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SHIFTING BOUNDARIES: THE TRANSITION FROM THE MIDDLE TO THE LATE BRONZE AGE IN THE AEGEAN UNDER A NEW LIGHT

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ABSTRACT

The aim of the present paper is to propose some synchronizations, mainly taking into consideration the typology of pottery. The period of our focus is the early Late Bronze Age and the data presented come from the Mainland, Crete and the Cyclades. Ceramic data from different places are combined, offering interesting correlations in terms of relative chronology. Emphasis is given to the dating systems proposed by some scholars, like those of Warren, Hankey and Dietz, since they have greatly influenced the literature and are still being used widely. We are particularly interested in the synchronization of the Mainland with Crete on a ceramic basis and especially the period of the late Middle and early Late Bronze Age.

ΠΕΡΙΛΗΨΗ

Το άρθρο αυτό προτείνει κάποιους συγχρονισμούς λαμβάνοντας κυρίως υπόψη την κεραμική τυπολογία. Η περίοδος στην οποία επικεντρώνεται είναι η πρώιμη Ύστερη Εποχή του Χαλκού και τα

στοιχεία που παρουσιάζονται προέρχονται από την ηπειρωτική Ελλάδα, την Κρήτη και τις Κυκλάδες. Συνδυάζονται κεραμεικά δεδομένα από διαφορετικές περιοχές παρέχοντας ενδιαφέροντες συσχετισμούς που αφορούν στη σχετική χρονολόγηση. Δίνεται έμφαση στα συστήματα χρονολόγησης που προτείνονται από ορισμένους μελετητές όπως εκείνα των Warren-Hankey και του Dietz, καθώς έχουν επηρεάσει σε μεγάλο βαθμό τη βιβλιογραφία και χρησιμοποιούνται ακόμη ευρέως. Μας ενδιαφέρει κυρίως ο συγχρονισμός της ηπειρωτικής Ελλάδας με την Κρήτη όσον αφορά στα κεραμεικά δεδομένα και ιδιαίτερα η περίοδος της ύστερης Μέσης και πρώιμης Ύστερης Εποχής του Χαλκού.

INTRODUCTION

The way we define the beginning of the Late Bronze Age is more subjective than we would like. The end of the Middle and the very beginning of the Late Bronze Age partly overlap; the end of the Middle might be viewed as the initial stage of the Late and vice versa, depending on the approach to the matter from a deep knowledge of the MBA, as opposed to the LBA pottery sequences. Aspects concerning the definition and subdivisions of this timeframe arise from confusion in applying competing terminologies to pottery.

It is commonly argued that the observed inconsistency is a consequence of the problematic Minoan sequences and the use of different nomenclature by several scholars. Nevertheless, a large number of recent publications clarify issues of Minoan terminology and chronology (Momigliano 2007, see particularly Hatzaki 2007, and Macdonald & Knappett 2013).¹

Before addressing any of the questions concerning the synchronizations we need to think in Mainland terms when the Late Bronze Age should begin and why. The prevailing view is that it begins with the appearance of early Mycenaean Decorated pottery, i.e. the local production of pottery influenced by the LM IA Lustrous Dark-on-Light decorative style. This is quite convenient, since it means the conjunction of a pottery style with the beginning of a new period and, thus, one of the rare occasions when the

¹ Terminological and sequential problems have also been the subject of several papers of the last decade (cf. Macdonald 2004 and Girella 2007).

same term for a chronological phase and a pottery style is being used correctly. We need, though, to consider the possibility that the influence from the Minoan Lustrous Dark-on-Light decorative style started a little bit earlier in Mainland terms taking into consideration the existing and broadly accepted overlap between MM IIIB and the early stage of the LM IA period.

Decorative styles that are usually considered typical of the LH I period, like the Lustrous Dark-on-Light with or without added white paint, had already started in and are actually considered characteristic of the MM IIIB period (Hatzaki 2007: 163-165). This means, in fact, that there might be a short period – considered part of the LH I in the literature – when shapes, motifs and styles of the MM IIIB pottery were being used, a period right before the genesis of the Mainland version of the Lustrous Dark-on-Light decorative style, i.e. the early Mycenaean Decorated pottery. A certain amount of time was required for the assimilation process and the final adoption of the ‘early Mycenaean’ styles and techniques. The existence of an intermediary stage would additionally explain the presence of types characteristic of the early LBA (i.e. Mainland Polychrome, Aiginetan Bichrome) in contexts deprived of early Mycenaean Decorated pottery.

The aim of the present paper is to argue for the existence of this period and to trace it in the available archaeological data.

RELATIVE CHRONOLOGY: THE EARLY DAYS

In the first attempt to create a Helladic sequence Wace and Blegen did not propose a tripartite division of the Middle Bronze Age like the one adopted for Crete; they argued, instead, for a two-phase division. The third MH period was first introduced by Forsdyke (1925), but it was not broadly accepted. It was supported and gradually became a fact in later times (Frödin & Persson 1938), although it was always a minority approach. Furumark also supported a bipartite division of the Middle Helladic period focusing on the data of the early Late Helladic period from Korakou (Furumark 1941; for a full presentation of Furumark’s chronological system see Kramer 2004: 28). He also stressed the presence of

Middle Helladic wares in the early Mycenaean levels. In order to date the 'problematic' grave VI of Grave Circle A at Mycenae he created a sub-phase in the Middle Helladic sequence, the MH IIB phase, but this division was not met with acceptance. The whole issue testifies to his concern about the date of the grave, which obviously did not look 'Middle Helladic' to him.

In later times Dickinson developed his own dating system based on the review of the pottery from the East Alley of Korakou, but also on new stratified deposits from area IV at Nichoria (Dickinson 1972; 1974). According to Dickinson the stylistic basis for the differentiation of Furumark's 'LH IA' and 'LH IB' periods is formed by the LH I pottery with lustrous decoration, which was the basis of Furumark's study in the first place. Giving emphasis to the character of the deposits he claimed that the 'LH IB' material of Furumark is in fact LH IIA material of domestic character, i.e. a group without Palatial style pottery. This has been accepted by several scholars – Mountjoy among others (Mountjoy 1999a: 19-20), since the division of LH I into two phases was not supported stratigraphically.

As far as the relationship of the LH I period with the Minoan sequence is concerned, once again, Dickinson saw LH I as equivalent to the mature LM IA period (Dickinson 1977: 29), a synchronization based on the similarities between the early Mycenaean pottery with the style mainly represented in the LM IA period i.e. Lustrous Dark-on-Light. By 'LH I' Dickinson meant the LH I pottery with lustrous decoration and not the pottery of Middle Helladic tradition (i.e. Mainland Polychrome, Late Matt-painted etc). Dickinson's dating system was based on the character and the duration of the Lustrous Mycenaean pottery. But, what about his final Middle Helladic 'Late Phase'?

Dickinson's division of the Middle Bronze Age according to ceramic criteria (Mature Minyan, Late Phase etc.), is indicative of his refusal to accept a tripartite Middle Helladic sequence; he believes that there is no stratigraphical basis for such a division and that no proper definitions of such terms have ever been proposed (Dickinson 2010: 22). His 'Late Phase' is characterized by wares of Middle Helladic tradition (Dickinson 1977: 22 fig. 3), like

Mainland Polychrome, Late Matt-painted, White on Lustrous Dark and Dietz's so-called 'Argive Light ware' (for a good presentation of these wares see Dietz 1991). Although the 'Late Phase' was not defined on a stratigraphical basis it seems to occupy part of MH III and LH I. The phase fitted well within the dating scheme proposed by Warren and Hankey (1989: 68), with their 'MM IIIB/LM IA' phase of the Minoan sequence supporting this synchronization in combination with the Minoan and Minoanizing wares from Kythera and Agios Stephanos.

A VIEW FROM KNOSSOS²

Warren's transitional 'MM IIIB/LM IA' phase, represented by the Knossos S'EX Pit VI deposit (Warren 1991), was mainly defined by the appearance of Dark-on-Light and Light-on-Dark wares in equal proportions and the high percentages of the former in comparison to those observed in the next phase. In this deposit a third of the decoration is White-on-Dark and two-thirds Dark-on-Light, with over half the latter tortoise-shell ripple pattern (Warren 1991: 331-332). This ratio is also met in Knossian MM IIIB assemblages, like the KS 178 stone-build compartment deposit (Hatzaki 2007: 160), the South Corridor: Lower Deposit of the Unexplored Mansion (Macdonald 2004: 245 fig. 18) and Pit 16, Trench SVII.6 of the South-West Houses (Unpublished material, excavated by Colin F. Macdonald), and should not be considered an indication of a later phase.

Warren and Hankey considered their 'MM IIIB/LM IA' phase contemporary with the LH I period according to typological criteria, giving in fact a very short time span to it (Warren & Hankey 1989: 97). According to them LH I is earlier than the mature LM IA period and synchronous with the Seismic Destruction Level at Akrotiri, due to the absence of the reed cup in LH I assemblages. The reed cup, though, is generally rare in Mainland Greek deposits. Even at the Volcanic Destruction Level at Akrotiri there are no Minoan imports of reed cups, to judge from the pottery from Sector Delta at least. Nevertheless, the pattern is present on locally produced vessels, i.e. large hemispherical and conical cups decorated in the White-on-Dark style (Mathioudaki & Nikolakopoulou forthcoming).

² We take here into consideration the Knossian sequence due to its key role for the synchronization with the Mainland, since Knossian deposits contain quantities of vessels decorated in the Lustrous Dark-on-Light style (i.e. tortoise-shell ripple, spirals, floral motifs), which are good indicators of chronology. We need here to stress the importance of the south Cretan (i.e. Kommos) sequence to the whole issue (see Van de Moortel 1998) and to note Betancourt's later view on the nomenclature according to which the 'Transitional MM III/LM IA' and 'Early LM IA' at Kommos should be considered 'MM IIIB' (Betancourt 2013: 145).

The range of fine pottery belonging to the end of the Middle Bronze Age in the Knossian sequence is illustrated by three pottery groups, those of the South Corridor of the Unexplored Mansion (Popham 1984: 154), Pit VI of the Stratigraphical Museum Extension (S'EX Pit VI, Warren 1991) and the KS 178 deposit (Hatzaki 2007: 160). From the pottery represented it is obvious that the Lustrous Dark-on-Light decorative style was present and even in a developed form already in MM IIIB (Betancourt 2013: 145). We could say, thus, that this style does not have the relevance to the start of the Late Bronze Age in Crete that it does for the Mainland.

Support for a 'mature LM IA' phase came as a consequence of the extensive use of Warren's and Hankey's transitional phase, despite the fact that Warren (1999: 896), also believed in the existence of an earlier LM IA phase. Evans (1928) did not divide LM IA stratigraphically into an earlier and a later phase, but he believed in a stylistic division based on the evidence of the House of the Frescoes and, once more, on the percentages of the White-on-Dark and Dark-on-Light wares. Hatzaki (2007: 160), also thinks of the 'mature LM IA' phase as a ceramic phase, since the 'official' division of the period into two phases by Popham (1977: 193 and pl. 29), was based on one deposit only, the North-East Magazines, and the prevalence of Vapheio cups with ripple decoration, which were presumably indicative of an earlier stage of the LM IA period. Ripple decoration should not be considered indicative of an early LM IA phase, since, as has been shown by the Anemospilia assemblage and several Knossian deposits, the tortoise-shell ripple pattern was already present in MM IIIA (Sakellarakis & Sakellarakis 1997: fig. 386; Knappett et al. 2013: 18; Macdonald 2013: 29; Hatzaki 2013: 40). It is also considered to be the main decorative style of KS 178, the type-deposit for the MM IIIB period at Knossos (Hatzaki 2007: 160). The absence from or rare appearance of the ripple pattern in LH I deposits, like those of Agios Stephanos (Mountjoy 2008: 348 fig. 6.26), speaks also for a chronological difference or for the fact that this pattern was not so popular on the Mainland and thus not a good indicator for off-island synchronizations.

The dating scheme of Warren and Hankey is still being used as a solid basis for chronological attributions, especially by schol-

ars dealing with the Mainland (see Zerner 2008), despite the fact that it has been strongly criticized. Hood, Macdonald and Hatzaki consider this transitional phase to be MM IIIB stressing, though, the difficulties in telling MM IIIB from LM IA in several Knossian deposits – as Popham originally did (Hood 1996: 13-14; Macdonald 2004: 242; Hatzaki 2007: 154).

We believe that the beginning of the Late Bronze Age in Crete, or rather the north-central part of the island, is defined by a combination of observations on the ceramic assemblage, like the amount of pottery decorated in the Dark-on-Light style with or without added white paint, the weak presence of pots decorated in the Light-on-Dark style, the large number of hemispherical cups and ogival bowls decorated with spirals and foliate bands, the increased use of elaborate decorative motifs like reeds and floral patterns, and the generally taller, deeper and more conical profiles of the plain wares, including the well-known conical cups and ledge-rim bowls (cf. Hatzaki 2007: 175-178 and figs. 5:13-14).

Deposits ascribed to the 'Seismic Destruction Level' at Akrotiri, which represents an early stage of LC I/LM IA, are characterized by new shapes, i.e. rhyta and eyed jugs, as well as new motifs (i.e. spirals) and, once again, the predominance of pots decorated in the Dark-on-Light style (Nicolakopoulou 2013: 214). Unfortunately, the site is not helpful for the definition of the MM IIIB period. According to Nicolakopoulou 'MM IIIB is the time frame for the establishment of the LC I Akrotiri and possibly also for Agia Irini, although primary deposits of this phase are apparently rare or non-existent' (2013: 216).

The difficulty in attributing deposits to the MM IIIB or the LM IA period gives a different perspective to the argument, since it also affects deposits dated in the LH I period.

A VIEW FROM THE MAINLAND

Important work on the Helladic sequence has been done by Dietz (1991 and 1998), who divided the LH I period into two subphases according to stratigraphical observations from the settlement of Asine. The main reason for the division was his belief that Furumark's and Dickinson's LH I phases were in fact 'LH IB' in

the Argolid sequence (Dietz 1991: 25-26 and fig. 1). It is not clear, though, to what extent this division relies on stratigraphical data or pure typological correlations. The typological basis for Dietz's (1991: 158-161, 175-179 and figs. 49, 54 and 55) division comes from the Lower Town of Asine and consists mainly of local wares (i.e. 'Argive Light'). Dietz's (1991: 70 and 92) 'MH IIIB' phase was defined according to a total of ca. 1600 sherds and the 'LH IA' from 500 sherds. The basis for the proposed division is the absence of early Mycenaean pottery from the 'LH IA' stratum. This fact indicates, according to Dietz (1980: 123-140; 1991: 103), the existence of a later LH I phase that is related to the 'traditional' LH I period.

It is obvious that emphasis was given to the typological correlations that were made with other sites, such as Korakou or the Mycenaean Grave Circles, rather than to the stratigraphical sequence per se. Why Dietz preferred to add this phase to the 'Late Helladic' rather than the 'Middle Helladic' sequence is an interesting question and the answer might be related to the Minoan imports located in his 'MH IIIB' layer and the presumably 'MM IIIB/LM IA' decoration of pots belonging to his 'Lustrous Decorated Argive' ware (Dietz 1991: figs. 25 and 28). In a few words, Dietz preferred to synchronise the 'MM IIIB/LM IA' phase with an early part of the LH I according to the belief that sherds decorated with tortoise-shell ripple pattern are indicative for a date in the early LBA.

Zerner presented a chronological scheme based on the pottery sequences of Agios Stephanos, despite the fact that there is not much stratigraphy at the site (Zerner 2008; see also Mountjoy 2008: 369). A large part of the material is out of context (Dickinson 2014: 13). We have to make with a stylistic approach, a fact that by itself cast doubts on the objectivity of the enterprise. For Zerner (2008: 182), the MH III Early phase is synchronous with both the MM IIIA and MM IIIB periods. MH III Late has two subphases, i.e. MH III Late and Transitional MH III/LH I, divided by 'significant changes in the ceramic repertoire' (Zerner 2008: 182). This second part of the MH III period is also 'difficult to date in Minoan terms', a puzzling statement since we would expect a synchroniza-

tion with the MM IIIB period. The phase is claimed to be equivalent with Kythera Deposit ε (dated to the MM IIIB period) and some sherds from deposit ζ dated to the transitional 'MM IIIB/LM IA' period (Warren's and Hankey's phase). The equations derive mainly from typological comparisons of the Lustrous Decorated ware. It is interesting that there is also a local version of Dietz's 'Argive Light ware', another indication of the independent creation of wares of Minoan inspiration (Zerner 2008: fig. 5.46 nos. 2054-2055; MH III Late-LH I/IIA). On the basis of the ceramic evidence from Agios Stephanos Zerner (Zerner 2008: 185-186) divided the LH I period into two phases, LH I Early (which is not the same as Dietz's LH IA since 'there is no corresponding phase in the Argolid') and a transitional LH I/IIA phase, which equates with Dietz's 'LH IB' period.

We would like to give credit to Zerner's proposed chronological scheme as a scheme based on local ceramic sequences that indicates patterns of local production and consumption of pottery, but not as a chronological system valid for the whole Peloponnese. This is the reason why we do not think that a juxtaposition of Zerner's scheme with other chronologies has any place in the understanding of the character of the early Late Helladic period overall.

THE BASIS FOR A DIFFERENTIATION

From all that has been said so far it is obvious that the chronological sequence of Mainland Greece is not as clear as we would like. To a large extent this is the consequence of intense regional differences, which often make typological comparisons a hard task. Dickinson argues against a division between the Middle and early Late Bronze Age stressing the fact that the change in the terminology does not coincide with a change of historical significance (Dickinson, pers. communication). The phasing systems derive, though, from typological observations, a procedure that leads to historical conclusions through the clarification of chronological issues. Pottery synchronizations have also historical implications. This is also implied by Dickinson (2014: 4-5) who gives historical value to the stylistic terminology preferring to use, instead of simply the

term 'LH I' the phrase 'the period in which the LH I style of decorated pottery became current'.

We have Dickinson's historical view, on one hand, and Dietz's and Zerner's clarified but complex chronological system based on the stylistic attributes of local pottery sequences, on the other. We could speak, in fact, of a confusion between the use of LH I as a chronological and as a stylistic term. Dickinson's 'Late Phase' is a ceramic phase, characterized mainly by pots of Middle Helladic tradition from the Mycenae Grave Circles (Dickinson 1977: 22-24). It is difficult to set the 'Late Phase' in accordance with the sequences proposed by Dietz or Zerner.

Just like the 'Late Phase' of Dickinson, Dietz's 'MH IIIB' is also considered synchronous to Warren's and Hankey's 'MM IIIB/LM IA' phase (according to the finds in Dietz 1991: fig. 25; Lustrous Decorated ware). Taking this into consideration we cannot exclude the possibility that Dietz's 'MH IIIB' covers also part of the LH I period. We believe thus that MM IIIB is synchronous to MH III, but also to a part of the LH I period as defined today, a short period before the genesis of the early Mycenaean pottery.

This stage is to be found stratigraphically at Asine (Dietz's MM IIIB and LH IA periods), Agia Irini on Keos (the first phase of Agia Irini VI, see below) and Kiapha-Thiti, which has two stratigraphically defined MH III phases, the earlier being synchronous with Agia Irini V and the later synchronous with the early phase of Agia Irini VI, the one without early Mycenaean pottery (Davis & Cherry 1990: 194; Maran 1992: 203). We believe that this 'pre-early Mycenaean pottery stage' can also be identified in several other places, such as at Tsoungiza (the 'Early LH I' deposit of area EU7, Rutter 1989). It is better defined stylistically than stratigraphically, though, a fact that speaks for a ceramic phase rather than a pure stratigraphical horizon that might be expected to be found everywhere.

According to Davis and Cherry the beginning of Agia Irini VI also includes the final stage of the Middle Bronze Age (Davis & Cherry 1990: 194). This is supported by the presence of LM IA styles and the lack of early Mycenaean pottery and not by the presence of late Middle Helladic wares. According to Cummer and Schofield, Agia Irini VI includes three stratigraphically defined

phases, which can be observed in Rooms 39 and 26 of House A (Cummer & Schofield 1984: 141). It is not clear, though, if the phases are located in a successive sequence in one trench or are the result of the typological comparison of different stratigraphies. Taking into consideration the agreed overlap between MM IIIB and the early stages of LM IA and the lack of Middle Helladic pottery, we are not sure whether Agia Irini VI starts in the last stage of the MH III period or at an early stage of the Late Bronze Age (Davis & Cherry 1990: fig. 4a, the illustrated pot could be placed in the MM IIIB period). Additional evidence on the subject comes from the recent publication of the Agia Irini's western sector; the division of period VI into sub-phases is supported by the stratigraphy of Room EJ.1 with EJ.1A representing the 'lower stratum of period VI' and EJ.1B the 'upper deposit of period VI' (Schofield 2011: 105 pls. 62 and 63 respectively). The same stratigraphy is followed in Rooms EJ.3 and W.4 and supports the existence of an even earlier part of phase VI contemporary with the MM IIIB period and possibly Phase 4 of Akrotiri, Thera (for phase 4 at Akrotiri's see Nikolakopoulou et al. 2008).

Girella (2010) also notes the inconsistencies of the synchronizations proposed so far. The late stage of MH II at Agios Stephanos is synchronous with MM IIIA according to a wide range of shapes and patterns of Minoanizing wares, most of which are also encountered in Lerna V (Girella 2010: 864-865). The latter was until recently claimed to be contemporary with MM II; Minoanizing pottery, though, reveals also parallels with MM IIIA on Crete and Agia Irini V (Girella 2010: fig. 2a-c). On the other hand pots of Dietz's 'MH IIIB' phase, cups with ripple pattern and running spirals occur also at LH I Lerna, while popular MM IIIA patterns like festoons, spirals and foliate bands on dark ground are attested in the Minoanizing wares of Aspis Phase IV, equivalent to 'MH IIIB'; thus MM IIIA is synchronised with 'MH IIIB' at Aspis. But, once more, the basis is formed by the Minoanizing wares.

Most recently Lindblom and Manning (2011: 146-147) argued for the subdivision of the LH I period (Early, Middle and Late) on a stylistic basis according to the typological comparisons of the filling material of the Lerna shaft graves, a view also supported by

radiocarbon analysis. 'LH I Middle' is, according to radiocarbon-based chronology, synchronous with the end of MM IIIB or the start of LM IA (Lindblom & Manning 2011: 147). This is, in fact, the view of High Chronology, supported also by the recent results of radiocarbon analysis from Middle Helladic Lerna and Kolonna, Aigina (Voutsaki, Nijboer & Zerner 2009: 159; Voutsaki 2010a: 101 table 7.1; Wild et al. 2010: 1019 and 1020 table 3; Gauss et al. 2011: 85). The latest data seem to support a MM IIIB-early LH I overlap that could be blamed for the inconsistencies in our terminologies and chronological systems. Taking this into consideration, Voutsaki's view on the subdivisions of the Middle and early Late Bronze Age, especially the belief that MH III goes together with LH I in aspects of social development and changes in material culture (Voutsaki 2010a: 100; 2010b: 86-87), seems to gain historical value.

A LONGER TIMESPAN FOR LATE HELLADIC I

The Helladic sequence relied strongly on the early Mycenaean pottery and its similarities or differences to the Minoan Lustrous Dark-on-Light style. Apart from the presence of early Mycenaean pottery to which extra weight has been given, several other wares are indicative for a dating in LH I. Two of these are Mainland Polychrome and Aiginetan Bichrome ware (Mathioudaki 2010: 629-630; Lindblom et al. forthcoming). It is questionable whether the fine variety of Dietz's 'Argive Light ware', produced mainly in small sized vessels, should be added to those. As already noted, the 'Argive Light ware' has greatly influenced the north-eastern Peloponnesian sequences, since local versions of it are encountered at several other sites, such as Korakou, Tsoungiza, Asine, Argos and Agios Stephanos, taking different names every time (i.e. Argive Light ware, Pale Burnished, Local Dark-on-Light etc).

Another ware that had a great impact in the formation of the Late Helladic chronological sequence is the so-called Fine Minoanizing or Lustrous Decorated ware (Rutter & Rutter 1976; Zerner 2008). Lustrous Decorated is believed to be the ware that led to the creation of early Mycenaean pottery – in connection with the LM IA pottery with lustrous dark paint on light surface or

the Kytheran version of LM IA pottery.³ According to the recent publication of Agios Stephanos, early Mycenaean pottery was first produced at the site as a developed form of the Lustrous Decorated ware (Zerner 2008: 185-186). On the other hand, Dickinson considers Kythera as the birthplace of both Lustrous Decorated and early Mycenaean pottery (his 'LH I' pottery).⁴

The first direct MM IIIB influences on the pottery production of the Mainland are observed in some of the motifs of the 'Argive Light' ware (Dietz 1991: figs. 49, 54 and 55) and should be placed in an earlier stage of pottery development. We have the motifs of retorted spirals and multiple hanging semicircles and festoons (Blegen 1921: pl. 2; Deilaki 2009: pl. Γ30: 1-4; Caskey 1955: pl. 16a, 17c; Dietz 1991: fig. 49 and 55), which appear both in the Dark-on-Light and White-on-Dark style, as observed in MM IIIB (for the same motifs in MM IIIB see Popham 1977: 187 fig. 1A; Catling et al. 1979: 26 fig. 18.90-92; Warren 1991: 325 fig. 6b, 327, fig. 8, 328, fig. 9 b-c,e; Macdonald 2004: 246 fig. 18.4c; Hatzaki 2007: 163 fig. 5.3 and 2013: 38, fig. 4.2). It seems, thus, reasonable to equate Dietz's 'MH IIIB' and 'LH IA' phases with the MM IIIA and MM IIIB period based on stylistic observations, like the presence of Minoan motifs in the 'Argive Light' or the negative version of the ware, the Light-on-(Lustrous) Dark (for this ware see Dietz 1991: 77; Lindblom 2007: 121 fig. 6; two last rows of drawings). The same motifs decorate both light and dark surfaces, a phenomenon also observed in the equivalent Minoan period.

The gradual shift from dark to light surfaces, characteristic of the late Middle Bronze Age, is witnessed in the 'Argive Light' ware as well as in the (Minoanizing) Lustrous Decorated ware; we believe that it is not a coincidence that the shift from dark to light surfaces on the Mainland is observed in wares influenced stylistically and sometimes also technologically by contemporary Minoan styles and wares. This should also have chronological implications. The shift from dark to light surfaces characterizes better the transition from the Middle to the Late Bronze Age in the Aegean. In this aspect the 'Argive Light' ware should be recognized, just like the Lustrous Decorated, as an important factor for the creation of the Early Mycenaean pottery style in the Peloponnese.

3 This view was first presented in Rutter & Rutter 1976, 64. For a recent update of the whole issue see Dickinson 2014 and W. Gauß, E. Kiriatzi & M. Lindblom, "Ceramic Technology Transfer in the Middle and Early Late Bronze Age at Kolonna, Kythera and Lerna", paper presented at the Conference entitled *The Distribution of Technological Knowledge in the Production of Ancient Mediterranean Pottery* (23-25 November 2012).

4 Dickinson 2014. For Dickinson 'LH I' is a pottery style and not a phase of historical importance; he thinks of the earliest LH I as an advanced form of Kytheran LM IA pottery and we tend to agree with this view, taking into consideration that Dickinson is mainly preoccupied with the genesis, definition and context of the LH I pottery style. He also offers conclusive evidence of both stylistic and technological nature for the derivation of the LH I style from a Kytheran version of the LM IA pottery and thus slightly different from the Knossian one.

Another important indication in favour of the assumption that MM IIIB covers also a part of the LH I period is the use of added white paint on vessels decorated in the Dark-on-Light (Lustrous) style, i.e. parallel white horizontal lines on broad black bands, rows of white dots on painted dark vessel parts, white dotted rosettes on solid-centre spirals etc. Details in added white paint comprise a common decorative practice of the MM IIIB period (Warren 1991: 328 fig. 9k, 329, fig. 10g; Hatzaki 2007: 164 fig. 5.4: 6-8, 165 fig. 5.5: 2 and 2013: 39 and 40 fig. 4.3; Macdonald 2013: 24 fig. 2.3: 1144 and 1174 for earlier examples of the ware) that became less popular in LM IA, according to the pottery retrieved from typical LM IA deposits at least, such as the East-West Stairs of the Domestic Quarter of the Knossian Palace (Hatzaki 2007: 175).

A subsequent part of the LH I period, defined mainly by the presence of early Mycenaean pottery, is synchronous with LM IA and LC I, i.e. the Volcanic Destruction Level at Akrotiri. The finds from Akrotiri, the early Mycenaean pottery and the wares of Middle Helladic tradition (i.e. Mainland Polychrome, Aiginetan Bichrome and Late Matt-painted) show that the LH I period is synchronous with the greater part of LM IA (Lolos 1990: 53; Marthari 1980). Just as in the Minoan sequence, where an overlap between MM IIIB and the early stages of LM IA has been observed (Popham 1977: 190), it is not until an advanced stage of LH I that the stylistic difference is obvious, due to the weak presence of early Mycenaean pottery.

Based on the data presented here we argue that the appearance of early Mycenaean pottery and thus of Dickinson's 'LH I' stylistic phase was gradual in the Peloponnese, as has been claimed for central Greece (Mountjoy 1999b: 644, 743; Aravantinos & Psaraki 2010: 392-393). We cannot claim that the LH I period did not exist at Thebes or Kirrha, simply because there is no early Mycenaean pottery there (the first appearance of Mycenaean pottery is in the LH IIA period in an already developed form). If we use early Mycenaean pottery as a defining criterion for the LH I period, we will come to a dead end when dealing with Central Greek or Thesalian sites. Following this logic and according primarily to stylistic

evidence, we cannot exclude the existence of a stage early in the LH I period without early Mycenaean pottery (the 'pre-early Mycenaean pottery stage' already referred to above): a phase when motifs of the MM IIIB period were adopted in Helladic, i.e. Peloponnesian wares, like the 'Argive Light' ware and the (Minoanizing) Lustrous Decorated pottery.

The adoption of Minoan motifs, styles and shapes was gradual and it is hard to attribute it to a certain phase, but we need to pinpoint certain wares where Minoan decorative techniques made their appearance. We believe that a combination of different wares and styles – some of those of Minoan inspiration – has led to the development and gradual prevalence of the Dark-on-Light decorative system and the creation of the early Mycenaean pottery. The latter might also have been developed independently in different places of the Mainland, i.e. the north-eastern and the southern Peloponnese (Kythera or Laconia).

From all that has been said so far, it is obvious that the LH I period covers a long time span (Dietz 1991: 316). The same is argued, indirectly and through Minoan evidence, by Warren (1999), who believes that LH IIA began after the Theran eruption, but before the end of LM IA. Dickinson also claims that the LH I period covers a longer timespan than was originally believed.

CONCLUSION

It is obvious that many aspects of the debate around the definition of the so-called 'Shaft Grave era' and the possible division of the MH III and LH I period, arise from confusion in applying a comprehensive terminological scheme in pottery wares and styles. Apart from an emphasis on the duration and the synchronizations of the LH I period, the existing terminological gap among the proposed classification systems and chronological schemes is the other point we would like to make here. We believe emphasis should be given to the local sequences of both stratigraphical and typological value. Differentiation according to settlement phases (e.g. Lerna V) or ceramic phases like those proposed for Aigina (Gauss & Smetana 2007) are most welcome, as long as they offer historical clues. LH I is, just like LM IA, a period of strong ceramic regionalism.

The adoption of Minoan motifs, styles and technologies, and the selective application of those in local pottery styles and wares, was a gradual procedure and the paths that were followed were different in the northeastern Peloponnese, south and Central Greece. The degree of 'Minoanization' could be estimated on this basis. We believe that the different paths that were followed in pottery production and distribution – and which need to be sought and defined by us – are, for the time being, the main obstacle to the creation of a widely accepted chronological scheme and accurate synchronizations.

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