better suited to the later phase of LH IIIA2 late. Contrast this with the typical motifs of the preceding phase, especially p. chevrons and wider range of flowers.

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*86 Cyprus (acquired from the collection Boyset) [FIG.110].
Sevres Museum, no.10691.
Bibl.: CVA France 15: pl.13.1-2, 4-5; MPVP: IV.55.
Context: unknown.

Restored from fragments, parts of handle and body missing. Pink-buff, black turning to red and brown in places.
Ht. 0.415; D.rim 0.31.
Form: FS 54.
Rim: groups of transverse strokes.
Handle: lightly ridged, 2 vertical bands; semicircular loop to neck.
Bands: three bands below frieze.
Base: not known.

Chariot facing r.
BOX/WING: rounded box, d.o., spotted fill; perched above wheel. Wheel: large with single cross, widening at felloe.
TRACTION: type 2, L-shaped, plain.
CONTROL: 4 reins attached to a spiral terret, rising up from withers; from the lower rein hangs a row of wavy lines.
HORSE: 3 tufts, elongated body; 4 front, 2 back legs, the rear one in outline. 2 tails. The horse's body is
covered with spirals executed in white paint. Male sex shown as an angular striped projection (A).

Ground-line: legs of small independent figures overlap upper band.

CHARIOTEERS: 2, d.o., spotted robes. Features: rounded eye set against forehead, pointed nose, short cap of hair.

INDEPENDENT SILHOUETTE FIGURES: A: 2 small figures, the first facing r. immediately in front of chariot, the second (separated from the first by a flower) also moves right but looks back over his shoulder. Both figures have pointed hair/caps, only the nose is articulated. Gesture: l. figure leans forward, arms in front, knees bent; r. figure appears to have a frontal torso, arms raised up to either side, front leg stretched forward. The execution is sketchy, yet there is a lively impression of movement.

S.D.E.:

a: flower (FM 18:12; others similar but unvoluted).
b: as a.
c: trefoil (FM 29:18).
e: quirk (FM 48:7).
f: large unvoluted flower (FM 18:108)
g: vertical quirk (FM 48).
h: dotted circle (FM 27:24).

DATE: LH IIIA2 late (b).

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87 Hala Sultan Tekke, tomb 2.215 [FIG.111].

Bibl.: HST I: 84-5, pl.LXXIV; MPVP: IV.56.

Context: LC II.

Fragments pres. parts of rim, neck and body. Pink-buff, worn red to dark brown paint.

FS 54.

Rim: p. chevrons groups.
Neck: low ridge.
Bands: 3 below frieze and on lower body.

Chariot facing r.

BOX/WING: rounded box, d.o. (hatched around wing), spotted; perched above wheel. Wheel: single cross, outline disc nave, widening at felloe.

TRACTION: type 3, striped pole brace and row of triangular arcades from front of box to lower edge of terret.

CONTROL: 3/4 reins joined to a curvilinear, hooked terret on the neck.

HORSE: 4 ears, line mane; short body, legs pres. one side only: 4 front, bent up and forward as if prancing, 4 back, separated just above outline hooves, reserved triangle on rear pair. 2 tails.

Ground-line: rear legs of team overlap bands.

CHARIOTEER: 2, s.o., spotted robes. Features: large, semicircular eye set against forehead and within the black frame of wavy hair to shoulder; beaky nose, long
neck.

INDEPENDENT ROBED FIGURE: pres. one side only; facing 1. in front of chariot. Features: as above. Costume: spotted robe (length not pres.) with thick outline. Gesture: the figure holds out in front a stick-like object with a row of short branching projections on its lower half.

S.D.E.:
a: unvoluted flower (cf. FM 18:69).
b: animal [see Comment].
c: p. chevron group (FM 58).
d: unvoluted flowers (FM 18:70).
e: quirk (FM 48).
f: cross.

COMMENT: The gesture of the independent figure and the object he carries are unusual; it is perhaps a sword, an object usually worn sheathed rather than brandished in chariot scenes. Cf. the LH IIIB stick carriers, who are are silhouette and the stick is invariably held behind (=?beside) the figure. The motif under the handle is an animal; either a boar (from the snout) or dog are possibilities (MPVP: 33).

DATE: LH IIIA2 late (b).

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*88 Maroni, Tomb 2 [FIG.112].
BMC 355.
Bibl.: CVA BM I: pl. 11:8,10; Johnson, 1980: no.33-4; MPVP: IV.59 (larger piece illustrated).
Context: LC II.

2 fragments, a group of joined sherds and a single sherd from the other side, pres. part of neck and frieze. Buff, orange to red paint, worn on smaller fragment.
Bands: 3 below frieze.

Chariot facing r.
BOX/WING: rounded box, d.o., spotted. Wheel: edge pres. with horizontal double spoke and/or floor of chariot and spots in upper quadrant (i.e. box behind wheel or spotted upper quadrants).
TRACTION: type 2, band edged with rows of spots, and lower edge formed by five triangular arcades.
CONTROL: 4 reins held in pairs, attached to a partly pres. projection on the neck.
HORSE: round eyes, 4 ears, 3 outline tufts; elongated body with arching rump; 2 back legs with outline hooves, rear leg in outline. 2 tails.
Ground-line: team's legs and tails overlap bands.
CHARIOTEER: 2, s.o., spotted robes. Features: round eye set against forehead, reserved ear in outline head, beaked nose, jutting or receding mouth/chin. Driver has hands.
S.D.E.:
a: edge of flower (in front of chariot)
e: quirk (FM 48:5).
f: confronted spiral joined by arcs (related to FM 12:42-44)

COMMENT: Note the stylistic development in the form of the traction: positioned only between box and rump (type 2), but the L- or V-shaped element has turned into an arcade (multiple triangles), as is typical in Type 3.

DATE: LH IIIA2 late (b).

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*89 Maroni [FIG.113].
BMC 354.

Bibl.: CVA BM I: pl. 11.3,6; Johnson, 1980: no.236, pl.XLVIII; MPVP: IV.61 (1 fragment illustrated).
Context: unspecified tomb.

2 non-joining groups of fragments, pres. turn for neck and frieze from both sides. Buff, red to brown crackled paint; BMC: 70 mentions added paint on "horses' collars" (no longer visible).

Chariot facing r.
BOX/WING: rounded box, d.o.?, large ox-hide or trefoil leaf fill; perched on wheel. Wheel: double cross.
TRACTION: pole. Type 2, L-shaped, striped, on one side only; on the reverse the upper edge of the box runs directly up against the team's rump.
CONTROL: 4 reins held in pairs, attached to a terret in the shape of an inverted V on the neck.
HORSE: round eyes, ears overlap neck-band, 4 tufts. 2 back legs, feel one in outline. 2 tails.
Ground-line: team's legs and tails overlap bands.
CHARIOTEERS: 2, d.o., robes spotted on one side, plain on reverse. Features: circular eye, pointed nose, smooth cap of hair. Driver has arms and hands.
S.D.E.:
a/b: edge of flower (FM 18).
c: p. chevron group (FM 58).
e: quirks (FM 48:5).
f: rock pattern (FM 33:6).
h: circle.

DATE: LH IIIA2 late (b).

Overall style supports this date, though p. chevrons are more characteristic of the preceding phase.

********
Enkomi, Tomb 12 [not ill.].
BMC 347.
Bibl.: ExcCyp :38-39; CVA BM I: pl.11.1; MPVP: IV.66
(larger frag. illustrated).
Context: plundered tomb, LC II.

2 non-joining groups of body sherds pres. part of horse
on both sides of frieze. Greenish-buff, red paint, worn
in places.
Bands: 3 below frieze.

Chariot facing 1.
BOX/WING: d.o., spotted; floor shown behind wheel or
upper quadrants spotted.TRACTION: type 2, L-shaped,
plain.
CONTROL: 4 reins.
HORSE: head not pres., angular turn from neck to
elongated body. Front legs: lower part in outline,
perhaps to indicate the 2 pairs of legs. 2 back legs,
the rear one in outline. 2 thin tails spring out from
rump.
Ground-line: team's legs overlap 2 bands.
S.D.E.:
f: row trefoil (FM 29:10).
g: N-pattern (FM 60).

FABRIC ANALYSIS: Peloponnese (Catling and Millett,
1960: 219-222, no.6); Argolid (GCP: 547, Table 7.6).

COMMENT: *91 below is the reverse of the same vase).

DATE: LH IIIA2 late (b).

*********

Enkomi, Tomb 12 [not ill.].
BMC 351.
Bibl.: ExcCyp 38; MPVP: IV.67.
Context: plundered tomb, LC II.

2 joining body sherds. Buff, red paint. Chariot facing
1.
CONTROL: 4 reins.
HORSE: part of head and neck pres.; round eye, edge of
tuft.
S.D.E.:
e: p. strokes;
N-pattern (FM 60).

COMMENT: Reverse of *90 above.

DATE: LH IIIA2 late (b).

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*92  Kourion, Tomb 48 [FIG.114].
    BMC 353.
    Bibl.: MPVP: IV.68.
    Context: not known.

2 non-joining body sherds. Buff, red-brown crackled paint.

Chariot facing r.
BOX/WING: front part of wheel pres. with double horizontal spoke.
TRACTION: pres. lower edge of pole brace hanging down between box/wheel and tail.
HORSE: 4 front legs, split low down, 4 back, the rear pair in outline. 1 tail. Male sex shown, striped.
Ground-line: team's legs and tail, and prob. wheel overlap upper band.
sde:
  f: tricurved arch (FM 62), with interior fill of dotted circle (FM 27).

FABRIC ANALYSIS: Peloponnese (Catling and Millett, 1965: 219-223, no.22); Argolid (GCC 547, Table 7.6).

DATE: LH IIIA2 late (b).

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*93  Klavdia [FIG.115].
    BMC 364.
    Bibl.: MPVP: IV.69.

Part of frieze, the lower body and foot.
Note: now broken in many pieces and unavailable for full study.
Pale orange, orange paint, well pres. and even colour; added white.
Ht. pres. 0.287.
Bands: 3 below frieze.
Base: raised; 2 bands above foot.

Chariot facing r.
BOX/WING: fill of crosses (description incomplete).
TRACTION: type 2.
CONTROL: 4 reins attached to a large oval terret on neck; harness in added white: V-shaped hatched band across chest (representing neck-strap and girth), with loop above and 2 wavy lines terminating in arrows below.
HORSE: round eyes, head covered in white spots (?stylised harness). Elongated body with arching rump, 4 front and back legs, rear set in outline. 2 tails.
S.D.E.:
a: voluted flower (FM 18:15-16);
  large unvoluted flower (FM 18:106).
e: chain ovals (FM 48:19, but not IIIB).
FABRIC ANALYSIS: Peloponnese (Catling and Millett, 1965: 219-223, no.23); Argolid (GCP: 547, Table 7.6).

DATE: LH IIIA2 late (b).

*94 Enkomi, tomb 3.276 [FIG.116].
Medelhavsmuseet, Stockholm.
Bibl.: SCE: I: 484; Karageorghis, 1960: 140-1, pl.III;
MPVP: V.10.
Context: LC II.

Restored from fragments, large portions missing, including most of one side. Buff, orange-red paint.
Ht. 0.395; D.rim 0.295; D.base 0.12; W.handle 0.046.
FS 54.
Rim: chevron groups, each edged to form a shell.
Handle: ridged, two vertical bands; semicircular loop to neck; perforations: 2 top, 2 bottom.
Bands: 3 below frieze.
Base: flat.

Chariot facing r.
BOX/WING: square box, d.o., spotted fill; edge of wing perched on wheel. Wheel: single cross.
TRACTION: type 3, from box to team's neck, striped band, below which a row of pendant arcades.
CONTROL: 4 reins held in pairs.
HORSE: head not pres. 4 tufts. 4 front legs, split at knee, 2 back legs, rear leg in outline. 1 tail.
Ground-line: team's legs overlap upper band.
CHARIOTEERS: 2, s.o., spotted fill. Features: round eye set against forehead, beaky nose, reserved ear in short hair. Driver has hands.
SILHOUETTE FIGURES: 2, facing 1. in front of chariot on both sides. Heads not pres. Triangular torso arching backwards and narrowing to a slender waist, well-defined buttocks and shins. Gesture: (1st figure on each side, legs only pres. of 2nd figure) one arm held out behind body, hooked hand; second arm not pres., but stump at shoulder shows that it was stretched upwards in front of the head. Walking stance, the front leg of the first figures overlapping the horse's legs.
S.D.E.:
b: voluted flower (cf. FM 18:16).
c: p. chevrons (FM 58).
e: N-pattern (FM 60).

DATE: LH IIIA2 late (b).
Karageorghis first dated it to the end of LH IIIA2 ((1960: 141), but more recently assigned it to LH IIIB (MPVP: V.10).

PAGE 422
Criteria in support of the earlier date: the vase form, i.e. the relatively short neck, ridged handles with perforations; design elements: flower, p. chevrons, although the traction type is more typical of LH IIIB.

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*95 Cyprus [FIG.117].
Perugia Museum, Bellucci 67; given by Cesnola.
Bibl.: unpublished; referred to by Furtwängler and Loeschcke, 1886: 29 (e); and SCE IV.1C: 313, m3.
Context: unknown.

Restored from fragments, one handle, parts of neck and shoulder missing.
Buff, red to brown paint.
Ht. 0.38; D.rim 23; D.base 0.11.
FS 54.
Rim: groups tranverse strokes.
Handle: slightly ridged, solid painted; semicircular loop to neck.
Bands: 3 below frieze.
Base: not known.

Chariot facing r.
BOX/WING: rounded box, s.o., spotted fill; upper quadrants of wheel spotted. Wheel: double cross.
TRACTION: type 2, L-shaped brace, striped.
CONTROL: 4 reins held in pairs.
horse: round eyes, 2 ears between 3 tufts; arching rump, 2 front and back legs with hooves, the rear leg solid painted, 2 tails.
Ground-line: team's front legs overlap upper band; chariot wheel hovers above ground-line.
CHARIOTEERS: 2, s.o., spotted robes, the line of the robe overlapping with the box on one side (B).
Features: round eye, sloping forehead with pointed nose; smooth cap of hair (A), or outline head and neck edged with spots (B). Drivers have hands.
S.D.E.:
a: palm (FM 15:11);
vertical quirk (FM 48:5).
b: palm (FM 15:10).
c: dotted circle (FM 27);
quirk (FM 48:5).
e: quirk (FM 48:5).
f: as e.
g: triangle with multiple stem (related to FM 19).

DATE: LH IIIA2 late (b).

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*96 Enkomi [FIG.118].
Context: Well 202 in the S.E. quarter; the well
contents (including other pictorial and bronzes) are characterised as originally tomb material.

NOTE: incomplete description, studied from single published photograph only. Restored from fragments, parts of body and base missing. FS 54.

Chariot facing r.
BOX/WING: rounded, s.o. spotted box; perched above wheel. wheel: single cross.
TRACTION: type 3, tringular pole brace/stay with hatched band extending over back to a hook on the neck; three chain arcades hang from the band.
CONTROL: 2 reins attached to a hook on the neck (as the hatched band (=reins) above.
HORSE: round eyes, horizontal muzzle, 3 tufts. 4 front legs, 2 back, the rear in outline. 2 tails.
Ground-line: team's legs and wheel overlap upper band.
CHARIOTEER: 2, s.o., spotted robes. Features: dot framed by semicircle eye, straight nose, receding mouth/chin, wavy outline for hair.

DATE: LH IIIA2 late (b).

*******
*97 Ains Shems (Beth Shemesh) [FIG.119].
Rockefeller Museum, Jerusalem.
Bibl.: MPL: 64, fig.21 (top); MPVP: IV.71.
Context: settlement.

Two joining fragments pres. part of rim, neck and frieze.
FS 54.
Rim: not known.

Chariot facing r.
CONTROL: 4 reins held by driver.
CHARIOTEERS: driver only pres. s.o., spotted robe.
Features: large round eye, round head with a pointed nose and smooth cap of hair, neck and head separated by a line. Driver has arms (shown as a thickened line at the front edge of robe) and hands.
S.D.E.:
e: quirks (FM 48:5, 7).

COMMENT: A second pictorial body sherd from Ains Shems preserves the legs of an independent silhouette figure (see MPVP: IV.72). It is possible that it belongs to a chariot scene, even to the same vase as *96, but this could only be verified by examination of the sherds.

DATE: LH IIIA2 late.

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*98 Atchana-Alalakh [FIG.120].
BM (Western Asiatic) 136429. Excavation no. ATP/37/287.

2 groups of fragments, pres. part of rim, neck and upper part of frieze. Pink-buff, orange to brown paint.
D.rim 0.24.
Form: FS 54.
Rim: groups of transverse strokes.

Chariot facing r. pres. forepart of horse.
CONTROL: 4 reins attached to a terret shown as a solid projection at the base of the neck.
HORSE: head overlaps with neck band; no ears, 2 tufts, the lower one in outline. S.D.E.:
a: edge of a curvilinear motif, probably a flower.
c: p. strokes (in front of horse).
e: as (c).

DATE: LH IIIA2 late.
MPVP: 34, 41 suggest either LH IIIA2 late or IIIB; the earlier date is confirmed by the relatively short, concave neck; the position of the terret at the base of the neck (though the form of the terret is unusual).
Crouwel and Morris (1985: 87) note a handle fragment in the BM (with the same museum no.), which might belong with this AK. It cannot be later than LH IIIA2: ridged, 2 vertical bands of paint; perforations: 1 top, 1 bottom.

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*99 Atchana-Alalakh [FIG.121].


DATE: LH IIIA2 late. Type 2 striped pole stay and p. strokes arounds reins occur throughout LH IIIA2 late. The driver's body is placed unusually far forward so as to overlap with the pole stay; this feature is paralleled on *41 (also from Atchana).

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*100 Atchana-Alalakh [FIG.122].

Body sherd. Pinkish-brown, orange darkened to brown paint (discolouration from ?burning).

Chariot facing r. BOX/WING: part of box, s.o., spotted fill; box shown behind the upper section of the wheel. Part of wheel: single cross with solid disc nave. HORSE: 2 tails just in front of wheel. S.D.E.: h: circle (sim. FM 27:3)

DATE: within LH IIIA2. Chariot box is regularly shown behind the wheel early in LH IIIA2, but the feature also recurs later. The solid disc nave occurs in different phases.

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*101 Atchana-Alalakh [FIG.123]  
Museum of Classical Archaeology, Cambridge (drawer 54).  
Bibl.: Crouwel and Morris, 1985: 90-1, no.10.  
Context: settlement, unspecified location.

Body sherd. Pink-buff, orange to red paint.
Chariot facing r. pres. part of chest and upper forelegs of horse.
S.D.E.:  
c: unvoluted flower (FM 18:70).

DATE: LH IIIA2 late.
The flowers are drawn closely together suggesting the abundance of filling motifs typical of the earlier part of this phase.

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*102 Atchana-Alalakh [FIG.124].  
Museum of Classical Archaeology, Cambridge.  
Bibl.: Crouwel and Morris, 1985: 91, no.11.  
Context: settlement, unspecified location.

Body sherd. Pink-buff, dark brown paint.
Chariot facing r.
BOX/WING: front edge of a chariot box with traces of driver above, both with spotted fill.
TRACTION: small portion of type 2 pole stay/brace, solid painted.

DATE: LH IIIA2.
The solid rendering of the traction elements is paralleled by *8.

********

*103 Berbati [not ill.].  
Context: "Courtyard" [see #2.2].

Body sherd. Buff, brown paint with added white, all worn; interior well smoothed.
Chariot facing r. pres. chest of horse and part of independent figure.
CONTROL: neck strap shown in added white as a hatched band.
INDEPENDENT FIGURE: facing r. in front of chariot. Part of chest, buttocks and one arm held behind (but not bent up to hold a stick).
S.D.E.:  
c: p. strokes.

COMMENT: The suggested reconstruction (Åkerstrom, 1987: ibid.) of the horses' muzzle is not entirely convincing as it leaves no room for the independent
figure's head.

DATE: LH IIIA2 late.
Probable date on criteria of harness details and use of p. strokes, both uncommon later.

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*104 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.9, pl.3a-b.
Context: North east baulk at N. end of Terrace wall.

2 body sherds, the larger one broken off at the neck join. Greenish, black paint.

Chariot facing r. pres. horses' head; motif on smaller sherd not identified (?floral).
CONTROL: 3 reins shown extending to muzzles.
HORSE: head at an oblique angle, 2 round eyes, traces of ears overlapping neck band, part of 1 tuft.
S.D.E.: a: flower (FM 18)

DATE: LH IIIA2 late.

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*105 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.16, pl.5:1.
Context: "Courtyard" [see #2.2].

Body sherd pres. turn for neck. Yellow, black paint.

Chariot facing r. pres. head of driver with reins.
CONTROL: part of 3 reins pres. held by driver.
CHARIOTEERS: driver only pres. Features: large, rounded eye set against hair, sloping forehead curving to a pointed nose, below which receding mouth/chin; wavy hair.

DATE: LH IIIA2 late.

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*106 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.17, pl.5:2.
Context: probably "Courtyard" [see #2.2].

Fragment pres. small part of frieze and neck. Yellow, black.

Chariot facing r. pres. horses' tufts.
HORSE: part of 2 outline tufts.
S.D.E.:
e: row p. chevrons (FM 58).

DATE: LH IIIA2; the p. chevrons make a later date unlikely.

********

*107 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.39, pl. 9:3.
Context: "Dump" [see #2.2].

Body sherd. Buff, red paint.
Chariot facing r. pres. part of chariot with horses' rump and tail.
BOX/WING: front edge only of box.
TRACTION: pole; triangular, spotted pole brace between box and rump.

DATE: probably LH IIIA2 late.
The spotted brace is unusual; cf.*229, also from Berbati for a spotted brace, but differently shaped .

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*108 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.41, pl. 9:5.
Context: "Dump" [see #2.2].

Body sherd. Buff, red-brown paint.
Chariot facing 1. pres. rump of horse with pole stay.
TRACTION: type 2, edge of brace curving down onto rump, striped fill.
CONTROL: 2 or 3 reins (the upper line perhaps a zigzag).

COMMENT: Åkerström's reconstruction, in which the chariot faces r. the curve of the horses' back is incorrect. The brace is better understood curving down onto the horses rump [cf. *52].

DATE: LH IIIA2.

********

*109 Berbati [not ill.].
Context: "Dump" [see #2.2].

Body sherd. Buff, brown paint.
Chariot facing r. pres. part of chariot and horses' tail.
BOX/WING: d.o., spotted fill box; box perched above
wheel. Wheel: upper quadrant only, edge of horizontal spoke.
TRACTION: pole; edge only of pole brace in front of box.

DATE: probably LH IIIA2 late.

********

*110 Berbati [not ill.].
Bibl.: Åkerström, no.45, pl.11.
Context: Rooms C and E; the former room being LH IIIA2 in date.

2 non-joining frags. of frieze and lower body. Pink, red paint.
Bands: 3 below frieze, 2 on lower body.

Chariot facing r. pres. part of horses' and traction, edge of wheel.
TRACTION: pole; long, wavy pole brace between wheel and tails.
HORSE: 2 tails, part of hoof and fetlock.

DATE: LH IIIA2.
Criteria of context, and the second set of bands on lower body.

********

*111 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.60, pl.14:3.
Context: Room C; LH IIIA2 in date.

Body sherd from an open krater. Yellow, red paint; interior polished.

Chariot facing r. pres. part of wheel and wing.
BOX/WING: rear of wing, d.o., spotted fill. wheel: double cross, centre not pres.
S.D.E.:
h: lozenge (FM 73b).

DATE: LH IIIA2 context.
Note that the lozenge is typical of LH IIIB, but begins to appear in LH IIIA2 late (b) [see #5.9].

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*112 Berbati [not ill.].
Context: 65: "Courtyard" or rooms d-F; 66: "Courtyard" [see #2.2].

2 non-joining body sherds; large open krater (Åkerström, 1987: 29-30).
Buff to pink, red paint; interior well finished.

Chariot facing r. pres. part of chariot and independent figures.
BOX/WING: wing only, d.o., spotted; perched above wheel. Wheel: double horizontal spoke.
INDEPENDENT SILHOUETTE FIGURE:
66: facing r. immediately behind chariot. Lower body only, prominent knee joint. At hip level a hook shaped projection.
65: facing r., similar to 66, but pres. only part of legs with prominent knee joint.
Ground-line: legs overlap with bands, of which only 1 pres.
S.D.E.:
c: dotted circle (FM 27:21)

COMMENT: The 2 sherds are probably from opposite sides; note the additional guide line above the band on no. 65.

The structure of the hooked projection is much clearer in the photograph; a slightly curved line crosses the body, terminating in a hook, immediately above which is the beginning of a diagonal line. It could perhaps be a folding stool [cf. #5.5.5].

DATE: LH IIIA2 late.
Date suggested by the structure of the design: silhouette figure immediately behind the chariot, and by the red paint.

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*113 Byblos [FIG.125].
National Museum, Beirut: B6248, B6249.
Bibl.: MPL: s.76, fig.27; Hankey, 1967: 117-8; MPVP: V.25.3-4.
Context: settlement.

Two joining sherds pres. turn for neck (join identified by V. Hankey, 1966).

Chariot facing r. pres. the heads of charioteers.
CHARIOTEERS: 2, s.o. spotted robe. features: round eye, sloping nose, receding mouth/chin; reserved ear set in hairline, smooth cap of hair ending in a small peak in front.

DATE: LH IIIB late.
contra the LH IIIB date of MPL and MPVP. Note that Hankey points out that the fragments "do not look late in style" (1967: 118). The facial features, and especially the reserved ear, support the LH IIIA2 date.

********
Cyprus [FIG.126].
Otago Museum, E.35.168 (given by the BM).
Bibl.: Betts and Green, 1964: 70-72; MPVP : 34, fn.8.
Context: not specified, but must be from the tomb material excavated by the BM (ExcCyp).

Body sherd.
Chariot facing r.
HORSE: rounded belly, 4 front legs, squarely split, part of back legs bent at hock.
S.D.E.:
c: p. chevrons (FM 58).
f: stemmed spirals (cf. FM 51).

COMMENT: The set of 5 pictorial sherds given to Otago may come from Enkomi, since one of them, *35, may be from the reverse of *34 (BMC 346 from Enkomi).
Re the other sherds given to Otago: E.35.164 is a rim fragment of FS 281 with a chariot scene (LH IIIB); E.35.169 is a shoulder fragment of an AK with bulls.

DATE: LH IIIA2 late.
This date is indicated by the p. chevrons. Stemmed spirals occur as a primary motif on non-pictorial pottery from LH IIIB (FM 51; MDP: 94-96), but similar spiral motifs occur in pictorial scenes, especially under the horses' belly, from LH IIIA2 late [cf. *52, *57].

********

Cyprus [not ill.]
CM 1958/VI-20/6.
Unpublished.

Body sherd. Buff, dark brown paint.
Chariot facing r.
CHARIOTEERS: parts of 2 charioteers in s.o., spotted robes. Features: rounded eye set against profile, beaked nose. Driver has hands, which hold reins in pairs.

DATE: LH IIIA2 late (perhaps a).

********

Cyprus [not ill.]
CM 1965/VIII-17/4d.
Unpublished.

Chariot facing r.
BOX/WING: partly pres., s.o., spotted fill; chariot floor shown behind wheel. Wheel: single cross.
DATE: LH IIIA2 late.

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*117 Enkomi, Tomb 5 (Swedish) [FIG.127].  
Context: LC II.

Fragment pres. part of neck and frieze. Buff, red paint.  

DATE: LH IIIA2.  
Criteria of facial features and the red paint.

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*118 Enkomi [FIG.128].  
Excavation no. 1987/1.  
Context: Level IIa (later), Area 1, room 142, on floor x.

Fragment pres. turn for neck, part of shoulder immed. in front of handle area with the edge of the semicircular band to the neck.

Chariot facing r. pres. charioteers.  
CHARIOTEERS: 2 tall figures in d.o. spotted robes. Features: driver has rounded eye set against forehead, beaky nose, short cap of hair, and a banded neck with two rows of dots. Passenger: round eye reserved in a black head, beaky nose, neck as driver. Both figures have arms and forked hands; the driver holds 2 pairs of reins.

DATE: LH IIIA2 late.

****

*119 Enkomi [not ill.].  
Excavation no. 218/3.  
Bibl.: Dikaios, 1969-71: pl.66.12, 304.32.  
Context: Level IIb, Area 1, under court 63 of IIIa Ashlar building, between bedrock and floor iv.

Body sherd.  
Chariot facing r., probably part of passenger with s.o. spotted robe.  
S.D.E.:  
c: chevron group (behind figure).
DATE: LH IIIA2 late.
The context is LH IIIB, but chevrons should be earlier.

*********

*120 Enkomi [FIG.129].
Excavation no.1696/1.

Body sherd.
Bands: 3 below frieze.

Chariots, placed back to back.
BOX/WING: d.o., spots (r. box), large spots edged with smaller (r. wing), edged with circles (l. wing). Wheel: double vertical, single horizontal cross.
sde:
c: trefoil rock-work (FM 29:10)
d: rock pattern
h: circle

DATE: LH IIIA2, though the context is LH IIIB.

*********

*121 Enkomi [FIG.130].
Excavation no. 5492/1.
Context: Level IIb, Area 1, under court 63 of IIIA Ashlar building, above floor IV.

Body sherd.
Chariot facing r. pres. part of horses' head.
CONTROL: 4 reins.
HORSE: 3 tufts.
S.D.E.:
e: p. chevrons (FM 58);
N-pattern (FM 60).

DATE: LH IIIA2 late.

*********

*122 Enkomi, Tomb 6 [FIG.131].
Context: looted tomb.

8 non-joining frags. presumed from one chariot krater; small parts of rim and frieze.
Rim: p. chevrons (4a,d).

Chariot facing r.
BOX/WING: part of spotted box shown behind wheel (4c
and 4h published upside down). Wheel: widens at felloe. Traction: pole (extending r. to tails). HORSE: part of head, oval eyes, 4 ears (4b).

COMMENT: 4i (pl.199.12) with ?large oxhide is perhaps from another vase.

DATE: LH IIIA2.
Box with floor behind wheel and pole shown intermittently through this period, though more common earlier.

********

*123 Gezer [not ill.].
Bibl.: Macalister, 1912: pl.CLI.3.
Context: settlement.

Body sherds pres. part of two bands below frieze.
Chariot facing r.
HORSE: hind legs split at knee.
S.D.E.: e: shell (cf. FM 23:5,10);
?p. chevrons or strokes.
g: edge of curvilinear motif.

DATE: LH IIIA2 late.
Cf. LH IIIB date suggested by MPVP, but the subsidiary motifs seem inappropriate to this date.

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*124 Ialysos, Tomb XXVII.4 (3076) [FIG.132].
Context: contents or tomb were LH IIIA2.

Restored from many fragments, badly worn.
Ht. 0.33; D.rim 0.255.
Form: not FS 53-55 [see Comment].
Rim: transverse strokes.
Handle: flat, solid painted; semicircular band to neck.

Bands: 4 narrow bands below frieze, 2 bands on lower body and above foot.
Base: not known.

Chariot facing r. (A); floral composition (B).
Side A: BOX/WING: not a dual chariot, rounded outline with oblique strokes. Wheel: single cross widening at felloe, disc nave.
TRACTION: none.
CONTROL: 2 reins.
HORSE: one horse only with 2 ears, line mane. long thin neck and body with front and back legs bent at knee. Chevron tail.
CHARIOTEER: driver only with indistinct facial features, silhouette torso and long arms bent at elbow. One arm bent behind and above his head holds the reins, the other arm is bent forward and appears to "hold" the end of the quirk chain.

S.D.E.:  
a: large papyrus/flower (FM 18:10).  
c: p. strokes  
  dotted circles (FM 27:18-19)  
  wavy lines framed by dots.  
e: quirks (FM 48:6).  
f: dotted circle (FM 27:18-19).  
h: groups of 3/4 dots.  

Side B:  
Primary motifs: from the left a large papyrus flower with wavy stem, similar to that on Side A (FM 18:10); smaller papyrus (FM 11:38), group of palms (FM 15:9). Subsidiary motifs: p. strokes, quirks and dotted circles.

COMMENT: Very unusual in all respects.  
1) Shape esp. the splaying handles, the very piriform lower body, and the body banding recall Minoan AKs.  
2) Design structure: pictorial composition on one side only;  
3) Design elements: the pictorial motifs are not like the rest of the series: e.g. one horse with chevron tail, one charioteer in a simplified box. The use of filling motifs does suggest copying from a Mycenaean original, i.e. the right sort of motifs but loosely used.  
As MPVP: 152 suggest, this must be a vase made by a painter unfamiliar with the conventions of the pictorial tradition.

DATE: LH IIIA2 late.

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*125 Kition [not ill.].  
Bibl.: MPVP: IV.70.  
Context: Area I.  

Fragment pres. edge of neck and part of frieze.  
Chariot facing r.  
CONTROL: 3 reins.  
HORSE: part of head and thin neck pres. 1 muzzle and 4 tufts.  
S.D.E.:  
e: silhouette birds;  
  row of blobs.

COMMENT: The row of birds above the reins is unparalleled. Birds do occur in other locations within chariot scenes: behind the chariot [*26, *146, and under the handle [*172].
DATE: LH IIIA2 late.

** MPVP: 34 assign it to their Middle III, but note that the fragment "is too small for certainty".

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*126 Kouklia [FIG.133].
Context: Site KA (Northeast Gate and Persian siege ramp), layer 3. Late Classical. (information courtesy of F. Maier).

Body sherd. Pale orange, red paint. 
Chariot facing r. 

DATE: LH IIIA2. 
On the criterion of design alone the piece could be LH IIIA2-B, but the red paint suggests the earlier date.

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*127 Kourion, tomb 16 [FIG.134].
Excavation no.B1072.
Bibl.: Benson, 1961a: 53-54, pl.29, figs. 1, 3-4.. 
Context: plundered tomb.

3 non-joining fragments of neck, handle, and frieze (identified as fragments of a single vase by Benson); fig.1=A; fig.3=B; fig.4=A/B. 
Handle: ridged.

Chariot facing r. 
BOX/WING: box only pres. (?no wing), s.o., with fill of large spots (A) or N-pattern (B); box perched above wheel. Wheel single cross with spots in all quadrants. TRACTION: pres. on B only; type 2, probably triangular between box and tails. 
HORSE: (A/B) part of head and neck with 2 tufts; (B) edge of rump and 1 tail. 
CHARIOTEERS: (A) 2 pres., the front figure in spotted robe, the rear in robe with p. chevron fill. Features: rounded head with central eye in the from of a C framing a dot, irregular profile showing nose and chin. (B): curving body of driver in s.o., spotted robe. INDEPENDENT SILHOUETTE FIGURE: part of a poorly pres. slim torso facing l. Gesture: one arm bent/stretched in front, the other bent across body at waist. 
S.D.E.: 
c: p. chevrons (FM 58); row of spots; p. strokes.

DATE: LH IIIA2 (?early). 
Benson dates the fragments to the second half of the
14th cent., through comparison with the "Zeus krater" [*25]. He notes, however, that an earlier date is preferred by Immerwahr (1961a: 54, fn.10).

*25 is datable to LH IIIA2 early and shares some features with the Kourion fragments: the spotted wheel quadrants, the slim silhouette torso, and perhaps the irregular facial profile. The chevron robe also finds a parallel in the same phase [*13: lower part of independent robed figure]. The small subsidiary motifs would not be out of place in LH IIIA2 early or IIIA2 late (a).

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*128 Maroni [FIG.135].
BMC 357.

Bibl.: Johnson, 1980: 33, no.238, pls. XLVII, LXV (inaccurate drawing); not in MPVP.
Context: unspecified tomb.

2 non-joining groups of fragments from opposite sides of the vase, pres. parts of frieze with edge of one band below. Buff, black to brown paint with crackled surface.

Chariot facing r.
BOX/WING: rounded box, s.o., spotted fill; wavy box floor shown behind wheel. Wheel: single cross.
TRACTION: type 1, solid painted element with added white edging and groups of strokes; it curves down along the front of the chariot box and groups of two or three short strokes hang from the lower edge.
CONTROL: 4 pairs held in pairs.
HORSE: edge of rump and 2 tails which overlap the wheel.
Ground-line: wheel overlaps bands.
CHARIOEERS: part of 2 tall and unusually slender figures in s.o. spotted robes. The driver has hands.

FABRIC ANALYSIS: Peloponnese (Catling and Millett, 1965: no.14); unassigned in multivariate analysis where Mycenae acted as the control for the Argolid (GCP: 547, Table 7.6).

DATE: LH IIIA2 late.
The piece has no close parallels in overall style and execution.

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*129 Maroni [FIG.136].
Cyprus Survey 649.

Bibl.: Johnson, 1980: 37, no.280:1-3, pl.LV.
Context: surface.

3 small non-joining body sherds, pres. turn for neck,
small parts of frieze with 3 bands below; probably from a single vase. Buff, red paint.

Chariot facing r.
CONTROL: traces of 2 reins.
HORSE: outline rear leg bent at hock.
S.D.E.:
c: p. chevrons.
e: as c.
DATE: LH IIIA2.
Criterion of p. chevrons.

*130 Maroni [FIG.137].
Cyprus Survey 649.
Bibl.: Johnson, 1980: 37, no.283, pl.LV.
Context: surface.

Body sherd. Buff, brown.
Chariot facing r., pres. part of horses' heads.
HORSE: round eyes.
S.D.E.:
a: unvoluted flower (cf. FM 18:63, 67).

DATE: LH IIIA2 late.

*131 Maroni [FIG.138].
Cyprus Survey 649.
Bibl.: Johnson, 1980: 37, no.286, pl.LVI.

Small fragment of frieze pres. turn for neck. Buff, red.
Chariot facing r. pres. part of horses' heads.
CONTROL: headstall shown in added white.
HORSE: oval eyes, ears overlap neck band.

DATE: LH IIIA2.
The oval eyes, vertical muzzles and white headstall can be paralleled throughout LH IIIA2 [cf. *6: IIIA2 early; *70-71 IIIA2 late (b)].

*132 Mycenae [FIG.139].
Context: below the level of the drain in the E. Trench, immediately east of the E. wall of the Cyclopean Terrace building. The fill in this area dates primarily to LH IIIB early (i.e. the time when the drain and the building were constructed), but the pottery recovered also included later stray sherds.

2 non-joining fragments of a bath larnax with a chariot

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scene on the exterior, octopus on the interior.

Chariot facing r.
TRACTION: pole. Type 2, interior edged with a wavy band.
CONTROL: 4 reins held in pairs attached to a ?loop terret on the neck.
HORSE: stump of tufts pres. Upper part of front legs not yet divided into pairs, rear pair has reserved triangle, 2 tails.
INDEPENDENT SILHOUETTE FIGURE: in front of the horse there seems to be part of a silhouette figure, pres. lower tors and thighs. Difficult to be sure which way the figure faces.
S.D.E.
a: papyrus (FM 11)
f: voluted flower (FM 18).

DATE: LH IIIA2.
No precise parallels for the rather sketchily drawn papyrus and flower, but they suggest a LH IIIA2 early or late (a) date.

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*133 Ras Ibn Hani [FIG.140].
Bibl.: Syria 1976: 275, fig.26.2.
Context: tomb.

Body sherd.
Chariot facing r. pres. part of horse and chariot.
TRACTION: type 2, L-shaped, striped.
CONTROL: 2 reins pres.
CHARIOTEER: part of driver in a s.o. spotted robe.
HORSE: rump with low set on tail.
S.D.E.:
c: (between traction and tail): dotted circle (FM 27:18).
e: p. strokes.

DATE: LH IIIA2 late.

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*134 Ras Shamra [FIG.141].
Bibl.: UgariticaI: 98, fig.93.
Context: not specified.

Body sherd with part of two bands below frieze. Buff, red to brown paint with details in added white.
Chariot facing r.
CONTROL: 4 reins attached to an oval terret rising up from the base of the horses' neck. Harness in added white: hatched band around girth with hatched loop to r. and series of wavy lines to 1. [cf. *6 for similar
though more elaborate harness].
HORSE: part of neck and body with 4 front legs.
S.D.E.: 
a: part of flower (FM 18c).
e: quirks (FM 48:5).
f: as e.

DATE: LH IIIA2 late.
The harness details and terret suggest the earlier part
of the phase.

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*135 Ras Shamra [FIG.142].
Bibl.: Ugaritica II: fig.94D.
Context: Trench 24, III, dated to "Ugarit Recent 3"
(1365-1250/1200) by the excavator.

Fragment pres. part of neck and frieze.
Chariot facing r.
CONTROL: hook on the horses' neck may be a terret, but
no reins are shown in the drawing [see Comment].
HORSE: oval eyes, 2 ears, no tufts shown. One muzzle is
shown with a reserved centre.
S.D.E.: 
a: radiating bars of flower (FM 18).
e: quirks (FM 48:5).

COMMENT: The absence of reins is unusual, given that a
team of chariot horses are clearly shown (two muzzles)
and perhaps a terret. It is possible that the quirks,
which normally frame the reins, were intended to be
stylised reins, or that the reins were omitted by the
artist.

DATE: LH IIIA2 late.

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*136 Ras Shamra [FIG.143].
Bibl.: Ugaritica II: fig.94 (lower right); MPVP:IV.77.
Context: found near the surface.

Fragment pres. part of rim, neck and frieze.
FS 54.
Rim: not known.

Chariot facing l.
BOX/WING: rounded box, s.o., spotted fill; box shown
behind wheel. Wheel: part of vertical single spoke
widening at felloe.
TRACTION: probably type 2, plain band from front of
chariot box, below which an L-shaped element with a
small solid triangle.
CONTROL: 4 reins held in pairs.
HORSE: part of tail only.
CHARIOTEERS: 2 in s.o. spotted robes. Features: round eye with interior circle (as opposed to the usual dot) set against forehead and in the passenger's case enclosed by the hair; straight nose, receding mouth/chin, ear formed by hook in hairline; short wavy hair. Driver has hands.

S.D.E.:  
- a: palm (FM 15:11);  
  radiating bars of flower (FM 18).  
- c: trefoil (FM 29:17-18);  
  p. strokes.  

DATE: LH IIIA2 late.  
Facial features and closely spaced subsidiary motifs suggest a date in the earlier part of the period. Cf. MPVP for a Middle III date, i.e. the later part of the LH IIIA2 late.

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*137 Ras Shamra [not ill.]  
Bibl.: Ugaritica VII: 296-7, fig. 34.4.  
Context: RS 1966, area E. of the "grand Palais"; date range not specified.

Body sherd.  

Chariot facing r.  
BOX/WING: d.o. spotted; lower edge of box/wing shown as an L-shape above (but not touching) the wheel. Wheel: single cross, forked at felloe.  
S.D.E.:  
- c: unvoluted flower (FM 18c).  
- h: trefoil (FM 29:16-18).

DATE: LH IIIA2 late.  

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*138 Ras Shamra [not ill.]  
Bibl.: Ugaritica VII: 296-7, fig.34.10.  
Context: RS 1961, sector W 201-101; date range not specified.

Body sherd.  

Chariot facing r.  
HORSE: chest with details of harness in added white.  
CONTROL: traces of two reins extending to muzzles. Harness: in added white, neckstrap and girth as pairs of lines linked by curving arcs; a single vertical line extends upwards from the neckstrap.

DATE: LH IIIA2.  
On the basis of the reasonably accurate location of the
harness elements.

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*139 Tell abu Hawam [FIG.144].
Palestine Archaeological Museum.
Context: settlement; E5, at 58, low level.

Body sherd. Buff, red paint.
Chariot facing r.
BOX/WING: curving edge of wing, d.o. spotted fill; upper wheel quadrants spotted.

DATE: LH IIIA2 late.
Cf. LH IIIA2 (Hankey, 1967:124), and LH IIIB (MPL: 78; MPVP: 202). The spotted fill of the wheels and the red paint support the earlier date.

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*140 Tell abu Hawam [FIG.145].
Palestine Archaeological Museum.
Context: settlement; E5 at 57, high level in V.

Fragment pres. part of neck and frieze. Buff, red paint.
Chariot facing r.
BOX/WING: front edge of box in d.o.
TRACTION: ?type 2, from front of box a pair of lines join a curving element (?traction/horse).
CHARIOTEERS: part of driver only, in d.o. robe.
Features: pres. only pointed nose. The driver's outstretched arms grasp the reins.
S.D.E.:
e: V-pattern (FM 59).

DATE: probably LH IIIA2 late.
Cf. LH IIIA (Hankey, 1967: 124), and LH IIIB (MPL: 78).

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*141 Cyprus [FIG.146].
Context: unknown.

Restored from fragments; Incomplete. Pinkish-buff, brown to dark brown paint.
Ht. 0.444; D.rim 0.27; Base restored.
Form: FS 55.
Rim: p. chevrons.
Handle: lightly ridged, 2 vertical bands; semicircular loop to neck.
Body: 3 below frieze, 2 on lower body, below which 2 painted signs (see below).
Base: restored as unpainted with two bands above; it is not clear what the evidence is for this unusual reconstruction.

Chariot facing 1.
BOX/WING: rounded box, s.o., spotted; perched above wheel. Wheel: single cross. Spur: L-shaped line attached to back of wheel immediately below box.
TRACTION: type 2, V-shaped, plain; overlaps with horses' tails.
CONTROL: 4 reins held in pairs, attached to a semicircular terret high on neck on one side only.
HORSE: oval eyes, ears overlap neck band, 2 tufts. 2 front and back legs, the rear one in outline; large, triangular hooves. 2 tails.
CHARIOTEERS: 2, s.o., spotted robes. Features: black-headed with reserved, staring eye, beaky nose, and long neck with bump projecting above robe. Driver has arms and hands.
b: as a.
c: trefoil (FM 29:22).
e: quirks (FM 48:5).
h: dotted circle (FM 27:24).

ATTRIBUTION: *141-144; Distribution of work: MAP 5.7.
Previous work:
1) MPVP: 177, their Painter 30 [*141-143; *145].
2) Akerstrom, 1987: 112-3 with fig.80 [*141, *143].
*141-143 together form a sub-group at the beginning of LH IIIB. The following are the most important characteristics shared by the three vases:
1) chariot faces left.
2) physical features of figures similar, although two are black-headed, and one is not; all have a characteristic bump at the point where the neck joins the spotted robe.
3) form of the horse is similar, note especially the oval eyes (more often circular by this date), the squarish angle between neck and back, and the
triangular hooves.

4) they all have a Type 2 traction system, which separates them from the mainstream LH IIIB material with the Type 3 system; characteristic in each case is the way the horses' tail overlaps the pendant part of the pole brace.

5) a projection at the back of the wheel is also shared by all three; it seems to be a misunderstood version of the spur shown at the rear of the chariot on earlier vases.

6) shared choice, location, and execution of subsidiary elements: flower form [*141/142]; trefoils [*141/143]; vertical wavy line [*142/143].

7) shared pattern of banding: 3 below frieze, 2 on lower body.

MPVP: 177, attribute the Corinth krater [*145] to the same group. It shares some general stylistic similarities, but fewer of the specific features listed above. It should rather be attached more loosely to the group. Vermeule also associates a fragment from Ugarit with the same group (1986: 83-4; see MPVP: V.3). The fragment, from a a loop handled krater, preserves the head and torso of a figure with spiral breasts. The piece is linked with *143 through the shared drawing convention of spiral breasts, but the details of the drawing indicate a different hand.

SIGNS: 2 identical painted signs in shape of downward pointing arrow on lower body in matt purple paint; the space between the two signs, now plastered, could have contained a third sign (see Masson, appendix to Karageorghis, 1969: 172-3).

DATE: LH IIIB1, forming a subgroup [*141-144] stylistically separate from the bulk of LH IIIB examples.

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*142 Hagia Paraskevi (according to Cesnola) [FIG.147]. Metropolitan Museum, New York 74.51.966 (previously CP 1405).
Context: unknown.

Restored from fragments, complete. Pinkish-buff, orange-red paint.
Ht.0.42; D.rim 0.31.
Form: FS 55.
Rim: groups of p. strokes with lozenge (FM 73j) between.
Handles: flat, 2 vertical bands, semicircular loop to neck.
Bands: 3 below frieze, 2 on lower body.
Chariot facing 1.

BOX/WING: rounded box, s.o., spotted; perched above wheel. Wheel: double cross. Spur: rectangular shape attached to rear of wheel, immediately below box.

TRACTION: type 2, triangular, horizontal wavy line; overlaps with horses' tails.

CONTROL: 4 reins held in pairs, attached to semicircular terret high on neck.

HORSE: muzzles almost horizontal, circular eyes, 2 ears, 3 tufts. Elongated body, square turn from neck to body, 2 front and back legs, the rear one in outline; large, roughly triangular hooves, 2 tails.

Ground-line: tails and rear legs overlap 2 bands.

CHARIOTEERS: 2, s.o., spotted robes. Features: circular dotted eye, beaky nose and jutting chin, wavy hair on crown of head. Bump at back of neck above robe. Driver has arms and hands.

INDEPENDENT ROBED FIGURE: Side A only. Features: as charioteers. Body formed by a vertical panel enclosing sets of horizontal stripes, the upper set becoming p. chevrons; the latter terminate in a double spiral which represents the breasts. The arms spring upwards from the sides of the spirals.

S.D.E.:

a: unvoluted flower (sim. FM 18:102);
   palm (FM 15:11)
   vertical wavy line.
b: unvoluted flower (as a);
   whorl shell (FM 23: 7-9).
c: lozenge (FM 73j).
e: running quirks (FM 48:5).

ATTRAIBUTION: *141-144.

SIGN: painted on base; listed by Daniel, 1941: no.1c, followed by Stubbings, 1951: no.14.

COMMENT: Intra-vase variation: independent figure on one side only [#A.2].

DATE: LH IIIB1, forming a subgroup [*141-144] stylistically separate from the bulk of LH IIIB examples.

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*143 Nauplion [FIG.148].
Nauplion Museum, no.15180.
Bibl.: AR 1978/9: 18, fig.22; MPVP: IX.1.1; Åkerström, 1987: 113 with fig.80.1, 118 with fig.82.2; Das Mykenische Hellas. Heimat der Helden Homers. 1988: 239, no.242 (colour photograph).
Context: Tomb B, containing pottery from LH I-III; unpublished.

Restored from fragments. Buff, brown paint, red in
parts.
Ht. 0.45.
Form: FS 55.
Rim: p. chevron groups linked by a zigzag line.
Handle: flat, 2 vertical bands, semicircular loop to neck.
Bands: 3 below frieze, 2 on lower body.

Chariot facing 1.
BOX/WING: rounded box, s.o. spotted; perched above wheel. Wheel: single cross. Spur: rectangular line attached to rear of wheel, immediately below box TRACTION: type 2, triangular, plain. Tails overlap traction elements.
CONTROL: 4 reins held in pairs, attached to a semicircular terret high on the horses' neck.
HORSES: oval eyes, 2 ears, 3 tufted manes. Elongated body, square turn from neck to body, 2 front and back legs, the rear one in outline. Large, roughly triangular hooves.
Ground-line: part of wheel overlaps; legs and tails pass through and below all three bands.
CHARIOOTEER: 2, s.o. spotted robes. Features: black headed with reserved, staring eye and beaky nose. Bump at back of neck above robe. Driver has arms/hands.
S.D.E.:
a: palm (FM 15:11);
   vertical wavy line.
b: isolated tricurved arch with pairs of semicircles fringed with dots in the arches (sim. FM 34 or 62, with FM 43).
c: trefoil (FM 29: 22).
e: quirks (FM 48:5).
h: dotted circle (FM 27:24).

ATTRIBUTION: *141-144.

COMMENT: Note that another chariot krater was found in the same Evangelistria cemetery near Nauplion. It is illustrated by Åkerström (1987: fig.82.1), though it remains unpublished (and therefore not catalogued here). The design is badly worn, but from the photograph it is clear that the piece is LH IIIA2 late.

DATE: LH IIIB1, forming a subgroup [*141-144] stylistically separate from the bulk of LH IIIB examples.

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*144 Enkomi, T.3/I [FIG.149].
Medelhavsmuseet, Stockholm.
Bibl.: Karageorghis, 1960: 135-153, pl.VI.1-2; MPVP: IV.30, the catalogue entry is for this piece, but the illustration is of T.3/II [*54].

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Context: LC II.

Large portion of upper body with neck; part of body from reverse, to which add two other body sherds (Karageorghis, 1960: pls.VII.3 (ill. upside down) and VII.5, listed as part of T.3/IIIb: see Comment below. Pale orange, orange to brown paint. Bands: 3 below frieze, 2 on lower body.


ATTRIBUTION: *141-144, especially to *141. Similarities are: chariot facing 1.; overlap of pole brace and horses' tails; choice, location and execution of flower motif (same type repeated in locations a and b; note the flower very close to the horses' muzzles in both cases); body banding (3 below frieze, 2 on lower body).

COMMENT: Two of the sherds listed as T.3/IIIb (Karageorghis, 1960: pl.VII.3 and 5) are re-assigned to this vase; the third sherd may be part of T.3/IIIa [*80].

DATE: LH IIIB1, forming a subgroup [*141-144] stylistically separate from the bulk of LH IIIB examples.

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Restored from fragments, missing half of one side, the foot and both handles.
Pink-buff, brown paint.
Ht. (rest.) 0.455; D.rim 0.265/27.
Form: FS 55 with very tall straight neck.
Rim: undecorated.
Handle: restored; semicircular loop to neck.
Bands: 3 wide bands.
Base: restored.

Chariot facing 1.

BOX/WING: rounded box, s.o., spotted; chariot perched at a sharp angle with only the front of the box touching the wheel. Wheel: double spokes. Spur(?): rectangular shape in angle between box and wheel.
TRACTION: type 3; between box and team shown as a curving line on which the crew stand; arcades hang from the bottom rein (A only).
CONTROL: 4 reins held in pairs attached to a large semicircular terret, hatched and outlined with dots (pres. only on B).
HORSE: 2 bulbous muzzles, circular eyes, 2 outline ears, 3 tufts. Elongated body, 4 front and back legs, one of each of the front pair shown as a thin line, the rear set in outline; 1 tail which follows the curve of the traction and joins the edge of the wheel.
CHARIOTEERS: 3, in s.o. spotted robes; the rear figure smaller and squashed under the handle band. Square heads with "turreted" outline on top, large circular eye, long, dripping nose, jutting chin. 2 figures have black necks (A). Bump in robe below neck suggests shoulders pulled back. As the figures appear not within the chariot but standing on the pole brace and box, they are full length and have feet.

INDEPENDENT SILHOUETTE FIGURE: (A) facing 1. in front of chariot. Features: as charioteers, with black neck. Curving torso narrowing to a thin line for waist, below which sturdy buttocks and long legs with bumps for knees. Gesture: one arm bent forward, the other bent back and up from the elbow (in the same manner as the stick-bearers), claw hands.
a: hybrid flower (sim. FM 18: 36-8, but lacking the pendant leaves).
e: quirks (FM 48:5).
f: (A) confronted spirals linked by hatched concentric arcs (cf. FM 12:45).
ATTRIBUTION: related to *140-144.

MPVP assign this piece to the painter of *141-143, while Vermeule has subsequently described it as related to the same group (1986).
The Corinth krater is indeed related to *140-144, but lacks many of the features which this well-defined group share. Important differences which suggest that the Corinth piece is stylistically later are:
1) the form, vase shape more developed, note the extremely tall neck and heavy body with only three bands;
2) facial features, tending more to the dripping long-nose type;
3) traction, the arcaded traction system of LH IIIB, as opposed to the type 2 system of other vases;
4) subsidiary motifs, different choice and location.

DATE: LH IIIb1, on combined criteria of style and context.

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*146 Ras Shamra [FIG.151].
AO 20 376.
Context: from a house at the foot of the N.E. acropolis of the tell; discovered at 3.25m. below point 138, Chantier III. The excavator dates the context to "Ugarit Recent 2" (1450-1365).

Restored from fragments, large portions missing. Pink buff, red to brown paint.
Ht. 0.48; D.rim 0.304; D.base 0.145; W.handle 0.058.
Form: FS 55.
Rim: p. chevron groups.
Handle: slightly ridged, 2 vertical bands; perforations: 3 top, 3 bottom; semicircular loop to neck.
Bands: 3 below frieze.
Base: flat; painted sign on base, see below.

Chariot facing r.
BOX/WING: rounded box, s.o., T-pattern fill; box perched above wheel. Wheel: single cross, disc nave, spokes widening at felloe.
TRACTION: type 3; triangular pole stay/brace, the interior edged with short strokes, between box and horse. row of arcades, solid painted with outline.
CONTROL: pole (B); 4 reins held in pairs, attached to a loop (?terret/yoke saddle) at the withers. Harness in added white: row of dots around muzzles and eyes for headstall,
HORSE: narrow muzzles, not clearly separated, 2 (A) or 3 (B) ears, 3 outline tufts (B only). 4 front and back legs with hooves and fetlocks; rear legs in outline. Two tails (A); tails on B shown looped back to legs; this feature is unparalleled, and it is equally possible that the line is part of the chariot [as *147 below], and that the tails hung down in the area behind, which is not preserved.
Ground-line: teams's legs overlap two bands (B only).
CHARIOTEERS: 3, with the driver perched over the
long dripping nose. Driver has hands.

INDEPENDENT SILHOUETTE FIGURE: (B only). Features: as charioteers. Short upper body, long legs with sturdy buttocks. Gesture: arm (one shown) behind and bent horizontally at the elbow, holds vertically a stick.

BIRD: (A only). Large silhouette bird, dotted eye and curving beak. Long neck curving into a thin body with upraised wing and tail; from the base of the neck rises a stemmed lozenge (cf. FM 7.24-5, 27).

S.D.E.: 

a: palm (cf. FM 15:11, but also with row of dots in top leaves, or duplicated pendant leaves); vertical quirk (FM 48:8).

b: palm, as a;

whorl shell (FM 23:7).

c: trefoil (cf. FM 29:8);

lozenge (FM 73a,b).

e: quirks (FM 48:8);

(A) hatched lozenge (FM 73j);

(B) e-pattern (cf. FM 11:19).

f: confronted spirals joined by arcs (cf. FM 12:45).

h: hatched lozenge (FM 73j).

ATTRIBUTION: *146-152; Distribution of work: MAP 5.8.

Previous work:

1) Benson, 1961a: 344, the 'Bamboula' Painter: *146-148 plus the name-piece, a kylix rim from Bamboula, Kourion.

2) MPVP 174: Painter 12, to whom they assign their V.7-9 [*146-148]; V.10; V.25.1-2; V.34 (Bamboula kylix).

3) Akerstrom, 1987: 47, 49 'Long Nose' Painter, to whom he assigns *147, *149 (his 23 with 105), *150 (his 64), plus his nos.101 and 111.

An emended list of this painter's work can be suggested, giving a total of 8/9 attributions and 8 strongly related pieces:

*146-150: chariot kraters; MPVP: V.34: Bamboula kylix;

Akerstrom, 1987: nos. 101 (chevron robed figure) and 111 (kylix).

Add *151, *152; *153-160 are closely related but not certainly by the same painter.

Delete the following: MPVP: V.10 (here classified rather as LH IIIA2, *94); V.25.1-2 (the facial features are not similar).

Characteristics of the "Bamboula" Painter:

1) facial features of figures, esp. the flat head, long, dripping nose, and the eye set against the forehead; note, however, that the long nose alone is a more generally shared feature of LH IIIA1.

2) Traction form: *146-7 very similar.

3) Horse: curving line tufts.

4) Choice and location of subsidiary motifs: simple palm, joined spirals below belly, hatched lozenge.

5) Expanded repertoire of vase shapes: in addition to
the chariot krater this painter also decorated kylikes with human figures, and perhaps experimented with placing chariot scenes on jugs [see *152].

FABRIC ANALYSIS: Peloponnese (Anson, 1980: no.83; GCP: 547, Table 7.6).

SIGN: on the base in the form of a Greek Rho in matt red paint (Schaeffer, 1936/7: 233-4).

COMMENT: Schaeffer suggested that the scene on Side A may have referred to an Eastern legend involving the capture of a large bird (1936/7: 223-229). The combination of human figures with a large bird elsewhere in Aegean art (e.g. Tanagra larnax, Vermeule, 1972: pl.XXXVb) suggests that the association could be meaningful within an Aegean iconographic frame of reference. Vermeule and Karageorghis have noted, however, that birds become increasingly common as a design element in LH IIIB (MPVP:38).
The presence of perforations on FS 55 is very unusual [see #4.2].

DATE: LH IIIB1.

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*147 Enkomi, Tomb 12 [FIG.152].
BMC 352.
Context: LC II.

Group of joined fragments pres. turn for neck and large part of frieze on one side.
Buff, brown to black crackled paint.
Handle: semicircular loop to neck.
Bands: 3 below frieze.

Chariot facing r.
BOX/WING: long box and wing divided into six vertical panels, three of which are filled with horizontal zigzag lines; box perched above wheel. Wheel: single cross.
TRACTION: type 3, triangular pole stay/brace, the interior edged with short strokes, between box and horse; row of arcades, solid painted with outline edging.
CONTROL: pole. 4 reins held in pairs, attached to a semicircular terret on the neck.
HORSE: round eyes, 4 ears, 1 line tuft. Long curving neck with angular turn to body, 4 legs front and back with outline hooves, the rear legs in outline. 1 bushy tail.
Ground-line: team and wheel overlap 2 or 3 bands.
CHARIOTEER: 3, one set over each of the zigzag portions

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of the chariot box. S.o. robes filled with small crosses. Features: as *146. Driver has claw hands.

INDEPENDENT SILHOUETTE FIGURE: 2 facing r. immediately in front of the chariot team. Features: as *146. Torso not pres., long legs with sturdy buttocks and calves. Standing stance. Gesture: figure in front of horse holds a stick behind him, and although the arm is not pres., the gesture is clearly the same as that of the silhouette figure on *146; second figure: head and torso missing, but one arm seems to curve over the body at waist level, i.e. his gesture is different.

S.D.E.:

a: palm (FM 15:11).
b: as a, but oblique.
c: lozenge (FM 73j).
e: confronted spirals joined by p. chevrons (FM 12:45).
h: lozenge (FM 73j)

ATTRIBUTION: *146-152.

*148 may be from the same vase, see below.

FABRIC ANALYSIS: Peloponnese (Catling and Millett, 1965: 222, no. 8); Argolid (GCP: 547, Table 7.6).

DATE: LH IIIB1.

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*148 Enkomi [FIG. 153].

A1253 (given by the BM in 1904).

Bibl.: CVA Belgique III: pl.3.11; MPVP: V.9.

Context: unspecified tomb.

Fragment pres. rim, neck and part of frieze immediately in front of handle.

Buff, brown to black paint.

FS 55.

Rim: quirks (FM 48:5).

Handle: semicircular loop to neck.

Probably a chariot facing r., pres. part of rear passenger.

CHARIOTEER: part of one figure, probably the rear passenger in a chariot. S.o. robe with oblique wavy stripes. Features: as *146.

S.D.E.:

a: palm (FM 15:11).

ATTRIBUTION: *146-152.

This fragment could be from the reverse of *147 above; it comes from one of the Enkomi tombs (British excavations); it is certainly by the same painter, and note that the use of zigzag lines for the robe is paralleled by the chariot box on *147.
DATE: LH IIIB1.

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*149 Berbati [FIG.154].
Bibl.: Åkerström, 1987: nos. 23 and 105, pls. 6.3 and 19.5 respectively.
Context: "Dump" [see #2.2].

a: (no.23) Fragment pres. turn for neck and part of frieze immediately in front of handle. Yellow-buff, brown paint.
Handle: semicircular loop to neck.

Chariot facing r.
BOX/WING: rear edge of wing in d.o. with fill of small crosses.
CHARIOTEERS: rear passenger only pres., in s.o. robe with T-pattern fill. Features: as *146.

b: (no.105) Body sherd pres. human figure facing r. Yellow-buff, faded brown paint.
INDEPENDENT SILHOUETTE FIGURE: long nose and edge of eye set against front of forehead pres. Torso with strong backward curve drawn in outline, large rounded buttocks. Gesture: one arm bent forward, the other not pres.

ATTRIBUTION: *146-152.

COMMENT: The two sherds are identified as coming from the two sides of one vase on the basis of fabric, style, and proximity in excavation (Åkerström, 1987: 32, 48).
Åkerström identifies this and several other silhouette figures as "ladies" taking leave of the charioteers (1987: 48). The figures are distinguished by the reserved torso and large buttocks. The arm gestures, one bent forward, the other back, do not really convey "excited" leave-taking (ibid.). The point may be reiterated here that in pictorial vase painting the gesture alone (shared by different figures) does not seem to define an activity [#A.3], and the "dramatic moment" may be more apparent than real given the fragmentary nature of the scenes.

DATE: LH IIIB1.

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*150 Berbati [FIG.155].
Bibl.: Åkerström, 1987: no. 64 with pl.15.1.
Context: "Dump" [see #2.2].

Body sherd from a neckless krater with tiny section of rim and part of frieze immediately in front of the handle loop. Buff, black paint.
?Chariot facing r., pres. the rear passenger, or unspecified human activity.
CHARIOTEER or INDEPENDENT ROBED FIGURE: s.o. robe with T-pattern fill. Features: as *142 Gesture: short arm held back and bent upwards from the elbow. A line, perhaps a spear, crosses the body obliquely. Note that independent robed figures are not usual in LH IIIB, making it more likely that the figure belongs in a chariot.
S.D.E.:
c: vertical quirks (FM 48:6).
ATTRIBUTION: *146-152.
DATE: LH IIIB1.

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*151 Berbati [FIG.156].
Bibl.: Åkerström, 1987: no.24 with pl.6.4.
Context: "Dump" [see #2.2].
Fragment pres. turn for neck and small part of frieze. Buff, black.

?Chariot facing r. pres. head of passenger, or unspecified human activity.
HUMAN FIGURE: outline, flat head tilted back, eye set against front of forehead, i.e. similar to *146 group.
S.D.E.:
a: ?edge of palm (FM 15:11)
ATTRIBUTION: *146-152.
DATE: LH IIIB1.

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*152 Berbati [FIG.157].
Context: "Dump" [see #2.2].

Body sherd pres. edge of painted neck and part of frieze. ?AK, though Åkerström (1987: 29) suggests that this may be "a jug of moderate size" [see Comment].

Chariot facing r.
HORSE: part of head with round eye, 3 ears and 3 curving line tufts.
INDEPENDENT FIGURE: back part of outline head only, which Åkerström reasonably reconstructs with features as *146-152 group. Gesture: arms not pres., but vertically held stick behind the figure, i.e. a stick carrier.
S.D.E.:
e: chain quirk (FM 48:15).

ATTRIBUTION: *146-152.

COMMENT: Åkerström (1987: 29) suggests that several fragments with chariot scenes belong to moderate sized jugs or closed vessels, although there are no profile drawings to illustrate the identification. Such a diversification into a wider range of shapes for pictorial scenes is in keeping with LH IIIB1 tendencies, but it would be useful to have corroboration of the appearance of chariot scenes on shapes other than kraters from larger or more distinctive fragments.

DATE: LH IIIB1.

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*153 Berbati [FIG.158].
Bibl.: Åkerström, 1987: no.73 with pl.16.3.
Context: "Dump" [see #2.2].

Small body sherd, ?AK; Åkerström suggests a "closed vessel, possibly a jug" (1987: 30). Buff, black.

Charriot facing r. pres. small part of horse.
HORSE: edge of head with stumps of 2 ears, 4 curving line tufts.
S.D.E.: c: lozenge (FM 73f).

ATTRIBUTION: related to the *146-152 group through the distinctive line tufts, though too little is pres. to hazard a definite attribution.

DATE: LH IIIB1.

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*154 Berbati [FIG.159].
Bibl.: Åkerström, 1987: no.2 with pl.2.1.
Context: "Dump" [see #2.2].

Body sherd. Buff, black paint.
Charriot facing r.
HORSE: part of head with round eyes, 2 ears, part of 1 line tuft.
INDEPENDENT FIGURE: facing r. immediately in front of horse. Back of outline head only pres., probably of similar type to the *146-152 group.

ATTRIBUTION: related to the *146-152 group through line tuft form and simple outline head. Åkerström suggests that 2 other sherds may belong to the same vase [see below *155-156].
COMMENT: Åkerström (1987: 13, 26-7) refers to pl. 50.3 as the profile drawing of nos. 2 and 15; as both are body sherds and the profile shows part of the neck, this must be incorrect.

DATE: LH IIIB1.

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*155 Berbati [FIG.160].
Bibl.: Åkerström, 1987: no. 15 with pl. 4.5.
Context: "Dump" [see #2.2].

3 joining body sherds. Buff, black paint.
Chariot facing r.
TRACTION: type 3, edge of pole brace/stay between horse and chariot; row of arcades hang from lower rein.
CONTROL: 4 reins attached to a large semicircular terret on the neck.
HORSE: long back only pres.
S.D.E.: e: unvoluted flower (cf. FM 18: IIIB types)

ATTRIBUTION: Åkerström (1987: 26, 47) suggests that this sherd is part of the same vase as his nos. 2 and 49 [here *154-156].

DATE: LH IIIB1.
The type 3 traction with arcades and the large terret indicate a LH IIIB1 date; the flowers (with no stamen, and anther and petals grown together) are of LH IIIB type, though the use of stemless flowers above the reins is rather a characteristic of LH IIIA2 late compositions.

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*156 Berbati [FIG.161].
Context: "Dump" [see #2.2].

Small body sherd. Buff, brown paint.
Chariot facing r. pres. part of wheel.
BOX: perched above wheel, which is a single cross, widening at felloe.
?TRACTION: three vertical strokes could be part of the traction element between horse and chariot and/or the horses' tails.
S.D.E.: h: dotted circle (FM 27:24)

ATTRIBUTION: Åkerström (1987: 26, 47) suggests this is part of the same vase as his nos. 2 and 15 [here *154-155]; this sherd is dated by its association with the other two.

PAGE 457
DATE: LH IIIB1.

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*157 Berbati [FIG.162].
Bibl.: Åkerström, 1987: no.56 with pl.13.4.
Context: "Dump" [see #2.2].

Body sherd. Buff, brown paint.
Bands: part of 2 pres.
Chariot facing r.
HORSE: edge of front leg overlapping bands.
S.D.E.: e: confronted spirals joined by arcs (cf. FM 12:45).

ATTRIBUTION: related to *146-147 through the distinctive belly motif.

DATE: LH IIIB1.

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*158 Berbati [FIG.163].
Bibl.: Åkerström, 1987: no.57 with pl.13.5.
Context: "Dump" [see #2.2].

2 joining body sherds. Buff, brown paint.
Chariot facing r.
HORSE: edge of belly and front leg pres.
S.D.E.: e: confronted spirals joined by hatched arc (cf. FM 12:45).

ATTRIBUTION: related to *146-147 through the distinctive belly motif.

DATE: LH IIIB1.

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*159 Berbati [FIG.164].
Context: "Dump" [see #2.2].

Buff, brown faded paint.
Chariot facing r.
BOX/WING: edge of wing only.
CHARIOTEERS: edge of rear passenger in s.o. spotted robe.
INDEPENDENT SILHOUETTE FIGURE: facing r. immediately behind chariot. Part of body and arms only pres. Reserved torso, large rounded buttocks. Gesture: one arm held forward at waist level, the other springs back from the shoulder and bends in at the elbow, following
the curve of the body; claw hands.

ATTRIBUTION: related to the *146-152 group, especially to *149, which has a similar silhouette figure.

COMMENT: see *149 for discussion of the silhouette figure with reserved torso and large buttocks, which Åkerström suggests may be a convention for a female figure.

DATE: LH III Bl.

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*160 Ras Shamra [FIG.165].
Bibl.: Ugaritica VII: 318-9, fig.41.7.
Fragment of neck and frieze, apparently just in front of the handle area.

?Chariot facing r. ot unspecified human activity.
ROBED FIGURE: robe with two inner lines following the curve of the robe. fetures: outline head, flat on top, eye set in angle of top and front of head, angular nose, curving neck.

ATTRIBUTION: related to the *146 group. The facial features are similar though the nose lacks the long dripping line.

DATE: LH III Bl.

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Cyprus [FIG.166]
Boston Museum 01 8044.
Bibl.: Fairbanks, 1928: 45, pl. x:143; MPVP: V.14
Context: unknown; purchased in 1901, formerly Cesnola collection.

Restored from fragments, excellent condition. Pink-buff, brown to black.
Ht. 0.436; D.max. 0.355.
Form: FS 55:10.
Rim: groups of p. strokes.
Handle: flat, 2 vertical bands; semicircular loop to neck.
Bands: 3 below frieze.

Chariot facing r.
BOX/WING: (FM 39:18), rounded, d.o., scale pattern; perched above wheel. Wheel: double cross.
TRACTION: type 3; pole brace composed of a double line with 2 pairs of long wavy lines hanging down to the ground-line; on one side only a row of double outline wavy arcades.
CONTROL: 4 reins held in pairs attached to an S-shaped terret high on the horses' neck.
HORSE: 2 large round eyes, very attenuated muzzles, ears formed by 4 joining semicircles giving a scalloped effect, 2 tufts. Elongated body, 4 front legs, 2 back, the rear one in outline, 2 tails.
Ground-line: design elements variously overlap all or part of bands. CHARIOTEERS: 2, d.o. robes filled with row of strokes. Features: silhouette head with a reserved dotted eye, sloping forehead ending in a beaky nose, thick neck. Driver has hands.
INDEPENDENT SILHOUETTE FIGURES: confronted pair in front of chariot. Features: as charioteers. The figures are linked by a double line which loops around their narrow waists. Standing posture, squarish buttocks. Gesture: hooked hands, both arms bent forward at chest level.
S.D.E.:
b: bird (FM 7:38);
triple wavy line from handle loop to ground-line flanked at centre by opposed semicircles;
trefoil (FM 29:10).
c: trefoil, as b.
e: (A) quirk (FM 48).
(B) hybrid lozenge/stemless flower.

ATTRIBUTION: *161-165; Distribution of work: MAP 5.9.
Characteristics of the painter: very distinctive facial features; additional similarities are: body silhouette, esp. the unusually square buttocks; continuation of edge of box down to wheel, double spokes, scale pattern box (*161-162), wavy line pole brace extending down to ground-line; use of elongated trefoils (FM 27.10).
COMMENT: As suggested by other scholars (e.g. MPVP: 39), the independent confronted figures may be engaged in "belt wrestling". This is a widespread form of personal combat where the opponents are tied to one another; the enforced proximity demands greater skills from the combatants than normal boxing or wrestling. Similar skills are demanded by a modern style of knife fighting in which the opponents are tied to one another (Alan Peatfield, pers. comm.).

For more general discussion of gestures in relation to confronted figures see #A.3.

DATE: LH IIIB1.

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*162 Tell esh-Shari'a [FIG.167].
Context: locus 139/156, Stratum X; from the Egyptian residency of the early 13th cent. B.C.

Body sherd.
Chariot facing r. pres. part of chariot, lower end of traction and horses' tails.
BOX: round, d.o., scale pattern. The front of the box extends down beside the wheel; box perched above wheel.
Wheel: double cross.
TRACTION: type 3; lower end of wavy line belonging to pole brace.
CHARIOTEERS: part of passenger's robe with vertical row of circles.

ATTRIBUTION: *161-165.

DATE: LH IIIB1.

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*163 Hala Sultan Tekke, Tomb 2.214 [FIG.168].
Bibl.: HST I: 84, pls.LVI, LXXIV; MPVP: V.15.
Context: LC II.

Restored from fragments with plaster; rim, handles, base and large parts of body missing. Pinkish-buff, red-brown to brown paint, badly faded.
Ht. pres. 0.38.
Form: FS 55.
Handle: stump of 1 lower attachment pres; flat, 2 vertical bands; semicircular loop to neck.
Bands: 3 below frieze and on lower body.
Chariot facing r.
BOX/WING: rounded, d.o., panel of lines framed by loops; box perched above wheel. Wheel: double cross.
TRACTION: type 3; triangular pole brace with long wavy lines extending to ground line; traction element over
horses' backs not pres.
CONTROL: 4 reins held in two pairs.
HORSE: part of head with round eye, and forepart; hooves of rear set of legs, and two tails.
Ground-line: legs and tails of team, legs of silhouette figures overlap with all three bands.
CHARIOTEERS: 2, robe solid painted with outer line.
Features: as *161. Driver has arms.
INDEPENDENT SILHOUETTE FIGURES: facing r. in front of chariot, each figure partially pres. Features: as *157.
Standing posture, square buttocks. Gesture: arm(s) bent forward at waist.
S.D.E.:
b: confronted spirals linked by pairs of hatched loops (sim. FM 12:45);
  lozenge (FM 73e);
  dotted circle (FM 27:24).
c: trefoil (FM 29:10);
  lozenge, as b;
  p. strokes (between legs of independent figure).
e: quirks (FM 48).
h: dotted circle, as b.

ATTRIBUTION: *161-165.

DATE: LH IIIB1.

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*164 Tyre [FIG.169].
Context: domestic or industrial; Stratum XVI, Area 7, IC-6, dated by the excavator to 1425/1415 - 1375/60.
This seems an impossibly high date for the AK fragment, and the transition between Strata XVI and XV (the latter with late LC II) need not be so early.

Fragment pres. small part of frieze and neck. Pink, red paint.

Chariot facing r. pres. head and shoulders of charioteers.
CHARIOTEERS: 2, silhouette or solid painted robe (the latter likely when compared with charioteers of *162).
Features: as *160, *162.
S.D.E.:
c: double trefoil (FM 27:23).

ATTRIBUTION: *161-165.

DATE: LH IIIB1.

*********
Stephania, Tomb 2.4 [FIG. 170].
Bibl.: Hennessey, 1964: 2; MPVP: V.16.
Context: Tomb 2 was found robbed in 1950. The pottery is said to date from LC IA to the end of LC II or early LC IIIA.

Restored from fragments, large parts missing and paint badly worn in places.

Chariot facing r.
BOX/WING: rounded, d.o., spotted; box perched above wheel. Wheel: 1 with double cross widening at felloe and at centre, 1 pres. vertical single spoke only.
TRACTION: type 3; V-shaped arcade hanging from a double line. Area over horses' back not pres.
CONTROL: 2 reins pres. attached to an S-shaped terret.
HORSE: large, round eye below which an attenuated muzzle, 3 tufts pres., forepart of body and 4 front legs joined in a loop at hoof, rump with parts of rear legs, 2 tails.
Ground line: team's legs, wheel and legs of figures variously overlap the bands.
CHARIOTEERS: 2, parts of d.o., spotted robes.
INDEPENDENT SILHOUETTE FIGURES: 2 each side facing r. in front of chariot, heads not pres. Front figure of each pair has one arm bent up and back, one has two lines projecting from his waist sim. to the confronted figures on *200, yet he is not paired. Square buttocks.
a: whorl shell (FM 23).
b: as (a).
rosette with dotted circle centre and 8 loop petals (FM17);
c: rosette, as b;
large confronted U-motifs.
e: (A) lozenge chain (sim. FM 73:3);
(B) oval loop chain (sim. FM 48:18).

ATTRIBUTION: *161-165.
Significant similarities are: very attenuated muzzle, looped hoof of front legs, details of silhouette figures (thick neck, long narrow feet).

COMMENT: As restored, certain features of the vase form are unusual. esp. the short, concave neck and splaying handles, the latter closer to Minoan examples; from the published photograph (MPVP: V.16) this appears to be entirely plaster restoration (?incorrect).

DATE: LH IIIB1
*166* Hala Sultan Tekke, N2030 [FIG.171].
Bibl.: HST 8, 1983: 59, 69, 98 with fig. 280.
Context: settlement, Area 6, Tr. ECd-e, Stratum 2, F2001. The stratum contained Middle and Late Cypriot and Mycenaean pottery.


DATE: LH IIIB1.

Note the similarities with *161: e.g. shape of the tufts. The terret may be reasonably be reconstructed as an S-shaped element, as *161 and *165.

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*167 Enkomi, Tomb 3.258 [FIGS.22, 172a-b].
Medelhavsmuseet, Stockholm.
Bibl.: SCE I: 483; Sjoqvist, 1940: fig.20.2; MPVP: V.13; Rystedt, 1985: 105, fig.6.
Context: LC II.

Restored from fragments, largely complete.
Pinkish-buff, orange to brown, but badly faded.
Ht. 0.445; D.rim 0.292; D.base 0.13; W. handles: 0.05 and 0.055.
FS 55 [type example, fig.22].
Rim: groups of transverse strokes with zigzag from left edge of each group.
Handle: flat, 2 vertical bands cover most of handle, semicircular loop.
Bands: 3 bands below frieze; 2 bands above foot.
Base: raised; painted sign [see below].

Chariot facing r.
BOX/WING: one box square, the other rounded, d.o., spotted fill; box perched above wheel. Wheel: single cross.
TRACTION: type 3: V-shaped pole brace hanging down to ground line, short strokes around inner edge. Row of wavy arcades hang from lower rein.
CONTROL: 4 reins held in pairs attached to a hooked terret, which springs up from the team's back.
HORSE: round eyes, 2 ears, 5 tufts. Square turn between body and curving neck, 4 front legs, split below knee, 4 back, rear set of legs in outline. 2 tails.
Ground-line: design elements overlap slightly with upper band.
CHARIOTEERS: 2, d.o., spotted robes. Features: eye set against forehead, beaky nose forming a C-shape with mouth/chin (giving the impression of an open mouth); headgear: hatched hat crowned at back by three joining semicircles. Driver has arms (crossing body) and hands.
INDEPENDENT SILHOUETTE FIGURES:
Side A: 2 facing r. in front of the chariot, 1 facing l. behind the chariot. Strongly arching torso, long legs. Gesture: one arm forward, one back and bent at elbow; the figure in front of the chariot holds a stick in his back hand. Side B: 2 facing r. in front of chariot, neither of whom hold a stick. No third figure behind chariot.
S.D.E.:
a: whorl shell (FM 23).
b: unvoluted flower (FM 18).
e: wavy line (FM 53).
f: single stemmed spiral (FM 51).
SIGN: painted in pale orange matt on base, rather worn.

DATE: LH IIIB1.

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Cyprus [fig 173a-b].

Restored from fragments; sherds which had been deliberately altered to fit were removed in 1968, and replaced with plaster (Crouwel, 1972a: 24-6). Pink-buff, red-brown to black.

Ht. 0.43; D.rim 0.30; D.base 0.13.

Rim: groups of transverse strokes, with 'lotus bloom' on rim at point of handle attachment [fig.xx].

Handle: flat, 2 vertical bands, semicircular loop to neck. 2 incised signs on each handle (see below).

Bands: 3 below frieze and on lower body; 2 bands above foot.

Chariot facing r.

BOX/WING: rounded box, d.o., spotted fill; box perched above wheel. Wheel: single spokes, disc nave.

TRACTION: type 3; V-shaped pole brace with dotted circle fill, hanging down to ground-line; row of wavy arcades each with dotted circle fill below reins.

CONTROL: 4 reins held in pairs.

HORSE: round eyes, 3 ears, 4 tufts, and 3 smaller tufts or forelocks in front of ears. Elongated body arching up to rump, 4 front legs, 2 back legs, 2 tails. Male genitals shown.

CHARIOTEERS: 3, solid painted robes with outer line.

Features: (A) solid painted heads with wavy outline on top of head; reserved dotted eye set against forehead; the driver has an additional curving line (eyebrow); beaky nose, forming a C-shape with mouth; (B) as reverse except that the heads are rounded and in outline (as opposed to solid painted). Driver has arms and hands.

INDEPENDENT SILHOUETTE FIGURE: A only, facing r. behind chariot. Features as charioteers on same side, i.e. black-headed. Short, arching torso, long legs. Gesture: hooked hands, one arm in front, the other behind and bent forward at elbow. A sword with pommel crosses the body obliquely at waist level.

HORSE-RIDER: one on each side, facing r. in front of chariot. Figure in s.o. spotted robe (shown as if in chariot with no lower body). Features: as charioteers, both drawn in outline; figure on Side A wears a conical hatched hat/helmet. Each horse-rider holds 2 pairs of reins: 2 black arms poke out from front of robe (A), or one arm crosses the body (B), both variations matching the chariot driver on the same side. Horse: similar in form to the chariot team, but with one muzzle and eye to indicate a single horse; 3 tufts, and 3 smaller
tufts or forelocks in front of ears. Legs and tails as chariot team, i.e. front legs split to show pairs, and 2 tails; rear leg in outline. Male genitals shown.

S.D.E.:
b: confronted stemmed spirals (related to FM 12:44-5).
c: dotted circle (FM 27).
e: (A) quirk (FM 48:7).

SIGNS: identical sign in the form of a diagonal cross with a vertical stroke through centre, at the top of each handle, incised after firing (Crouwel, 1972a: 28-9).

COMMENT: The "lotus bloom" on the area of the rim opposite both handles is without parallel. The motif resembles the stylised birds within a bowl (MPVP: V.119), with the addition of p. chevrons across the 'wings'. The elaboration of the rim decoration by the addition of extra elements to the basic parallel chevrons or tranverse strokes is common in LH IIIB and the latter part of LH IIIA2 late. The figure with the sword differs in several respects from other depictions, which show robed figures wearing sheathed swords slung from baldric. Here the figure is silhouette and neither the tassels of the sheath nor the baldric are indicated; nevertheless, the figure does not actually hold the sword (Crouwel, 1972a: 26).

Horse-riders are rare on Mycenaean pictorial vases, which should account for the confused rendering of the horse: a single muzzle and eye, but 4 reins and 2 tails. For a general discussion of horse-riding see Crouwel (1981: 45-53). Intra-vase variation: as is characteristic of other LH IIIB chariot scenes one side has extra features, in this case the silhouette figure with sword (A). The vase is also interesting for the use of two" methods of showing the facial features, solid with reserved eye (black-headed), and the more usual outline technique.

DATE: LH IIIB1.

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*169 Enkomi, Tomb 11.33 [FIG.174a-c].
Bibl.: SCE I: 516-7; MPVP: V.18.
Context: see #2.2.

Restored from fragments, rim chipped.
Pink-buff, orange-brown.
Ht. 0.39; D.rim 0.31; D.base: 0.138; W.handles: 0.064.
Rim: p. chevron groups edged with spiral with solid centre.
Handle: flat, 2 vertical bands and zigzag band along centre; semicircular loop to neck.
Bands: 3 bands below frieze.
Base: raised; painted sign [see below].
Chariot facing r.
BOX/WING: rounded, d.o., filled with rows of strokes; box perched above wheel. Wheel: double spokes.
TRACTION: type 3; wavy, hatched pole brace hanging down to ground-lin; row of wavy arcades hanging from reins.
CONTROL: 4 reins held in 2 pairs attached to a hook-shaped terret with hatched fill, which joins the last arcade.
HORSE: round eyes with dotted circle, 2 ears, 2 tufts. square turn from neck to body, 4 front and back legs, the rear pair in outline, 2 tails. Male genitals shown, hatched.
Ground-line: team overlaps 2 bands.
CHARIOTEERS: 2, s.o. robes, solid painted area frames horizontal rows of strokes or 3 vertical rows of spots; bodies arched strongly back. Features: sloping forehead ends in a beaky nose, below which two c's form mouth and chin; short, smooth cap of hair ending in a peak. Both figures have arms with forked hands.
S.D.E.: a: whorl shell (cf. FM 23:7); palm (FM 15:13).
b: large fish (FM 20:7).
c: dotted circles (FM 27:23); unvoluted flower (FM 18:108).
f: running spirals with solid centres (sim. FM 46:57).
SIGN: reversed Sigma on base, in matt reddish paint.
COMMENT: The combination of the chariot with the large fish emerging from under the handle is unparalleled. As Vermeule and Karageorghis have noted (MPVP: 40-1) there is an element of humour (at least in our modern perception of the scene) in the large fish almost nudging the chariot passenger, whose arching torso and open mouth (actually stylistic features well-known on other scenes) add to the impression of terror. Whether or not the artist intended to be humourous or indeed to allude to a mythological episode, the image of a large, predatory fish is not, in fact, without parallel in Aegean art. Recent work on sacrificial symbolism in Minoan iconography by N. Marinatos has shown that the dolphin (elsewhere referred to as a 'fish-monster') appears both as the predator in scenes of predator and victim, and in association with other, better known predators such as the lion and griffin (1986: 48-9). It is difficult to know whether the association between the chariot and the large fish should be read in terms of this earlier symbolism, or indeed, as a humourous pun on it, but a more explicit link with the Minoan symbolism of the dolphin or 'fish-monster' as a predator attacking a victim is provided by another LH IIIB1 pictorial vase; on a loop handled krater a large fish surges forward from under the handles towards a row of goats, who look back in
Aradhippou [FIG. 175a-b].
Louvre AM625; gift of the French School at Athens, expedition of M. Perdrizet.
Context: unknown; but for the probable location of LBA tombs at Aradhippou see Karageorghis, BCH 64, 1933: 331.

Restored from fragments, one handle and parts of body missing. Pink-buff, paint shading from orange through to black.
Ht. 0.378; D.rim 0.285; D.base 0.125; W.handle 0.044.
FS 55.
Rim: groups of tranverse strokes.
Handle: flat, solid painted; semicircular loop extends from neck through bands below frieze, enclosing the handle area.
Bands: 2 below frieze.
Base: flat.

Chariot facing r.
BOX/WING: (FM 39:20) rounded box, hatched d.o., spotted fill; horizontal lower edge of chariot perched over wheel. Wheel: single cross, forked at felloe.
TRACTION: type 3; no traction elements (A), row of arcades below reins (B).
CONTROL: 4 wavy reins held in pairs attached to a semicircular terret on neck.
HORSE: round eyes below which outline muzzles; 2 ears, 2 tufts, also row of short strokes in front of ears (mane/forelocks); 2 front legs in outline, 2 back legs, the rear one in outline; 1 tail bushing out into separate strands at end.
Ground-line: team's legs overlap upper band.
CHARIOTEERS: 3, s.o., all three in spotted robes (A), the driver's plain, the 2 passengers' with pairs of horizontal lines (B). Features: circular eye, sloping forehead with pointed nose, pointed hats (A), or flat cap of hair on crown of head (B). All figures have arms and claw hands.
INDEPENDENT SILHOUETTE FIGURES:
Side A: 3 figures facing r, 2 full size behind the chariot, 1 smaller in front. Features: as charioteers, short flat cap of hair with curl. Strongly curving torsos, emphasised buttocks, back leg stretched back in walking stance. Gesture: claw hands, one arm forward, one back, following the curve of the torso; the smaller...
figure carries a short stick obliquely across his body.

Side B: 2 figures facing r, one full size figure behind the chariot, one smaller figure in front. The larger figure has a squarish, striped hat/hair from which hangs a curl.

S.D.E.:
a: vertical quirk (FM 48:7)
e: quirk (FM 48:7).

ATTRIBUTION: same painter/potter made an AK with human figures (MPVP: V.32); note the close similarity both of the design elements (the human figures) and the vase form (shape, 2 bands below frieze).

COMMENT: Differentiation of the two sides with additional elements on one side: 3 independent figures, one with stick [see #A.2].

DATE: LH IIIB1.

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*171 Cyprus [not ill.].
Rochester Memorial Art Gallery 51.203.
Context: unknown.

Restored from fragments. Pinkish-buff, brown to dark brown.
Ht. 0.456; D.rim 0.31; D.base 0.15.
Form: FS 55.

Rim: p. strokes; circle with inner edge fringed by joined semicircles where the rim joins each handle (like the motif behind the silhouette figure, but without the stem).

Handle: flat, 2 vertical bands; semicircular loop to neck.
Bands: 3 below frieze.
Base: raised.

Chariot facing r.
BOX/WING: rounded, d.o., spotted fill; perched above wheel. Wheel: single cross with solid disc centre.
TRACTION: type 3; pole stay comprises 2 horizontal dotted lines from which hang 4 elongated triangles, whose wavy lines reach down to the ground line. A row of triangular arcades curves up from the front of the chariot box to high on the horses' neck; from each arcade a dotted line extends down to the ground line, crossing the horses' body.
CONTROL: 4 reins held in pairs.
HORSE: large circular ringed and dotted eyes, thin, curving muzzles, 2 ears, no mane. Elongated body, 4 front legs, 2 back legs, the rear one in outline, 2 tails.

Ground-line: team's legs and tails overlap upper band.
CHARIOTEERS: 2, d.o., spotted robes. Features: black head and neck with reserved, staring eye, beaky nose. Driver has black arms and hands.

INDEPENDENT SILHOUETTE FIGURE: facing r. in front of chariot on both sides. Features: as charioteers. Back leg bent back with heel raised of the ground in walking stance. Gesture: hooked hands, one arm curving forward from chest, the other holds up a short stick behind.

S.D.E.

a: circle, fringed by joined semicircles on inner edge, on a wavy stem (cf. FM 27: elaborate); palm (FM 15: IIIB types).
b: palm, as a.
c: trefoil (FM 29:23).
e: between the two parts of the arcade, row of N-motifs; chain of circles (FM 48.15).

DATE: LH IIIB1.

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*172 Cyprus [not ill.].
Bonn, Akademisches Kunst Museum, no.777.
Context: unknown; acquired in Athens.

Restored from fragments, one handle, half of the other, all of base missing.
Pinkish-buff, brown to black.
Ht. (rest) 0.384; D.rim 0.26.
Form: FS 55.
Rim: not known.
Handle: flat, 2 vertical bands flanking a vertical chain of circles (FM 48:15); no handle loop.
Bands: 3 below frieze; 3 (rather than the usual one) above painted foot.
Base: reconstructed.

Chariot facing r.
BOX/WING: rounded, d.o., spotted fill; perched above wheel. Wheel: single spokes widening at junction with felloe.
TRACTION: type 3; simplified remains of pole stay formed by upper edge of chariot box continuing to join the rump, and a reserved triangle incorporated into front of chariot box; triangular arcades hang from lowest rein.
CONTROL: 3 reins attached to semicircular terret high on neck.
HORSE: large round, ringed and dotted eyes, below which long, narrow muzzles drawn in outline; 5 tufts, each a line crowned by a disc. Very elongated, thin body arching up to rump, 2 front and back legs, the latter drawn as thin lines, as are the 2 tails.
Ground line: legs and tails overlap two bands.
CHARIOTEERS: 2 small figures in s.o., spotted or plain robes. Features: rounded outline head with a large
dotted eye and beaky nose, thick neck. Gesture: one arm forward holding up a stick crowned by a disc, the other (where shown) bent back. On one side only, the 2 main figures are linked by a lozenge with spotted fill, its upper point crowned by a disc, giving the impression of a third stylised figure. S.D.E.:
a: palm (FM 15: IIIB types).
b: bird derivative [see #5.6].
c: dotted circles (FM 27:17-18)
e: quirks (FM 48:8).
f: as e.

COMMENT: The charioteers are unusual, esp. their gesture. Cf. Minoan Episkopi larnax for figures holding up similar "lollipops" i.e. disc on a stem (Kanta, 1980: 150, pls. 63, 65). Note that the same element forms the horses' mane, a good example of how a design detail can take its function from its context.

DATE: LH IIIB1.

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*173 Enkomi, Tomb 68 [FIG.176].
CM 1646
Bibl.: CVA Cyprus I: pl.8.1-4; MPVP: V.5.
Context:

Complete. Pinkish-buff, orange to brown.
Ht. 0.43; D.rim 0.30.
FS 55.
Rim: groups of transverse strokes; lozenge (FM 73f) opposite handle attachment.
Handles: flat, 2 vertical bands; semicircular loop to neck.
Bands: 3 bands below frieze, 1 on lower body. Painted signs on body: see below. Base: raised.

Chariot facing r.
BOX/WING: rounded box, d.o. with front edge hatched, fill of 4 solid circles edged by dots; box floor shown behind wheel. Wheel: single spokes.
TRACTION: type 3; L-shaped arcades attached to hooked terret/yoke element on neck.
CONTROL: 4 reins held in pairs.
HORSE: round eyes, curving muzzles, 2 ears, 3 tufts. Elongated body arching to rump, 2 front and back legs, the rear one in outline; 1 tail.
Ground-line: legs of team and independent figure overlap bands.
CHARIOTEERS: 2, d.o., plain robes, appearing just above the chariot. Features: eye drawn as a dot within a semicircle, pointed nose, receding mouth/chin, hair shown as a series of joined semicircles.
INDEPENDENT FIGURE IN TUNIC: facing r. in front of chariot. Features: as charioteers. Costume: d.o. knee-length robe or tunic, filled with horizontal wavy lines with a hatched lower border. Gesture: one arm
curving forward, the other bent back and up from the elbow, holding a stick vertically.
S.D.E.:
a: stemmed trefoil (classified by Furumark as FM 18:31).
c: trefoil (cf. FM 29:23).
b: antithetic, stemmed spirals (related to FM 12:44-45).
e: N-pattern (FM 60).

SIGNS: 4 signs painted on body below triple bands in matt purplish paint (CVA Cyprus I: fig.3-13).

DATE: LH IIIB1.

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*174 Enkomi, Tomb 3.272 [FIG.177].
Medelhavsmuseet, Stockholm.
Bibl.: SCE I: 484; Karageorghis, 1960: 135-53; MPVP: V.11; Rystedt, 1985: 105, fig.3.

Context:

Restored from fragments, half of one side missing.
Greyish buff, faded dark brown.
Ht. 0.465-455; D.rim 0.265; D.base 0.128; W.handles 0.06 and 0.064.
FS 55 (classified as FS 54:16 by Furumark).
Rim: groups of transverse strokes, framed with curving stroke.
Handle: flat (one slightly ridged), 2 vertical bands, semicircular loop to neck.
Bands: 3 bands below frieze; 2 bands above foot.
Base: flat; incised sign (see below).

Chariot facing r.
BOX/WING: rounded box, d.o., single row of spots following outline of chariot; box perched over traction elements, wing over wheel. Wheel: single cross with solid lozenge centre, widening at felloe.
TRACTION: type 3; loop shaped pole brace below box, and row of small triangular arcades from box to team's neck.
CONTROL: 4 reins held in pairs.
HORSE: round eyes, 2 ears, line mane together with 2 tufts. Elongated body, 2 front legs, 2 rear legs, both in outline; 2 tails.
Ground-line: slight overlap of design elements with upper band.
CHARIOOTEERS: 2, solid painted robe with outer line.
Features: circular eye, line for nose, smooth cap of hair ending in a peak, long neck. Driver has arms and hands.
INDEPENDENT SILHOUETTE FIGURES:
Side A: pair of confronted figures in front of chariot, pres. heads and torso of one figure only. Features: as charioteers. Gesture: both arms curving forward at chest level.
Side B: 2 facing r. in front of chariot. Curving buttocks, long thin legs. Gesture: 1 arm in front, 1 behind, both bent at elbow. 


SIGN: incised sign on the base. 

DATE: LH IIIB1. 

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*175 Ras Shamra [FIG.178]. 
Bibl.: Ugaritica VII: 296-7, fig.34.6. 
Context: unspecified. 

Fragment pres. turn for neck and part of frieze. Buff, red paint. 

Chariot facing r. 
CONTROL: traces of 2 reins. 
HORSE: part of head and neck, pres. large round eye, 2 ears, line mane together with 2 long stemmed tufts. 

ATTRIBUTION: possibly by the painter of *175 above on the criteria of the unusual combination of line mane and tufts. 

DATE: LH IIIB1. 

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*176 Suda Bay area, Crete [FIG.179a-b]. 
Bibl: Matz, 1951: 82-8; MPVP: V.19. 
Context: destroyed tomb; contents as pres. LM/LH IIIB. 

Loop handled krater. 
Restored from fragments, foot restored in plaster. 
Buff, orange to brown, worn in places. 
Ht. 0.32; D.rim 0.245. 

Chariot facing right. 
BOX/WING: square box, d.o., crossed lozenge fill; perched above wheel. the front edge of the box formed by the horses' tail. Wheel: single spokes, widening at felloe. 
TRACTION: type 3; row of arcades with central wavy line hang below the reins. CONTROL: 4 reins held in 2 pairs. 
HORSE: round eyes, ears overlap neck band, 4 tufts. 
Elongated body arching towards rump, 2 front and back legs, rear leg in outline, 1 tail with oval loop end. 
Ground-line: design elements overlap upper band. 
CHARIOTEERS: 4 (A), 3 (B), solid painted robe with outline. Features: rounded eye set against forehead, long, dripping nose, below which a double C forms mouth and jutting chin. Smooth, short cap of hair from which hang 3 or 2 wavy lines joining to form a curl. All except the last passenger on side A have arms and claw
INDEPENDENT SILHOUETTE FIGURES: Side A: 3 figures facing r., 2 behind and 1 in front of chariot. Features: as charioteers, though the figure in front of chariot has no hair. Short, arching torsos shown with angular elbows held well back; buttocks and calves strongly emphasised, the calf of the front leg in each case shown back to front. Gesture: both arms bent forward at chest level from the elbow. The figure in front of the chariot differs in that a spear, its leaf shaped blade pointing back towards the horse, crosses his body at chest level.

Side B: 4 figures facing r, 3 behind and 1 in front of chariot. As Side A except that the hair/headgear is cross-hatched and the curl is formed by 3 wavy lines [FIG. 178b]. Only the lower legs of the figure in front of the chariot is pres.

S.D.E.: b: large semicircle with hatched d.o., cross-hatched loop at arch and zigzag curving up from base.
c: jug lozenge (FM 73f).
e: quirk (FM 48:7).
f: stemmed spirals joined by chevrons (cf. FM 12:45).

COMMENT: For discussion of vases within scenes see #7.4.

Intra-vase variation in the design structure, i.e. number of charioteers and independent figures [#6.2].


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*177 Klavdia [not ill.].

BMC 398.

Bibl.: CVA BM I: pl. 7:8; MPVP: V. 22.

Context: unspecified tomb.

Loop handled krater, restored from fragments, parts of body missing. Buff, orange.

Ht. 0.266; D. rim 0.315.

Chariot facing right.

BOX/WING: rounded box, d.o. of which front edge is hatched, two rows of spots following curve of box and wing; perched above wheel. Wheel: double cross.

TRACTION: type 3; hatched band from front of chariot to rump, from which hang a pair of wavy lines; row of d.o. arcades with hooked points hang from lower rein.

CONTROL: 4 reins attached to a d.o. semicircular terret on neck.

HORSE: (FM 2:4) one muzzle only, 2 round eyes one above the other, 2 ears, 2 tufts. 2 front legs, back legs drawn in outline with dots around the inner edge of the rear one; 1 tail.

Ground-line: team's legs overlap bands. CHARIOTEERS: 2, s.o. cross-hatched robes. features: circular dotted
eye, sloping forehead, receding mouth/chin, short smooth cap of hair.

S.D.E.:

a: voluted flower (FM 18:20);
  double whorl shell (FM 23: IIIB types);
  vertical double row of zigzags.

e: trefoil (FM 29:24).

f: trefoil (FM 29:19).

COMMENT: *176 and *177 are among the best preserved of the loop handled kraters with chariot scenes which are stylistically close to those on the AKs (i.e. not the later LH IIIIB-C series). This clearly illustrating the overlap in production of the two vase shapes: the AK going out of use and the loop handled krater becoming the main vehicle for pictorial themes within LH IIIB1.

DATE: LH IIIB1.

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*178 Minet el Beida, Tomb D (1929) [not ill.].
Louvre AO 11724.
Bibl.: Ugaritica II: 57.29; 124.8,10; MPVP: V.21.

Restored from fragments, large parts missing. Buff, brown paint, very worn and pres. as a shadow in places. Ht. 0.465; D.rim: 0.30; D.base 0.14; W.handle: 0.055. FS 55.

Rim: short and poorly defined; transverse stroke groups.

Handle: flat, 2 vertical bands frame row of diagonal bands; smicircular loop to neck.

Bands: 3 below frieze, 1 on lower body, and 2 above foot.

Base: raised.

Chariot facing r.

BOX/WING: no dual chariot; instead the charioteers are perched on a double band which extends back from the horses' rump. Wheel: single cross, forked at felloe.

TRACTION: type 3 (though disintegrated); hanging from the double band are 2 roughly triangular elements ending in a spiral, and filled with horizontal wavy lines. They are positioned one either side of the wheel. From the horses' neck extends an elaborate arcade composed of chevron triangles framed by arcs (FM 27.21).

HORSE: round eyes, 2 ears, 3 outline tufts. Elongated body, 2 front and back legs.

Ground-line: team's legs overlap bands.

CHARIOTEERS: part of driver (A) and passenger (B) pres. in d.o. robe with spotted fill.

INDEPENDENT FIGURE: facing l. in fornt of horse on each side. Features: black head with reserved eye, flat head, beaky nose and chin, long thin neck.

Costume: knee length s.o. tunic with d.o. border, and
filled with short wavy lines and C-pattern. Gesture: black arms with splayed fingers stretched out in front at chest level; one hand touches the muzzle of the horse as if patting it. Silhouette legs and feet.

S.D.E.: b: (A) bird with raised wing, drawn in outline with wavy line fill; (B) traces of animal with turned back head. c: solid lozenge with spiral at each corner between driver and horse (FM 73). f: (A) vertical rows of chain quirks from belly to upper band (cf. FM 48.15).

COMMENT: The absence of the dual chariot and the disintegrated relationship of the design elements should be stylistically late in the series [cf. *178 below], as should the AK form: note the poorly defined rim and less articulated transition from neck to shoulder (cf. MPVP: V.114).


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*179 Mycenae [FIG.180].
NM 7387.
Bibl.: Wace, 1953: 6; MPVP: IX.2.
Context: LH IIIB1 Poros Wall [#2.2].

Large portion of upper body with turn for neck and stump of one handle.

Handle: flat, 3 vertical bands; no loop around handle.

Chariot facing 1. (on better pres. Side A) and facing r. on reverse.
BOX/WING: shown only as a horizontal line which extends from the horses' rumps and over their tails. Wheel: single cross, disc nave with central dot, widening at felloe.
TRACTION: type 3; wavy triangular arcades hang from lower rein.
CONTROL: 2 reins linked by groups of transverse strokes.
HORSE: round eyes, 2 ears, 5 tufts. Elongated body, 2 front and back legs, 1 tail. Added white: line around body and legs, hatched head and neck, row of dotted circles on body.
CHARIOTEERS: (A: largely pres.): 2, silhouette bodies striped with white wavy lines. Features: semicircular eye set against profile, beaky nose, short cap of hair, long triangular neck.
(B: small portion pres.): 2 figures in overlapping, s.o. spotted robes. Features: as A, but with long and thin painted necks.
INDEPENDENT SILHOUETTE FIGURE: (pres. on A only) facing 1. in front of chariot. Features: as charioteers, with a long, striped neck. Arching torso. Gesture: one arm in front, the other behind and holding a stick
vertically, both arms bent up from the elbow. Added white stripes extending over torso, arm with stick, and the legs.

COMMENT: This seems to be a stylistically late version of the chariot scene on the AK. Several features typical of the AK series of chariot scenes have been replaced by elements better known from the later LH IIIB-C material; these include the simplified chariot box (instead of the spotted dual chariot), the silhouette charioteers (instead of robed figures), the widespread use of white paint in rows of dots or wavy stripes on all parts of the design, and the lack of subsidiary design elements.

DATE: LH IIIB1.

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*180 Berbati [not ill.]
Bibl.: Åkerström, 1987: no. 4 with pl. 2.3. MPVP: VIII.3
Context: "Dump" [see #2.2].

Fragment pres. part of neck and frieze. Buff, black. Chariot facing r. pres. part of horses' head with reins. CONTROL: 4 reins attached to a large, semicircular terret on neck. HORSE: part of 2 round eyes, 2 ears, 3 outline tufts. S.D.E.: e: V-pattern (FM 59); lozenge (FM 73a).

COMMENT: Note that outline tufts are uncommon (contra Åkerström's use of them in his reconstructions).

DATE: LH IIIB1; criteria of terret form and lozenges.

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*181 Berbati [not ill.]
Bibl.: Åkerström, 1987: no. 6, pl. 2.5.
Context: "Dump" [see #2.2].

Body sherd. Buff, brown. Chariot facing r. pres. part of horses' head and muzzles. HORSE: long neck with beginning of 1 tuft; parts of 2 long, thin muzzles with 3 reins.

DATE: LH IIIB1.
Long neck and thin muzzles more typical of IIIB.

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*182 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.7, pl.3.1.
Context: "Dump" [see #2.2].

Body sherd pres. edge of neck band. Pink, black paint.

Chariot facing r.
HORSE: part of head and neck pres. Round eyes, part of mane with 4 line tufts, thin curving neck and muzzles.

COMMENT: form of mane similar to *154 and perhaps from the same workshop.

DATE: LH IIIB1.
Criteria: thin muzzles and neck, line tuft mane.

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183 Berbati [not ill.]
Context: "Dump" [see #2.2].

Small body sherd.
Chariot facing r. pres. small section of reins and traction, and tip of horses' tuft.
CONTROL: 4 reins merging into a solid band.
TRACTION: Type 3; 2 wavy arcades hanging from lowest rein.

DATE: LH IIIB1.
Criterion of traction type.

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*184 Berbati [not ill.]
Bibl.: Åkerström, 1987: no.18, pl.5:3.
Context: "Courtyard" [see #2.2].

Fragment pres. small part of frieze and neck. Buff, brown.
Chariot facing r. pres. part of driver with reins.
CONTROL: edge of 2 reins held in hand.
CHARIOTEER: forehead and dotted eye only.
S.D.E.:
e: row of irregular lozenges.

DATE: LH IIIB1.
Criterion of lozenges.

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*185 Berbati [not ill.]
Bibl.: Åkerström, 1987: no.21, pl.6:1.
Context: probably "Courtyard" [see #2.2].
Fragment pres. part of frieze immediately in front of handle loop, and turn for neck. Yellow, red-brown to black.

Chariot facing r. pres. heads of charioteers.
CHARIOOTEERS: 2, robes drawn in thick outline, no visible fill. Features: head drawn in simple outline, eye shown as a dot within a half moon. Gesture: passenger raises his hand up and forward.

DATE: LH IIIB1.
Criterion of simplified facial features (contra Åkerström, 1987: 47 "stylistically early").

*186 Berbati [not ill].
Context: "Dump" [see #2.2].

Fragment of frieze immediately in front of handle loop. Buff, black.

Chariot facing r. pres. edge of passenger and chariot wing.
BOX/WING: wing only in d.o. with cross fill.
CHARIOOTEER: passenger only in s.o. robe with traces of cross fill.

DATE: LH IIIB1.
Criterion of cross fill.

*187 Berbati [not ill].
Bibl.: Åkerström, 1987: no.29, pl.7:4.
Context: "Dump" [see #2.2].

Small body sherd. Green (overfired).
Chariot facing r. pres. part of driver and traction.
BOX/WING: vertical line forms front edge of box, and a hatched band extends forward towards brace.
CONTROL: traces of hands holding reins.
traction: type 3; L-shaped brace edged with short strokes behind rump, part of 2 triangular arcades hanging from reins.
CHARIOOTEER: driver only, s.o. spotted robe. Driver inaccurately perched over the hatched band in front of the chariot box.

DATE: LH IIIB1; criteria of traction type and disintegrated relationship of chariot and occupants. (contra LH IIIA2 date given by Åkerström (1987: 49); His
criteria are the "substantial brace" and the spotted robes. The latter occur in all phases, and the pole brace is well paralleled by other LH IIIB examples [e.g. *146-147].

*********

*188 Berbati [not ill.]
Bibl.: Åkerström, 1987: no.30, pl.8:1.
Context: "Dump" [see #2.2].

Small body sherd. Buff, brown.
Chariot facing r. pres. rump of horse and part of traction.
TRACTION: type 3; lower part of 2 arcades.
DATE: probably LH IIIB1; criterion of traction type.

*********

*189 Berbati [not ill.]
Bibl.: Åkerström, 1987: no.32, pl.8:3.
Context: "Dump" [see #2.2].

Small body sherd. Pink, red.
Chariot facing r. pres. back of horse near rump and part of traction.
TRACTION: type 3; triangular arcades hanging from the lowest of 4 reins.
DATE: probably LH IIIB; criterion of traction type.

*********

*190 Berbati [not ill.]
Bibl.: Åkerström, 1987: no.37, pl.9:1.
Context: "Dump" [see #2.2].

Body sherd. Buff, red; interior well smoothed.
Chariot facing r. pres. part of chariot and horses' tail.
BOX/WING: not pres., but a hatched band extends above wheel towards rump; comparison with other examples indicates this is part of a disintegrated chariot (e.g. *204). Wheel: edge of wheel with horizontal spoke.
TRACTION: triangular arcade between wheel and tail.
CHARIOTERS: 2 pres., part of a figure in d.o. spotted robe perched on hatched band, and the edge of a d.o. robe of a second figure in front.
DATE: LH IIIB1.
Criterion of disintegrated structure of chariot and occupants; cf. *146-147.

**********
*191 Berbati [not ill.]
Context: Southern border.

Body sherd. Buff, brown.
Chariot facing r. pres. part of wheel.
WHEEL: rear edge of wheel pres. horizontal spoke widening at felloe.
S.D.E.:
b: palm (FM 15).
h: lozenge (FM 73b).

Date: LH IIIB.
Criterion of lozenge. Note too the similar use of palm under handle on *147.

********

*192 Berbati [not ill.]
Bibl.: Åkerström, 1987: no.48, pl.12:3.
Context: Test pit III (1936).

WHEEL: single cross.
S.D.E.:
h: lozenge (FM 73j).

DATE: LH IIIB1.
Criterion of lozenge and perhaps traction type.

********

*193 Berbati [not ill.]
Context: "Courtyard" [see #2.2].

Body sherd. Pink, red.
Chariot facing r. pres. horses' front legs with hooves and fetlocks.
S.D.E.:
f: stemmed lozenge (cf. FM 73.8).

DATE: LH IIIB1.
Criterion of lozenge.

********

*194 Berbati [not ill.]
Context: "Dump" [see #2.2].

Buff, red-brown.
Chariot facing r. pres. part of box and brace or tails.
BOX/WING: cross fill, upper part of square box with hatched band at top, fringed front edge; beginning of wing behind.
CHARIOTEER: trace of front edge of driver's robe above hatched band.

DATE: LH IIIB1.
Criterion of cross fill.

*195 Berbati [not ill.].
Context: "Dump" [see #2.2].

Body sherd; ?AK or "closed vessel" (Åkerström, 1987: 29). Buff, black.

Chariot facing r. pres. parts of box, wheel and traction system.
BOX/WING: s.o., square box with cross fill; preched over wheel. Wheel: single cross with disc nave and spokes widening at felloe.
TRACTION: part of a triangular brace with wavy edging and spotted fill.
S.D.E.: h: lozenge (FM 73b).

DATE: LH IIIB1.
Criteria of cross fill box and lozenge.

*196 Berbati [not ill.]
Bibl.: Åkerström, 1987: no.70, pl.15:7.
Context: "Dump" [see #2.2].


Chariot facing r. pres. part of chariot and occupants.
BOX/WING: 3 sections, s.o., cross fill.
CHARIOTEERS: part of 2 pres. in s.o. spotted robes.

Date: LH IIIB1.
Criterion of cross fill of chariot.

*197 Berbati [not ill.]
Context: Southern Baulk.

Body sherd of krater. Buff, black.

Chariot facing r. pres. horses' back arching to rump
and edge of traction.
TRACTION: probably type 3; ends of triangular arcades pres. (as reconstructed by Åkerström).
S.D.E.:
e: lozenge (FM 73j).

DATE: LH IIIB1.
Criteria of lozenges and probable type 3 traction.

********

*198 Berbati [not ill.]
Context: "Dump" [see #2.2].

Small body sherd; ? shape, "possibly bowl" (Åkerström, 1987: 33).

Chariot facing r. pres. part of box and occupant.
BOX/WING: part of box/wing with cross fill.
CHARIOTEERS: back part only pres., in s.o. spotted robe.

DATE: LH IIIB1.
Criterion of cross fill chariot.

********

*199 Enkomi, unspecified tomb [FIG.181].
Brussels A 1256.
Bibl.: CVA Belgique 3, pl.3.10.
Context: unknown.

Small body sherd. Pink-buff, red-brown.
Chariot facing r.
TRACTION: type 3, arcades, solid painted, extend from driver.
HORSE: rump/tail overlaps with charioteer/box.
CHARIOTEER: part of driver only in s.o., spotted robe.
S.D.E.:
c: reversed Z-pattern (between arcades).
DATE: LH IIIB1.
Criterion of traction form.

********

*200 Gezer
Bibl.: Macalister, 1912: pl.CLI.8; MPVP: V.25.7 (not illustrated).
Context: settlement.

Body sherd.
Chariot facing r.
TRACTION: type 3, band with row of spots between horse and chariot (details at far l. of sherd unclear); part of arcades above.
HORSE: part of rump and tail.

DATE: LH IIIB1.
Criterion of traction form.

*********

*201 Kourion [FIG.182].
Excaervation no. B1070.
Bibl.: Benson, 1961a: 53-54, pl.29: fig.8; MPVP:
V.25.1.
Context: Area C, unstratified.

Fragment pres. turn for neck and shoulder.
Chariot facing r., pres. edge of horses' neck and one
tuft; 4 reins over back, attached to a large spiral
terret.

DATE: LH IIIB.
Criterion of spiral terret.

*********

*202 Lachish [FIG.183]
Context: burned debris of Locus 1031, which included
pottery of LH IIIA-B date. According to Hankey this
material may have been in use in the temple of Level VI
at the time of its destruction after the accession of
Ramesses III.

9 groups of fragments from the the rim, neck, handle,
frieze and lower bdy and foot. Grey to buff, red to
brown paint; sherds burnt to varying degrees.
Ht. reconstructed c. 0.45; D.rim 0.248; D.base c.0.14;
W.handle 0.05.
FS 55; profile incomplete but reconstructed by Hankey.
Rim: groups of transverse strokes.
Handle: flat; 2 vertical bands with wavy band down
centre.
Bands: 3 below frieze pres.
Base: underside not pres.

Chariot facing r.
WHEEL: part of large wheel with circle within disc nave
and soles widening at felloe.
TRACTION/CONTROL: curving edge of terret or traction
element on neck. 3 reins framed by row of dots extend
from chest to muzzle.
HORSE: part of chest.
INDEPENDENT FIGURES: parts of three figures facing r.
a) part of torso and legs; torso shown in d.o. spotted
garment, the lower body and legs in silhouette.
Posture: the front leg bent up and forward from the
knee, as if stepping up, the back leg straight.
b) lower part of two figures; to r. a d.o. spotted
tunic to just above the knee, below which silhouette leg and foot; to 1. the edge of a longer robe and a foot.

S.D.E.:

a: vertical chain of circles (FM 48.15 but vertical).
b/c: part of a spiral motif of uncertain type (cf. FM 49 or 52).
h: dotted circle (FM 27.24).

COMMENT: These fragmentary pieces are imaginatively reconstructed by V. and H. Hankey (1985: fig.2). Note, however, that there is no evidence for the relative position of the sherds within the scene, especially the figure jumping up to the chariot over the spiral. The figure with spotted torso and silhouette lower body is paralleled by independent figures on *49 and *50.

Excavations by Ussishkin have produced fragments of other chariot kraters of LH IIA2-B date, as yet unpublished (Hankey, 1985: 88; Hankey, pres. comm.).

DATE: probably LH IIIB1.

The tall neck and flat handles suggest FS 55, although the pres. details of the design could be LH IIIA2 late or IIIB1.

********

*203 Ras Shamra [FIG.184].

no. 9064 (1937).

Bibl.: Ugaritica II: figs. 62.24, 90.1; MPVP: V.20.

Context: unspecified.

Fragment pres. part of neck and upper frieze. Buff, red paint.

Chariot facing r.

BOX/WING: d.o., within which two rectangles of dots with a circle at the centre; front edge of box hatched. Box positioned on top of traction elements, wing over wheel, only the edge of which is pres.

TRACTION: type 3; lines extend down below box in roughly triangular shape with inner wavy line. From front of box an arcade.

CONTROL: 4 reins held in pairs.

HORSE: rump and tail only pres.

CHARIOTEERS: 3, the driver in double outline with spotted fill, the other two with solid painted robe within a double outline. Sketchy features with circular eye. Driver has hands.

S.D.E.:

c: dotted circles (FM 27:17).

DATE: LH IIIB1.

Criteria of traction, 3 charioteers.

********
**204 Ras Shamra [FIG.185].
Excavation no. 80-5216.
Bibl.: *Syria*, 1982: 189, fig. 12h.
Context: settlement, Chantier Sud, an area with many luxury and cultic objects.

Body sherds, 3 non-joining fragments.

Chariot facing r.
BOX/WING: d.o., box filled with reversed e-motifs, wing spotted; elongated wing perched above wheel, the box over the tail and set against the rump. Wheel: double spokes.
TRACTION: type 3; long triangular arcades hang from bottom rein.
CONTROL: 4 reins held in two pairs.
HORSE: pres. body and upper legs. Elongated body with square turn for neck, reserved rear leg.
CHARIOTEERS: 3, heads not pres. driver in d.o. robe with vertical strokes and spots, has arms/hands; 2 passengers in d.o. spotted robes.
INDEPENDENT SILHOUETTE FIGURE: facing r. on a non-joining sherd, relationship to chariot unknown. Pres. lower body with buttocks and long legs.
a-c (location uncertain): curving row of strokes, possibly radiating bars of a floral motif.
h: lozenge (FM 73h).

DATE: LH IIB1.
Criteria of traction, 3 charioteers, lozenge.

********

**205 Ras Shamra [not ill.].
Bibl.: *Ugaritica VII*: 296, fig. 34.11.
Context: unspecified.

Fragment pres. part of neck and shoulder. Buff, brown-black paint.

Chariot facing r.
BOX/WING: rounded, s.o., plain.
TRACTION: type 3; hatched band running along lower edge of box to rump may be intended as part of the traction system; arcades from front of box.
CONTROL: no reins: only arcades and row of quirks above.
HORSE: rump, reserved triangle on rear leg, 1 tail (as pres.).
CHARIOTEERS: driver, and edge of one passenger pres., very sketchily drawn with the outline of the head and robe, but no inner details.

DATE: LH IIIB1.

*******
*206 Ras Shamra [not ill.].
Bibl.: Ugaritica VII: 296-7, fig.34.5.
Context: not specified.

Body sherd, ?AK. Buff, black shading to brown.

Chariot facing r.
Control: 2 reins.
Horse: head and neck pres. Round eyes. 4 tall tfuts, bulbous muzzles.
Independent silhouette figure: facing r. immediately in front of horse. Features: reserved eye in a solid black head, with slight projection for chin. Short pigtail at back of head. Arching torso, short projection hangs down from buttock. Gesture: one arm forward, one back, both bent upwards from the elbow. The rear arm has splaying fingers and touches the horses' reins, as if leading it.

DATE: LH IIIB1.
Criterion of style of silhouette figure.

*207 Tell abu Hawam [FIG.186].
Context: settlement; D2, Stratum IV, house at 45.

Chariot facing r.
HORSE: part of chest and front legs, split at knee.
S.D.E.:
(e): part of confronted spiral (cf. FM 12.44).
(g): Body sherd pres. 3 bands below frieze. Fabric and paint as f, according to Balensi.
HORSE: part of rear leg with carefully drawn hoof, end of tails behind.

DATE: LH IIIB.
Hamilton, followed by Balensi, suggested that (f) and (g) might be from one vase. The spiral motif under the belly dates (f) to LH IIIB.

*208 Tell abu Hawam [not ill.].
Context: settlement; E3, E. corner Stratum 3 level.

Fragment pres. beginning of neck band and part of frieze. Buff, black paint.

Chariot facing r.
Charioteers: 3, partly pres. in do. spotted robes.
Features: (=FM lab "chicken-like"); round eye with beak for nose set at front of head, do. neck.

DATE: LH IIIB.
Note that MPVP: 202 date the piece to LH IIIB, but relate the very stylised heads with material from Tiryns, which they date to LH IIIC.

********

*209 Tell Kazel [FIG.187].
Bibl.: Hankey, 1967: 115-6, fig.3.
Context: settlement.

Body sherd.

Chariot facing r. pres. rump of horses' with traction.
TRACTION: type 3; outline arcades below reins.
S.D.E.:
e: lozenge (FM 73j).

DATE: LH IIIB1.
Criteria of traction type and lozenges.

********

*210 Tell el Muqdam, Egypt [not ill.].
Swiss private collection.
Context: "with faience fragments bearing cartouches of Ramesses II, Mernaptah" according to MPVP: 201.

Fragment pres. part of neck and frieze immediately in front of handle area.

Chariot facing r.
BOX/WING: arching box in triple outline also serves as the body of the driver; rounded, do. wing with row of spots around inner edge. Wheel: upper edge of wheel with double vertical spoke. Relationship of chariot and wheel is disintegrated with only the edge of the wing touching the wheel, and the traction elements below the driver.
TRACTION: below box/body of driver a triple band from which hangs a triangular element. The space in front of the chariot seems to be occupied by the horse.
CONTROL: 4 reins held in pairs.
HORSE: rump of horse set against front of box and traction elements.
CHARIOTEERS: 2, driver's body ambiguously combined with box (see above), otherwise only head and hands shown; head and neck of passenger shown above wing. Features: simple profile with pointed nose and flat head, round eye set in centre of head. Passenger wears hatched headgear with single tress hanging down behind.
S.D.E.:  
c: small shell (FM 25).  
e: beginning of curving lines above and below reins,  
?running quirk.  

DATE: LH IIIB1.  
Criteria of facial features, disintegrated nature of  
chariot [cf. *178-179].  

********
*211 Ashdod [not ill.].
Bibl.: Dothan, 1967: 102, fig.24.7, pl.XIV.8; MPVP: V.29.5.
Context: Stratum 1, locus 520; date range not specified.

Body sherd.
Chariot facing 1.
BOX/WING: part of box/wing, d.o., spotted fill; chariot hovers above wheel. Wheel: small portion of a large wheel, of which 3 spokes are preserved within one quadrant, indicating that the wheel had more than the 4 spokes normal for the Aegean.
INDEPENDENT FIGURE: ?two silhouette feet and legs at upper left above wheel.

DATE: LH IIIA2-B.

*******

*212 Atchana-Alalakh [not ill.].
Ashmolean museum, Oxford 1939.382 and Institute of Archaeology, London ACA 7-F50/7397. Excavation no. ATP/38/208c. (Two joining sherds, published together but subsequently separated and deposited in two different collections).
Bibl.: Woolley, 1955: pl.cxxix lower right; MPVP: IV.76; Crouwel and Morris, 1985: 87-8, no.3.
Context: settlement, location not specified.

Bands: 3 below frieze.
Chariot facing r.
BOX/WING: front edge of wheel with single cross.
HORSE: 4 rear legs and tails of horse.
Ground-line: team's legs and tails overlap with upper two body bands.

DATE: LH IIIA2 late-B.

*******

*213 Atchana-Alalakh [not ill.].
BM (Western Asiatic) 136564.
Bibl.: Crouwel and Morris, 1985: 89, no.8.
Context: settlement, unspecified location.

Body sherd. Buff, black-brown.
Chariot, probably facing r.
Precise identification uncertain: perhaps part of a figure in a spotted robe above the front edge of box or intersection of box/wing.

DATE: LH IIIA2-B.

*******
*214 Berbati [not ill.].
Context: "Dump" [see #2.2]

2 joining body sherds; ?AK or "possibly a jug" (Bibl.: Åkerström, 1987: 26). Buff, brown.

Chariot facing r. pres. head of horse.
HORSE: 2 round eyes, no ears, 3 outline tufts; 3 reins to muzzles.

Date: LH IIIA2 late-B.

********

*215 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.8, pl.3:2.
Context: "Dump" [see #2.2].

Fragment pres. small part of frieze and neck. Buff, black.

Chariot facing r. pres. head of horse.
HORSE: pres. 1 round eye, and 3 tufts.

DATE: LH IIIA2-B.

********

*216 Berbati [not ill.].
Context: "Dump" [see #2.2].

Body sherd; ?AK or open krater (Åkerström, 1987: 26). Buff, red.

Chariot facing r. pres. neck of horse and part of traction.
TRACTION: prob. type 3; 2 wavy arcades.
CONTROL: 2 reins.
HORSE: thin, curving neck.

DATE: LH IIIA2 late-IIIA2.

********

*217 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.11, pl.4:1.
Context: "Dump" [see #2.2].

Body sherd. Buff, black, crackled.
Chariot facing r. pres. forepart of horse with traces of reins.
CONTROL: traces of reins attached to a terret on neck.
HORSE: curving chest and front leg pres.
DATE: LH IIIA2-B.

********

*218 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.12, pl.4:2.
Context: East of storage room L.

Body sherd. Grey, black.
Chariot facing r. pres. forepart of horse.
HORSE: lower part of chest and beginning of front leg.
S.D.E.:
a: vertical quirks (FM 48).
?motif in front of horse: pair of vertical lines, perhaps flower stems or edge of a d.o. robe.

DATE: LH IIIA2 late-B.

********

*219 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.13, pl.4:3.
Context: "Dump" [see #2.2].

Body sherd. Buff, red.
Chariot facing r. pres. chest and front leg of horse; the latter overlaps with the body bands, one of which is pres. 2 reins to muzzles.

DATE: LH IIIA2-B.

********

*220 Berbati [not ill.].
Context: surface find.

Fragment pres. small part of frieze and neck. Buff, brown.

Chariot scene pres. small part of 3 reins.
S.D.E.:
e: zigzag line above (FM 61).

Date: LH IIIA2-B.

********

*221 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.20, pl.5:5.
Context: "Courtyard" [see #2.2].

Fragment pres. small part of frieze and neck. Yellow, red-brown.

Chariot scene pres. arcaded traction (type 3), with
wavy lines above: disintegrated reins.

DATE: LH IIIA2 late-B.
The disintegrated reins suggest the later date.

*******

*222 Berbati [not ill.].
Bibl.: Åkerström, 1987: no. 25, pl. 6:5.
Context: "Dump" [see #2.2].

Fragment pres. small part of frieze and turn for neck. Buff, brown.

HUMAN FIGURE facing r. (?chariot scene). Outline of robe. Features: circular dotted eye set in middle of head, forehead to nose formed by a single line, a wavy line below for moth/chin. Gesture: part of 2 lines, one diagonal, the other horizontal, extend from the figures chest: perhaps a stick/whip and reins.

DATE: LH IIIA2 late-B.

*******

*223 Berbati [not ill.].
Context: Test Pit II, -1.20 (1936) near the Terrace Wall.

Fragment pres. part of neck and frieze immediately in front of handle area. Yellow, black paint.
Chariot facing r.
BOX/WING: rounded, s.o., spotted box; row of large circles around upper edge of wing.
HORSE: two curving lines, one longer than the other, overlap driver and chariot box. ?Tail [cf. *225 below]. Åkerström, however, suggests they are the ends of the reins (1987: 27).
CHARIOTEERS: 2, s.o. spotted robes. Features: eye is a dot in the centre of the head, pointed nose and long neck, short cap of hair.

DATE: LH IIIA2-B.

*******

*224 Berbati [not ill.].
Bibl.: Åkerström, 1987: no. 27, pl. 7:2.
Context: East of storage room L.

Body sherd. Yellow, red to black.

ROBED FIGURE facing r., prob. the driver of a chariot (as Åkerström's reconstruction).
S.o. robe with horizontal wavy stripes. One arm bent across body, the other from the shoulder, prob. holding reins.

COMMENT: The probability that the figure is holding reins is greatly strengthened by the fact that robed figures are otherwise rarely shown with arms and hands. [cf. *167].

DATE: LH IIIA2 late-B.
More likely IIIB because the robe is not spotted; for a striped robe, cf. *173.

*225 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.28, pl.7:3.
Context: cleaning E. side of Terrace wall.

Body sherd. Buff, brown.
Chariot facing r. pres. part of chariot and charioteer.
BOX/WING: d.o. (top edge only pres.), spotted fill.
CHARIOTEER: 1 robed body pres., d.o., spotted fill.
?HORSE: part of two curving lines overlapping with box may be the horses' tails rather than an irregular wheel.

DATE: LH IIIA2 late-B.

*226 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.31, pl.8:2.
Context: E. of storage room L.

Body sherd; ?AK or open krater. Buff, red.
Chariot facing r. pres. back of horse curving up to shoulder, and edge of traction above.
TRACTION: prob. type 3; ends of wavy arcades touching horses' back.
Ground-line: edge of upper band pres. with horses' belly just above; thus, the legs must have cut through all the bands, cf. *27 (C340).

DATE: LH IIIA2-B.
The traction type points to later in the date range.

*227 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.33, pl.8:4.
Context: "Dump" [see #2.2].

Body sherd. Grey, dull brown.
Chariot facing l. pres. part of horses' body with turn to shoulder.
CONTROL/TRACTION: diagonal line from withers could be part of a terret or end of an arcade.

DATE: LH II IA2-B.

********

*228 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.34, pl.8:5.
Context: "Dump" [see #2.2].

Body sherd. Pink, red.

Chariot facing r. pres. neck of horse with traction. TRACTION: triangular arcade attached to neck.

DATE: LH II IA2 late (b)- IIIB; date range of stylistically comparable traction [e.g. *87, *174].

********

*229 Berbati [not ill.].
Context: "Dump" [see #2.2].


Chariot scene pres. small section of horses' back with traction above. TRACTION: wavy arcade pendant from a double line, perhaps reins.

DATE: LH II IA2 late (b)- IIIB.
Date range of stylistically comparable traction.

********

*230 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.36, pl.8:7.
Context: "Dump" [see #2.2].

Body sherd. Buff, dark brown.

Chariot scene pres. small section of horses' back with traction above. TRACTION: wavy end of arcade touching back.

DATE: probably LH II IA2 late (b)- IIIB.

********

*231 Berbati [not ill.].
Context: "Dump" [see #2.2].

Small body sherd. Buff, brown.

PAGE 496
Chariot facing r. pres. part of traction and horses' rump.
Traction: large leaf shaped pole brace with spotted fill, attached to a double line.

DATE: prob. LH IIIA2 late-B.
No good parallels for the pole brace, but the traction seems to extend over the horses' back, suggestive of this later date.

*********

*232 Berbati [not ill.].
Context: "Dump" [see #2.2].


Chariot facing r. pres. part of wheel, traction and horses' tail.
WHEEL: part of horizontal spoke, widening at felloe.
TRACTION: lower part of pole brace with spotted fill, between wheel and tail.
S.D.E.:
h: dotted circle (FM 27.24).

DATE: LH IIIA2 late-B.

*********

*233 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.43, pl.10:2.
Context: "Dump" [see #2.2].

Body sherd with 3 bands below frieze. Buff, red.

Chariot facing r. pres. horses' rear legs and edge of wheel.
HORSE: 2 back legs, rear set in outline
Ground line: legs overlap 2 bands, wheel cuts through all three.

DATE: LH IIIA2-B.

*********

*234 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.44, pl.10:3.
Context: "Dump" [see #2.2].

Body sherd. Greyish, brown.
Chariot facing r. pres. part of chariot, traction, driver, and edge of horses' tails.
BOX/WING: front edge of box, d.o., spotted fill.

PAGE 497
TRACTION: pole brace curves up as an extension of the box, striped band with plain, triangular pendant element.
CHARIOTEERS: driver only, s.o., spotted robe.

DATE: LH IIIA2-B.
Åkerström dates the piece to LH IIIA2 on criteria of the spotted box and "substantial brace" (1987: 49). Note, however, that while boxes with designs other than spots are characteristic of LH IIIB, the spotted box occurs in all phases. Re the pole brace: earlier examples are not necessarily more "substantial" than later ones.

*235 Berbati [not ill.].
Context: Room D.


Chariot facing r. pres. part of wheel and edge of wing. BOX/WING: s.o., spotted wing. wheel: single cross.
S.D.E.:
c: ?lozenge
h: dotted circle (FM 27.24).

DATE: LH IIIA2-B.
If the motif behind the wheel is a lozenge, the date range would be narrowed to LH IIIA2 late (b)- B. For comparable lozenges cf. *77 and *79.

*236 Berbati [not ill.].
Context: "Dump" [see #2.2].

Small body sherd. Buff, red.
Chariot scene pres. lower part of wheel overlapping with upper band.

Date: LH IIIA2-B.

*237 Berbati [not ill.].
Context: "Dump" [see #2.2].

Small body sherd. Buff, red.
Chariot scene pres. part of wheel with double cross spokes.
Date: LH IIIA2-B.

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*238 Berbati [not ill.].
Context: terrace.

Body sherd. Buff, brown.
Chariot scene pres. lower part of wheel. WHEEL: double cross spokes.

DATE: LH IIIA2-B.

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*239 Berbati [not ill.].
Context: "Dump" [see # 2.2].

Body sherd. Buff, brown.
3 bands below frieze, edge of band on lower body.

Chariot facing r. pres. part of wheel and horses' tails and legs.
Wheel: double vertical spoke.
Horse: single stroke and pair of thinner strokes overlap with wheel: ?team's tail/end of brace and rear legs.
Ground line: design overlaps bands.

COMMENT: the poor structure of the design is striking: the design sinks down into the bands, and the rear of the horse overlaps the wheel.

DATE: LH IIIA2-B.

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*240 Berbati [not ill.].
Context: "Courtyard" [see #2.2].

Body sherd. Grey, paint worn to a shadow.

Chariot facing ?r. pres. part of box and edge of wheel.
BOX/WING: lower edge only, d.o., spotted; lower edge crosses through edge of wheel, indicating that the box is shown behind the wheel, though the spotted box itself is not visible.
COMMENT: It is not entirely clear which part of the box/wing is pres. The location of the lozenge and the absence of traction elements or horses' tails suggests that it is the wing of the chariot, although this is normally rounded not square.

DATE: LH IIIA2 late (b)-B; criterion of lozenge. For similar use of lozenge cf. *77 (IV.48), *142 (V.2).

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*241 Berbati [not ill.].
Context:

Chariot facing r. pres. part of traction and horses' tails.
TRACTION: pole; L-shaped brace with wavy line inner edging.
HORSE: edge of rump and 2 tails.

DATE: LH IIIA2 late-B.

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*242 Berbati [not ill.].
Context: room E.

Body sherd; open krater.
Buff, red-brown; interior polished.

Chariot facing 1. pres part of wing and upper edge of wheel.
BOX/WING: curving extension of wing, d.o., spotted.
CHARIOTEER: fragment of spotted robe only.

DATE: LH IIIA2-B.

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*243 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.67, pl.15:4a-c.
Context: "Dump" [see #2.2].

3 non-joining body sherds; ?AK or "closed vessel" (Åkerström, 1987: 30). Red-brown, brown.

Chariot facing r. pres. parts of horse and traction.
TRACTION: wavy arcade pendant from a double line (?reins) above team's back.
HORSE: chest with 2 reins and 2 front legs (a), rear legs (b), part of back (c).
S.D.E.:
c: large dotted circle (FM 27).
DATE: LH IIIA2 late-B.
Probable type 3 traction, relative lack of filling motifs (e.g. in area in front of horse), point to the end of LH IIIA2 late or IIIIB.

*244 Berbati [not ill.].
Context: E. section of room A.

Fragment pres. part of frieze and neck. Greyish-green, brown.

Chariot facing r. pres. charioteers with reins.
CONTROL: 3 reins.

CHARIOTEERS: 2 pres., edge of s.o. robe, no fill visible. Features: dot eye, sloping forehead ending in beaky nose, receding mouth/chin, long neck, short wavy hair. Driver has arm bent across body towards reins; edge of hand suggests passenger made the same gesture.

DATE: LH IIIA2-B.
Sketchy features make dating difficult.

*245 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.72, pl.16:2.
Context: unknown.

Body sherd. Yellow, red.

Chariot facing r. pres. part of horses' head.

HORSE: 1 narrow oval eye pres, stumps of 2 tufts.
Painted area at extreme l.: ?part of traction or terret.

DATE: LH IIIA2 late-B.

*246 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.74, pl.16:4.
Context: "Dump" [see #2.2].


Chariot facing l. pres. curving chest of horse.

S.D.E.:
a: palm/unvoluted flower (FM 15 or 18c).

COMMENT: Palm or flower motif wrongly reconstructed in publication drawing.
DATE: LH IIIA2 late-B.
The palm (FM 15) remains in use throughout this period, and in this fragmentary state is not closely datable.

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*247 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.75, pl.16:5.
Context: "Dump" [see #2.2].

Body sherd. Buff, red.
?Chariot facing r. pres. chest and front leg of a horse.

DATE: LH IIIA2-B.

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*248 Berbati [not ill.].
Context: "Dump" [see #2.2].

Body sherd. Buff, red.
Chariot facing r. pres. chest of horse with ?2 reins, below which part of 2 strokes: unidentified filling motif.

DATE: LH IIIA2-B.

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*249 Berbati [not ill.].
Bibl.: Åkerström, 1987: no.78, pl.16:8.
Context: "Dump" [see #2.2].

Body sherd; ?AK or "closed vessel, possibly jug" (Åkerstrom 1987: 30). Buff, brown.

Chariot scene pres. part of triangular arcade with chain of circles (FM 48:17) below (location e).

DATE: LH IIIA2 late (b)-B.
Type 3 traction. For chain of circles in location e, cf. *147.

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*250 Berbati [not ill.].
Context: "Dump" [see #2.2].

Body sherd. Greyish, black.
Chariot facing l. pres. neck of horse.
CONTROL: 2 reins (perhaps one of two separated pairs).
HORSE: part of neck with 1 outline tuft.
DATE: LH IIIA2-B.  

*251 Berbati [not ill.].  
Bibl.: Åkerström, 1987: no.80, pl.16:10.  
Context: room 1, surface layer.  

Small body sherd; "probably a bowl" (Åkerstrom, 1987: 30). Buff, red.  

Comment: The pair of muzzles show that this is a team of horses, yet a complete chariot design would not easily be accommodated within the decorative area of the suggested shape, a bowl.  

DATE: LH IIIA2-B.  
For ringed eyes cf. *172.  

*252 Berbati [not ill.].  
Context: "Dump" [see #2.2].  

Body sherd, ?small AK. Buff, brown.  

Chariot facing r. pres. edge of wheel with lower part of tail and rear leg in outline.  

DATE: LH IIIA2-B.  

*253 Berbati [not ill.].  
Bibl.: Åkerström, 1987: no.82, pl.17:2.  
Context: "Dump"; [see #2.2].  

Body sherd. Buff, red.  
Chariot scene pres. large of part of wheel.  
S.D.E.:  
St: dotted circle (FM 27.24).  

DATE: LH IIIA2 late-B.  

*254 Berbati [not ill.].  
Context: "Dump" [see #2.2].  

Body sherd. Buff, black.
Chariot scene, pres. lower quadrant of wheel.
WHEEL: single cross, widening at felloe, disc nave with central dot.
DATE: LH IIIA2-B.

*255 Berbati [not ill.].
Context: "Dump" [see #2.2].

Chariot scene, pres. part of chariot and occupants.
?Upper edge of d.o., spotted box at junction with wing, cnd charioteer in spotted robe above.
Date: LH IIIA2-B.

*256 Enkomi [not ill.].
Excavation no. 5301/1.
Context: Level IIb, Area I, under court 63 of IIIA Ashlar building, between floors V-IV.

Body sherd.
Chariot facing r.
HORSE: part of horse's head, ear, two tufts, reins.
DATE: LH IIIA-B (context IIIB).

*257 Enkomi [not ill.].
Excavation no. 6025/2.
Context: Area I, under room 47 of IIIA Ashlar building, between floors VIII-VII.

Body sherd.
Chariot facing r. pres. only lower edge of wheel and tails overlapping with upper of the three bands.
DATE: LH IIIA-B.
*258 Enkomi [FIG.188].
Context: not specified; from Schaeffer's 1949 excavations.

Body sherd.
Chariot facing r.
CHARIOTEERS: part of 2 pres. s.o. spotted robes. Arm (drawn as a solid band) crosses body of front figure, probably the driver.

FABRIC ANALYSIS: unassigned both in Anson (1980) and in the re-assessment by Jones (GCP: 547).

DATE: LH IIIA2-B.

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*259 Gezer [not ill.].

Body sherd; ?AK.
?Chariot scene facing l.
Horse: pair of rear legs bent at knee, edge of second pair of legs or tails behind.

DATE: LH IIIA2-B.

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*260 Hala Sultan Tekke [FIG.189].
Context: Area 21.

Body sherd.
Chariot facing r.
HORSE: part of front legs, squarely split.
S.D.E.:
c: ?edge of shell or unvoluted flower.

DATE: LH IIIA2 late-B.

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*261 Hala Sultan Tekke [not ill.].
Bibl.: HST 7: 32, 46, fig.83f-g.
Context: Area 8, Room 10, layer 3/4, found on and built into chavara floor. According to the excavator the fragments of Mycenaean pottery are survivals from earlier periods.

2 joining body sherds pres. part of wheel and 2 body bands.
Chariot facing ?
WHEEL: lower part of wheel with spoke widening at
felloe.
Ground-line: wheel set neatly on upper band.

COMMENT: Several other sherds are identified by the excavator as belonging to this chariot krater: fig.82e, part of AK rim with transverse strokes and ridged handle with 2 vertical bands crossed by groups of lines; fig.83h-i: these cannot belong to the chariot krater as the interior is monochrome and the design is not from a chariot.

DATE: LH IIIA2-B.
If the handle fragment is from the same vase the ridged section indicates a LH IIIA2 date.

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*262 Kourion [not ill.].
Excavation no. B1078-79.
Bibl: Benson, 1961a: 53-54, pl.29: figs.5 and 9.
Context: deposit of cellar in Area D, general terminus ante quem of LC IIIa.

Two non-joining body sherds, probably from the same vase.
Chariot facing r.
HORSE: rump with reserved rear leg, forepart with beginning of front legs.

DATE: LH IIIA2-B.

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*263 Miletus [FIG.190].

Small body sherd.
Chariot facing r.
CHARIOTEERS: 2, d.o. spotted robes.

DATE: LH IIIA2-B.

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*264 Nauplion, Palamidi [FIG.191].
Bibl.: Furtwangler and Loeschcke, 1886: 45, pl.XV.97; MPVP : VIII.4.
Context: not specified.

Body sherd.
Chariot facing l.
BOX/WING: s.o., spotted; box perched above wheel.
Wheel: single cross, the line of the horizontal spoke extending beyond the wheel.

PAGE 506
DATE: LH IIIA2 late-B.

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*265 Ras Shamra [not ill.].
Bibl.: Ugaritica VII: 296-7, fig.34.3.
Context: RS 1966, Tomb 4642; date range not specified.

Small body sherd. Buff, brown.

Chariot facing ?. (It is not clear which way up the sherd should go).
?BOX/WING: rounded, d.o., spotted fill; or part of box/wing and robed charioteer.

DATE: LH IIIA2-B.

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*266 Ras Shamra [not ill.].
Bibl.: Ugaritica VII: 296-7, fig. 34.7.
Context: RS 1966, topographic point 4638; date range not specified.

Body sherd. Buff, black to brown, crackled paint; added white details.

?Chariots confronted.
Horse: heads of 2 confronted horses. Round eyes, 2 ears. Rows of dots and chevron pattern around and above eyes in added white (?harness).

COMMENT: Confronted chariots occur on *50, although they are separated by a silhouette figure. A sherd from Enkomi also preserves two back-to-back chariots [*120].

DATE: LH IIIA2-B.
The horses are not closely datable, but if they do belong to a chariot composition an earlier date (LH IIIA2) would be more appropriate to accommodate two chariots on one side of the vase.

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*267 Ras Shamra [not ill.].
Bibl.: Ugaritica VII: 296-7, fig.34.unnumbered (after no.11).
Context: not specified.

Fragment pres. part of neck and frieze. Chariot facing r.
HORSE: head and chest. round eyes, thin muzzles (no reins).
S.D.E.:
a: stem of palm/unvoluted flower (FM 15 or 18c).
DATE: LH IIIA2 late-B.
The thin muzzles and absence of reins might suggest a IIIB date.

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*268 Tell abu Hawam [not ill.].
Context: unknown.

Body sherd. Pale orange, red to brown paint.
Chariot facing r.
HORSE: part of neck, muzzles, and outline tuft bisected by a vertical line.
CONTROL: 4 reins.

COMMENT: The tuft form is unusual, but it is paralleled on the ideograms of the Linear B tablets [#5.3].

DATE: LH IIIA2-B.

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*269 Tell abu Hawam [not ill.].
Palestine Archaeological Museum.
Context: settlement; E5, probably Stratum IV.

Fragment pres. turn for neck and part of frieze. Buff, brown to black worn paint.

Chariot facing r.
HORSE: round eyes, 2 ears, part of 2 tufts, thin muzzles.

DATE: LH IIIA2-B.

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*270 Tell abu Hawam [not ill.].
Palestine Archaeological Museum.
Context: settlement; E, F4, below later V house at 61.

2 body sherds. Buff, black paint.
?Chariot scene.
(c): small part of design element divided by vertical lines and containing trefoil-shaped fill.
S.D.E.: (location unclear) quirks (FM 48.5).
(d): part of curving edge of design element with vertical hatched band and spotted fill.
S.D.E.: as sherd (c) above.
COMMENT: The pieces are identified simply as pieces of chariot kraters by Hankey and Balensi, while Vermeule and Karageorghis call the elements "spiral reins and fillers" (MPVP: 202). The composition of the scene is obscure, though it should be pictorial; it is not even clear which way up the sherds go.

DATE: LH IIIA2-B.
Cf. perhaps LH IIIA2 (Hankey, 1967: 124); LH IIIB (MPL:78;MPVP: 202). Note that the quirks are not chronologically diagnostic.

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*271 Tell abu Hawam [not ill.].
Palestine Archaeological Museum.
Context: G4, beside the town wall foundation.

Two joining sherds. Buff, red paint.
Chariot facing r.
BOX/WING: upper part of box, s.o., very fine dotted fill.
TRACTION: probably type 2, L-shaped, solid painted with ?added white. Traces of horses' rump tails in front.
CHARIOUTERS: 2 tall figures in s.o. robes with fine dotted fill.

DATE: LH IIIA2-B.
The form of the traction elements is suggestive of the LH IIIA2 late.

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*272 Tell abu Hawam [not ill.].
Palestine Archaeological Museum.
Context: G3, outside and the below the foundation of Stratum III town wall.

Body sherd. Buff, red paint.

?Chariot facing l.
HORSE: rear legs of horse, split at hock, facing l.
Ground-line: legs overlap pres. band.

DATE: LH IIIA2-B.

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*273 Tell abu Hawam [not ill.].
Palestine Archaeological Museum.
Bibl.: Hamilton, 1935: pl.XX.307u; Balensi, 1980:
91-92, pl.155.7.
Context: settlement; DE 2 below the IV building at 45.

Body sherd. Pink-buf, red paint.
Chariot facing r.
BOX/WING: part of box, rounded, d.o. with the front edge hatched, spotted fill.
CHARIOTEERS: traces of 2 in spotted robes.

DATE: LH IIIA2-B.
Cf. LH IIIA (Hankey, 1967: 124); LH IIIB (MPL: 78).

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## PERIODICALS:

*AAA*: Athens Annals of Archaeology.

*AAS*: Annales Archeologiques de Syrie.

*AD*: Arkaiologikon Deltion.

*AE*: Arkaiologiki Efimeris

*AJA*: American Journal of Archaeology.

*Annuario*: Annuario della Scuola Archeologica di Atene.


*BaBesch*: Bulletin Antieke Beschaving.

*BCH*: Bulletin de Correspondence Hellenique.


*BSA*: Annual of the British School at Athens.

*JHS*: Journal of Hellenic Studies.

*OpAth*: Opuscula Atheniensia.

*PAE*: Praktika tis en Athinais Arkaiologikis Etaireias.

*RDAC*: Report of the Department of Antiquities of Cyprus.

## BOOKS:


*CMS*: Corpus der Minoischen und Mykenischen Siegel.

*CVA*: Corpus Vasorum Antiquorum.


SCE IV, 1C: Astrom, P. 1972. The Swedish Cyprus Expedition IV 1C. The Late Cypriot Bronze Age. Lund.


SIMA: Studies in Mediterranean Archaeology.

TUAS: Temple University Aegean Symposium.


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