



Protopalatial (MM IB-MM IIIA): Early Chamber beneath the West Court, Royal Pottery Stores, the Trial KV, and the West and South Polychrome Deposits Groups

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Protopalatial (MM IB–MM IIIA): Early Chamber beneath the West Court, Royal Pottery Stores, the Trial KV, and the West and South Polychrome Deposits Groups

J. Alexander MacGillivray

INTRODUCTION

The pottery recovered from Protopalatial Knossos comes in a multitude of fabrics, wares and styles. As a pan-Cretan centre, Knossos received exchanges, offerings and tributes from such a wide variety of sources (evident in the macroscopic examination of pottery fabrics) that it has become increasingly difficult to distinguish between ‘local’ products and imports. Only a comprehensive analytical programme of fabrics and wares could give us more certainty.

For this handbook the author has chosen to concentrate on examples of Kamares Ware, the finely decorated ceramics mostly found in the first Cretan palatial centres, which, with a possible few exceptions, were produced in the Knossos–Archanes region. These should be the most useful to colleagues who would use this book to search for Knossian parallels and chronological correlations. The semi-fine, gritty and tempered fabrics used for the lamps, cooking pots and storage and/or transport vessels found at Knossos, but probably produced in other Cretan workshops, are published elsewhere (MacGillivray 1998, 85–90; Momigliano 2000a; Macdonald and Knappett, in press). For Protopalatial pottery from Phaistos and Kommos, readers are referred to Levi and Carinci (1988), Carinci (1997), Betancourt (1990) and Walberg (1976).

Kamares Ware is one of the most recognisable ceramics in the world. It is characterised by oxidation–reduction–oxidation firing of an iron-rich slip to produce a high-quality, often lustrous, black ground, which probably imitates the black lustre of oxidised silver. Intricate red, orange, yellow, violet and white designs were applied on this dark ground. The considerable technical knowledge and skills required to produce this polychrome pottery inform us of its ancient worth, also indicated by its export to Egypt, the Levant and Anatolia, as fine ceramics and not containers (Kemp and Merrillees 1980; Betancourt 1998; Warren 1995). Its modern appeal has been apparent from the beginning of its rediscovery, which started far from its place of origin.

In 1890 Flinders Petrie found sherds decorated with patterns, which he compared with ‘the savage neatness of Polynesian ornament’ (no doubt a reference to the use of running spirals), amid the 12th Dynasty (*c.* 1950–1800 BC) rubbish heaps at Kahun in Egypt’s Fayum (letter of February 1890 to the British Museum, cited in Fitton 1995, 114). Three years later John Myres recognised similar pottery in Crete and called it Kamares Ware after the cave on the southern slopes of Mount Ida where it occurred in some abundance (Myres 1895; MacGillivray 2001, 80, 112). The Egyptian date for the Cretan product was confirmed in 1900 when Arthur Evans began systematic excavations in the building he called the ‘Palace of Minos at Knossos’ (Evans 1900a, 63–6, 1900b, 1–7). He observed that the foundations for the great building of the ‘Mycenaean’ (*i.e.* *c.* 17th–13th centuries BC) palace went back to ‘pre-Mycenaean’ times (*i.e.* *c.* 20th–19th centuries BC), when Kamares ware was in production. Italian archaeologists had observed a similar Old and New palace sequence when they began the Phaistos excavations later in that year (Pernier 1935).

Duncan Mackenzie (1903, 1906) first subdivided Minoan pottery on the basis of his observations of the Knossian stratigraphy. Evans used Mackenzie’s divisions as the basis for his Minoan chronology, and placed the ‘catastrophe’, which caused the ‘general overthrow of the earlier Palaces’ at Knossos and Phaistos at the end of his MM IIB ceramic phase; this was followed, in MM IIIA, by ‘the beginning of a new era’ (Evans 1921, 299–300, 315; Evans 1928, 320).

The first major challenge to this scheme came when Doro Levi’s excavations at Phaistos in the 1950s revealed a new wing of the old palace (Levi 1976, with further references). Levi arranged his deposits into four ‘phases’, Ia, Ib, II and III, none of which corresponded to Evans’s MM IIIA. Levi placed the destruction of the Old Palace at Phaistos in his phase II, which he assigned to MM IIB. Levi’s conclusions were criticised (Platon 1962, 1968; Zois 1965, 1968) and his architect proposed a revised chronology replacing his phases with periods 1–4, which better mirrored Evans’s Minoan

MM IB, MM IIA, MM IIB and MM III subdivisions (Fiandra 1962; 1980). The author finds it clearer to refer to Fiandra's periods than those of Levi, even though Carinci has done much to re-sort Levi's groups (Levi and Carinci 1988; see also Van de Moortel 2000). Thus, references to Phaistos are given using Fiandra's periods and comparanda are cited as F. inventory numbers, which can be found using the full appendices in Levi and Carinci's study.

Recent discoveries of important deposits by Catling, Hood, Macdonald, Momigliano, Popham, Wardle, Warren and Wilson, as well as re-examinations of Evans's deposits, have provided greater detail of the Evans–Mackenzie scheme (see also Introduction, this volume) and have necessitated some modification to the definition of the ceramic phases and the history of the First Palace of Knossos.

The construction of what is usually referred to as the 'First Palace' took place after the period represented by the MM IA House C / Royal Road South Fill Group, and ended in a destructive event of undetermined nature, represented by the deposits forming the Early Chamber beneath the West Court Group (MM IB). The subsequent phase represented by the deposits assigned to the Royal Pottery Stores Group (MM IIA) ended with a burnt destruction. The next group in the pottery sequence (Trial KV) probably represents a relatively short period with little evidence for a major terminal event at Knossos. Our ceramic taxonomy is greatly assisted here by the major catastrophe at Phaistos, which marks the end of the Old Palace period there in MM IIB. But the destruction of the palace at Knossos is defined by a number of deposits (West and South Polychrome Deposits Group), which appear to be later than those at Phaistos, and have been assigned to MM IIIA. The end of MM IIIA is a major horizon at Knossos and Archanes, probably due to a severe earthquake, which necessitated rebuilding at both centres.

The majority of the Kamares Ware found in Crete and certainly the highest-quality examples, such as those in Egg-shell Ware, come from the palaces. The only exception is the Kamares Cave, which may have received the highest-quality ceramic votive offerings available because their creators, who worked nearby, presented their best works. This suggestion comes after Day and Wilson's petrographic analyses, which showed that the probable source of the clay used for a large selection from Knossos and Phaistos lay in the hills bordering the Mesara plain to the north and south (Day and Wilson 1998). Myres's label may be more accurate than he could have known. The region near the sacred cave is certainly well watered and would have had an abundance of firewood in the MM period, which, together with the clay, would have made it an ideal potting region. But the clay beds on the north, west and south slopes of Mount Juktas, exploited on a huge scale to judge from the tons of kiln wasters nearby, are

quite similar (Day 1988). This makes the macroscopic distinction between north and south-central fine-ware products problematic; one possible clue might be that the Mesara pottery sometimes fires grey at the core, while the Knossian products are usually an even buff throughout. Another possible clue may be the red pigments, which tend to present lighter orange hues at Knossos and darker red at Phaistos.

The pottery in this chapter is what might still be regarded as Knossos–Archanes manufacture because of the frequency of distinctive wares, styles and types, which generations of excavators at Knossos have come to regard as 'local', both for statistical reasons and because of its fabric.

Day and Wilson have also observed that much of the pottery from the first palaces was used for consuming liquids, and so perhaps a continuation of the feasting scenarios which they posit for the palace site at Knossos starting in the EM I period (Day and Wilson 2002). The range of common forms — cups, bowls, bridge-spouted jars and jugs — could certainly be interpreted as essential parts of daily life as imagined by 21st-century scholars, but the major difference between domestic and public consumption is scale and quality.

The MM ceramics from Knossos and Phaistos, then, are more likely to have been used for feasting and celebrations than for the routines of daily life. This explicit function has an important bearing on how we approach the classification of this pottery from Knossos, which archaeologists are just beginning to consider as one of the major Cretan centres for communal gatherings, a sanctuary or festival hall, and not the seat of worldly authority, as it was viewed throughout much of the 20th century, and which it may have become after the LM IB period (Driessen 2002; MacGillivray 2002). We are no longer surprised when we do not find the full gamut of forms and fabrics, but instead a selection associated with the storage, preparation and serving of large quantities of food and drink. Absent are forms associated with production and manufacturing, such as beehives, olive and wine presses, fermentation and dyeing vats, blowpipes, tuyères and crucibles. The deposit of terracotta weights, which gives the Loom-Weight Basement its name, could represent palatial weaving workshops. But these could also have been weights suspended from the fine tapestries and embroideries, which probably adorned those palace walls not painted with frescoes, the designs of which were most likely shared by the vase painters and weavers (Blakolmer 1999).

Another point worth bearing in mind is that many of the ceramic types listed below are probably close imitations of metal originals; otherwise crinkled rims, rivets and hole-mouthed or bridge-spouted jars make little sense to the ceramist. The archaeological proof for this comes from the long-held opinion that the 153 silver vessels found in the 12th Dynasty chest at El Tôd in Egypt were manufactured in Crete (MacGillivray 1998,

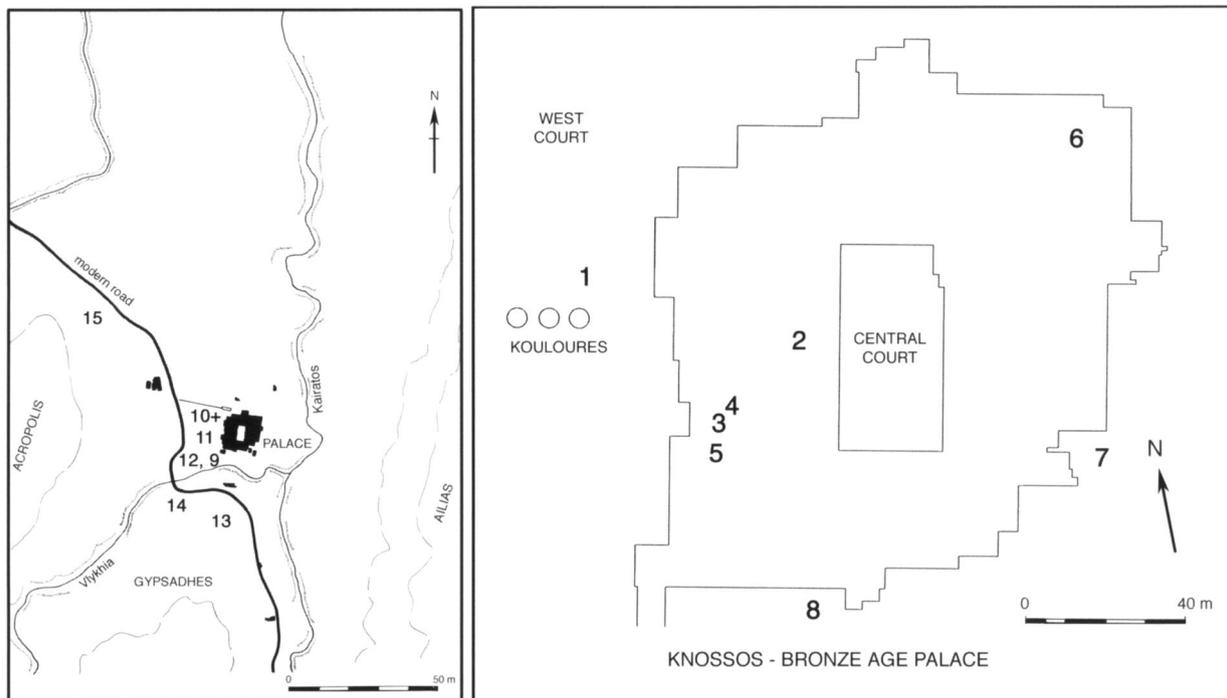


Fig. 4.1. Early Chamber beneath the West Court Group (MM IB): location of deposits listed in the text.

103–4). This theory is greatly supported by the recovery of the contemporary and very similar silver cup from Burial Building 3 at Archanes–*Phourni* (Sakellarakis and Sapouna-Sakellarakis 1997, 605, fig. 636).

THE EARLY CHAMBER BENEATH THE WEST COURT GROUP (MM IB)

Archaeological contexts (FIG. 4.1)

The Kephala hill at Knossos was settled in the Neolithic period and used continually for more than four millennia before the first palace was sited there in the MM IB ceramic phase, at roughly 1950 BC. This conspicuous first phase of the Knossos Old Palace may have followed on from the severe seismic event which Evans took to mark the end of the MM IA period (Evans 1928, 320; see also Chapter 3, p. 95). This ambitious and expensive operation did much to obscure the previous uses of the Kephala, but also respected and incorporated some earlier structures, such as the EM III North-West Palace Angle and possibly the MM IA Monolithic Pillar, probably because of their importance and/or sanctity (MacGillivray 1994).

There is clear stratigraphic evidence to support the position of this group within the Knossian sequence. The Early Chamber beneath the West Court was stratified over the MM IA House C (see this volume, Chapter 3) and beneath a layer assignable to a later (MM II) Protopalatial phase (MacGillivray 1998, 24; Momigliano 2000c, 230–1). In the Royal Road South (RRS) excavations, Hood discovered a floor deposit

assignable to the Early Chamber beneath the West Court Group, sandwiched between two other floor deposits assignable to the House C / RRS Fill and to the Royal Pottery Stores Groups (MM IA and MM IIA) respectively (Cadogan *et al.* 1993, 26). A similar stratigraphy can be reconstructed in the Room of the Jars of the Royal Pottery Stores (see Chapter 3, this volume, and below). In addition, during recent excavations in the area of the South-West Houses, upper and lower deposits, assignable to Knossian MM IIA and MM IB respectively, have been distinguished in the S. VII 5 trench (see below, deposit no. 9; Macdonald and Knappett, in press). The following list is not exhaustive, but includes major deposits assignable to this group (for other minor deposits see MacGillivray 1998).

West Court

1) The Early Chamber beneath the West Court (KSM B.I.6, B.I.7: boxes 178–191, 215, 217–220, 222, plus restored or complete vases in KSM and HM). Evans and Mackenzie excavated a primary floor deposit in 1904 (Evans 1905b, 15, fig. 8, 1921, 187, fig. 135). First assigned to MM II (Mackenzie 1906, 250, 256) then to MM IB (Evans 1921, 186–9), the latter confirmed by reinvestigation (MacGillivray 1998, 24–7). Stratified beneath MM II and above MM IA (Momigliano 2000c, 230–1; Chapter 3, pp. 95–6, House C).

West Wing

2) Vat Room Deposit (KSM F. II.3: boxes 750–751 plus complete vases in HM, BM and AM). Excavated by

Evans in 1903 and assigned to the MM IA period (Evans 1903, 94–8; Panagiotaki 1998a); reinvestigated by Momigliano (1991, 167–75), who showed that the latest material is Protopalatial, i.e. MM IB (MacGillivray 1998, 34–5).

3) Early Deposit beneath West Magazine 1. Evans (1901a, 48, 1921, 172) excavated an early floor deposit beneath West Magazine 1 in 1901 and assigned it to the MM IA period, but recent reinvestigation showed that the latest pottery is MM IB (Momigliano 1991, 154–5; MacGillivray 1998, 35).

4) Early Deposit beneath West Magazine 2. An early floor deposit excavated by Evans beneath West Magazine 2 in 1900 and assigned to MM IA (Evans 1900a, 21; Evans 1921, 172; Brown 1983, 68–9). The author assigned it to MM IIA (MacGillivray 1998, 35), but Macdonald and Knappett (in press) argue convincingly for a date at the end of MM IB.

5) South-West Palace Angle deposit. Hood and Shaw began trial excavations in 1973 (Catling 1974, 34), which were completed in 1987 by Macdonald, who found fine pottery, including many examples in the Diagonal Red and White Style, and clay nodules in a destruction deposit (Catling 1988, 68; Hood 1994, 101; Macdonald and Knappett, in press).

East Wing

6) Royal Pottery Stores, Room of the Jars (KSM L.III.8: boxes 1047–1052 and complete/restored vases in the KSM, HM and AM; Momigliano 2000a). Floor deposit excavated by Evans in 1902 and 1905 and assigned to the MM III period (Evans 1921, 571–2). Recent reinvestigations showed that the pottery belongs to the Early Chamber beneath the West Court Group, and was stratified above a fill containing MM IA pottery (MacGillivray 1998, 38; Momigliano 2000a; Chapter 3, p. 96, no. 3).

7) Monolithic Pillar Basement (see Chapter 3, p. 96). Tested by Evans in 1900, 1902 and 1903 (Evans 1900a, 7; 1902; 106–7, 1903; 17–18; 1921, 587–8). Several floors were reported (Evans 1903, 17–18; Mackenzie 1906, 244, 246): the earliest was assigned to MM IA (Evans 1921, 146) and the one above contained MM IB pottery (MacGillivray 1998, 45–6), a stratigraphy that cannot be ascertained because the pottery has not been stored separately.

South Front

8) The South Front Early Paving. Deep fill beneath paving east of the EM III South Front House, excavated in 1993 (Momigliano and Wilson 1996).

Town

9) Area of the South-West Houses: S. VII.5 lower deposit (Macdonald and Knappett, in press)

10) Town Drain. Excavated by Evans in 1926 north-west of the House of the Frescoes (Evans 1928, 368–9); first published as MM IA, but revised to MM IB (Evans 1935, 106, n. 3), the latter confirmed by reinvestigation (MacGillivray 1998, 49–50).

11) Royal Road South (RRS): middle basement. Excavated by Hood in 1959 and 1960 (Hood 1962a, 1966), this is the middle of three superimposed floor deposits, and was stratified over MM IA and beneath MM IIA (Cadogan *et al.* 1993, 26; MacGillivray 1998, 51).

12) Hogarth's Early Heap. Excavated by Hogarth in his 1900 search for tombs: a group of pottery, which he found 'heaped up between two houses' (Hogarth 1900, pl. XII: 12; Hogarth and Welch 1901, 80). Reinvestigation listed the pottery which could be assigned to this group in Hogarth's report (MacGillivray 1998, 50).

13) Gypsades 'pits'. Excavated by Hogarth on the north-east slope of the Gypsades Hill in 1900 (Hogarth 1900, 70; Hogarth and Welch 1901, 79). A number of early pits contained pottery, which reinvestigation identified as MM IB types (MacGillivray 1998, 52–3).

14) Aqueduct Well. Excavated by N. Coldstream in 1958 on the line of the water main to the Venizelion Hospital north of the palace, this well contained some very fine MM IB pottery (Hood and Smyth 1981, 56, no. 290).

15) Villa Dionysus. Excavated by K. Wardle in 1994 north of the Villa Ariadne, near the Villa Dionysus, this deposit contained more than 60 MM IB vases, including many in the Woven Style (French 1994, 75).

Characteristics of the Early Chamber beneath the West Court Group (MM IB)

Fabrics

As mentioned in the introduction to this chapter, the author decided to focus on the pottery made in the 'fine buff' fabric almost certainly obtained from the light-coloured Neogene clays, which abound on the slopes of Mount Juktas. Many other fabrics are found in Knossian MM IB deposits, but these are little understood and some probably come from elsewhere. A clear example of this is the vessels made in fine red fabric found at Knossos, which are likely to be imports from the Pediada region (Cadogan 1990; Momigliano 1991, 261–4, 'fabric III', and this volume pp. 93–4, 100; MacGillivray 1998, 88–9, 'fine red'; Rethemiotakis and Christakis 2004). Similarly, lamps made in a gritty soft buff clay, which are also found at other sites, may come from a small number of still undiscovered specialised workshops (MacGillivray 1998, 86–7).

Wares and forms

Many wares — *Plain, Monochrome, Dark-on-Light, Light-on-Dark, Polychrome (Kamares), Barbotine*, etc. — and forms (egg-cups, straight-sided and carinated cups, etc.) are carried through from the preceding phase. At the same time, the Early Chamber beneath the West Court Group presents a number of innovations in terms of forms, shapes and techniques of decoration and manufacture. While a great deal of pottery continues to be handmade and proto-wheelmade, that is, somewhere between handmade coil-built and wheel-fashioned (Knappett 1999b, 2004; Momigliano 2000a, 75, n. 22), for the first time one can see significant evidence for the use of wheel-throwing (Knappett 1999b, 121–2; Knappett 2004, 258–9). Moreover, one can now observe a much wider variety of surface treatments and decorative patterns. For this reason, and to avoid confusion with the terminology employed in the author's previous publication of Knossian Protopalatial pottery (MacGillivray 1998), the pottery discussed in this chapter will be described under 'wares', but also under 'styles' and 'types' labels, which are slightly different from those employed in previous and subsequent chapters. [*Editor's note*: to help the reader, summary illustrations of MacGillivray's (1998) Protopalatial types are also reproduced in the accompanying CD.]

Pared Ware

A small number of handmade pots show signs of paring, or the shaving away of clay with a cutting tool in strokes. Forms include: egg-cups of type 1 (FIG. 4.2: 1) with plain, dark-on-light sprayed, and monochrome coated surfaces; straight-sided cups of type 1 (FIG. 4.3: 2) with plain surfaces; and tumblers of type 1 with dark-on-light or monochrome surfaces. This manner of finishing a vase is quite common in the EM III and MM IA pottery of Knossos, where it is found on similar types (Momigliano 1991, 264; Chapter 3, p. 97). These MM IB examples may represent the last products in this ware, which ceased production gradually as throwing on the potter's wheel became more popular.

Barbotine Ware

Small dabs of clay or slurry were applied in relief to the surface of a vase to form part of the decorative pattern characterising this ware (Foster 1982). The examples in fine buff fabric have 'prickles' (FIG. 4.3: 8; see also Betancourt 1985, 83, fig. 58c), which are used to outline or give structure to the decoration or to accent the angle on an angular form. This appears in both handmade and wheelmade pottery. Forms include: tumblers of type 4; egg-cups or rounded goblets of type 3; egg-cups or conical goblets of type 3; straight-sided cups of type 5; tall-rimmed angular or carinated cups of type 1; and short-rimmed angular or carinated cups of type 2 (see below). The use of barbotine decoration begins in the

Neolithic period in Crete, is evident on the EM III and MM IA pottery of Knossos (Foster 1982, 147–8; Momigliano 1991, 267 and Chapter 3, this volume), but has come to be regarded as most typical of the MM IB period (Betancourt 1985, 83), as numerous examples in period 1 deposits at Phaistos suggest (e.g. F. 61, 62, 2116, 2169, 2170). It may have continued into MM IIA, as indicated by a few examples from Knossos (MacGillivray 1998, 56) and from period 2 contexts at Phaistos (Fiandra 1980, pls. 32: 10, 35: 2, 44: 2, 49: 2, 54: 10, 55: 10).

Shallow Grooved Ware

A small group of early wheelmade monochrome coated vases has thin horizontal incisions or rough grooves cut into the exterior of the body (FIG. 4.3: 1). These are distinguished from the incisions on the later Precision Grooved Ware (see p. 135) by either their shallowness or their random displacement on the vase. A clear link between shallow grooved ware and metal vases is suggested by a cup fragment decorated in this manner and also provided with a spool handle (Evans 1921, fig. 183b.1; Matthäus 1980, pl. 76: 5). Forms in this ware include: squat rounded and angular or carinated cups, and tumblers of type 4. This ware appears to continue into the MM IIA period, as examples in similar forms are quite numerous in both periods 1 and 2 at Phaistos (F. 397, 626, 2115, 2499, 3490a, 5022, 5273, 5606a, 5644, 6571; Fiandra 1980, pls. 36: 4, 37: 2, 37: 9) and in MM II contexts at Kommos (Betancourt 1990, nos. 371, 383). Examples from Mallia may be MM II (Stürmer 1993, nos. 2, 8, 9), but the revised MM IB date seems more appropriate (Poursat 1993). Pottery of similar form, decoration, and date occur in the Pediada red fabric (Pendlebury *et al.* 1936, 59–69, fig. 14; Dimopoulou 1987; Rethemiotakis 1988, 1989, 1990; MacGillivray 1998, 88–9) and Myrtos–Pyrgos (Cadogan 1990, Knappett 1999a, 629, fig. 12; for earlier occurrences of the Pediada red fabric at Knossos see Chapter 3, pp. 93–4, 100).

Early Printed Ware

This ware illustrates the use of a device, perhaps of clay, wood, leather or sponge, dipped in paint and applied repeatedly either directly on to a vase's buff surface or a dark monochrome coat, to imprint a continuous pattern. The motifs employed are a sponge pattern (FIG. 4.3: 2), a roughly circular dot pattern, likened by Mackenzie to 'brush dabs' (MacGillivray 1998, 58), a crescent, seed or maggot pattern (FIG. 4.3: 3), which continues to be used in late printed ware, and various unidentifiable shapes. Forms include: egg-cups of type 3; straight-sided cups of type 6; rounded cups of type 3; and tall-rimmed angular or carinated cups of type 3 (see below). These also occur in deposits belonging to the MM IIA Royal Pottery Stores Group. A similar ware is found in Fiandra's periods 1 and 2 at Phaistos (F. 361, 418, 1926, 1941, 2175, 2314, 2315,



Fig. 4.2. Early Chamber beneath the West Court Group (MM IB): (1) Pared Ware goblets and (2) straight-sided cups (after MacGillivray 1998, pls. 33 and 132).

5479a; Pelagatti 1962, 111, pl. 14: 1–2; Fiandra 1973, pl. 23: 1–2), Kommos (Betancourt 1990, no. 1006) and the Porti tholos (Xanthoudides 1924, pl. VI, no. 5069).

(Black / Red Slipped) Light-on-Dark Ware

Pottery covered with a monochrome coated surface (usually black or red) and decorations in white paint goes back to EM IIA (see Chapter 2, this volume). In MM IB Knossos this continues into what the author has previously labelled the ‘White Banded Style’ (MacGillivray 1998, 58–9; for analyses of white pigments on Minoan pottery see Ferrence *et al.* 2001).

White-banded Style

This consists of one or more broad white-painted bands applied horizontally on the dark monochrome surfaces of wheelmade vases (FIG. 4.3, 4–7). Single bands appear on egg-cups or rounded goblets of type 2. Single or multiple bands are found on rounded goblets of type 3, straight-sided cups of types 2, 5 and 6, and pyxides. This style is common in MM IB and MM IIA deposits at Knossos (MacGillivray 1998, 58–9). It is rare, however, in the Mesara, there being a single example from a period 2 context at Phaistos (F. 89) and another from Porti (Xanthoudides 1924, pl. XXXVIb, no. 5119).



Fig. 4.3. Early Chamber beneath the West Court Group (MM IB): (1) Shallow Grooved Ware; (2–3) Early Printed Ware; (4–7) Black Slipped Light-on-Dark Ware: White Banded Style; (8) Barbotine Ware (after MacGillivray 1998).

There is a closely related style of the MM IB and MM II periods at Myrtos–Pyrgos (Knappett 1999a, fig. 24) and Palaikastro (MacGillivray *et al.* 1992, 133, figs. 11: 1, 12: 2).

Polychrome or Kamares Ware

Protopalatial pottery with a basic light-on-dark decoration to which red paint has been added has been commonly referred to as Polychrome or Kamares Ware. This kind of surface treatment, which goes back to the late Prepalatial phases (see Chapter 3, this volume), developed into a number of popular styles in the First Palace period (MacGillivray 1998, 56–65). Those common in Knossian MM IB are described below.

Diagonal Red and White Style. A large number of handmade vases are decorated with pairs of red or orange lines outlined with pairs of white lines and placed diagonally or, in the case of tumblers and goblets, spiralling outward from the base to the rim (FIG. 4.4). This pattern is found on tumblers of type 1, conical goblets of types 1 and 2, tall-rimmed angular or

carinated cups of types 1 and 2, and angular or carinated bridge-spouted jars of type 1b. Although there are close antecedents in MM IA, and a few examples survive into Knossian MM IIA, this style is very much typical of the Early Chamber beneath the West Court Group (MacGillivray 1998, 59).

Woven Style. A large number of handmade vases are decorated with patterns in thick, powdery white, red and orange paint on a thick, lustrous dark monochrome surface. The patterns may be horizontal, diagonal or vertical and employ linear, circular, interlocking and floral motifs in a great complexity of designs (FIGS. 4.5–6). The patterns are those that one might imagine to have been inspired by woven textiles in that they are regularly laid out in measured, well-defined and geometrically spaced zones, and the colours are made to alternate within the designs; they remind one of the Geometric and Deximata styles of traditional Cretan textiles. The woven style is especially popular on straight-sided cups of types 2 and 3 (FIGS. 4.5, 4.6: 1), and is also found on tall-rimmed angular/carinated cups

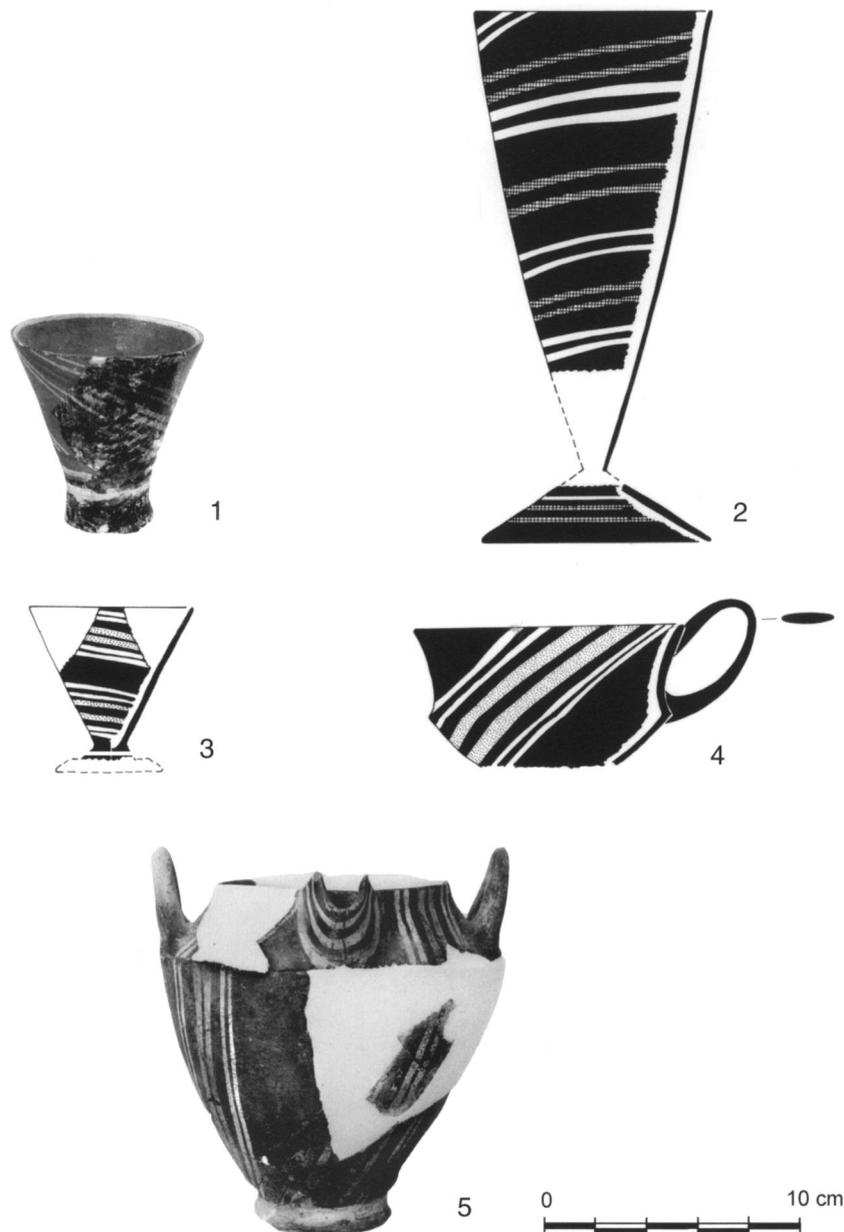


Fig. 4.4. Early Chamber beneath the West Court Group (MM IB). Polychrome Ware: Diagonal Red-and-White Style (after MacGillivray 1998).

of type 1a, shallow angular bowls of type 1, angular/carinated bridge-spouted jars of type 2 (FIG. 4.6: 3–4); squat rounded bridge-spouted jars; rounded bridge-spouted jars of type 2, jugs and large jars. This is one of the most distinctive of the MM IB styles of the Knossos region, with examples from Juktas (Karetsou 1978, 247–9, figs. 11: 6, 7; 12: 4), Archanes–Phourni (Sakellarakis and Sakellaraki 1972, pl. 5a; 1997, 406–8, figs. 362–3) and Gournes (Zois 1969, 22, pls. 27: 7046, 28: 7014a). It is found rarely in eastern Crete (Bosanquet and Dawkins 1923, pl. IV g) and the Mesara (Vasilakis 1990, 44, fig. 14e), though there are a number of examples among the earliest Cretan exports to Phylakopi

on Melos (Papagiannopoulou 1991, nos. 337–8, 382, 386). There is a closely related and contemporary style from period 1 at Phaistos (F. 62, 2029, 2171, 2276, 2315, 5398, 5473–4, 5482, 5939, 5946). A predecessor to this style may be seen in some examples of Mackenzie's 'Polychrome Geometric' MM IA pottery (Mackenzie 1906, 246; MacGillivray 1998, 93–4; Momigliano 1991, 150, 2000a, 89 and Chapter 3, this volume).

Forms

Some of the forms produced in this group are ware-specific, but many crosscut the wares described above: the most common are described below.

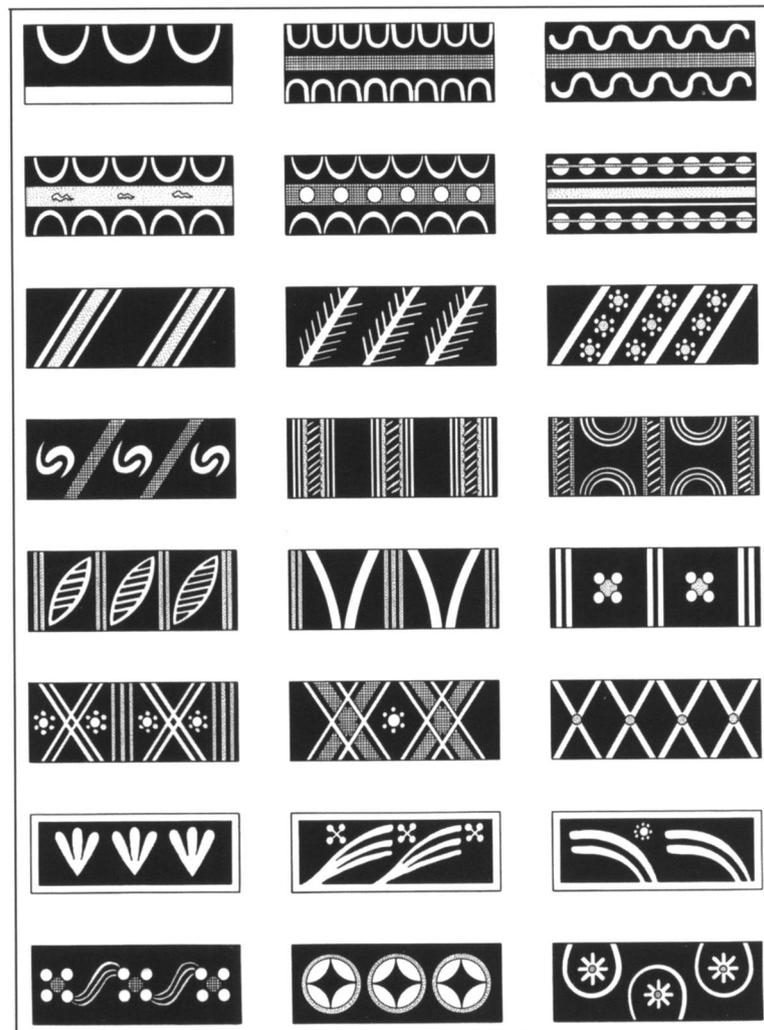


Fig. 4.5. Early Chamber beneath the West Court Group (MM IB): Polychrome Ware, Woven Style designs on straight-sided cups of type 2 (after MacGillivray 1998).

Shallow bowls (FIG. 4.7: 1–2)

These are rare, occurring in only two types, one handmade, the other wheel-thrown. Profiles are similar: with out-splayed sides, flat rim and base. Type 1 is handmade, 3.2–3.8 cm high with rim diameter of 9.4–16 cm; examples are plain or monochrome coated; similar bowls at Phaistos are most common in period 1

(Levi 1976, pl. 36); the form, however, originates in the late EM IIA pottery of Knossos, continues to be produced in the late Prepalatial and cannot be taken as characteristic of any single Knossian ceramic phase. Type 2 is a fine, wheelmade variant of type 1 with slightly larger dimensions; a later variation of this type may be the crude bowl of type 2, which begins in MM IIA.

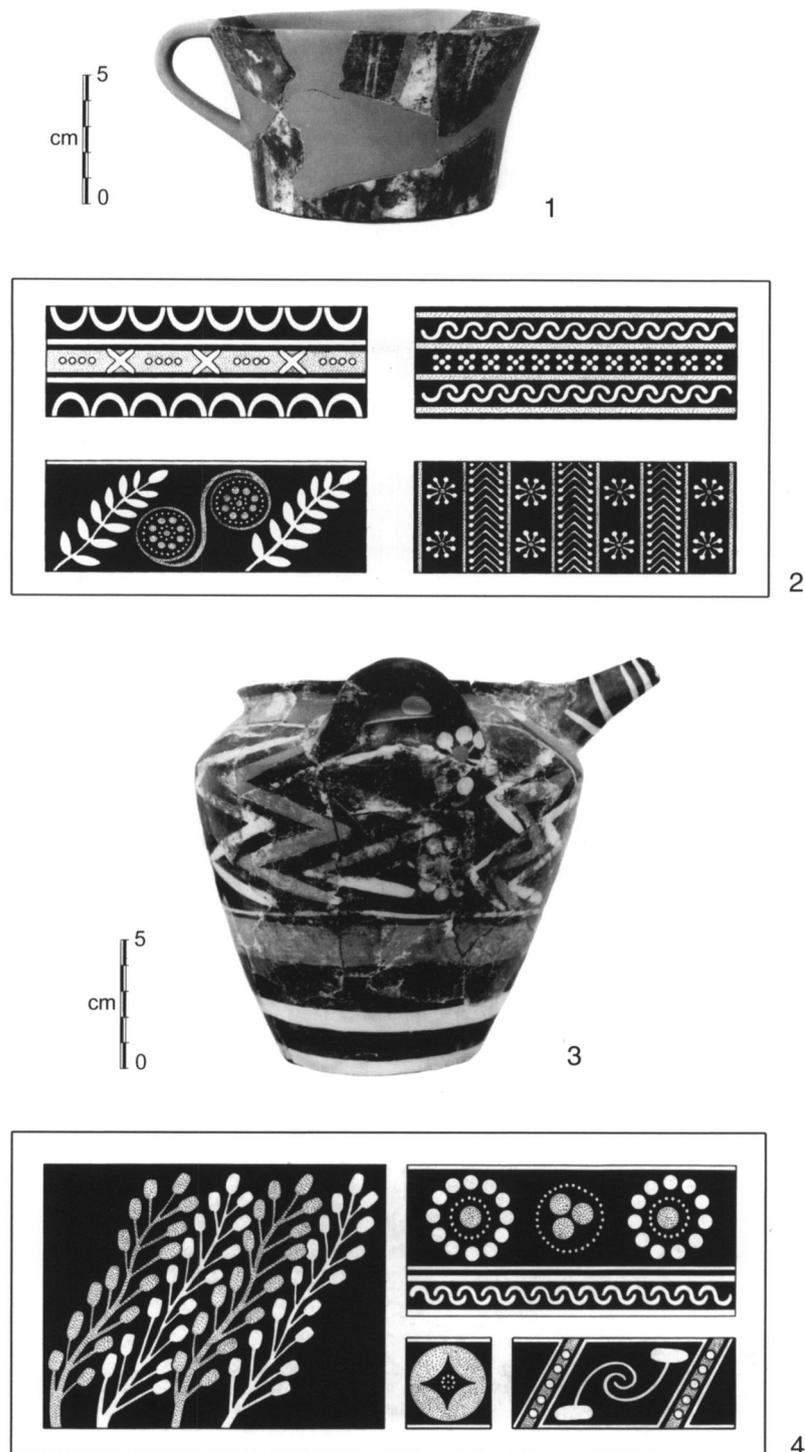


Fig. 4.6. Early Chamber beneath the West Court Group (MM IB): Polychrome Ware, Woven Style designs on straight-sided cups of type 3 and bridge-spouted jars of type 2 (after MacGillivray 1998).

Rounded tripod bowls (FIG. 4.7: 3)

These are handmade with a part of the rim pulled out to form a spout, two lugs on the rim and three bosses on the rounded underside that act as pods; examples are 4.5 cm high with diameters of 6 cm at the rim; a possible later development of this form may be seen in a small spouted bowl with tripod feet of the MM IIB

period from the pit in Chamber Tomb XVII at Mavro Spelio (Forsdyke 1927, 281, pl. 23: 27; see also this volume, pp. 134–5).

Egg-cups or footed goblets (FIG. 4.7: 4–7)

These occur in two basic shapes, which the author has previously called ‘rounded’ and ‘conical goblet’

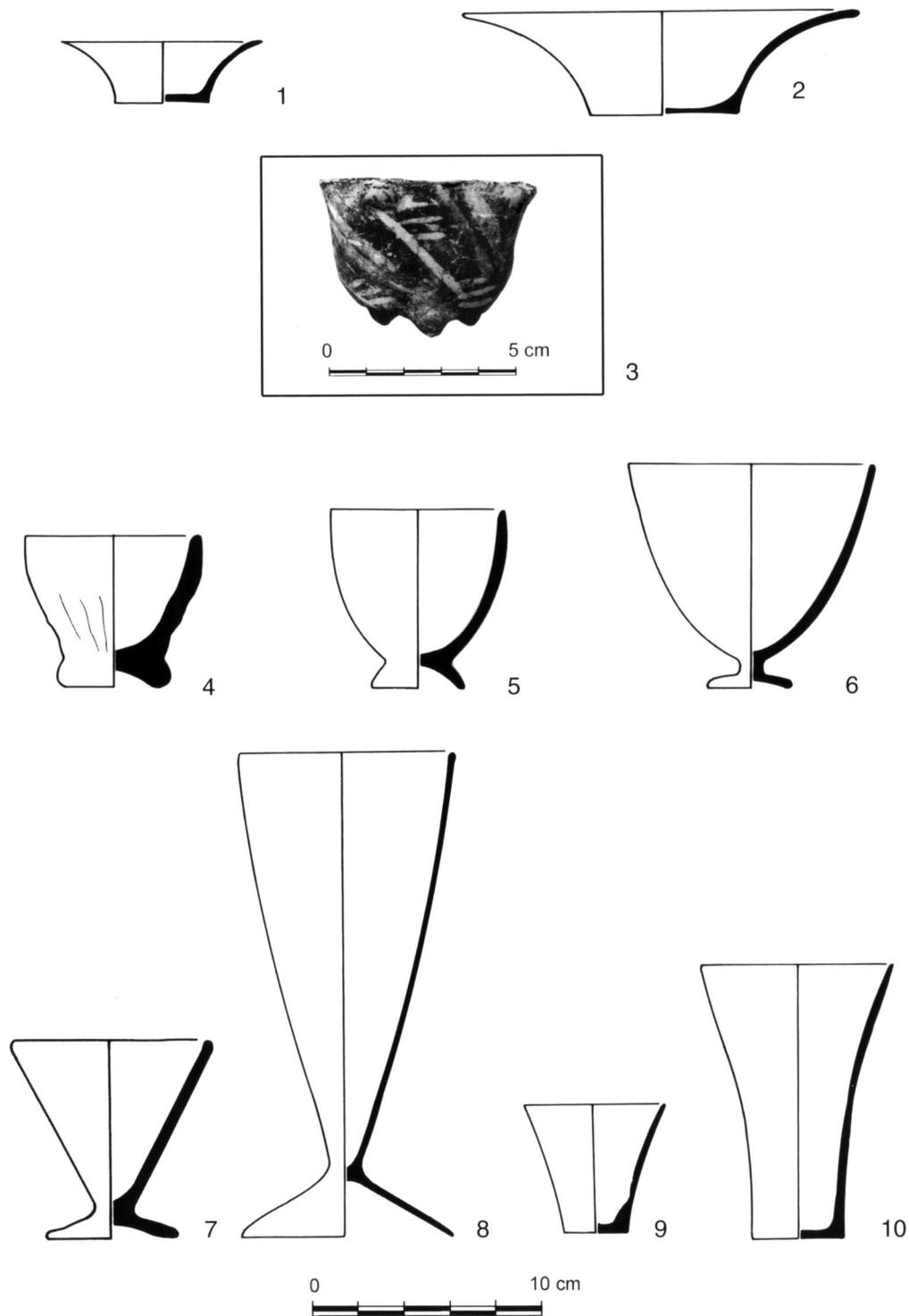


Fig. 4.7. Early Chamber beneath the West Court Group (MM IB): (1–2) shallow bowl (type 1); (3) rounded tripod bowl; (4–6) rounded goblet or egg-cup (types 1–3); (7–8) conical goblet (types 1–2); (9–10) tumbler (types 1–2) (after MacGillivray 1998).

(MacGillivray 1998, 66–7). Hood (1971a, 38 fig. 14) convincingly traces the development of this form from the EM I period (restated in more detail by Momigliano 1990). Tall conical goblets also occur in stone (Warren 1969, 97–8).

Rounded goblets (FIG. 4.7: 4–6)

Rounded goblets are very common in the early deposits of the Old Palace at Knossos, and are based on earlier prototypes (Andreou 1978, 34–5; Momigliano 1990, 1991, 245–8; this volume, Chapters 2 and 3). Type 1

(FIG. 4.7: 5) is handmade and formed by shaving or paring the lower side and then attaching a rough strip of clay to form the base; examples are 6–7 cm high with rim diameters of approximately 8 cm; a related form, though lacking a foot, may be seen in some of the period 1 *skoutelia* from Phaistos (Fiandra 1973, 86–8, pl. 21; Levi 1976, pl. 35; Levi and Carinci 1988, pl. 99). Type 2 (FIG. 4.7: 5) has a wheelmade upper body attached to a handmade base; examples are 7.4–7.8 cm high with rim diameters of 7.5–9.0 cm; they are monochrome coated on the upper part, and have a thick white horizontal band added below the rim; the foot is plain but has drips of paint from the coating of the upper part. This type appears also in Knossian MM IIA, and may be the successor to the EM III and MM IA footed goblets representing the first attempts to use the potter's wheel (see Chapter 3; Momigliano 1991, 247–8, n. 285, type 4); it seems likely that it is the prototype for the 'crude goblet' that is quite common during the MM IIA period. Type 3 (FIG. 4.7: 6) is the fine wheelmade, and slightly taller, variant of types 1 and 2, and also continues into Knossian MM IIA; the immediate predecessor for this type may be seen in goblets from the upper levels of House B beneath the West Court (Momigliano 1990, 483, figs. 1–4; 1991, pl. 54: 12) and the earliest floor beneath the Monolithic Pillar Basement (Mackenzie 1906, pl. 7: 15, 16), which may be assigned to MM IA on stylistic grounds.

Conical goblets (FIG. 4.7: 7–8)

With conical profile and pronounced out-splayed foot, these occur in three types at Protopalatial Knossos. The first two appear in this MM IB group alongside the rounded goblets discussed above. Type 1 (FIG. 4.7: 7) is handmade, but very fine and decorated in the Diagonal Red and White Style; a single conical goblet from Phaistos in rough barbotine appears to be contemporary (F. 3014). Type 2 (FIG. 4.7: 8) is handmade and may be regarded as the large variant of type 1.

Tumblers (FIG. 4.7: 9–10)

These occur in four types at Protopalatial Knossos, of which the first two are found in MM IB deposits. Type 1 (FIG. 4.7: 9) is handmade, occasionally in Pared Ware, and may represent the continuation of the EM III and MM IA types (see Chapter 3; Momigliano 1991, 248, n. 288, type 1); examples are 3–7 cm in height with rim diameters of 4–8 cm, and are also found at Archanes (Sakellarakis and Sapouna-Sakellarakis 1997, fig. 367); a very similar form occurs in the Pediada red fabric (MacGillivray 1998, 89). Type 2 (which is represented by a single example: MacGillivray 1998, 68; FIG. 4.7: 10) is also handmade and is the tall, 12 cm high, variant of type 1. The tumbler is more common in Protopalatial eastern Crete where it was richly decorated (Bosanquet and Dawkins 1923, pls. IV a, c, X k–m; Betancourt 1983, fig. 19: 254; Walberg 1983, 8, form 38, 184, no. 203; MacGillivray *et al.* 1992, 133, fig. 11:

1–3; Stürmer 1993, no. 174). This form also occurs in stone (Hankey 1980, pl. 76).

Straight-sided cups (FIG. 4.8)

The most common product of the central Cretan potters, continuing from MM IA, is the straight-sided cup. Six of the 13 types occurring in the Old Palace at Knossos (MacGillivray 1998, 68–72) are found in MM IB deposits. Type 1 (FIG. 4.8: 1) is proto-wheelmade (Knappett 1999b, 2004; Momigliano 2000a, 75, n. 22); it has a strap handle and in most cases is in Pared Ware (FIG. 4.2: 2); examples are 4.5–6.0 cm high with rim diameters 9–10 cm. Type 2 (FIG. 4.8: 2) is proto-wheelmade with a slightly convex base and strap handle; examples are 3.0–5.5 cm high. This is a popular form in the Woven Style of decoration, a selection of which is given in FIG. 4.8; besides Knossos, examples are found at Archanes–*Phourni* (Sakellarakis and Sakellarakis 1972, pl. 5a, 1997, fig. 366) and Gournes (Zois 1969, pls. 27, 28a). Type 2 is rare in the Mesara: a single example is known from Megaloi Skinoi (Vasilakis 1990, 44, fig. 14e) and there is a similar form, though in barbotine ware, from a period 1 context at Phaistos (F. 362); further afield, there are examples from Palaikastro (Bosanquet and Dawkins 1923, pl. IVg), the Cyclades (Papagiannopoulou 1991, cat. 337–8) and Miletus (Raymond 2001, 20, fig. 1b–c). Type 3 (FIG. 4.8: 3) is the proto-wheelmade large version of Type 2: like that, this is most popular in the Woven Style, of which a selection is given in FIG. 4.6: 1–2. Type 4 (FIG. 4.8: 4) is fine and wheelmade with a sharp edge at the base and lower side and no handle; examples are 4.5–6.0 cm in height. Type 5 (FIG. 4.8: 5) is wheelmade and similar to type 4, but has a strap handle added at the rim and lower side; examples are 5–7 cm in height, with rim diameters 8.5–12.0 cm; this type came into being in the MM IB phase and persisted with little change throughout the Old Palace period. Type 6 (FIG. 4.8: 6) is wheelmade and the tall version of type 5; this also has a long history, spanning the Old Palace period at Knossos.

Tall-rimmed angular or carinated cups (FIG. 4.9: 1–3)

With high out-splayed rim and side above a carination or angle near the base, these appear in six types in Protopalatial Knossos. Three of these are found in MM IB deposits. Type 1 (FIG. 4.9: 1) is handmade and may be regarded as an angular companion to the straight-sided cup of type 2; sub-type 1a has a flat base, while 1b has a slightly raised and moulded base; height ranges are 4–6 cm, and rim diameters 6–9 cm. One example with two handles from Hogarth's Early Heap in the town of Knossos shows another variation (Hogarth and Welch 1901, 91, fig. 21). Examples from Knossos show that this type may also continue into MM IIA; examples from Archanes–*Phourni* (Sakellarakis and Sakellarakis 1972, pl. 5b; Sakellarakis and Sapouna-Sakellarakis 1997, fig. 365) and Gournes (Zois 1969, pl. 28) most likely belong to the early stages of MM IB, but a very similar

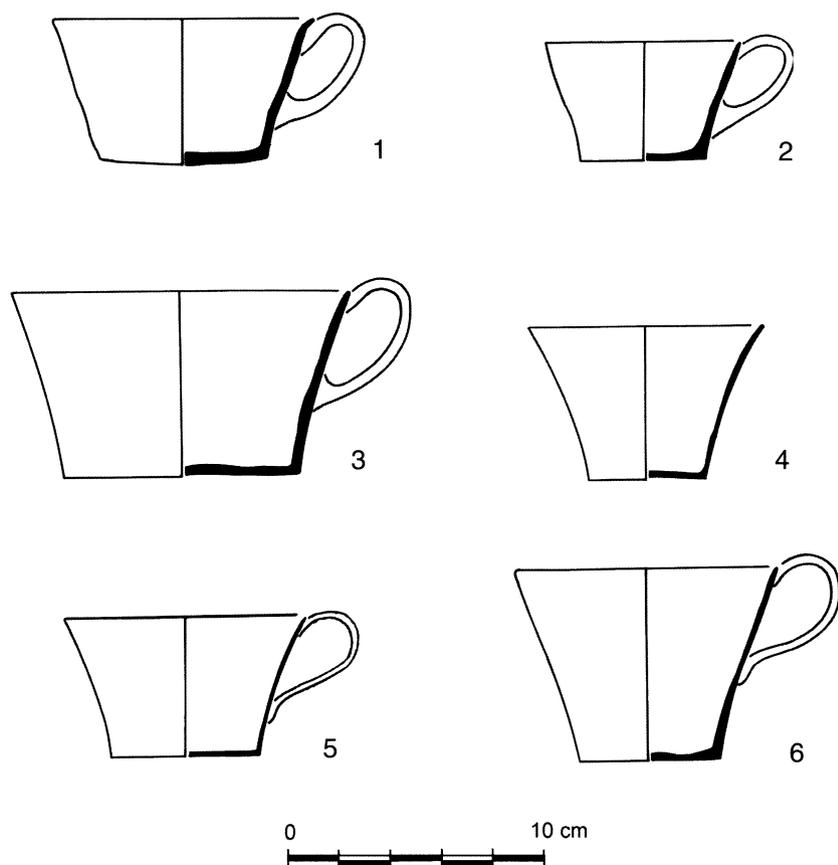


Fig. 4.8. Early Chamber beneath the West Court Group (MM IB): straight-sided cup (types 1–6) (after MacGillivray 1998).

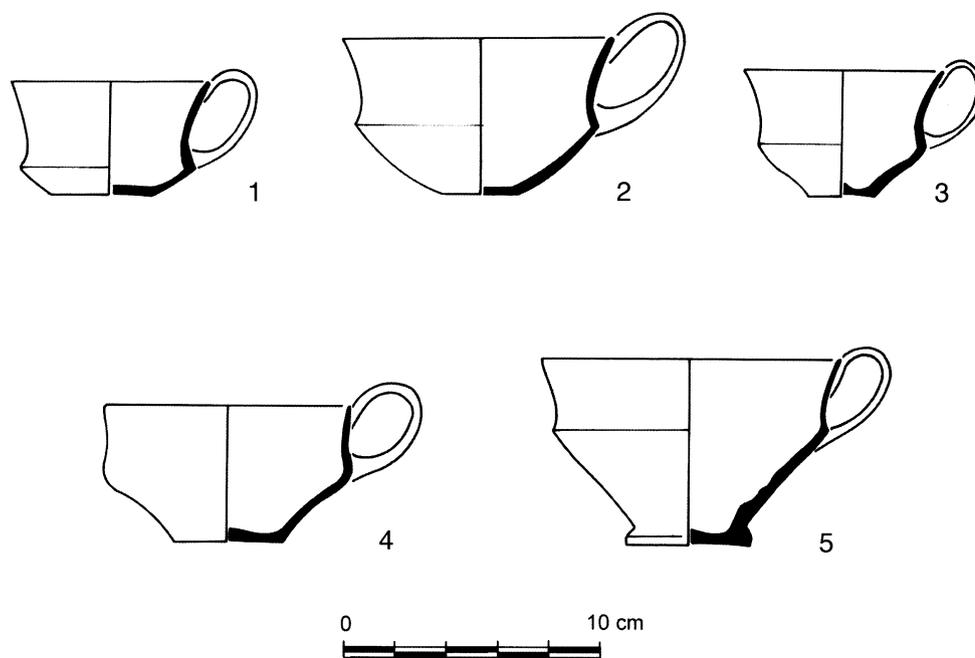


Fig. 4.9. Early Chamber beneath the West Court Group (MM IB): (1–3) tall-rimmed angular or carinated cup (types 1–3); (4–5) short-rimmed angular or carinated cups (types 1–2) (after MacGillivray 1998).

type from Phaistos comes from a period 2 context (F. 3247). Type 2 (FIG. 4.9: 2) is also handmade and occurs in Dark-on-Light, Monochrome and Polychrome wares (Diagonal Red and White Style) and continues in Knossian MM IIA deposits. Type 3 (FIG. 4.9: 3) is the

wheelmade equivalent to type 1: the two types are similar in profile but the lower side of type 3 is more often concave instead of the straight or convex profile of type 1; examples are 3.5–6.1 cm high, and rim diameters 7.0–8.5 cm; this type occurs in Monochrome,

Shallow Grooved, Light-on-Dark and Polychrome wares; there is an example in the early MM IB group at Gournes (Zois 1969, pls. 25–6), but similar cups at Phaistos seem to come from period 2 contexts (e.g. F. 186, 405, 424, 430, 434, 695, 1397 a,b, 4935a, 4944a; Fiandra 1980, pl. 43: 2), which appear to be largely contemporary with Knossian MM IIA.

Short-rimmed angular or carinated cups (FIG. 4.9: 4–5)

These occur in three types at Protopalatial Knossos, of which the first two appear in MM IB deposits. Type 1 (FIG. 4.9: 4) is wheelmade with a strap handle attached at the rim and angle and has a simple base; examples are 3.7–5.3 cm high, with diameters 7.2–10.0 cm. Type 2 (FIG. 4.9: 5) is wheelmade with a strap handle attached at the rim and angle and a high lower body; two sub-types may be distinguished: 2a has a plain base, 2b a moulded one; examples are 4.5–8.0 cm high, with rim diameters 7–17 cm; most examples are monochrome coated. The frequency of this type in the Early Chamber beneath the West Court Group suggests that it begins in the MM IB period, but numerous examples in MM IIA Knossian contexts indicate its continued production and popularity, and a related form is found in period 2 contexts at Phaistos (F. 187, 3520, 4358).

Squat rounded cups (FIG. 4.10: 1–4)

These appear in two types. Type 1 (FIG. 4.10: 1–2) is wheelmade and has a simple profile with slightly out-splayed rim, strap handle attached at the rim and lower side, and a flat base; examples are 5.5–8.0 cm high, with rim diameters 6.5–9.5 cm. Two very similar examples from Phaistos were found with material of period 2 under *Vano* CVII, which may show that the type continued to the end of the MM IIA period there (F. 6448, 6485); there is a strong resemblance between this type and one of the cup forms in the ‘Tôd Treasure’ (Bisson de la Roque *et al.* 1953, pls. XII: 70580, XIII: 70583). Type 2 (FIG. 4.10: 3–4) is also wheelmade and similar in profile to type 1, but it has a horizontal step or flange in the middle: examples are 7.5–9.9 cm high, with rim diameters 7.5–8.3 cm.

Rounded cups (FIG. 4.10: 5–9)

With their semi-globular or hemispherical profile, these enjoy a long history at Knossos. Of the six general types occurring in the Old Palace period, four are found in MM IB contexts. Type 1 (FIG. 4.10: 5–6) is handmade with a simple profile and a strap handle attached at the rim, rising above it and connecting in the middle of the side. There are two sub-types: 1a (FIG. 4.10: 5) has a simple, flat base, while 1b (FIG. 4.10: 6) has a slightly raised and moulded base; this type is almost indistinguishable from the one-handled cups of the EM III and MM IA periods (see this volume, Chapter 3, FIGS. 3.3: 7–10, 3.5: 4; 3.12: 5–, 3.13: 5; see also Momigliano 1991, 249–51, types 1 and 2; Sakellarakis

and Sakellaraki 1991, 101, fig. 74; Sakellarakis and Sapouna-Sakellaraki 1997, fig. 362). Type 2 (FIG. 4.10: 7) is handmade with offset rim, a rounded bulge in the profile of the upper side and a strap handle attached at the rim and widest part of the body; it may be the last stage in the development of a rare late Prepalatial type (see Chapter 3, FIG. 3.8: 12; see also Momigliano 1991, 251, type 5) and the handmade equivalent to the more common rounded-cup of type 3; the form also appears in stone, as illustrated by a serpentine cup from the Patema ossuary at Palaikastro (Warren 1969, 40: P227). Type 3 (FIG. 4.10: 8) is wheelmade and similar to type 2 but with a concave profile on the lower side and the base is usually indented. It occurs in many wares (from Monochrome Ware to Polychrome Egg-shell Ware), begins in MM IB, becomes common in MM IIA, but does not appear to continue into MM IIB. This may also be the case at Phaistos, where the closest parallels for this type are from a period 2 context in *Vano* XCIV (F. 4817b, 5017, 5421a–d). Type 4 (FIG. 4.10: 9) is the wheelmade variant and likely successor to type 1, but with slightly out-turned rim; it is distinguished from type 3 by the globular profile of the lower side; examples are 6–8 cm high, diameters are 8.8–12.5 cm at the rim and 3.5–5.5 cm at the base; it appears in both MM IB and MM IIA deposits at Knossos.

Shallow angular or carinated bowls

There are two types of these in Protopalatial Knossos, of which type 1 occurs in MM IB contexts (FIG. 4.11). This is handmade with loop handles and a raised outward splayed base. One example is decorated in the Woven Style.

Angular or carinated bridge-spouted jars (FIG. 4.12: 1–3)

Two types occur in the early groups of the Old Palace period. Type 1 is handmade with two cylindrical lambda-shaped handles on the shoulder. Two sub-types may be distinguished: 1a has a simple, tapering lower side and flat base, and 1b (FIG. 4.12: 1) has a slightly raised and moulded base; one example is decorated in the Diagonal Red and White Style (FIG. 4.4: 5); this type seems to appear first in the Early Chamber beneath the West Court Group (MM IB) and continues into the Royal Pottery Stores Group (MM IIA). Type 2 (FIG. 4.12: 2–3) is handmade and a large version of type 1 but with a distinctive thickened and flat rim; this is a popular form in the Woven Style (FIG. 4.6: 3–4); this type seems to be confined to the Knossos area, there being also at least one example from Juktas (Karetsou 1981, 144, fig. 8: 6). Angular or carinated bridge-spouted jars are almost unknown in the Mesara, there being only one possible example from Phaistos (F. 264) as well as a stone version (F. 6245). The examples from Phylakopi on Melos are thus quite likely to be Knossian in origin (Papagiannopoulou 1991, nos. 382, 386).

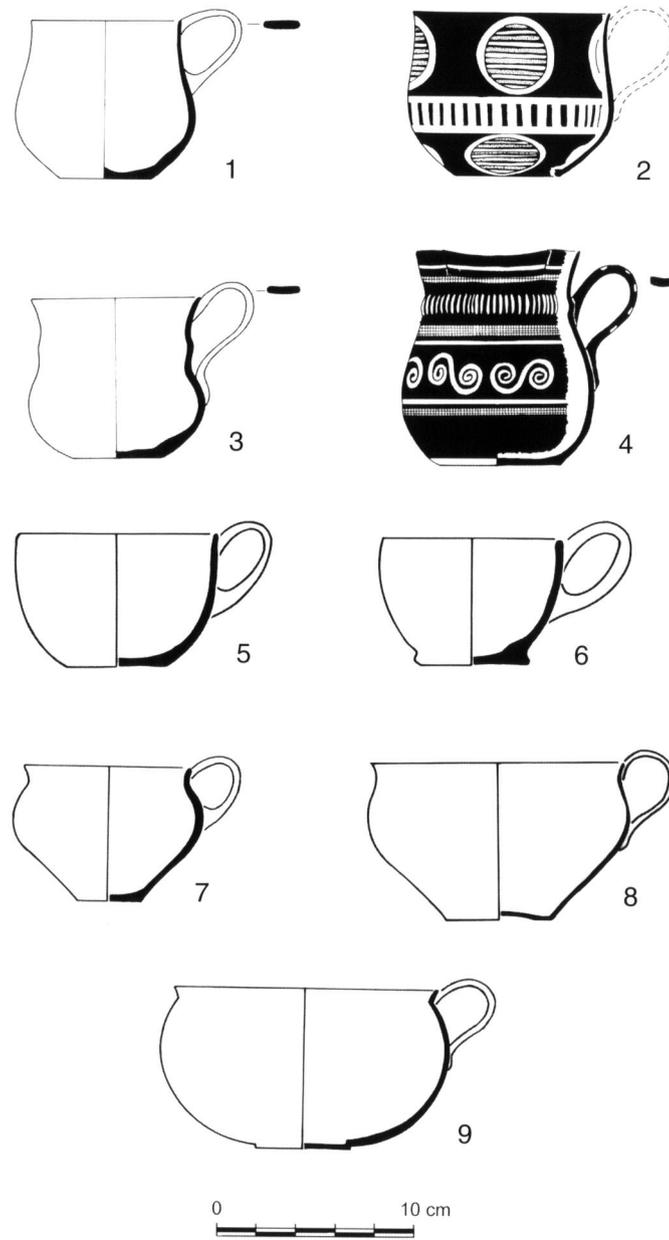


Fig. 4.10. Early Chamber beneath the West Court Group (MM IB): (1–4) squat rounded cups (types 1–2); (5–9) rounded cups (types 1–4) (after MacGillivray 1998).

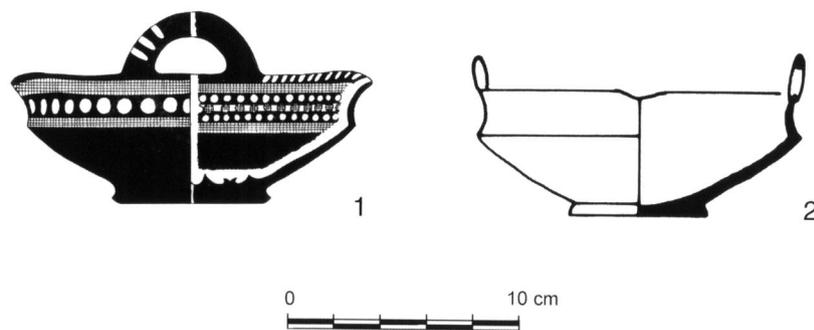


Fig. 4.11. Early Chamber beneath the West Court Group (MM IB): shallow carinated bowl (type 1) (after MacGillivray 1998).

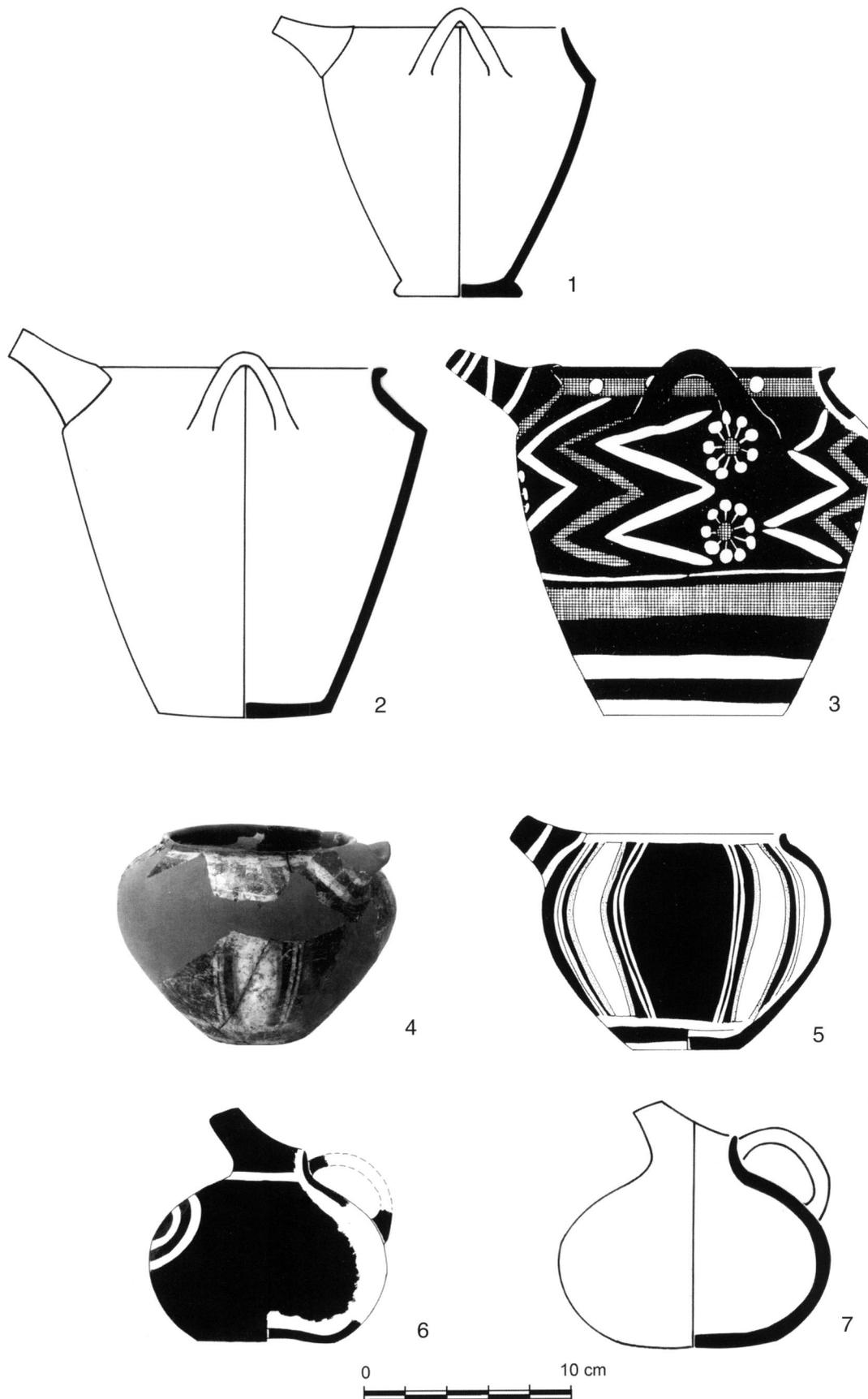


Fig. 4.12. Early Chamber beneath the West Court Group (MM IB): (1-3) angular bridge-spouted jars (types 1-2); (4-5) rounded bridge-spouted jars (type 2); (6-7) jugs with cut-away spout (type 1) (after MacGillivray 1998).

Rounded bridge-spouted jars

These occur in six types in Protopalatial deposits at Knossos (MacGillivray 1998, 78–9), of which type 2 (FIG. 4.12: 4–5) appears in the Early Chamber beneath the West Court Group; this is handmade with a tapering lower side, flat base, and spout rising above the rim, with typical lambda-shaped handles; examples are about 10 cm high and are decorated in the Woven Style; it probably has predecessors in MM IA (see FIG. 3.15: 5–6).

Jugs with cut-away spout

These occur in four types in the Old Palace at Knossos (MacGillivray 1998, 80–1), of which type 1 (FIG. 4.12: 6–7) appears in the Early Chamber beneath the West Court Group. This is handmade with a squat profile and flat handle; examples are 10–11 cm high and usually appear in Light-on-Dark or Polychrome / Kamares ware.

Summary

The pottery associated with the earliest stages of the Old Palace at Knossos presents some features that are carried through from the late stages of MM IA, as one would expect. The pottery most diagnostic of the Early Chamber beneath the West Court Group (MM IB) comprises: the conical goblet of type 2, the tall-rimmed angular or carinated cup of types 1 and 2, and the angular bridge-spouted jar of type 1b in the Diagonal Red and

White Style. Also typical are the straight-sided cups of types 2 and 3, tall-rimmed angular or carinated cups of type 1a, shallow angular bowls of type 1, angular bridge-spouted jars of type 2 and rounded bridge-spouted jars of type 2 in the Woven Style. Also characteristic are the jugs with cut-away spout of type 1 and, perhaps, the tall-rimmed angular or carinated cups of types 1–3.

Forms thrown on the radial centred potter's wheel first appear in some quantity in this group, for example the straight-sided cup of types 4, 5 and 6, the shallow bowl of type 2, the tall-rimmed angular cup of type 3, the short-rimmed angular cup of types 1 and 2, the squat rounded cup, the rounded cup of types 3 and 4, the rounded goblet of types 2 and 3, and the rounded bridge-spouted jar of type 3. This may coincide with the appearance of Evely's type 2 wheel head or bat made of fired clay found at Phaistos and Mallia (Evely 1988, 89, 97–100, fig. 3).

Additions and corrections to this definition of Knossian MM IB should come with the full publication of deposits such as the South-West Palace Angle and the RRS / Basements, Middle Floor.

Relative chronology of the Early Chamber beneath the West Court Group (MM IB)*Synchronisms with other Cretan sites*

As the definition of the MM IB ceramic phase at Knossos solidifies, so does its chronological position (TABLE 4.1). This is certainly evident in north-central

TABLE 4.1: Selected Cretan sites with deposits contemporary with the Early Chamber beneath the West Court Group (MM IB).

West Crete

Chamalevri–*Tzabakas*: MM I building (Andreadaki-Vlasaki 1997; Andreadaki-Vlasaki and Papadopoulou 2001)

North-Central Crete (including Pediada)

Archanes–*Phourni*: 'MM I apotheti' (Sakellarakis and Sakellarakis 1972; 1997, 406–8)

Juktas: Terrace I (Karetso 1978, 247–9; 1981, 144)

Gournes: Funerary building (Zois 1969, 22, pls. 25–8)

Kastelli–Pediada (Dimopoulou 1987; Rethemiotakis 1988; 1989; 1990; Rethemiotakis and Christakis 2004)

Galatas (Rethemiotakis 2002; Rethemiotakis and Christakis, 2004)

South-Central Crete

Phaistos: Period 1 (Fiandra 1962); Phase 1a (Levi and Carinci 1988)

Kommos: MM IB (Betancourt 1990, 28–30 and 65–75)

Porti: tholos (Xanthoudides 1924, pl. VI nos. 5069, 5119)

Odigitria: Megaloi Skinoi (Vasilakis 1990, 44, fig. 14e)

Odigitria: Tis Xatzinas to Liophyto (Vasilakis 1990, 64–5, pl. 13b)

Mallia / Lasithi

Mallia: Chrysolakkos (Stürmer 1993, nos. 2, 8, 9, 174)

Myrtos–*Pyrgos*: Period II c–d (Cadogan 1990; Knappett 1999a, 629, figs. 12, 24)

Platyvola cave: (Pendlebury *et al.* 1936, 59–69, fig. 14)

East Crete

Mochlos: D (Andreou 1978)

Vasiliki: House B (Andreou 1978)

Palaikastro (Bosanquet and Dawkins 1923, 9–15; MacGillivray and Driessen 1990, 399–401)

Crete, where deposits are quite similar, perhaps due to the close temporal spacing or contemporaneity of the event(s) that created them, possibly an earthquake. The MM I *apothetis* at Archanes–Phourni, a group of redeposited material, perhaps originally from MM IA Funerary Building 7, but found in a long trench between Building 6 and Tholos B, includes much that conforms to Knossian MM IA, but also distinctive examples of Knossian MM IB forms and styles (Sakellarakis and Sakellarakis 1972, pls. B: a, E: b, F: b; Sakellarakis and Sapouna-Sakellarakis 1991, 101, fig. 74; Sakellarakis and Sapouna-Sakellarakis 1997, 406–8, figs. 362–3, 365–7). Juktas also has a redeposited context: the fill in Terrace I, which includes many examples of Knossian MM IB types and styles (Karetsou 1981, 144, fig. 8: 6). The latest pottery from the funerary structure at Gournes also conforms quite closely to the Early Chamber beneath the West Court Group (Zois 1969, 22, 25–8). Predictably, this uniformity disappears the further one travels from the Knossos–Archanes core.

In west Crete, deposits possibly contemporary with Knossian MM IB were found at Chamalevri–Tzabakas in the Zachari plot in a well planned and built structure dated to the MM IA and MM IB periods (Andreadaki-Vlasaki 1997; Andreadaki-Vlasaki and Papadopoulou 2001), but too little pottery and contextual information has been published at present to make a proper evaluation.

To the south, the Early Chamber beneath the West Court Group finds good correlations with Phaistos period 1 as set out by Fiandra (1962) and phase 1a as presented by Levi and Carinci (1988) as well as with MM IB as defined by Betancourt at Kommos (Betancourt 1990, 28–30, 65–75). Knossian imports at Phaistos, Kommos and in a few tholoi, together with general similarities in wares and types, allow for this broad equation.

The major MM I centre at Kastelli Pediada probably produced the very distinctive ware in red fabric which is found from Knossos to Viannos alongside Knossian MM IB ceramics (Rethemiotakis 2002, 55; Rethemiotakis and Christakis 2004; Panagiotakis 2004). Contemporary deposits are also reported from Galatas, but have yet to be published (Rethemiotakis 2002, 55).

Moving east, Andreou's South Houses Group at Mallia and Mochlos House D–Vasiliki House B group are closest to the MM IB Early Chamber beneath the West Court Group at Knossos, although they may also slightly overlap with Knossian MM IA (Andreou 1978, 70–92, 126–33, 172; see also Chapter 3, p. 100): a full publication of this material is essential before any more detailed comparison may be attempted. The Mallia–Chrysolakkos pottery, recently published as MM IIB, includes Knossian MM IB imports (Stürmer 1993, nos. 2, 8, 9, 174), and has been reassigned largely to MM IB by Poursat (1993). Myrtos–Pyrgos phase II c–d (Cadogan 1978) also largely overlaps with the Early

Chamber beneath the West Court Group, and there are comparable deposits from the recent excavations at Palaikastro. Moreover, deposits previously assigned to MM IA at Palaikastro have now been redated to MM IB (MacGillivray and Driessen 1990, 399–401, where the label MM IB / IIA was employed), as they include Knossian imports datable to this phase (Bosanquet and Dawkins 1923, pl. IVg). Much new stratigraphic evidence, especially from beneath Building 7, further clarifies this eastern site's Protopalatial pottery sequence (MacGillivray *et al.* 1992, 132–4).

Synchronisms with the Aegean and east Mediterranean

Overseas, we find approximate synchronism available by means of recognisable Cretan products at Phylakopi period II (Papagiannopoulou 1991, nos. 337, 338, 382, 386). Touchais (1989, 113, 257–8) equates Lerna V (levels 3 and 4) and Aigina–Kolonna VIII with MM IB, but both sites require fuller publication before this can be confirmed. The MBA period III at Miletus has Cretan imports that span the whole Protopalatial period, but the earliest Minoan pottery found there includes Knossian straight-sided type 2 cups in the Woven Style (Raymond 2001, 20, fig. 1b–c).

The Shaws report the discovery of numerous large and small open and closed Cypriot vessels from MM I–MM IIA fills beneath building AA at Kommos (Blackman 1999, 116). These could be related to the Early Cypriot III / Middle Cypriot I Red Polished amphora, probably found in one of the MM IA–B levels from the Monolithic Pillar Basement (Catling and MacGillivray 1983; see also this volume, Chapter 3).

The earliest Minoan vase in Egypt is the small, handmade jug from Tomb 88 at Qubbet el-Hawa near Aswan (Kemp and Merrillees 1980, 176–219; see also this volume, p. 103). Its form and especially its decoration in the Alternating Red and White Floral style suggest an east Cretan provenance and an MM IB date, which may consequently be linked to an early stage of the 12th Dynasty (Floyd 1997; MacGillivray 1998, 103; Warren and Hankey 1989, 130).

ROYAL POTTERY STORES GROUP (MM II A)

Many ceramic innovations may be noted during the period between the MM IB destruction illustrated by the previous group, and the burnt MM IIA destruction, which resulted in the formation of the deposits discussed in this section. The most striking are the widespread adoption of the radial centred potter's wheel and of the crude-ware class of drinking and feasting vessels.

The stratigraphic position of the Royal Pottery Stores Group within the Knossian sequence is shown by the latest floor in the RRS Basements (Cadogan *et al.* 1993, 26) and by the upper deposit in the Area of the South-

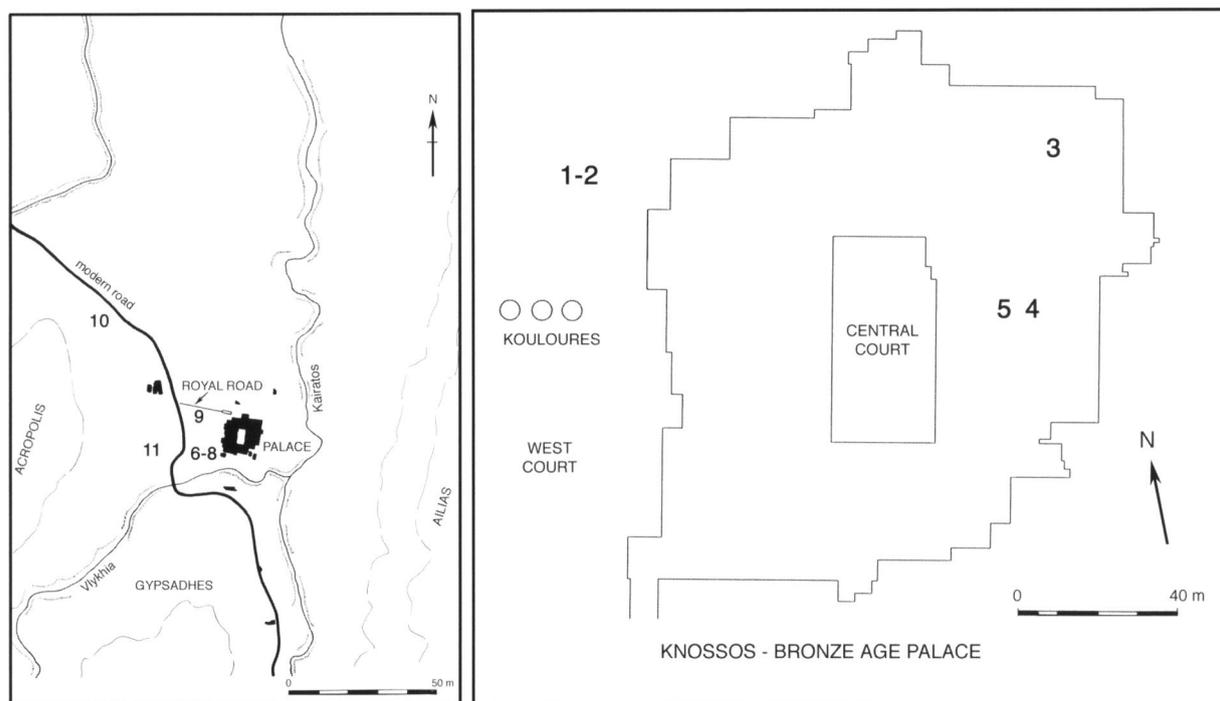


Fig. 4.13. Royal Pottery Stores Group (MM IIA): location of deposits listed in the text.

West Houses (S. VII 5) (Macdonald and Knappett, in press): both deposits are stratified above others belonging to the preceding group. None of the deposits assigned to the Royal Pottery Stores Group, however, was stratified beneath MM IIB, with the possible exception of those in the Loom-Weight Basement and in the earliest silt level in Trial KV (see below, nos. 4 and 11). In the former, Evans reported the discovery of a MM IIB floor stratified above MM IA. The material originally assigned by Evans to MM IA, however, has now been reassigned to MM IIA, but unfortunately the finds from the MM IIB floor above were not stored separately. This and the smallness of the earliest silt level in Trial KV make the distinction between MM IIA and MM IIB at Knossos less clear than one would desire.

Archaeological contexts (FIG. 4.13)

West Court

Excavations beneath the Neopalatial North-West Treasure House (or 'North-West Treasury') in 1903 suggested the existence of least three MM IIA floor deposits (MacGillivray 1998, 27–31). One, the so-called 'North-West Pit', is problematic in terms of reassembly and deposition history, but the following two can be safely assigned to this group.

1) Area of the Polychrome Jug (KSM A.II.9: boxes 92, 93). Excavated in 1903 (Evans 1904, 18), was assigned by Mackenzie (1906, 256) to the MM II destruction horizon in the palace, a date later refined to MM IIA (Evans 1921, fig. 186a, pl. III) and confirmed by recent restudy (MacGillivray 1998, 28).

2) Porcelain Deposit (KSM A.II.17: box 106). Assigned by the author to Evans's 1903 excavation in the North-West Treasure House on the basis of Pendlebury's guide to the KSM (Pendlebury *et al.* 1933–5, A. II. 17; MacGillivray 1998, 28).

East Wing

3) Royal Pottery Stores: the South-west Room, the Area of the Lime Kiln and the Small East Rooms (KSM L.III.1: boxes 996, 998; M.III.2: boxes 1997, 1998 [mislabelled]; L.III.15: box 1071; L.III.16: boxes 1072–1075 plus vases in HM and AM). Excavated in 1902 and 1905 and assigned to the MM II period (Mackenzie 1903, 176, 1906, 252–3), later refined to MM IIA (Evans 1921, 231–47; MacGillivray 1998, 35–9).

4) Loom-Weight Basement: deposit on early rough plaster floor, beneath cement floor with MM IIB deposit (K.S.M. M.III.2: boxes 1189–1194 plus vases in HM and AM). Excavated by Evans in 1902 and later assigned to the MM IA period (Evans 1903, 23–7, 1921, 249–53), recently revised to MM IIA (MacGillivray 1998, 39–41). Unfortunately the finds from the two floors were not stored separately.

5) Early Floor beneath the Room of the Olive Press (KSM M.II.5: boxes 1171–1182; L.III.1: box 997 [mislabelled]; M.III.2: boxes 1195, 1196 [mislabelled]). Excavated in 1902 and 1903, this early floor contained fine pottery and clay sealings (Evans 1903, 19–22; Panagiotaki 1993), which Evans later assigned to the MM IIA period (1921, 239–40, n.1, 1935, 134), a

date supported by recent reinvestigation (MacGillivray 1998, 42–4).

Town

6) Area of the South-West Houses: S. VII 5 upper deposit. In 1993, Macdonald discovered a MM IIA secondary deposit stratified above a primary MM IB destruction deposit (S. VII 5: lower deposit) in a Protopalatial House cut into Neolithic strata (Macdonald and Knappett, in press).

7) Area of the South-West Houses: S. VII 8. Macdonald discovered a primary destruction deposit (S. VII 8) datable to MM IIA (Macdonald and Knappett, in press).

8) Area of the South-West Houses: S. V 6.2/7.1. Macdonald excavated a burnt deposit with a sealing and part of an inscribed tablet in either Hieroglyphic or Linear A associated with pottery assignable to the Royal Pottery Stores Group (Macdonald and Knappett, in press) [*Editor's note*: the MM IIA and MM IIB stratigraphic sequence of deposits for this area, as reported in French 1993, 68, has not been confirmed by subsequent study.]

9) Royal Road South: Uppermost Basement. Excavated by Hood in 1959 and 1960 (Hood 1962a, 1966). The latest of three superimposed floor deposits, was stratified over MM IB (see above p. 108) and contained 'Egg-shell' Ware and Crude Ware typical of the Royal Pottery Stores Group as well as an Egyptian scarab of late 12th–early 13th Dynasty.

10) Villa Dionysus. Wardle excavated a deposit in 1996, which contained MM IIA Crude Ware and was stratified beneath a Roman structure, near the Villa Dionysus (Tomlinson 1996, 42).

11) Trial KV: silt level (Popham 1974, 185, figs. 2, 5, 7.1). Although the smallness of the deposit (with only five vases assigned to it) calls for caution, the presence of a polychrome three-footed cup in Woven Style together with vases in Crude Ware suggests that this deposit may belong to the Royal Pottery Stores Group.

Characteristics of the Royal Pottery Stores Group (MM IIA)

Fabrics and Wares

The usual 'fine buff' fabric continues to be employed in the production of pottery decorated in Monochrome, Light-on-Dark, Barbotine and Polychrome or Kamares wares. In addition to these basic types of surface treatments, one can distinguish more specific wares typical of this group, such as 'Egg-shell' and Crude Ware.

'Egg-shell' Ware (FIG. 4.14: 1–4)

The most distinctive and rare of the palatial pottery is in 'Egg-shell' Ware, so-called by Evans (1921, 241) because the walls of vases are comparable in thickness with the walls of small bird's eggs. The term, however, has been used erroneously to describe fine polychrome decorated MM pottery in general: for instance, Betancourt (1985, 94) wrongly cites a Knossos bowl with crinkled rim (Evans 1935, 134, fig. 102; MacGillivray 1998, no. 926, 165, pl. 135) as an example. The author restricts its use here to pottery with walls less than 1 mm thick. This technical feat may have been achieved by the careful shaving of a vase revolving on the potter's wheel, as it would have been almost impossible to throw a pot of such extreme delicacy. Another possibility is that the body was moulded: a very thin sheet of highly refined clay could have been smoothed on to the inside of a mould, in effect taking the place of a metal sheet as would have been the process for vessels in gold, silver or copper. One problem with this latter theory is that there are no traces of mould lines left on the vases. The potter's desire may have been to create the less expensive ceramic equivalent to the fine metal wares of that time. The rounded cup form, together with the mouldings and decorations seen on this ware, links it directly to the silver cups and bowls of the 'Tôd Treasure' from Egypt (Bisson de la Roque *et al.* 1953). The only examples of this ware from Knossos come from the Royal Pottery Stores and are straight-sided and rounded cups. The limited repertory and extremely fine workmanship of these pieces may indicate that they come from a single, highly specialised workshop. This true Egg-shell Ware remains a hallmark of the MM IIA period. It was certainly the finest pottery of its time and so was unlikely to have been for everyday use. A cup from the sanctuary at Kato Syme may belong to this class (Lebessi 1994, 101, fig. 96), and two fragments are known from Palaikastro (MacGillivray *et al.* 1992, fig. 14: 3). Two cups were exported to Melos (Papagiannopoulou 1991, nos. 348, 358), and one to Kea (Overbeck 1989, 183 pl. 85 DG 20).

Stamped and Impressed Ware

A group of early wheelmade pottery had designs stamped or impressed into the side of the vase before the clay dried (FIG. 4.14: 7–8). These stamps were generally repeated horizontally in a haphazard manner. Some examples include grooves, which were impressed to create a three-dimensional background to the painted patterns completing the overall decoration. This class, which Evans dubbed Stamped Ware (1921, 242), includes rounded cups in 'Egg-shell' Ware and an angular or carinated cup. It is evident, as Evans pointed out (1921, 242), that the stamps used here very likely imitate or may even be the same as those used on metal wares, which Egg-shell Ware certainly copies (MacGillivray 1987). The impressed lines could be



Fig. 4.14. Royal Pottery Stores Group (MM IIA): (1–4) Egg-shell Ware (on rounded cups of types 3 and 4); (5–6) Early Printed Ware (on straight-sided cups of type 6); (7–8) Stamped Ware (after MacGillivray 1998, pls. 103–4; Evans 1921, fig. 182).

compared with the chasing technique used in finishing metal products: perhaps the most accomplished examples are the silver cups and bowls in the ‘Töd Treasure’. Examples of a very similar ware are quite common in Fiandra’s period 2 at Phaistos (F. 359, 398, 865, 986, 5759; Fiandra 1980, pls. 35: 4, 35: 7, 44: 13, 46: 5, 47: 2, 47: 7, 48: 4, 48: 9, 49: 8, 52: 1, 52: 4, 53: 5, 53: 11, 54: 13, 54: 15, 60: 1, 60: 2; Levi 1976, fig. 683, pl. LXII) and in MM II at Kommos (Betancourt 1990, nos. 108, 353, 375, 376, 380, 382, 1011). There are also examples from Kato Syme (Lebessi 1994, 101, fig. 96) and Phylakopi on Melos (Papagiannopoulou 1991, nos. 347, 348, 358). One example from Haraga in Egypt helps to align MM IIA with the middle of the 12th Dynasty (Evans 1928, 211, 228, fig. 119; Kemp and Merrillees 1980, Ha. 5). Stamped and Impressed Ware is quite distinct from the later Precision Stamped Ware, which used stamps to create coherent and measured decorative patterns, and in which the stamps were employed quite differently (see pp. 135–6).

Early Printed Ware

The use of various devices to print sponge and crescent or seed patterns on to the clay surface of fine vases continues without perceptible change from the previous group (FIG. 4.14: 5–6). The same applies to the Light-on-Dark Ware White-banded Style. A few examples of Barbotine Ware also occur in this group (MacGillivray 1998, 56) and in period 2 contexts at Phaistos (Fiandra 1980, pls. 32: 10, 35: 2, 44: 2, 49: 2, 54: 10, 55: 10).

Forms

The most common forms, which appear in the wares discussed above, are as follows.

Egg-cups or footed goblets

Egg-cups or footed goblets of rounded and conical varieties continue (FIG. 4.7: 4–8). Rounded goblets of type 2 (FIG. 4.7: 5) continue to appear without change, and in this phase may be seen as the fine counterpart to

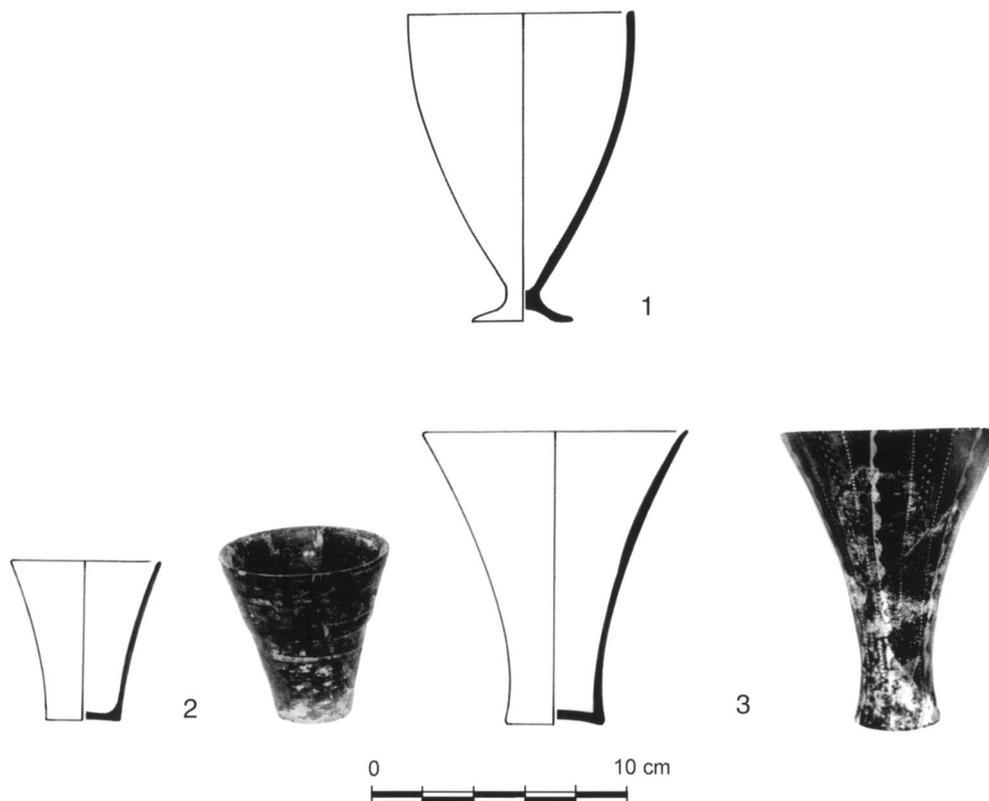


Fig. 4.15. Royal Pottery Stores Group (MM IIA): (1) conical goblet (type 3); (2–3) tumblers (types 3–4) (after MacGillivray 1998).

the frequent conical cup or crude goblet. Examples of type 3 rounded goblets (FIG. 4.7: 6) also continue without change, and make their appearance at Phaistos (e.g. F. 6506 below the floor in Vano CVII and F. 4378 below the floor in Room Gamma of Chalara South). There is no comparable form from the later deposits at Knossos or elsewhere. The conical goblet (FIG. 4.7: 7–8), the third type occurring at Protopalatial Knossos, with conical profile and pronounced out-splayed foot, makes its appearance in this group (FIG. 4.15: 1): it is wheelmade and quite fine; examples are estimated at c. 11–12 cm in height, with rim diameters at 9 cm; this type seems to be confined to Knossos. Conical goblets cease to be produced after the MM IIA period.

Tumblers

Types 1 and 2 continue from the preceding group (FIG. 4.7: 9–10). In addition, third and fourth types seem to make their first appearance in Knossian MM IIA (FIG. 4.15: 2–3). Type 3 (FIG. 4.15: 2) is the wheelmade version and likely successor to type 1. Type 4 (FIG. 4.15: 3) is the wheelmade successor to type 2 and the large equivalent to type 3, with examples 11–12 cm in height; this type could continue into the MM IIB period, and an even later development may be recognised in the chalice form of the Neopalatial period, well illustrated by MM IIIB examples from Palaikastro (MacGillivray *et al.* 1991, 135, fig. 12: 6–7).

Straight-sided cups

Straight-sided cups of types 5 and 6 (FIG. 4.8: 5–6), which appeared in the previous ceramic phase, continue to appear in some quantity in Knossian MM IIA deposits.

Tall-rimmed angular or carinated cups

Of the six types characteristic of Protopalatial Knossos, types 4, 5, and 6 make their first appearance in deposits of the Royal Pottery Stores Group (FIG. 4.9: 1–3, FIG. 4.16: 1–3). Type 4 (FIG. 4.16: 1) is wheelmade and distinguished by its very high upper side and rim as compared with the lower side; it has a strap handle probably rising above the rim and a flat base; similar cups are most often found in deposits of period 2 at Phaistos (e.g. F. 398, 429, 435, 446, 447, 1427, 2297a, 2604, 4904, 5063, 5420), and this may indicate a possible Mesara origin for examples of this type. Type 5 (FIG. 4.16: 2) is wheelmade with a distinctive convex profile on the lower side; a similar type occurs in some quantity at Myrtos–Pyrgos (Knappett 1999a, 635, fig. 24) and Palaikastro (MacGillivray *et al.* 1992, figs. 10: 1, 12: 2–3). Type 6 (FIG. 4.16: 3) is the wheelmade counterpart to type 2, which occurred in the previous group; it has an indented base, a strap handle attached at the rim and above the angle in the side, and a concave profile at the lower side; examples of this type at Phaistos are

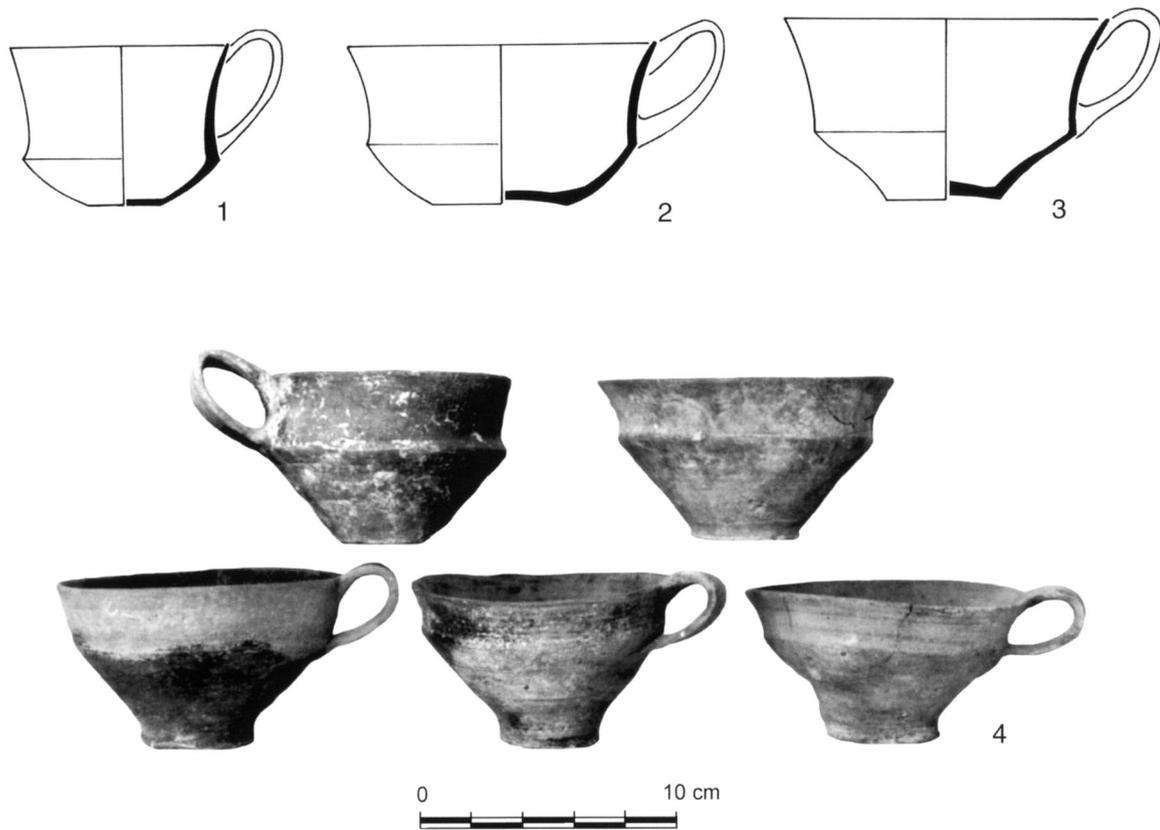


Fig. 4.16. Royal Pottery Stores Group (MM IIA): (1–3) tall-rimmed angular or carinated cups (types 4–6); (4) short-rimmed angular or carinated cups (type 2) (after MacGillivray 1998).

found in period 2 (e.g. F. 277, 399, 420, 436, 974, 1996, 3423, 5410; Fiandra 1980, pl. 38: 1–4), suggesting a possible Mesara origin for the few examples found at Knossos.

Short-rimmed angular or carinated cups of type 2

These first appeared in MM IB (FIG. 4.9: 5), and continue in Knossian MM IIA (FIG. 4.16: 4).

Rounded cups of types 3 and 4

These occurred in Knossian MM IB (FIG. 4.10: 8–9), and continue to appear in the Royal Pottery Stores Group, where the finest examples of type 4 are made in Egg-shell Ware (FIG. 4.14: 2).

Shallow angular (or carinated) bowls

Type 1 continues from MM IB (FIG. 4.11), and in addition type 2 makes its appearance (FIG. 4.17: 1). Type 2 is wheelmade with a crinkled rim, with cylindrical lambda-shaped handles on the upper side and flat base; examples are 5.0–5.5 cm high, and rim diameters are 14–16 cm; some are in Barbotine Ware, which is more characteristic of MM IB, but continues into MM IIA.

The pyxis

The pyxis is a small open vase (FIG. 4.17: 2–7) evidently designed to receive lids. Such vessels are found at Protopalatial Knossos in deposits assignable to MM IIA and IIB. Six different types can be distinguished, of which the first five (FIG. 4.17: 2–6) occur in deposits of the Royal Pottery Stores Group, and the sixth (FIG. 4.17: 7) could date to both MM IIA and IIB. All are wheelmade, and occur in Light-on-Dark or Polychrome / Kamares wares. Their height is 3–7 cm, and their rim diameter 8–12 cm. Type 1 (FIG. 4.17: 2) has a simple straight-sided profile and flat base. Type 2 (FIG. 4.17: 3) has a distinctive out-turned rim, a slight groove in the upper side below the rim and two horizontal handles in the middle of the side. Type 3 (FIG. 4.17: 4) has a distinctive angular profile, out-turned rim and two horizontal lugs on the rim. Type 4 (FIG. 4.17: 5) has a flat wide rim, two horizontal handles at the middle of the side and a slightly bevelled base. Type 5 (FIG. 4.17: 6) is small, with a flattened out-splayed rim, two imitation lugs on the side, and an indented base; it is similar to the Crude Ware pyxis (see p. 133). Type 6 (FIG. 4.17: 7) has a pronounced indent below the rim, two horizontal handles on the side and a bevelled base: it bears some resemblance to the Crude Ware pyxis, and is probably MM IIB in date.

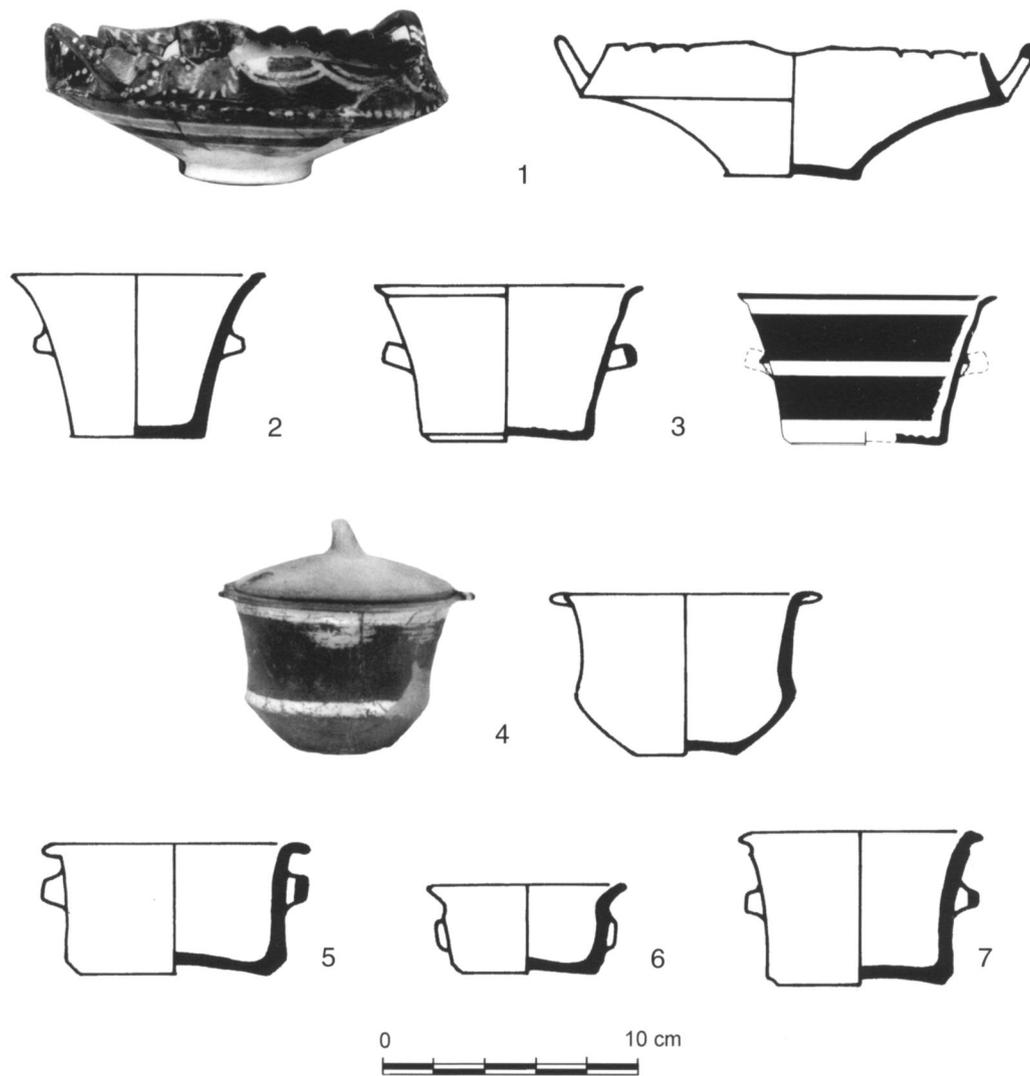


Fig. 4.17. Royal Pottery Stores Group (MM IIA): (1) shallow carinated bowl (type 2); (2–7) pyxides (types 1–6) (after MacGillivray 1986, fig. 33, 1998).

Angular or carinated bridge-spouted jar

Type 1 occurred in the Early Chamber beneath the West Court Group (FIG. 4.12: 1), and may continue into MM IIA.

Rounded bridge-spouted jars

These appear in six types at Protopalatial Knossos. Of these, type 2 occurred in the previous group (FIG. 4.12: 4–5), while types 1, 3 and 4 occur in Knossian MM IIA. Type 1 (FIG. 4.18: 1) is a short, handmade jar with the spout pointing above the rim and round-section handles; the single, well-preserved example is 7.5 cm high with a rim diameter of 7 cm (MacGillivray 1998, 78, no. 157, pls. 48–9). Type 3 (FIG. 4.18: 2) is an elegant wheelmade equivalent to the earlier type 2, with distinctive pointed handles, with a roughly rectangular section; one restored example is 12 cm high; similar jars belong in both periods 1 and 2 at Phaistos (Levi

1976, 144, fig. 215; Levi and Carinci 1988, pl. 53). Type 4 (FIG. 4.18: 3) is a wheelmade jar with a tall tapering base, a rounded shoulder, a spout rising only slightly above the rim, and thick, rounded handles with a roughly rectangular section; examples are 13.5–15.5 cm high; it is quite likely that type 4 and type 5 were fitted with lids, as seen on the stone copy from Mycenae (Xenaki-Sakellariou 1985, pl. 97: 3050). The presence of jars and straight-sided cups with matching decoration suggests the existence of specific workshops that produced them (MacGillivray 1987).

Jugs with cut-away spout

These appear in four types in Protopalatial Knossos, of which type 1 occurred in Knossian MM IB (FIG. 4.12: 6–7), and types 2–4 in Knossian MM IIA deposits (FIG. 4.19: 1–3). Type 2 (FIG. 4.19: 1), which is rare, is low, wheelmade with a large opening at the rim. Type 3 (FIG.

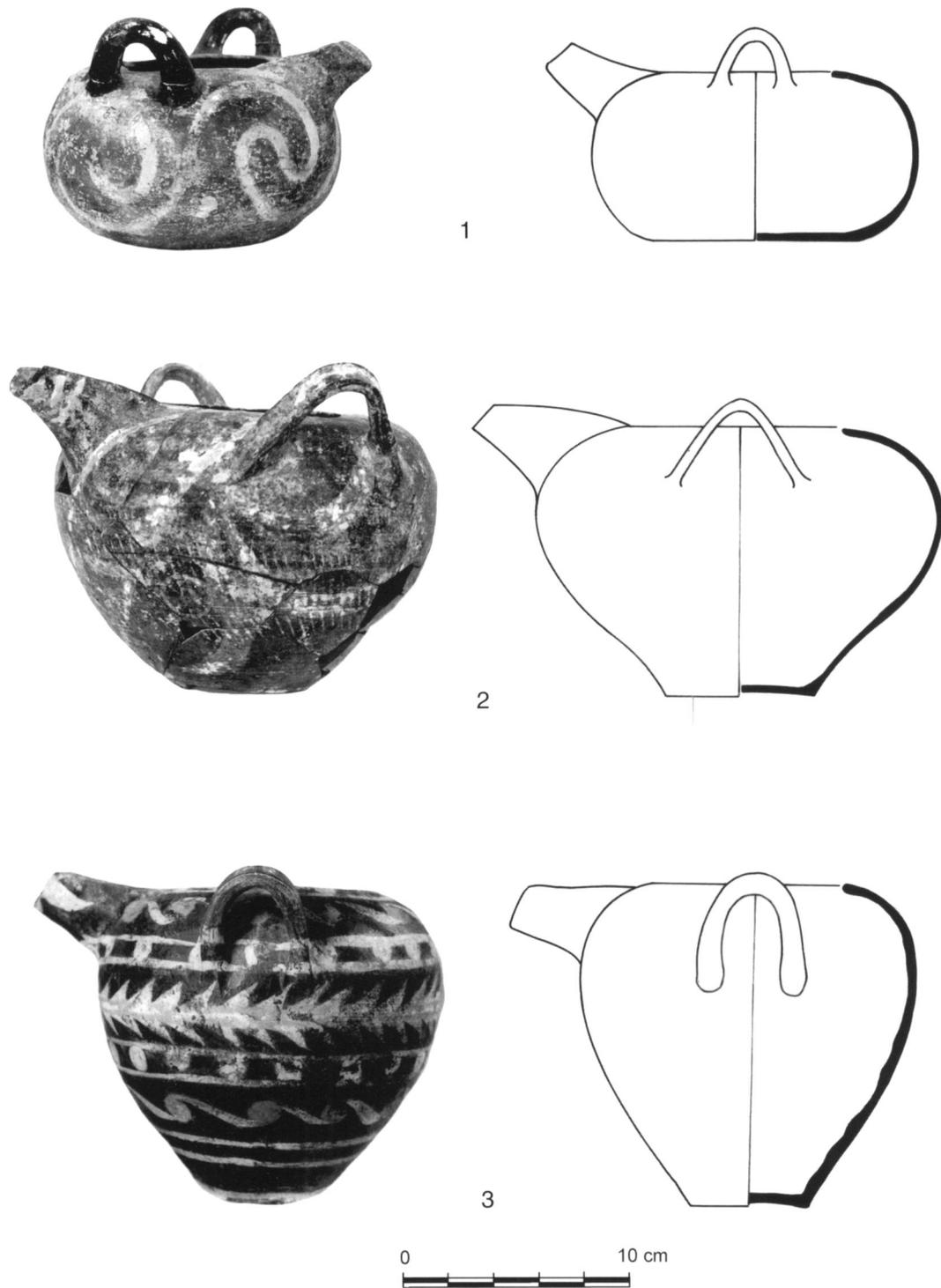


Fig. 4.18. Royal Pottery Stores Group (MM IIA): bridge-spouted jars (types 1, 3, and 4) (after MacGillivray 1998).

4.19: 2) is wheelmade with a rounded body, tall spout and strap handle; the decoration on the single Knossian example illustrating this type (MacGillivray 1998, no. 250) is so like that on a rounded bridge-spouted jar of type 4 from Kahun that they should be regarded as products of the same workshop (Kemp and Merrillees 1980, 57–9, fig. 22, Ha. 1); examples of a very similar

type are grouped with the Archanes MM II pottery types (Sakellarakis and Sapouna-Sakellarakis 1997, fig. 374). Type 4 (FIG. 4.19: 3) is wheelmade with a tall shape, tapering lower body and three strap handles attached at the rim and middle of the side; one restored example is 17.5 cm high; this type originates in MM IIA but continues to be found in MM IIIA, as examples from

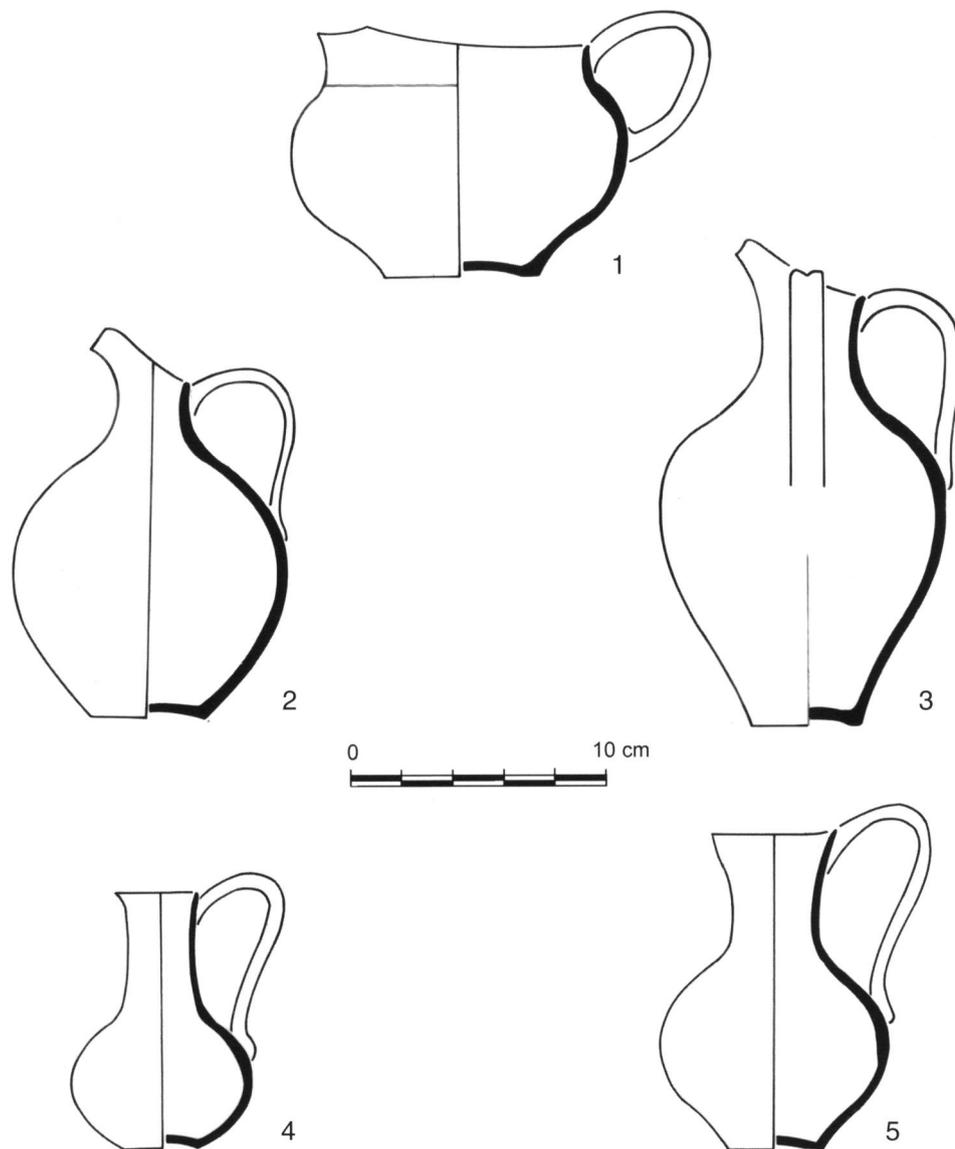


Fig. 4.19. Royal Pottery Stores Group (MM IIA): (1–3) jugs with cut-away spout (types 2–4); (4–5) jugs with horizontal spout (types 2–3) (after MacGillivray 1998).

Archanes–Anemospilia indicate (Sakellarakis and Sakellaraki 1972, pl. 183; Sakellarakis and Sapouna-Sakellaraki 1997, figs. 387, 426).

Jugs with horizontal spout (FIG. 4.19: 4–5)

These appear in three types at Protopalatial Knossos, of which the first two occur in deposits of the (MM IIA) Royal Pottery Stores Group. Type 1 (FIG. 4.19: 4) is wheelmade with a long, cylindrical neck and rounded handle; examples are 9–10 cm high. Type 2 (FIG. 4.19: 5) is also wheelmade, and has a slightly squat rounded body and rounded handle pushed into the rim; this type is also found in MM II at Archanes (Sakellarakis and Sapouna-Sakellaraki 1997, fig. 374), and probably continues throughout the Protopalatial period, as examples in MM IIIA deposits suggest (see p. 148).

Fine Buff Crude Ware

This very distinctive class of wheelmade pottery first appears at Knossos in deposits of the Royal Pottery Stores Group. It consists of simplified versions of some of the types that we find in fine buff Pared, Monochrome, Light-on-Dark and Kamares wares, which are ‘mass produced and clumsily made’ (Popham 1974, 186). The potter chose quantity over quality, perhaps because these pots were for one-time or occasional use. The label of Crude Ware, meaning rough and hastily made, lacking in refinement, has been employed to distinguish these vases from the finer varieties (MacGillivray 1998, 82). This class was probably manufactured by centring a large cone or hump of clay on the potter’s wheel and throwing small pots in rapid succession without having to re-centre a new measure of clay (Van As 1984, 150,

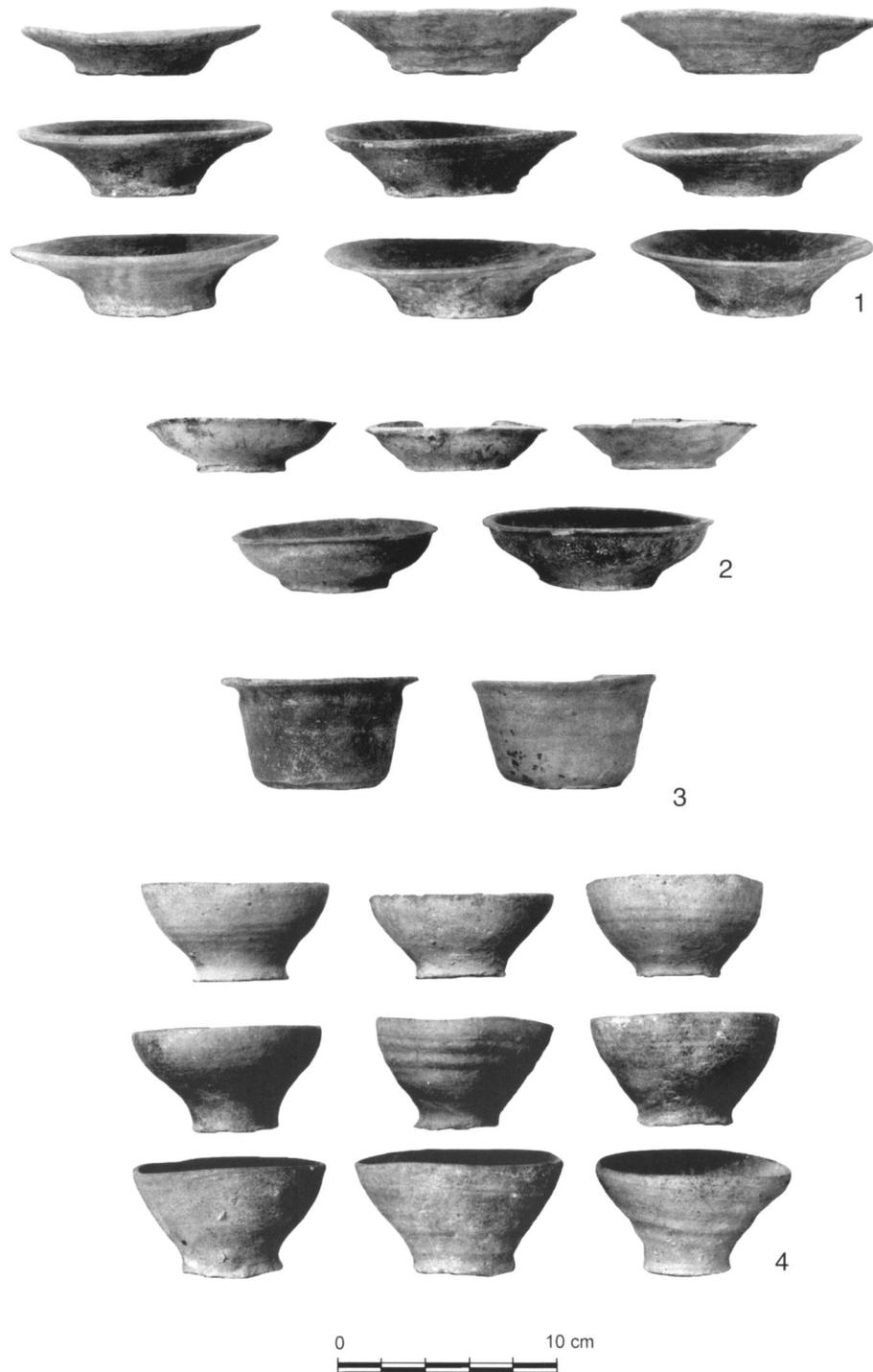


Fig. 4.20. Royal Pottery Stores Group (MM II.A). Crude Ware: (1–2) bowls (types 2 and 3); (3) pyxis; (4) goblets/conical cups (after MacGillivray 1998).

fig. 5). [Editor's note: see, however, Knappett 2004.] This innovation was almost certainly borrowed from Egypt where the radial centred potter's wheel was introduced during the 5th Dynasty and where by the time of the 11th and 12th Dynasties wheelmade pottery was in the majority (Arnold 1993, 43). A clear depiction of throwing off the hump is painted on the west wall of the

main chamber of the tomb of the nomarch Amenemhat at Beni Hasan from the end of the reign of Senwosret I, c. 1908 BC, perhaps less than a generation before Crude Ware appears in Crete (Newberry 1893, pl. XI, fourth register; Warren and Hankey 1989, 170, n. 11). That the Cretans made the technique their own is shown by the forms they chose to produce, primarily bowls and cups



Fig. 4.21. Royal Pottery Stores Group (MM IIA). Crude Ware: (1-2) cups (types 1 and 2); (3) juglets (after MacGillivray 1998).

that had already been a part of their repertory and were essential elements in their feasting rituals. The Cretans retained this technique into the MM III and LM I periods to manufacture the ubiquitous conical cup, which many Aegean archaeologists regard as the ceramic symbol of ‘minoanisation’ (Wiener 1990; Gillis 1990; Knappett 1999c).

Crude Ware Forms

Crude bowls appear in four types in Protopalatial deposits at Knossos (MacGillivray 1998, 82–3), of which types 2 and 3 (FIG. 4.20: 1–2) occur in the Royal Pottery Stores Group. Type 2 (FIG. 4.20: 1) is a shallow bowl with wide flat base and simple outward splayed rim; examples vary in height at 2–4 cm, and their rim diameters are 8.5–11.5 cm; they are plain or sprayed with dark paint, like Spatter Ware (Haggis 2001a, 2001b); this type appears in MM IIA and continues without obvious change into MM IIB and MM IIIA. Type 3 (FIG. 4.20: 2) is a shallow bowl with distinctive slightly rounded profile and flattened rim with varying degrees of outward projection; examples are 1.5–3.5 cm high, with rim diameters 8.5–10.0 cm; they are plain, sprayed with dark paint, partially dipped in dark paint or monochrome coated.

The *crude pyxis* (FIG. 4.20: 3) is similar to the pyxis of type 5 made in fine buff Monochrome, Light-on-Dark and Polychrome wares (see FIG. 4.17: 6); it is a deep, straight-sided vase with horizontal grooves below the out-turned rim; examples are 3.3–4.8 cm high, with rim diameters 8.2–8.9 cm, and they are usually monochrome coated. This form appears in Knossian MM IIA, and continues, perhaps slightly deeper and with a more pronounced groove in the side, into the MM IIB and possibly MM IIIA phases.

The *crude goblet* (FIG. 4.20: 4) recalls the egg-cup or rounded goblet of type 2 (see FIG. 4.7: 5); all examples are plain and quite similar to a Mesara type, which continued into the MM IIB period at Phaistos (Levi 1976, 274, fig. 431; Fiandra 1973) and Kommos, where they are called ‘conical cups’ (Betancourt 1986, fig. 2: 12–15).

Crude cups (FIG. 4.21: 1–2) appear in four types in Protopalatial deposits at Knossos, of which the first two occur in the Royal Pottery Stores Group. Type 1 (FIG. 4.21: 1) is a simple, straight-sided conical-shaped cup without handle; examples are 5–6 cm high, with rim diameters of 6.5–9.0 cm; this type becomes more popular in the MM IIB Trial KV Group. Type 2 (FIG. 4.21: 2) is like type 1, but with a vertical strap handle, and may be the crude equivalent to the straight-sided cup of type 5 in other wares; examples are monochrome coated and might be considered ‘type fossils’ of Knossian MM IIA.

Crude juglets (FIG. 4.21: 3) have a horizontal spout and arched round handle and are 4.5–8.0 cm high; some are sprayed with dark paint like Spatter Ware (Haggis 2001a, 2001b) or monochrome coated. This type begins in the Royal Pottery Stores Group but becomes much more common in later Protopalatial deposits.

Summary

The Royal Pottery Stores Group presents many ceramic innovations compared with the previous ceramic phase. Perhaps the most striking is the widespread adoption of the radial centred potter’s wheel, including the technique of throwing off the hump to produce what the author has labelled Crude Ware. The flywheel disc and collar, Evely’s type 3c (1988, 90, 100–1), found in Protopalatial contexts at Mallia, would have served the purpose well. In this group wheelmade pottery became the norm, especially in the case of small forms. This technical revolution may have encouraged the more creative potters to experiment with new forms, the unprecedented and wide variety of which is particularly noticeable in the material from the West Court.

The most distinctive, albeit rare, forms in use at the time of the MM IIA destruction at Knossos are rounded cups of type 3 in ‘Egg-shell’ Ware and Stamped and Impressed Ware. Also diagnostic are conical goblets of type 3, tumblers of type 3, tall-rimmed carinated cups of types 4–6, pyxides of types 1–5, rounded bridge-spouted jars of types 3 and 4, and jugs with horizontal spout of type 2.

Relative chronology of the Royal Pottery Stores Group (MM IIA)

Synchronisms with other Cretan sites

Synchronisms with other Cretan deposits are summarised in TABLE 4.2. As much of the Kamares ware produced in the Mesara found its way to Knossos, the overall links between the Royal Pottery Stores Group (Knossian MM IIA), period 2 at Phaistos and MM IIA at Kommos (Betancourt 1990, 30–3) are confirmed.

Chronological comparisons with other sites, however, are tenuous at best. The Archanes excavators are unable to be more specific than MM IIA–IIB, and there are no clear comparable deposits evident elsewhere in west, central or southern Crete. Clear stratigraphy at Palaikastro suggests that MM II was a long and largely unbroken sequence (MacGillivray *et al.* 1992, 132–5). A contemporary deposit at Petras, the ‘Lakkos’, when published, should shed much new light (Tsipopoulou 1999; Haggis 2001b, 3–4).

Synchronisms with the Aegean and east Mediterranean

Overseas, we may postulate some overlap between our group and Phylakopi II (Papagiannopoulou 1991, nos.

TABLE 4.2: Selected Cretan sites with deposits contemporary with the Royal Pottery Stores Group (MM IIA).

West Crete

?

North-Central Crete (including Pediada)

Archanes: (Sakellarakis and Sapouna-Sakellarakis 1997, fig. 374)

South-Central Crete

Phaistos: Period 2 (Fiandra 1962); Fase Ib (Levi and Carinci 1988)

Kommos: MM IIA (Betancourt 1990, 30–3)

Kato Syme (Lebessi 1994, 101, fig. 96)

Mallia / Lasithi

?

East Crete

Petras (Haggis 2001*b*, 3–4)

Palaikastro (MacGillivray *et al.* 1992, figs. 10.1, 12.2–3, 14.3)

347, 348, 358), Keos IV (Overbeck 1989, 183, pl. 85 DG 20), Lerna V level 5 (Zerner 1990) and perhaps Aigina–Kolonna IX (Touchais 1989, 113, Table II, 258) on the basis of Knossian imports (see also Hiller 1993; Kilian-Dirlmeier 1997).

MBA connections with the Levant are shown with the MM IIA cup from Karmi in Cyprus (Stewart 1962) and the tall-rimmed angular cup of type 4 from the MBA phase 2 funerary context at Sidon (MacGillivray 2003).

The ‘Tôd Treasure’, with its cartouche of Amenemhat II, contained silver vases in forms paralleled in both Knossian MM IB and MM IIA, and provides a link between Egypt’s mid-12th Dynasty and MM IIA Crete (Bisson de la Roque *et al.* 1953; MacGillivray 1998, 103–4). The numerous Minoan sherds from Kahun and Haraga find close parallels in Cretan MM IIA types and styles and so confirm the chronological correspondence between the second half of the 12th Dynasty and MM IIA (Kemp and Merrillees 1980, 6–14, 82–90; MacGillivray 1998, 105–6).

THE TRIAL KV GROUP (MM IIB)

The next ceramic phase, represented by the Trial KV Group of deposits, is the most difficult to define stratigraphically at Knossos. The most reliable deposit is the destruction level of Trial KV, on the Acropolis slopes, which has nothing above it and very little beneath it (i.e. Trial KV silt-level deposit: see p. 124, no. 11, and Popham 1974, 185, figs. 5, 7: 1). Evans’s MM IIB deposit on the cement floor in the Loom-Weight Basement was stratified over a MM IIA level and beneath MM III fill, but the material from the different archaeological layers was not stored separately (see pp. 123, no. 4). The ‘MM II’ floor deposit in F/FG of the

SEX excavations seems to contain the stylistic elements of this group, and may provide a clearer picture of this ceramic phase when it is published (Warren 1981, 74; MacGillivray 1998, 52).

Archaeological contexts (FIG. 4.22)

East Wing

1) Loom-Weight Basement: cement floor deposit (KSM M.III.2: boxes 1189–1194 and complete/restored vases in the KSM, HM and AM). This consists of the whole vessels found on this floor, and stratified over an earlier MM IIA deposit, associated with a rough plaster floor. Excavated by Evans in 1902 and later assigned to the MM IIB period (Evans 1903, 23–7; 1921, 248–60; MacGillivray 1998, 39–41).

Town

2) Trial KV: destruction deposit. Popham cleared part of a house at Sochara on the slopes of the Acropolis in 1969 (Popham 1974). A destruction deposit included stacked pottery, which Popham assigned to the MM IIB period, a date supported by recent reinvestigation (MacGillivray 1998, 52). This was stratified above an earlier, possibly MM IIA level (see Royal Pottery Stores Group, deposit no. 11).

3) SEX: deposit F/FG. This was described as MM II by the excavator (Warren 1981, 74 figs. 3, 4), but on the basis of the material published so far, it may be assigned to the Trial KV Group (MacGillivray 1998, 51–2).

Tombs

4) Mavro Spelio: pit in Tomb XVII (KSM T.III.3; Forsdyke 1927; Evans 1928, 557–8, fig. 353). In 1926

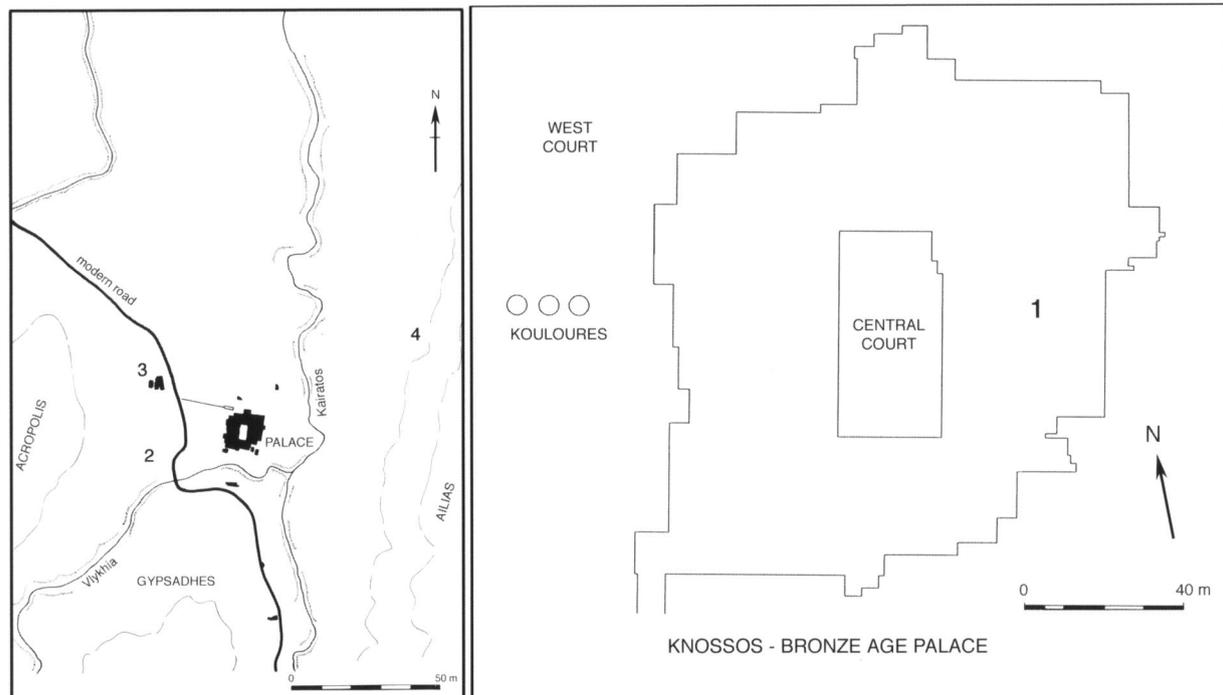


Fig. 4.22. Trial KV Group (MM IIB): location of deposits listed in the text.

and 1927 Evans and Forsdyke excavated a number of tombs on the west slopes of Ailias. Few were undisturbed, and there is no single primary Protopalatial burial. In Tomb XVII, however, a pit had been dug into the floor: the pottery associated with it suggests that this deposit can be placed in the Trial KV Group (MacGillivray 1998, 53).

Characteristics of the Trial KV Group (MM IIB)

Fabric and Wares

A large percentage of the pottery continues to be produced in the usual fine buff fabric in Monochrome, Light-on-Dark and Polychrome wares. In addition to these basic types of surface treatments, one can distinguish more specific wares typical of this group, as described below.

Precision Grooved Ware (FIG. 4.23: 1)

This comprises fine wheelmade vases with distinctive, precision-tooled and evenly spaced groups of horizontal grooves cut into their sides. It is similar to the Shallow Grooved Ware of the MM IB Early Chamber beneath the West Court Group (p. 109), but much more carefully executed. This technique is used on straight-sided, rounded and short-rimmed angular or carinated cups as well as jugs with a horizontal spout. Many of the examples are also decorated in the White-spotted Style, which is more typical of the MM IIIA period (see below pp. 145–6), but most likely goes back to MM IIB, as examples from Knossos and Phaistos period 3

suggest (MacGillivray 1998, 57; F. 783, 3089, 6248; Fiandra 1980, pl. 42: 1). A very similar effect in silver may be seen on a cup from Enkomi in Cyprus (Matthäus 1980, pl. 76: 3).

Precision Stamped Ware (FIG. 4.23: 2)

This is distinguished by the carefully measured use of stamps on wheelmade vases. Like the earlier Stamped and Impressed Ware (p. 124), it employed die stamps but instead of these being pushed into the wall of the vase, the thin wall of the vase was pushed from within, leaving the manufacturer's fingerprint. The die stamps were in the form of circles, star or sun motifs, spirals, concentric circles and shells arranged in such a way as to be supplemented or connected with painted designs to form well-ordered decorative patterns. The technique was used on straight-sided and rounded cups and on bridge-spouted jars. Most Knossian examples are from mixed MM IIB and MM IIIA contexts, but a cup from deposit F/FG in SEX suggests an origin in MM IIB (Warren 1981, 74, fig. 3). This date is also supported by a number of almost identical examples from Phaistos period 3 (F. 1041, 1477; Borda 1946, 21, pl. XI, 77406; Pernier 1935, pls. XXIVa, XXXb, XXXV), including one decorated in the Sunrise Style of MM IIB (Pernier 1935, pl. XXXb). Similar examples are known from Kommos (Betancourt 1990, nos. 378, 1159, 1160, 1191, 1209, 1307, 1589), Palaikastro (Bosanquet and Dawkins 1923, 16, fig. 11; Bernini 1995, 71, fig. 13: 52) and Thera (Papagiannopoulou 1991, nos. 295–6), and a large closed



Fig. 4.23. Trial KV Group (MM IIB): (1) Precision Grooved Ware; (2) Precision Stamped Ware; (3) Late Printed Ware (after MacGillivray 1998).

vessel from Kea IV may be a Cycladic imitation (Overbeck 1989, 136, pl. 70: 26). A silver cup from Byblos gives a good impression of what the metal inspirations for this ceramic class might have been (Montet 1928, pl. CXI; Davis 1977, fig. 64), as does the shoulder of a bronze jug with interlocking spirals (Matthäus 1980, no. 260.) The difference between the Stamped and Impressed ware of MM IIA and the Precision Stamped Ware of MM IIB could reflect a change in the manufacture and decoration of metal wares; the earlier being stamped and chased, the later introducing the repoussé technique.

Late Printed Ware (FIG. 4.23: 3)

The successor to MM IB and MM IIA Early Printed Ware may be seen on a group of straight-sided cups of type 10 (MacGillivray 1998, nos. 223, 293–8); these show the crescent or maggot pattern similar to that in the earlier vases (FIG. 4.14: 6). In MM IB and IIA patterns could be applied directly on to the buff surface of the clay; in Late Printed Ware they are printed on a white horizontal band as well as on a dark monochrome surface.

Polychrome / Kamares Ware

As we have seen earlier, this kind of surface treatment, which goes back to the late Prepalatial period, developed into a number of popular styles in the First Palace period (MacGillivray 1998, 56–65). Those common in Knossian MM IIB are as follows:

Sunrise Style (FIG. 4.24: 3). One of the most distinctive styles is set around a white design composed of two

concentric semi-circles with upright petals or rays above, possibly representing a stylised sunrise. The main motif alternates most frequently with red ‘coralline’ designs (Walberg 1976, 69) outlined in white, less frequently with vertical strokes and occasionally represented on its own. Knossian examples are from mixed MM IIB and MM IIIA deposits, but the popularity of this style in Phaistos period 3 argues for a MM IIB origin (F. 341, 441, 445, 801, 950a, 1358; Pernier 1935, 220, fig. 97, 262, figs. 145, 150 left, 177 right; Borda 1946, pls. A top left, 9 second row left; Levi 1976, pl. 179: 1).

Starburst Style (FIG. 4.24: 1). A small number of straight-sided cups of types 8 and 10 are decorated with a white-painted star or rosette as the central motif on two sides with swirls and loops as frames. Knossian examples are from mixed MM IIB and MM IIIA deposits, but the frequency of very similar ceramic types in a closely related style from Phaistos period 3 (F. 610, 700, 1040, 4076, 4941, 5083, 5541; Pernier 1935, 267, fig. 150 right, 381, fig. 228: 2), and Kommos (Betancourt 1990, no. 1328), strongly suggest a date in MM IIB. Betancourt (1985, fig. 70: 0) illustrates the central motif as typical of MM IIB.

Wavy-line Style (FIG. 4.24: 2, 6). This highly distinctive style is characterised by covering the body of rounded cups of type 6 with either wavy lines or scale patterns in white paint and filling the interstices with white or polychrome patterns often repeated in diagonal lines. A selection of patterns is shown in FIG. 4.24: 6. In most cases, the base of the cup is decorated with elaborate,

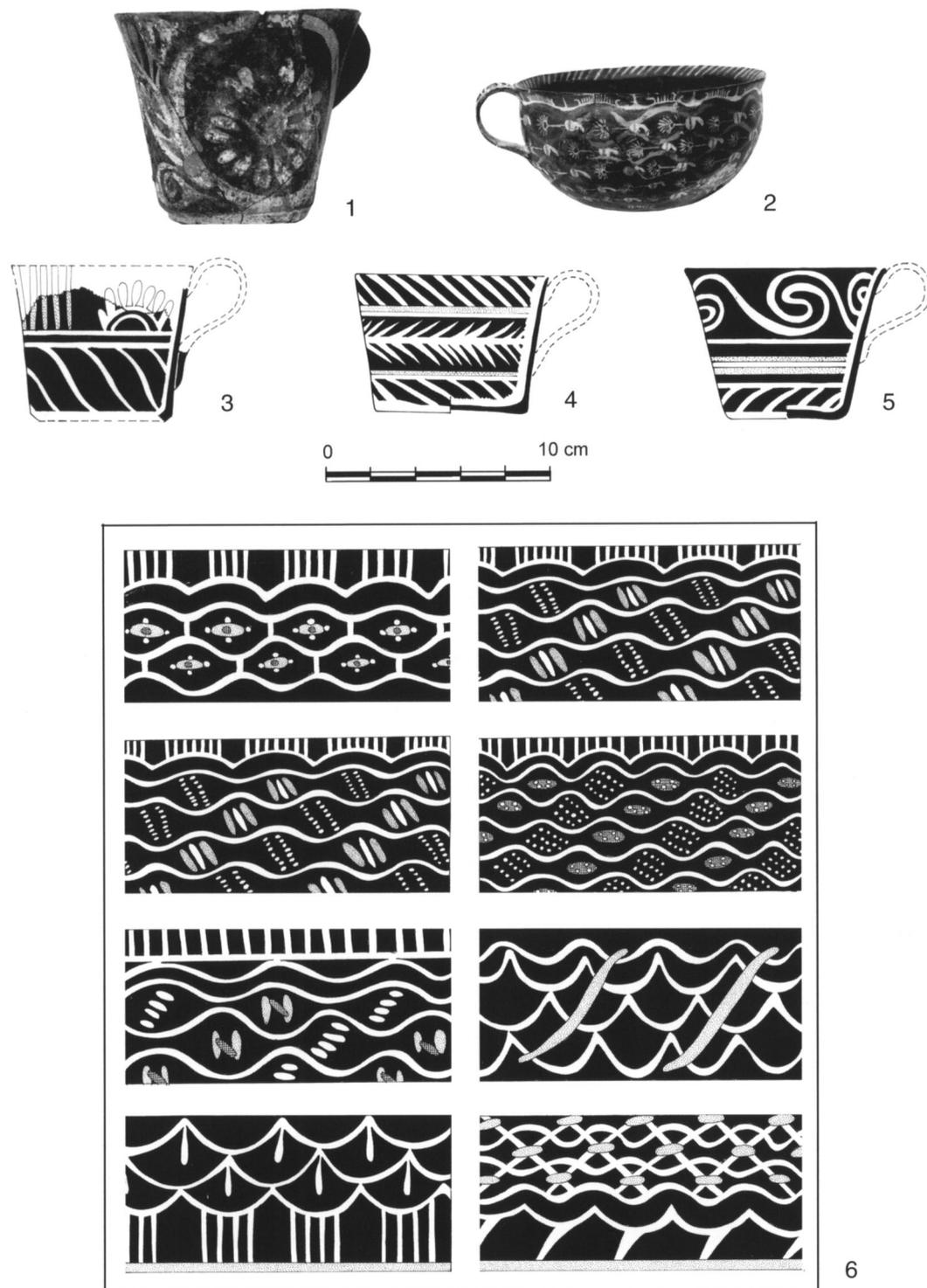


Fig. 4.24. Trial KV Group (MM IIB): Polychrome Ware: (1) Starburst Style; (2 and 6) Wavy-line style; (3) Sunrise Style; (4–5) Spiral Band Style (after MacGillivray 1998).

dynamic polychrome patterns on the bottom and inside of the base. This style could be considered a successor to the MM IB Woven Style (FIGS. 4.5, 4.6), for the patterns could reflect woven designs with tiny beads stitched on in a variety of regular patterns. This style occurs in mixed deposits from the end of the Old Palace period at Knossos, but its frequency in period 3 at

Phaistos suggests that it was most common in MM IIB (F. 527, 1430; Pernier 1935, pl. XXIIa; Levi 1976, pl. 124: c, e, f, h). The example from the primary MM IIIA destruction deposit at Archanes–*Anemospilia* may be a survivor (Sakellarakis and Sakellaraki 1991, 144, fig. 120; Sakellarakis and Sapouna-Sakellaraki 1997, 418, fig. 384; Warren and Hankey 1989, 47–52).

Exported examples at Phylakopi (Papagiannopoulou 1991, nos. 346, 359, 361), Kea (Overbeck 1989, 182, pl. 85 DG 16), Ugarit (Schaeffer 1949, 256, fig. 109: A) and Tell el-Dab^a (Walberg 1991; MacGillivray 1995) testify to the popularity of this distinctive Knossian style overseas.

Spiral Band Style (FIG. 4.24: 4–5). This is defined by the subdivision of the surface into horizontal zones and the use of either a spiky foliate band or interlocking S-spirals running around the vase. Forms decorated in this style include straight-sided cups of types 5–10, rounded cups of type 5, rounded bridge-spouted jars of type 5, spouted jars and bowls. Very closely related styles are found in other fabrics unlikely to originate from the Knossos region (MacGillivray 1998, 85; Day and Wilson 1998, fig. 2). Evans (1921, 251) and Betancourt (1985, 97, fig. 70: K, AG) placed vases in this style in the MM IIB period. This designation is yet to be supported at Knossos because examples come from mixed MM IIB and MM IIIA contexts, but is sustained by the frequency of examples in the destruction deposits of Phaistos period 3 (F. 305, 525, 782, 804, 806–7, 1359, 2585, 3059, 6144, 6150; Pernier 1935, 390, fig. 237). Further support may be the use of the spiky foliate band on Precision Stamped Ware (FIG. 4.23: 2; MacGillivray 1998, cup no. 433). There is little evidence for the use of the continuous running band of interlocking retorted or S-spirals on pottery before its adoption in MM IIB, when it becomes quite common. Variations in the interlocking spiral may be seen in the Heavy Spiral Style of MM IIIA (see below, p. 146). This motif was enlarged to exaggerated proportions and became one of the dominant decorative patterns during MM IIIB at Knossos (Warren 1991a, fig. 6: B; Hood 1996; Macdonald 1996), and in the Mesara (Shaw *et al.* 2001, cat. nos. 18, 19, 26, 35, 40, 43, 50–1).

Forms

Straight-sided cups of types 5 and 6

These originate in Knossian MM IB (FIG. 4.8: 5–6) and continue to appear in MM IIA and MM IIB. In addition, types 7–10 (FIG. 4.25: 1–4) make their appearance in the Trial KV Group. Type 7 (FIG. 4.25: 1) is wheelmade with a slightly rounded profile at the base and lower side and strap handle attached at the rim and lower side; examples are 5.5–7.0 cm in height, with rim diameters 8.0–10.5 cm, and are often decorated in the Starburst or Spiral Band styles. Type 8 (FIG. 4.25: 2) is wheelmade and a tall counterpart for type 7; examples are decorated in the Starburst and the Spiral Band styles, and appear in Precision Grooved Ware; similar cups from Phaistos are from period 3 contexts (F. 1426, 1445, 1719, 1911, 2301a). Type 9 (FIG. 4.25: 3) is wheelmade with a strap handle attached at the rim and lower side, and has a distinctive bevelled profile at the base and lower side; examples are 6–7 cm in height, and rim diameters 8.0–12.5 cm; some are decorated in the Sunrise Style most common at Phaistos on similar cup types in period 2 (F. 441, 445, 801, 950a), but also continuing into period 3 (F. 1911); others are decorated in the Spiral Band Style and Starburst Style; this type was most popular during the MM IIB period at Knossos, but may have been introduced earlier at Phaistos (see F. 443, from Vano 11); an example from a well-stratified sequence of deposits at Palaikastro confirms that the type belongs to the later part of the Old Palace period in eastern Crete (MacGillivray *et al.* 1992, 136, fig. 13). Type 10 (FIG. 4.25: 4) is wheelmade with bevelled base and is the tall version of type 9; some examples are in Late Printed Ware, others are decorated in the Starburst Style and the Spiral Band Style; this type is also common in the destruction deposits of period 3 at Phaistos (Levi and Carinci 1988, 205–11, pls. 88–9).

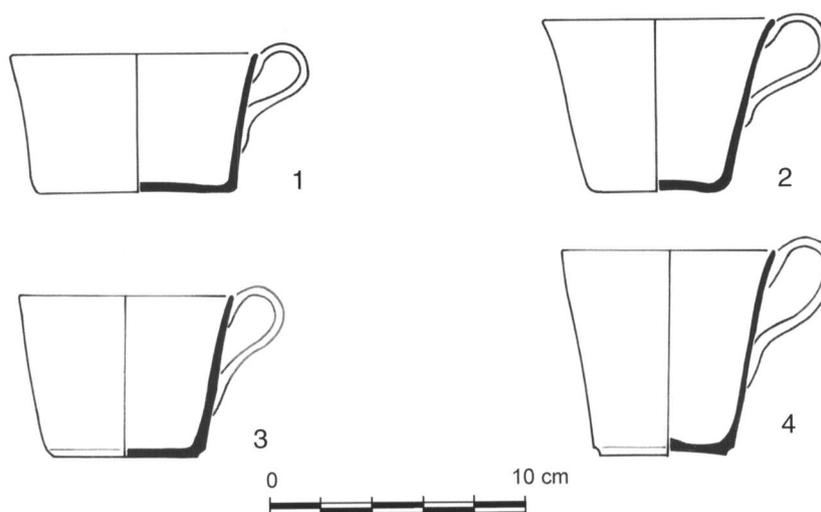


Fig. 4.25. Trial KV Group (MM IIB): straight-sided cups (types 7–10) (after MacGillivray 1998).



Fig. 4.26. Trial KV Group (MM IIB): (1–3) short-rimmed angular or carinated cups (type 3); (4–6) rounded cups (types 5–7) (after MacGillivray 1998).

Short-rimmed angular or carinated cups of type 3 (FIG. 4.26: 1–3)

These probably first appear in this group; this type is wheelmade with a strap handle attached at the rim and below the slight angle formed by tooling; examples are 8.5–10 cm high, with rim diameters 10.0–13.5 cm; many examples are decorated in the White-spotted Style, which began in MM IIB and became very popular in MM IIIA; the similarity of the fine tooling to create the ridge below the rim recalls straight-sided cups of type 12 (see p. 143) and gives the impression of both types having been manufactured in the same workshop; a closely related form appears in period 3 at Phaistos (F. 534, 4687, 6054); an example also appears in a MM IIB context at Petras (Tsipopoulou 2003, 49, fig. 12).

Rounded cups of types 5, 6 and 7 (FIG. 4.26: 4–6)

These appear in Knossian MM IIB. Type 5 (FIG. 4.26: 4) is wheelmade and appears to be a development of the MM IB–MM IIA type 3 with a less pronounced base and lower side, but retaining the same offset rim and rounded bulge in the profile of the upper side (FIG. 4.10: 8); examples exist in Precision Stamped Ware, Precision Grooved Ware and the Spiral Banded and Heavy Banded styles; this type originated in the MM IIB period but may have continued into the early stages of MM IIIA. Type 6 (FIG. 4.26: 5) is wheelmade and seems to be a development of the MM IB–MM IIA type 4 (FIG. 4.10: 9); it continues to have a rounded profile on the lower side but now has a slightly raised foot and wider mouth; examples are decorated in the Wavy-line Style; similar cups with Wavy-line Style decoration from Phaistos are

found in the period 3 destruction deposits, and provide a firm date for both this type and decorative style (F. 521, 527, 1430, 6018, 6147, 6148; Pernier 1935, pl. 21a; Levi 1976, pl. 64). These distinctive cups are one of the most popular MM IIB central Cretan exports; examples are found at Palaikastro (Bosanquet and Dawkins 1923, 16, fig. 10) Phylakopi (Papagiannopoulou 1991, nos. 346, 359, 361), Kea (Overbeck 1989, 182, pl. 85 DG 16), Ugarit (Schaeffer 1949, 256, fig. 109: A) and Tell el-Dab'a (Walberg 1991, 117, pls. 1–2; MacGillivray 1995); a possible successor to type 6 may be seen in a MM III cup from Kommos (Betancourt 1990, fig. 38: 790); later still is the rounded cup decorated in Evans's Finicky Style of MM IIIB (Evans 1921, 595, fig. 437c–e; MacGillivray *et al.* 1991, 138, fig. 14). Type 7 (FIG. 4.26: 6) is wheelmade, has a sharply offset rim and stands on a raised base; examples are 6.5 cm high, with diameters 9–10 cm, and are in Precision Grooved Ware decorated in the White-spotted Style (see pp. 145–6); this form is not found in the period 3 deposits at Phaistos, nor in the MM IIIA deposits from the town and acropolis at Knossos.

Pyxides of type 6

These are illustrated by a single example (MacGillivray 1998, 77) and are likely to make their first appearance in Knossian MM IIB. (See pp. 127–8 and FIG. 4.17: 7.)

Rounded bridge-spouted jars

These appear in two types in the Trial KV Group (FIG. 4.27), types 5 and 6, both wheelmade. Type 5 (FIG. 4.27: 1) has a bulbous profile, a spout rising above the rim,

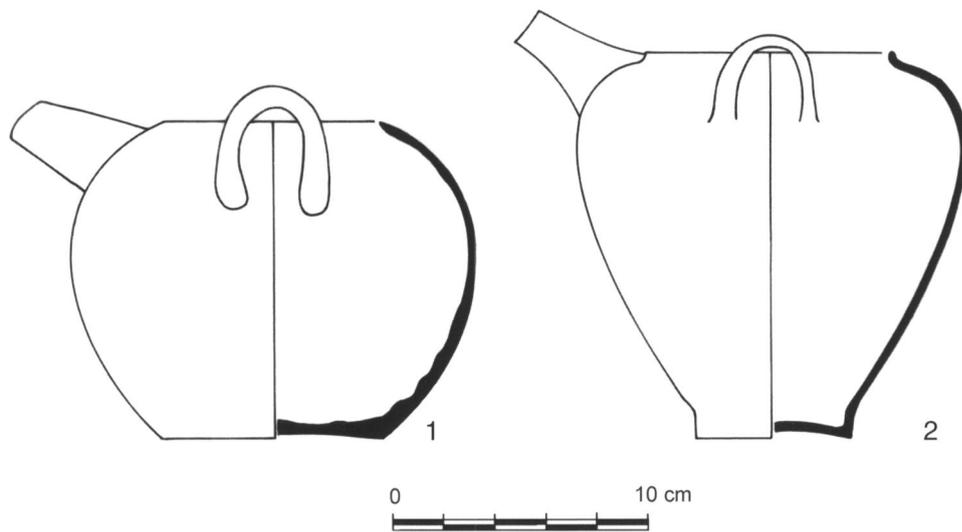


Fig. 4.27. Trial KV Group (MM IIB): bridge-spouted jars (types 5 and 6) (after MacGillivray 1998).

and handles like those on earlier type 4; examples are 10.5–12.0 cm high and are decorated in the Sunrise and Spiral Band styles; a similar form decorated with sunrise motifs from Context 19 at Kommos could be a MM IIIA development of the type (Betancourt 1990, no. 822). Examples in stone, probably heirlooms and certainly imports, were found in chamber tombs at Mycenae (Xenaki-Sakellariou 1985, pls. 97: 3050, 141: 4922). Type 6 (FIG. 4.27: 2) has a tall profile tapering towards the base, a slightly raised rim, a spout rising above the rim and handles like those on types 4 and 5; examples are 14–15 cm high; a very similar bridge-spouted jar decorated in the Wavy-line Style was found in a grave at Byblos (Baramki 1973, pl. IV: 1).

Jugs with cut-away spouts of type 4 (FIG. 4.19: 3)

These probably continue also in Knossian MM IIB, as suggested by their presence in Knossian MM IIIA contexts (MacGillivray 1998, 80). The same applies to jugs with horizontal spout of type 2 (FIG. 4.19: 5).

Rhyta

Rhyta appear in two types in deposits from the Old Palace at Knossos. Type 1 (FIG. 4.28) is conical with a flat rim, strap handle and metallic-like rounded additions at the rim; its height is approximately 27 cm; some examples are from mixed MM IIB and MM IIIA deposits (MacGillivray 1998, no. 395), but their decoration suggests that they belong in MM IIB (Warren 1981, 74, fig. 3); very similar forms appear in period 4 at Phaistos (F. 4263, 5778) and in MM III contexts at Kommos (Betancourt 1990, no. 652, 1985, 105, fig. 77; Koehl 1981, 180, fig. 1), suggesting that production of this type probably began in MM IIB and continued into MM III. Type 2 (MacGillivray 1998, 142, nos. 398–9, pl. 72) is globular and restored on the basis of a similar MM IIB form from Phaistos (F. 1036) (see also Koehl 1981, 180, fig. 1).



Fig. 4.28. Trial KV Group (MM IIB): conical rhyton (type 1) (after MacGillivray 1998, pl.16)

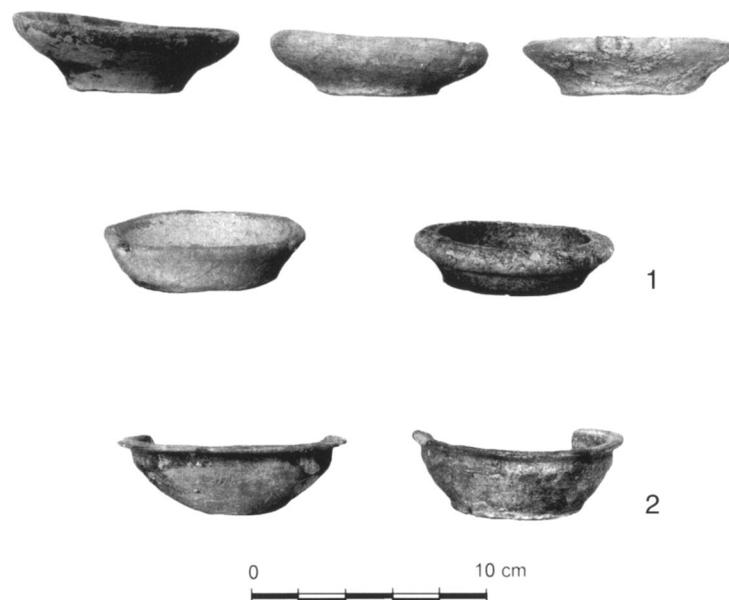


Fig. 4.29. Trial KV Group (MM IIB): Crude Ware bowls (types 1 and 4) (after MacGillivray 1998).

Fine buff crude ware

This continues from the preceding group with the introduction of some new types, as discussed below.

Crude bowls of types 2 and 3 (FIG. 4.20: 1–2). These continue with little apparent change from MM IIA to MM IIB, as shown by examples from the destruction deposit in Trial KV (Popham 1974, fig. 6: 8, 16) and the pit in Mavro Spelio Tomb XVII (Forsdyke 1927, 281, pl. 23: 19–20). There are also similar bowls from MM IIB destruction deposits of period 3 at Phaistos (Fiandra 1973, pl. 31; Levi 1976, pl. 143). But type 1 (FIG. 4.29: 1) seems to make its appearance in this group: it is a shallow bowl with a very thick section, flat base and rounded rim; examples are plain (Popham 1974, fig. 6: 1–5), 3.0–3.5 cm high, with rim diameters 9.5–10.0 cm. Type 4 (FIG. 4.29: 2) also seems to make its appearance in this group: it is a shallow bowl with distinctive angular profile and slightly flattened, out-turned rim (Popham 1974, fig. 6: 8).

Crude pyxides (FIG. 4.20: 3). These continue from MM IIA into MM IIB without apparent change.

Crude cups of type 1 (FIG. 4.21: 1). These continue from MM IIA, but become much more popular in MM IIB, as numerous examples from the destruction deposit in Trial KV (Popham 1974, figs. 6: 10, 8: 1, 4, 7) and the pit in Mavro Spelio Tomb XVII (Forsdyke 1927, 281, pl. 23: 25) show. The earlier type 2 is not attested in deposits of this group, but type 3 (FIG. 4.30: 1) makes its appearance in Trial KV (Popham 1974, fig. 6: 11, 13) and in the pit in Mavro Spelio Tomb XVII (Forsdyke 1927, 281, pl. 23: 24); type 3 is a one-handled

straight-sided cup like type 2, but the handle is smaller and rougher and, in many cases, too small to function as such: it is more like a grip in the shape of a handle; examples are monochrome coated, 5.5–7.0 cm high with diameters of 8.5–9.5 cm. Type 4 (FIG. 4.30: 2) is also new: it has a roughly angular profile, which in most cases has a small, rough handle or grip like that on type 3: there are numerous examples from Trial KV (Popham 1974, fig. 6: 11–15), the pit in Mavro Spelio Tomb XVII (Forsdyke 1927, 281, pl. 23: 26) and deposit F/FG in the SEX excavations (Warren 1981, 74, fig. 4 right).

The *crude amphoriskos* (FIG. 4.31: 1–2) is a new form: it is a small closed jar similar in profile to the crude juglet but with two false handles represented by arched folds of clay on the sides.

Crude juglets (FIG. 4.21: 3) first appeared in deposits of the Royal Pottery Stores Group, but became more popular in MM IIB, as shown by numerous examples from the West Polychrome Deposits (MacGillivray 1998, 84, fig. 2.22 right, pl. 61), Trial KV (Popham 1974, fig. 6: 23, 25) and the pit in Mavro Spelio Tomb XVII (Forsdyke 1927, 281, pl. 23: 28).

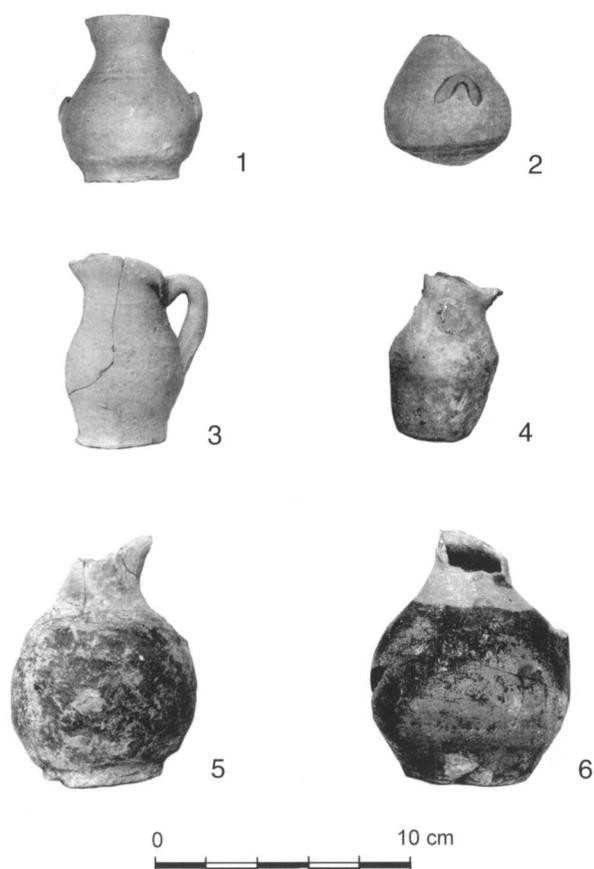
Crude jugs (FIG. 4.31: 5–6) appear in late Protopalatial contexts in two types. Type 1 (FIG. 4.31: 3–4) is a small slightly rounded jug with rough handle or grip like those on crude cups of types 3 and 4; examples are 7–8 cm high with base diameters of 3–4 cm; a similar type also appears in the late deposits at the Old Palace at Phaistos (F. 4401; Levi 1976, 500, fig. 771). Type 2 (FIG. 4.31: 5–6) is a slightly larger rounded jug with round handle and raised base; examples are 10–11 cm high (Forsdyke



Fig. 4.30 (right). Trial KV Group (MM IIB): Crude Ware cups (types 3 and 4) (after MacGillivray 1998).



Fig. 4.31 (below). Trial KV Group (MM IIB): (1-2) Crude Ware amphoriskoi; (3-6) jugs (types 1 and 2) (after MacGillivray 1998).



1927, 281, pl. 23: 32); similar jugs come from MM IIB contexts at Monastiraki (Kanta 1999, 389, pl. 82e). Its occurrence in mixed MM IIB-MM IIIA contexts at Knossos may suggest continued production into the latter phase.

Summary

The wares and styles most diagnostic of the Trial KV Group are Precision Stamped Ware and the Sunrise, Starburst, Spiral Band and Wavy-line styles used most frequently on straight-sided cups of types 9 and 10, rounded cups of types 5 and 6 and rounded bridge-spouted jars of types 4 and 5. Also characteristic are the pyxis of type 6 and the short-rimmed angular or carinated cups of type 3. Many of the Crude Ware types introduced in MM IIA seem to continue, but Crude Ware bowls of types 1 and 4, cups of types 3 and 4, and jugs of types 1 and 2 seem to make their first appearance in deposits of this group. It is quite likely that Ridged Ware and the White-spotted and Heavy Spiral styles were introduced before the end of MM IIB at Knossos, but they become much more popular in the following ceramic phase.

TABLE 4.3. Selected Cretan sites with deposits contemporary with the Trial KV Group (MM IIB).

West Crete

Monastiraki: General destruction horizon (Matz 1951; Kanta 1999)

North-Central Crete (including Pediada)

Poros, Sanoudakis plot (Blackman 1999, 118)

South-Central Crete

Phaistos: Period 3 main destruction deposits (Fiandra 1962); Fase II (Levi and Carinci 1988)

Kommos: MM IIB (Betancourt 1990, 33–7)

Mallia / Lasithi

Mallia: Quartier Mu, destruction (Knappett 1999a; Poursat and Knappett 2005)

East Crete

Myrtos Pyrgos: Pyrgos III (Cadogan 1978; Knappett 1999a)

Vasiliki: Group A (Andreou 1978)

Katalimata: (Nowicki 2001)

Petras: Palace, Hieroglyphic Archive: (Tsipopoulou 2003, 49, fig. 12)

Palaikastro: (Bosanquet and Dawkins 1923, 16, figs. 10, 11; MacGillivray and Driessen 1990, 403; MacGillivray *et al.* 1992, 133; 1998, 239)

Kato Zakros: (Andreou 1978, 93ff.)

Relative chronology of the Trial KV Group (MM IIB)

Synchronisms with other Cretan sites

As shown in TABLE 4.3, the deposits assigned to the Trial KV Group find good correlations with period 3 deposits at Phaistos, which indicate the final destruction of the first palace at this Mesara site. These, in turn, are closely comparable with MM IIB deposits at Kommos (Betancourt 1990, 33–7), Monastiraki (Matz 1951; Kanta 1999, 389), Mallia Town Group (Andreou 1978, 134ff.) and Quartier Mu (Knappett 1999a; Poursat and Knappett 2005), Myrtos–Pyrgos III, Vasiliki House A–Zakros Group (Andreou 1978, 93ff.), and can be taken to indicate more or less contemporary destructions. That these deposits in the island were formed during a period of widespread insecurity is nowhere more evident than at Katalimata, a tiny refuge shelter overlooking the northern Hierapetra Isthmus (Nowicki 2001). The hieroglyphic deposit at Petras also indicates a disturbance in MM IIB (Tsipopoulou 2003, 49, fig. 12), and there is evidence for a break and burning at Palaikastro as well, though more detailed study of recently excavated deposits is required to confirm whether this break comes in MM IIB or MM IIIA (MacGillivray and Driessen 1990, 403; MacGillivray *et al.* 1992, 133, 1998, 239, fig. 15).

There is little evidence at Knossos of the kind of unrest we see all over the island in MM IIB, though a recently discovered burnt MM IIB pottery deposit in the Sanoudakis plot at Poros–Katsambas may indicate just such strife at the port of Knossos (Blackman 1999, 118). Moreover, the Knossian deposits assigned to the

Trial KV Group do not seem to represent a major destruction horizon associated with the end of the first palace at this site. The seismic event, which brought down much of the first palace at Knossos, took place either at the very end of the MM IIB period, or early in the subsequent MM IIIA period; there are no pure deposits within the palace to be certain either way. As there is clear evidence for just such an event at Archanes–Anemospilia in MM IIIA, we currently believe that Knossos may have been affected then as well, which resulted in the formation of the West and South Polychrome Deposits Group, perhaps a generation after the violent war-like destructions at Phaistos and elsewhere (see p. 148).

Synchronisms with the Aegean and east Mediterranean

Overseas, Knossian pottery of the Trial KV Group is found in Keos IV levels (Overbeck 1989, 136, pl. 70: 26; 182, pl. 85: DG16), in Phylakopi II (Papagiannopoulou 1991, nos. 346, 359, 361) and at Akrotiri on Thera (Papagiannopoulou 1991, nos. 295–6).

The Knossian vases in Levantine tombs at Beirut (Warren and Hankey 1989, 134–5), Byblos (Montet 1928, pl. CXI; Davis 1977, fig. 64; Baramki 1973, pl. IV), Ugarit (Schaeffer 1949, 256, fig. 109, 109A, pl. 38) and Qatna (Du Mesnil du Buisson 1926, 324, fig. 41) provide a generic link with MM IIB and the MBA in the Levant and Syria. More useful for precise dating are the rounded bridge-spouted jar of type 5 from Abydos tomb 416 (Kemp and Merrillees 1980, 118–19) and the fragments of a rounded cup of type 6 in the Wavy-line Style from Tell el-Dab'a (Walberg 1991,

1998; MacGillivray 1995), which provide good links between MM IIB and early 13th Dynasty Egypt (MacGillivray 1998, 105).

THE WEST AND SOUTH POLYCHROME DEPOSITS GROUP (MM IIIA)

The complexity of the transition from the Old to the New palace forced the author to waver over the years on the issue of the destruction date of the first palace at Knossos. His first impression was that this destruction was caused by an earthquake, which struck Knossos later than the destruction of the Phaistos palace (MacGillivray 1986, 1990), that is, in the Knossian MM IIIA instead of MM IIB ceramic phase. Later, he revised this opinion to suggest that the earthquake struck Knossos at the same time as the Phaistos destruction (i.e. in MM IIB), and that the subsequent clearing up and rebuilding in MM IIIA created a number of large mixed MM IIB–MM IIIA deposits. The current evidence from Archanes and Galatas suggests that the first impression makes the most sense. Macdonald was also of the opinion that MM IIIA marked the end of the Old Palace period at Knossos (2002, 36–7), but has recently revised that to MM IIB (Macdonald 2005). The author now believes that the Old Palace at Knossos was brought down by a seismic event, which occurred some time after the destruction of the Phaistos palace. At Knossos, in the palace area, huge fill deposits, such as the West and South Polychrome deposits, discussed below, resulted from the almost immediate clearing

operations following this seismic destruction, and preceded the great rebuilding operations of the New Palace. A few undisturbed primary deposits caused by the same seismic event can be found in the surrounding town and at Archanes–*Anemospilia*, where three storerooms filled with the full range of ritual pottery were sealed *in situ*. The pottery found in the Knossos and Archanes–*Anemospilia* deposits presents a number of features suggesting a date later than the Trial KV Group and the Phaistos period 3 deposits. Unfortunately, nowhere have deposits of the West and South Polychrome Deposits Group been found stratified above deposits of the Trial KV Group and beneath the earliest Neopalatial deposits discussed in Chapter 5. Deposit no. 6 below, however, although not stratified above MM IIB, was found beneath material datable to MM IIIA (see also Chapter 5). Similarly, the Loom-Weight Basement MM IIB deposit (see p. 134) was stratified beneath a massive fill containing pottery assignable to MM IIIA (MacGillivray 1998, 39–42), although this can no longer be verified, for the pottery from different levels has not been stored separately. Nevertheless, this stratigraphic evidence, stylistic analysis and comparison with deposits from sites where a better stratigraphy has been preserved (e.g. the earliest deposits of Fiandra's period 4 or Levi's Fase III at Phaistos: see Carinci 1989, 78) suggest that the West and South Polychrome Deposits Group is later than the Trial KV Group discussed above, and earlier than the KS 178 Group, assigned to MM IIIB (see Chapter 5).

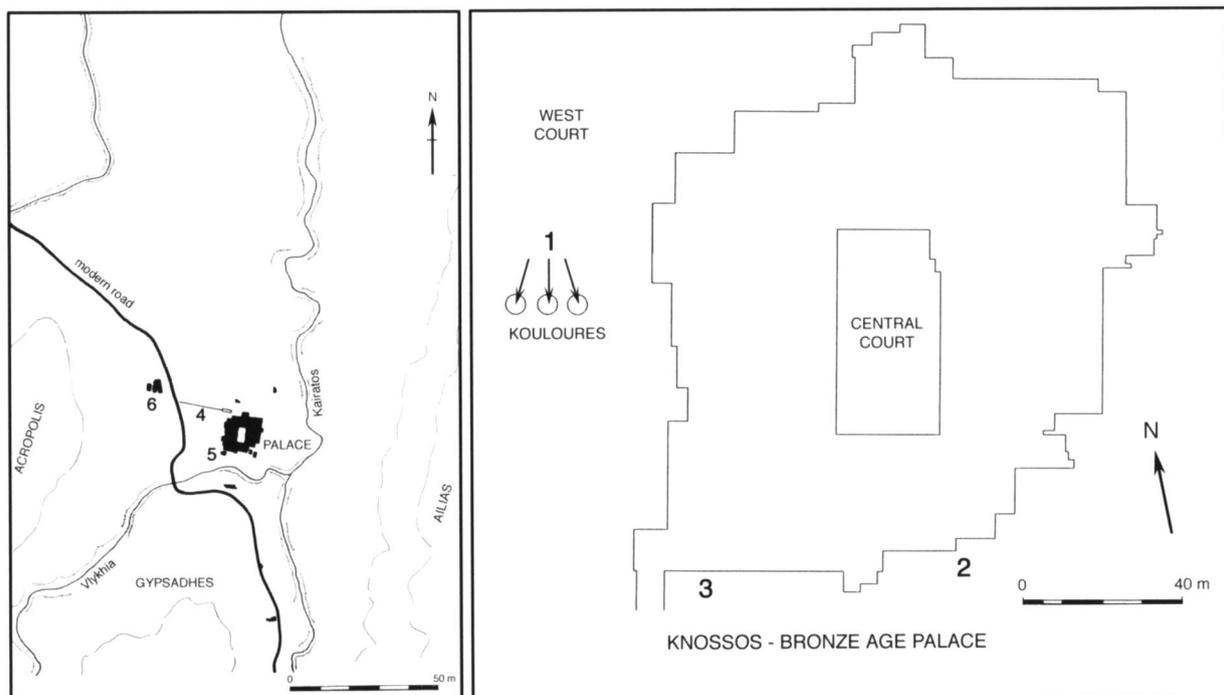


Fig. 4.32. West and South Polychrome Deposits Group (MM IIIA): location of deposits listed in the text.

Archaeological contexts (FIG. 4.32)*West Court*

1) The West Polychrome Deposits (KSM B.I.14: boxes 256–262; B.I.19: boxes 322–329; B.I.20: boxes 330–350; B.I.21: boxes 351–356; B. III.8: boxes 416–418). Evans (1921, 554) cleared the first of the three West Court Kouloures in 1907 and dated the pottery and stone fill to the MM III period. Pendlebury extended the West Court excavations in 1930 and discovered the other two kouloures as well as the North–West Acropolis Houses (Evans 1935, 51, fig. 30). Recent reinvestigation of this material found numerous joins between the fills in the three kouloures and adjacent houses, and narrowed the deposition date to MM IIIA (while acknowledging the presence of a large amount of MM IIB pottery), probably created during the clearing operations following a seismic destruction (MacGillivray 1998, 33; Macdonald 2002).

South Front

2) The South Polychrome Deposits (KSM R.IV.2–6: boxes 1527–1551; R.V.2, 4–6: boxes 1553–1560, 1565–1589). Evans cleared the House of the Fallen Blocks and the House of the Sacrificed Oxen near the southeast angle of the palace in 1922 (Evans 1928, 294–311). The fallen blocks are the best evidence for the effects of a major earthquake, which Evans placed at the end of the MM IIIB period (1928, 305). Recent reinvestigation of a selection of the great mass of pottery from both houses showed that much of it joined up, as in the case of the West Polychrome Deposits, and that the latest examples are MM IIIA, but with an admixture of MM IIB (MacGillivray 1998, 46–9).

3) South House: beneath floor of inner basement (KSM S.I.8: boxes 1610–1611). A mixed deposit, excavated by Evans in 1908, probably deposited as floor packing in MM IIIA (Knappett 2003, 41ff.).

Town

4) Town Houses (KSM P.III.5–7: boxes 1482–1487). Evans cleared two town houses, which he dated to the MM IIIA period (1928, 369). Recent reinvestigation confirmed this date (MacGillivray 1998, 50–1).

5) Hogarth's Later Heap. Hogarth's 1900 tests in the Knossos town found a 'heap' of pottery in the corner of the yard of a house west of the West Court and south of the Royal Road (Hogarth 1900; Hogarth and Welch 1901, 80). Evans cited this group as typical of his MM IIIA ceramic phase (1921, 415–16), a date confirmed by recent reinvestigation (MacGillivray 1998, 51).

6) Vlachakis Plot. A rich destruction deposit of pottery assignable to this group was discovered in a rescue excavation in the village of Bougada Metochi near the

KSM. The deposit was stratified above bedrock and beneath an ashlar building dated by the excavator to MM IIIB–LM IA (Rethemiotakis and Grammatikaki 1999, 222–4; Rethemiotakis 2002, 57, n. 11; Blackman 2000, 133), and by Hatzaki (see this volume, p. 162) to MM IIIB.

Characteristics of the West and South Polychrome Deposits Group (MM IIIA)*Fabric and Wares*

Much of the pottery belonging to this group continues to be produced in the usual fine buff fabric, and is wholly or partially dark-coated and decorated with white or polychrome patterns. In addition to these basic types of surface treatments, one can distinguish more specific wares and styles, as described below.

Ridged Ware (FIG. 4.33: 1–4)

This is characterised by fine tooling to create evenly spaced, horizontal ridges giving the impression of stacked metal plates. This is typical of straight-sided cups of types 11 and 12, and short-rimmed angular or conical cups of type 3. Ridged Ware hardly appears in the Mesara (Levi 1976, 477, fig. 730), but was exported and imitated elsewhere in Crete at Gournia (Boyd-Hawes *et al.* 1908, 38, pl. 6: 35), the Trapeza Cave (Pendlebury *et al.* 1935–6, 62–3, fig. 14, 548) and Palaikastro (MacGillivray *et al.* 1992, fig. 14.2). In the Cyclades, it is found at Phylakopi on Melos, Akrotiri on Thera (Papagiannopoulou 1991, nos. 263, 340), Mikre Vigla on Naxos (Barber and Hadjianastasiou 1989, 107, fig. 22: 420); Ayia Irini on Kea (Davis 1986, 81, pl. 28, U79–82); and Iasos in south-west Turkey (Momigliano 2005). Survival may be seen in cups of the MM IIIB period from Knossos (see this volume, Chapter 5; Catling *et al.* 1979, fig. 18: 49, 95–8) and from a cave shelter in Poros (Lebessi 1967, pl. 180b; Muhly 1992, nos. 35–7).

Styles

White-spotted Style (FIG. 4.33: 2–5). Evans (1921, 417) coined the term 'White-spotted' to describe the style characterised by the application of white spots with the tip of a fine brush on a dark ground, likened by Mackenzie to 'snow flake dots'. Sakellarakis and Sakellarakis (1991, 418) suggest that the inspiration came from conglomerate stone originals. These spots were either applied individually or carefully sprayed on. The definition of this style can be problematic; pots decorated with sprayed, dabbed or otherwise applied white spots on a dark ground appear in many periods, as indicated below, and only further detailed studies may help to establish which types of spots are diagnostic for certain periods. In Knossian MM IIIA this style was applied to the tumbler of type 4, straight-sided cups of types 7, 8, 12 and 13, rounded cups of types 5 and 7,

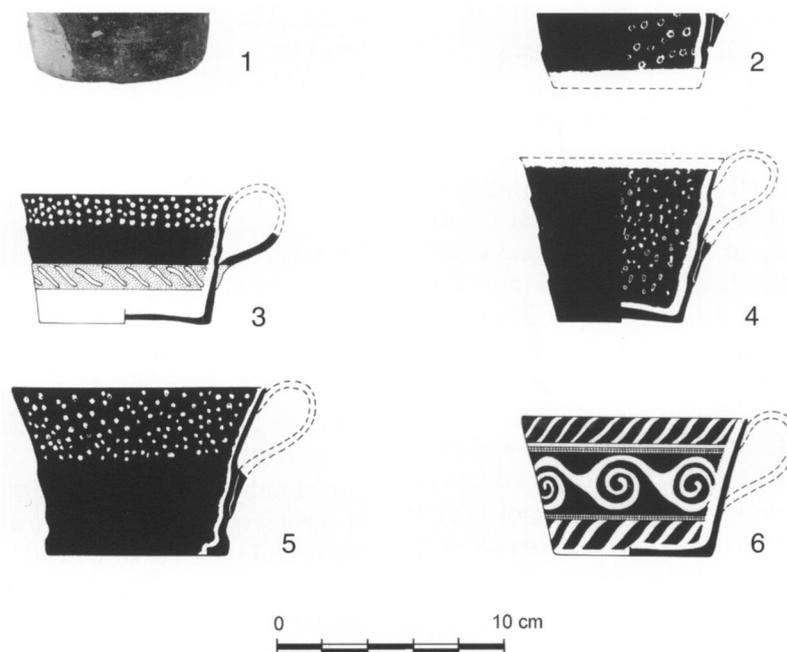


Fig. 4.33. *West and South Polychrome Deposits Group (MM IIIA)*: (1–5) examples of *Ridged Ware* and *White Spotted Style* (on straight-sided cups of types 11 and 12); (6) *Light-on-Dark Ware Heavy Spiral Style* (on straight-sided cup of type 5) (after MacGillivray 1998).

the short-rimmed angular cups of type 3, and the jug with horizontal spout of type 3. Its frequency in the West Polychrome Deposits and in Hogarth's Later Heap west of the palace (Hogarth and Welch 1901, 80, figs. 7–9, 12, 18–19) place this style largely in the MM IIIA period, as Evans thought (1921, 417). However, it may have begun much earlier, as the examples from the Trial KV Group (see p. 139) and the Mesara indicate (Betancourt 1990, 1316; Levi 1976, pls. 105a, 118b, 123a, 127c, 132p, 138f, 178a, 179h, all from Levi's Fase Ib and II). It was also common in Levi's Fase III deposits (Levi 1976, pl. 198c, 201b, h, pl. 210g–m), which include Knossian MM IIIA and IIIB. Moreover, its appearance in Deposits A and B at the Acropolis Houses (Catling *et al.* 1979, fig. 18: 49, 95–8) and in a large fill from the SEX excavation (Warren 1991a, figs. 5F, 8J, 9F) suggest continuation into MM IIIB. A possible survival into MM IIIB may also be seen on three cups from a tomb at Poros (Muhly 1992, nos. 35–7). Pottery decorated in the White-spotted Style was exported to Thera and Melos in the Cyclades (Papagiannopoulou 1991, nos. 278, 332; Knappett and Nikolakopoulou 2005), and Iasos in south-west Turkey (Momigliano 2005).

Heavy Spiral Style (FIG. 4.33: 6). This relatively rare but important style is distinguished by a heavy or weighted spiral design created by either thickening the outermost line or filling the angle (Walberg 1992, 93)

between the spirals. Within this style an important distinction may be made between those composed of open running spirals and those with closed spirals resembling breaking or crashing waves. This style appears on vases from the primary destruction deposit at Archanes–*Anemospilia* (Sakellarakis and Sakellaraki 1979, pl. 183; Sakellarakis and Sapouna-Sakellaraki 1991, fig. 120; 1997, figs. 387, 390). It is also found in early Neopalatial deposits at Knossos (Acropolis Houses: Catling *et al.* 1979, 28, fig. 18: 91–2) and Phaistos (F. 354, 387; Borda 1946, 21, pl. XI: 77437), and it may originate at the end of the MM IIB period at Phaistos, where heavy open running spirals are combined with precision stamps on a bridge-spouted jar from a period 3 destruction deposit (Pernier 1935, pl. XXXV). Another jug from Phaistos combines heavy open running spirals on the body with pendant closed spirals on the shoulder, suggesting that closed spirals first appear at the very end of the MM IIB period (Pernier 1935, 295, fig. 172).

Forms

Straight-sided cups

These continue to appear in many different types (MacGillivray 1998, 68–72, fig. 2.10: types 8–13). Types 8, 9 and 10 carry on from the previous ceramic phase (FIG. 4.25: 2–4). In addition similar cups in some early

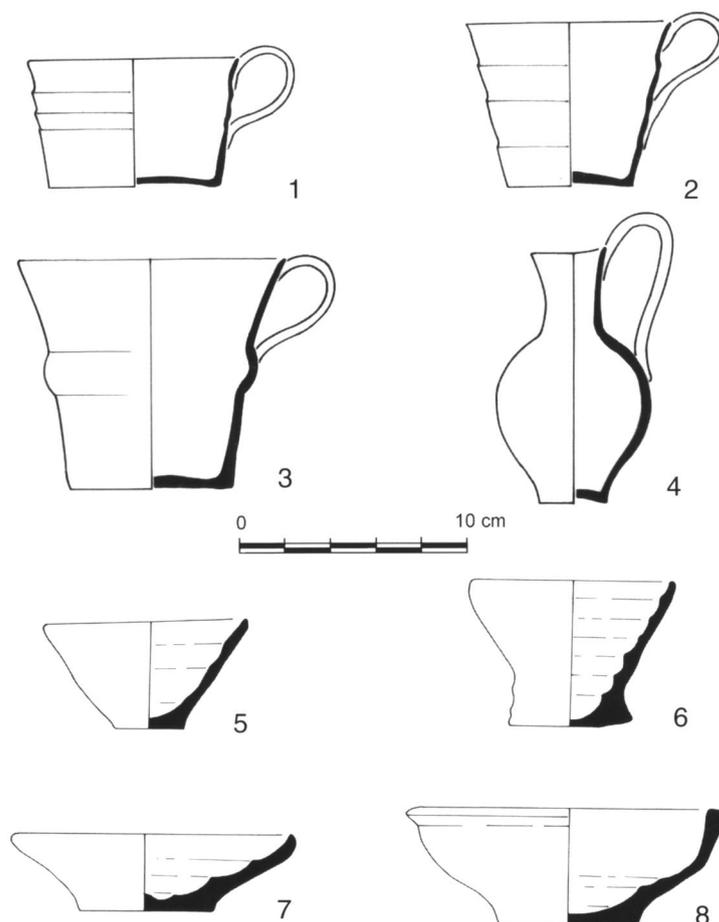


Fig. 4.34. West and South Polychrome Deposits Group (MM IIIA): (1–3) straight-sided cups (types 11–13); (4) jug with horizontal spout (type 3) (after MacGillivray 1998); (5–8) Crude Ware conical cups and ledge-rimmed bowl (Olive Press Room test pits, courtesy of Colin Macdonald).

Neopalatial deposits show that these types continued into MM IIIB (see Chapter 5 and Catling *et al.* 1979, figs. 18: 97, 19: 53, 114, 115, 118–19). Type 11 (FIG. 4.34: 1) makes its appearance in Knossian MM IIIA: it is wheelmade with strap handle attached at the rim and lower side, and has the horizontal grooves of ridged ware cut in a zone at the middle; examples are 5.8 cm high, with diameters 9.2–9.5 cm; it is quite similar to straight-sided cups of type 12 (see below) and is often decorated in the White-spotted Style. A possible example from a mixed deposit at Phaistos seems to be the only instance of this type outside Knossos (Levi 1976, 477, fig. 730). Type 12 (FIG. 4.34: 2) is wheelmade with strap handle attached at the rim and middle of the side, and has a distinctive series of well-spaced horizontal grooves at regular intervals characteristic of Ridged Ware; examples are 6–7 cm high, with rim diameters 9.0–11.5 cm; this type is very common in the West Polychrome Deposits where numerous examples are white-spotted, with spots restricted to the rim. Examples are so numerous in the MM IIIA deposit at Archanes–Anemospilia, that the excavators called it the Archanes cup (Sakellarakis and Sapouna-Sakellarakis 1997, 418,

fig. 385); a very similar cup type found at Gournia was placed by the excavator ‘on the borderline between Middle Minoan and Late Minoan times’ (Boyd-Hawes *et al.* 1908, 38, pl. 6: 35). Apparently there is not a single example of this type from the Mesara, yet the form was imported and imitated in Kea (Davis 1986, 81, pl. 28, U79–82), Naxos (Barber and Hadjianastasiou 1989, 107, fig. 22: 420), Thera and Melos (Papagiannopoulou 1991, nos. 263, 340), and possibly at Iasos (Momigliano 2005); the metallic inspiration may be understood best by comparing it with a gold cup from Grave Circle A at Mycenae (Hood 1978, 156, fig. 148F; Matthäus 1980, pl. 75: 9). Type 13 (FIG. 4.34: 3) has a rounded horizontal bulge at the middle; it appears in the West and South Polychrome Deposits and can be decorated in the White-spotted Style. It is quite similar to cups from Fiandra’s period 4 (deposit in Vano LXXV at Phaistos, F. 3708) and from the Kamilari Tholos (F. 3202); this type is the obvious predecessor to the MM IIIB and LM IA Vapheio cup, often decorated with ripple decoration (Popham 1977, 193, fig. 1B; 1984, pls. 128a, 142: 12–14, Catling *et al.* 1979, fig. 27: 186; Warren 1991a, fig. 9K, L; Levi 1976, pl. 212r).

Rounded bridge-spouted jars

It is not possible to isolate a specific Knossian MM IIIA type, but in this period, in general, this form stands on an elongated foot (Betancourt 1985, 106, fig. 77; Levi and Carinci 1988, pl. 58; MacGillivray *et al.* 1999, 466, pl. CI:d; Shaw *et al.* 2001, 54, fig. 34).

Jugs with horizontal spout

These appear in the following types. Type 2, with slightly squat rounded body, which first appeared in the Royal Pottery Stores Group (FIG. 4.19: 5), continues to occur in this group, such as in Hogarth's Later Heap (Hogarth and Welch 1901, fig. 18) and at Archanes–Anemospilia (Sakellarakis and Sapouna-Sakellarakis 1997, 426, figs. 387, 395). Type 3 (FIG. 4.34: 4) makes its appearance: this is wheelmade with a tapering lower body and a rounded handle pushed well into the rim of the spout, causing an indent. Examples are 11.0–15.5 cm high and can be decorated in the White-spotted Style (Hogarth and Welch 1901, 90, fig. 19); a very similar type appears in Deposit C in the Knossos Acropolis Houses (Catling *et al.* 1979, 35 fig. 23: 154).

Rhyta

Rhyton types 1 and 2, which first appeared in Knossian MM IIB, continued into MM IIIA.

Crude Ware

Many of the Crude Ware forms and types found in the palatial contexts of this West and South Polychrome Deposits Group are quite similar to those found in the MM IIB Trial KV Group (FIGS. 4.29–31). This could mean either that they continued to be manufactured in MM IIIA or that they are mixed in with the MM IIIA material. We suspect the former in the cases of the crude amphoriskos and both crude jug types because of their frequency in those mixed deposits, but we await the fuller publication of pure MM IIIA contexts to be certain.

Forms

Crude conical cups (FIG. 4.34: 5–7). Some resemble the MM IIA and MM IIB crude cups of type 1, but probably replaced the function of the crude bowl of type 2 (Knappett 1999c, 417).

Crude ledge-rimmed bowls (FIG. 4.34: 8). Probably developed from the crude bowl of type 3 (see p. 141). This form has a low, rounded body and distinctly everted and finely tooled rim.

Crude juglets. These first appeared in MM IIA (FIG. 4.21: 3), became quite common in MM IIB, and may have continued into the MM IIIA period, as examples from Archanes–Anemospilia show (Sakellarakis and Sakellarakis 1979, pl. 183). The Neopalatial successor

to this form may be seen in deposits at the MUM (Popham 1984, pls. 131j, 137d, 143: 15–17) and SEX excavations (Warren 1991a, 323, pl. 77G).

Summary

The Knossian potters carried on producing some of the fine wares and styles current at the end of the Old Palace period at Phaistos (MM IIB) for at least another generation until a great seismic event brought down the Old Palace at Knossos. Polychrome pottery, however, was hardly produced. Forms in Ridged Ware and in the White-spotted and Heavy Spiral styles are the most diagnostic of this group. Crude Ware forms such as the juglet and probably the amphoriskos and jug types continue to appear. Crude Ware conical cups and ledge-rimmed bowls become diagnostic of MM III deposits at Knossos and throughout Crete, though the finer distinction between MM IIIA and MM IIB types is not clearly established yet (Knappett and Cunningham 2003, 116).

Relative chronology of the West and South Polychrome Deposits Group (MM IIIA)*Synchronisms with other Cretan sites*

Deposits more or less contemporary with the West and South Polychrome Deposits Group have been found at Galatas (Rethemiotakis 2002, 56–7, pls. 13–15) and Archanes–Anemospilia (Sakellarakis and Sakellarakis 1979, pl. 183; Sakellarakis and Sapouna-Sakellarakis 1991, fig. 120; Sakellarakis and Sapouna-Sakellarakis 1997, figs. 385, 387, 390, 395, 426) (see TABLE 4.4).

At Phaistos, Fiandra's period 4 (= Levi and Carinci's phase III) comprises the whole of the MM III period, but includes some early deposits, which may be contemporary with Knossian MM IIIA (Carinci 1989; MacGillivray 1998, 102). Kommos is more difficult to equate because Betancourt's MM III definition is equivalent to MM IIB at Knossos (Betancourt 1990, 37–41), and includes the kiln deposits labelled LM IA (Shaw *et al.* 2001; see p. 183, TABLE 5.8).

Examples of the highly distinctive Ridged Ware and White-spotted and Heavy Spiral styles appear at Gournia (Boyd-Hawes *et al.* 1908, 38 pl. VI: 34) and Palaikastro (MacGillivray *et al.* 1992, fig. 14: 2; MacGillivray *et al.* 1999, 466, pl. 101e), though the finer details of the transition from MM IIB to MM IIIA in east Crete have yet to be studied in full.

Synchronisms with the Aegean and east Mediterranean

Minoan links to Kea are now with period V (Davis 1986, 81, pl. 28, U79–82). The relatively sparse early Protopalatial Minoan imports gave way in MM IIIA to greater numbers and local imitations in Naxos (Barber and Hadjianastasiou 1989, 107, fig. 22: 420), Thera (Papagiannopoulou 1991, nos. 263, 340;

TABLE 4.4: Selected Cretan sites with deposits contemporary with the West and South Polychrome Deposits Group (MM IIIA).

West Crete

?

North-Central Crete (including Pediada)

Archanes–*Anemospilia* (Sakellarakis and Sakellarakis 1979, pl. 183; 1991, fig. 120; 1997, figs. 385, 387, 390, 395, 426)
Galatas (Rethemiotakis 2002)

South-Central Crete

Phaistos: Period 4 (Fiandra 1962; Borda 1946, 21, pl. XI: 77437); Fase III (Levi and Carinci 1988)
Kommos: MM III (Betancourt 1990, 37–41).

Mallia / Lasithi

Trapeza Cave (Pendlebury *et al.* 1936, 62–3, fig. 14: 548)

East Crete

Gournia (Boyd-Hawes *et al.* 1908, 38, pl. VI: 34)
Palaikastro (MacGillivray *et al.* 1992, fig. 14.2; MacGillivray *et al.* 1999, 466, pl. 101e)

Knappett and Nikolakopoulou 2005; Nikolakopoulou *et al.*, forthcoming), Rhodes, Kos, Miletus and possibly Iasos (Furumark 1950; Davis 1982; Papagiannopoulou 1985; Momigliano 2005). This could indicate population movements following the unrest at the end of the MM IIB period in Crete.

In the Levant, the rounded bridge-spouted jar of type 6 in the Heavy Spiral Style from Byblos levée X was most likely a Knossian MM IIIA product (Dunand 1939, 191, no. 2986, 192, pl. CLXXVII; Schaeffer 1949,

66, fig. 74: 2–4). The fragment of the large bowl in the Spiral-band Style from late MB II Hazor, once regarded as MM II (Yadin *et al.* 1960, 91, pl. CXV: 13), may now be placed in either MM IIIA or, more likely, in MM IIIB (Dothan *et al.* 2000).

There is no evidence for MM IIIA pottery in Egypt, which entered the Second Intermediate Period at this time, but the lid of the Hyksos ruler Khyan in the North Lustral Basin at Knossos may have been deposited at this time (Warren and Hankey 1989, 136, 141, 171).











































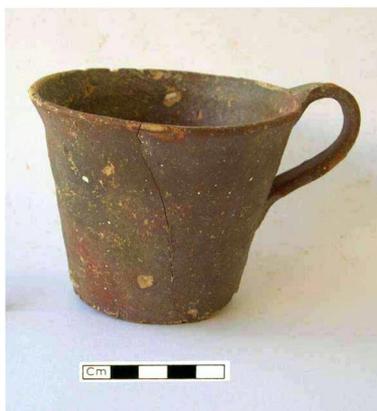






















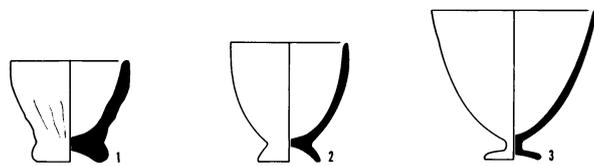


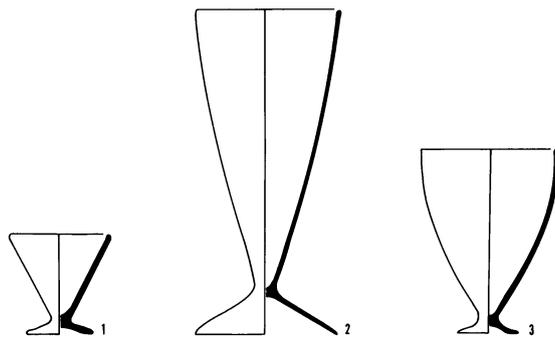


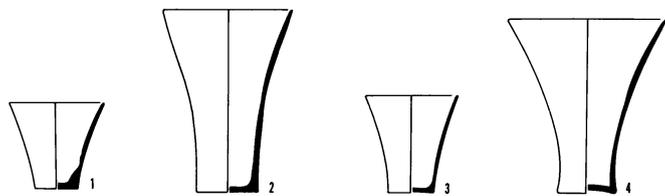


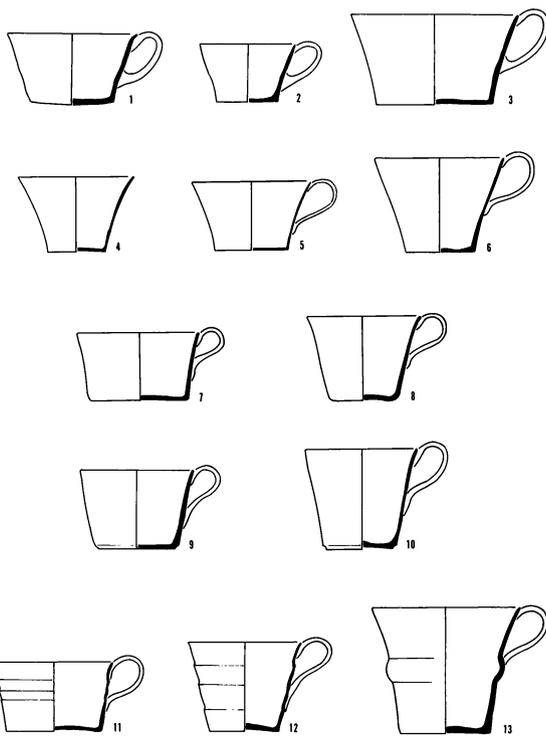


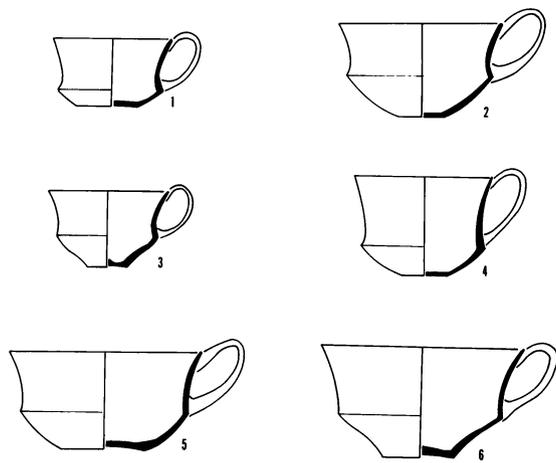


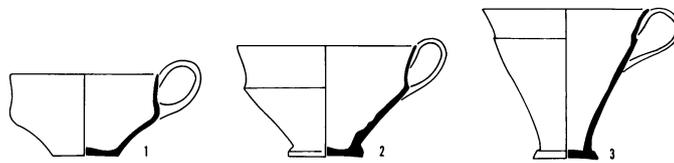




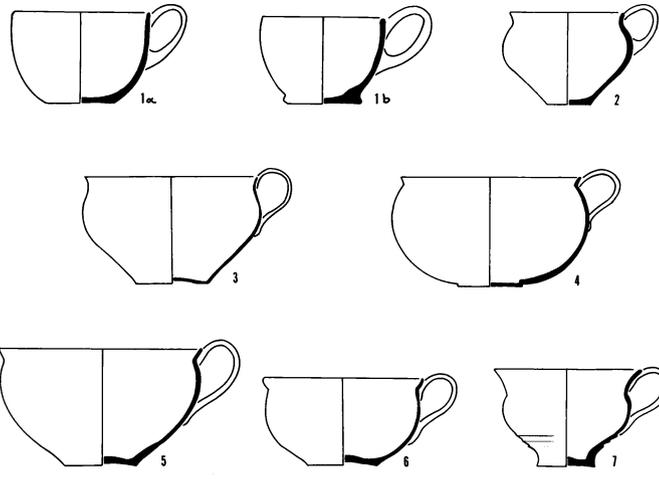


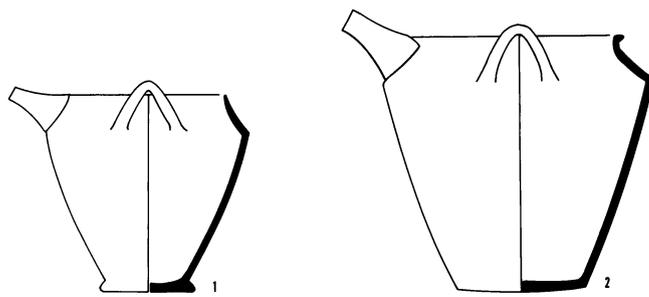


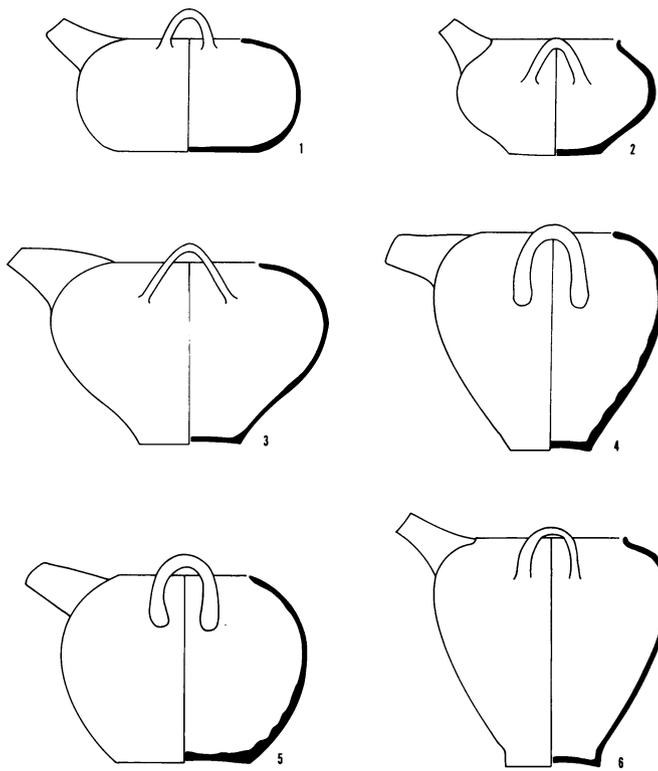


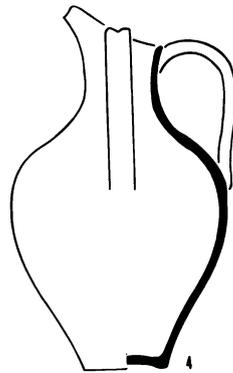
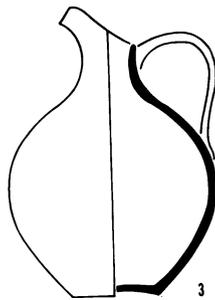
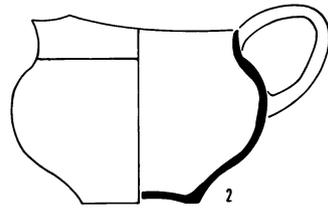
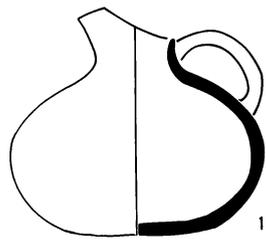


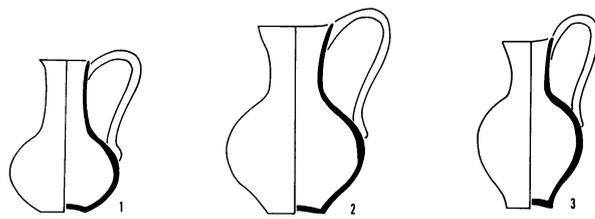


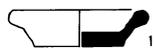




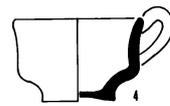
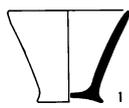




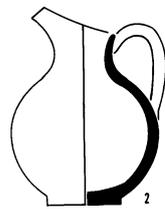


















M.M. II. POLYCHROME POT. KNOSSOS

- 3.23. MM IA. House C deposit, selected vessels. After Evans 1921, fig. 122.
- 3.24. MM IA. Dark on Light Ware, footed goblets sherds. After Momigliano 2000a, fig. 16: b and c.
- 3.25. MM IA. Dark on Light Ware one-handled cup. After Momigliano 1991, pl. 33: 4.
- 3.26. MM IA. Dark on Light Ware jug. After Momigliano 1991, pl. 34: 9.
- 3.27. MM IA. Light on Dark footed goblet. After Momigliano 1991, pl. 33: 2.
- 3.28. MM IA. Polychrome Ware cup, footed goblet and spouted jar sherds. Cf. Momigliano 2000a, fig. 15.
- 3.29. MM IA. Polychrome Ware footed goblet. After Momigliano 1991, pl. 54: 12.
- 3.30. MM IA. Polychrome Ware spouted jar. After Momigliano 1991, plate 34: 11.
- 3.31. MM IA. Polychrome Ware jug. After Momigliano 1991, pl. 34: 10.
- 3.32. MM IA. Barbotine Ware sherds from various forms. From the Royal Road South Fill deposit.

CHAPTER 4. (Photos by N. Momigliano)

- 4.1. MM IB. Early Chamber Beneath the West Court deposit, selected vessels.
- 4.2. MM IB. Early Chamber Beneath the West Court deposit, selected vessels.
- 4.3. MM IB-IIA. Pared Ware rounded goblet type 1. MacGillivray 1998, pl. 33: 15.
- 4.4. MM IB-IIA. Pared Ware rounded goblet (type 1), Light on Dark Ware (White Banded Style) rounded goblet (type 2), and tumbler in reddish fabric. Momigliano 2000a, pl. 23: 65, pl. 25: 75, pl. 26: 80.
- 4.5. MM IB-IIA. Light on Dark Ware (White Banded Style) rounded goblet (type 2). MacGillivray 1998, pl. 4: 110, pl. 33: 110.
- 4.6. MM IB-IIA. Monochrome Ware rounded cup (type 1 a), Pared Ware straight-sided cup (type 1), Light on Dark (White Banded Style) straight-sided cup (type 2). Momigliano 2000a, pl. 23: 66, pl. 22: 60, pl. 24: 72 (= MacGillivray 1998, pl. 123: 790).
- 4.7. MM IB-IIA. Polychrome Ware (Early Printed Ware) goblet (type 3). Momigliano 1991, pl. 22: 4 (= MacGillivray 1998, pl. 29: 976).

- 4.8. MM IB-IIA. Polychrome Ware (Woven Style) straight-sided cup (type 2). MacGillivray 1998, pl. 36: 57.
- 4.9. MM IB-IIA. Polychrome Ware (Woven Style) straight-sided cup (type 2). MacGillivray 1998, pl. 35: 63.
- 4.10. MM IB-IIA. Polychrome Ware (Woven Style) straight-sided cup (type 2). MacGillivray 1998, pl. 102: 674
- 4.11. MM IB-IIA. Monochrome Ware and Light on Dark Ware angular/carinated cups of various types. Momigliano 2000a, pl. 23: 67 (= MacGillivray 1998, pl. 123: 788), pl. 24: 69, fig. 17: 70, pl. 25: 74.
- 4.12. MM IB-IIA. Monochrome Ware angular/carinated cup (short-rimmed angular cup type 2). MacGillivray 1998, pl. 27: 913, pl. 134: 913.
- 4.13. MM IB-IIA. Monochrome Ware angular/carinated cup (short-rimmed angular cup type 2). MacGillivray 1998, pl. 112: 677.
- 4.14. MM IB-IIA. Polychrome Ware, carinated/angular bridge spouted jar (type 1). MacGillivray 1998, pl. 27: 905, pl. 133: 905.
- 4.15A and 4.15B. MM IIA. Polychrome Ware rounded bridge-spouted jar (type 4). MacGillivray 1998, pl. 28: 931, pl. 136: 931.
- 4.16. MM IIA. Polychrome Ware rounded bridge-spouted jar (type 4). MacGillivray 1998, pl. 136: 933.
- 4.17. MM IIA. Polychrome Ware (Woven Style) tripod cup. Popham 1974, fig. 7: 1, pl. 30: b, c.
- 4.18. MM IIA-IIB. Crude Bowls (type 3). From Trial KV. Cf. Popham 1974, fig. 6: 8, pl. 28: k.
- 4.19. MM IIA-IIB. Crude Bowls (type 3). From Trial KV. Cf. Popham 1974, fig. 6: 9, pl. 28: k.
- 4.20A and 4.20B. MM IIB. Crude Bowls (type 1). From Trial KV. Cf. Popham 1974, fig. 6:1-5, pl. 28: k.
- 4.21. MM IIB. Crude Bowls (type 1). From Trial KV. Cf. Popham 1974, fig. 6:1-5, pl. 28: k.
- 4.22. MM IIA-IIB. Crude Cups (type 1). From Trial KV. Cf. Popham 1974, fig. 6:10.

- 4.23A and 4.23B. **MM IIB. Crude Cups (type 4).** From Trial KV. Cf. Popham 1974, fig. 6: 11-15, pl. 28: a-c.
- 4.24. **MM IIB-III A. Monochrome Ware straight-sided cup (type 8).** From Trial KV, Popham 1974, pl. 28: g.
- 4.25. **MM IIB-III A. White-spotted Style cup fragments.** From Trial KV. Popham 1974, pl. 31: a (top right).
- 4.26A and 4.26B. **MM IIB-III A. White-spotted Style straight-sided cup (type 8).** From Trial KV. Popham 1974, pl. 28: j.
- 4.27. **MM IIB. Monochrome and White-spotted Style crude juglets.** From Trial KV. Popham 1974, fig. 6: 23, 24; pl. 30: d.
- 4.28A and 4.28B. **MM IIB-III A. White-spotted Style straight-sided cup (type 7).** MacGillivray 1998, pl. 147: 990.
- 4.29A. **MM IIB. Monochrome Ware and White-spotted Style carinated/angular cups (type 3).** MacGillivray 1998, pl. 148: 991 and 992.
- 4.29B. **Inside of 4.29A left (MacGillivray 1998 no. 991).**
- 4.30. **MM IIB-III A. Dark on Light sprayed with added white paint straight-sided cups (type 6).** MacGillivray 1998, pl. 68: 263, 265.
- 4.31. **Folder with MacGillivray 1998 Protopatatal typology.**
- 4.32. **Folder with Polychrome and Barbotine Ware colour illustrations after Evans 1921: colour plates I-III.**

CHAPTER 5 (E. Hatzaki)

- 5.1. **MM IIIB. Light on Dark Ware bowl.**
Short ledge-rimmed bowl, in fine buff fabric, from KS178.
- 5.2. **MM IIIB. Dark on Light Lustrous Ware (with added white paint) vaphio cup.**
After Popham 1977, pl. 29 b: vaphio cup in fine buff fabric, from NE Magazines.
- 5.3. **MM IIIB. Dark on Light Lustrous Ware (with added white paint)in-and-out bowl.**
After Driessen and Macdonald 1997, fig. 2.1c: in-and-out-bowl in fine buff fabric, from KS 178.
- 5.4. **MM IIIB. Dark on Light bowl.**
Tall ledge-rimmed bowl in fine buff fabric, from KS 178.