

# MIDDLE MINOAN POTTERY CHRONOLOGY AND REGIONAL DIVERSITY IN CENTRAL CRETE

*Aleydis Van de Moortel*

Pottery specialists working on the Greek mainland and in the Aegean tend to view Minoan pottery chronology as a monolithic sequence pretty much equivalent with Knossian pottery chronology. In reality, the landscape of Minoan pottery production is far more complex. Everywhere in Bronze Age Crete local ceramic traditions existed that at times produced vases of considerably different character, even in the Palatial periods, which were times of relatively greater homogeneity.<sup>1</sup> For instance, Middle Minoan (MM) II potters at Malia produced shapes that are entirely unknown at contemporary Knossos or in the Mesara, such as large wheel-thrown collar-necked jugs made of fine buff fabrics with unpainted polished surfaces.<sup>2</sup> Body fragments of those Protopalatial Maliot jugs are nearly indistinguishable from unpainted body fragments of large Late Minoan (LM) IA Mature and LM IB Knossian dark-on-light patterned jugs with lustrous buff surfaces.<sup>3</sup> Protopalatial Maliot potters also made fine buff vases with polished surfaces splattered with dark paint, which at first sight are not so different from Knossian vases decorated in Peter Warren's LM IB "Jackson Pollock" style.<sup>4</sup> Only the well-smoothed surfaces of the Maliot dark-splattered vases allow us to distinguish them from the roughly finished LM IB Knossian vases.

These few examples serve to show that it is important for scholars working elsewhere in the Aegean to learn about regional diversity in Minoan pottery, not only to determine the origin of their Minoan ceramic imports with greater precision, but also to avoid making mistakes in dating, since Knossian chronological criteria are not always valid in other areas of

Crete. Regional variation can be seen in vases of all classes but, as can be expected, is most common among utilitarian pottery that did not carry prestige value and did not circulate much outside the local consumer area, such as conical or other simple cups, saucers, bowls, and pouring and storage vessels.<sup>5</sup>

The present paper focuses on problems related to the synchronization of the Protopalatial pottery sequences of Knossos and of the western Mesara plain in south-central Crete during the MM IB, IIA, and IIB phases. One may wonder about the relevance of discussing southern Cretan pottery chronology in a collection of papers on Aegean synchronisms, since southern Crete borders on the Libyan Sea, not the Aegean Sea. I believe that southern Crete is relevant to this volume for two reasons:

1) Many close similarities exist between the Protopalatial pottery of Knossos and of the western Mesara plain, more than between Knossos and any other region of Crete. What is more, a lot of the highest-quality pottery consumed at Knossos and in the western Mesara – the so-called Kamares pottery – may in fact have been produced in the western Mesara, as Day and Wilson have suggested on the basis of fabric analysis.<sup>6</sup> Hence the southern Cretan ceramic sequence offers the possibility of testing the Knossian sequence as established by Duncan Mackenzie and Arthur Evans in the early 20<sup>th</sup> century and recently reinterpreted by MacGillivray.<sup>7</sup> It is primarily this Knossian sequence that is used as a dating reference by archaeologists elsewhere in the Aegean. In this paper it will be argued that the cur-

<sup>1</sup> Cf. ANDREOU 1978, 164–171; WALBERG 1983, 1–2.

<sup>2</sup> A dark monochrome coated jug has been published from Quartier Mu: POURSAT and KNAPPETT 2005, 66, 221, no. 646, fig. 17.5, pls. 24, 49. Several unpainted examples have been found in the *Abords Nord-Est*, the area northeast of the palace at Malia. I thank Pascal Darceque for permission to mention them. Much smaller dark monochrome versions of this bridge-spouted jug type have been published from Quartier Mu and other houses as well as from the cemetery of *Vilot du Christ* at Malia (POURSAT and KNAPPETT 2005, 65, fig. 17.4; VAN EFFENTERRE 1969, 73, pl. XLVIII, L157; 1963, 108, pl. XLIV, no. 7878).

<sup>3</sup> Cf. POPHAM 1967, pls. 76c, 80a; BETANCOURT 1985, pl. 17F–G.

<sup>4</sup> WARREN 1996. The splatters on the Protopalatial Maliot vases are in fact sloppy versions of the *alque* pattern; cf. VAN EFFENTERRE 1963, pl. III.f–h. Many fragments with this decoration have been identified by the author in mixed early Neopalatial fills at the *Abords Nord-Est*.

<sup>5</sup> VAN DE MOORTELT 1997, 444–448, 475–476, 634–663.

<sup>6</sup> DAY and WILSON 1998. The authors never specify, however, how many vases they have analyzed in respect to their fabrics. For definitions of the term "Kamares pottery", see BETANCOURT 1985, 96, and DAY and WILSON 1998.

<sup>7</sup> EVANS 1905; 1906, 5–11; 1921; 1928; 1930; 1935; MACKENZIE 1903; 1906. MACGILLIVRAY 1998.

rent definition of the MM IIA and IIB phases at Knossos needs to be reexamined in the light of new evidence from stratified Protopalatial contexts excavated at Kommos, the harbor of Phaistos.<sup>8</sup>

2) The western Mesara plain is also relevant to the topic of the present volume because, even though oriented toward the African coast, it has yielded a number of Aegean pottery imports from Protopalatial contexts that in the future may provide the possibility of cross-dating Aegean and southern Cretan ceramic sequences. All of these come from the harbor of Kommos; none have been identified at Phaistos or Ayia Triada. There are fragments of Cycladic pans and a few other Cycladic vases identifiable by their highly micaceous fabrics. Other nonlocal vessels, such as lentoid flasks, may come from the Aegean as well.<sup>9</sup>

Regional diversity in Cretan ceramic production is greater in the Protopalatial period than in the Neopalatial period. Even though Knossos and the western Mesara plain show the fewest regional differences, each production area has idiosyncratic vase types not seen in the other area, such as Knossian saucers, thin-walled tumblers, and tripod cups, and the fast-changing conical cup types of the western Mesara.<sup>10</sup> Moreover, among vase types with similar shape and decoration, there are enough subtle differences relating to manufacturing practices to help us distinguish between the products of Mesara and Knossian potters. So, for example, Protopalatial western Mesara potters were much slower than their Knossian counterparts to adopt the potter's wheel and to fully oxidize their pottery during firing. Mesara pottery routinely shows a gray core in its fracture in the MM IB and IIA phases, whereas Knossian pottery already in the MM IA phase is fully oxidized and often shows a reddish fracture.<sup>11</sup> Western Mesara potters always finished the surfaces of their utilitarian vases very well, whereas Knossian potters, certainly by the MM IIB phase, did only a rudimentary job of it.<sup>12</sup>

Such differences are the result of different decisions taken by potters at various steps of the production sequence. Other differences relate to motor habits and routine actions acquired through training and passed down through generations of potters. So, for example, western Mesara potters, from at least as early as the MM IIB phase and through the LM IB phase, make their cup handles the same way: narrow, thin strap handles twisted to the side at the lower attachment.<sup>13</sup> In terms of decoration they paint rim bands of consistent width (ca. 1 cm) and their spiral bands always run from the right to the left. Such consistencies based on routine are especially striking on simple mass-produced pottery such as conical cups, where the potter went "on automatic pilot".<sup>14</sup> Because of its close similarities in manufacturing details it seems to me that western Mesara pottery was produced by one or only a very small group of potters at any time, in contrast to Knossian pottery, which shows much more variation and may represent the output of several local production traditions. This impression is strengthened by the fact that wheelmade western Mesara pottery, at least from the MM IIA through the LM IB phases, always was thrown on a wheel turning counterclockwise, whereas at Knossos the direction of the wheel varies.

All these subtle differences in manufacture make it possible to distinguish western Mesara from Knossian vases, even if their shape and decoration look the same in drawings and their fabrics are closely related. Thus close autopsy of Protopalatial pottery from the Mesara and Knossos has led me to conclude that during the Protopalatial period there was not much movement of pottery between the two regions other than of the highest-quality "Kamares" vases and some transport vessels. It is primarily on the basis of the shared "Kamares" styles that the western Mesara region offers the potential, more than any other region in Crete, to establish a pottery chronology synchronized with that of Knossos.

<sup>8</sup> The pottery of these stratified Protopalatial contexts from large civic building AA and elsewhere in the Southern Area at Kommos has been published by the author (VAN DE MOORTELE, 2005).

<sup>9</sup> These nonlocal vases and fragments are still under study. Some have been published in VAN DE MOORTELE (2005, 630–646).

<sup>10</sup> For Knossian MM II saucers, tumblers, and tripod cups, see POPHAM 1974, 185–186, fig. 6.1–8, 6.10, 7.1, 8.7; MACGILLIVRAY 1998, 82–83; VAN DE MOORTELE 1997, 446. For Protopalatial conical cup types of the western Mesara, see FIANDRA 1973, 84–91, pls. 19, 21, 2, 27a, 29, 31, 34; LEVI and CARINCI 1988, 234–245, pls. 99–103a; VAN DE MOORTELE

1997, 308–311; BETANCOURT 1990, 29–35. MM IB and IIA conical cups from Kommos are discussed in VAN DE MOORTELE (2005, 330–331).

<sup>11</sup> Protopalatial western Mesara firing practices are discussed by VAN DE MOORTELE (2005, 330). The fabric colors of fine Knossian MM IA pottery are described by MOMIGLIANO 1991, 245, 260. The same fabrics continued into the Protopalatial period at Knossos (MACGILLIVRAY 1998, 55, 85).

<sup>12</sup> VAN DE MOORTELE 1997, 638–639; 2001B, 195.

<sup>13</sup> VAN DE MOORTELE 2001A, 104–105.

<sup>14</sup> For discussions of motor habits and its implications for the identification of a potter's output, see MORRIS 1993; THOMAS 1997. See also REDMAN 1977.

Phaistos LEVI and CARINCI	Phaistos FIANDRA	Kommos	Knossos MACGILLIVRAY
<i>fase</i> IA	period 1	MM IB	MM IB
<i>fase</i> IB Early	period 2	MM IIA	MM IIA
<i>fase</i> IB Late/II	period 3	MM IIB	MM IIB
FINAL PROTOPALATIAL DESTRUCTION			
<i>fase</i> III	period 4	MM III	MM III

Table 1 Approximate synchronization of ceramic phases at Phaistos (LEVI and CARINCI 1988; FIANDRA 1961–1962), Kommos, and Knossos (MACGILLIVRAY 1998)

In the early days of excavations at the Phaistian palace, these shared characteristics allowed Luigi Pernier and Luisa Banti to apply Evans's pottery phases – without any problem – to the modest amounts of Protopalatial vases they found below the New Palace at Phaistos.<sup>15</sup> This situation changed when Doro Levi in the 1950s discovered the southwest wing of the Old Palace, and excavated deeply stratified layers with well-preserved architecture and masses of pottery. On the basis of his finds, Levi proposed a ceramic sequence that was quite different from that of Knossos. Levi's sequence consisted of four ceramic phases (*fase* IA, IB, II, and III), each corresponding, in his interpretation, to different architectural phases separated by layers of concrete ("calcestruzzo") (Table 1).<sup>16</sup>

Levi's *fase* IA roughly corresponded with Evans's MM IB phase, and his *fase* III with Evans's MM III, but Levi's *fase* IB and II were problematic. As several critics pointed out, *fase* IB pottery showed strong similarities with both MM IIA and IIB pottery from Knossos, and it had been found on top of, as well as below, floors of the First Palace.<sup>17</sup> The pottery of *fase* II, on the other hand, did not differ significantly from that of *fase* IB, which raised doubts over the validity of this pottery phase. Because of the close similarities between the Phaistian and Knossian "Kamares" pottery, it was evident that either Evans

or Levi was right, but not both, and so a major controversy erupted in which Levi resolutely rejected Evans's Knossian chronology.<sup>18</sup> It did not help communications that Evans had not published the Knossian palace in a systematic fashion.

Among Levi's most severe critics was his own excavation architect, Enrica Fiandra. She rejected Levi's interpretation of the Phaistian stratigraphy and proposed instead the existence of four architectural periods in the palace based primarily on changes in building style and the composition of mortar and plaster.<sup>19</sup> According to Fiandra, Levi's *fase* IB and II do not represent different architectural phases but two stories of the period 3 palace. Associated with Fiandra's four architectural periods is a sequence of pottery styles that closely follows Evans's ceramic chronology at Knossos. The pottery of her architectural period 1 agrees stylistically with Evans's MM IB phase, that of her period 2 with Evans's MM IIA phase, and so on (Table 1). Fiandra's interpretation of Phaistian stratigraphy and pottery chronology has been widely accepted among British archaeologists working in Crete, whereas Levi's work has been largely ignored by them.<sup>20</sup>

Unbeknownst to many scholars, however, already in 1988 Levi and his co-worker Filippo Carinci had published changes to Levi's chronological scheme, bringing it more in line with those of Fiandra and Evans. First, they accepted that the pottery of the *fase* IB and II floor deposits is stylistically the same, even though they maintain that it belongs to two different architectural phases.<sup>21</sup> A second important step was their division of Levi's *fase* IB into two stages. The Early stage of *fase* IB is represented by the pottery found *below* the latest floors of the palace. It is stratigraphically earlier than and stylistically distinct from the vases found on top of the floors of the destruction horizon, which are now assigned to a Late stage of *fase* IB.<sup>22</sup> The new *fase* IB Early is roughly equivalent with Evans's MM IIA phase and its contexts correspond more closely, but certainly

<sup>15</sup> PERNIER 1935; PERNIER and BANTI 1950.

<sup>16</sup> LEVI 1976.

<sup>17</sup> PLATON 1961; 1968; ZOIS 1965.

<sup>18</sup> LEVI 1981.

<sup>19</sup> FIANDRA 1961–1962; 1973; 1980; 1990; LA ROSA 1995, 884–887.

<sup>20</sup> MacGillivray, for example, in his publication of pottery groups from the Old Palace at Knossos, rejects Levi's chronology simply by stating that Fiandra's chronology is the most convincing and most relevant for the Knossian material (MACGILLIVRAY 1998, 100).

<sup>21</sup> LEVI and CARINCI 1988, 299, 303, regarding Rooms XXVII–XXVIII, IL, L, LI, LIII, LIV, LV, LXI, LXIII, LXIV, LXV. For a recent affirmation of the existence of a final MM IIB architectural phase after the large late MM IIB destruction of the Phaistian palace and settlement, see CARINCI and LA ROSA 2001.

<sup>22</sup> LEVI and CARINCI 1988, 300–301. There seems to be little difference between the pottery dated to *fase* IB Early and that dated to transitional *fase* IA/IB Early.

Ceramic Phase	Number of Contexts	Number of Vases/Sherds	Percentage of Vases/Sherds
MM IA	4	35	1.6
MM IB <i>fase IA</i>	23	192	9.0
MM IIA <i>fase IB Early</i>	27	415	19.4
MM IIB Early	2	11	0.5
MM IIB Late <i>fase IB Late/II</i>	85	1,484	69.5
Total	141	2,137	100

Table 2 Chronological distribution of Phaistian pottery dated specifically to the MM IA, MM IB, MM IIA, and MM IIB phases as well as the number of contexts in which it was found (after LEVI and CARINCI 1988, 311–351)

not entirely, with Fiandra's period 2 (Table 1). Both Levi's *fase IB Late* and II are considered to be contemporary with Evans's MM IIB phase.

Levi and Carinci's 1988 monograph is the most detailed study of a chronology of regional Protopalatial pottery produced anywhere on Crete, and should serve as a model for future pottery publications. In more than 300 densely filled pages and over 1,000 shape drawings the authors published some 1,500 complete vases from the *fase IB* and II destruction deposits of the southwest wing of the Phaistian palace, and hundreds of vases and fragments from earlier and later Middle Minoan contexts, totalling some 3,000 pieces in all (Table 2). The stratigraphic basis of their pottery chronology was explained as well, and is

here graphically represented in Table 3. For the first time in Minoan pottery studies, the *entire* range of vase shapes, from the humble conical cup to the most exquisite "Kamares" vase, was characterized in minute detail for each phase and subphase. Numerous parallels were drawn with pottery from other Cretan and Aegean sites. Thus this study is a true treasure trove for pottery specialists working elsewhere in Crete and the Aegean, and deserves to be better known.

More recently, Carinci has introduced further changes. He recognized that *fase IB Late/II*, rather than *fase III*, was the last Protopalatial ceramic phase at Phaistos, and that *fase III* was the first Neopalatial phase, more or less equivalent with Evans's MM III phase.<sup>23</sup> As a last step, Carinci has abandoned Levi's terminology in favor of Evans's terms MM IB, MM IIA, and MM IIB.<sup>24</sup>

Even though, with all these changes, there is now significantly more common ground between Levi and Carinci's chronology on the one hand and Fiandra's – and Evans's – on the other, the chronologies still differ substantially in respect to the stylistic characteristics of the ceramic phases, and in particular of the MM IIA and IIB phases. Not only do Levi, Carinci, and Fiandra date some contexts differently based on their different interpretations of Phaistian stratigraphy, they also disagree about the dating of many vases from mixed contexts. For instance, two bridge-spouted jars (F.426 and F.428) from a mixed context excavated below room 11 of the Phaistian palace are dated to MM IIA by Fiandra, but to MM IIB by Levi

	Palace Room IL	Palace Room LXIII	Palace Room LXV	Palace Rooms XXVII–XXVIII	Palace Below Room 11	House Rooms IC, C, CIII	Acro. Med. Room CVII	A. Phot. Room Beta	Bastione II	Chalara Below Room Iota'
MM IIB Late	floor depo.	floor depo.	floor depo.	floor depo.	mixed debris	floor depo.	floor depo.			
MM IIB Early	Bench fill									fill
MM IIA	fill	bench fill, two lower levels					fill	floor depo. with few earlier and later vases	mixed fill	
MM IB			floor depo.		Larnax fill	floor depo.		Bench fill		
Prepalatial				fill						

Table 3 Protopalatial stratified sequences in the palace and settlement at Phaistos. Thick black horizontal lines represent floors; "floor depo." is a floor deposit (after LEVI and CARINCI 1988, 299–302; for the dating of the fill below the floor of Room IL to MM IIA, see VAN DE MOORTELE 2005, 271, 691, n. 22)

<sup>23</sup> CARINCI 1989, 73, 78.

<sup>24</sup> SPEZIALE 1993, 540–544; CARINCI 1997; 1999.

and Carinci. The dating of those two Phaistian jars is important for Knossian chronology, because they have a decoration similar to that of teacup no. 617 from the Royal Pottery Stores and of fragmentary cup no. 170 from the Northwest Treasury at Knossos, respectively, dated by MacGillivray to MM IIA (see below).<sup>25</sup>

It is difficult to make an informed choice between Levi and Carinci's and Fiandra's chronologies, because Fiandra does not provide detailed stratigraphic descriptions. Her pottery discussions are brief as well, and provide explicit dates for only approximately 150 Protopalatial vases and fragments, in contrast to the more than 2,000 Protopalatial vases dated and discussed in minute detail by Levi and Carinci. Nevertheless, it is possible to establish that Fiandra disagrees with Levi and Carinci on some major decorative and morphological characteristics of MM IIA and IIB pottery. For instance, in terms of painted decoration, Levi and Carinci's high-quality MM IIB pottery shows more intricate and dynamic patterns than their MM IIA pottery, which still has a certain simplicity and stiffness. Levi and Carinci's MM IIB pottery also displays, to borrow from Furumark's terminology, a much greater emphasis on horizontal circumcurrent designs, often with continuous motives, whereas their MM IIA pottery decoration shows a greater emphasis on vertically oriented patterns. Thus horizontal bands of running and retorted spirals, in Levi and Carinci's view, do not begin before the MM IIB phase. In Fiandra's chronology the differences between MM IIA and IIB decorative syntax are not as pronounced.

Discrepancies between Fiandra's and Carinci's pottery sequences do not pertain merely to details of style but also to the overall characteristics of the various Protopalatial phases. As Evans and MacGillivray maintain in respect to Knossos, Fiandra considers the MM IIA phase at Phaistos to be the

acme of ceramic and architectural developments, having produced pottery of the highest quality and greatest variability, whereas the MM IIB phase would have been one of decline.<sup>26</sup> In contrast, Levi and Carinci believe that the high point of Protopalatial ceramic production in the Mesara was the MM IIB phase.<sup>27</sup> Levi and Carinci's assessment is supported by Betancourt and Walberg.<sup>28</sup>

Levi and Carinci in their 1988 study tentatively proposed a further refinement of Phaistian chronology on the basis of some characteristics of a pottery fill found inside a bench in Room IL of the Phaistian palace. This bench fill was stratified between a MM IB–IIA pottery fill below the floor and a MM IIB destruction stratum on top of the floor. Stylistically the latest vases from this bench fill are intermediate between the MM IIA phase and the late MM IIB destruction horizon. The bench fill of Room IL contained 125 mendable vases, most of which are MM IB and IIA in date, but six vases look more advanced. Two conical cups similar to Kommian Type C and D cups have bases with sloping interior surfaces that are typical for conical cups of the late MM IIB destruction horizon at Phaistos.<sup>29</sup> They differ from MM IIA conical cups, which have base interiors with a “hollowed-out” profile.<sup>30</sup> Two carinated cups from the bench fill in Room IL have low carinations which also are typical of MM IIB destruction contexts and are not found in MM IB or IIA contexts at Phaistos.<sup>31</sup> Two more vases from the bench fill look stylistically more advanced than MM IIA pottery but less advanced than vases from the late MM IIB destruction horizon. One is conical cup F.457, with a shallow convex bowl and a ledge rim, which is similar to Kommian Type A conical cups.<sup>32</sup> Type A cups never occur in MM IB or IIA contexts at Phaistos or Kommos – and in this respect Carinci and Fiandra agree – but they do appear in late MM IIB contexts at Phaistos and Kommos. Cup F.457 – from the bench fill in Room

<sup>25</sup> FIANDRA 1961–1962, pl. KH.1–3; 1973, pl. 28a–b; MACGILLIVRAY 1998, 28–29 (group C), 36–37 (group F), 98, fig. 3.1, 130, no. 170, 151, no. 617, pls. 7, 50, 103; EVANS 1921, pl. IIa. A similar rosette is seen on a lentoid flask from the West Polychrome Deposits (group E), a mixed context closed in MM IIIA (MACGILLIVRAY 1998, 98, fig. 3.1, 149, no. 570, pls. 20, 94). *Contra* LEVI and CARINCI 1988, 128, 129, 193, 315, F.426 and F.428; LEVI 1976, pls. 107c, 110d.

<sup>26</sup> FIANDRA 1973, 90; 1980, 169.

<sup>27</sup> LEVI and CARINCI 1988, 299. The authors observed, however, some deterioration in the surface finish of many MM IIB vases.

<sup>28</sup> BETANCOURT 1985, 96–101; 1990, 32–34; WALBERG 1987, 122–

125. However, Walberg's highest-quality “Classical Kamaros” phase is not coterminous with the MM IIB phase, since it begins already in MM IIA and continues into MM IIIA.

<sup>29</sup> LEVI and CARINCI 1988, pl. 100i, k. For MM IIB conical cup types from Kommos, see VAN DE MOORTELT 1997, 35, fig. 5; 2005, 331, 368.

<sup>30</sup> In this respect FIANDRA (1973, 89) agrees with LEVI and CARINCI (1988, pl. 100b–c, g, l, m).

<sup>31</sup> Carinated cups F.53 and F.89: LEVI and CARINCI 1988, 197, pl. 90h; LEVI 1976, pl. 130w.

<sup>32</sup> LEVI and CARINCI 1988, 244, pl. 102v; for Kommian Type A conical cups, see VAN DE MOORTELT 1997, 35; 2005, 331, 368, pl. 3.13, no. L/I.



Fig. 1 MM IIB Early bridge-spouted jar fragment with handle preserving its groove throughout, from a construction fill of Building AA at Kommos (photo T. Dabney)

IL – has a less developed rim than its late MM IIB counterparts, however, and looks less advanced.<sup>33</sup>

The other vase from the bench fill that is more advanced than MM IIA vases but less than late MM IIB vases is fine bridge-spouted jar F.189. It has grooved horizontal strap handles, a feature that is common in the MM IIB destruction horizon but that never occurs in MM IB or IIA contexts at Phaistos as defined by Levi and Carinci.<sup>34</sup> However, in contrast to late MM IIB bridge-spouted jar handles, which are flattened at their attachments, the handles of bridge-spouted jar F.189 are not flattened, but have carefully finished grooves that continue all the way down to the point at which the handles are attached to the body (cf. Fig. 1). Carinci tentatively proposed that such carefully executed bridge-spouted jar handles, preserving their grooves throughout, are typical for the beginning of the MM IIB phase.

A similar bridge-spouted jar has been found with a MM IIB carinated cup in a pottery fill below the floor of Room  $\iota'$  at Chalara South, which is the area of the Phaistian settlement located on the south slope below the palace.<sup>35</sup> Since the latest vases from the bench fill of Room IL and from below Room  $\iota'$  at Chalara are stylistically much closer to the pottery from the MM IIB destruction horizon than to that from the MM IIA phase, Carinci believed that they should be considered to belong to an early stage of MM IIB rather than a late stage of MM IIA.

Ceramic Phase	Contexts	Sherd Count	Mendable Vases
MM IIB Late	K–M, O	1,972	37
	other contexts		3
MM IA– MM IIB Early	A–Ji	27,361	
Total		29,333	40

Table 4 Protopalatial pottery groups from Building AA at Kommos with numbers of sherds and mendable vases

The number of vases that can be assigned to the beginning of the MM IIB phase is certainly very small and the morphological criteria for identifying them are quite subtle. Levi and Carinci were fully aware that the Phaistian evidence alone was insufficient to support the creation of a new subphase, and they limited themselves to merely pointing out the possibility.<sup>36</sup> The same minute stylistic differences, however, as well as several other stylistic changes, have now been observed in a large number of newly excavated stratified contexts at Kommos, the nearby harbor of Phaistos. Thus we can now make a strong case for the existence of a MM IIB Early subphase at Kommos and, by extension, in the western Mesara. At the same time, it will be argued here that the new evidence from Kommos clearly supports Levi and Carinci's pottery chronology over Fiandra's, and allows us to question some of the stylistic criteria presently used for identifying the MM IIA and IIB phases at Knossos.

Protopalatial pottery from Kommos is in all respects indistinguishable from that of Phaistos and must have been produced by the same workshop or a small group of workshops working closely together. The Phaistian and Kommian sequences, combined, represent by far the best known regional Protopalatial pottery sequence published anywhere in Crete.<sup>37</sup> In the most recent series of excavations at Kommos, carried out from 1991 through 1997, three superimposed large civic buildings were found in the Southern Area. The oldest of the three, Building AA, dates to the period of the First Palaces. Its stratigraphy is simple (Table 4). Very little of its superstructure survives since it was largely razed to make way for the

<sup>33</sup> Cf. the MM IIB Late Type A conical cups illustrated by LEVI and CARINCI 1988, pl. 102w, y–a'.

<sup>34</sup> LEVI and CARINCI 1988, 124, pl. 54l; Levi 1976, pl. XXXIVc.

<sup>35</sup> Bridge-spouted jar F.4350: LEVI and CARINCI 1988, 124, fig.

35; LEVI 1976, pl. 112a; and carinated cup F.4361: LEVI and CARINCI 1988, 197; LEVI 1976, pl. 132h.

<sup>36</sup> The author would like to thank Prof. Carinci for generously discussing the characteristics of MM IIB Early pottery with her during her study of the pottery from Kommos.

next civic building, Neopalatial Building T. The extant architectural remains are mostly massive foundation walls, on the east and south sides of the building, which held large fills consisting of gray *lepis* (marl), stones, and lots of pottery. Similar construction fills were also encountered elsewhere wherever soundings were made below the interior of the building. In all, more than 27,000 pottery fragments were excavated from these fills (groups A–Ji), and nearly all were single fragments. They are mixed in date, including MM IA, IB, and IIA pieces. The latest fragments belong to fine bridge-spouted jars and other vases datable to MM IIB Early as defined by Levi and Carinci (see below).

The foundation fills were found covered by earthen or pebble surfaces. Here and there on top of these surfaces small amounts of pottery were found, 40 vases in all, which were highly mendable and stylistically datable to MM IIB Late, as defined by Levi and Carinci. It is believed that this pottery was used during the lifetime of Building AA. One of these groups (group K) consisted of three vases lying on the earthen floor of the south stoa of Building AA. Two other groups (groups L and M) appear to have been redeposited, probably during the construction of Building T. Group L – the largest, with 23 mendable vases – was part of a MM IIB–III fill of potsherds and other debris found below a staircase of Building T. It was only partially excavated since it extended further south below the massive south walls of the later buildings T and P. Group M, consisting of eight vases, was found in the fill of a stone-lined pit or drain in the south stoa of Building AA. A final batch, of three vases belonging to group O, was found on the slab floor of room T5 in the northwest corner of the civic structure. In addition, three single mendable vases – found in more obscure stratigraphic positions (C/1, C3352; C9785) – are stylistically similar to the groups of purported use pottery of Building AA.

Thus the bulk of this MM IIB Late pottery believed to have been used in the lifetime of Building AA is clearly distinguishable in its stratigraphic posi-

tion, degree of preservation, and stylistic characteristics from the pottery of the underlying construction fills, of which the latest pieces are datable to the MM IIB Early subphase. Furthermore, in a sounding to the north of Building AA and east of the Classical Round Building, a large homogeneous fill, excavated and recently restudied, appears to consist of restorable vases dating to the same MM IIB Early subphase.<sup>38</sup>

The simplicity of Building AA's stratigraphy and the paucity of high-quality pattern-painted vases datable to the MM IIB phase did not allow me to test the chronologies of Levi and Carinci and of Fiandra in every detail. I was, however, able to focus on some major stylistic differences between the two ceramic dating systems. For instance, according to Fiandra, the wheel-thrown low teacup already appears in the MM IB phase and continues into MM IIB, whereas in Levi and Carinci's view it is not found until late in the MM IIB phase.<sup>39</sup> Fine bridge-spouted jars with grooved horizontal strap handles are assigned by Fiandra to her MM IIA and IIB phases, but for Levi and Carinci they begin only in MM IIB (handles preserving their grooves throughout are dated to MM IIB Early, and flattened handles to MM IIB Late; see above).<sup>40</sup> In terms of decoration, the two systems differ about the chronology of the wavy-line pattern. Fiandra believes that it dates to both the MM IIA and IIB phases, but Levi and Carinci assert that it does not begin before MM IIB.<sup>41</sup>

The results of my study of the stratified pottery from Building AA at Kommos and the large homogeneous fill to its north unequivocally support Levi and Carinci's chronology over Fiandra's. The latest pottery of Building AA's construction fills and of the fill east of the Round Building consists of conical cups of Types C and D with sloping interior bottoms – which are dated to MM IIB by both Carinci and Fiandra – and fine bridge-spouted jars with grooved strap handles that preserve their grooves up to the handle attachment (Fig. 1). Perhaps more significant are the features missing from the construction fills. Even though the ca. 27,000 pottery fragments include a

<sup>37</sup> The Protopalatial pottery of the residential area on the hill at Kommos has been published by BETANCOURT (1990), and that of the civic Building AA and the southern Area by VAN DE MOORTELT (2005).

<sup>38</sup> Trench 20B, pails 35, 37, 39, 41, 42, 43, 44, 56, 58, 64, 66, 67, 68, 74, 76, 77, 78, 80, 82, 83, 84, 85, 86, 87, 88, 89, 90; VAN DE MOORTELT 2005, 264, 272, 689 n.s. This partially excavated fill includes thousands of fragments. The discovery of numerous cross-joins throughout this fill has led the

author to conclude that it was deposited in a single episode rather than in successive phases, as was thought by BETANCOURT (1990, 55).

<sup>39</sup> FIANDRA 1973, pls. 27.g–d, 30b.1–2; 1990, figs. 7, 20, 21, 22, 23. LEVI and CARINCI 1988, 189–193, 300.

<sup>40</sup> FIANDRA 1961–62, pl. KH'.2–3; 1973, pl. 28a–b. LEVI and CARINCI 1988, 123–124, pls. 55c, 56o.

<sup>41</sup> FIANDRA 1973, pls. 27g–d, 30b.1–2; 1980, pl. 40.1. LEVI and CARINCI 1988, 193.

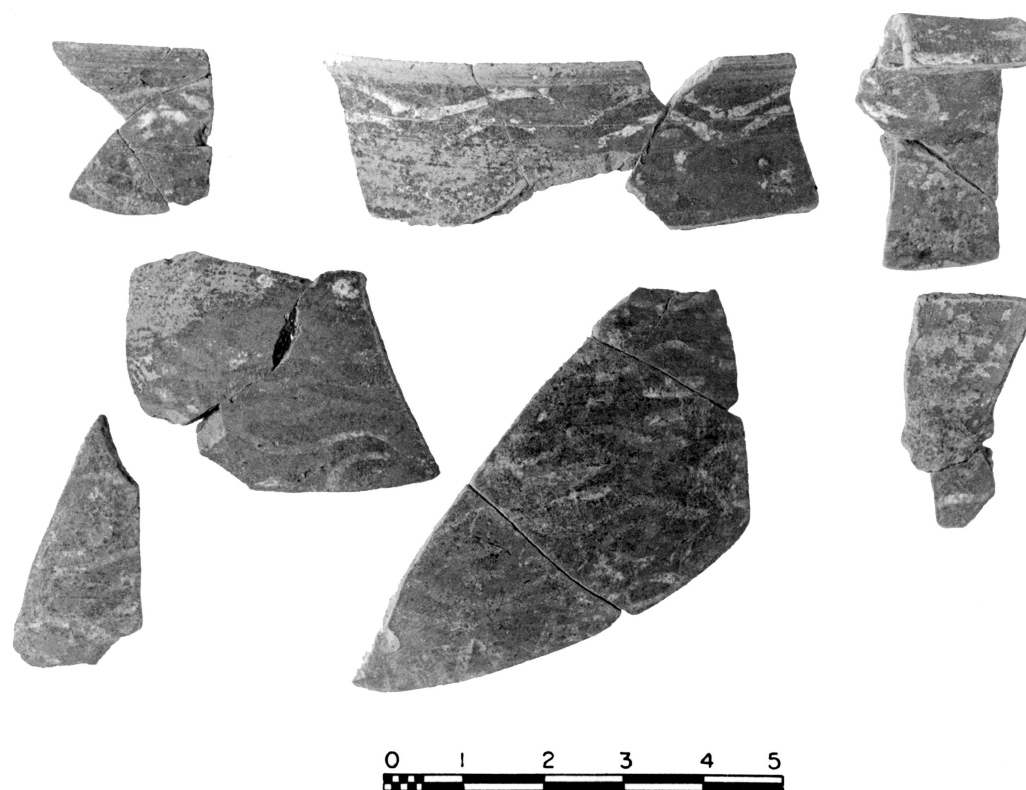


Fig. 2 MM IIB Late teacup C9785 decorated with a wavy-line pattern, from Building AA at Kommos (photo T. Dabney)

large variety of rounded cups, there is not a single example of a standardized low teacup; neither do they include fine bridge-spouted jars with grooved strap handles and flattened handle attachments or vases decorated with a wavy-line pattern. Also absent from the construction fills are fragments of high-quality “Kamares” vases decorated with intricate dynamic polychrome patterns or circumcurrent designs. Instead, the many high-quality pattern-painted fragments found in the fills are datable to the MM IB and IIA phases as defined by Levi and Carinci.

When we turn to the much smaller amounts of MM IIB Late pottery thought to have been used in the lifetime of Building AA, we immediately encounter a low teacup (C9785) decorated with a wavy-line pattern (Fig. 2). We also find other new shapes that in Levi and Carinci’s view begin late in MM IIB: type A and type J, conical cups with fully developed rim, standardized straight-sided cups, and deep globular bowls.<sup>42</sup> We do not have mendable fine bridge-spouted jars with flattened strap handles, but

this lack may be attributed to the relatively small number of mendable vases found in building AA and to their restricted range of shapes. Thus it is safe to conclude that the new data from Kommos clearly support Levi and Carinci’s chronology and cast serious doubts on the validity of Fiandra’s.

At Knossos, the stylistic characteristics of the MM IIA and IIB phases were not always clearly delineated by Evans.<sup>43</sup> Much more precise definitions are provided by MacGillivray in his recent restudy of Knossian Protopalatial pottery chronology. Like Fiandra, MacGillivray dates wheel-thrown low teacups (his types 3–6) to MM IB–IIB and fine bridge-spouted jars with horizontal grooved strap handles (his types 4 and 5) to MM IIA–IIB. Unlike Fiandra, however, he dates the wavy-line pattern at Knossos to the MM IIB and IIIA phases, which is in agreement with Levi and Carinci’s dating of that pattern at Phaistos.<sup>44</sup>

One could make the case that the morphological differences between MacGillivray’s and Levi and Car-

<sup>42</sup> VAN DE MOORTELT 2005, 368–372, pls. 3.3 (no. c/1), 3.13–3.17A.

<sup>43</sup> MACGILLIVRAY (1998, 16) points out that Evans’s chronology was based on fewer than 100 vases and a few groups of

pottery fragments; moreover, Evans changed his mind several times.

<sup>44</sup> MACGILLIVRAY 1998, 62–64, 75–76, 79–80.



inci's pottery sequences are due to regional diversity. It is possible that the low teacup appeared at Knossos already in the MM IB phase and was imitated at Phaistos only late in the MM IIB phase.<sup>45</sup> One also could accept the possibility that grooved strap handles on fine bridge-spouted jars may have begun at Knossos in the MM IIA phase and may have been copied at Phaistos in MM IIB. The case is different, however, for the intricate decoration of high-quality polychrome vases of the "Kamares" class, such as teacup no. 617 from the Royal Pottery Stores and cup no. 170 from the Northwest Treasury, discussed above. Both cups are dated by MacGillivray to the MM IIA phase, but they closely parallel the decoration of two bridge-spouted jars from Phaistos dated by Levi and Carinci to the MM IIB Late phase. The similarities in their design strongly indicate that the Knossian and Phaistian vases are contemporary. Similarly, a group of 21 highly decorated bridge-spouted jars with grooved strap handles from the Early Floor beneath the Room of the Olive Press are dated by MacGillivray to the MM IIA phase, but their horizontal circumcurrent designs are closely comparable to typical MM IIB Late painted patterns from Phaistos.<sup>46</sup> The Royal Pottery Stores and the Early Floor beneath the Room of the Olive Press at Knossos are considered by MacGillivray to be *the* type deposits of the MM IIA pottery phase at Knossos. The close comparanda from Phaistos just cited, however, make it seem plausible that a number of their high-quality "Kamares" vases deemed typical for the MM IIA phase at Knossos should in fact be dated to MM IIB.<sup>47</sup> Such downdating would obviously necessitate a revision of the characteristics of the Knossian MM IIA and IIB pottery phases.

Upon close scrutiny it appears that the stratigraphic information preserved for the Royal Pottery Stores, the Early Floor beneath the Room of the Olive Press, and the Protopalatial levels below the Northwest Treasury allows for such a downdating. All these

contexts were dug according to artificial stratigraphy without absolute elevations related to fixed points, and the information given in Mackenzie's notes is quite scanty. The fact that the restorable pottery of all three contexts is definitely mixed in date – assigned to MM IB and IIA by MacGillivray – leads one to suspect that several earthen floors may have been excavated together, something already suggested by MacGillivray for group H of the Royal Pottery Stores.<sup>48</sup> Furthermore, nothing in the recorded stratigraphic sequences of the three areas forms an impediment to downdating the contexts' closing to the MM IIB phase.

To begin with the Northwest Treasury, a series of clay floors that may belong to a single Protopalatial structure was reportedly found below this building. A lot of Protopalatial pottery was recovered from various locations, including restorable and intact vases dated by MacGillivray to the MM IB and IIA phases.<sup>49</sup> Cup fragment no. 170, which has a polychrome radiating pattern identical to that of MM IIB Late bridge-spouted jar F.426 from Phaistos, belongs to MacGillivray's group C, which is Pendlebury's "Porcelain Deposit".<sup>50</sup> This group does not have a specific documented context, but is thought by MacGillivray to have come from this area. From among reportedly numerous fragments of polychrome cups and bridge-spouted jars, MacGillivray publishes only one other fragment (no. 169). It belongs to a grooved tumbler of MacGillivray's morphological type 4, which is MM IIA–B in date.<sup>51</sup> Two more vases found in a different context (group B) below the Northwest Treasury are closely comparable in shape and decoration to vases from Phaistos that are said by Levi and Carinci to come from the MM IIB Late destruction horizon. One is squat bridge-spouted jar no. 157 with high-set, almost vertical coil handles and a squat dark-coated body decorated with a horizontal band of white-painted retorted spirals.<sup>52</sup> The

<sup>45</sup> MACGILLIVRAY 1998, 69–70 also believes that standardized straight-sided cups of medium quality with simple or no painted decoration appear at Knossos already in MM IB, whereas at Phaistos they do not occur before the MM IIB Late subphase.

<sup>46</sup> MACGILLIVRAY 1987, 274, fig. 1a, b, d; 1998, 42–44 (group L), 98, fig. 3.1, pls. 28–29, 136–140; see below for more discussion.

<sup>47</sup> A similar conclusion was reached by WALBERG (1987, 107) and BETANCOURT (1985, 94–95).

<sup>48</sup> MACGILLIVRAY 1998, 38. It is possible that some pottery in the boxes in the Stratigraphical Museum was contaminated during its tumultuous post-excavation history (MACGIL-

LIVRAY 1998, 18, 36, 43), but this is not likely to have been the case for the vases discussed here, since they were specifically identified by Evans or Pendlebury as coming from the stated contexts.

<sup>49</sup> MACGILLIVRAY 1998, 27–30. One of these floors contained a two-handled jug which from Mackenzie's description seems to be a MM IB two-handled jug with diagonal barbotine and polychrome bands on a dark ground. MacGillivray dates it to MM IIA, however.

<sup>50</sup> MACGILLIVRAY 1998, 28–29, 98, fig. 3.1, 130, pls. 7, 50; see pp. 204–205 and n. 25 above.

<sup>51</sup> MACGILLIVRAY 1998, 68.

<sup>52</sup> MACGILLIVRAY 1998, pls. 48–49.

second is a well-known intricately decorated polychrome bridge-spouted jar (no. 165) which, according to MacGillivray, may well have a Phaistian medium-coarse fabric, and compares very well in shape to several large bridge-spouted jars from Phaistos. However, whereas MacGillivray dates the jar from below the Northwest Treasury to MM IIA and claims that Fiandra does likewise for the Phaistian comparanda, the Phaistian jars are in fact dated to MM IIB by Fiandra as well as by Levi and Carinci.<sup>53</sup> Also, the highly complex decoration of radiating and revolving curvilinear patterns and stylized plant motives of jar no. 165 closely fits the characteristics of Phaistian MM IIB pottery as defined by Levi and Carinci. The remaining Protopalatial pottery from below the Northwest Treasury comes from the Northwest Pit (group D), which is interpreted by MacGillivray as a mixed dump with MM IB, IIA, and IIB pottery.<sup>54</sup> Thus it appears that not only cup no. 170 but also a number of other vases from these Protopalatial contexts found below the Northwest Treasury are datable to the MM IIB phase. Hence it seems likely that the closing of all these Protopalatial contexts should be dated to some time in the MM IIB phase.

The second Knossian context dated by MacGillivray to the MM IIA phase, but having close comparanda among MM IIB Late vases from Phaistos, is the Royal Pottery Stores.<sup>55</sup> These consist of a

complex of small rooms and corridors, located on a slope running from west to east, which were disturbed by the construction of a lime kiln. Teacup no. 617, closely comparable in its painted decoration to MM IIB bridge-spouted jar F.428 from Phaistos, as well as all the other highly decorated “Kamares” vases from the Royal Pottery Stores published by Evans are thought by MacGillivray to belong to group F and to come perhaps from the small enclosed room in the southwest corner of the complex.<sup>56</sup> Group F was reportedly not covered by later Minoan material but was found immediately below a 0.50 m thick surface level. Its stratigraphic relationship to the rest of the complex has not been made clear, but there appears to be no reason for dating its closing to the MM IIA phase rather than to MM IIB, all the more since one of its fragments, cup no. 642, is decorated with a scale pattern, a design that at Knossos has only MM IIB–IIIA comparanda.<sup>57</sup>

The other pottery groups from the Royal Pottery Stores (groups G, H, and I) are believed to have been found in a complex of two corridors and a series of small rooms that are located to the north of the small room of group F and do not communicate with it. The stratigraphy of group G is not documented, but group H is described by Mackenzie as having been covered by two strata, one pale and one dark and burned. Both strata, according to Evans, contained

<sup>53</sup> EVANS 1921, 247, fig. 186a, pl. III; MACGILLIVRAY 1998, 28. BETANCOURT (1985, 101, fig. 72), dates the bridge-spouted jar from the Northwest Treasury to MM IIB. It is similar in shape to two bridge-spouted jars C 5833 and C 5834 from Room XXVII (PERNIER 1935: pl. XVIa–b) and the famous large bridge-spouted jar F.1400 from a MM IIB Late destruction level in Room LV of the Phaistian palace (LEVI 1976, 103–104, pl. 103c; LEVI and CARINCI 1988, 114, 323). Bridge-spouted jar C 5833 as well as various vases found in Room LV in association with bridge-spouted jar F.1400 are dated to MM IIB by FIANDRA (1990, 123, figs. 30–32, 35, 39). PELAGATTI (1961–1962, 101–103, pl. G’ 2–4, E’ 1–2) provides an identical dating and includes bridge-spouted jar C 5834.

<sup>54</sup> For a description and plan, see MACGILLIVRAY 1998, 28–29.

<sup>55</sup> MACGILLIVRAY 1998, 35–39. For its slope, see HOOD and TAYLOR 1981, section 3. Evans had also considered the Royal Pottery Stores to be the MM IIA type deposit of Knossos (EVANS 1921, 231–247). Their MM IIA dating is accepted by Cadogan and his co-workers, who see the pottery from the Royal Pottery Stores as stylistically related to the unpublished upper floor deposit of Hood’s basement south of the Royal Road, which was stratified above a middle floor of MM IB date (CADOGAN *et al.* 1993, 25–26). Both the Royal Pottery Stores and the Royal Road deposits are

considered to be stylistically earlier than the pottery from Popham’s trial KV in the modern village of Knossos, whose date is unanimously accepted to be MM IIB (POPHAM 1974). However, the fact that Hood assigned this Royal Road deposit first to MM IIA and later to MM IIB and the fact that Warren dates the Royal Pottery Stores to MM II illustrate the uncertainties surrounding the differentiation of the two MM II stages at Knossos (AR 1959, 19; HOOD 1961–62, 96; WARREN and HANKEY 1989, 52).

<sup>56</sup> See pp. 204–205 and n. 25 above. The rosettes of teacup no. 617 are also found on tray F.1033 from a MM IIB Late destruction level in Room LV (LEVI 1976, pl. 60d; LEVI and CARINCI 1988, 320) and, executed in a reverse scheme, on amphoriskos F.777 from a MM IIB Late destruction level in Room LIV at Phaistos (LEVI 1976, pl. 76k; LEVI and CARINCI 1988, 318). BETANCOURT dates the motive to MM IIB (BETANCOURT 1985, fig. 70). The white dashed line on the rim of teacup no. 617 from the Royal Pottery Stores is paralleled on the interior of bowl F.5099 from the Grande Frana at Phaistos, dated by LEVI and CARINCI to MM IIB Late (LEVI 1976, pl. XLIIIb; LEVI and CARINCI 1988, 341).

<sup>57</sup> MACGILLIVRAY 1998, 153, pl. 106. For his dating of the scale pattern, see MACGILLIVRAY 1998, 62–64. He considers the decoration of cup no. 642 to be an early version of this pattern.

pottery similar to that of the Loomweight Basement, which is now dated to MM IIB–IIIA. This MM IIB–IIIA pottery is best explained as belonging to a fill laid down during cleanup operations early in the MM IIIA phase.<sup>58</sup> Like the restorable pottery from below the Northwest Treasury, that of the Royal Pottery Stores is believed by MacGillivray to be mixed MM IB and IIA in date. Group I (Room of the Jars) would have been closed already in the MM IB phase according to MacGillivray, whereas Evans saw it as contemporary with the MM IIB–IIIA fill overlying group H. Not clear is the stratigraphic relationship between group I, thought to have been found in a corridor, and group H, believed to have come from one of the small rooms that communicated with this corridor. It seems to the present author that the stratigraphic information from the Royal Pottery Stores is generally quite confusing and does not preclude a closing date of MM IIB for these contexts.

Certainly not all of the vases recovered from the Royal Pottery Stores need to be downdated to MM IIB in Phaistian terms, but MacGillivray's nos. 615, 617, 620, 636, 638, 639, 642, 651, 652, 657, 658, 686, and 746, and perhaps no. 650, would stylistically be at home in MM IIB at Phaistos. To these can be added a low teacup published by Evans as coming from this area, decorated with a band of retorted spirals and cross-hatched loops.<sup>59</sup> Cross-hatched loops do not appear at Phaistos before MM IIB, according to the chronologies both of Levi and Carinci and of Fiandra.<sup>60</sup> Cups 618, 619, 621, 633, 634, 635, and 645, on the other hand, are more closely paralleled in

MM IIA at Phaistos.<sup>61</sup> The proposed mixture of mendable or intact MM IB, IIA, and IIB vases in the Royal Pottery Stores may be explained by suggesting that this context was a dump that remained open into the MM IIB phase or that these vases belonged to multiple earthen floors excavated together.<sup>62</sup>

The third and final Protopalatial pottery group from Knossos that is dated to the MM IIA phase by MacGillivray but that is stylistically closer to MM IIB in Phaistian terms, comes from a small sounding carried out by Mackenzie beneath the Room of the Olive Press (a.k.a. the Area of the Stone Drain-Heads). This lower area, also called the Early Floor beneath of the Room of the Olive Press, had a floor covered by a 2 m thick deposit of nearly complete vases.<sup>63</sup> MacGillivray believes that this pottery, too, is mixed MM IB and IIA in date, but a comparison with Levi and Carinci's Phaistian sequence suggests that the deposit also contained MM IIB pottery.<sup>64</sup> The deposit includes a series of 31 polychrome bridge-spouted jars with grooved strap handles, of which 21 are decorated with polychrome circumcurrent designs of spiky foliate bands, linked dots, dots, and chevrons, or with rapport patterns of interlinked circles or spirals. MacGillivray considers these bridge-spouted jars to be typically MM IIA in style, but in Phaistian terms their design structures and motives are closely related to MM IIB vases and quite different from MM IIA pottery.<sup>65</sup> Evans himself believed that the deposit from beneath the Olive Press was mixed MM IIA and IIB in date, and he dates one of the bridge-spouted jars with horizontal circumcurrent design to the MM IIB phase.<sup>66</sup>

<sup>58</sup> Cf. MACGILLIVRAY 1998, 41. MERSEREAU (1991, 87–88) reports finding pottery joins between the fill overlying the Royal Pottery Stores (presumably over group H) and fills covering the Loomweight Basement as well as the Early Floor beneath the Room of the Olive Press (a.k.a. the early floor below the Area of the Stone Drain-Heads) and the Basement of the Monolithic Pillars. MACGILLIVRAY (1998, 36, 43) does not mention Mersereau's study but points out that the contents of some of these boxes had been switched. He apparently does not accept the identification of box #1198 recorded by Mersereau as "coming from the Loomweight area beneath dais to floor" (MERSEREAU 1991, 86, note 28).

<sup>59</sup> EVANS 1928, pl. IXc1–2.

<sup>60</sup> FIANDRA 1990, fig. 31. See also PELAGATTI 1961–1962, pl. E'.

<sup>61</sup> VAN DE MOORTELT 1997, 455–459.

<sup>62</sup> MACGILLIVRAY (1998, 38) himself suggests that group H may include pottery from two floors of different dates. Alternatively, the remote location of this complex in the

northeast corner of the palace makes it conceivable that it could have been left in ruins and used as a dumping ground in the MM IIB phase.

<sup>63</sup> For a plausible interpretation of the confusing excavation notes, see MACGILLIVRAY 1998, 42–44. For methodological problems surrounding this excavation, see PANAGIOTAKI 1993.

<sup>64</sup> It includes a crinkled-rim bowl (no. 926) that is closely related to a barbotine MM IB bowl from Phaistos: MACGILLIVRAY 1998, pl. 135; cf. LEVI 1976, pl. XIIa; LEVI and CARINCI 1988, pl. 75a.

<sup>65</sup> MACGILLIVRAY 1987, 274, fig. 1a, b, d; 1998, pls. 28–29, 136–140. For a quick overview of the highest-quality MM IIA and IIB Late pottery from Phaistos, see LEVI 1976, pls. XX–LXXIV, 41–179; for dates of individual vases, see LEVI and CARINCI 1988, 311–351. More detailed descriptions are given by LEVI and CARINCI (1988) and VAN DE MOORTELT (1997, 306–348).

<sup>66</sup> EVANS 1921, 239–240, 270, figs. 199e, 200.

Again, stratigraphically there is no impediment to a MM IIB date of the closing of the Early Floor beneath the Room of the Olive Press. Its 2 m thick layer of restorable pottery was covered by debris dating to the MM IIB and IIIA phases, which may have included some MM IIIB or early LM IA pottery as well, and by another floor.<sup>67</sup> This pottery fill, according to Mersereau, has joins with the fill covering group H of the Royal Pottery Stores, and is likely to have been laid down at the same time.<sup>68</sup> It seems improbable that this room with restorable pottery located well within the interior of the east wing of the palace building would have been left exposed from the end of the MM IIA phase through the MM IIB phase to then be covered by a MM IIB–IIIA fill during the cleanup after the final destruction of the Old Palace.<sup>69</sup> It is more likely that the room of the Early Olive Press was in use through the MM IIB phase, and that its latest restorable pottery is of that date.

In conclusion, it appears from this overview that the stratigraphic sequence as recorded by Mackenzie and reconstructed by MacGillivray is nowhere tight enough to prevent the downdating of the latest pot-

tery from the Northwest Treasury, the Royal Pottery Stores, and the Early Olive Press from the MM IIA phase to the MM IIB phase. In the absence of sufficient stratigraphic support, MacGillivray's MM IIA dating of the latest pottery of those three areas is based merely on its stylistic differences with pottery dated by him to MM IIB, such as the vases thought to have come from the cement floor and overlying fill of the Loomweight Basement and pottery from the West and South Polychrome deposits.<sup>70</sup> It is proposed here that those stylistic differences may instead represent contemporary variations and that all these contexts were closed at the same time by the final destruction of the Old Palace and subsequent cleaning operations.<sup>71</sup> The MM IIB date of the latest high-quality "Kamares" vases from all these contexts is strongly indicated by close stylistic correspondences with the pottery from the large MM IIB Late destruction horizon at Phaistos, as defined by Levi and Carinci. Levi and Carinci's interpretation of Phaistian Protopalatial pottery chronology is in turn supported over Fiandra's by the newly excavated data from large and well-stratified deposits from civic Building AA at Kommos.<sup>72</sup>

<sup>67</sup> MACGILLIVRAY 1998, 43–44. The later fragments are described by Mackenzie as decorated with "large spirals in opaque cream-white on purple black lusterless varnish."

<sup>68</sup> MERSEREAU 1991, 87–88; see above, note 57.

<sup>69</sup> For the location of the Room of the Olive Press, see HOOD and TAYLOR 1981, no. 78.

<sup>70</sup> MACGILLIVRAY 1998, 39–42, 98, fig. 3.1, pls. 25–26, 126–132 (group K); 33–34, pls. 9–21, 61–99 (group E); 46–49, pls. 30, 144–150 (group N).

<sup>71</sup> Cf. MACGILLIVRAY (1998, 41–42) who considers the West

and South Polychrome deposits to have been laid down during the same cleaning and leveling operations after the destruction of the Old Palace.

<sup>72</sup> Such as the excavations south of the Royal Road (MACGILLIVRAY 1998, 51; *AR* 1959–1960, 22–23) and southwest of the palace (MACGILLIVRAY 1998, 32; *AR* 1993, 68; see WEINGARTEN 1994, 177–178 for a different dating). Thus it is best to treat the present Protopalatial Knossian pottery sequence with great caution until better stratified data from Knossos are published in the future.

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