EARLY AND MIDDLE CYPRIOTE CHRONOLOGY AGAIN*

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The past 20 years have witnessed a general lowering of the absolute dates of the Cypriote Early and Middle Bronze Ages (EC and MC), mainly based on the works of Stewart and Åström in the 1950's and 1960's.[1] It has become obvious to many students in the field that both these scholars had been far too drastic in their proposal of a late beginning of the Early Bronze Age in Cyprus and the shortening of EC phases; but it is only during the past few years that their findings have been at all questioned.[2] This article is the outcome of a re-examination of the evidence for the Early Cypriote III (EC III) and Middle Cypriote I (MC I) periods, an age when at least some evidence of Cypriote foreign contact should help provide a basis for an absolute chronology for the island.[3]

Critical to the entire problem is the relative chronology of the island's deposits of the EC and MC periods. These have been set out by Åström and Stewart[4] and never seriously questioned.[5] It is the major purpose of this present article to make some observations on the relative chronology of the tomb-groups of EC III–MC I and then reconsider the evidence of foreign contact within these contexts.

The tomb-groups to be considered are:[6]
Lapithos tomb 6A (and 312, 313, 322);
Vounous tombs 19, 143, 64, 68;
Palealona (Karmi) tombs 3A and 11B.

Paramount in any consideration of the absolute chronology of the EC and MC periods is Lapithos tomb 6A.[7] Following Grace's original publication and Stewart's acceptance of her statements[8] the equation EC IIIA = MM Ia = *c.* 2000 B.C. has been generally accepted.[9] It is obvious if one looks carefully at Lapithos 6A that much of the above equation cannot be supported. Grace suggested that no. 16 of 6A, a Minoan bridge spouted bowl or jar, belonged to the earliest deposit in the tomb which she dated EC IIIA.[10]

[1] Åström, MCBA, passim; Stewart, ECBA, passim.

[2] D. L. Saltz, *RDAC* (1977), 51 ff.; R. S. Merrillees, *RDAC* (1977), 33 ff. and *RDAC* (1979), 115 ff.; R. S. Merrillees, *Introduction to the Bronze Age Archaeology of Cyprus* (Göteborg, 1978, passim); J. Mellaart, *RDAC* (1974), 38 ff.

[3] These objects have all been examined before: V. Grace, *AJA*, 44 (1940), 10 ff. (Lapithos tomb 6A) *SCE* I, 85 ff. and 140 ff. (Lapithos tombs 313, 322) Dikaios, Vounous, 43 ff. (Vounous tomb 19) Stewart, Vounous, 324 ff. (Vounous tomb 143) J. R. Stewart *OPAth*, IV (1963), 197 ff. (Karmi tomb 11B); see also H. W. Catling and V. Karageorghis, *BSA*, 55 (1960), 109 ff. (Minoika in Cyprus); C. F. A. Schaeffer, *Missions en Chypre 1932–1935*, (Paris, 1936), 29 ff.; C. F. A. Schaeffer, *Stratigraphie Comparée*, I, (Paris, 1948), 328 ff.

[4] Åström and Stewart, see above, n. 1.

[5] R. S. Merrillees, *RDAC* (1979), 111: "Traditional methods of classification of the island's Bronze Age pottery have made Ware the basic criterion of differentiation".

[6] Of these groups the following are still unpublished and at the Nicholson Museum at the University of Sydney: Vounous tombs 64 and 68 (Schaeffer's excavation) Palealona (Karmi) tomb 3A (Stewart's excavation). It is thanks to the courtesy of J. B. Hennessy that I have been allowed to use the material from these tombs for my thesis and this article.

[7] Grace, op. cit., n. 3 and *AJA*, 77 (1973), 195; see also R. S. Merrillees in: ACTS, 42 ff.

[8] Stewart, ECBA, passim and idem, *Handbook to the Nicholson Museum* (2nd Ed.), Sydney, 1948, 130 ff.; V. Karageorghis, *RDAC* (1958), 115 ff. (Kalvassos tomb 5).

[9] Instances of scholars who have used this equation as a starting point: P. Dikaios, *IRAQ*, VII (1940), 83; J. Mellaart, *RDAC* (1974), 38 ff.; H. W. Catling and V. Karageorghis, *BSA*, 55 (1960), 109 ff.; H. W. Catling, *CAH*, Fasc. 43, 1966, (rev. Ed.), passim; H.-G. Buchholz and V. Karageorghis, *Prehistoric Greece and Cyprus* (London, 1973); V. Karageorghis, *RDAC* (1958), 115 ff., esp. Kalavassos tomb 5.

[10] Grace, op. cit., n. 3, p. 21: Grace's are (a) the burial and no. 16 are in the right-hand corner of the entrance to the east. She states this to be commonly regarded as the first burial place in a chamber; (b) Grace maintains that the more fragmented pots are earlier than the less fragmented ones on grounds of increasing hardness of ware and increasing resistance to breakage; (c) in case of vases on top of each other she maintains the earlier to be at the bottom.

Excavators in Cyprus have often made suggestions on the succession of deposits within multiple burial tombs;[11] but rarely have they been able to advance conclusive evidence. If one follows Gjerstad's tomb/chamber descriptions[12] from EC I to MC, it becomes evident that there are no strict rules as to the positioning of burials other than perhaps:

(a) a preference to place the body with the head facing the entrance and

(b) by EC III to adopt a sitting or squatting position for the bodies using the chamber walls as a prop.

If anything, one could say that many tombs were not originally planned for continued use and that the single or first burial was frequently placed opposite the stomion or against the back wall of the chamber.[12a] Stewart and others[13] maintain that earlier burials were often removed and replaced, for example, towards the back of the chamber to make way for new interments. This is another indication that the chamber was initially thought of as a single grave. In spite of respect for previous burials (which may not be of the same family) the fact that by EC III the bodies were nonetheless "moved" accounts for certain irregularities in the choice of location within the chamber. The positioning of subsequent burials would be determined largely by the availability of space.

In Cypriote tombs the breakage of a vessel cannot be used to determine chronological factors, since the dropping of roof deposits (rock chips, hard soil) from the chamber ceiling could cause damage depending on how the vessel was placed or at which angle the vessel was hit. In the case of items of pottery deposited on top of each other, Grace's argument for the earlier to be at the bottom does not automatically hold good, due to the flooding of tombs. Certain vessels could have floated and have easily resettled on top of another vessel or other deposit.[14] To sum up, there is no *structural* evidence to suggest the burial and its associated deposits on the right hand side to be the earliest in this chamber. The most likely context for no. 16 with regard to associated finds beside the entrance of the tomb is that it belonged to the later or latest and not the earliest burial in the group. Furthermore, if one compares the various burials of tomb 6A with Vounous tombs 19, 143, 64, 68; Palealona tomb 3A and Lapithos tombs 312, 313 and 322, a general similarity is undoubtedly obvious.

The result of a computer program (Figs. 1, 4, 5) comparing and contrasting similarities and dissimilarities within these various tomb-groups strengthens the suggestion that they are all in part contemporary and in fact cover the period from later EC III through to MC I. It appears reasonable to argue and indeed is evident from the deposits that the gaps between burials cover sometimes more than a generation. The re-use of a tomb-chamber need not necessarily occur within one family over many generations. The re-openings of the same chamber, addition of niches and side chambers were probably dictated by necessity, e.g. lack of cemetery space in conjunction with an increasing

[11] Stewart, ECBA, 295; Karageorghis, CPC, 65 resp.; H. Cassimatis, *RDAC* (1973), 116 ff., esp. 123 where he says "... mais l'on ne peut reconnaître de règle".

[12] Gjerstad, SPC, 73 ff. and 85 ff.

[12a] The problem of sequence identification occurs above all when confronted with multiple burials of the same period or, close enough where subphases of local pottery are not easily distinguishable. There a solution can be found in the detailed type (rather than ware) seriation as suggested in my computer analysis; cf. also n. 24a.

[13] Stewart, ECBA, 294 ff. and idem, *Handbook to the Nicholson Museum*, (2nd Ed.), (Sydney, 1948), 130 ff.

[14] Floating occurred mainly with closed types or lighter and smaller vessels. The flooding and draining happened gradually as the watermarks on the chamber walls indicate. This means that even open vessels like a bowl could have floated and shifted from its original position when resettling. Inundation of chambers happened at intervals (depending on the rainfall) over a long period so that the repeated "lifting" of vessels could have ultimately resulted in some significant alteration to the original position held. I owe the information about the nature of flooding in chambers to J. B. Hennessy, who observed such features at Stephania.

% of VARIABLES		9	10	5	3,4,7	12^1	12^2	13	TOTAL No. OF IDENTIFIED POTTERY TYPES
VOUNOUS	19	48.31	6.74	1.12	17.98	3.37	–	3.37	89
	64	12.24	8.16	16.32	23.47	4.08	4.08	1.02	98
	68	24.99	–	21.42	3.57	10.71	–	–	28
	143	15.77	7.02	7.02	29.82	1.75	–	–	57
PALEALONA	3A	48.69	1.74	6.96	9.57	2.61	–	9.57	115
LAPITHOS	6A	15.64	9.78	10.86	42.39	1.09	2.17	–	92

Fig. 1. Percentages of selected types and their variants in relation to the total number of identified pottery types per tomb.

Key to variables in Fig. 1:

9 : class 18 : XIII F^2 = RPII knob-lug bowl and variants without decoration (Fig. 7.1).

10 : class 19 : XIII F^{3a} = RPII knob-lug bowl and variants with decoration (Fig. 7.2–6).

5 : class 8 : I B^3 = RPIII gourd juglet and variants with decoration (Fig. 7.7–10).

3, 4, 7 : classes 4, 5, 6, 7, 12, 13 : I B^{1-2} and VII, VIII = RPII plain and decorated cylindrical neck jug and amphora and their variants (Fig. 7.11–12 and 16–19).

12^1: class 30: General types classified under WPIA, B and WPII ware (ECIIIB and MC).

12^2: class 31: General types classified under WPIII and successive wares (MC only).

13: class 32: General types attributed to ECI—early ECIII RP ware, excluding the knob-lug bowl.

population and expansion of the settlement area. Hence, with a re-use of a chamber and shifting of previous burials within it, it would not be surprising if:

(a) some of the deposits of earlier burials were left lying *in situ* and the new interments placed on top or next to it together with its own burial gifts and

(b) that some deposits may have been "borrowed" from the first burials for later interments.

The latter could have happened in particular when a tomb had been "rediscovered" and was subsequently "claimed" by a new family. That people were not automatically aware of previous tombs on a necropolis can be seen, for example, at Lapithos[15] where a new chamber/tomb was cut accidentally into an older "forgotten" one.

The intervals of burial are of the utmost importance to the relative chronology of Cypriote cultures. It is due to Grace's statement[16] that the MM Ia jar belongs with the EC IIIA period, i.e. the so-called first burial, that other tombs with similar deposits have been dated, and their finds classified.[17] Another and equally important issue is the life (in relative terms) of any specific ceramic type (shape) or its variant(s). This has been mostly assessed on "bulk evidence" of a total tomb deposit quite often representing more than one burial. For example, a type associated with an EC II burial may recur in a tomb that contains also a MC burial. The EC II type (*post quem*) need not, however, have been produced in the MC period because it has been found in connection with MC deposits. Yet, since most tomb finds are treated in bulk and only subdivided by *wares* and their ratios,[18] the life of production of such a vessel has sometimes been decided on the estimate of the

[15] SCE I, 142 ff. (tomb 322).

[16] Grace, op. cit., n. 10.

[17] V. Karageorghis, *RDAC* (1958), esp. 121 ff. tomb 5.

[18] Gjerstad, SPC, 265 and 274; SCE I, s.v. tombs 313, 322; Åström, MCBA, 198 f.

whole time in which the tomb has been used. And yet, it should not be surprising to find an EC II type next to or within the vicinity of a burial classified as MC (characterized by WP II and later wares and for example BS ware).[19]

There are, of course, instances such as the RP knob-lug bowl where the type appears to have remained common (implying production) from EC II down to well-advanced MC phases.[20] It is extremely dangerous, however, to define the life of a type mainly by the find context of a tomb with multiple burials, i.e. the earliest and the latest deposit and where stratification is lacking. It is hoped that the final pottery analysis of the current Cornell excavations at Alambra[21] will provide a firmer basis on which to grade occurrences of types and wares, their rate of successions and overlaps. It is somewhat misleading, however, to compare the percentage of wares between the Alambra 1976 and 1978 finds and Gjerstad's 1926 and Kalopsida levels with the percentage rating of wares established for whole tomb-groups.[22] The overall tendency of decrease or increase of RP II, III, IV and other wares need not be questioned but the types and, in particular their variants as established by Stewart,[23] need closer stratification. There is also the consideration of regionalism which has, so far, mainly been based on some preliminary observations of decorative features.[24] A more satisfactory method would perhaps be to attempt more rigorous burial divisions and groupings of the deposits (as, for example, shown on Figs. 3, 6) and to form seriation patterns of the various types and wares similar to the tables established for the SCE publications and the Alambra excavations. In other words, the basic method is there but detail of information is lacking. The tables in this article (Figs. 1–4) are by no means complete or conclusive. They merely serve to illustrate that certain differences may be discerned between burials in one chamber apart from the mere subdivision of wares and may help, therefore, to classify another chamber deposit more precisely, tying it with a burial rather than the total complex of finds (cf. Figs. 5 and 6).

Another problem that confronts us continuously when discussing relative chronology is that we often do not know how long a tomb has really been in use. Lacking clear *in situ* definitions of individual burials it is necessary to construct a "substitute stratification"[24a] where settlement equations are missing. This has been done by Stewart and others; but one should avoid a typological

[19] Karageorghis, CPC, 66: ". . . it was later that the same tomb was used for multiple burials".

[20] Stewart, ECBA, 359 ff. and 381 f.; Åström, AMAM, 77 and his n. 7.

[21] J. Coleman, *RDAC* (1977), 71 ff., esp. 75 ff.; J. Coleman and J. A. Barlow, *RDAC* (1979), 159 ff., esp. 163 ff.

[22] Gjerstad, SPC, 263 f., 269 and 272; SCE I, s.v. tombs, e.g. 313, 322; Åström, MCBA, 198 f.

[23] Stewart, ECBA, 359 ff. and plates.

[24] To cite some instances where regionalism has been considered: Stewart, ECBA, 271 ff., 296 f., 299; Åström, MCBA, 175 f.; Dikaios, Vounous, 159; J. R. Stewart, *Handbook to the Nicholson Museum* (2nd Ed.), esp. 163 f.; R. S. Merrillees, *Introduction to the Bronze Age Archaeology of Cyprus*, 20 ff. and idem. *RDAC* (1979), 115 ff., esp. 116; for specific studies see: Hennessy, *Artists*, 16 ff.; D. Frankel, *SIMA*, 42, 1974; E. Herscher, *RDAC* (1976), 11 ff.

[24a] "Substitute stratification": an example of combined reading of tables (Figs.) 1 and 4; high ratios of group II (other than pottery objects) compared with percentages of variables (pottery types and variants) of group I:

The high ratios of group II can be understood together with the relatively high percentages of the early variables (9, 13) as well as the low percentages of the later variables (10, 5, 12^1, 12^2) of group I. It confirms not only the general consensus that precious objects and metals (group II) increase towards the end of EC III (lower ratios, cf. other tomb-groups on Fig. 4), but also that it occurs in conjunction with certain pottery types and their increase or decrease depending on whether they are early or late. This pattern illustrates that the ratios of group II to group I can be used for relative chronology when compared with the typological ceramic sequence. The numerical measurements confirm specifically what has been said generally about EC III/MC I tomb finds. The meaningful relation between percentages of pottery types and ratios of other objects serves as a substitute stratification either for individual burials or whole tomb-groups.

Tombs	Ratios	High % (variable:)		Low % (variable:)			
		9	13	10	5	12^1	12^2
Voun. 19	8·091	48·31	3·37	6·74	1·12	3·37	—
Pal. 3A	19·167	48·69	9·57	1·74	6·96	2·61	—

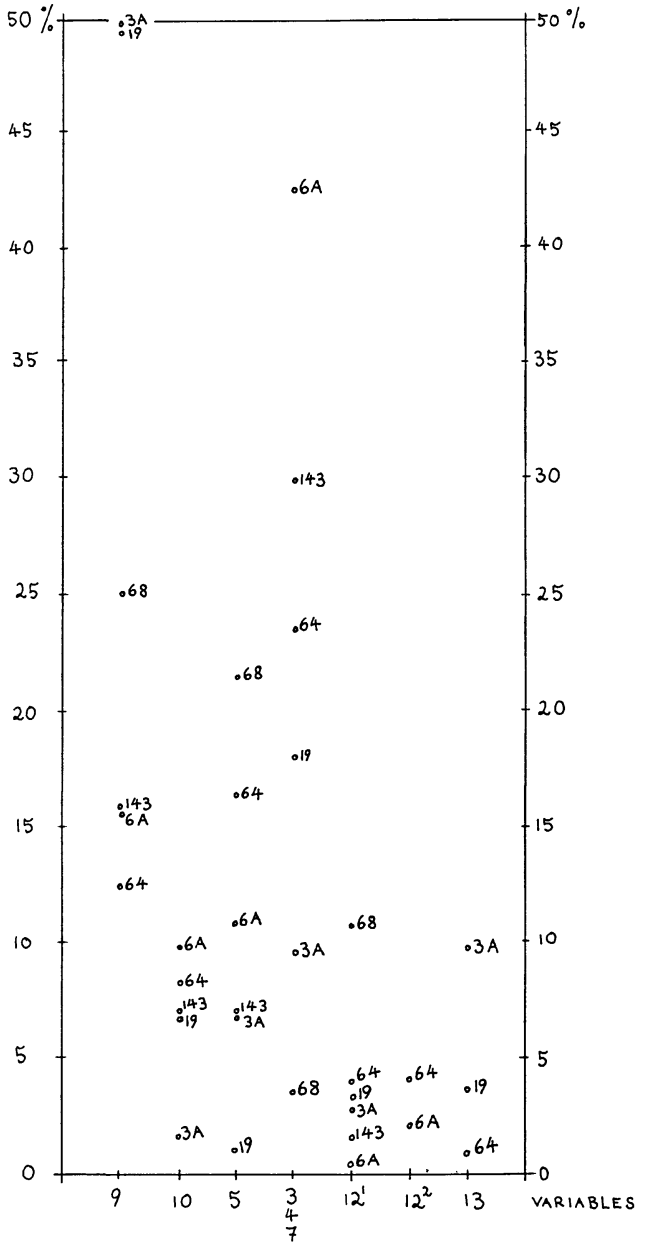

Fig. 2. Clusters of tomb-groups according to percentages of variables (cf. Fig. 1).

system which has been designed too rigidly and which tends to explain variations mainly from the point of view of chronology. Lack of or irregularity of contact between sites could also explain variations, or their absence.[25] The present computer program provides statistical data[26] useful for

[25] Stewart has given several types and their variants a life-span of some hundred years, for example, his type XIII F² knob-lug bowl (cf. ECBA, 227). Realizing the improbability of such a long period of manufacture without change, he has tried to solve the problem by shortening the EC period. This appears to be unsatisfactory and unrealistic as are many of his excessive subdivisions in his pottery classification.

[26] The program has been devised by the writer and will appear in full detail in the MA thesis. The illustrations show only some of the types/variants.

% of VARIABLES		9	10	5	3,4,7	12¹	12²	13
BURIAL	1	20.00	-	20.00	30.00	-	-	-
	2	20.00	20.00	20.00	30.00	-	-	-
	3	17.64	5.88	17.64	41.18	5.88	-	-
	4	35.00	10.00	10.00	40.00	-	-	-
	5	4.55	18.18	-	59.09	-	-	-
	6	15.38	-	7.69	38.46	-	15.38	

Fig. 3. Lapithos tomb 6A: Percentages of selected types and their variants in relation to the total number of identified pottery types per burial.

GROUP II A		RATIO	B		RATIO
VOUNOUS	19	8.091	LAPITHOS 6A BURIAL:	1	2.500
	64	4.261		2	1.250
	68	4.667		3	2.125
	143	4.750		4	4.000
PALEALONA	3A	19.167		5	7.333
LAPITHOS	6A	3.286		6	0.000

Fig. 4. Numerical ratio of group II (deposits other than pottery) to group I (pottery types); A: per tomb, B: per burial.

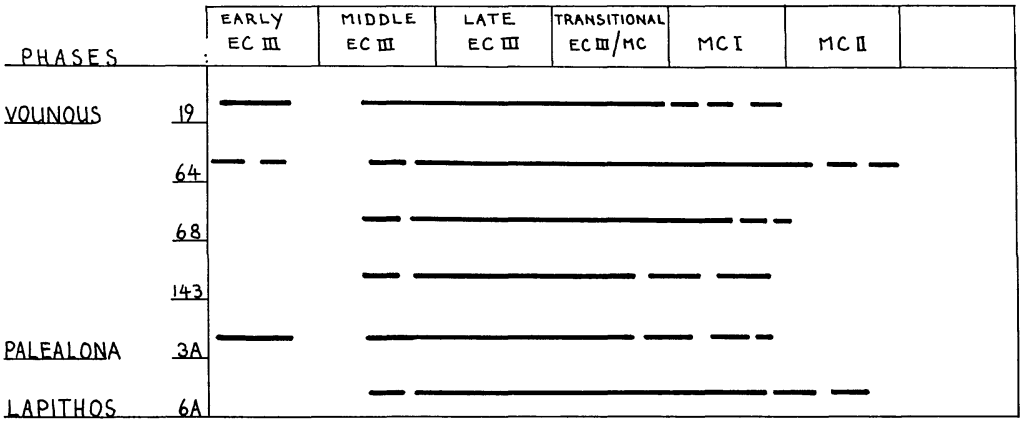

Fig. 5. Suggested relative chronology of tombs and their total burials (cf. Figs. 1 and 4).

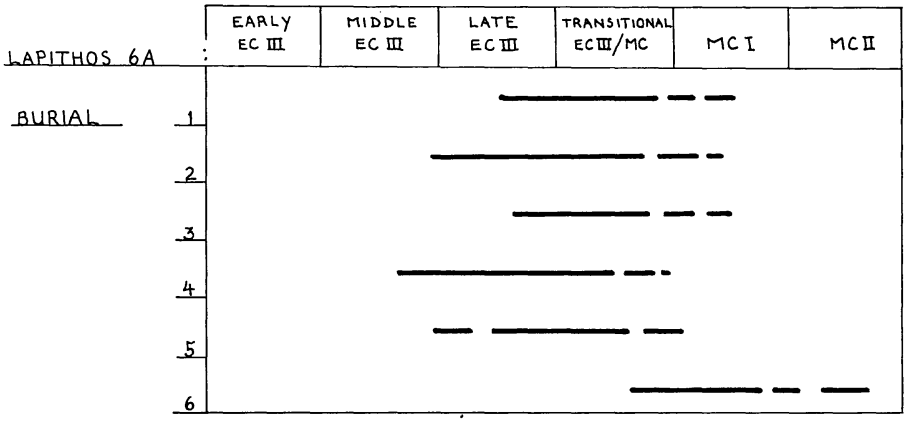

Fig. 6. Lapithos tomb 6A: Suggested intervals during which the burials could have taken place (cf. Figs. 3 and 4).

information on seriation patterns and parallels, overlaps and gaps for types common to certain tomb-groups (Figs. 1–4), as well as isolating variants and types that are not commonly shared. The same system can be applied within a tomb-group for its isolated burials (if one is so lucky). The tomb-groups have been selected because they contain imported objects (except for Palealona tomb 3A) and also appear to be roughly similar in their local find content. These tombs, in particular Vounous tombs 64 and 68, Lapithos tomb 6A and Vounous tombs 19 and 143, serve well for the purpose of analysing the local Cypriote pottery sequence (even regarding the regional aspect of Vounous) which in turn enables the classification of totally local deposits like Palealona tomb 3A.[27]

The statistical analysis showed the following results, which are illustrated in a summary fashion by some of the major features singled out and shared by all tomb-groups:

Knob-lug bowl, Stewart's type XIII F^2 and its variants,

RP II without incised or applied plastic decoration (Fig. 7.1 and Figs. 1 var. 9 and 3 var. 9).

We find this type and its variants represented in all tombs; Vounous tomb 19 has 43 examples while the other groups contain between 7 and 17 examples. Tomb 3A at Palealona has 59 examples.[28] The decorated version

Knob-lug bowl, Stewart's type XIII F^{3a} and its variants,

RP II with white-filled incised decoration (plus BP variant) (Fig. 7.2–6 and Figs. 1 var. 10 and 3 var. 10), ranges from 1 to 9 representations per tomb. Another common type is the

Gourd juglet, Stewart's type I B^3 and its variants,

RP III, usually with white-filled incised decoration (Fig. 7.7–10 and Figs. 1 var. 5 and 3 var. 5). It is often found together with the bowl and not dissimilar in its position (and type of decoration) to the decorated bowl type, the quantitative ratings being from 1 to 18 examples in the tombs, predominantly in Vounous tomb 64 with 18 pieces.

[27] Other associated finds have been included in the program, but since their relative position largely depends on the ceramic sequence they will not be included here.

[28] As can be seen on the illustrations (Fig. 7.1–6) the variations are of minor quality, mainly based on features like the position of the knob-lug (whether level with, above or below the rim of the bowl). Obvious irregularities within each variant have been allowed for by Stewart himself (e.g. the size of the lug and to a certain degree the contour of the bowl sides and base) since these are due to the hand-made quality of the ware. The variants themselves need not necessarily show any meaningful significance for relative dating, at the most one may perhaps concede that they show a workshop or bulk production of a certain number of bowls. This in turn would show some degree of planning with regard to pottery manufacture. On the whole the writer is inclined to bring most variants of the above type under one hat, at least as far as the relative chronology is concerned, not conceding the long life suggested by Stewart.

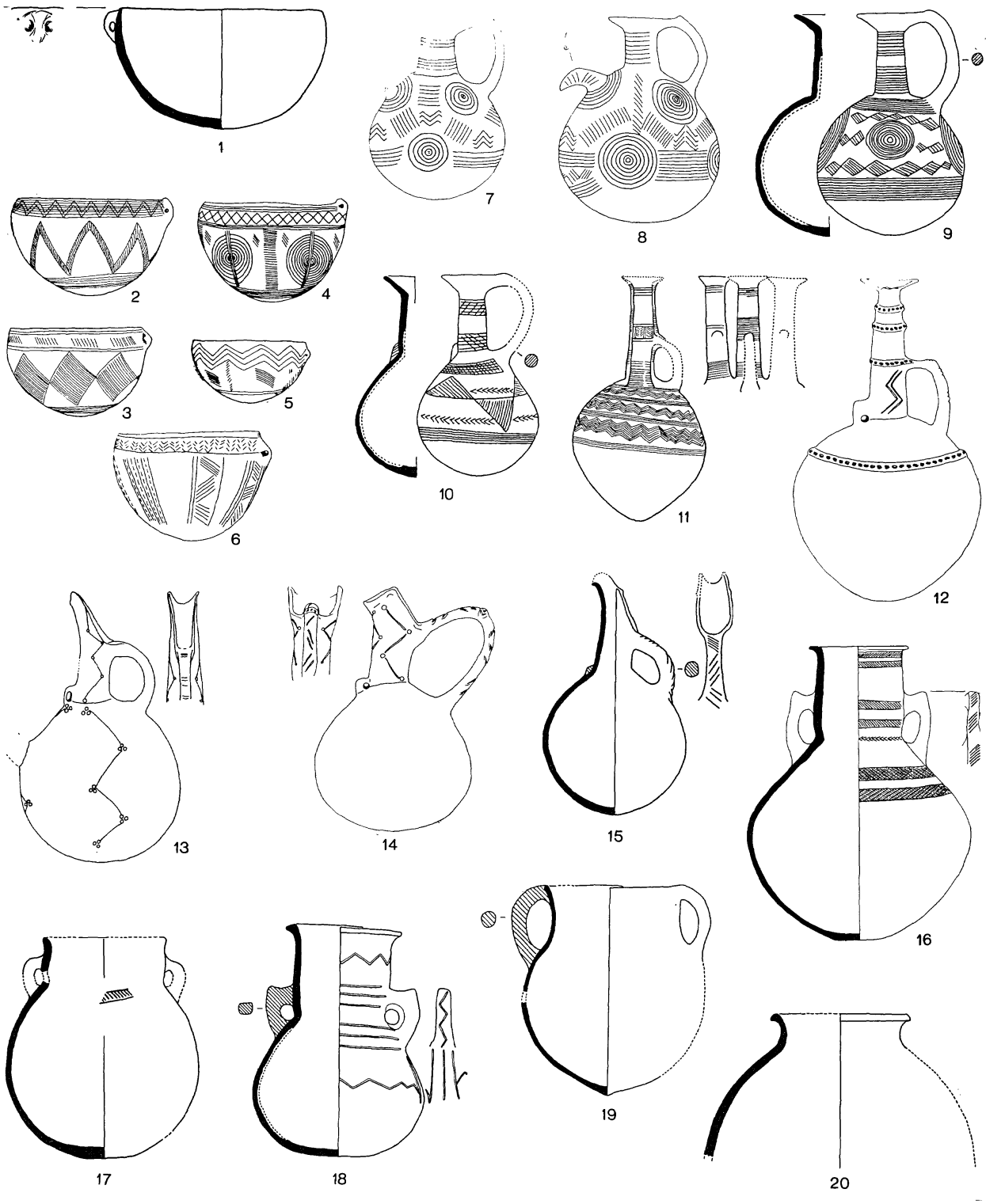

Fig. 7

The larger class of vessels in RP III ware such as the cylindrical neck jug and amphora (Fig. 7. 11–12, 16–19 and Figs. 1 and 3, vars. 3, 4, 7), whether plain or decorated, are fewer in number than the smaller vessels but occur regularly. The cut-away spouted jug (Fig. 7.13–15) hardly occurs at all, once only in Vounous tomb 64 and twice in Lapithos tomb 6A.[29] It should be noted that these particular RP III vessels are of Stewart's later EC and early MC variety in ware and shape.[30] In conjunction with these late EC or early MC types one should mention the White Painted ware (WP) (Figs. 1 and 3, vars. 12^1, 12^2) which also shows up sporadically in some of the tomb-groups.[31] We have eight examples from Vounous tomb 64 ranging from WP IA or IB (an EC III feature) down to WP IV, only two examples of WP IA and IB in Vounous tomb 19, none in Vounous tomb 143 and three examples of WP II at Palealona tomb 3A; three further examples in Vounous tomb 68 and Lapithos tomb 6A with one WP IA or IB and two WP III vessels.[32] At the same time—and in a sense confirming or explaining the MC and late EC wares—it is noticeable that hardly any of Stewart's early ceramic types[33]—ranging from EC I to early EC III (Figs. 1, 3 var. 13)—have been found (excluding the knob-lug bowl). There are only four examples from Vounous tomb 19,[34] one in Vounous tomb 64 but 11 at Palealona tomb 3A. The occurrence of WP wares (mainly MC types) and in contrast the lack of early RP wares provide a *terminus post* and *ante quem* respectively for the overall use of the tombs (cf. Fig. 5); the *terminus ante quem* is also confirmed by the imported objects[35] when associated with the last burial. It seems clear that in their main assemblage the selected tomb-groups have to fit into at least the second half of the EC III period and the first part of the MC period. One could say then that the life-span or use of the tombs lasted over a considerable time without, however, any indication of the length of hiatus between individual interments.

A problem which remains is the actual length of manufacture period of ceramic types and the point at which a new variant may have been introduced. Unfortunately, without stratification or separate burial information[36] there can be no definite proof or means by which to decide firmly on such issues. Although Stewart would have us believe otherwise, one can be almost certain that ceramics were not manufactured over these centuries without some alterations to shape or

[29] They occur at other Lapithos tombs, see e.g. here Fig. 7.20.

[30] Cf. Stewart, ECBA, 359 ff. for the earlier types and 360 ff. for his RP III types; cf. also Åström, MCBA, Pls. 19–21 with regard to his RP IV and Red Slip wares for the MC period.

[31] Åström, ibid., Pls. 3 ff.; D. Frankel, *SIMA*, 42, 1974.

[32] Grace, op. cit., Pl. I.A. The latest WP variety serves only as a terminus *post quem* for the use of the tomb and need not concern us here other than what has already been said on total context assessment.

[33] Stewart, ECBA, 359 ff.

[34] Dikaios, Vounous, cat. nos. 39, 4, 6, 20.

[35] See n. 3.

[36] There are good examples for single burials (see Vounous) but unfortunately mostly belonging to the EC I and EC II periods.

Key to Fig. 7.

1 Kob-lug bowl, Palealona, Tomb 3A: no. 51.
2–6 Knob-lug bowls, Lapithos, Tomb 322B : nos. 6, 8; Lapithos Tomb 322E : nos. 58, 24, 63.
7–10 Gourd juglets, Lapithos, Tomb 322E : nos. 88, 98; Vounous Tomb 64 : nos. 87, 166.
11 Cylindrical neck jug, Vounous, Tomb 64: no. 29.
12 Cylindrical neck jug, Lapithos, Tomb 322D: no. 53.
13 Cut-away spout jug, Lapithos, Tomb 322E: no. 81.
14 Cut-away spout jug, Lapithos, Tomb 322D: no. 27.
15 Cut-away spout jug, Vounous, Tomb 64: no. 131.
16–17 Amphora, Palealona, Tomb 3A, no. 121, 141.
18–19 Amphora, Vounous, Tomb, 64: nos. 10, 31.
20 Import: Syrian Jar, Vounous, Tomb 64: no. 106.

decoration. Therefore, one may assume that certain variants of a type like the knob-lug bowl are to be identified with the earliest or earlier burials in the tombs and some of its variants introduced with later burials. That is, if one agrees with a relative chronological explanation of Stewart's variants.[37] It is clear though from the quantitative representation that, for example, the first burial of Vounous tomb 19 antedates those of tombs 64, 68 and 143 and that of Lapithos tomb 6A while, on the other hand, it is roughly contemporary with that of Palealona tomb 3A. We may find a hiatus between the first burial(s) of Vounous tomb 19 and Palealona tomb 3A and the succeeding interments which correspond to or at least overlap with deposits from the earliest burials in Vounous tombs 64, 68 and 143 and Lapithos tomb 6A (cf. Fig. 5). In Lapithos tomb 6A we find, therefore, only relatively few representatives of the RP II bowls (cf. Figs. 1–3).[38] This corresponds to the slightly later RP III gourd juglets[39] and larger vessels where we find fewer examples at Vounous tomb 19 and Palealona tomb 3A than in the other tomb-groups. Similarly, the earlier RP wares already mentioned occur only at Vounous tomb 19 and Palealona tomb 3A while both tomb-groups lack the definite MC WP wares (cf. Fig. 1).

Other ceramic types belonging to RP III and BP wares are shared by most tombs. Their number alters according to the type of vessel; ranging from the spouted dish, platter and flask to the rarer types of composite pottery or even ritual vessels and objects.[40] These fit into the second half of EC III and some, like the variants of the RP III decorated amphora stand for the transitional phase or period of overlap from the very end of EC III and the beginning of MC; they can be found in all tombs. Their quantitative representation may be partly explained by the fact that larger vessels are usually fewer in number than the smaller types. The same may be argued for decorated ware in general, although one can detect a certain increase with later burials.[41] Most tomb-groups[42] show roughly identical sum totals of ceramic deposits; only Vounous tombs 68 and 143 show markedly less (i.e. fewer burials?). According to the gradation of pottery types (Fig. 1) within each tomb-group it is suggested that—apart from the EC I types[43]—Vounous tomb 19 and Palealona tomb 3A show the earliest contemporary burials in the context of EC III interments, i.e. datable to the middle of the EC III period. The remaining burials must have occurred within the later EC III phase and the tombs were in disuse by the beginning of MC I proper. Vounous tombs 64, 68 and 143 and Lapithos tomb 6A all began more or less at the same time in the second half of EC III and their earliest burials are contemporary with the later interments of Vounous tomb 19 and Palealona tomb 3A (cf. Figs. 1–5).

[37] Cf. e.g. Åström, AMAM, 76, n. 5 and p. 78; R. S. Merrillees, *RDAC* (1979), 117 where he says: "The chronological distinction that has been made between articles of the same general Ware through the use of the suffix of Roman numerals to the Ware has probably shed more confusion than light in practice, for some of the purportedly successive stages of evolution turn out not to be technical developments in their given order but regional variants contemporaneous with others before or after, quite apart from the often substantial overlaps between related phases".

[38] Stewart, ECBA, 227 s.v. Red Polished II Ware. For a complete concordance-table of Lapithos tomb 6A cf. Grace, n. 7 and Merrillees in: ACTS, 42 ff.

[39] And, according to Stewart, ECBA, 365 and 227, the decorated knob-lug bowls which he dates a little later than the plain versions; cf. also Åström, AMAM, 76, his n. 5a.

[40] Vounous Site B in particular has shown unusual cult vessels and objects which led to Dikaios' reasonable suggestion that we are dealing with a cult centre, cf. Dikaios, Vounous, 173 and idem, *Syria*, 13 (1932), 345 ff.

[41] There seems to be a gap between earlier EC III and late EC III in that after the initial EC III period—in contrast to EC II—relatively little decoration occurs on the pottery and is only picked up again noticeably towards the end of EC III with the introduction of overall shape changes. Thus we notice on the larger vessels heavily applied plastic decoration for early EC III and more sparsely, often in combination with incised designs, on late EC III and early MC vessels. This is also the period in which the WP II ware is introduced.

[42] Those discussed here contain ceramic deposits coming close to or just above 100 pieces whilst Vounous tombs 64 and 143 have only 28 and 57 vessels respectively.

[43] Dikaios, Vounous, 44 f., cat. nos. 39, 4.

There were possible gaps[44] between individual burials in each tomb although the actual number of burials could only be suggested for Lapithos tomb 6A (Figs. 3, 6). 6A contained probably six burials (the sixth is uncertain) and it seems possible to subdivide and identify the major components of the individual burial deposits. It has not been possible to attribute some objects to a specific burial with absolute certainty, but on the whole this does not invalidate the analysis of the clusters. This is particularly important in view of the imported objects associated with the local Cypriote.[45] As already stated, the imported Minoan jar or bowl belongs to the second last and not the earliest burial in Lapithos 6A. This is pertinent to the local Cypriote ceramic sequence and other associated objects which are largely dependent on them, and the result of this is in turn helpful for the relative position of the remaining burials, in the same tomb or other tomb-groups.

It has become increasingly obvious that the EB/MB chronologies of the countries in contact with Cyprus (whether direct or indirect) are anything but absolute or conclusive. Åström's discussion[46] on Middle Minoan chronology summarizes the most salient factors with regard to the unsatisfactory nature of chronological data; even considering in general terms calibrated C-14 dates[47] as unreliable, and not applicable for the whole of Crete. It would appear that some serious doubt has to be thrown onto the usefulness of "absolute" dates when derived from areas like Crete. It is partly or even mainly due to absolute dates offered by various scholars and differing for one period up to some 600 years (Mellaart: EC I = 2700 B.C. versus Åström: EC I = 2050 B.C.)[48] that one is presented with a problem that does not really exist, but is the result of artificially co-ordinated dates and hypothetically defined termini[49] for Cypriote phases.

Contrary to the indirectly expressed opinion of many scholars, the writer does not hold the view that Cyprus was lagging behind its surrounding foreign cultures, at any rate not enough to allow for the EBA in Cyprus to have flourished in its earlier phases when nearly terminated anywhere else. This implication can be understood from the absolute dates offered in accordance with Albright's chronology[50] rather than from descriptions of the relative cultural phases. By changing the EM III = MM Ia jar's Cypriote context in Lapithos tomb 6A (cf. p. 59ff.) from the earliest to the second last burial, the so-called absolute day for early EC III is changed with regard to the Cretan synchronism. By attributing the findspot to a late EC III/MC I context or transitional EC/MC, the equation now reads: end of EC or beginning of MC = EM III or MM Ia Knossos, i.e. between c. 2200–2000/1900 B.C. depending which of the Cretan absolute dates one prefers. This date-range has been decided by Åström as the beginning of the EBA in Cyprus; by Grace and her followers as belonging to the beginning of the subphase A for EC III. An added problem—apart from the lack of burial division—is the parochial nature of Cretan chronology as I have mentioned above. We need not discuss Minoan dates: it has been done many times over and as said, more recently and to the point by Åström.[51] Åström sets out convincingly that at least as far as earlier phases are concerned there can hardly be a final conclusion other than that Cretan absolute dates remain uncertain.

A similar situation prevails with material imported from the Levant during the EC and earlier MC periods (Pl. XIIB ; Fig. 7.20). Here, too, we are faced with seemingly insurmountable disagree-

[44] In other words, we may not be dealing with burials at regular intervals corresponding to subphases of the cultural sequence. It may well be, and most likely is the case, that some subphases were left out so that if one has six burials, it may not mean that they followed subphases 1–6 but rather occurred either in the earlier ones only, the middle sequence or are spread unevenly over a much wider range.

[45] See n. 35.

[46] *OPAth*, XII (1978), 87 ff.

[47] C. Renfew, *The Emergence of Civilization* (1972), 445 ff., 200 f.; K. Branigan, *Kreta Chronika*, 25 (1973), 352 ff.

[48] J. Mellaart, *RDAC* (1974), 38 ff.; P. Åström, *Archaeologia Viva*, II, 3 (1969), 73 ff.

[49] R. S. Merrillees, *Introduction to the Bronze Age Archaeology of Cyprus*, 36 and idem, *RDAC* (1977), 44 f.

[50] W. F. Albright, *BASOR*, No. 209 (Feb. 1973), 12 ff.

[51] Åström, op. cit., n. 46.

ments between Near Eastern scholars and their local chronologies.[52] It seems somewhat absurd to "select" one or the other of the many chronologies for the Levantine regions and make those the absolute and "real" dates for Cypriote periods. From the above it is not surprising that archaeologists cannot agree on dates for Cyprus. What is astonishing, however, is the apparent urge to push Cyprus along just such unreliable lines as for example Crete.[53] If one equates relative chronological phases between relevant countries, it shows quite clearly that Cyprus is more or less contemporary with her neighbouring areas and their respective cultural levels. This very important aspect becomes obscured or is overlooked when absolute dates are being applied to EC phases. Lowering or raising dates for Cyprus by choosing the one or the other of the foreign chronologies is hardly the way in which to fix cultural phases in EC and MC. In spite of the desirability of "safe" termini one should consider the cultural probability of a date/phase equation as regards foreign synchronisms.[54] It is fairly certain, in spite of some erroneous assessments,[55] disturbed stratification and its contextual data, that the overall cultural equation of EC III/MC I = EB IV/MB I (Syria and Palestine) = EM III/MM Ia = Cilician EB/MB holds. In addition, we can show that Cyprus is roughly contemporary when looking at the later MC ceramic finds in the Levant and beyond. In other words, what is definitely and culturally speaking considered MBA in Cyprus occurs in MBA contexts in the Levant.

The Alambra excavations[56] reinforce the view that we do have to consider regional cultural aspects and maybe local relative sequences within Cyprus. Until these are more carefully studied one may have to apply caution to a general Cypriote phase-structure. This has, for example, been recognized for Palestine, a further warning that one should not "squeeze" EC Cyprus into a rigid chronological frame.[57] Saltz has shown in her article that the Cretan MM I data at Ras Shamra can be used in spite of certain limitations[58] on the basis of *comparative relative chronology*. It does not contradict other findings from the Levant[59] nor a general trend in the type of finds that are introduced in Cyprus and the Near East during that period (gold, silver, faience, models). The additional RP finds at Ugarit do not contradict the equation between Ras Shamra and Crete. On the contrary, they agree in relative terms with the Cypriote-Minoan equations.

Finally, one cannot escape the impression that absolute dates, at least as far as Cyprus is concerned, are thought of as qualitative assessments of the social and historical development. The termini tend to imply the stage of sophistication of a cultural level rather than defining its actual existence. Until we know more about settlements, their architecture and life within them, the stages of technologies reached in fields other than pottery, metallurgy and tomb architecture, one should avoid giving a "status" of civilization by means of dates alone. In general, the tomb-groups illustrate the ceramic repertoire typical for late EC III and the change-over to wares typical of the MC

[52] See also Merrillees op. cit., n. 49 (*Introduction*) 35 f. Although Merrillees stresses the paradoxical nature of absolute chronology he nonetheless adheres to the methodological tradition, recently attacked by Åström, see n. 46.

[53] What Merrillees says (ibid., 35) for the avoidance of "... Cypriote synchronisms with the Aegean World at this stage for all dating purposes", might well be applied to the Levant.

[54] The writer refrains from discussing the chronologies, their merits or loopholes firstly because no new knowledge has come to light and secondly, until a "synchronism" does eventuate between the various chronologies and their authors, one has best leave it, since no meaningful contribution could possibly result in yet another dictate.

[55] C. F. A. Schaeffer, *Revue Archéologique*, 6/33 (1949), 129 ff. and some of his critics: Åström, MCBA, 261 ff. and idem, AMAM, 77 and his n. 7; R. S. Merrillees, *RDAC* (1977), 38 f. and 44. For Cretan and Egyptian data cf. Åström op. cit., n. 46.

[56] Cf. n. 21.

[57] E. D. Oren, *BASOR*, No. 210 (April 1973), 20 ff.

[58] D. L. Saltz, *RDAC* (1977), 51 ff.

[59] E.g., R. S. Merrillees, *SIMA*, 39, 1974; R. Amiran, *BASOR*, No. 210, (April, 1973), 63 ff.; K. Branigan, *AJA*, 70 (1966), 123 ff. and idem, AJA, 71 (1967), 117 ff.

period.[60] Vounous tomb 19 and Palealona tomb 3A demonstrate in their earlier burials the same change-over from middle to late EC III. Similar observations can be made for Lapithos tombs 313 C–D, 322A and 302B and all those tomb-groups which contain Minoan (EM III/MM I) imported objects.[61] Also typical for those groups is the increase of copper, bronze and other precious objects pertaining to the later EC II and MC period (cf. Fig. 4). In conclusion the writer suggests the following sequence of burials for the tomb-groups under discussion: (Figs. 4 and 5).

It is obvious from the above that the whole of Lapithos tomb 6A is confined to the end of EC III and the beginning of MC I. With some hesitation for the reasons mentioned above, a suggested tentative equation then should be MC I = MMI = *c.* 2200–2000 B.C. The same general equation is supported by the evidence of imported bronzes in Vounous tombs 19 and 143 and Lapithos tombs 313 C–D and 322A.

There are no exact parallels for the foreign pottery of Vounous tombs 64 and 68 (Pl. XIIB; Fig. 7.20) but it seems more likely that the general parallels lie not in Palestine MB IIa as stated by Merrillees but rather in the Syrian EB/MB or MB I period.[62]

The Kamares cup from Palealona tomb 11B[63] again is a matter of some contention; but the following statement seems probable. The relative local position of Karmi tomb 11B is late MC I or early MC II. The Kamares cup in Cyprus has a very close shape parallel at Gournia in a context which is MM Ia.[64] On Walberg's analysis (decoration) the latest probable date is MM Ib with an absolute date of possibly 2000–1900 B.C.[65]

The above would support the following:

EC IIIB/MC I = EM IIIB/MM Ia, traditional dates being: 2200–2000 B.C.

MC I (late)/MC II = MM Ib/MM IIa, *c.* 1900 B.C.

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ABBREVIATIONS

Åström, MCBA = P. Åström, *The Middle Cypriote Bronze Age* (Lund, 1957).

Åström, AMAM = P. Åström, Cypriote Pottery in the Allen Memorial Art Museum, *Allen Memorial Art Museum Bulletin*, XVII No. 3 (1960), 75 ff.

ACTS = *Acts of the Second International Symposium: The Relations between Cyprus and Crete ca. 2000–500 B.C.* (Nicosia, 1978).

Dikaios, Vounous = P. Dikaios, "The excavations of Vounous-Bellapaise in Cyprus, 1931–32," *Archaeologia* 88, (1940).

[60] SCE I, Gjerstad has already shown the proportionate relation of different *wares* in his charts for the Lapithos tombs; see also Åström, MCBA and above, n. 22. On these a gradation in terms of increase and decrease can clearly be seen between the different tomb-groups and an overall trend of popularities is recognizable.

[61] Catling and Karageorghis, cf. n. 3.

[62] R. S. Merrillees, *SIMA*, 39, 1974, 75 f.; Hama J and Ras Shamra (levels Ugarit Ancien III and Ugarit Moyen I = E.B. III and MB I Palestine respectively); cf. also Oren, above, n. 57.

[63] J. Stewart, *OPAth.*, IV (1963), 197 ff.

[64] Information communicated by J. B. Hennessy.

[65] M. Walberg, *Kamares Ware*, (1976), 191, Fig. 46, no. 20.2, p. 62 f. and 125.

Gjerstad, SPC = E. Gjerstad, *Studies on Prehistoric Cyprus* (Uppsala, 1926).
Hennessy, Artists = J. B. Hennessy, Cypriote Artists of the Early and Middle Bronze Age, *Arts*, (Univ. of Sydney, Sydney) 8 (1973), 16 ff.
Karageorghis, CPC = V. Karageorghis, *The Civilization of Prehistoric Cyprus*, (Athens, 1976).
Stewart, ECBA = J. R. Stewart, *The Early Cypriote Bronze Age* (Lund, 1962).(as part of *SCE* IV: 1a, pp. 205–401).
Stewart, Vounous = E. and J. R. Stewart, *Vounous 1937–38* (Lund, 1950).
SCE I = E. Gjerstad *et al.*, *Swedish Cyprus Expeditions*, I (Stockholm, 1934). "Lapithos: The Necropolis at Vrisis tou Barba," pp. 33–162, esp. 40 ff.