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# Where is the gap? Of the EM III-MM IA period in East Crete

### ABSTRACT

It has long been argued whether the EM III-MM IA period exists in East Crete and how it should be defined. There have been attempts to resolve the issue using ceramic material and/or stratigraphy; however, this issue has never been fully resolved.

The EM III-MM IA period is now viewed as a time of major growth that gradually increases in complexity through MM I (Schoep 2006; Schoep et al. 2012) and is often explained through ideological and peaceful influence of elites on communities. There is also evidence for major urban and rural growth (Whitelaw 2012).

Despite the data from regional surveys confirming the increased number of sites in East Crete, the gradual growth of sites can only be seen up until EM IIB. The increase of sites in EM III is rather rapid and cannot be explained only by natural generation growth.

This paper examines and – where possible – provides answers to the two main questions, i.e. how to look at the EM III-MM IA period from the perspective of ceramics and stratigraphy at Priniatikos Pyrgos, and what is the background of the decline of Priniatikos Pyrgos after EM III-MM IA.

KEYWORDS: late Prepalatial period, Early Minoan period, Middle Minoan period, settlement, pottery, elites, chronology

### INTRODUCTION

It has been long argued whether the truly fascinating EM III - MM IA period exists in East Crete or not, how it should be defined, if it should be counted as one or whether it can be divided into two separate parts (EM III and MM IA), or if there simply is just "an" EM III or MM IA phase respectively. Many scholars have attempted to answer this question using the changes in ceramic material and/or stratigraphy; however, this issue has never been fully resolved.

The EM III-MM IA (or late Prepalatial period), which was previously seen as a transitional era before the "palaces" or "court buildings" were built, is now viewed more as a time of major growth that gradually increases in complexity through MM I (Schoep 2006; Schoep et al. 2012). This complexity

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### 2 ΠΕΠΡΑΓΜΕΝΑ ΙΒ΄ ΔΙΕΘΝΟΥΣ ΚΡΗΤΟΛΟΓΙΚΟΥ ΣΥΝΕΔΡΙΟΥ

is often explained through ideological and peaceful influence of elites on communities. There is also evidence for major, yet again gradual, urban and rural growth (Whitelaw 2012).

The data from the Vrokastro (Hayden 2005), Gournia (Watrous et al. 2012) and Kavousi (Haggis 2005) surveys confirm the increased number of sites in East Crete during the Prepalatial period. However, the gradual growth of sites can only be seen up until EM IIB, while the increase of sites in EM III is rather rapid and cannot be explained by natural generation growth but rather by the arrival of new people into the region.

In this paper the three following issues will be discussed:

- 1. Whether the EM III-MM IA period(s) exist(s);
- 2. Whether the EM III-MM IA period can be seen as a period of major growth and rapid increase in settlement and population numbers; and finally
- 3. Priniatikos Pyrgos in EM III-MM IA.

# 1. THE EXISTENCE OF EM III-MM IA

The EM III-MM IA period has complicated chronological resolution (Zois 1968; Andreou 1978; Levi 1981; Momigliano 1991; Momigliano 2007; Watrous 1994; Momigliano 2000; Lachanas 2000; Todaro 2010; Todaro 2009; Betancourt 1985; Todaro 2013), largely due to the fact that Evans used East Cretan pottery from sites that did not offer well stratified deposits to describe the EM III-MM IA phase(s) in Knossos (Evans 1921, 109), and discrepancies arose when there were attempts to understand the chronological developments in Central and East Crete (Betancourt 1985, 53; Betancourt 1984). Many scholars have argued whether in fact there is an EM III phase at all, or if the two periods had a different duration in Central and in East Crete. Since EM III pottery of East Cretan style – as depicted by Evans – was not found anywhere else but in East Crete, it was assumed that the EM II ceramic styles persevered throughout what would be EM III in East Crete until the typical Central Cretan pottery of MM IA date appeared (Momigliano 2007, 79). This, however, is somewhat obscure as at least Vasiliki ware, the highly distinctive style of EM IIB, must have been absent in these deposits – unless these were not stratified or properly excavated during Evans' time.

One would wish to say that there has been a consensus in this matter, stating that the EM III phase does indeed exist and is separate from the MM IA part, yet is typical of strong regionalism throughout the island (Warren 1965; Zois 1968; Andreou 1978; Momigliano 1991; 2000; 2007; Watrous 1994). However, there are also scholars who continue to deny the existence of the EM III ceramic phase due to deemed lack of continuity in ceramic typology and decorative styles from the EM IIB period into the following period(s) (Watrous 2015, *pers. comm.*).

The situation in Central and South (Central) Crete seems to be much clearer nowadays. Recent re-examination of ceramic deposits at Knossos (Momigliano 2007) has made it possible to stratigraphically and stylistically separate the EM III (early and late) and MM IA periods. The chronological divisions at Phaistos have also been revised recently, separating the early, middle, and late phase of EM III, as well as a single MM IA phase (Todaro 2009; Todaro 2010).

Unfortunately, the existence of EM III-MM IA, or separate EM III and MM IA phases, in East Crete remains enigmatic and inconclusive due to the small amount of currently excavated and published sites from the period in question. The fact that some researchers are not consistent when it comes to chronological phasing and ceramic typology does not make the clarification any easier.

# 2. PERIOD OF MAJOR GROWTH - AND RAPID INCREASE

The late Prepalatial period (EM III-MM IA), which was previously seen as a transitional era before the "palaces" or "court buildings" were built, is now viewed more as a time of major growth that increases in complexity gradually through MM I (Schoep 2006; Schoep et al. 2012). This complexity is often explained through ideological and peaceful influence of elites on communities. There is also evidence for major, yet again gradual, urban and rural growth (Whitelaw 2012).

When turning to East Crete, specifically to Mirabello Bay, we can make a good use of the extensive surveys in the Vrokastro (Hayden 2003; Hayden 2004; Hayden 2005), Gournia (Watrous et al. 2012), and Kavousi (Haggis 2005) regions and the published results. It is important to mention here the somewhat unfortunate groupings of periods made by Hayden in the Vrokastro survey, where the EM II and EM III phases of Early Minoan period are put together; this again applies to the MM IA with MM IB and MM II phases of the Middle Minoan period. This chronological division proves to be a significant issue when attempts are made to establish the correct number of sites for each given period in the more traditional way, i.e. EM II, EM III-MM IA, MM IB-II, etc.

Therefore, in order to compare the data from the Vrokastro survey to those of the Gournia and Kavousi regional surveys, the author of this paper and Barry Molloy have decided to separate the respective phases based on the published material from the Vrokastro survey (using Volume 3 discussion, catalogued material, and appendices of site and pottery catalogues) and limited site re-visits. This division is of course rather rough and certainly only approximate (some sites had to be excluded as it was not possible to successfully place them in EM III-MM IA, whilst some other sites counted as EM III-MM IA either began in EM IIB or continued into MM IB); however, the re-examination proved to be very useful when compared with data from other surveys.

The following graphs (Fig. 1) show the number of sites from FN/EM I to MM II in the three surveyed areas of Mirabello Bay, taken from the published materials, with special attention paid to the Vrokastro area, where results revised by Watrous and by us are shown. Looking at these, we can say that Hayden's data would support a rather gradual growth in number of sites throughout the periods; Watrous's data show decline in EM III-MM IA with a sharp increase in the following period (which can also be seen in the Gournia and Kavousi survey data); and finally, our revised data also show the increase in number of sites in MM IB-II.

The important thing one has to bear in mind is that the periods in question did not have the same time duration. Therefore we decided that each period is split into century-long segments and divided the number of sites in the period by the number of centuries. Then the average number of new sites per every one hundred years is obtained. This progression is shown in



Fig. 1. Graphs showing number of sites from FN/EM I to MM II.



Fig. 2. Average number of sites per century.

Fig. 2. It is again important to underline that this is a broad and averaged division under the assumption that the increase in number of sites in each respective period is more or less constant throughout, which of course cannot be guaranteed (for example there could be more activity at the beginning of the phase, less in the middle and more again towards the end, any scenario is more or less possible).

Despite this, it is obvious that one can see a clearer picture of the settlement patterns in Mirabello Bay from EM I to MM II. There is an obvious increase in number of sites in the EM III-MM IA period and a rather extensive growth in the period that follows. Both the Gournia and the Vrokastro survey suggest that most of the new sites are of lower ranking, i.e. there are more field sites and farms as opposed to hamlets and villages.

This goes hand in hand with changes in political, economic and social organisation in the area. One may wonder who was in charge of these changes. Hayden proposed that they can be linked to the growing power of Malia and managed locally through Priniatikos Pyrgos (Hayden 2004, 99). This theory can be supported by the preliminary analyses of the MM I-II ceramic material from the site (Hayden et al. 2012, 561-2; Moody 2005; Nodarou et al. 2014, 96-7); however, the possible increased Malian influence is not (yet) visible in the EM III-MM IA phase.

# 3. PRINIATIKOS PYRGOS IN EM III-MM IA

Priniatikos Pyrgos is a multi-period site located in Mirabello Bay in East Crete (Fig. 3). Its importance was first recognised at the beginning of the 20th century by Edith Hall, when she was excavating the nearby settlement of Vrokastro (Hall Dohan 1914; Hall Dohan 1915). The significance of the site was confirmed in the late 20th century during the extensive survey of the Vrokastro area (Hayden 2003; Hayden 2004; Hayden 2005), which was followed by rescue excavations led by Metaxia Tsipopoulou and Barbara Hayden in 2005 and 2006 (Hayden et al. 2012) and succeeded by systematic excavations and study seasons under the leadership of Barry Molloy from the Irish Institute for Hellenic Studies at Athens (IIHSA) from 2007 onwards. Given the continuous occupation from the Final Neolithic/Early Minoan I period until the Modern era, Priniatikos Pyrgos is an excellent example of a stratigraphically complex and challenging site.



Fig. 3. Map of Crete showing location of Priniatikos Pyrgos.



Fig. 4. Location of Trenches and Areas at Priniatikos Pyrgos.

# **TRENCH IV**

The excavation in Trench IV (Fig. 4) in 2009 led to a discovery of six to seven pebble surfaces/ floors that are dated from EM III-MMIA to MM II. These surfaces were repeatedly packed, cleaned and re-laid, leading to disturbance of lower layers. Thus they do not represent unbroken deposits, and this was already obvious during the excavations, yet the ceramics recovered from these floors and packings provided stratified material to establish secure sequence of occupation. As we were aware of the possible disturbance, we created specific charts for weighted analysis to illustrate the progression from one phase to another. In this analysis, every diagnostic sherd was assigned to the respective time period with 100, 75 or 50% probability. This can be seen in the graphs shown in Figs 5 and 6.

The ceramic material from Trench IV has also allowed us to establish a set of typical wares and fabrics for this site in the period. We were able to identify seven wares: White on Dark, Dark on Light, Monochrome Black and Red, Bichrome, Cooking, and Undecorated Wares (Fig. 7). The representation of wares in the assemblage and typical shapes across wares is depicted in graphs in Figs 8 and 9. Unfortunately only a few complete or partially complete (mainly cooking ware) vessels have been recovered. The separation of EM III from MM IA was not possible due to the continuous disturbance of these floors in the past.

We were also able to macroscopically identify six fabrics: Jar, Fine, Cooking, Cooking Calcite, South coast, and Phyllitic. These were confirmed in our microscopic petrography analysis, with additional sub-groupings in two of them – Jar and Cooking fabrics (Fig. 10). Three fabrics are local

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Fig. 5. Weighted analysis chart (sherd count).



Fig. 6. Weighted analysis chart (sherd weight).

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Fig. 8. Representation of wares in the assemblage.



Fig. 9. Representation of shapes in the assemblage.



Fig. 10. Representation of fabrics in the assemblage.

Mirabello fabrics with granitic-dioritic inclusions and gold mica Jar, Cooking, Fine), one continues from the previous period (Cooking with calcite inclusions), and two are imported – one from the South Coast (with flysch inclusions), and one with phyllitic inclusions that could originate west of Priniatikos Pyrgos in the Malia region or could be from east of Priniatikos Pyrgos, from the Kavousi area to Siteia. Preliminary petrography results suggest that Priniatikos Pyrgos had contacts with both of these regions (i.e. Malia and Kavousi-Siteia).

However, the amount of imported ceramics in the assemblage is very small; there is obvious decrease when compared to the previous periods on site (13.25% of South Coast in EM I to 1.01% in EM III-MM IA) (Molloy et al. 2014, 324-6). As mentioned above, the preliminary examination of MM IB-II deposits shows change again as a strong Malia influence is visible in the ceramic material (stylistic, potter's marks, potential imports, etc.).

The sequence of pebble floors in Trench IV is also interesting for another reason. Above the second pebble floor (4.2-C 672) a deposit of ash ca 7 cm deep with dimensions of  $1.10 \times 0.95$ m was revealed. The deposit contained heavily burned sherds of EM III-MM IA and earlier (Fig. 11).



Fig. 11. Selection of pottery from burned deposit (C 673).

The depth of the deposit and the heavily burned pottery may suggest that it is the remains of a destruction event rather than refuse from a hearth in this domestic setting; unfortunately the amount of preserved material is too small to make a final assertion. It is certain that there is no break in occupation and the following surface is again of EM III-MM IA date.

Similar pebble surfaces were also found in the north part of Trench II (C128, above EM I House 1) and Area G (locus G5022) and H (H 2000/3000); however, these deposits contained more storage vessels when compared to those of Trench IV (which are merely of a domestic character).

# TII PITHOI

Another interesting set of deposits was discovered in Trench II during the excavations in 2008-2010. Within the Byzantine Building 1, a room containing several pithoi was excavated (Fig. 4). This room was defined by walls C 758 and C 179, and C 694 as continuation of C758 built of stone (lower courses) and mudbrick (upper courses). It contained three pithoi (Fig. 12) and fragments of at least three more. Additional ceramic material in this deposit was rather scarce and could not provide secure dating; however, based on the (published and unpublished) *comparanda* it can be said the pithoi are EM III-MM IA. All pithoi have similar diameters and production technique as well as decoration (Dark on Light/Trickle), suggesting standardisation. These pithoi were fallen on their sides and lying on the already collapsed burnt mudbrick and mud plaster from the walls defining this room. It is therefore evident that the fire and collapse had been initiated first and the fall of pithoi occurred during the building/walls collapse. The current data do not tell whether this destructive event was accidental or initiated as perhaps an act of violence.



Fig. 12. Pithoi in situ.



Fig. 13. Examples of typical EM III – MM IA pithoi at Priniatikos Pyrgos.

Overall, the evidence from Trench II and Trench IV would support a destructive event at some point during EM III-MM IA, with immediate phase of rebuilding.

### **CONCLUDING REMARKS**

The survey data show clear continuity from EM IIB into the following periods with changes in landscape use towards the end of EM III-MM IA and in MM IB-II.

It was possible to define ceramic wares and fabrics typical for this period on site. However, the ceramic sequence and the current state of evidence do not allow us to securely separate EM III from MM IA, either stylistically or stratigraphically.

Based on the excavated areas on the site and current state of research it seems that in EM III-MM IA the central part of the Priniatikos Pyrgos promontory served as a storage area (especially when taking into account that a similar storage jar was discovered in Area A 6000), whereas the function of the eastern part was rather domestic.

Unlike other sites in East/South East Crete, there is no definitive proof of destruction at the end of EM IIB. From the evidence presented here, it seems more likely that some sort of destructive event(s) occurred during EM III-MM IA. It is not certain whether this was an act of violence; however, the possibility that Priniatikos Pyrgos as a local production centre (probably in EM IIB) was seen as a problematic rival to elites from Malia (or even Gournia) cannot be excluded. On a larger scale this destruction, even though it did not lead to abandonment of the site, may have been the turning point for the elites to gain the control over the region which seems to have been completed in the following period (post MM IA) – as attested in the ceramic materials from the site.

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### ABBREVIATIONS USED

FN – Final Neolithic

EM – Early Minoan

- MM Middle Minoan
- IIHSA Irish Institute of Hellenic Studies at Athens