
2 **Aegean and Cypriot Comparative Chronology**

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In order to discuss the connections between the Aegean and Cyprus,
a comparative chronology must first be established.

2.1 Some Preliminary Considerations on the Aegean Relative Chronology

It is well known that one of the most discussed topics in Aegean Bronze Age chronology is the absolute chronology of the Late Bronze Age phases, resulting from the different absolute dates for the volcanic destruction of Akrotiri at Thera at a mature to later LM IA period which have significant impact on the absolute chronology of the close of LM IA. During the last five decades this topic has been a subject of the intense discussions which have been comprehensively overviewed in recent publications by Fantuzzi (2024) and Wiener (2024). The Aegean literature antedating 2018 showed an increasing adoption of the so-called Aegean High Chronology, which was based on the suggestion that the event occurred in the last decades

of the seventeenth century BC,¹ although several scholars followed a low chronology based on the traditional method of establishing synchronisms with Egypt and Mesopotamia suggesting a date about the end of the sixteenth century BC for the Thera eruption (cf. Shelmerdine 2008a, 4-5, figs 1.1-1.2 for the comparative schemes; Tartaron 2008, 84, tab. 1, modified low chronology, 86-9). However, the introduction of the new calibration curve IntCal 20 including annual measurements of tree-ring segments for the period 1700-1500 BC (Pearson et al. 2018; 2020) made it possible to recalculate the previous radiocarbon date range for the seed samples from the Thera eruption deposits. At the present state of art, the new radiocarbon determinations, including the latest data from an olive branch buried during the Thera eruption and an olive shrub found carbonized by the same eruption deposits on Therasia, are shifted towards the sixteenth century BC (Pearson et al. 2023; Fantuzzi 2024, fig. 2.7). Moreover, the study of the presence of sulphates in the ice-core record shows that the source of the traces of the 1628 BC eruption was the Aniakchak volcano in Alaska, while they were formerly connected to the Minoan eruption (Pearson et al. 2022; Fantuzzi 2024, 17). Summing up, a date for the Thera eruption near the end of the seventeenth century BC, and more specifically 1611 BC, now seems unlikely (Pearson 2024, 200), while the 1561 BC date appears as a reasonable hypothesis for this event.² However, according to Pearson radiocarbon data

depending on interpretation, could also support younger sulphate events at 1558 BC, 1555 BC, ca 1538 BC and even, just possibly, 1525/4, which would align better certain archaeologically based dating. (202)

As a consequence, the absolute date of the volcanic eruption of Thera is still unsettled but it is likely that further data in the future will lead to more precise dating of this event. For these reasons, in table 2.1 the calendric dates for the beginning and the end of the LM IA and LM IB are left undefined; generally speaking, however, Manning's chronological scheme is also shown in this table, although sharing his warnings that "Minoan, Cycladic, and Mainland phases are of course not in exact synchronicity in reality" and that a variation of 50 years should be allowed for the Early Bronze Age while a range of 25 years should be allowed for the Middle and Late Bronze Age (Manning 2010, 23, tab. 2.2, and pertinent note).

¹ Cf. for example, Cline 1994, 7, tab. 1; Rehak, Younger 2001, 391, tab. 1, Modified High Chronology and Low Egyptian Chronology; Manning 2010, 23, tab. 2.2; 2014.

² Pearson 2024, 202; Fantuzzi 2024, 17; cf. Manning 2022; 2024a; 2024b.

Although the resolution of the problem of the Thera eruption date is, of course, of utmost importance in the archaeology of the Aegean and related areas, it is important to point out here that the competing absolute Aegean chronologies have limited impact on the content of this book. Since “the relative chronology based on pottery is reasonably secure” (Hallager 2010, 151, tab. 11.1), references will be generally made to the Minoan and Helladic chronologies based on ceramic and palatial relative chronologies. For Crete, the five Minoan palatial periods that are deeply rooted in Aegean archaeology (Manning 2010, 17, tab. 2.1) are used. The recent discussion concerning the use of “palace”, on a general basis and, more specifically, of “Protopalatial” as valid terms in the Cretan sequence (Tartaron 2008, 95-8 with refs; Schoep, Tomkins, Driessen 2012) is of particular relevance to this study, since it incorporates frequent references to the Minoan palatial chronologies. Turning to the archaeological record of mainland Greece, the use of the traditional firmly established chronology based on ceramic styles appears to be similarly unavoidable, and, as with the Minoan chronology, this book also sometimes refers to the Mycenaean palatial periods. In addition, a pivotal role in Cypro-Aegean relations is also played by the East Aegean regions, including the Dodecanese and the Aegean coast of Anatolia, beginning before the Mycenaean Palatial Period. The archaeological evidence of this area is discussed in terms of general Bronze Age periods (EBA, MBA, LBA). Although on principle the use of either ceramic or palatial Minoan and Mycenaean chronologies may be an individual choice, the two chronological systems are often not incompatible, and, therefore, coexist in many studies concerning Aegean subjects, which is a precedent followed in this book.

Table 2.1 The relative and absolute chronology of Crete and Mainland Greece in the Bronze Age: absolute dates after Manning 2010, 23, Table 2.2, with the exception of the LM IA (LH I)- IIIA1/IIIA2 Early (LH IIIA1) period. (*) see discussion on the date of Thera eruption in Chapter 2.1

Crete			Greek mainland		
Palatial Phases	Relative Chronology	Dates BC	Palatial Phases	Relative Chronology	Dates BC
Pre-Palatial Period	EM I	3100-2650	Early Bronze Age	EH I	3100-2650
	EM II	2650-2200		EH II	2650-2200
	EM III	2200-2100/ 2050		EH III	2250-2100/ 2050
	MM IA	2100/2050- 1925/1900	Middle Bronze Age	MH I	2100/2050- 1950/1900
Protopalatial Period	MM IB	1925/1900- 1875/1850	-	-	

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Crete			Greek mainland		
	MM II	1875/1850-1750/1700	-	MH II	1950/1900-1750/1720
Neopalatial Period	MM III	1750/1700 – 1700/1675	-	MH III	1750/1720-1700/1675
	LM IA	(*)	Mycenaean Prepalatial Period	LH I	(*)
	LM IB	(*)	-	LH IIA	(*)
Monopalatial Period	LM II	(*)	Mycenaean Palatial Period	LH IIB	(*)
	LM IIIA1-LM IIIA2 early	(*)	-	LH IIIA1	(*)
Final Palatial Period	LM IIIA2 late-LM IIIB	1375/1350-1200/1190	-	LH IIIA2	1390/1370-1330/1315
			-	LH IIIB	1330/1315-200-1190
Postpalatial Period	LM IIIC	1200/1190-1075/1050	Postpalatial Period	LH IIIC	1200/1190-1075/1050

2.2 A Preliminary Discussion on the Cypriot Relative Chronology

Like the Aegean basic chronological scheme, the conventional Cypriot Bronze Age chronology is tripartite having a structure where each of the three main periods (EC, MC and LC) has been further subdivided in three sub-phases. However, many inherent problems have been noted regarding the effectiveness of such a sequence. In particular, its base rests on the original pottery classification by E. Gjerstad in 1926, which does not consider the continuity of the EC-MC II periods and neglects the fact that MC III is better linked to the LC I period (Gjerstad 1926; cf. however Steel 2004a, 12-13, 218 fn. 87; Crewe 2007b, 4). Leaving aside the alternative cultural/chronological sequence later proposed by P. Dikaios (1962, 192-203; cf. Steel 2004a, 13-14), which relates to earlier prehistoric periods, the scheme proposed by B. Knapp beginning in 1994 warrants attention. Knapp's scheme distinguishes between the Prehistoric and Protohistoric Bronze Age periods, with the latter (dating, in traditional terms, from MC III/LC I to LC IIIB) subdivided in three phases.³

³ Knapp 1994a, 379-82, fig. 1; Knapp 1994b, fig. 9.2. For later references to this scheme, cf. Knapp 1997, 35, tab. 1; Knapp 2008, 71, tab. 1 (Prehistoric Bronze Age), 133, tab. 3 (Protohistoric Bronze Age); Webb, Knapp 2020, tab. 1, for Early and Middle Cypriot. A

Another classification, used in L. Steel's book (2004a, 13, tab. 1.1), is a compromise between Knapp's scheme and the conventional chronology. In this book, I have followed Knapp's scheme in general, with a few modifications based on adaptations derived from my consideration on the LC Urban Phases, which are explained below [tab. 2.2].

In the development of Cypriot civilization an important role was played by the urbanism process and in this study a particular importance is attached to it. J. Stewart initially discussed the emergence of 'urbanisation' processes in Cyprus during the EC III and into the MC period (Knapp 2013c, 109-11 with refs), but not much attention was paid to the process until the recent generation of scholars (113). Current views differ from Stewart's interpretation, with broad consensus that the process of urbanisation on Cyprus dates back to the LC period, much later than in other countries of the Eastern Mediterranean, especially Mesopotamia, Syria and Egypt (Negbi 1986, 97; Keswani 1996, 217-18; Knapp 2013b, 38-9). However, there are different opinions on the start of the process. Some scholars have stated that the rise of urbanisation on the island may be found on the southern coast by the thirteenth century (LC IIC), although they acknowledge that there was a hierarchical settlement pattern as early as the beginning of the LBA (Steel 2004a, 149, 156-7; 2014, 578; Crewe 2007b, 7-8). Instead, following the notion of urbanism based on the archaeological materials and architectural, economic, and ceremonial features (Knapp 1996a; Knapp 1997, 56), one can suggest that on Cyprus there were proper urban centers with specialized economies and ceremonial activities in the early LC period. Among the various changes which appear in Cyprus during the Protohistoric Bronze Age 1 (MC III/LC I-LC I), Knapp also considers "the establishment of true urban centers with monumental architecture" (Knapp 2013c, 115; also cf. 2013a, 348). Other scholars agree that on Cyprus there was a rapid development of urban settlement in MC III/LC I (Fisher et al. 2011-12, 415; Fisher, Manning, Urban 2019, 474) and, taking into account the combined evidence from the settlement and the cemetery, P.M. Fischer (2019b, 221) recently argued that the city of Hala Sultan Tekke was founded "sometime in the period covering the end of MC and the beginning of the LC period". The use of the term "Proto-Urban" for the early phases of the LC period may therefore reflect this view, since it implies that the start of urbanism dated back as early as the earliest LBA or MC III/LC I, while Cypriot towns did not substantially develop until LC IIC. For example, although aware of the limits of the available evidence, K.D. Fisher "termed a Proto-Urban period covering roughly the MC III through the LC IIB"; in his opinion, this is followed by a

revised scheme was published in Knapp 2013a, 27, tab. 2, and in Meyer, Knapp 2021, 437, tab. 1, where Prehistoric Bronze Age 2 is regarded as equivalent to LC IIA-LC IIC Early, Prehistoric Bronze Age 3 to LC IIC Late-LC IIIA, and LC IIIB to the Early Iron Age.

fully urban phase from the mid-fourteenth century to the end of Late Bronze Age (Fisher 2014, 187-90, Proto-Urban period, 190-201, fully urban phase). Similarly, G. Cadogan (1989a, 48; 1993, 22; 1998, 6-7) referred to “true urbanism” in the thirteenth century “as against the proto-urbanism of LC I”, and other scholars also regarded Enkomi, Morphou *Toumba tou Skourou*, and Hala Sultan Tekke as proto-urban settlements during the LC I period (Papadimitriou, Kriga 2013, 11). While P. Keswani (2004, 154-5) discussed the foundation of these “new towns” in LC I, according to O. Negbi (1986; 2005, 3-5, tab. 2), urbanisation was the most prominent innovation of the Middle/Late Cypriot Bronze Age transition even if the process accelerated in the advanced phases of the LC, reaching its apex in LC IIC. L. Bombardieri has recently considered Cypriot urbanisation as a gradual uninterrupted phenomenon and, more expressly, suggested that there was

a long proto-urbanisation process that gradually develops through the Middle Bronze Age, without significant external triggers, and culminates in MC III-LC I. (Bombardieri 2017, 362-3; cf. however, Webb, Knapp 2020, 31)

Based on the identification of distinctive urban traits in individual sites, such as social stratigraphy, architectural development, commercial and administrative activities, and centralized and specialized production activities, in 2006 I stated that the so-called “proto-urban” settlements of LC I effectively already had clearly defined urban characteristics and distinguished four Urban Phases (I-IV) in the period dating from MC III/LC I to the end of LC IIIB (Graziadio 2006).

As a result of recent research in the Maroni valley area, a low-density urban model has been proposed, which is of particular interest to the process of emerging urbanisation discussed above. In fact, the variations observed in the alignments of some geophysically identified structures may reflect a diachronic settlement development (Manning et al. 2014, 21-2). The archaeologists working in this area wrote that

the ‘townscape’ structures imaged between *Vournes* and *Tsaroukkas* [...] seem roughly to follow the south-southeast alignment of the structures at *Tsaroukkas*, and/or of the LC I structures in the south area of the *Vournes* excavation (21)

while other LC II structures are oriented more southeasterly. Among the various explanations suggested by the authors, it seems that the suggestion that “the LC II monumental structures were superimposed into an existing LC I-II urban environment” (22) is entirely plausible. If indeed this is the case, Maroni would offer an archaeological example of an urban sequence from LC I to the apex of the urbanization process in LC IIC. This would confirm a progressive

development of the process on Cyprus from the beginning to the end of the LBA as suggested in my 2006 study. Therefore, I distinguished four Urban Phases (I-IV) in the period dating from MC III/LC I to the end of LC IIIB (Graziadio 2006), and the following synchronisms with the conventional chronological scheme may be suggested: Urban Period I = MC III/LC I; Urban Period II = LC IIA-IIC early; Urban Period III = LC IIC late-end of LC IIC; Urban Period IV = LC IIIA-IIIB [tabs 2.2-2.3]. In Urban Periods II and III, the range of features marks the differences between the urban centers and the secondary and tertiary sites as they were defined in the settlement hierarchy suggested first by Knapp in 1997.⁴ However, the four Urban Phases distinguished in my 2006 study are not intended as a new chronological system of the LC period, but simply as a theoretical framework for the traditional chronology in terms of urban development.

Table 2.2 The relative and absolute chronology of Bronze Age Cyprus

Knapp's chronological scheme ⁵	Urban periods (Graziadio 2006)	Approximate absolute chronology
Prehistoric Bronze Age 1, Philia 'Phase'	Philia Phase	2500/2400-2200 BC
Prehistoric Bronze Age 1	EC I-III	2200-2100/2050 BC
Prehistoric Bronze Age 2	MC I-II	2100/2050-1800/1750 BC
Prehistoric Bronze Age 2	MC III	1800/1750-1690/1650 BC
Protohistoric Bronze Age 1 (MC III-LC I)	Urban Period I (MC III-LC I)	1690/1650-1450 BC
Protohistoric Bronze Age 2 (LC IIA-IIC early)	Urban Period II (LC IIA-LCIIC early)	1450-1340 BC
Protohistoric Bronze Age 3 (LC IIC Late-LC IIIA)	Urban Period III (LC IIC late- end of LC IIC)	1450-1340 BC
Early Iron Age (LC IIIB)	Urban Period IV (LC IIIA)	1190/1185-1125/1100 BC
	Urban Period IV(LC LC IIIB)	1125/1100-1050 BC

2.3 The Scheme of Correlations Between the Aegean and Cyprus Used in This Volume

If we consider the Aegean and Cypriot relative chronologies comparatively, the difficulty in correlating the single cultural phases across so many regions is clearly a major problem. In order to avoid continuously presenting equivalencies between the different chronologies

⁴ Knapp 1997, 53-63. Note however that in the following studies Knapp (2008, 138; 2013a, 355) proposed a four-tiered settlement hierarchy.

⁵ Knapp 2013, 27, Table 3; Webb, Knapp 2020, Table 1; Meyer, Knapp 2021, Table 1.

of each area and for the sake of simplification and intelligibility of the text, it is more advantageous to refer to phases or periods of contact between the involved areas.⁶ While Steel (1998, 286; 2004b, 70) distinguished three main phases of Aegean imported pottery to Cyprus during the LBA, from a Cypriot perspective K. Eriksson (2008, 299; 2009b, 122-3) utilized the earlier classifications based on ceramics and distinguished seven key Historical Periods relating to particular Late Cypriot chronological phases, from LC IA:1 to LC IIC:1-2, in order to discuss the interaction between Cyprus and other contemporaneous societies (Minoans, Egyptians, Hittites, Mycenaeans, Ugait). On the other hand, in his studies on the development of ceramic exchange between the Aegean and Cyprus in the MBA and LBA, Nikolaos Papadimitriou first conformed to this approach and adopted a division into four chronological stages, choosing an Aegeocentric approach (Papadimitriou 2015, 423); more recently he has distinguished two main phases: (Phase A) the time when Crete “dominated Aegean affairs”, including Proto- and Neopalatial periods as well as LM II-III A1 and (Phase B) “the time when Mycenaean centers controlled maritime exchanges”, i.e. LH III A2-B (Papadimitriou 2022, 179-80, tab. 1).⁷ Here a subdivision of Cypro-Aegean interactions into five periods is preferred because this allows consideration of the Cypro-Aegean interactions from a Cypriot perspective. In fact, significant importance must not only be attached to the Minoan Palatial Periods (from the beginning of interaction to the end of the Neopalatial Period) and the Mycenaean Palatial Periods (from then on) but also to the single phases of urbanisation process on Cyprus, since beginning at the transitional MC III-LC I period, they define the single phases in the history of Cyprus in the LBA. Keeping any further discussion on synchronisms to the following chapters, from this point forward five distinct Interaction Periods are defined below to correlate the chronology and make possible the discussion of Cypro-Aegean interconnections, although it should be admitted that they are not in exact synchronicity [tab. 2.3]:

⁶ Note that, in addition to scholars mentioned in the text, Portugali, Knapp (1985, 60-1, figs 4-14, 4-15, and 4-16) already distinguished three Periods of exchanged artifacts between the Aegean and Cyprus.

⁷ Papadimitriou defines his own approach as Aegeocentric. Cf. Papadimitriou 2012, 94-5; 2015, 423-4, tab. 1, where the following general synchronisms are proposed: Stage 1: MM IB-MM IIB = MC II-III; Stage 2: MM III/LM-LM IB/LH IIA = MC III/LC IA:1-LC IB (earlier part); Stage 3: LM II/LH IIB-LM/LH IIIA1 = LC IB (later part)-LC IIA; Stage 4: LM/LH IIIA 2-LH/LM IIB = LC IIB-LC IIC. In his recent publication (Papadimitriou 2022, 180, tab. 1) he has suggested a synchronism between MM IB-LH/LM IIIA1 and MC-LC IIA (Phase A), while he has correlated LH IIIA2-B with LC IIB-C (Phase B). On the other hand, Cadogan (2005, 314) suggested the following synchronisms: LC I (and going back into late MC) to IIA, more or less equivalent to LM/LH I-III A1; LC IIB = LH IIIA2 into early B; LC IIC = LH IIB2 and LC IIIA-B = LH IIIC (-SM).

Table 2.3 The suggested correlations between the Aegean and Cyprus according to the relative chronologies used in this book

Interaction period	Crete	Mainland Greece	Cyprus
Period 1 Early	Final Pre-palatial Period: MM IA	Early Bronze Age - Middle Bronze: MH I	EC III
Period 1 Late	Protopalatial Period: MM IB-MMIIB; beginning of the Neopalatial Period (MM III early)	Middle Bronze Age: MH II-MH III early	MC I-MC III
Period 2	Later phases of Neopalatial Period: MM III late-LM IB	final Middle Bronze Age - Early Mycenaean period: MH III late -LH IIA	MC III/LC I – LC I (Urban Period I)
Period 3	Monopalatial Period: LM II-LM IIIA2 early	Earlier Mycenaean Palatial Period: LH IIB- LH IIIA2	LC IIA- LC IIC early (Urban Period II)
Period 4	Postpalatial Period: LM IIIA2 late-LM IIIB	Later Mycenaean Palatial Period- beginning of Postpalatial Period: LH IIIB-early LH IIIC	LC IIC late-end of LC IIC (Urban Period III)
Period 5	Postpalatial Period: LM IIIC	Postpalatial Period: LH IIIC	LC IIC Final/IIIA-LC IIIB (Urban Period IV)

- **Interaction Period 1: Two phases** (chapter 3)
 - **Earlier Phase:** the late Minoan Prepalatial period (EM III-MM IA) on Crete and the late Early Bronze Age and early Middle Bronze Age (EH III-MH I) on the Greek mainland correspond to the EC III on Cyprus;
 - **Later Phase:** the Minoan Protopalatial period (MM IA-MM IIB) and the beginning of the Neopalatial period (MM III early) on Crete and the MHII-MH III early on the Greek mainland roughly correspond to the MC I-MC III on Cyprus;
- **Interaction Period 2** (chapter 4): most of the Minoan Neopalatial period (MM III/LM IA-LM IB) on Crete and the final Middle Bronze Age-Prepalatial Period (MH III late-LH IIA) on the Greek mainland correspond to MC III/LC I-LC IA and LC IB, namely the first urban phase on Cyprus;
- **Interaction Period 3** (chapter 5): generally speaking, the Minoan Monopalatial period (LM II-LM IIIA2 early) and the early Mycenaean Palatial Period (LH IIB-LH IIIA2) on the Greek mainland correspond to the second urban phase on Cyprus (LC IIA-IIC early);⁸
- **Interaction Period 4** (chapter 6): the Minoan Final Palatial period (LM IIIA2 late-LM IIIB) on Crete and the late Mycenaean

⁸ For a discussion on the distinction between early and late Mycenaean Palatial Period, see § 5.1.

Palatial Period (LH IIIB)-early phase of LH IIIC on the Greek mainland approximately correspond to the third urban phase on Cyprus (LC IIC middle and late of LC IIC);⁹

- **Interaction Period 5 (Epilogue):** the Minoan Postpalatial period (LM IIIC) on Crete and the Mycenaean Postpalatial period later than LH IIIC 1 early on the Greek mainland correspond to the last urban on Cyprus (LC IIC Final/IIIA-LC IIIB).

Finally, it is important to point out that Interaction Period 5 is considered out of the scope of the discussion on Cypro-Aegean interaction presented in this book since in the troubled period around 1200 BC the end of the Palatial Mycenaean period in the Aegean and the unsettled conditions prevalent in Cyprus at the end of the LC IIC period gave rise to dramatic changes both in the Aegean and Cypriot scenarios. Moreover, they also modified the nature and intensity of the long-lasting interaction and trade between the two areas (also see Epilogue).

⁹ It should be noted that, according to Mountjoy (2018, tab. 1-4), LC IIC ends in the early twelfth century BC, in the period which she names “Cyp IIIC Early 1” and regards it as partially contemporaneous with LH IIIC Early 1. This synchronism is accepted in this book (see chapters 6.1 and 6.4.2.4 for a fuller discussion).