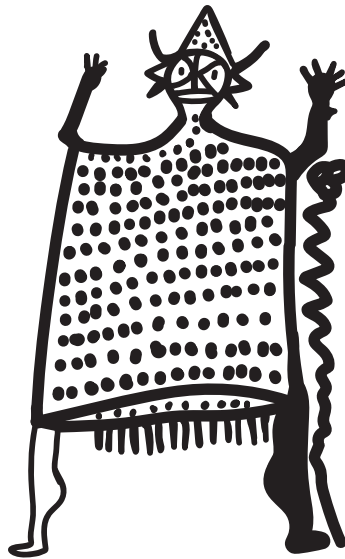


STUDIES IN MEDITERRANEAN ARCHAEOLOGY
VOL. CLIV

**THE DECLINE OF BRONZE AGE
CIVILISATIONS IN THE MEDITERRANEAN:
CYPRUS AND BEYOND**

edited by

Teresa Bürge and Peter M. Fischer



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STUDIES IN MEDITERRANEAN ARCHAEOLOGY

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Cover image: 'Horned God' on krater N121 from Hala Sultan Tekke, CQ2, Stratum 2
(LC IIIA early; ca 1200 BC) (drawing by T. Bürge)

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Preface and acknowledgements

The papers presented in this volume are the results of the conference *The Decline of Bronze Age Civilisations in the Mediterranean: Cyprus and Beyond* organised by the editors of the volume and held on January 17 and 18, 2020 at the Department of Historical Studies, University of Gothenburg. It was supported by much appreciated funds from the Swedish Research Council (Vetenskapsrådet, registration number 2019-00327) and the Riksbank's Anniverary Fund (Riksbankens Jubileumsfond, registration number F19-1036:1). In addition, it was the final conference of the project *The Collapse of Bronze Age Societies in the Eastern Mediterranean* (Vetenskapsrådet, registration number 2015-01192; project director Peter M. Fischer) that investigated the causes of disruption in international trade and the 'collapse' of Bronze Age civilisations in the Eastern Mediterranean in the second half of the 13th and the 12th centuries BC, focusing on the island of Cyprus which was the centre of interregional trade in this region. The project was closely connected with our ongoing excavations at the Late Bronze Age harbour city of Hala Sultan Tekke on the island's southern coast.

The newly restored and enlarged building of the Faculty of Humanities, where the conference was hosted, thanks to the support of Henrik Jansson, the Head of the Department, provided an excellent environment for the conference. The conference dinner in the refined Jugendstil milieu of 'Ågrenska Villan', built in 1916 in the centre of Gothenburg as a private residence and since 1981 owned by the University of Gothenburg, was much appreciated by the participants. To the best of our knowledge, this conference was the last at the university of

Gothenburg before the serious outbreak of COVID-19 ended physical meetings for almost two years. In retrospect, we are even more grateful that we could enjoy these very intense and stimulating two days to the full, untroubled by thoughts about physical distancing, the potential spread of infection and other issues that would start to affect our everyday life only a few weeks later.

For some of us the pandemic was a very quiet and perhaps more productive period than usual, while others had to deal with parental challenges while schools and preschools were closed. In spite of these and the many other difficulties, issues and changes that we all had to face during the last more than two and a half years, we are particularly glad that all participants were able to submit a contribution to the present volume. In addition, we have included three more chapters to round off the topic.

Besides the funding bodies mentioned above, we would like to thank Jennifer Webb and David Frankel and Lennart Åström, the editors-in-chief and manager of SIMA, for including the volume in this series. Each single contribution was carefully peer-reviewed and we are grateful to all reviewers for accepting this task. Jennifer Webb has given us incredible support by finalising the layout and correcting and improving the language. We are very much obliged for all her accurate work! We also want to thank Elena Peri, who has assisted with copy editing, and Jennie Fälth of the administration of our department for practical help.

Gothenburg and Bern, June 2023
Teresa Bürge and Peter M. Fischer

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The first urban landscape of southwest Cyprus: Paphos in the ‘Age of Transformations’

Maria Iacovou

Abstract

The archaeological evidence from an array of primary settlements and inland territories suggests that the response of Late Cypriot polities to the Mediterranean-wide crisis of circa 1200 BC was extremely diverse. Entire regions and their primary centres failed to survive, and were abandoned either towards the end of LC IIC or in LC IIIA. At the same time, the transformations of the socio-economic system worked in favour of a number of coastal centres. At Kition and Paphos, which are situated on either side of the depleted valley systems of the Vasilikos, Maroni and Kouris Rivers, their respective sanctuaries were enhanced with labour-intensive and technologically demanding *temene*. Taking a long-term view and employing landscape analysis in relation to the settlement site and the catchment of Paphos, this paper attempts to reconstruct the history of a Late Cypriot gateway, which developed into the first urban landscape of southwest Cyprus in the ‘Age of Transformations’ and remained the political and economic centre of the region of Paphos until the end of the 4th century BC.

Method and principles

Ancient Paphos (Kouklia *Palaepaphos*), the primary settlement site of one of the most resilient and long-lived city-states of Cyprus, and the catchment (hydrological basin) of Paphos (Fig. 1), much of which remains *terra incognita* (Rupp 2004: 63), are the research targets of the Palaepaphos Urban Landscape Project (acronym PULP) (cf. Iacovou 2008a). Two papers that appeared, by chance, the same year (Iacovou 2007a, 2007b) describe the method and principles I follow for the study of the Cypriot polities in general and for the study of Paphos in particular. In summary, instead of looking to the east or west of the island for the emergence of state formation, I consider it more productive to use an island-specific, ‘Cyprocentric’ and consistently macrohistoric approach that studies the 2nd and 1st millennia BC together, without the artificial division imposed by the ‘Great Divide’

(cf. Iacovou 2013a: 17–18; Georgiou & Iacovou 2020: 1133). This cultural continuum covers the chronological span of the rise and demise of all those island units that had operated, for a lesser or greater period of time, between the Late Cypriot (LC) and the Cypro-Classical eras, as distinct polities (for the debate over the use of different terms, e.g. ‘regional economic systems’, ‘chiefdoms’, ‘city-kingdoms’, etc., see Iacovou 2013a: 39). The last of the Cypriot micro-states, seven in all, including Paphos (Salamis, Kition, Amathous, Paphos, Marion, Soloi and Lapethos), were abolished at the end of the 4th century BC by Ptolemy I Soter (cf. Papantoniou 2013). Also, instead of trying to define the size of urban centres at any one time of their existence, I concentrate on unlocking the significance of site structure in relation to the physical properties of the region’s topography and the main functions of a central place. These study principles enhance the regional characteristics of the Cypriot polities and enable the reconstruction of their distinct histories. However, the history of an isolated settlement that had functioned as a region’s central place does not constitute the history of a polity. The history of a polity is primarily the record of transformations born by its regional site hierarchy system over time; this is ‘the ideal framework of Landscape Archaeology, where our analytical focus is that of settlement systems in the same countryside across millennia’ (Bintliff 2013: 66). We should, therefore, approach a Cypriot polity not only from its primary urban centre but also from its associated settlement structure.

In the context of PULP, because of the absence of settlement visibility, especially in relation to the Late Bronze and Early Iron Ages, we initiated landscape analysis from the hypothetical environment of the primary centre of Paphos (cf. Iacovou 2013b). The project relied on a GIS linked to an entity-related geo-database that accommodated a vast amount of archaeo-cultural (published and unpublished) data spread over an area of 3km² in relation to the sanctuary of Palaepaphos (to include the extra-urban cemeteries of the 1st millennium BC), and on a multi-sensor geophysical survey (cf. Sarris *et al.* 2006). Our long-term goal was, and still is, to record

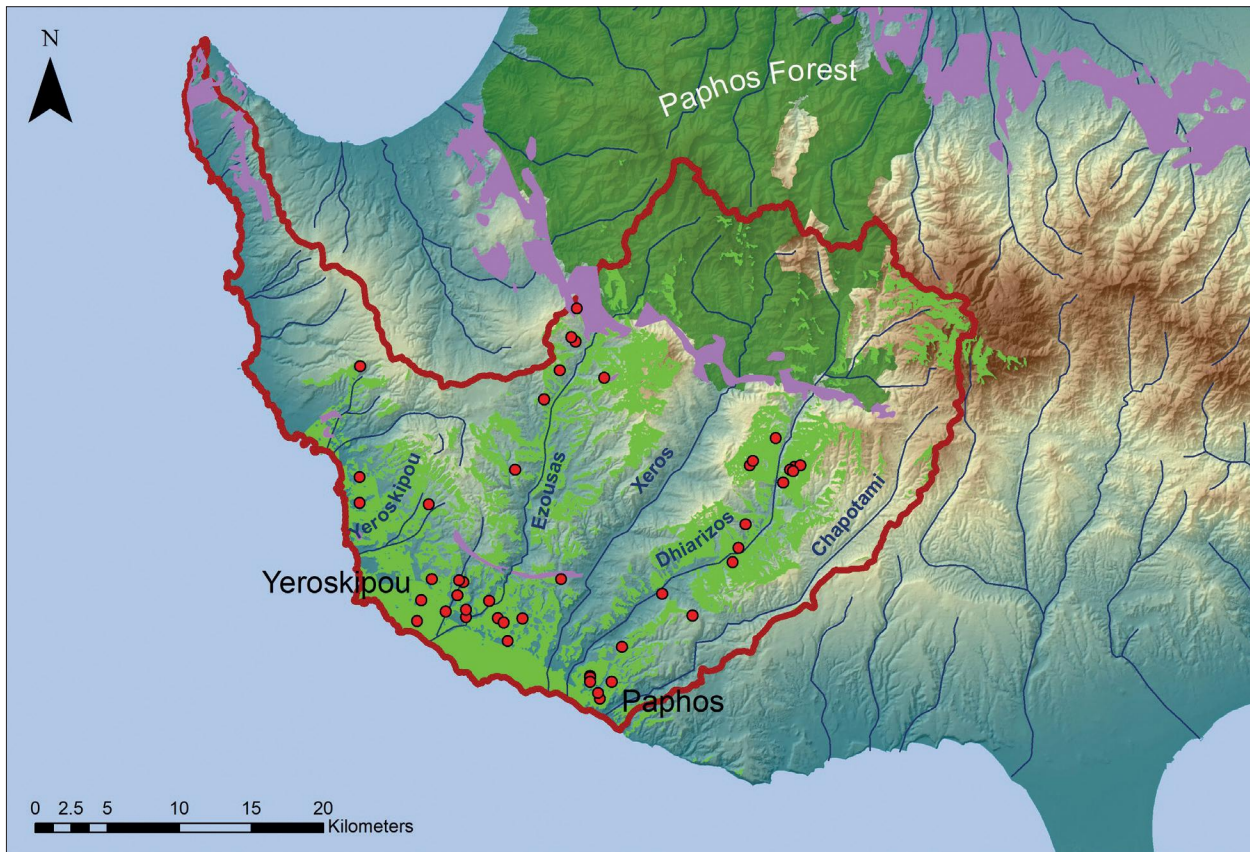


Figure 1. The Paphos hydrological basin (catchment). Digital geological data from the Cyprus Geological Survey Department and MC III–LC I site visibility; geolocated by A. Agapiou. Drafted by A. Agapiou (PULP@)

the transformations of the settlement pattern in the Paphos catchment—arbitrarily defined as the *chora* of the ancient polity (Iacovou 2012a)—and to integrate them with the foundation of the settlement of Paphos and its subsequent rise as the region’s first and only political centre until the Ptolemaic takeover of Cyprus. It is in the course of this *longue durée* that we will examine the response of Paphos to the Mediterranean-wide crisis of circa 1200 BC.

Winners and losers in the ‘Age of Transformations’

When we introduce the era of the initial urbanisation of Cyprus (MC III–LC IA), we approach it through the reconfiguration of the settlement pattern per region. We observe the foundation of new sites, especially coastal gateways (e.g. Enkomi and Hala Sultan Tekke), which were the catalysts of the island’s successful participation in the Mediterranean exchange system of the 2nd millennium BC. We also take note of the abandonment of settlements that failed to participate in the site hierarchy system of their region; Marki and Alambra, for example, may have been abandoned ‘in favour of a more concentrated pattern of settlement and more tightly controlled regional networks’ (Webb & Knapp 2021). Evidently, an extended period of

island-wide settlement pattern transformations that allowed Cyprus to participate in ‘the first “Age of Internationalism” in the eastern Mediterranean’ (cf. Killebrew 2014: 595) had winners and losers. Similarly, an extended period of crisis as widespread and intense as the one that killed the globalised, palace-based economic system, and opened the way for a transformed socio-political landscape that enjoyed increased economic autonomy, also had winners and losers (Killebrew 2014: 601).

The current state of archaeological research in Cyprus, besides having done away with theories of invasions and whole-scale destructions attributed to the Sea Peoples (cf. Muhly 1984: 49; Iacovou 2013c, 2018: 17; Knapp & Manning 2016: 134), has also highlighted the diverse responses of the Cypriot polities to the ‘Age of Transformations’ (for the terms, ‘Age of Internationalism’ and ‘Age of Transformations’, Killebrew 2014: 601). Dozens of individual settlement biographies have become much better known in recent years (consult Knapp 2013) and, though in most cases we are still missing a concise view of how regional site hierarchies were affected, the variable reaction of different regions to the collapse is becoming more comprehensible, especially when a long-term view is adopted (recently, on the formation of territories, Satraki 2019).

The extensive and exceptionally well-published Vasilikos Valley survey project (Todd 2004, 2013; South 2013) and the excavation of the primary urban centre of Kalavassos *Ayios Dhimitrios* (South *et al.* 1989: 1–21; South 1996; recently, Fisher *et al.* 2019) render the Vasilikos River valley the best documented case of a Cypriot polity, whose site hierarchy system disintegrated, leaving the valley without evidence of organised habitation for quite some time in the Cypro-Geometric (CG) period (Todd & South 1992; South 2013: 157; Todd 2013: 97–101). The neighbouring river valley of Maroni (Manning *et al.* 1994) and the Kouris River valley system (Hadjisavvas 2017: 468–470, 474) further to the west also failed to cope with the crisis. In all three valleys, the LC IIC ashlar complexes of their respective urban centres at Kalavassos *Ayios Dhimitrios* (cf. South 2002), Maroni *Vournes* (cf. Cadogan 1989, 1996) and *Alassa Paliotaverna* (cf. Hadjisavvas 2017: 464), which contained industrial units and had significant storage capacity, were thoroughly deserted (cf. South 1989: 322; Hadjisavvas 1991; Cadogan 2018: 111, 115). Close to the south coast, Episkopi *Bamboula*, which may have functioned as a gateway in relation to *Alassa*, was also abandoned in LC IIIA (cf. Hadjisavvas 1989: 40; 2017: 7–8). It is a wonder that, despite their sturdiness and social significance, these LC IIC urban edifices were never reused at any time after their abandonment (cf. Hadjisavvas 2017: 474). Apparently, the settlement pattern of their respective regions was so extensively affected that no community considered it viable to live nearby and to incorporate these impressive secular monuments into their daily lives.

The disparate histories of the Late Cypriot polities during and after the crisis

The record of urban and industrial failures, which marked the inception of the 12th century in Cyprus, should serve as a preamble for a longer-term landscape analysis that will identify the status of the affected regions in the 1st millennium BC. Cadogan (2018: 116) remarks that the reversion of the Kalavassos-Maroni district 'to peasant-style subsistence farming must have created a void that made it probably impossible to manage any supply of food'. South (2002: 68) observes that in the course of the Early Iron Age the political pattern of the Vasilikos River valley 'changed out of all recognition'. The landscapes of Kalavassos and Maroni were apparently pushed to the borders of a new settlement pattern, which was initiated with the foundation of a new coastal gateway on the south coast (cf. Georgiadou 2018: 155). This gateway became the capital centre of Amathous, one of the strongest and most extensive territorial city-states of the 1st millennium BC (cf. Hermary 1999, 2013, 2015). Likewise, *Alassa* and the upper valley of the Kouris River, which has remained a rural area to this day,

were incorporated into the hinterland of the city-state of Kourion in the Iron Age (cf. Iacovou 2013a: 28).

Hence, three urban centres, for which the excavators do not claim to have found evidence for human-generated, whole-scale destruction, devolved into rural areas (cf. South 1989: 322–323; Hadjisavvas 2017: 472–474; Cadogan 2018: 111, 115–116). These dissolution phenomena are different from the events that caused the closure of two major harbour towns: Enkomi and Hala Sultan Tekke. Despite the fact that their urban centres appear to have suffered destruction at the end of LC IIC (Enkomi Level IIB: Dikaios 1971: 487) or the beginning of LC IIIA (Hala Sultan Tekke Stratum 2: Fischer 2017, 2020: 224), these two prominent port authorities continued to function well into the 12th century BC. Rebuilding activity, intensified evidence of metallurgical activity and rich burials are attested in both sites in LC IIIA (cf. Georgiou 2017: 209); but then another destruction struck Hala Sultan Tekke around the mid-12th century BC. 'After that, the city was abandoned, never to be occupied again by permanent settlers' (cf. Fischer 2020: 224). No human-generated violence is associated with the slow abandonment of Enkomi, where pottery associated with LC IIIB reveals limited activity in distinct areas as late as the 11th century BC (cf. Courtois 1971; Yon 1999: 17). On several occasions (encouraged by Gifford 1978; Åström 1996; Devillers 2008; Devillers *et al.* 2015), I have expressed the opinion that these two primary centres were abandoned and never resettled because siltation had rendered their harbours unusable (cf. Iacovou 2014: 166; 2018: 21–22). As regards Hala Sultan Tekke, a more intriguing scenario has recently been put forward by Peter M. Fischer, who associates the silting up with the lack of maintenance, a consequence of the last destruction and the waning manpower at the site: 'the harbour became a shrinking lagoon ending with the Larnaca Salt Lake cut off from the open sea and, therefore, useless for direct anchorage, which had serious trade-related consequences' (Fischer 2020: 224). Deprived of functioning harbours, which were the reason for their foundation in the first place, Enkomi and Hala Sultan Tekke devolved into rural areas. Today, many of the known or presumed locations of Cyprus' ancient harbours, especially those situated in natural lagoons or by the mouths of rivers, e.g. *Bamboula* at Kition (Morhange *et al.* 2000) and Pyla (Caraher *et al.* 2005), are located inland at some distance from the current coastline.

Decisive studies by Edgar Peltenburg (1996) and Lindy Crewe (2007) have approached the foundation of Enkomi from the settlement pattern of the hinterland. Enkomi was the first of three successive port facilities that functioned as the central place of the eastern plain of Mesaoria from the 2nd millennium BC to today; the other two are Salamis (to the end of Late Antiquity) and, since the Middle Ages, Famagusta (cf. Cadogan 2018: 108; Iacovou 2018: 11, fig. 1).

Thus, despite the eventual closure of Enkomi—the modern-day name of the original site of Old Salamis, according to Marguerite Yon (1980: 79; 1999: 17)—the site hierarchy system of its economic territory was not left without a central place or a port of export; these functions were relocated to (New) Salamis, which was founded in the 11th century BC (cf. Yon 1980). It is likely that Kition, which was not a primary site until LC IIC–IIIA, took over the role of Hala Sultan Tekke when the latter was abandoned. Hence, despite the definitive abandonment of Hala Sultan Tekke, its economic territory, which as shown by Anna Satraki (2019: 231) would have included the pillow lavas of the easternmost part of the Troodos (i.e. Sia, Mathiatis, Lythrodontas, Pyrga and Stavrovouni), would not have been left without a central place that was also a gateway to the sea. Although the foundation of Paphos dates back to MC III/LC IA and of Kition to LC IIB/IIC, it would appear that they became primary centres with hierarchical authority over their respective territories in the course of, and probably also because of, the crisis suffered by other Cypriot polities (cf. Iacovou 2012a, 2012b; Fischer 2020: 225).

Longevity, visibility and the colonisation of the southwest coast in MC III–LC IA

The coastal sites of Kition and Paphos, which were neither abandoned, nor relocated in the name of a new anchorage, are ideal sites for the study of continuities and transformations in relation to the entire spectrum of the material culture from the Late Cypriot to the Early Iron Age and beyond, within the same urban landscape. Unlike Kition, whose ancient urban centre is now buried deep under the city of Larnaca, making any organised attempt to reach its Late Bronze Age or Early Iron Age landscape extremely painstaking (cf. Fourrier 2018), Paphos (Kouklia-Palaepaphos) has not been overburdened with the monuments of more recent urban cycles. With the exception of the site of its famous sanctuary, which occupies one (*Alonia*) of the four terraces on which evidence of Late Bronze Age settlement activity has been confirmed, the rest of the landscape and, especially, the other three terraces (*Marchello*, *Mantissa* and *Hadjiabdoulla*), were gradually abandoned before the inception of the Roman era (mid-1st century BC) (Fig. 2). The transfer of the official harbour to Nea Paphos, almost certainly



Figure 2. Visible monuments and site locations within the Palaepaphos urban landscape. Background: aerial orthophoto of 2008; source: Department of Lands and Surveys, Cyprus. Drafted by A. Agapiou (PULP@)

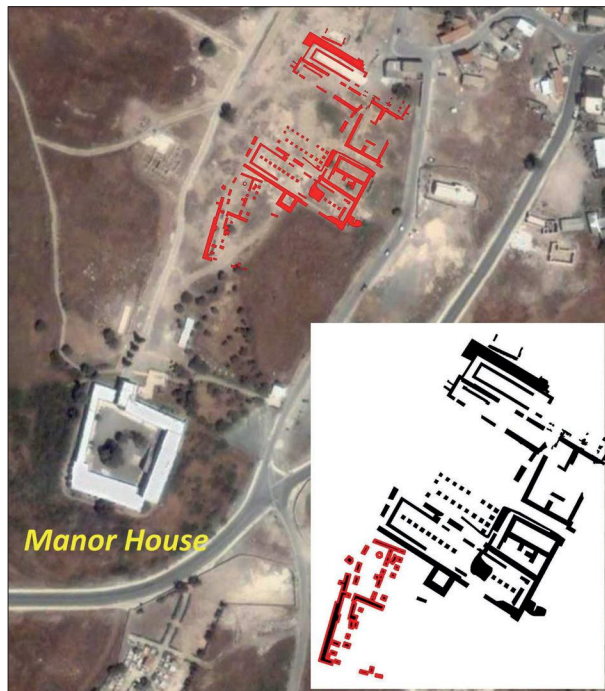


Figure 3. Ground plan of the ruins of the sanctuary with the Mediaeval Manor House to the south and the village of Koukklia to the northeast, superimposed on Google Earth satellite image. A. Sarris and A. Agapiou (PULP@)

by the last local king, Nikokles, in the 4th century BC and, not long after, the loss of its political status to Nea Paphos, spared the better part of the ancient landscape of Paphos from obliteration by later development projects (cf. Iacovou 2014: 167).

To this day, the only visible built monument of the Late Cypriot period in Paphos is the megalithic *temenos* of the sanctuary (Fig. 3), which has 'the longest unbroken cult tradition in Cyprus—from the Late Bronze Age (c.1200 BC) to the Late Roman period (end of the 4th c. AD)' (Maier 2000: 496; 2007). Our knowledge of the Late Cypriot landscape of Paphos is, therefore, largely based on ceramic evidence collected from tombs and well fillings (cf. von Rüdén *et al.* 2016; Georgiou 2019). A small but significant amount of residual MC III ceramic material, for which a recent paper by Lindy Crewe and Artemis Georgiou (2018: 56) provides a concise analysis (also, Georgiou 2019), suggests that the site was founded during the transition from Middle Cypriot to Late Cypriot, like almost all the Late Bronze Age gateways of Cyprus. The idea that Paphos was founded as the terminal link in a chain of hinterland settlements that follow the river Dhiarizos from the foothills of the Troodos to the coast, was promoted and defended by two pioneering studies. Giorgos Georgiou's, regrettably unpublished, 'Topography of Human Settlement in Cyprus in the Early and Middle Bronze Age' (2007) provided the first comprehensive study of site distribution in the catchment of Paphos from the 3rd millennium BC to

the end of the Middle Cypriot period. Pioneered by Athos Agapiou, the digital analysis of site distribution in the region of Paphos with the use of GIS provided a preliminary record of the settlement pattern to the end of LC IIIA (Agapiou *et al.* 2013).

Contrary to the evidence from the north coast of Cyprus (Webb & Frankel 2013; Webb 2019), which confirms incipient stages in the emergence of socio-political complexity in relation to ports of call since the Philia phase of the Early Bronze Age (see Webb 2013: 59 for the gateway of Vasilia), the configuration of the human territory of Paphos in the later 3rd millennium BC shows no signs of contact with the south coast; in fact, the Early Cypriot period in the region remains a mystery (consult Georgiou 2019: 202). The crucial horizon for the development of the catchment of Paphos from an 'un-central landscape' (for the term, Papantoniou & Vionis 2019) to the economic territory of the first polity of southwest Cyprus was initiated with the colonisation of the coastal landscape in MC III–LC IA. Analyses of the available evidence from the hydrological basin of Paphos show that the number of sites recorded in the catchment in MC III–LC IA is nearly double by comparison to the earlier Middle Cypriot phase (45 versus 25), and includes the first evidence of activity at the site where the urban centre of Paphos was to grow (Georgiou 2007: 425, 477). However, it also points to the colonisation of another coastal location, which is to this day known as Yeroskipou, the Sacred Gardens of Aphrodite. It is therefore likely that the sites of Paphos and Yeroskipou had been founded as the terminal links of two different site clusters (consult Fig. 1); both originate near the copper and timber resources of the southwest foothills of the Troodos but they mark two different routes to the south coast: the eastern route is along the river valley of Dhiarizos; the western route along the river valley of Ezousa (Iacovou 2012a: 60; Agapiou *et al.* 2013). Although a survey and exploration of the landscape of Yeroskipou is severely hindered by modern development projects, the earliest ceramic evidence from the neighbouring cluster of sites confirms significant activity in MC III–LC IA (see Georgiou 2019: 204, 208), also in LC IB–IIA when 'the focus of occupation was transferred to the coast' (Crewe & Georgiou 2018: 64). The mouth of the Ezousa next to Yeroskipou could have functioned as an alternative, or competing, gateway to Paphos.

The founders of Paphos and the slow pace towards central authority

Landscape Archaeology is reaching the stage when we can write the 'cultural biography' of the site [...], whether farm or great city, able to support or challenge historical evidence, but also providing essential complementary insights (Bintliff 2013: 68).

The macro-scale site distribution analysis of the catchment in combination with the medium-scale landscape analysis from the settlement site of Paphos allows us to approach the establishment pattern of the founders (ca 1700 BC), and to follow them to the end of LC IIIA (ca 1200–1150 BC). They had come from different settlements of the hinterland, maybe also from ‘between’ sites such as Kissonerga *Skalia*—as suggested by Crewe and Georgiou (2018: 64)—to service the needs of a coastal station. The sharp drop observed in the number of LC IB sites in the hinterland (Agapiou *et al.* 2013: 178–179, fig. 4), also the abandonment of Kissonerga *Skalia*, are attributed to nucleation processes related to the foundation of the gateway of Paphos (Crewe & Georgiou 2018: 64–65). It was through this maritime base that the region of Paphos came out of its isolation; it initiated contacts with other regions of the island (cf. Iacovou 2014: 164; Georgiou 2019: 210), and when a central authority was established that controlled the extraction and transportation of raw resources (presumably, copper and timber), Paphos could participate in the complex economic model of the Late Bronze Age. As early as 1951, Peter Megaw commented that the ‘discovery of quantities of copper slag’ from the lowest, Late Bronze Age layers of the sanctuary provides ‘an explanation of the wealth of the ancient city’ (Megaw 1951: 13; Iacovou 2012a: 66). An abundant supply of high-quality timber and cupriferous sources, whose exploitation has left slag heaps in the Paphos forest (Stos-Gale *et al.* 1998), lie at a distance of 25km from the sanctuary. PULP has recently initiated a new survey of these slag deposits—several of the large ones have been radiocarbon dated to Late Antiquity—in order to record their geolocation and calculate their volume (Iacovou 2014: 170–172, fig. 5).

The heterogeneous provenance of the settlers is strongly expressed in the dispersed pattern of their establishment on all four of the main plateaus, which impose a natural fragmentation of what was to become the urban landscape of the polity some centuries later. LC I tomb clusters were installed next to the living quarters, and this arrangement continued to the end of LC IIIA (Georgiou 2019: 196–200, for a detailed analysis per cluster). The founders of Paphos did not establish a common burial ground. Having neither a common provenance, nor a common identity, each group kept its burials close to home. This practice is well documented in newly founded gateways such as Enkomi, for which Priscilla Keswani argues that the first settlers placed their tombs near their houses ‘to symbolize, through the immediate presence of their ancestors, their local identity and their rights to local residence and resources’ (Keswani 2012: 189–190). The site clusters of Paphos do not necessarily represent sharply differentiated settlements, rather distinct locations accentuated by the physical topography. At this stage of the research, it would be premature to propose that ‘Palaepaphos might have been more an

agglomeration of several smaller settlements, which led only in the following period to a *synoikismos*’ (von Räden 2016a: 19).

When can the currently available material evidence defend the rise of a central authority? One that could have maintained secure communication routes from the Paphos forest and could have had primary resources safely transported all the way south to its harbour for export? ‘The LC IB–IIA periods mark the emergence of the political and economic mechanisms that replaced early exchange networks dealing with the flow of goods within the Dhiarizos valley’ (Georgiou 2019: 210). At the moment, however, it does not look as if Paphos had unified the whole of the extensive territory of the catchment—beyond the Dhiarizos Valley (consult Fig. 1)—under a hierarchical authority by LC IIA. Evidence that can support its independent involvement in Mediterranean trade networks before LC IIC–IIIA is scarce (see below). This delay may be associated with the activity of a second gateway at the terminal point of Ezousa (i.e. Yeroskipou), where a substantial number of sites were clustered. Georgiou (2019: 209) points out that ‘[a]mong these stand out the MC III–LC IA tombs excavated at Timi *Sentouztin tou Rafti* and Anarita *Retzepis* that were equipped by wealthy ceramic and metallic finds, illustrating the prosperity attained by these communities at the opening of the LBA’. If Paphos and Yeroskipou acted as two competing centres that served two transport systems in two distinct river valleys, the fragmentation of the economic landscape could explain Paphos’ slow process to becoming the region’s central place.

Although Paphian tombs that were established in LC I continued to be used until LC IIIA (cf. Maier & von Wartburg 1985: 146; Catling 1979: 272–274), a peremptory comparison with the Late Cypriot tombs of Enkomi and Hala Sultan Tekke (cf. Crewe 2009; Fischer 2020: 204–208, 217) would lead us to question the active participation of Paphos in the Mediterranean trade system before LC IIC–IIIA. Imported items are no match for the luxuries deposited in tombs of the east and south coasts. Despite its western geographical location, the material that reached Paphos from the Aegean remains unimpressive (cf. Georgiou 2016: 191–196). Based on the currently available evidence, the number and type of imported Minoan and Mycenaean ceramics do not support substantial and direct commercial exchanges between Paphos and Aegean centres during the heyday of the Mycenaean palaces. It is more likely that the limited number of Aegean vessels would have reached the site indirectly after they had been imported through some other early Late Cypriot gateways. Prime candidates are the unidentified coastal sites in the bay of Morphou, whose existence is presumed by the industrial installations and tombs of *Toumba tou Skourou* on the Ovgos River (Vermeule & Wolsky 1990: 381) and the LC I necropolis of Ayia Irini on the coast further north (Pecorella 1973: 19–24, pl. V; Pecorella & Rocchetti 1985: 193–194;

Webb 2022). Apparently, Morphou Bay served as the entry point for some of the earliest Late Minoan and Late Helladic imports to Cyprus (Georgiou 2016: 191; Crewe & Georgiou 2018: 55). However, although the island was practically flooded with LH IIIA2–IIIB1 pictorial vases (cf. Vermeule & Karageorghis 1982), no imported pictorial vases have been reported from the region of Paphos. Instead, in LC IIC, as soon as the 'import of these vases dried up', Paphos together with Enkomi and Kition established their own workshops for the local production of pictorial vases of the so-called Rude/Pastoral Style (cf. Mountjoy & Mommsen 2015: 474–475, fig. 36; Mountjoy 2018: 812).

Urbanism and territorial expansion: Paphos in the 13th–12th centuries BC

The limited access of Paphos to precious raw materials and exotica changes drastically in LC IIC–IIIA. Locally produced elite crafts made of imported gold and ivory (cf. Catling 1968; Maier & von Wartburg 1985: 147 on ivory waste from *Evreti*) are manufactured by resident craftsmen and an Astarte-on-the-Ingot bronze figurine from *Teratsoudhia* Tomb 104 (Karageorghis 1990: 29, 59) alludes to Paphos' investment in the copper trade (Webb 1999: 232–236; Georgiou 2017: 215). Hence, at the time when the generalised Mediterranean crisis was beginning to affect Cypriot polities, in the tombs of Paphos we observe a marked increase of wealth and status items, which reaches a peak in the 12th century BC. More importantly, it is evident that the human environment of Paphos had been enriched with specialised craftsmen, whose work would have been supported by an affluent local elite. The publication of the *Evreti* well fillings (von Rüden *et al.* 2016) is a most valuable contribution regarding the crafts produced in LC IIC and LC IIIA within the urban nucleus of Late Bronze Age Paphos (Fig. 4). In fact, some of the spectacular burial gifts that accompanied the LC IIIA interment in *Evreti* Tomb VIII, including bimetallic iron knives with bronze rivets (Catling 1968; Sherratt 1994: 69–70), could have been manufactured in the nearby crafts' quarter of *Evreti*. 'Especially the almost 2kg of elephant ivory seems to exhibit almost the whole *chaîne opératoire* of the craft and clearly points to a workshop debris' (von Rüden 2016b: 420). The material from the wells—pottery and specialised crafts—will soon have to be studied against the burial assemblages of 44 tombs excavated in the adjacent locations of *Evreti*, *Asproyi* and *Kaminia* between 1951 and 1954, which Hector Catling (1979: 274–275) had undertaken to publish in 1954. Thanks to Richard Catling, the posthumous publication of these tombs (Catling 2020) appeared shortly after the present paper was submitted to the editors. With 36 of the 44 tombs containing LC IIIA burials (cf. von Rüden 2016a: 18), these assemblages will enable a much better assessment of the socio-economic landscape at the time of the construction of the *temenos* circa 1200

BC (cf. Maier & von Wartburg 1985: 149; Maier 2004: 39).

The construction of the *temenos* in relation to a port lagoon

If we upload the Late Cypriot tomb and site clusters on the geomorphological map of Palaepaphos (i.e. *Alonia*, *Asproyi*, *Eliomyliá*, *Evreti*, *Hadjiabdoulla*, *Kaminia*, *Mantissa*, *Marchello* and *Teratsoudhia*), we will observe that they are closely distributed to the east, north and west of the narrow streambed of *Loures* (Fig. 5). This is one of the reasons to suggest that the natural cove, which must have served as a protected anchorage since the foundation horizon of Paphos, may have disappeared under the silt at the mouth of *Loures* (cf. Iacovou 2013b: 286). The other is the location chosen for the erection of the megalithic *temenos*. Copper slag found in the sanctuary's foundation layers (above, Megaw 1951: 13) suggests that, as in Kition Temple 1, copper working was practised in workshops within the sanctuary precinct. If, as suggested by Susan Sherratt (1998: 300, 304) and Jennifer Webb (2014: 628–630), the urban sanctuaries of Enkomi and Kition acted as the managers of the export trade in LC IIIA, proximity to harbour facilities would have been 'the key factor in the initial location of the sacred area' (Webb 1999: 287). The *temenos* of Paphos, just like the contemporary and equally monumental *temenos* of Kition, ought to have been able to oversee and control its harbour (cf. Iacovou 2019: 219). The west side of *Loures* is defined by the slopes of *Alonia*, the plateau on which the *temenos* was erected close to 500 years after the foundation horizon of Paphos. If the lake-size lagoon that had served as the gateway's first anchorage—its existence was recorded in historical treatises until the 18th century AD (cf. Iacovou 2014: 166; 2019: 216)—was situated in *Loures* then, based on viewshed analysis, from the *temenos* one would have had an unimpaired visual contact with the harbour. Still, the location suggested for the first anchorage of Paphos remains hypothetical; it should be viewed with caution until an ancient harbour palaeo-geographic project can provide answers regarding changes along the southwestern coastline of the island, as it has for the southeastern coastline (Morhange *et al.* 2000).

A non-monumental sanctuary may have existed on the site from early on. On the evidence of sherds, dating to around 1400 BC, 'we can at least not exclude earlier ritual activities' (von Rüden 2016a: 17–18). However, the monumental enclosure was constructed close to half a millennium after the foundation of the gateway of Paphos. The construction of this emblematic sacred edifice required the employment of engineers and stone masons and a massive deployment of human resources on behalf of a central authority. Evidently, before work on the *temenos* had commenced, Paphos had ascertained its authority as the central place of an extensive Late Cypriot polity.



Figure 4. Palaepaphos site locations as seen from an oblique low altitude image taken during the October 2020 UAV campaign performed by K. Themistocleous and A. Agapiou of the Eratosthenes Research Centre, Cyprus University of Technology (PULP@)

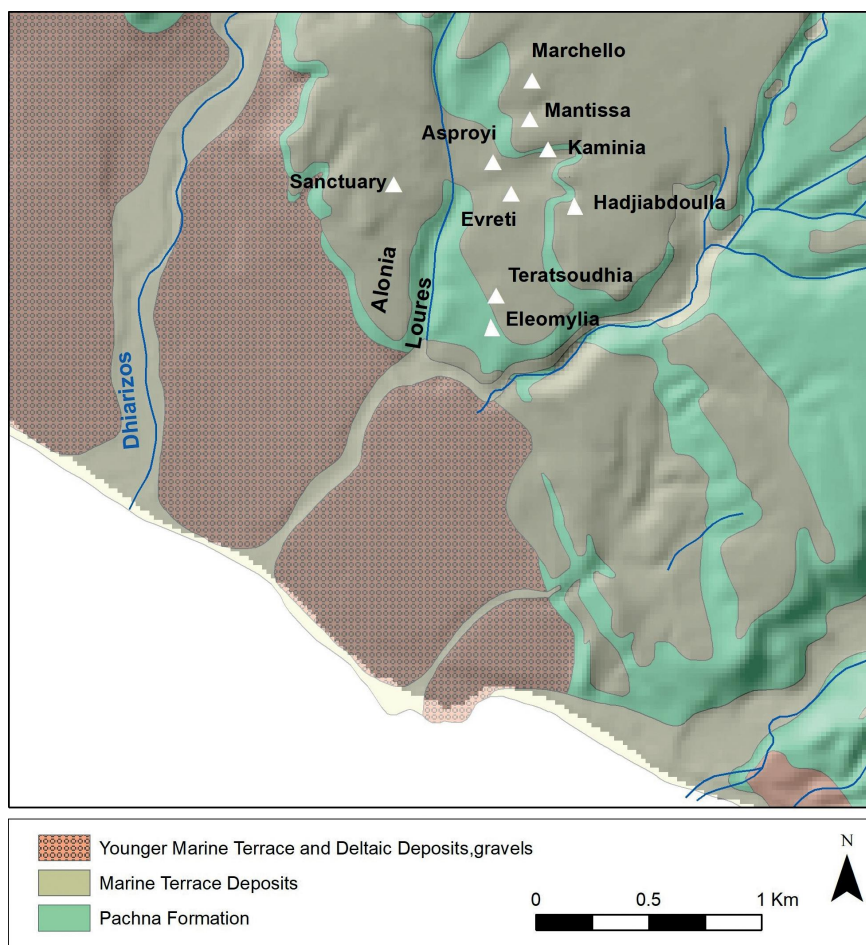


Figure 5. Geological map of the wider Palaepaphos area with the location of Late Cypriot burial clusters. Digital geological data from the Cyprus Geological Survey Department. Drafted by A. Agapiou (PULP@)

The locally manufactured White Painted Wheelmade III Paphos pottery identified at Tarsus (Mommsen *et al.* 2011) and also at sites along the Levantine coast from Tel Kazel to Ashkelon, as well as further inland (e.g. Megiddo) (cf. Mountjoy & Mommsen 2015: 487–488, fig. 43; Mountjoy 2018: 812, 1271, fig. 686), suggests that Paphos had developed a prominent profile in Mediterranean exchange networks in the course of the crisis years. These networks were no longer controlled by palace-based economies; the latter, as Sherratt (1998) has claimed in a seminal paper on the 'Sea Peoples', had been undermined by the subversive activities of smaller mercantile units operating from coastal centres in the Levant and Cyprus. One of these coastal urban centres that profited from the dissolution of the Age of Internationalism and the establishment of independent trading partnerships between city-states, was the polity of Paphos. The political and economic autonomy it achieved in the 12th century lasted until the whole of the island lost its independence to the Ptolemies.

The Late Bronze Age city of Paphos

Paphos, the first central place to control the southwest region of Cyprus, did not grow around a sanctuary; it grew around a harbour (Iacovou 2019: 215). However, 'cities are produced by the place-making activities of their inhabitants at various scales' (Fisher *et al.* 2019: 473), and Paphos became a veritable city when the sanctuary received the *temenos* that has since remained the iconic sacred monument of ancient Cyprus (Fig. 6). In the course of LC IIC–IIIA, when urbanism came to an end in many, especially coastal, polities across Cyprus, the establishment of Sanctuary I at Paphos and Temple 1 at Kition, 'both constructed of enormous ashlar blocks, [which] show that local authorities were able to command substantial investments of labour' (Webb 2014: 627), reveal the institutionalisation of control over their respective economic territories and resources through ritual practise. Hence, Paphos became a veritable city in the Age of Transformations.

Besides the massive investment made towards the construction of a ritual centre, it is also likely that a building of cut stone had been constructed on *Hadjiabdoullah*, the most extensive of the plateaus within the urban landscape of the city, which is situated close to 1km east of the sanctuary and only 300m from the *Evreti* wells. PULP's fieldwork on the plateau revealed an extensive industrial and storage complex (cf. Iacovou 2019: 223, figs 18–21); it occupies the north side and slope of the terrace and lies to the west of a monumental building of cut stone, which was partially excavated in the 1950s and has since been known as the Late Archaic to Classical palace (Maier 2004: 74; recently, Fisher 2020: 317) (Fig. 7).

The two complexes were, evidently, constructed in the context of an ambitious place-making strategy on behalf of an agency whose goal was to associate itself

with a new citadel (Iacovou 2019: 222). Both of them appear to have been built circa 500 BC, following the careful levelling of the area down to bedrock. Their construction, especially that of the palace, employed re-used and often re-cut drafted blocks (Fig. 8). Since the terrace has produced no sign of habitation in Cypro-Geometric or early Cypro-Archaic times, this fine stonework must have originally belonged to a LC IIC–IIIA edifice (cf. Blackwell 2010: 160, on the use of ashlar masonry from Enkomi in the Cypro-Archaic royal necropolis of Salamis). PULP's trial trenches to the south of the palace have produced substantial quantities of Late Cypriot ceramic material; their study by Georgiou (2017: 217; 2019: 198) revealed that the plateau had been inhabited throughout the Late Cypriot era. It was, therefore, an integral part of the Late Bronze Age settled landscape of Paphos. Admittedly, a holistic study of the *Hadjiabdoullah* site cluster in the Late Cypriot period will require more field research, especially along the still unexplored east and south sector of the terrace. However, it looks as if a new local dynasty that had come to power circa 500 BC purposefully chose to establish its administrative centre (cf. Iacovou & Karnava 2019) on a site where the memory of the ancestors was still visible. In this respect, the dynasty that ruled Paphos in the course of the Cypro-Classical era, until the end of the 4th century BC, associated itself with, and claimed descent from, the founders of Paphos (cf. Fisher 2020: 331 on 'Remembering' in relation to ancestral and territorial claims). Interestingly, in the royal inscriptions of this period (cf. Satraki 2012: 394–398 with illustrations), the *basileus* (king) of Paphos is also identified as the priest of the *wanassa* (the goddess) (cf. Maier 1989), which is another ancestral claim (Iacovou 2008b: 649): they identified and promoted themselves as descendants of the autochthonous legendary king Kinyras, who was the goddess' beloved priest (Pindar, *Pyth.* 2, 15–16).

LC IIIA to LC IIIB: landscape and material culture transformations

The archaeological data from Paphos show no evidence of violent destruction and, given that today the only visible monument of the Late Cypriot period is the *temenos*, it is hard to comprehend why Paphos is included in a list of sites where '[d]uring if not just prior to the Protohistoric Bronze Age [...] on Cyprus, various monumental structures were destroyed at several sites: Enkomi, Kition, Kouklia Palaipaphos, Myrtou *Pigadhes*, Maroni *Vournes*, Kalavassos *Ayios Dhimitrios*, and Alassa *Paleotaverna*' (Knapp & Manning 2016: 132). The list also includes other sites where there is no recorded evidence for the destruction of monumental structures (e.g. Kition and Maroni *Vournes*). The only registered destruction suffered by the *temenos* in Paphos took place in the Mediaeval period when its ashlar blocks were used as



Figure 6. Palaepaphos Sanctuary I; internal view of the southwest corner of the surviving Late Cypriot megaliths of the temenos (photo by the author; PULP@)



Figure 7. Orthophoto of the palace (East complex) and the workshops (West complex) on the north side of the Hadjiabdoullah plateau; produced after the June 2020 UAV campaign performed by K. Themistocleous and A. Agapiou of the Eratosthenes Research Centre, Cyprus University of Technology (PULP@)

millstones for the cane sugar refinery (cf. Maier 2004: 39).

Many sites on the island were abandoned before LC III B and others were established after LC III B (e.g. Amathous), in the Cypro-Geometric period. This makes Paphos one of a couple of urban landscapes

on the island where changes and transformations associated with the period of the crisis and the transition to the new economic system of the Early Iron Age are archaeologically visible and can be studied in some detail (on the case of Kition, see above). The most dramatic transformation affecting



Figure 8. Re-used and/or re-cut ashlar blocks on the external south wall of the palace on the Hadjiabdoullah plateau (photo by the author; PULP@)

the urban environment of the city of Paphos is the closure of the Late Cypriot family tombs: all Late Cypriot tomb clusters were abandoned. There is no evidence for a LC IIIB or a CG I burial in any of the tombs that held LC IIC–IIIA interments in Paphos. As a rule, uninterrupted continuity in the use of LC IIC–IIIA tombs is not recorded on the island, and the re-use of Late Bronze Age tombs in the Iron Age is a rare phenomenon (Hatzaki & Keswani 2012: 318). To the extent that in Paphos the Late Bronze Age tombs were the family sepulchres of the founders since LC I, it is likely that the transformed social and economic environment did not work in favour of the old local families. LC IIIA is the last phase of *intra* settlement burials all over Cyprus; it is also the phase in which we observe the appearance of a new and short-lived type of tomb that did not last for long after the 12th century BC: the shaft grave, a simple shaft destined for a single interment, though not for a destitute individual, has been recorded at Paphos and Kition (cf. Karageorghis 2000: 257), as well as at Enkomi and Hala Sultan Tekke (Niklasson-Sönnerby 1987; Niklasson 1999). Keswani (1989: 70; 2004: 96–97) has attributed the proliferation of shaft graves in LC IIIA to the presence of foreigners, functionaries or specialists, in general people detached from their place of origin. In the city of Paphos, 21 shaft graves were excavated at *Kaminia* separately but not far from either the *Asproyi* or the *Evreti* Late Cypriot chamber tombs (Catling 1979, 2020). If the individuals interred

in the *Kaminia* tombs did not belong to one of the old, established family groups of Paphos, who could these newcomers have been, for whose interment shaft graves were used? The resident craftsmen and stone masons, whose specialised skills (e.g. in turning raw metal into intricately crafted jewellery and vessels, in hammering iron for the production of some of the earliest iron tools and weapons in Cyprus, in drafting and erecting huge blocks of stone) are not recorded in the region of Paphos before LC IIC–IIIA. Whether they had come from other Cypriot sites and/or from abroad, they would have been attracted to Paphos as economic migrants (Coldstream 1994: 145), but they could not have owned an ancestral tomb.

My views regarding the absence of coherence in the material culture of the 12th century BC, and on the internally and externally generated migration movements that may have taken place in Cyprus as a result of the crisis years, have been presented elsewhere (cf. Iacovou 2012b, 2013c: 611). Homogeneity in the material culture of the island was restored in the early phase of the Cypro-Geometric period with the development of a new material expression, especially as regards the mortuary pattern and the ceramic production (Iacovou 2005). If shaft graves were a symptom of the 12th century BC, and of changes in the settled social fabric brought about by the establishment of people from abroad or from other regions of the island, they disappeared all the same from the Early Iron Age urban environment

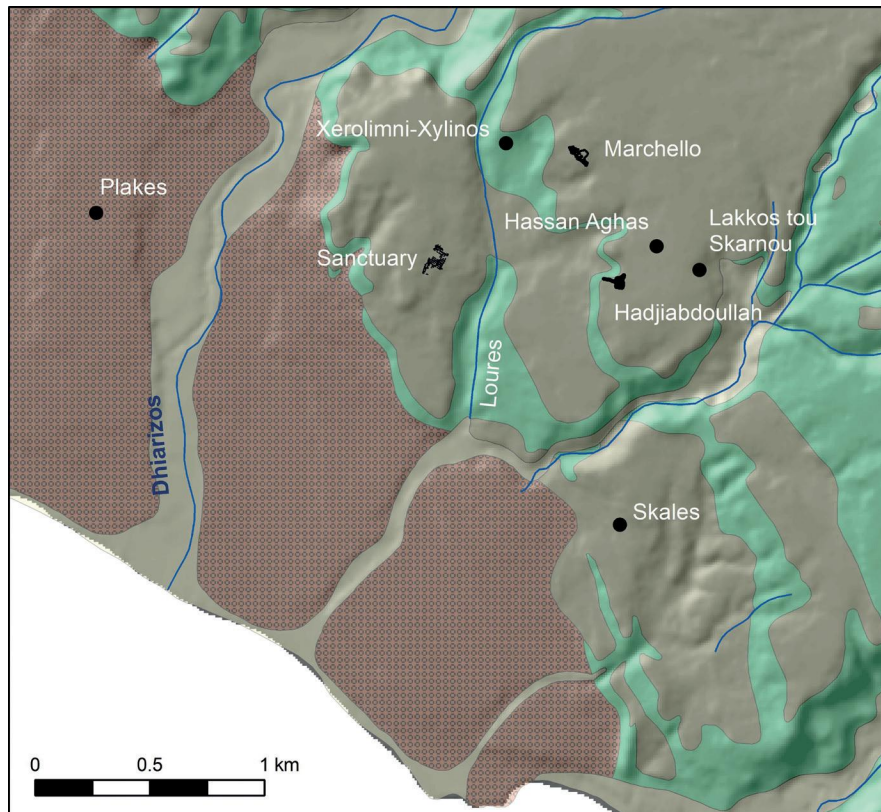


Figure 9. Geological map of the wider Palaepaphos area with the location of the Early Iron Age cemeteries. Digital geological data from the Cyprus Geological Survey Department. Drafted by A. Agapiou (PULP@)

together with the Late Cypriot chamber tombs. Intra-settlement burials were not established again anywhere in Cyprus during the Iron Age.

Although the Early Iron Age settlement of Paphos suffers from the same visibility problem as the Late Cypriot settlement structure (architectural remains seem to have been largely eradicated by Cypro-Achaic and Cypro-Classical buildings), the withdrawal of tombs from the habitation quarters is as evident at Paphos as it is throughout the island. The inauguration of new Early Iron Age community cemeteries is recorded as of the 11th century BC (LC IIIB–CG I) at *Skales*, *Lakkos tou Skarnou*, *Hassan Aghas*, *Xerolimni*, *Xylinos* and *Plakes* (cf. Karageorghis 1967, 1983; Karageorghis & Iacovou 1983; Flourentzos 1997; Raptou 2002; Karageorghis & Raptou 2014, 2016, 2019); hence beyond the four plateaus where the settlement had grown since its foundation (Fig. 9). In these rapidly expanding chamber-tomb cemeteries, we witness the introduction of a new wheelmade, fine-ware painted pottery. The skills and the imagination of the potters of Paphos in the production of a wide range of shapes in Proto-White Painted and White Painted I ware have not yet been matched by any of the other regional production centres (cf. Georgiadou 2014 on Cypro-Geometric ceramic production and regional workshops). Proto-White Painted is the hallmark of LC IIIB (Iacovou 1991), and Sherratt

(1991: 193–194) has eloquently described it as an ‘island wide, standardized, [...] mass-produced but quality controlled product’; it was the culmination of a long process of integration into a single spectrum of wheelmade pottery manufacture that had taken place in LC IIC–IIIA.

A new class of merchant aristocrats, an old scribal system and a new language

The early Cypro-Geometric tombs reveal that the specialised craft of the metalsmith was booming in Paphos. From the cemetery of *Plakes* on the west side of the Dhiarizos River to that of *Skales* more than 2km to the southeast of the sanctuary, rescue excavations by the Department of Antiquities have recovered monumental bronze amphoroid kraters, shield bosses, helmets with or without cheek pieces, mace-heads, *obeloi*, iron swords and bimetallic knives as well as gold jewellery and gold plaques embossed with the head of the Egyptian goddess Hathor (Karageorghis & Raptou 2014: pls XXIV–XXVIII, XLVIII–LII; 2016: pls VIII–XI, XIII–XIV, LXVI; 2019: 357, fig. 14). Besides registering an exceptionally high degree of specialisation that was not lost in the course of the crisis and the transformations, the local manufacture of these luxury items confirms that Paphos continued

to have access to copper sources that could be exchanged for tin and gold (cf. Karageorghis & Raptou 2014: 117). The content of many of these tombs also reveals the development of a new class of merchant aristocrats that were buried with their weapons and their symposium gear.

Of all the precious finds in these Cypro-Geometric tombs, the most eloquent with regard to Paphos' successful management of the socio-economic challenges presented by the era of transformations are two inscribed metal objects, which confirm the long-term continuity of Late Cypriot scribal technology. The Cypro-Minoan script was not lost like other systems (i.e. Linear B), which disappeared together with the complex palace societies that had used them as political economy tools. In addition, the inscribed bronze *obelos* from *Skales* Tomb 49 (Karageorghis 1983: 60–61, pl. 88) and the inscribed bronze bowl from *Skales* Tomb 235 (Karageorghis & Raptou 2016: 95, pl. 70.10) indicate that the Late Cypriot script of the island had been adopted by a new population that made it the scribal tool of a new language (Egetmeyer 2016; Steele 2019: 56). According to Anna Morpurgo-Davies and Jean-Pierre Olivier (2012: 112), the inscription of *Opheltas* on the *obelos* provides the missing link, which justifies '[t]he process of adaptation of the earlier script to the writing of Greek'. The new language, identified as the Arcado-Cypriot Greek dialect, is the one in which the first known kings of Paphos, Akestor and Eteandros, recorded their title as *basileis* on precious metal objects in the 7th century BC (Iacovou 2020: 250–254).

The Iron Age settlement pattern of the *chora* of Paphos: a research gap

The evidence from the site of Ancient Paphos confirms that the city of Paphos functioned as a place of economic and ideological centrality in the context of an autonomous Cypriot polity from circa the 13th century BC to the end of the 4th century BC. However, how the settlement structure of the *chora* of Paphos responded or was re-organised in the course of the transformative horizon, especially during the 12th century BC, but also later, during the ensuing Cypro-Geometric, Cypro-Achaic and Cypro-Classical periods, is unknown. Despite the original target of the Canadian Palaipaphos Survey Project, which was to investigate the 'spatial patterning ... of the settlements within an Iron Age kingdom' (cf. Rupp 2004: 63), to this day we have no comprehensive settlement pattern analysis of the hydrological basin of Paphos in the 1st millennium BC analogous to the one compiled by G. Georgiou, and digitally upgraded by Agapiou, for the Bronze Age (cf. Iacovou 2014: 164). The site hierarchy system of Paphos from the end of the Late Bronze Age to the end of the city-state's autonomy (circa 300 BC) constitutes a major research gap. This landscape analysis project, and hopefully also that

of the neighbouring Kouris River valley, should be considered prime research targets for the near future.

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Bibliography

- Agapiou, A., M. Iacovou & A. Sarris 2013: Spatial analysis of the Bronze Age sites of the region of Paphos in southwest Cyprus with the use of Geographical Information Systems, in F. Contreras, M. Farjas & F.J. Melero (eds), *CAA 2020—Fusion of Cultures: Computer Applications and Quantitative Methods in Archaeology, Granada, Spain, April 2010, (British Archaeological Reports International Series 2494), 177–183, Oxford*
- Åström, P. 1996: Hala Sultan Tekke—a Late Cypriote harbour town, in P. Åström & E. Herscher (eds), *Late Bronze Age Settlement in Cyprus: Function and Relationship (SIMA Pocket-book 126), 9–14, Jonsöred*
- Bintliff, J. 2013: Catchments, settlement chambers and demography: case studies and general theory in the Greek landscape from Prehistory to Early Modern times, in S. Bergerbrant & S. Sabatini (eds), *Counterpoint: Essays in Archaeology and Heritage. Studies in Honour of Professor Kristian Kristiansen (British Archaeological Reports International Series 2508), 61–69, Oxford*
- Blackwell, N.G. 2010: Mortuary variability at Salamis (Cyprus): relationships between and within the royal necropolis and the Cellarka cemetery, *Journal of Mediterranean Archaeology* 23, 143–167
- Cadogan, G. 1989: Maroni and the monuments, in E.J. Peltenburg (ed), *Early Society in Cyprus, 43–51, Edinburgh*
- Cadogan, G. 1996: Maroni: change in Late Bronze Age Cyprus, in P. Åström & E. Herscher (eds), *Late Bronze Age Settlement in Cyprus: Function and Relationship (SIMA Pocket-book 126), 15–22, Jonsöred*
- Cadogan, G. 2018: A step up: from Maroni *Vournes* to Kalavassos *Ayios Dhimitrios*, in L. Hulin, L. Crewe & J.M. Webb (eds), *Structures of Inequality on Bronze*

- Age Cyprus. Studies in Honour of Alison K. South (SIMA PB 187)*, 107–120, Nicosia
- Caraher, W., R.S. Moore, J. Noller & D. Pettegrew 2005: The Pyla-Koutsopetria Archaeological Project: first preliminary report (2003–2004 seasons), *Report of the Department of Antiquities, Cyprus*, 245–268
- Catling, H.W. 1968: Kouklia: Evreti Tomb 8, *Bulletin de correspondance hellénique* 92, 162–169
- Catling, H.W. 1979: The St. Andrews-Liverpool Museums Kouklia Tomb Excavation 1950–1954, *Report of the Department of Antiquities, Cyprus*, 270–275
- Catling, H.W. 2020: *Kouklia. Late Bronze Age and Early Iron Age Tombs at Palaepaphos 1951–1954 (British Archaeological Reports International Series 2994)*, Oxford
- Coldstream, J.N. 1994: What sort of Aegean migration?, in V. Karageorghis (ed), *Cyprus in the 11th Century BC*, 143–147, Nicosia
- Courtois, J.-C. 1971: Le sanctuaire du dieu au lingot d'Enkomi-Alasia, in C.F.-A. Schaeffer (ed), *Alasia I. Publié à l'occasion de la XX campagne de fouilles a Enkomi-Alasia sous la direction de Claude F.-A. Schaeffer (Mission archéologique d'Alasia IV)*, 151–362, Paris
- Crewe, L. 2007: *Early Enkomi: Regionalism, Trade and Society at the Beginning of the Late Bronze Age on Cyprus (British Archaeological Reports International Series 1706)*, Oxford
- Crewe, L. 2009: Feasting with the dead? Tomb 66 at Enkomi, in T. Kiely (ed), *Ancient Cyprus in the British Museum. Essays in Honour of Veronica Tatton-Brown (British Museum Research Publication 180)*, 27–48, London
- Crewe, L. & A. Georgiou 2018: Settlement nucleation at the beginning of the Late Bronze Age in Cyprus: the evidence from Palaepaphos, in L. Hulin, L. Crewe & J.M. Webb (eds), *Structures of Inequality on Bronze Age Cyprus. Studies in Honour of Alison K. South (SIMA PB 187)*, 53–70, Nicosia
- Devillers, B. 2008: *Holocene, Morphogenesis and Anthropisation of a Semi-Arid Watershed, Gialias River, Cyprus (British Archaeological Reports International Series 1775)*, Oxford
- Devillers, B., M. Brown & C. Morhange 2015: Paleo-environmental evolution of the Larnaca Salt Lakes (Cyprus) and the relationship to second millennium BC settlement, *Journal of Archaeological Science: Reports* 1, 73–80
- Dikaios, P. 1971: *Enkomi. Excavations 1948–1958: Volume II. Chronology, Summary and Conclusions, Catalogue, Appendices*, Mainz am Rhein
- Egetmeyer, M. 2016: Appendix V. A bronze bowl from Palaepaphos-Skales with a new Cypro-Minoan inscription from the Cypro-Geometric period, in V. Karageorghis & E. Raptou, *Palaepaphos-Skales. Tombs of the Late Cypriote IIIB and Cypro-Geometric Periods (Excavations of 2008 and 2011)*, 131–136, Nicosia
- Fischer, P.M. 2017: The 13th/12th century BCE destructions and the abandonment of Hala Sultan Tekke, Cyprus, in P.M. Fischer & T. Bürge (eds), “Sea Peoples” Up-to-Date. *New Research on Transformations in the Eastern Mediterranean in the 13th–11th Centuries BCE. Proceedings of the ESF-Workshop held at the Austrian Academy of Sciences, Vienna, 3–4 November 2014 (Contributions to the Chronology of the Eastern Mediterranean 35)*, 177–206, Vienna
- Fischer, P.M. 2020: The occupational history of the Bronze Age harbour city of Hala Sultan Tekke, Cyprus, *Egypt and the Levant* 29 (2019), 189–238
- Fisher, K.D. 2020: The materiality of ashlar masonry on Late Bronze Age Cyprus, in M. Devolder & I. Kreimerman (eds), *Ashlar. Exploring the Materiality of Cut-Stone Masonry in the Eastern Mediterranean Bronze Age (Aegis 17)*, 307–339, Louvain-La-Neuve
- Fisher, K.D., S.W. Manning & T.M. Urban 2019: New approaches to Late Bronze Age urban landscapes on Cyprus: investigations at Kalavassos-Ayios Dhimitrios, 2012–2016, *American Journal of Archaeology* 123, 473–507
- Flourentzos, P. 1997: The early Cypro-Geometric Tomb 132 from Palaepaphos, *Report of the Department of Antiquities, Cyprus*, 205–218
- Fourrier, S. 2018: Kition de Chypre, une ville sous la ville: dix ans de recherches sur la topographie urbaine (2008–2018), *Dialogues d'histoire ancienne* 44.2, 301–320
- Georgiadou, A. 2014: Productions et styles régionaux dans l'artisanat céramique de Chypre à l'époque géométrique (XIe–VIIIe s. av. J.-C.), *Bulletin de correspondance hellénique* 138, 361–385
- Georgiadou, A. 2018: The Vasilikos Valley within the Amathusian territory in the Iron Age: settlement patterns and inequalities, in L. Hulin, L. Crewe & J.M. Webb (eds), *Structures of Inequality on Bronze Age Cyprus. Studies in Honour of Alison K. South (SIMA PB 187)*, 155–167, Nicosia
- Georgiou, A. 2016: The imported Late Helladic and Late Minoan vessels, in C. von Rüden, A. Georgiou, A. Jacobs & P. Halstead (eds), *Feasting, Craft and Depositional Practice in Late Bronze Age Palaepaphos. The Well Fillings of Evreti (Bochumer Forschungen Zur Ur- und Frühgeschichtlichen Archäologie 8)*, 191–196, Rahden/Westf
- Georgiou, A. 2017: Flourishing amidst a ‘crisis’: the regional history of the Paphos polity at the transition from the 13th to the 12th centuries BCE, in P.M. Fischer & T. Bürge (eds), “Sea Peoples” Up-to-Date. *New Research on Transformations in the Eastern Mediterranean in the 13th–11th Centuries*

- BCE. *Proceedings of the ESF-Workshop held at the Austrian Academy of Sciences, Vienna, 3–4 November 2014 (Contributions to the Chronology of the Eastern Mediterranean 35)*, 207–227, Vienna
- Georgiou, A. 2019: Tracing the foundation horizon of Palaepaphos. New research on the early history of the Paphos region, in C.M. Kearns & S.W. Manning (eds), *New Directions in Cypriot Archaeology*, 190–218, Ithaca
- Georgiou, A. & M. Iacovou 2020: Cyprus, in I. Lemos & A. Kotsonas (eds), *A Companion to the Archaeology of Early Greece and the Mediterranean*, 1133–1162, Hoboken
- Georgiou, G. 2007: The Topography of Human Settlement in Cyprus in the Early and Middle Bronze Age. PhD Dissertation, University of Cyprus, Nicosia
- Gifford, J.A. 1978: Paleogeography of Archaeological Sites of the Larnaca Lowlands, Southeastern Cyprus. PhD Dissertation, University of Minnesota, Duluth
- Hadjisavvas, S. 1989: A Late Cypriot community at Alassa, in E. Peltenburg (ed), *Early Society in Cyprus*, 32–42, Edinburgh
- Hadjisavvas, S. 1991: LC IIC to LC IIIA without intruders: the case of Alassa-Pano Mandilaris, in J.A. Barlow, D.L. Bolger & B. Kling (eds), *Cypriot Ceramics. Reading the Prehistoric Record (University of Pennsylvania Museum Monograph 74)*, 173–180, Philadelphia
- Hadjisavvas, S. 2017: *Alassa. Excavations at the Late Bronze Age Sites of Pano Mantilaris and Paliotaverna 1984–2000*, Nicosia
- Hatzaki, E. & P.S. Keswani 2012: Mortuary practices and ideology in Bronze Age–Early Iron Age Crete and Cyprus: comparative perspectives, in G. Cadogan, M. Iacovou, K. Kopaka & J. Whitley (eds), *Parallel Lives. Ancient Island Societies in Crete and Cyprus (British School at Athens Studies 20)*, 307–330, London
- Hermay, A. 1999: Amathous before the 8th century BC, in M. Iacovou & D. Michaelides (eds), *Cyprus. The Historicity of the Geometric Horizon*, 55–67, Nicosia
- Hermay, A. 2013: Building power: palaces and the built environment in Cyprus in the Archaic and Classical periods, *Bulletin of the American Schools of Oriental Research* 370, 83–101
- Hermay, A. 2015: Amathus, capital of the kingdom and city-state, in A. Nicolaou-Konnari & C. Schabel (eds), *Lemosos. A History of Limassol from Antiquity to the Ottoman Conquest*, 1–48, Newcastle upon Tyne
- Iacovou, M. 1991: Proto-White Painted pottery: a classification of the ware, in J.A. Barlow, D.L. Bolger & B. Kling (eds), *Cypriot Ceramics. Reading the Prehistoric Record (University of Pennsylvania Museum Monograph 74)*, 199–205, Philadelphia
- Iacovou, M. 2005: Cyprus at the dawn of the first millennium B.C.E.: cultural homogenization versus the tyranny of ethnic identifications, in J. Clarke (ed), *Archaeological Perspectives on the Transmission and Transformation of Culture in the Eastern Mediterranean (Levant Supplementary Series 2)*, 125–136, Oxford
- Iacovou, M. 2007a: Advocating Cyprocentricism: an indigenous model for the emergence of state formation on Cyprus, in S. White Crawford, A. Ben-Tor, J.P. Dessel, W.G. Dever, A. Mazar & J. Aviram (eds), *“Up to the Gates of Ekron” (1 Samuel 17:52). Essays on the Archaeology and History of the Eastern Mediterranean in Honor of Seymour Gitin*, 461–475, Jerusalem
- Iacovou, M. 2007b: Site size estimates and the diversity factor in Late Cypriote settlement histories, *Bulletin of the American Schools of Oriental Research* 348, 1–23
- Iacovou, M. 2008a: The Palaepaphos Urban Landscape Project: theoretical background and preliminary report 2006–2007, *Report of the Department of Antiquities, Cyprus*, 263–289
- Iacovou, M. 2008b: Cultural and political configurations in Iron Age Cyprus: the sequel to a protohistoric episode, *American Journal of Archaeology* 112, 625–657
- Iacovou, M. 2012a: From regional gateway to Cypriot kingdom: copper deposits and copper routes in the *chora* of Paphos, in V. Kassianidou & G. Pappasavvas (eds), *Eastern Mediterranean Metallurgy and Metalwork in the Second Millennium BC. A Conference in Honour of James D. Muhly, Nicosia, 10th–11th October 2009*, 58–69, Oxford
- Iacovou, M. 2012b: External and internal migrations during the 12th century BC: setting the stage for an economically successful Early Iron Age in Cyprus, in M. Iacovou (ed), *Cyprus and the Aegean in the Early Iron Age. The Legacy of Nicolas Coldstream*, 207–227, Nicosia
- Iacovou, M. 2013a: Historically elusive and internally fragile island polities: the intricacies of Cyprus's political geography in the Iron Age, *Bulletin of the American Schools of Oriental Research* 370, 15–47
- Iacovou, M. 2013b: Paphos before Palaepaphos. New approaches to the history of the Paphian kingdom, in D. Michaelides (ed), *Epigraphy, Numismatics, Prosopography and History of Ancient Cyprus. Papers in Honour of Ino Nicolaou (SIMA PB 179)*, 275–291, Uppsala
- Iacovou, M. 2013c: Aegean-style material culture in Late Cypriote III: minimal evidence, maximal interpretation, in A.E. Killebrew & G. Lehmann

- (eds), *The Philistines and Other "Sea Peoples" in Text and Archaeology* (Archaeology and Biblical Studies 15), 585–618, Atlanta
- Iacovou, M. 2014: Political economies and landscape transformations. The case of ancient Paphos, in J.M. Webb (ed), *Structure, Measurement and Meaning. Studies on Prehistoric Cyprus in Honour of David Frankel* (SIMA 143), 161–174, Uppsala
- Iacovou, M. 2018: From the Late Cypriot polities to the Iron Age 'kingdoms'. Understanding the political landscape of Cyprus from within, in A. Cannavò & L. Thély (eds), *Les royaumes de Chypre à l'épreuve de l'histoire : Transitions et ruptures de la fin de l'âge du Bronze au début de l'époque hellénistique* (Bulletin de correspondance hellénique Supplément 60), 7–28, Athens
- Iacovou, M. 2019: Palaepaphos: unlocking the landscape context of the sanctuary of the Cypriot goddess, in G. Papantoniou, A. Sarris, C.E. Morris & A.K. Vionis (eds), *Unlocking Sacred Landscapes: Digital Humanities and Ritual Space* (Open Archaeology 5), 204–234
- Iacovou, M. 2020: Greeks on the island of Cyprus: "at home" on the frontiers, in F. De Angelis (ed), *A Companion to Greeks Across the Ancient World*, 248–271, Hoboken
- Iacovou, M. & A. Karnava 2019: An administrative ostrakon from Kouklia-Hadjiabdoullah, *Cahiers du Centre d'Études Chypriotes* 49, 37–52
- Karageorghis, V. 1967: An early XIth century B.C. tomb from Palaepaphos, *Report of the Department of Antiquities, Cyprus*, 1–24
- Karageorghis, V. 1983: *Palaepaphos-Skales: An Iron Age Cemetery in Cyprus* (Ausgrabungen in Alt-Paphos auf Cypern 3), Konstanz
- Karageorghis, V. 1990: *Tombs at Palaepaphos, 1: Teratsoudhia, 2: Eliomylia*, Nicosia
- Karageorghis, V. 2000: Cultural innovations in Cyprus relating to the Sea Peoples, in E.D. Oren (ed), *The Sea Peoples and Their World. A Reassessment* (University Museum Monograph 108), 255–273, Philadelphia
- Karageorghis, V. & M. Iacovou 1983: Cypro-Geometric material from Palaepaphos, *Report of the Department of Antiquities, Cyprus*, 123–137
- Karageorghis, V. & E. Raptou 2014: *Necropoleis at Palaepaphos from the End of the Late Bronze Age to the Cypro-Archaic Period*, Nicosia
- Karageorghis, V. & E. Raptou 2016: *Palaepaphos-Skales. Tombs of the Late Cypriote IIIB and Cypro-Geometric Periods* (Excavations of 2008 and 2011), Nicosia
- Karageorghis, V. & E. Raptou 2019: Palaepaphos-Skales Tomb 277. More prestigious burials, *Opuscula. Annual of the Swedish Institutes at Athens and Rome* 12, 327–367
- Keswani, P.S. 1989: Dimensions of social hierarchy in Late Bronze Age Cyprus: an analysis of the mortuary data from Enkomi, *Journal of Mediterranean Archaeology* 2, 149–186
- Keswani, P.S. 2004: *Mortuary Ritual and Society in Bronze Age Cyprus* (Monographs in Mediterranean Archaeology 9), London
- Keswani, P.S. 2012: Urban mortuary practices at Enkomi and Ugarit in the second millennium BC, in P. Pfälzner, H. Niehr, E. Pernicka & A. Wissing (eds), *(Re)Constructing Funerary Rituals in the Ancient Near East. Proceedings of the First International Symposium of the Tübingen Post-Graduate School "Symbols of the Dead" in May 2009* (Qatna Studien Supplementum 1), 183–203, Wiesbaden
- Killebrew, A.E. 2014: Introduction to the Levant during the transitional Late Bronze Age/Iron Age I and Iron Age I periods, in A.E. Killebrew & M.L. Steiner (eds), *The Oxford Handbook of the Levant, c. 8000–332 BCE*, 595–606, Oxford
- Knapp, A.B. 2013: *The Archaeology of Cyprus. From Earliest Prehistory through the Bronze Age* (Cambridge World Archaeology), Cambridge and New York
- Knapp, A.B. & S.W. Manning 2016: Crisis in context: the end of the Late Bronze Age in the eastern Mediterranean, *American Journal of Archaeology* 120, 99–149
- Maier, F.-G. 1989: Priest kings in Cyprus, in E. Peltenburg (ed), *Early Society in Cyprus*, 376–391, Edinburgh
- Maier, F.-G. 2000: The Sanctuary of the Paphian Aphrodite in the Roman period, in G. Ioannides & S. Hadjistryllis (eds), *Πρακτικά του τρίτου Διεθνούς Κυπρολογικού Συνεδρίου. Λευκωσία, 16–20 Απριλίου 1996*, Τόμος Α: Αρχαίον Τμήμα, 495–505, Nicosia
- Maier, F.-G. 2004: *Guide to Palaipaphos (Kouklia)*, Nicosia
- Maier, F.-G. 2007: From regional centre to sanctuary town: Palaipaphos in the Late Classical and Early Hellenistic period, in P. Flourentzos (ed), *From Evagoras I to the Ptolemies. The Transition from the Classical to the Hellenistic Period in Cyprus*, 17–33, Nicosia
- Maier, F.G. & M.-L. von Wartburg 1985: Reconstructing history from the earth, c. 2800 B.C.–1600 A.D. Excavating at Palaepaphos, 1966–1984, in V. Karageorghis (ed), *Archaeology in Cyprus 1960–1985*, 142–172, Nicosia
- Manning, S.W., D.L. Bolger, A. Swinton & M.J. Pointing 1994: Maroni Valley Archaeological Survey Project: preliminary report on 1992–1993 seasons, *Report of the Department of Antiquities, Cyprus*, 345–367
- Megaw, A.H.S. 1951: *Annual Report of the Director of Antiquities for the Year 1950*, Nicosia

- Mommsen, H., P.A. Mountjoy & A. Özyar 2011: Provenance determination of Mycenaean III C vessels from the 1934–1939 excavations at Tarsus-Gözlüküle by neutron activation analysis, *Archaeometry* 53, 900–915
- Morhange, C., J.-P. Goiran, M. Bourcier, P. Carbonel, J. Le Champion, J.-M. Rouchy & M. Yon 2000: Recent Holocene paleo-environmental evolution and coastline changes of Kition, Larnaca, Cyprus, Mediterranean Sea, *Marine Geology* 170, 205–230
- Morpurgo Davies, A. & J.-P. Olivier 2012: Syllabic scripts and languages in the second and first millennia BC, in G. Cadogan, M. Iacovou, K. Kopaka & J. Whitley (eds), *Parallel Lives. Ancient Island Societies in Crete and Cyprus (British School at Athens Studies 20)* 105–118, London
- Mountjoy, P.A. 2018: *Decorated Pottery in Cyprus and Philistia in the 12th Century BC: Cypriot III C and Philistine III C (Contributions to the Chronology of the Eastern Mediterranean 36)*, Vienna
- Mountjoy, P.A. & H. Mommsen 2015: Neutron Activation Analysis of Aegean-style III C pottery from 11 Cypriot and various Near Eastern sites, *Egypt and the Levant* 25, 421–508
- Muhly, J.D. 1984: The role of the Sea Peoples in Cyprus during the LCIII period, in V. Karageorghis & J.D. Muhly (eds), *Cyprus at the Close of the Late Bronze Age*, 35–55, Nicosia
- Niklasson, K.H. 1999: Late Cypriot III pit and shaft graves: explaining the 'phenomenon', in K.H. Niklasson (ed), *Cypriote Archaeology in Göteborg (SIMA Pocket-book 157)*, 97–98, Jonsered
- Niklasson-Sönnerby, K. 1987: Late Cypriot III shaft graves: burial customs of the last phase of the Bronze Age, in R. Laffineur (ed), *Thanatos : Les coutumes funéraires en Égée à l'Age du Bronze (Aegaeum 1)*, 219–225, Liège
- Papantoniou, G. 2013: Cypriot autonomous polities at the crossroads of empire: the imprint of a transformed islandscape in the Classical and Hellenistic periods, *Bulletin of the American Schools of Oriental Research* 370, 169–205
- Papantoniou, G. & A.K. Vionis (eds) 2019: *Central Places and Un-Central Landscapes. Political Economies and Natural Resources in the Longue Durée*, Basel
- Pecorella, P.E. 1973: Mycenaean pottery from Ayia Irini, in V. Karageorghis (ed), *Acts of the International Symposium 'The Mycenaeans in the Eastern Mediterranean'*, Nicosia
- Pecorella, P.E. & L. Rocchetti 1985: The Italian archaeological mission at Ayia Irini, in V. Karageorghis (ed), *Archaeology in Cyprus 1960–1985*, 193–194, Nicosia
- Peltenburg, E.J. 1996: From isolation to state formation in Cyprus, c. 3500–1500 BC, in V. Karageorghis & D. Michaelides (eds), *The Development of the Cypriot Economy, from the Prehistoric Period to the Present Day*, 17–44, Nicosia
- Raptou, E. 2002: Nouveaux témoignages sur Palaepaphos à l'époque géométrique d'après les fouilles de Kouklia-Plakes, *Cahiers du Centre d'Études Chypriotes* 32, 115–133
- Rupp, D.W. 2004: Evolving strategies for investigating an extensive *terra incognita* in the Paphos District by the Canadian Palaipaphos Survey Project and the Western Cyprus Project, in M. Iacovou (ed), *Archeological Field Survey in Cyprus: Past History, Future Potentials (British School at Athens Studies 11)*, 63–76, London
- Sarris, A., G. Stamatis, N. Papadopoulos, E. Kokkinou, S. Topouzi, E. Kokkinaki, E. Moissi, M. Iacovou, V. Kassianidou, G. Papasavvas, G. Papantoniou, M. Dikomitou & S. Stylianides 2006: Palaepaphos, Cyprus: the contribution of geographical information systems and geophysical prospection in the study of the archaeological topography and settlement patterns, in A. Figueiredo & G. Velho (eds), *Proceedings of the XXXIII International Conference Computer Applications and Quantitative Methods in Archaeology: "The World in Your Eyes"*, 199–204, Tomar
- Satraki, A. 2012: *Κύπριοι Βασιλείς από τον Κόσμοσσο μέχρι το Νικοκρέοντα. Η πολιτειακή οργάνωση της αρχαίας Κύπρου από την Υστερη Εποχή του Χαλκού μέχρι το τέλος της Κυπροκλασικής περιόδου με βάση τα αρχαιολογικά δεδομένα (Αρχαιογνωσία 9)*, Athens
- Satraki, A. 2019: Alambra: from "a Middle Bronze Age settlement in Cyprus" to a royal district, in C.M. Kearns & S.W. Manning (eds), *New Directions in Cypriot Archaeology*, 221–240, Ithaca
- Sherratt, E.S. 1991: Cypriot pottery of Aegean type in LC II–III: problems of classification, chronology and interpretation, in J.A. Barlow, D.L. Bolger & B. Kling (eds), *Cypriot Ceramics. Reading the Prehistoric Record (University of Pennsylvania Museum Monograph 74)*, 185–198, Philadelphia
- Sherratt, E.S. 1994: Commerce, iron and ideology: metallurgical innovation in 12th–11th century Cyprus, in V. Karageorghis (ed), *Cyprus in the 11th Century BC*, 59–107, Nicosia
- Sherratt, E.S. 1998: Sea Peoples and the economic structure of the late second millennium in the eastern Mediterranean, in S. Gitin, A. Mazar & E. Stern (eds), *Mediterranean Peoples in Transition. Thirteenth to Early Tenth Centuries B.C.E. In Honor of Professor Trude Dothan*, 292–313, Jerusalem

- South, A.K. 1989: From copper to kingship, in E. Peltenburg (ed), *Early Society in Cyprus*, 315–324, Edinburgh
- South, A.K. 1996: Kalavassos-Ayios Dhimitrios and the organisation of Late Bronze Age Cyprus, in P. Åström & E. Herscher (eds), *Late Bronze Age Settlement in Cyprus: Function and Relationship* (SIMA Pocket-book 126), 39–49, Jonsered
- South, A.K. 2002: Late Bronze Age settlement patterns in southern Cyprus: the first kingdoms?, *Cahiers du Centre d'Études Chypriotes* 32, 59–72
- South, A.K. 2013: Moving into the world: a region of southern Cyprus in the Late Bronze Age, in A.B. Knapp, J.M. Webb & A. McCarthy (eds), *J.R.B. Stewart. An Archaeological Legacy* (SIMA 139), 149–160, Uppsala
- South, A.K., P. Russell & P.S. Keswani 1989: *Vasilikos Valley Project 3: Kalavassos-Ayios Dhimitrios II. Ceramics, Objects, Specialist Studies* (SIMA 71.3), Göteborg
- Steele, P. 2019: *Writing and Society in Ancient Cyprus*, Cambridge
- Stos-Gale, Z.A., G. Maliotis & N.H. Gale 1998: A preliminary survey of the Cypriot slag heaps and their contribution to the reconstruction of copper production on Cyprus, in T. Rehren, A. Hauptmann & J.D. Muhly (eds), *Metallurgica Antiqua. In Honour of Hans-Gert Bachmann and Robert Maddin* (Der Anschnitt. Zeitschrift für Kunst und Kultur im Bergbau Beiheft 8), 235–262, Bochum
- Todd, I.A. 2004: Field survey in the Vasilikos Valley, in M. Iacovou (ed), *Archaeological Field Survey in Cyprus: Past History, Future Potentials* (British School of Athens Studies 11), 37–54, London
- Todd, I.A. 2013: *Vasilikos Valley Project 12. The Field Survey of the Vasilikos Valley Volume III. Human Settlement in the Vasilikos Valley* (SIMA 71.12), Uppsala
- Todd, I.A. & A.K. South 1992: The Late Bronze Age in the Vasilikos Valley: recent research, in G.C. Ioannides (ed), *Studies in Honour of Vassos Karageorghis*, 191–204, Nicosia
- Vermeule, E.T. & V. Karageorghis 1982: *Mycenaean Pictorial Vase Painting*, Cambridge
- Vermeule, E. & F.Z. Wolsky 1990: *Toumba tou Skourou. A Bronze Age Potters' Quarter on Morphou Bay in Cyprus*, Boston
- von Räden, C. 2016a: Introduction: the Late Bronze Age context in Palaepaphos, in C. von Räden, A. Georgiou, A. Jacobs & P. Halstead (eds), *Feasting, Craft and Depositional Practice in Late Bronze Age Palaepaphos. The Well Fillings of Evreti* (Bochumer Forschungen Zur Ur- und Frühgeschichtlichen Archäologie 8), 11–21, Rahden/Westf
- von Räden, C. 2016b: Conclusions, in C. von Räden, A. Georgiou, A. Jacobs & P. Halstead (eds), *Feasting, Craft and Depositional Practice in Late Bronze Age Palaepaphos. The Well Fillings of Evreti* (Bochumer Forschungen Zur Ur- und Frühgeschichtlichen Archäologie 8), 419–425, Rahden/Westf
- von Räden, C. A. Georgiou, A. Jacobs & P. Halstead (eds), *Feasting, Craft and Depositional Practice in Late Bronze Age Palaepaphos. The Well Fillings of Evreti* (Bochumer Forschungen Zur Ur- und Frühgeschichtlichen Archäologie 8), Rahden/Westf
- Webb, J.M. 1999: *Ritual Architecture, Iconography and Practice in the Late Cypriot Bronze Age* (SIMA Pocket-book 75), Jonsered
- Webb, J.M. 2013: The mantle of Vasilika: have Stewart's views on the centrality of the copper trade in prehistoric Bronze Age Cyprus stood the test of time?, in A.B. Knapp, J.M. Webb & A. McCarthy (eds), *J.R.B. Stewart: An Archaeological Legacy on Cyprus* (SIMA 139), 59–71, Uppsala
- Webb, J.M. 2014: Ritual as the setting for contentious interaction: from social negotiation to institutionalised authority in Bronze Age Cyprus, in A.B. Knapp & P. van Dommelen (eds), *The Cambridge Prehistory of the Bronze and Iron Age Mediterranean*, 619–634, Cambridge
- Webb, J.M. 2019: Shifting centres: site location and resource procurement on the north coast of Cyprus over the longue durée of the prehistoric Bronze Age, in G. Papantoniou & A. Vionis (eds), *Central Places and Un-Central Landscapes. Political Economies and Natural Resources in the Longue Durée*, 70–100, Basel
- Webb, J.M. 2022. Cyprus' maritime connectivity before and during the transition to the Late Bronze Age. The case of the north and northwest, in G. Bourogiannis (ed), *Beyond Cyprus: Investigating Cypriot Connectivity in the Mediterranean from the Late Bronze Age to the End of the Classical Period* (Athens University Review of Archaeology Supplement 9), 23–34, Athens
- Webb, J.M. & D. Frankel 2013: Cultural regionalism and divergent social trajectories in Early Bronze Age Cyprus, *American Journal of Archaeology* 117, 59–81
- Webb, J.M. & A.B. Knapp 2021: Rethinking Middle Bronze Age communities on Cyprus: "egalitarian" and isolated or complex and interconnected?, *Journal of Archaeological Research* 29, 203–253
- Yon, M. 1980: La fondation de Salamine, in M. Yon (ed), *Colloques Internationaux du CNRS Salamine de Chypre: histoire et archéologie*, 71–80, Paris
- Yon, M. 1999: Salamis and Kition in the 11th–9th century BC: cultural homogeneity or divergence?, in M. Iacovou & D. Michaelides (eds), *Cyprus. The Historicity of the Geometric Horizon*, 17–33, Nicosia