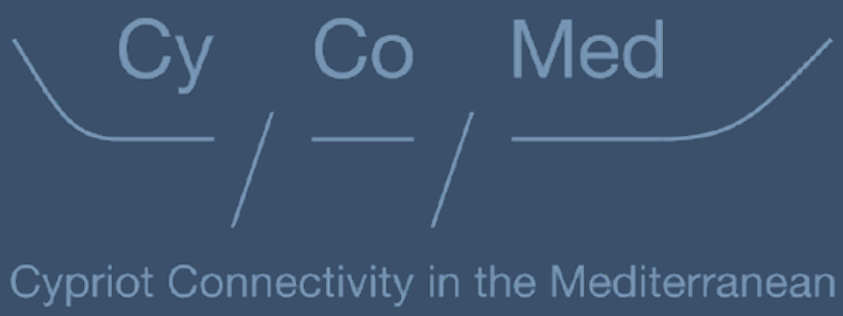
BEYOND CYPRUS:

INVESTIGATING CYPRIOT CONNECTIVITY IN THE MEDITERRANEAN FROM THE LATE BRONZE AGE TO THE END OF THE CLASSICAL PERIOD

Edited by Giorgos Bourogiannis



AURA SUPPLEMENT 9 • ΣΕΙΡΑ ΜΟΝΟΓΡΑΦΙΩΝ AURA 9

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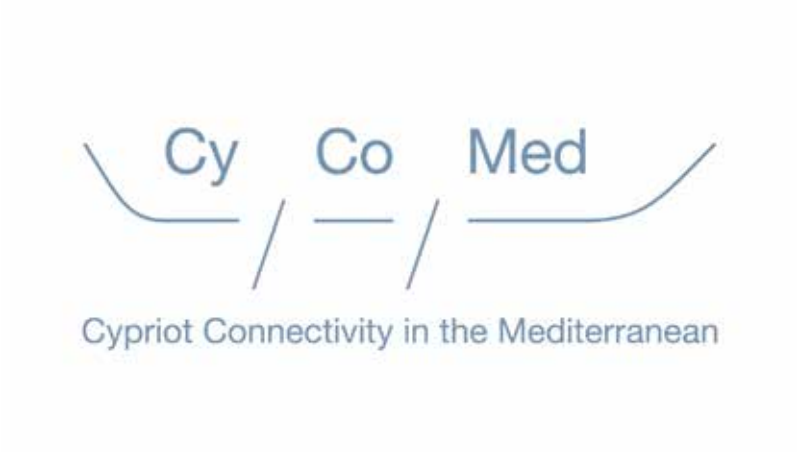

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PROOFREADING • ΤΥΠΟΓΡΑΦΙΚΗ ΕΠΙΜΕΛΕΙΑ

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Katerina Boukala-Karkagianni

Editorial • Εκδοτικό Σημείωμα

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In memory of Vassos Karageorghis
(1929–2021)

PREFACE

We need look no further than a map of the Mediterranean to understand the geographic importance of Cyprus. Few other places enjoy such a strategic position and few other areas in the Mediterranean have been so successful in building and retaining close cultural contacts with neighbouring areas. The seafaring activity of the Cypriots transcends most eras of the island's complex history and facilitated maritime connections. As a result, the island interacted with almost every major civilisation that influenced the Mediterranean politically and culturally, and its archaeology is an amalgamation of multiple mutual interactions with the whole of the Eastern Mediterranean and beyond. This enhanced mobility of the Cypriots resulted in enhanced connectivity processes, through which Cyprus became both the source and recipient of influences, and its people adept in cross-cultural interaction and adaptation.

Cyprus managed to successfully exploit its uniquely favourable environment for human mobility, the exchange of ideas and the spread of technologies and offers exceptional conditions for the archaeological investigation of such phenomena. Moreover, the island was successful in preserving its economic prosperity even during periods of major upheaval and economic recession, as in the case of the final years of the 13th century BC that witnessed the collapse of socioeconomic structures in many parts of the Eastern Mediterranean but left Cyprus largely unharmed. For all these reasons, the island is one of few cases in which Mediterranean connectivity is comprehensively documented over long periods of time and with no major gaps in its archaeological record.

Noticeably, although past scholarship often treated ancient Cyprus as an area of successive foreign dominations and influences –an approach that clearly underrated the island's cultural dynamism– modern scholarship has fully established Cyprus as an instigator of major political, cultural and economic accomplishments throughout antiquity. All these roles are closely linked to the island's economic vitality. Cyprus had what was needed to thrive economically: a location at the crossroads of major intra-Mediterranean maritime routes, good arable land, plenty of timber for shipbuilding, a regular coastline to accommodate port activities and a prestigious mineral commodity in abundance, copper. In addition to these natural and geo-strategic assets, the island has been systematically excavated and published, resulting in an extensive and thorough academic literature. The proliferation of publications on ancient Cyprus, especially during recent decades, is extraordinary given the island's modest size. It remains almost unmatched by other areas of the Mediterranean and provides a solid ground for the further development of Cypriot studies as an autonomous scholarly domain.

One of the areas that still offers ample scope for further examination is related to our understanding of Cypriot material and textual evidence from extra-insular sites, as well as to the definition of the role Cypriots may have played as participants in the maritime contacts of the ancient Mediterranean.

This brings me to the background of this volume, which is largely based on papers presented at the conference "Beyond Cyprus: Investigating Cypriot Connectivity in the Mediterranean from the Late Bronze Age to the End of the Classical Period". The conference was held digitally on 8–11 December 2020, under the auspices of the Institute of Historical Research of the National Hellenic Research Foundation, and was organised by the editor as part of a postdoctoral research project under the same name (acronym CyCoMed). The latter was funded by the Hellenic Foundation for Research and Innovation (HFRI) and the General Secretariat for Research and Innovation (GSRI) as part of the first HFRI advertisement for postdoctoral research projects, under grant agreement no. 481.

The principal research questions treated in this book can be outlined as follows:

1) How is Cypriot activity and, perhaps, presence in the ancient Mediterranean reflected by and in the material and epigraphic evidence?

2) How does Cypriot evidence found outside Cyprus change over time? How does it mirror the historical setting both on Cyprus and in the areas where this evidence is found?

3) What is the provenance and contextual setting of Cypriot evidence produced in non-Cypriot contexts?

4) How do different types of Cypriot evidence relate to each other?

5) What similarities or differences can be found in Cypriot evidence from different parts of the Mediterranean? How did Cypriot connections with each area differ?

6) What changes can be deduced from the study of Cypriot material and epigraphic evidence in the Mediterranean over a long period of time? How did patterns of interaction change and what role did the Cypriots play in these changing patterns?

7) What, potentially, was the role of Cypriot material and epigraphic evidence discovered abroad as a statement of a Cypriot cultural and/or political identity?

All 41 papers contained in this volume were externally reviewed and revised for publication. They cover a time range that spans approximately the Middle Bronze Age to the Roman period (early second millennium BC to ca AD 300). Equally numerous are the geographic entities examined. Apart from Cyprus, these include the Levantine littoral, Syria and Jordan, Egypt, Cilicia and Asia Minor, Greece and the Aegean, the Black Sea, southern Italy and Sicily, Sardinia, Carthage, as far west as Ibiza and the Iberian Peninsula. Even though the focus remains on the Eastern Mediterranean, the area which is discussed most extensively and in greater depth, the volume provides an overview of Cypriot evidence throughout the Mediterranean.

The index of sites and geographic terms at the end of the volume serves as an additional tool for the reader who wishes to gain an overview of the areas covered in this book. Since toponyms often have more than one valid spelling and/or ending (e.g. Kamiros and Kameiros, Miletos and Miletus, Halicarnassos and Halicarnassus etc), it was decided to respect and follow the authors' spelling preferences, not least because these are dictated also by each author's academic background or scholarly preference. Therefore, although multiple spellings are used for certain place names, especially in the Aegean, pages in the index include all mentions, since they refer to the same site.

Given that a broad spectrum of subjects, issues and types of evidence are explored in this volume (e.g. ceramics, terracotta and limestone statuettes, scripts and inscriptions, sealing practices, bronze artefacts and metalwork, weaponry, coinage, maritime transport, mercenaries, cult, iconography, museum collections, methods of scientific analysis etc), papers are arranged chronologically and geographically rather than thematically, although chapters focusing on similar types of evidence or following similar methodological paths are grouped together.

A volume of this scale can be realised only as a result of collective effort. I would therefore like to take this opportunity to warmly thank all those involved in this long and fruitful process, starting with the authors whom I thank for their time, expertise and prompt response during the different stages of the painstaking editorial work. Of major importance also was the thorough engagement and feedback of the reviewers, all of whom made valuable comments that facilitated both the work of the authors and my own. Special thanks are also due to the Institute of Historical Research of the National Hellenic Research Foundation in Athens, for hosting the conference and for providing technical support during the four days of the venue. Furthermore, I would like to extend my most sincere thanks to the AURA editorial committee for including this volume in its Supplement series and for providing support throughout.

My greatest gratitude, however, is owed to the three members of the volume's editorial team, for their diligent work, effectiveness and collaborative spirit: to Dr Jennifer Webb, who bravely undertook the daunting task of editing and improving the language of the whole volume, to Mrs Vanessa Pappa who scrutinised the footnotes and bibliography of all papers and offered substantial help with the index, and to Dr Katerina Boukala who was in charge of the final layout, for putting everything together and for turning everyone's contribution into a book.

It was unanimously decided to dedicate this volume in memory of Vassos Karageorghis (1929–2021). His passing on 21 of December 2021 marked the end of a great era in the history of Cypriot archaeology.

Giorgos Bourogiannis

January 2022

ABBREVIATIONS

Abbreviations of journals, ancient authors and standard reference works follow the guidelines of the *American Journal of Archaeology*. In addition, the following abbreviations are used in this volume:

CHRONOLOGICAL AND STYLISTIC TERMS

CA: Cypro-Archaic
CC: Cypro-Classical
CG: Cypro-Geometric
CM: Cypro-Minoan
EBA: Early Bronze Age
EC: Early Cypriot
EG: Early Geometric
EH: Early Helladic
EIA: Early Iron Age
EO: Early Orientalising
EPC: Early Protocorinthian
EPG: Early Protogeometric
LBA: Late Bronze Age
LC: Late Cypriot
LG: Late Geometric
LH: Late Helladic
LM: Late Minoan
LO: Late Orientalising
LPC: Late Protocorinthian
LPG: Late Protogeometric
MBA: Middle Bronze Age
MC: Middle Cypriot
MG: Middle Geometric
MM: Middle Minoan
MPG: Middle Protogeometric
PC: Protocorinthian
PG: Protogeometric

PGB: Protogeometric B
SG: Sub-Geometric
SPG: Sub-Protogeometric

CERAMIC AND DECORATIVE TERMS

BichrWM: Bichrome Wheelmade
BLWM: Black Lustrous Wheelmade
BoR: Black-on-Red
BR: Base Ring
BS: Black Slip
CLS: Cross Line Style
DR: Dotted Row
HC: Hooked Chain
LL: Ladder Lattice
PBR: Proto Base Ring
PL: Parallel Lines
PLS: Pendent Line Style
PWP: Proto White Painted
PWS: Proto White Slip
PWWM: Plain White Wheelmade
RL: Red Lustrous
RLWM: Red Lustrous Wheelmade
RoB: Red-on-Black
RoR: Red-on-Red
RS: Red Slip
VLB: Very Large Bowl group
WL: White Lustrous
WLWM: White Lustrous Wheelmade
WM: Wheelmade
WP: White Painted
WPHM: White Painted Handmade
WPWM: White Painted Wheelmade
WS: White Slip
WSh: White Shaved

Cypriot connectivity in the Mediterranean

Robin Osborne

University of Cambridge

Connectivity may be 20 years old, but it has proved its worth in this conference as a way of organising archaeological material to raise questions of how Cyprus relates to the wider world. That said, there is a reason why no one can ever remember what exactly it is, beyond catch-terms like connectivity and abatement, that the many pages of *The Corrupting Sea* contain. That reason is that all sorts of different things connect people in the Mediterranean. It was not all ecology. Inter-annual variability in climate and crop yield may be the most basic of the factors linking Mediterranean places, but for historic antiquity it was anything but the most important. That dearth and plenty have played essentially no part in the "Cypriot Connectivity in the Mediterranean" conference is entirely apt.

The economy is fundamental, but complex. This conference began with Vassiliki Kassianidou's discussion of trade in copper, yet what part exactly copper plays in the ongoing story remains unclear – and significantly more papers have found no occasion to mention copper at all than have featured it in their story. The world we have been exploring has neither been a world of peasants barely putting together enough to subsist on, constantly endangered by drought, and desperately making connections with those who might be able to supply their want, nor has it been a world in which the only interest anyone has in Cyprus is to get their hands on copper. We are dealing with a prosperous world in which many have resources to spare and are looking for ways to distinguish themselves. Copper plays a part in the story of connectivity less for its own sake than because it underpinned Cypriot prosperity.

We have more than once been reminded in this conference that absence of evidence is not evidence of absence. That we have no evidence for connections between one place and another does not mean that there is no connection between them. Anastasia Christophilopoulou gave us a poignant contemporary example where large numbers of people move around leaving no material trace. When we do have traces it is because materialising the connection was important. And almost always materialising the connection is important because what is acquired enables those who acquire it to do something that they could not otherwise do, or do something they could otherwise do, but do it better. Limestone statuettes and terracotta figurines from Cyprus impress themselves upon Ionians because of their quality and because their technology is particularly enchanting. In the other direction, as Artemis Karnava insisted, Marion acquires Attic black glazed pottery because it is simply the best quality pottery there is.

What exactly people want to do that they have not previously done varies from time to time and place to place. Fashion plays a part in that. It is hard to think that the arrival of Cypriot mortaria in great quantities in the 7th century did not relate to a change in foodways, just as the arrival and imitation of Aegean skyphoi relate to consumption of drink. But as those same skyphoi show, function is rarely the whole story. Cyprus produced perfectly good drinking cups before someone started producing Al Mina Ware, but along the Levantine coast evidently Aegean imports had established such expectations that Al Mina Ware could sell where other Cypriot drinking vessels could not. And what are we to make of the late development of distinctive Cypriot basket-handled amphoras? Are we really to believe that none of the substances that amphoras carry were ever

transported in or from Cyprus before these maritime transport containers were devised? Surely not. We must be seeing a moment when advertising Cypriot origin became a way of increasing the value of the substance being moved.

These stories play out variously. Sometimes it seems that quality will out. On other occasions, imitations take over – even when manifestly poor in quality. That seems to be the story of Black-on-Red jugs in the Aegean.

But all these stories, at least told as I have just told them, flatten out reality. If there is one aspect of connectivity that should imprint itself most strongly as a result of this conference it is "glocalism" – local inflections of widely distributed commodity exchanges.

Throughout the Early Iron Age, different Cypriot cities offered different objects for exchange. Those exchanges potentially joined every place to every other place, but in fact what was offered for exchange and what was taken up was shaped by the many different political, social, economic and religious characteristics of the places involved. Some particular materials were picked out of the flow, some allowed to flow past. Some links between particular places make obvious geographical sense. Some do not – it makes perfect sense for Salamis to be linked to Al Mina and the Levant, but it seems impossible to come up with any convincing explanation for why it was Salamis whose terracottas caught on in Ionia.

How did anyone know what they could acquire? We have seen some attraction to the "tramping" model – the poor old merchant humping miscellaneous cargoes around the Mediterranean, never knowing who might buy what. But almost everything we have heard goes against this model. We simply don't have places that buy a little of everything from a merchant who has made his way round the cities of Cyprus collecting a little of everything from each place. We have very distinct flows of very distinct items from particular Cypriot cities to particular places elsewhere. The more we understand, the more particular the connections become.

For all that we have now long embraced connectivity, we have been reluctant to believe that places were really connected, that is that people in one place know all about who lives where and what they are good for. This conference has not only told me a vast amount about what the cities of Cyprus were good for from the Late Bronze Age to the Classical period, it has also convinced me that during this whole period it was never not the case that the inhabitants of the Eastern Mediterranean and its littoral knew what they were all good for. The mixed cargoes or wrecks cannot possibly represent a speculative merchant loading up tens of copper ingots in the hope that someone might want to buy them. He knew where he was taking them, and he knew where he was taking everything else he was carrying. Even at the end of this wonderful conference, we still do not know as much as he did.

ACKNOWLEDGEMENTS

My warm thanks to Giorgos Bourogiannis for his initiative and kind invitation and to all who spoke at the conference. It was a privilege to attend, particularly since I am an interloper to the field of Cypriot studies.

Cyprus' maritime connectivity before and during the transition to the Late Bronze Age

The case of the north and northwest

Jennifer M. Webb

La Trobe University, Melbourne and the University of Cyprus, Nicosia

ABSTRACT

Cyprus was involved in a maritime interaction sphere with Anatolia and related areas in the Middle Bronze Age (MBA) and with Egypt and the Levant from late Middle Cypriot (MC) III into the Late Bronze Age (LBA). During the MBA this primarily involved communities on the north coast and a trade in metals. The most celebrated MC III/ Late Cypriot (LC) I networks operated from coastal settlements in the east and southeast and Cyprus' participation is primarily visible in the appearance of Cypriot pottery abroad. This paper investigates the external connections of LBA communities in the northwest of the island and asks whether they may be a continuation of those which existed on the north coast in the MBA.

INTRODUCTION

The early years of the Early Bronze Age (EBA) in Cyprus, which saw major changes in almost all aspects of society and economy as a result of sustained contact with Anatolia, were followed by a period of relatively low external connectivity, before Cyprus re-entered maritime networks in ca 2000 BC. This is best understood in the context of a long-distance trade in raw metals, which linked southeast Anatolia to the northeast Aegean, the Cyclades and mainland Greece, and is most clearly visible on the north coast at Lapithos (for all sites mentioned see Fig. 1), where MBA tomb assemblages include a significant number of imported goods and show an increase over time in the use of imported tin or/and tin bronze.[1]

MBA settlements across the island, including those at Lapithos, are believed to have been abandoned at the end of the MBA and replaced at the MC III/LC IA transition or in LC IA by new, nucleated coastal "gateways" and a new set of maritime connections. The most visible (and most celebrated) MC III/LC I trade networks operated between coastal settlements in eastern Cyprus, the Levant and Egypt. Imports of foreign pottery now appear in Cyprus, while late MC III and LC IA pottery –in much larger numbers and almost exclusively in the form of small container vessels– has been found in Egypt, the Levant, Crete and Cilicia.[2] These vessels have been regarded as by-products of a trade in Cypriot copper and, more recently, as evidence of an independent trade in precious oils or perfume.[3]

1 See Webb 2019 and Charalambous and Webb 2020 with references.

2 See e.g. Maguire 2009; Charaf 2010–2011; Bushnell 2016; Oyman-Girginer 2017; Vilain 2019.

3 For the latter see Crewe 2010; Bushnell 2016.

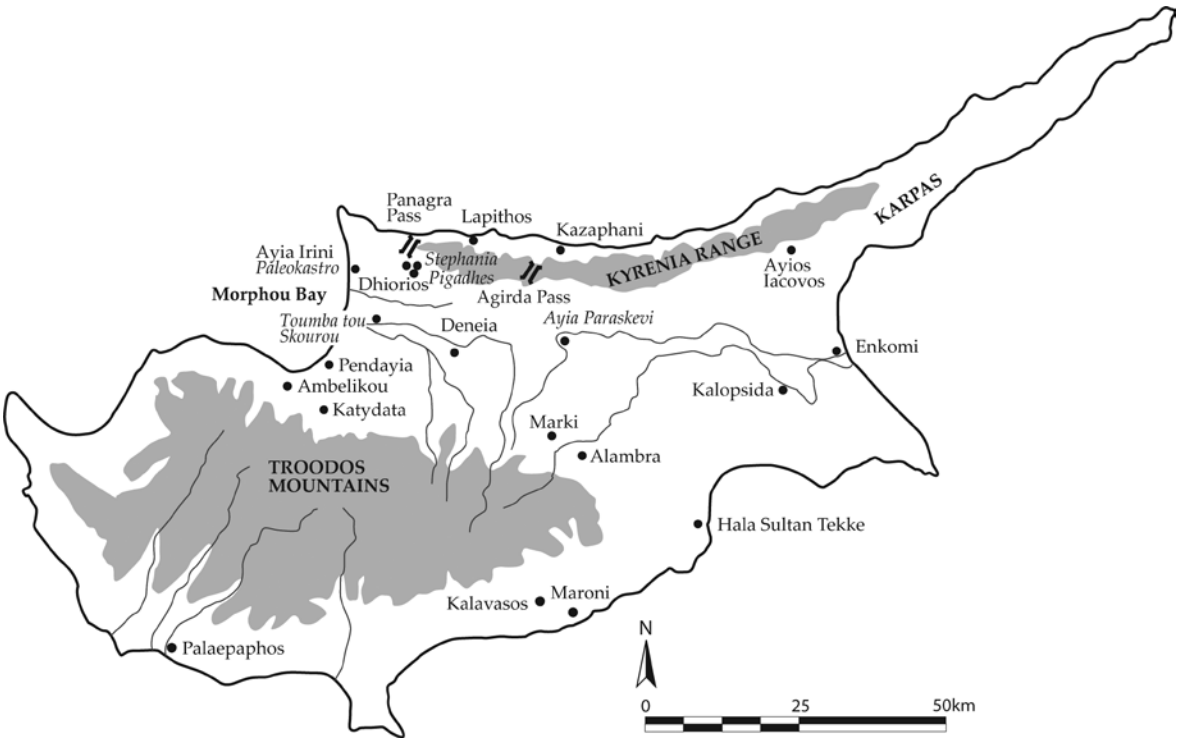

Fig. 1. Map of Cyprus showing sites mentioned in the text.

Among the problems associated with this *eastern export horizon* is the regional nature of MC III–LC I pottery fabrics.[4] Specifically, the White Painted (WP) Wares which serve as markers of the eastern "take-off", primarily Pendent Line Style (PLS) and Cross Line Style (CLS), developed in the eastern Mesaoria in MC III. They are different to WP Wares in the north and centre of the island and the chronological relationship between them is unresolved.

I wish to do two things in this paper. Firstly, to address the issue of relative chronology, using data from Lapithos – and secondly, to examine the internal dynamics and external connections of northwest Cyprus in late MC III and LC I. Lapithos had high maritime connectivity in the MBA. What happened to that connectivity? Might population movement and settlement relocation rather than demise, abandonment and subsequent nucleation better explain the nature and extra-insular connections of sites in this region?

THE RELATIVE CHRONOLOGY OF NORTH COAST AND EASTERN CERAMIC SEQUENCES

The cemetery at Lapithos *Vrysi tou Barba* was in use from Early Cypriot (EC) II to MC III. Two tombs at *Kylistra* in the modern village contained material of slightly later date than the latest material from *Vrysi tou Barba*.[5] This suggests that settlement continued at a reduced level at Lapithos after *Vrysi tou Barba* went out of use with a shift inland in tomb construction, possibly to the end of MC III.

4 See e.g. Manning 2001, 80–4; Crewe 2007, 32–40; Maguire 2009, 80.

5 Webb 2018, 238–39; 2020, 496.

Among the imported vessels that appear in Cyprus during the eastern export horizon are juglets of Syrian Red Burnished Ware. One of the latest tombs at *Vrysi tou Barba* produced a juglet in this fabric (Fig. 2a).[6] It is, however, a MB IIA type, which appears in the Levant in contexts predating levels which contain Cypriot pottery, and does not provide a correlation with the eastern Cyprus export horizon. Lapithos *Kylistra* Tomb 702, however, produced a Black Burnished juglet (Fig. 2b),[7] similar in form to Black Burnished and Red Burnished juglets found in the upper burial layer of *Ayia Paraskevi* Tomb 36, assigned to the end of MC III.[8] These juglets are of MB IIB types, found in conjunction with Cypriot pottery abroad.[9] *Kylistra* Tomb 702 and *Ayia Paraskevi* Tomb 36 (upper burial) may, then, be contemporary or near contemporary with the eastern export horizon.

Three jugs of Red-on-Black Ware (RoB) found at *Vrysi tou Barba* are imports from the Karpas (Fig. 2c).[10] RoB appears among exports to Egypt and the Levant[11] but it was first produced in MC II or early MC III,[12] well before the late MC III export horizon and there is no necessary chronological correlation between its appearance at *Vrysi tou Barba* and that horizon.

Nine lentoid flasks decorated with straight and wavy vertical lines from *Vrysi tou Barba* were classed by Åström as WP III–IV PLS (Fig. 2d).[13] He grouped them with a quite different series of juglets (and some flasks) produced in the eastern Mesaoria, which are among the earliest vessels exported to the Levant (Fig. 2e).[14] The Lapithos flasks, however, are indistinguishable in form and fabric from northern WP III–IV and not imports from the east. They tell us nothing about the relative chronology of eastern and northern ceramic sequences and should not, in my view, have been classed as PLS.[15]

The second major WP marker of the eastern export horizon is the CLS. A jug of CLS was found at Lapithos *Vrysi tou Barba* in 1913 (Fig. 2f).[16] It has a very fine orange-brown fabric and slip, lustrous red paint and thin, close and regular crossing lines, which suggest an early date in the CLS series. The vessel is an import to Lapithos from eastern Cyprus but differs from CLS juglets exported to Egypt and the Levant, which are of a less finely levigated buff, pink, light brown, red-brown or greenish clay with a buff or cream slip and less carefully decorated in matt red, orange or black paint.[17] The latest tombs at *Vrysi tou Barba* must be contemporary with the early production of CLS but not, or not necessarily, with the export horizon.

In sum, none of the ceramic indicators of the eastern export horizon are unequivocally present at Lapithos *Vrysi tou Barba*. The Black Burnished juglet in *Kylistra* Tomb 702 may, however, indicate contemporaneity for this apparently smaller and somewhat later cemetery. This suggests that settlement at Lapithos had significantly downsized prior to the final phase of MC III and prior to the eastern Cyprus export horizon.

6 Webb 2020, 476–77, Tomb 18A.44, fig. 5.11.

7 Sjöqvist 1934, 167 no. 19, pl. XL, where it is identified as Black Slip Wheelmade.

8 Georgiou 2009, 69–73, figs. 2–3.

9 See e.g. Maguire 2009, 53–5, 59, fig. 15; Bretschneider and Van Lerberghe 2010, 21, figs. 18–20.

10 Webb 2020, 475, fig. 5.10.

11 Åström 1965, 79–81; Maguire 2009, 33, figs. 12, 14.

12 Åström 1965, 78; Crewe 2007, 38.

13 Åström 1972a, 28–9, Types IIA1a, IIBc, IIC1c, fig. IX.8. See also Webb 2020, 473–74, fig. 5.9.

14 Åström 1972a, 27–8, Types IA1–3, IB1, IIB1a–b, IIC1a, fig. IX.3–7; Maguire 2009, 46–50, figs. 20–1; Charaf 2010–2011, 159–60; Oyman-Girginer 2017; Vilain 2019, 314 with references.

15 The III–IV suffix should be dropped from references to the eastern juglets, as suggested by Maguire 2009, 91. For a more detailed discussion see Webb 2020, 473–74.

16 Webb 2020, 474, Tomb 18A.138, fig. 5.9.

17 See e.g. Maguire 2009, 99–109; Wolff and Bergoffen 2012; Vilain 2019, 315–16.

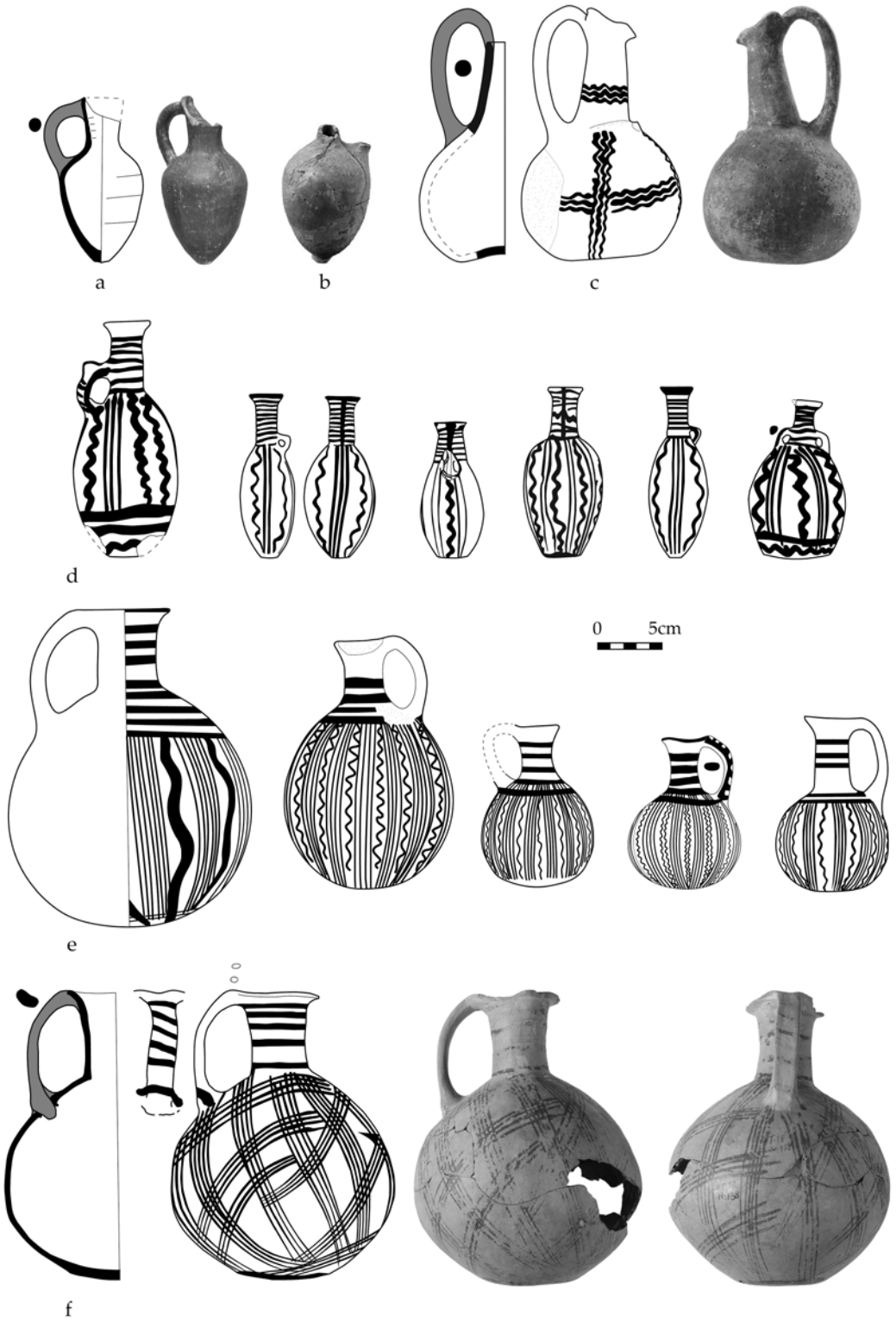

Fig. 2. a. Lapithos *Vrysi tou Barba* Tomb 18A.44; b. Lapithos *Kylistra* Tomb 702.19; c. Lapithos *Vrysi tou Barba* Tomb 29.49; d. (from left to right) Lapithos *Vrysi tou Barba* Tombs 18A.165, 8.23, 18A.169, 29.94, 316.134 (after Åström 1972a, fig. IX.8), 28.19; e. (from left to right) Sidon S/3758/2084 (after Karageorghis 2018, pl. 538), Tell el-Dab'a DAB 9 (after Maguire 2009, fig. 26), Pendayia *Mandres* Tomb 1.3 (after Karageorghis 1965, fig. 9), Enkomi Tomb 240.5 (after Courtois 1981, fig. 2), Nitovikla Tomb 2.40 (after Åström 1972a, fig. IX.4); f. Lapithos *Vrysi tou Barba* Tomb 18A.138.

THE NORTH AND NORTHWEST IN LC I

What follows, while necessarily speculative, is based on ceramic and other connections. Following the closure of *Vrysi tou Barba*, at least one new settlement was established on the north coast at Kazaphani. A tomb located ca 400 m from the coastline, despite having been looted, contained almost 1000 objects.[18] The earliest material is similar to that at Lapithos *Kylistra* while the LC I assemblage shows closest links with sites in the Morphou Bay area.[19] The richness of this and several unpublished tombs at Kazaphani, one of which contained a bronze warrior belt,[20] leaves little doubt that there was a prosperous community here in LC I with a maritime orientation and close ties with the northwest.[21]

New sites were also established toward the end of MC III near Myrtou at the base of the Panagra Pass, around Morphou Bay and in the hills close to the ore bodies at Skouriotissa. They include Dhiorios *Aloupotrypes*, Myrtou *Pigadhes* and *Stephania*, Ayia Irini *Paleokastro*, Morphou *Toumba tou Skourou* and Pendayia *Mandres*. Once again, there are numerous parallels between the ceramic and metal assemblages from these sites and between these sites and Kazaphani[22] and pottery and metal types develop directly from northern MC traditions.[23]

At Morphou *Toumba tou Skourou*, a settlement with access to the sea via a marine estuary, the earliest excavated material is dated to late MC III.[24] The fabrics which define this period at *Toumba tou Skourou* are not present at Lapithos *Vrysi tou Barba* but there are parallels with *Kylistra* Tomb 702 and the latest MBA tombs at Deneia. Tomb V produced an imported Tell el-Yahudiyeh juglet and local imitations in Black Slip, and an eastern PLS juglet.[25] PLS vessels are also reported from Dhiorios and a PLS juglet and CLS jug were found at Pendayia in an assemblage assigned to the MC III/LC IA transition.[26] These occasional imports from eastern Cyprus suggest that the earliest phases of many, if not all, of these settlements in the northwest were contemporary with the eastern export horizon, while ceramic parallels with Lapithos *Kylistra* suggest a link between the closure of *Vrysi tou Barba* and the founding of Kazaphani, *Toumba tou Skourou* and new settlements in the Panagra Pass and northwest Troodos.

There is abundant evidence also to suggest that these northwestern settlements were well connected with the Aegean, the Levant and Egypt from the beginning of the LBA. Tomb I (LC IA–IB) at *Toumba tou Skourou* produced 11 Late Minoan (LM) IA vessels, at least one Egyptian razor, a Syro-Mitannian cylinder seal, a dagger of Syrian type, an ostrich egg and beads of carnelian, amethyst and rock crystal.[27] Tombs of similar date at Ayia Irini produced six Aegean cups, an Egyptian razor, at least three imported seals, an ostrich egg and objects of faience, ivory, silver, gold and carnelian.[28] Connections with Tell el-Ajjul, in particular, are noted by Bergoffen,

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18 Nicolaou and Nicolaou 1989.

19 Courtois 1989, 107; Merrillees 1989.

20 Keswani 2004, 122 with references.

21 Other LBA sites on the north coast, including eight at Lapithos, are recorded by Catling (1962, nos. 3–4, 32–3, 54, 58, 144, 149–56, 197–98, 235, 237–42), but whether these were in use in LC I is unclear.

22 See Vermeule and Wolsky 1990, 12, 387 ed. note; Eriksson 2009, 56–8.

23 As noted, for example, by Hennessy 1963, 50; Catling 1986, 92–3; Manning 2001; Crewe 2007, 44.

24 Vermeule and Wolsky 1990, 393–94.

25 Vermeule and Wolsky 1990, 301 no. 101, 386–87 no. 24; Eriksson 2007, 171–72.

26 Frankel 1983, 79–80, nos. 658–62, pl. 43D row 2; Karageorghis 1965, 27, 35, 55, fig. 9.30, pl. III.9.

27 Vermeule and Wolsky 1990, 222, 336, 346, 381–83 nos. 34A, 34B, 56 (identified as a "cleaver"), 71, 263–65, 340, 379, 485, 494, 496–500, 682, 733, pls. 101, 107, 123, 167–74; Eriksson 2007, 177–78.

28 Pecorella 1977, 34–5, 78–9, 247–48, 258, 261–62, figs. 31, 76, 188, 190–91, 310, 383, 420; Quilici 1990, nos. 228, 422, 426–27, 435, figs. 316, 326, 348; Eriksson 2007, 177–79.

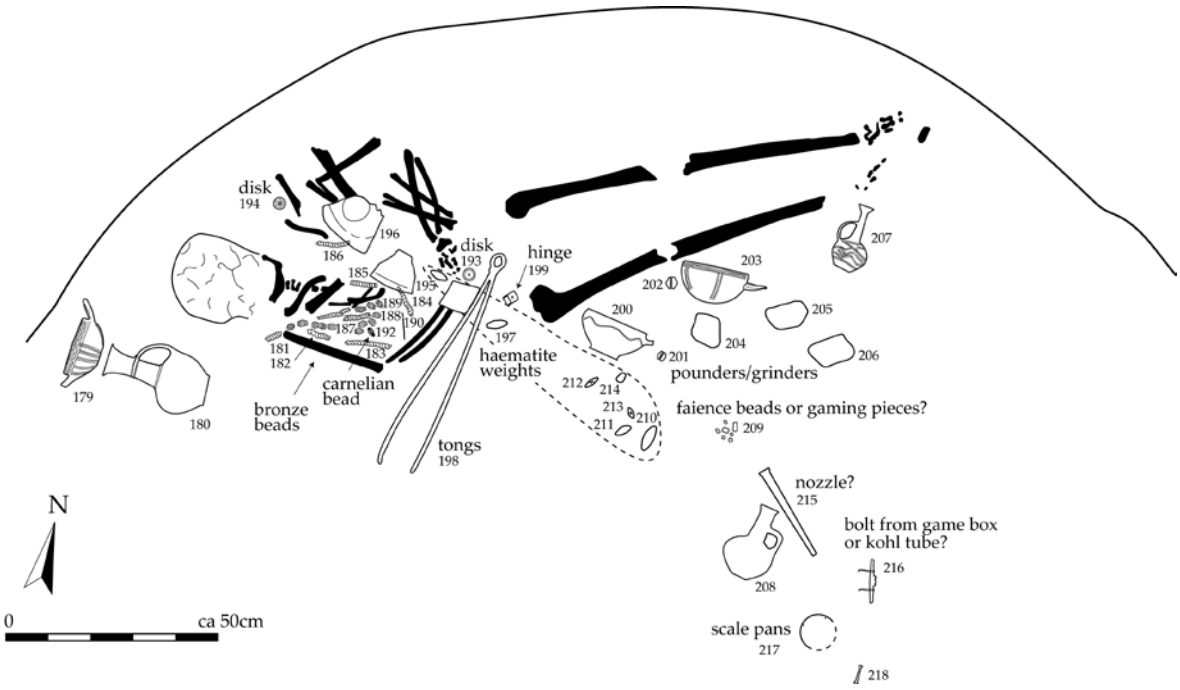

Fig. 3. Ayia Irini *Paleokastro* Tomb 21, stratum 6 (burial N) (after Pecorella 1977, fig. 330).

who suggests that a large part of the Proto White Slip (PWS) and White Slip (WS) I assemblage at this site came from northwest Cyprus, with Ajjul a likely port of entry for Cypriot copper into Canaan.[29]

Of equal interest is the evidence which the northwest coastal settlements, and Ayia Irini in particular, have produced for commerce and metalworking in LC I. *Toumba tou Skourou* Tomb I contained three balance weights, three cylinder seals and several probable scale pans.[30] The uppermost strata of the tomb excavated by Quilici at Ayia Irini produced a bronze scale pan and seven balance weights; and a likely second scale pan was found in stratum V along with metalworking debris, which led Quilici to suggest that Ayia Irini was involved in metal production and international trade from at least LC IA:2.[31] Eleven balance weights, two seals, a scale pan and three bronze objects identified as styli were associated with LC I burials in Tomb 3 at Ayia Irini.[32] Tomb 10 produced a scarab, two seals and four styli, Tomb 11 six weights and three seals and Tomb 20 a seal and scale pan.[33]

The clearest indication, however, comes from the first burial layer in Ayia Irini Tomb 21, which contained a single adult burial of unidentified sex dated to LC IA:2 (Fig. 3).[34] Metalworking tongs had been placed across the body and bronze scale pans, seven balance weights and three stone pounders or grinders beside the body

29 Bergoffen 2001, 154. See also Manning 2001, 83, 86; Crewe 2007, 14; Eriksson 2007, 174–75.

30 Vermeule and Wolsky 1990, 225–26, 241–42, 336–37 nos. 8, 48, 49A, 78a–b, 251–2, 343, 343A, 344, pls. 115, 123–24, 126–27.

31 Quilici 1990, 15–7, 26, 86, 92, 95, 101 nos. 13, 16 (identified as a mirror), 18–20, 28–30, 223 ("grumo di rame e stagno, residuo di fusion"), 245 (the holes perhaps obscured by corrosion, identified as a saucer), 255 ("pezzo di ferro, come residuo di lingotto, probabile prodotto secondario della lavorazione del bronzo"), 256 ("grumo di bronzo di residuo di fusion"), 323 ("cubo di pirite"), figs. 14, 19–20, 37–8, 238, 243, 316b, 318.

32 Pecorella 1977, 22, 29–31, 33–6 nos. 17, 42–4, 49, 52, 58–61, 75, 77, 88, 93, 97–8, 102, figs. 32, 57, 76, 117.

33 Pecorella 1977, 56–7, 61, 68, 79, 87, 89–90, 118, 124, Tomb 10 nos. 3, 3bis, 5–6, 31, 33–4, Tomb 11 nos. 1, 67, 101–4, 107–8, 117, Tomb 20 nos. 67, 102, figs. 127, 129, 141, 143, 154, 190, 210–12, 289, 296.

34 Pecorella 1977, 140, 194, figs. 330, 333.

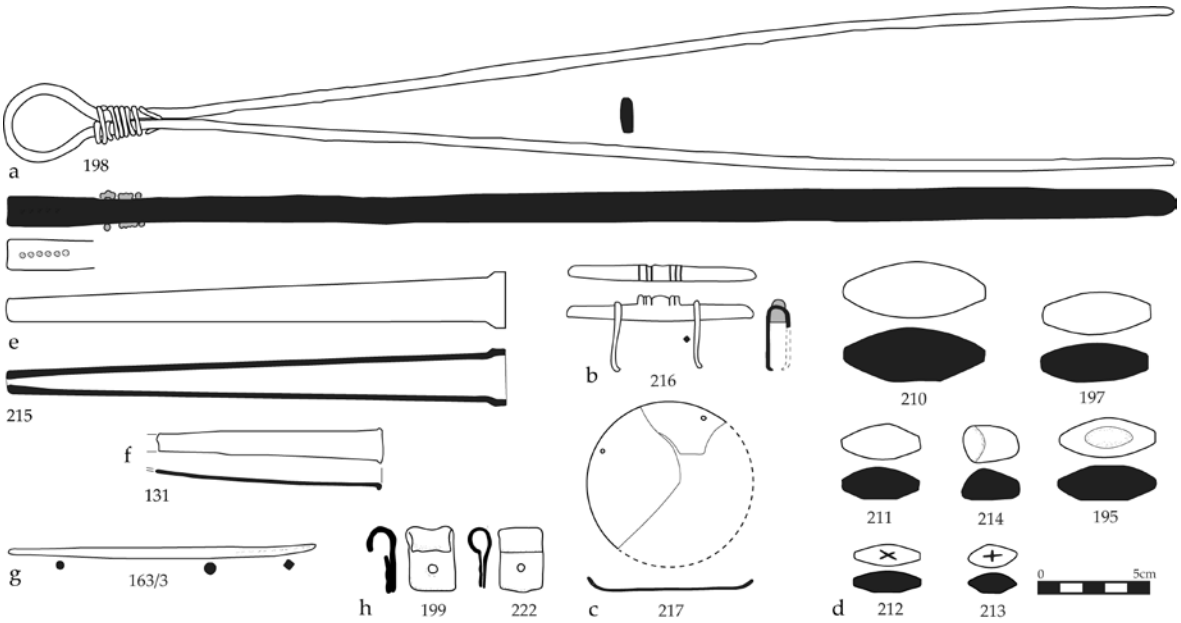

Fig. 4. Objects associated with Ayia Irini *Paleokastro* Tomb 21, stratum 6 (burial N) (after Pecorella 1977, figs. 416, 420).

(Fig. 4a, c–d).[35] An ivory object, initially identified as a balance beam, appears to be the bolt from a gaming box or kohl tube of Egyptian origin (Fig. 4b).[36] A long bronze tube with a rim at one end and a narrow opening at the other, found near the body, and a similar object from the west of the chamber may be nozzles for bellows (Fig. 4e–f).[37] The body was adorned with 25 coiled spiral and flat strip beads of bronze, which, if from a single necklace, suggest a length of almost 1.00 m, with a likely central bead of carnelian, as well as faience beads and two decorated bone disks.[38] The rest of the chamber produced a bronze stylus (Fig. 4g), stone grinders, grooved pebbles, a cylinder seal, a bronze chisel, a possible ingot fragment and a "frammento di minerale (?)".[39]

At least several of the bronze objects identified by Pecorella as styli, including the example from Tomb 21, combine the characteristic point and flat, chisel-shaped end (for erasing) of styli used primarily for writing on wax tablets.[40] In this context another two objects acquire significance. Wax tablets were typically two-part writing boards of wood hinged on one long side. Two small bronze hinges (Fig. 4.h), comprised of a folded plate with a tubular back and central hole, found near the Tomb 21 burial, are similar to hinges from later contexts at Enkomi and Hala Sultan Tekke which Papasavvas suggests may be from hinged tablets.[41] Virtually identical

35 Pecorella 1977, 193–95 nos. 195, 197–98, 204–6, 210–14, 217, figs. 416, 420, 494, 496.

36 Pecorella 1977, 195 no. 216, figs. 420, 501. See Hayes 1959, 25–6, 64, 198–99, figs. 10, 33, 113. I am indebted to Alison South and Enrico Benedictis for this identification.

37 Pecorella 1977, 175, 195 nos. 131, 215, figs. 416, 451, 500. They have been identified as ferrules or spear butt-spikes (Catling 1986, 93; Keswani 2004, 228, table 5.8), but no spearheads were found in the tomb and their form appears unsuited for this purpose.

38 Pecorella 1977, 191–94 nos. 181–86, 192–94, 209, figs. 416, 420, 490–93, 499.

39 Pecorella 1977: 173, 175–77, 181–82, 185 nos. 125 ("frammento di lingotto (?)"), 128–30, 132, 137–38, 151–52 ("frammento di minerale(?)"), 153–55, 157–58, 163/3, figs. 416, 420, 449–50, 457, 468, 471. A "bronze" ingot fragment was also found in an upper level in Tomb 21, Pecorella 1977, 152 no. 58, figs. 380, 416.

40 Papasavvas 2003, 80–5, figs. 1–6; Smith 2008, 60, fig. 32.c (all later examples).

41 Pecorella 1977, 192, 195 nos. 199, 222, fig. 416. See Papasavvas 2003, 87–8 with references.

hinges or "clips" from Knossos, of LM I and II date, further suggest that the object they belonged to, whether a tablet or a box, may have been an Aegean import.[42]

The haematite balance weights from Ayia Irini and *Toumba tou Skourou* are of Near Eastern sphendonoid type and occur in multiples or fractions of the coastal Syro-Palestinian shekel of ca 9.4 g (equivalent to a fraction of the Egyptian *deben* of the New Kingdom), with probable examples of other metrological systems including the Syrian, Anatolian and Mesopotamian shekels of ca 7.8 g, ca 11.7 g and ca 8.4 g respectively.[43] These Near Eastern units and systems of conversion facilitated trade in the eastern Mediterranean in the LBA and were in use alongside local weight systems in the Aegean.[44]

The presence of weights or/and scale pans (i.e. balances) in five of the six more intact tombs at Ayia Irini, together with seals and styli, suggests a significant engagement in economic transactions in the associated settlement in LC I, while in the high-status burial in Tomb 21 there is a connection also with metalworking. Some individuals at Ayia Irini were clearly conversant with economic practices which involved accurate weights and measures, record-keeping and possibly the transactional use of silver,[45] within a commercial system common to Egypt, the Levant and the Aegean. The use of balances, seals, styli and perhaps writing boards and the evidence for metalworking at this site is as early if not earlier than currently known from any other coastal settlement in LBA Cyprus, including Enkomi.[46]

The commercial connections and likely involvement in the metals trade argued for Ayia Irini by both Pecorella and Quilici[47] have often been ignored in subsequent discussions of the external connections of the northwest region in favour of *Toumba tou Skourou*.[48] While *Toumba tou Skourou* was also involved in long-distance trade, and may have been the centre of a copper procurement network in the Morphou Bay region in LC II,[49] the evidence for metalworking and commercial activity is currently stronger at Ayia Irini in LC I.

CONCLUSION

Much of what I am suggesting is not new. Vermeule and Wolsky noted "a certain family likeness" between the earliest material from *Toumba tou Skourou* and pottery from Lapithos, *Stephania*, Pendayia and Deneia and suggested "A general immigration down from the north coast around the end of the Kyrenia range past Myrtou to the Morphou river valley, with others moving on to the southern shore of Morphou Bay".[50] This "exodus" appears to have coincided with the closure of the cemetery at *Vrysi tou Barba* and to have involved the establishment of new coastal outlets, likely including Kazaphani, and a focus on the ore bodies of the northwest Troodos with which Lapithos had long been connected via the Panagra Pass; along with a set of alliances which represent, in some form, a continuation of those which Lapithos had previously enjoyed with Ambelikou and Katydata.

The establishment of forts at Krini *Merra* and Bellapais *Kapa Kaya*, at either end of the Agirda Pass, at some point during the MBA indicates a serious concern with the defence and surveillance of this vital north/south

42 See Catling 1986, 93 with references.

43 See Petruso 1984, who suggests (p. 303) that the Egyptian *qedet* is the most likely candidate for the basis for the Cypriot sphendonoid system. Also, among others, Alberti et al. 2006.

44 See e.g. Alberti 2009; 2016.

45 See various papers by Peyronel, most recently Peyronel 2019.

46 On the early adoption of glyptic in the northwest see Donald 2016, 20–5.

47 Pecorella 1977, 272–74; Quilici 1990, 148–49.

48 But see Keswani 2004, 122, 137, 143.

49 Keswani and Knapp 2003, 214–17.

50 Vermeule and Wolsky1990, 289.

route.[51] On-going conflict over the Agirda Pass, and possible loss of access to the northeast Troodos, might in part explain the westward "relocation" of a segment of the population of Lapithos toward the end of MC III. The abandonment of Ambelikou, Marki and Alambra during MC II and a probable retraction of settlement at Deneia in MC III must also have had an impact on Lapithos' procurement network and suggest that the events which characterise the MC III/LC IA transition represent the culmination of a complex process which had been unfolding for several generations.[52]

Under this scenario, the inhabitants of Lapithos did not suffer a "decline and downfall" as a result of being "left behind by the new forces of LC IA",[53] but proactively moved to establish new coastal outlets closer to ore sources in the northwest Troodos, building on existing external connections and the internal alliances required to sustain a system of direct procurement. These new settlements flourished in LC I and were likely trading metal and perhaps other commodities with the Aegean, Egypt and the Levant. It would appear that the northwest, where local actors were conversant with the technology and computational systems required to manage their own crafting and trade activities, was among the first regions in Cyprus to establish trade links with the emporia of the eastern Mediterranean in the early LBA.

Papadimitriou[54] has suggested that two distinct networks of exchange functioned in the eastern Mediterranean in the 16th and 15th centuries BC: one involving raw materials within high-level exchanges and the other relatively low-cost products such as pottery vessels and their contents dispersed more widely by autonomous merchants. Whether entrepreneurs in northwest Cyprus were engaged in the former and southern and eastern merchants largely or exclusively in the latter in LC I is too big a call to make on current evidence, but the "unbalanced picture of Cypriot culture during the Late Bronze Age with its accent on the east"[55] continues to be an issue. Mining, specialised production and long-distance exchange began well before the transition to the LBA, principally managed from the north coast and linked via a network of alliances with communities in the northwest Troodos. A shift to Morphou Bay, closer to the northwestern ore bodies, in the final years of the MBA may represent a continuation of earlier extra-insular connections, the latter clearly visible here in LC I.

51 For a more detailed discussion on the chronology and significance of these forts see Webb and Knapp 2021.
52 See Webb and Knapp 2021 with references.
53 Åström 1972b, 55.
54 Papadimitriou 2015.
55 Hennessy 1963, 51.

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The anthropomorphic figurines of Cyprus in the Bronze Age

Style, local traditions and foreign associations

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ABSTRACT

This paper presents the artistic development of Bronze Age Cypriot anthropomorphic figurines from a diachronic perspective in order to explore their symbolic and social dimensions. The artefacts examined include both clay and metal figurines, which were produced in the Early (EBA), Middle (MBA) and Late Bronze Ages (LBA). The analysis of the objects of each of these three periods focuses on their form and style, as well as on their find contexts. It aims to recognise local traditions of manufacture and use, and to seek possible influences from the neighbouring areas of Cyprus. The diachronic approach attempted here demonstrates that Early Cypriot (EC) standardised figurines were succeeded by Middle Cypriot (MC) coroplastic diversity and then by the significantly standardised Late Cypriot (LC) examples in clay. It is consequently argued that the tripartite conceptual scheme of identity, connectivity and hybridity that dominates interpretations of Bronze Age and especially LC social organisation needs to be revisited.

The springboard of this paper is the distinct character of figurine production in Cyprus during each period of the Bronze Age. Thus, the Early Bronze Age features the well-known plank-shaped figurines with their highly stylized, incised, linear and geometric decoration. By contrast, most of the Middle Cypriot figurines are not flat, while they are difficult to pigeonhole in specific types. During the Late Bronze Age, clay figurines are predominantly women, often with a bird's head, and bulls. There are also a few metal male and female figurines. Interestingly, the archaeological record of each of these periods is connected on the one hand with different types of social organization in the island and on the other hand with variable degrees of intensity as regards Cypriot relations across the water. The following examination of indicative examples of figurine production of each of these three periods focuses on their form and style, as well as on their finds contexts. It aims to recognize local traditions of manufacture and use and to seek possible external influences. More emphasis is placed upon the Late Cypriot figurines.

THE EARLY CYPRIOT PERIOD

Taking a step back in time, it is important to note the scarcity of figurines in Neolithic times.[1] They are mostly phallic in form and made of stone. There are very few Late Neolithic anthropomorphic clay examples.[2] However, in the following Chalcolithic period,[3] the production of figurines rises and shows signs of some degree

1 Mantzourani 2006, 24, 35–6. Mantzourani and Voskos 2019, 305–8.

2 Mantzourani and Voskos 2019, 308–9, εικ. 409, 411–13.

3 Karageorghis 1991, 1–43; Mantzourani 2006, 67–73.

of standardisation, albeit only regarding the stone finds, such as the typical cruciform figurines. Interest in coroplastic art increases but does not match the popularity of picrolite figurines. There is a broad preference for modelling clay in the form of a female figure, especially women in relation to childbirth, but the rendering of various characteristics, such as eyes, ears, arms and legs, demonstrates significant variability, if not a lack of sophistication. It is only in the Middle Chalcolithic that coroplastic production reaches a peak,[4] both in terms of the number of artefacts and in the interest shown in their rendering and painted decoration. Variation is also observed as regards the find contexts of figurines, including both stone and clay examples. They are found both in domestic and funerary contexts. Most burials are intra-mural and thus maintained a strong link to the domestic sphere. As a result, it is difficult to ascertain the specific role(s) of these figurines, with the exception of the obvious symbolic connotations of female figures relating to fertility and the regeneration of life.

Turning to the EBA,[5] it should first of all be underlined that most of the figurines come from cemeteries, many of which were looted rather than properly excavated. The picture has been amended fairly recently,[6] due to the study and publication of assemblages from well-known EC and MC cemeteries at, for example, Deneia,[7] Karmi *Palealona*,[8] Psematismenos *Trelloukkas*[9] and Lapithos.[10] The relatively recent renewal of excavations at the cemetery of Nicosia *Ayia Paraskevi*[11] has also enriched the understanding of this important Bronze Age centre, which is located between other significant sites, such as EC II–MC III Lapithos in the north and EC I–II Psematismenos in the south. Unfortunately, the settlements of the period remain insufficiently known, despite exceptions, such as those at Sotira *Kaminoudhia*[12] and Marki *Alonia*,[13] where two figurines from well-stratified contexts of the Philia culture have been uncovered.

However, a large number of figurines are stray finds or come from private collections[14] or from burials, while relatively few examples were recovered in stratified domestic contexts. Thus, the detailed study of EC figurines is made more difficult and their precise dating remains highly problematic. Nevertheless, they are usually ascribed an EC III–MC I date, on the basis of their stylistic affinities to the associated pottery. Despite the recent tendency for a lower and purely MC (I) dating of many of the figurines,[15] especially the plank-shaped examples (see more below), detailed discussions acknowledge the problem of distinguishing between the EC III and MC I periods.[16] Notably, the recent publication of the funerary assemblages from Karmi *Palealona* and *Lapatsa* dates the plank figurines to EC III–MC I. Only their White Painted counterparts are ascribed a purely MC date.[17]

Admittedly, the issue of the periodisation of the 3rd millennium BC in Cyprus has long been debated; hence the suggestion that the tripartite system of relative chronology should be abandoned and the whole EC and most of the MC given the general characterisation of the Prehistoric Bronze Age.[18] Nonetheless, there is a tendency among researchers to return to the traditional tripartite scheme, while recent radiocarbon dating

4 See, for example, the figurines from the ritual deposit in the Kissonerga *Mosphilia* Ceremonial Area (Peltenburg 1991).

5 Mantzourani 2006, 103–7.

6 According to Heil (2018, 251), from about 200 figurines known to date, 68 have come from burial contexts and 41 from settlements, while according to Knox (2012, 150), from a total of 110 figurines with a specific context, 69 come from tombs and 41 from settlements.

7 Frankel and Webb 2007.

8 Webb et al. 2009, 227, fig. 4.28, pl. 9.

9 Georgiou et al. 2011. The final publication of this cemetery does not include any figurines, but it is about a systematically excavated and dated assemblage.

10 Webb 2018, 2020. For a discussion of the figurines see Webb 2015, 2016.

11 Georgiou 2017, 69–91; for the figurines and models see 77–85.

12 Swiny et al. 2003, 399, for a possible part of arm from a clay cruciform EC figurine.

13 Frankel and Webb 1996, 187–88 (figurines); 2006, 36–41 (stratigraphy), 155–57 (figurines).

14 Indicatively see Karageorghis 1985; Morris 1985.

15 Webb 2016, 7.

16 Webb and Knapp 2021, 207.

17 Webb et al. 2009, 227.

18 Recent discussion in Knapp 2013, 20–8.

Fig. 1. Two plank-shaped figurines and one woman carrying a baby, Red Polished Ware. Not to scale. Adapted from Mantzourani 2006, 412, figs. 74–6.

results and studies confirm that the MC I period is best examined with the EC.[19] For this reason, and given that reliable data are still too few to account for the whole island, it has been considered prudent to retain the traditional early dating of the plank figurines. In addition, there is one more element that connects them with EC craft traditions. They all match Red Polished Ware in fabric and external appearance, including the incised decoration that many vessels also exhibit.

Beyond the dating problems, it is plausible to argue that there was an EBA break with the Chalcolithic figurine tradition in several respects. EC figurines are exclusively made of clay with very few exceptions. Stone was seldom employed as a raw material.[20] The most popular type was the plank figurine, which was highly standardised in terms of both its form and incised decoration (Fig. 1). These figurines are either sexless or, most often, female. However, they do not seem to be connected to childbirth. Rather, emphasis is placed upon their clothing and perhaps on motherhood and childcare, judging by the figurines of babies in cradles.

Models, including the plastic scenic representations on vessels, comprise another category of EC coroplastic art.[21] Most of the human figures are rendered in a simple and frequently schematic manner, although their bodies are often rounder than on the plank figurines. Their artistic abstraction makes it hard to pinpoint their gender. Studies have tended to identify them as women when they carry babies or are engaged in household activities and as males when they are associated either with cult acts or involved in outdoor occupations. As many of the human figures are rendered without gender-specific features, such as pronounced breasts or genitalia, these identifications remain hypothetical, and to a degree may betray a modern gender bias. Gender identification is safer in the case of pairs of figures, which appear occasionally on models and on a few vases with plastic decoration. Characteristic examples include couples depicted embracing each other or lying in bed.

If artistic production always retains a link to the social framework wherein it takes place, EC figurines and human figures on clay models and vessels have to be considered within the context of the time. Cyprus underwent a major change at the end of the Chalcolithic period and the beginning of the EBA. The change is none

19 Paraskeva 2019, especially 70, table 1.4.

20 The find from Politiko *Troullia* is an exception (Falconer and Fall 2013, 110).

21 Recent discussion with updated bibliography by Mantzourani 2019, 189–96; see also Georgiou 2017, 80–5 for recent finds at Nicosia *Ayia Paraskevi*.

other than the Philia cultural phenomenon. This is no place to discuss whether the Philia facies entailed the migration of people from Anatolia or was a result only of the transfer of technological knowledge and ways of living. Nevertheless, it is difficult to deny the strong affinities of Cyprus with its neighbours at this time. The figurines considered here are certainly later than the Philia phenomenon but still within the period of time that was necessary for the effects of this phenomenon to become socially absorbed. This seems to be a case where foreign contacts were connected to the emergence of an island-wide artistic vocabulary, which tended towards abstraction. This does not mean that the figurines are identical to each other. However, their individual features relate mostly to minor details of their rendering while the overall picture clearly demonstrates a tendency to formalisation and artistic homogeneity, with a focus on the schematic rendering of the human figure. These features are undoubtedly related to the material dimension of both figurines and the figures on models and vessels. Their small size and their manufacture in clay did not allow a more precise rendering of details.[22] However, size and raw materials also involve choices, both artistic and socio-cultural.

Most of the EC III–MC I figurines with a known provenance come from burial contexts. Immediately, this points to their ritual significance and their connection with beliefs about the supernatural. Differences in the specific interpretation of figurines as either divinities or ancestors "are more in terminology than of substance".[23] However, their link to everyday life should not be downplayed. The scenic compositions on models and on vases undoubtedly display an interest in daily activities. The plank figurines should be considered within this wider framework of artistic expression, which probably aimed at a better understanding of the social conditions that prevailed through the EBA.[24]

THE MIDDLE BRONZE AGE

The MC period is problematic, not only regarding its beginning and the issue, mentioned above, in reference the EC III period, but also its end. MC III is very difficult to separate from the following LC I. Despite these chronological discrepancies, it is possible to identify several products of Cypriot coroplastic art as dating to the MBA with some confidence.[25] These are human figurines with links to the major pottery wares of the period. For example, there are figurines with White Painted decoration. Others were made in the Drab Polished technique, or their surface is covered with a black slip. Admittedly, Red Polished Ware retained its popularity, which is why it is frequently impossible to distinguish between EC and MC figurines, as already noted.

Plank figurines continued to be made and several of them bear painted decoration. In addition, the coroplasts of the time produced human figurines featuring bodies with some volume, limbs as well as facial features. There are also babies in cradles, human protomes and a very few scenes on vases or models (Figs. 2–3). This enrichment of the artistic vocabulary resulted in significant morphological diversity. Indeed, most MC figurines look rather individual when compared with their earlier counterparts. It seems that the tendency towards homogeneity and strict schematisation weakened significantly, and this is a phenomenon that needs to be understood within the social context that prevailed in the MBA.

This issue has to be tackled with reference to the find contexts of the MC figurines. Very few of them come from settlements. Notably, the excavations at Alambra *Mouttes*[26] yielded little more than a dozen figurine fragments. Admittedly, very few MC settlements have been excavated, and MC remains often lie underneath

22 Steel 2004, 147–48; 2013, 62.
23 Karageorghis 1991, 51.
24 Falconer et al. 2014, 11–4; Mantzourani 2019, 195–96.
25 Karageorghis 1991, 170–90; Mantzourani 2006, 136–39.
26 Coleman et al. 1996, 199–205.

2.

3.

Fig. 2. MC human figurines. Not to scale. Adapted from Mantzourani 2006, 438–39, fig. 104α–β.
Fig. 3. A MC male figurine, perhaps holding a baby. Not to scale. Adapted from Mantzourani 2006, 440, fig. 105.

LC settlements. Four more figurines come from Ambelikou *Aletri*. One is plank-shaped and intact and two are fragmentary and plank-shaped. There is also a small standing pregnant woman, probably detached from a vessel. Three of these figurines come from Unit 1 in Area 2, identified as a pottery workshop, but the contextual information for the fourth has been lost.[27] A few more figurines come from Politiko[28] and Marki.[29] As with their EC counterparts, most MC figurines were either recovered from cemeteries or belong to private collections and have no secure provenance. Although the use of figurines within the course of everyday life cannot be ruled out, it is certain that they retained their symbolic significance in the funerary realm from earlier periods.

Such significance has been taken to include a social dimension[30] and it may be argued that the individual characteristics of the MC figurines are connected to the socio-economic conditions of the period. There is a broad consensus that Cyprus had not yet evolved into the stratified urban society visible in the following LBA. Nevertheless, its social organisation entailed a notable degree of complexity with clear evidence for individual wealth and status display,[31] as manifested by certain tombs with exceptionally rich finds, e.g. several of the late tombs at the cemetery of Lapithos *Vrysi tou Barba*.[32] At the same time, the MC period saw the intensification of copper production, which in its turn must have included craft specialisation and further social differentiation. It may be plausibly suggested that during the MC there was a gradual rise in complexity and social competition

27 Webb and Frankel 2013, 62–7, 169–72, figs. 8.3–5, 8.16.
28 Falconer and Fall 2013.
29 Frankel and Webb 1996, 187–88 (figurines); 2006, 155–57 (figurines).
30 Heil 2018, 253; Webb 2016, 16–8 (with further references).
31 Frankel 2019, 32–9.
32 Webb 2018; 2020.

Fig. 4. Female clay figurine (upper left), the Horned God of Enkomi (upper right) and a selection of clay figurines from Enkomi (lower tiers). Not to scale. Adapted from Mantzourani 2006, 473–74, figs. 143–44, 513, fig. 182.

between individuals and groups that aspired to establish themselves as elites.[33] The fortresses and other fortifications that appeared at the end of the MC further testify to the existence of forceful internal processes of social transformation, which culminated in turmoil during the MC III–LC I. It is interesting that these intra-island processes coincide with the emergence of individuality in the morphological features of the figurines.

THE LATE BRONZE AGE

The LC figurines fall into four broad categories according to both their morphology and provenance: local, local with Levantine influences, Levantine style and Mycenaean style figurines.[34] Local clay figurines may be divided into two main types: standing or seated females and standing bird-faced females with or without a baby. Less frequent variations of this last type hold other objects. Both types were manufactured in Base Ring (BR) Ware, either hollow or solid. The idea of the bird-faced figurine may be of Levantine origin, but the execution is Cypriot. There are also metal anthropomorphic figurines, which are significantly rarer than their clay counterparts (Fig. 4). Most of them are made of bronze. They are male or female, seated or standing and, rarely, depicted in scenic compositions. Their types are individualised, as in the case, for example, of the Horned God and the Ingot God, both from Enkomi, the Ashmolean nude female, the female from Pyla *Kokkinokremos*, a few Egyptianising seated males also from Enkomi, and the Levantine-style Baal-type

33 Webb and Knapp 2021.

34 Karageorghis 1993, 3–18, 26–35, 53–4; Mantzourani 2006, 192–99 (with further references).

figures with a conical head cover and one or both hands extended forward. Finally, there is the unique silver composition of a standing man on a stag from Kalavasos *Ayios Dhimitrios*, which is most probably a Hittite import.

The difference between the clay and metal figurines not only concerns their raw material, but also, and most importantly, their style, cultural affinities and find contexts. Clay figurines are rather standardised in style and almost mass produced. Despite their possible Levantine style features, such as the emphasis on bird-like faces or the placing of the hands under the breasts, their overall rendering is of local inspiration and manufacture. There is a long-standing coroplastic tradition of female figurines in Cyprus, going back to the Chalcolithic period. Furthermore, the pierced ears of the bird-faced specimens are also found on MC figures. Women holding or nursing babies also have parallels in earlier periods. In addition, and notwithstanding taphonomic biases, most LC clay figurines come from funerary assemblages or from private collections. The majority of the latter, however, were probably also recovered from tombs. Moreover, a few LC female figurines have been found outside Cyprus, both at Near Eastern sites as well as in Egypt.[35]

In contrast, the metal human figurines are characterised by their individuality, if not uniqueness. Each may be viewed as having its own biography. Furthermore, almost all have distinctive non-Cypriot features, even though they may have been crafted on the island. Apart from the Levantine-style figurines, other examples have non-Cypriot features such as the headgear and dress of the Ingot God, the headgear of the Horned God or the distinct hairlocks of the Ashmolean lady. A final and equally important distinction is their frequent occurrence in major urban settlements. Most of them have been found at Enkomi and the rest come from sites such as Hala Sultan Tekke and Kalavasos *Ayios Dhimitrios*. This probably explains their alien cultural affinities as these centres were actively participating in the international network of trade and other relations that characterised the Eastern Mediterranean in this period.

Consequently, it is plausible to argue that the metal figurines are elite markers and indeed an elite phenomenon.[36] This further explains their relative rarity and individual character. Their recovery in cult contexts, such as the sanctuaries of the Horned God and the Ingot God at Enkomi, further supports this argument, as the control of economic production was largely put under divine protection and cult places were probably controlled by LC elites.[37] This picture is in stark contrast to the standardised clay figurines, which may be held to have been associated with wider social groupings in Cyprus. Their local character demonstrates reluctance –if not resistance– from the base of the Cypriot social pyramid to participate in the cosmopolitan cultural atmosphere established by the elites of the time.

It is important to note that most clay figurines were employed in the course of funerary rituals in and around chamber tombs. The latter were not able to host large social gatherings. Rather they allowed for relatively few attendants. In this sense, funerary rites mostly promoted the renegotiation of social relations at a small scale, probably between the family and the local community. Admittedly, there are several richly furnished LC burials, which probably constitute manifestations of high-status display. However, the tombs that received such burials are frequently intra-mural. Thus, they would also have allowed only a small number of participants and their otherwise undoubted social footprint would again have been restricted.[38]

Clay figurines may then be considered as constituents of a social discourse that retained some distance from the wider social processes of LBA Cyprus.[39] These processes include the transformation of small communities to large-scale societies with complex socio-economic relations and institutions within the framework of intense connectivity with the whole Eastern Mediterranean. It is possible to argue, then, that part of Cypriot society

35 Alexandrou 2016, 44–5.

36 Knapp 2013, 393–94.

37 Knapp 1986.

38 For similar thoughts on the social dimension of LC burials, albeit from a different point of view, see Keswani 2004, 87–8 (intra-mural burials), 107–8 (small burial groups), 140–44 (interpretation).

39 For further on socio-political processes see Mantzourani et al. 2019, 118–20.

preferred to retain a more introverted and relatively traditional way of life. However, the lack of upheavals or of any type of social unrest suggests a seamless blending between the cosmopolitan and the local ways of life or between the elites and the wider population. The latter insisted on using figurines that are homogeneous in form. This is another sign of island-wide social integration, and the latter must have been, in its turn, a prerequisite for the stabilisation of elite power.

CONCLUSIONS

The diachronic examination of Cypriot Bronze Age anthropomorphic figurines has revealed a movement back and forth between homogeneity and heterogeneity as regards their form. EC standardised figurines were succeeded by MC coroplastic diversity and then by the significantly standardised LC examples in clay. The latter are distinct because they represent nude females. In contrast, their EC–MC counterparts are shown dressed and often heavily decorated. These changes seem to have been connected to the wider social transformations that characterised each period. More specifically, artistic homogeneity or standardisation seems to have prevailed during or right after periods of connectivity. The EBA followed the Philia facies, while the LBA was a period of cosmopolitanism. It has been argued that external stimuli triggered coroplastic uniformity as an artistic and symbolic response. On the contrary, the MBA, which is characterised by insularity, saw a significant degree of coroplastic diversity as a result of the internal social processes and economic developments of the time.

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Egyptian gold at Enkomi

A material manifestation of a ruling ideology on Late Bronze Age Cyprus

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ABSTRACT

The establishment of Enkomi as one of the main export ports for Cypriot copper in the Late Bronze Age (LBA) left its imprint at the site, inter alia in the form of monumental architecture, extensive metallurgical remains and the earliest recorded use of script on the island. It also afforded considerable wealth to those engaged in international exchanges, which in turn led to an influx of foreign prestige goods, predominantly from Egypt, the Near East and the Aegean. These objects and the behaviours associated with them had a profound impact on the construction of political authority and social identities. Gold, in particular, played a significant role in the formation and maintenance of social hierarchies and the display of power on the island.

This is reflected in the gold finds from Tomb 93 at Enkomi. One item is a magnificent gold pectoral of a distinctive Egyptian type, called the "broad collar". This is an emblematic type of Egyptian jewellery in use from early Pharaonic times to the Roman period. Of superb craftsmanship and precious materials, these collars appear around the necks of gods, kings and nobles and could even be offered by the Pharaoh as a reward for service to the king and state. The recovery of this example not only demonstrates the appreciation of Cypriots for Egyptian things, but also poses questions about how and why it ended up in Cyprus and, more importantly, what value and meaning it had for its Cypriot owner and the people of Enkomi.

An Egyptian landing on Cyprus in the LBA would have been perplexed by the Cypriot environment: no gigantic temples and palaces, monumental tombs or reliefs and inscriptions to broadcast the power of a king. Still, this Egyptian would have had to reconcile this absence of monumental manifestations of royal authority with the fact that his own king, as well as other rulers in the region, relied on good diplomatic relations with the small land of Cyprus in order to secure the provision of massive quantities of copper. The island had, by the mid-2nd millennium BC, emerged as a major supplier of copper to the Eastern Mediterranean.[1] In turn, socio-political evolution on Cyprus in the LBA can only be understood in the context of interaction with the economic and political structures of this region.[2] This period also witnessed an unprecedented influx of imported, prestigious artefacts and raw materials on the island, testifying to its internationalisation as well as to the emergence of a social hierarchy.[3] Among them, an exceptional piece of Egyptian gold jewellery from Enkomi

1 Zaccagnini 1987, 59–63; 2000, 141, 153; Liverani 1990, 205, 269; Sherratt and Sherratt 1991, 365–71; Monroe 2005, 166; Kassianidou 2013; Knapp 2013a, 406–16. Also Kassianidou in this volume.

2 Muhly 1989, 301–2; Keswani 1996, 217–20; 2004, 85–6, 128, 143–44, 160–61; Peltenburg 1996; Knapp 1998, 204–5; 2013a, 352–59; Webb 2005, 176, 180–81.

3 Keswani 1996, 238–39; 2004, 126–27, 154–59; Knapp 1998, 193–203; 2013a, 381–89, 427–32; 2013b; Antoniadou 2005; Webb

Fig. 1. The broad collar from Enkomi Tomb 93, British Museum 1897,0401.535 (© The Trustees of the British Museum).

Tomb 93 outshines all others (Fig. 1).[4] Its superb craftsmanship, sheer volume of glimmering gold and vividly-coloured inlaid materials as well as its utterly alien character, dramatically different than anything Cypriot, must have stood out in the eyes of all ancient viewers.

ENKOMI TOMB 93

Enkomi Tomb 93 was excavated in 1896 by the British Museum.[5] No information on the position of the finds or the number of burials is available. In addition, several grave goods were stolen from this and other tombs. The British Museum Inventory for 1897 lists a total of 214 objects from Tomb 93; only 143, however, can be associated with certainty with this context.[6] The remainder were reclaimed from the antiquities market in Cairo two years later, where they were bought by John Williamson, who had collaborated as an intermediary agent in the Enkomi excavations. His account of the rediscovery of the finds in Cairo is not without problems, especially since he sold the objects soon after to the British Museum.[7] While it is not certain if they all came from Tomb 93, some certainly did: two pieces of a gold bar, one undoubtedly from Tomb 93, the other acquired by purchase, were found by Tatton-Brown and Crewe to join each other.[8] It is fortunate that the find discussed here was certainly excavated by the British Museum in 1896.

2005, 176–78; Peltenburg 2012, 15; Peltenburg and Iacovou 2012, 346–50.

4 British Museum Inv. No. 1897,0401.535; Murray 1900, pl. 6; Marshall 1911, 36–7, no. 581 fig. 6, pl. V; Tatton-Brown 2003, 53, 66 fig. 15.

5 Tatton-Brown 2003, 53–5.

6 Crewe 2007, 64.

7 For an account of these excavations, Tatton-Brown 2003; Kiely (forthcoming).

8 Tatton-Brown 2003, 53 n. 38.

Fig. 2. The burial assemblage of Enkomi Tomb 93 (British Museum, © The Trustees of the British Museum).

Tomb 93 is a rock-cut chamber with a short dromos, which was probably disturbed in antiquity.[9] More than half the registered finds are of gold, including two or possibly four necklaces, 26 strips or diadems, 58 earrings, 15 rings and several pieces of scrap. There is also some silver jewellery, a glass vessel, cylinder seals (Mitannian?), Late Helladic (LH) IIIA–IIIB and Late Cypriot (LC) pottery, as well as a few LH and LC terracotta figurines (Fig. 2). The chronological range of the grave goods is LC IA–LC IIC.[10] The tomb had apparently been used for several burials over a long period and, while the gold finds cannot be associated with individuals, it is clear that its occupants had privileged access to this metal. Despite ancient and modern looting, and even without taking into consideration the gold items acquired in Cairo, Tomb 93 is the wealthiest tomb excavated at Enkomi, in fact on the entire island, if wealth is measured by the weight of gold grave goods, which in this case is an impressive 1,430 gr.[11]

THE "BROAD COLLAR" FROM ENKOMI

The find from Enkomi Tomb 93 that attracts immediate attention is a spectacular gold pectoral (Fig. 1). This is undoubtedly an Egyptian work of the 18th Dynasty that belongs to a distinct type of jewellery, whose ancient name survives in Egyptian texts. It was called *wesekh*, meaning "the broad one", hence the modern term "broad collar".[12] The example from Enkomi has been occasionally mentioned previously. It has not, however, with a few notable exceptions,[13] received the attention it deserves.

9 Murray 1900, 5 fig. 4; Crewe 2007, 60 fig. 2, 64.

10 Tatton-Brown 2003, 53–5 fig. 15; Keswani 2004, 126, 236.

11 Crewe 2007, 64; 2009, 29.

12 Aldred 1971, 36–9; Wilkinson 1971, 30–3, 108.

13 Åström and Åström 1972, 507, 579–80, 583; Goring 1983, 68, 254–55, 257–59, 376; Courtois et al. 1986, 47, 109–10, pl. XXI:1; Jacobsson 1994, 58–9 no. 320, 84, pl. 36; Crewe 2007, 94; Knapp 2013b, 3; Paule 2018, 90–3.

The Enkomi broad collar consists of several (at least six) rows of pendants of different shapes, made of hammered and inlaid gold sheet in various forms and strung together in strands. These are arranged so as to form a large, bib-like pectoral designed to cover the entire chest and shoulders, reaching up to the base of the neck. About 120 beads and pendants (some double) of at least seven different types survive, but their exact arrangement is unclear. Most are either husk-shaped, concave at the back, or flat, of an elongated, leaf-shaped form; others are bell-shaped, discoid, or spoon-shaped (the latter reproducing the hieroglyphic sign *nefer*, "beautiful"),[14] also concave at the back. They were equipped on both extremities with tiny loops for strings to pass through. The majority replicates plain or pleated leaves, fruits and flowers.[15] Reconstruction is based on comparable finds from Egypt (see below), which, however, were also found disarticulated. The strands of beads were fastened at the back with large gold clasps in the form of lotus flowers. These clasps, as well as some of the flat pendant beads, are divided into cloisons, inlaid not with true enamel but with vitreous paste in alternating blue, white, and red colours.[16]

THE BROAD COLLAR IN EGYPT

In order to evaluate the importance of such an outstanding Egyptian object in a Cypriot context, we need first to discuss its meaning in its place of origin, as well as the mechanisms that allowed its entry into the Cypriot material record and its incorporation into local social practices. In Egypt, the *wesekh* was the most iconic element of sumptuous personal adornment, appearing in reliefs, paintings and statuary around the necks of gods, royals and noble men and women participating in court, cult and funerary rituals. It appears in the 4th Dynasty, in the mid-3rd millennium, and continues to be worn for almost three millennia, down to the Ptolemaic and Roman periods.[17] In addition, they were regularly painted on the chests of anthropomorphic coffins, not only for adornment but also as a protection device for the mummified body.[18] Their exact form depended on the material, shape and number of the pendants and their combinations, resulting in more than 15 varieties of the broad collar.[19]

In the 14th century, a new type of broad collar came into fashion, and it is to this version that the *wesekh* from Enkomi belongs. The new type is decorated with beads in the shape of floral elements made of multi-coloured materials, replacing the tubular beads of the earlier type, strung in a variety of groupings into a tight mesh of alternately-coloured rows and bordered by drop pendants. The terminals, which were previously plain and semi-circular, were now made in the form of falcon heads or lotus flowers. The beads imitate folded leaves of olive or willow trees, lotus and other flower petals, and mandrake or persea fruits and dates.[20] The type is considered to be a more permanent version of pectorals made of real flowers, petals and leaves, such as those preserved in the tomb of Tutankhamun and depicted elsewhere.[21]

The representations of men and women and even sacred animals and inanimate objects, such as the prows and sterns of royal barques, adorned with broad collars are innumerable. However, a few images may be singled out to demonstrate the significance of such gold artefacts, when shown not simply as decorative elements but as playing an important role in ritual contexts. Such is the case of the broad collars offered to princess Setamun,

14 Johnson 1999.

15 For the herbal prototypes see Faegersten 2005, 268–71; Tomashevska 2019, 4–27.

16 Goring 1983, 68, 254–55, 257–59, 376 (vol. 1); 168–69 cat. no. 559 (vol. 2); Jacobsson 1994, 58–9 no. 320; Paule 2018, 91–2.

17 Aldred 1971, 36–9, pls. 7, 10, 54–5, 57, 91; Wilkinson 1971, 30–3, 108–10; Feucht 1977; Andrews 1990, 199–200; Patch 2018, 71–2, 74–5.

18 Handoussa 1981, 144–48; Riggs 2001, 57–9; Auth 2005, 315–17.

19 Patch 2018, 71–2.

20 Aldred 1971, 38; Wilkinson 1971, 32, 206; Andrews 1990, 37; Johnson 1999; Tomashevska 2019, 4–27.

21 Manniche 1989, 27–31; Auth 2005, 315; Faegersten 2005, 268–71; Patch 2018, 71–2.

Fig. 3. The broad collar from Tomb KV 55 (Thebes, Valley of the Kings), 18th Dynasty; National Museum of Egyptian Civilization, Cairo (JE 39631/CG 52674); (after Vernier 1925, pl. XL:52.674).

daughter of Amenhotep III, depicted in duplicated images on the back of a throne found in her grandparents' tomb;[22] of King Sethi I, depicted multiple times offering gold broad collars to gods in his temple in Abydos;[23] of Nefertiti in an Amarna relief, in the act of clasping Akhenaten's own broad collar;[24] and of the *wesekh* on a stand next to the royal couple, themselves also adorned with superb broad collars, on the back of the golden throne of Tutankhamun.[25]

Despite the plethora of artistic representations, relatively few actual examples survive. These are made of various colourful materials, such as gold, semi-precious stones, glass and faience, often combined. One of the best parallels for the Enkomi find is the gold broad collar from the 18th Dynasty Tomb KV 55 at Thebes, dating to the second half of the 14th century BC (Fig. 3).[26] Several identifications have been proposed for the occupant of this tomb, according to one of which it housed none other than Pharaoh Akhenaten.[27] A second, very fragmentary example in the British Museum, allegedly from Memphis, consisting of a gold clasp and the remnants of seven different types of gold pendants, some originally with inlays (Fig. 4), is also similar to the Enkomi broad collar.[28] Comparable pieces, dated to the first half of the 15th century, were found in the Tomb of the Three Foreign Wives of Thutmoses III, with gold pendants originally inlaid with carnelian and turquoise.[29] There are also several broad collars that were made mainly with faience beads, combined with gold ones, such as the partially preserved example recently recognised in the tomb of Tutankhamun, made of small beads of

22 Eaton-Krauss 1989.

23 Gardiner 1933, pls. 13, 16, 23, 33; 1935, pls. 12, 19, 27; Handoussa 1981, 144–48; for other representations of such dedications in Theban temples by Pharaohs from Hatschepsut to the Ptolemies, see Porter and Moss 1972, 4, 45, 49, 70, 71, 106, 116, 117, 129, 228, 241, 332.

24 Aldred 1973, 69 fig. 45.

25 Eaton-Krauss 2008, 25–56, pl. VIII.

26 Vernier 1925, 223–24, pl. XL (52.674); Aldred 1971, 120–21 pl. 57; Wilkinson 1971, 109, pl. XXXVII:B.

27 Gabolde 2009, with references.

28 Andrews 1990, 60.

29 Aldred 1971, 120 pls. 54–55; Wilkinson 1971, 109–10; Lilyquist 2003, 169–73, cat. nos. 129–30, 132, figs. 162–64.

Fig. 4. Gold broad collar from Memphis (?), British Museum, EA3074 (© The Trustees of the British Museum).

gold, red haematite, turquoise and yellow glass.[30] The only broad collar still in position on the chest of its owner was revealed in the X-rays of the unwrapped mummy from the burial of the architect Kha and his wife Merit in Deir el-Medina, dated to the reign of Amenhotep III.[31] Merit still wears her elaborate broad collar, composed of at least eight rows of beads, probably made of gold and faience, glass or semi-precious stones (Fig. 5).

GOLD JEWELLERY IN EGYPT

Among its many social roles, gold jewellery held a specific function within the Egyptian system of prestige and political symbolism. Gold fixtures were often offered by the Pharaoh to high status Egyptians (but not foreigners) as a reward for their accomplishments or services to the king and the state. The reward, called in Egyptian texts the "Gold of Praise" or "Gold of Honour", was offered to those selected in public ceremonies in the royal court, especially during the Amarna period, and involved gold collars, armlets and bracelets.[32] The most important item awarded was the *shebyu* collar, composed of two or more rows of large lentoid beads of gold.[33] In contrast to other royal honours, such as the provision of titles or land, this could be worn and emphatically displayed by the honoured person; it was a visible manifestation of royal favour. Receiving such a reward was clearly a memorable moment and privileged individuals frequently commemorated the event in paintings, reliefs and inscriptions in their tombs, especially during the 18th to 20th Dynasties.[34] In these representations, *shebyu* collars are often combined with broad collars, placed one above the other.[35] Occasionally the broad collar

30 Gabolde 2016, 9–11, and 17–20 for parallels in faience; see also Aldred 1971, pls. 7–8, 10, 91.

31 Brand 2006, 17–9; Binder 2012, 3–5; Bianucci et al. 2015.

32 Wilkinson 1971, 7–9; Vomberg 2004; Binder 2008, 1–2, 36–7, 62, 88–9, 212, 232–36, 256–57, 261–63, 363; 2012, 1–6. It must also be noted that the hieroglyphic sign for gold depicts such a gold collar (Klemm and Klemm 2013, 22).

33 Brand 2006; Binder 2008, 1–2; 2012, 3–5.

34 Binder 2008, 261–66, 269–74; 2012, 7–8.

35 Binder 2008, 6.

Fig. 5. X-Ray of the unwrapped mummy of Merit from Deir el-Medina, still wearing her broad collar, 18th Dynasty (© Museo Egizio, Torino).

is shown even if the *shebyu* is not,[36] and it is evident that the former could also be given as part of the "Gold of Honour". Several reliefs show servants fastening an elaborate broad collar around the neck of the honorand during this ceremony, in some cases in combination with the *shebyu* collar (Fig. 6);[37] others depict the honoured individual, already wearing several *shebyu* collars, in the act of receiving a broad collar from the Pharaoh.[38]

From this brief overview, it is obvious that there is a close connection between broad collars and Egyptian deities, royalty and court officials. In other words, the broad collar from Enkomi Tomb 93 appears to be completely out of place. It seems as if one or more occupants of this grave enjoyed a special connection with the Egyptian royal court.[39]

36 Binder 2008, 142.

37 E.g. Binder 2008, 6, 118, 130, 137, 212, 218, 233, 236, figs. 8:30, 8:35, 8:37, 9:2, 11:2, 13:8; Ivanov 2018, 4 fig. 4 (Fig. 6).

38 Aldred 1973, 19–21 fig. 5 (relief showing the reward of Ay, who later became Pharaoh himself).

39 It is important to note that Tomb 93 delivered two more finds associated with Egyptian royals, a scarab with the name of Tiye, wife of Amenhotep III and mother of Akhenaten, and a silver ring engraved with the name of Akhenaten; for this and other Egyptian jewellery with royal inscriptions from Enkomi, Knapp 2006, 54–5; 2013b.

Fig. 6. The Royal Scribe Tjay receiving the "Gold of Honour", consisting of gold *shebyu* collars and a broad collar; relief from his tomb in Thebes (TT 23), Ramesside period (© Centre for Egyptological Studies of the Russian Academy of Sciences, Moscow).

THE OWNER(S) OF THE BROAD COLLAR AT ENKOMI

The Egyptian divine, royal and elite connotations of this find from Enkomi call for an enquiry into the identity and social status of the individual(s) buried in Tomb 93.[40] This question is linked to a second one – how did this artefact reach Cyprus. There are no compelling reasons to suggest that it belonged to an Egyptian residing on the island. That there were Egyptians stationed on Cyprus (and *vice versa*), and that some could die while abroad, is well documented in the Amarna correspondence.[41] However, Tomb 93 and the great majority of its contents are entirely in keeping with LC burial practices.

Although we do not know the specific circumstances that brought this object to the island, or the identity of the people involved in its relocation, a few relevant aspects may be highlighted. To begin with, we can assume that, since broad collars carried a high degree of prestige which was directly transferred to their bearers, this change of ownership must have happened at an exceptionally high social level.

There were several mechanisms and motivations for the circulation of prestige objects in the Eastern Mediterranean and Near East, ranging from the most ceremonial, such as gift exchange between royal courts, to the most mundane, such as tomb looting.[42] To take the latter first, it was not uncommon for plundered objects from Egyptian tombs to find their way into the market, despite severe penalties for despoiling royal burials. However, when it came to metal objects, particularly those of gold, looters took precautions to conceal their source by

40 Cf. Paule 2018, 92–3.

41 Lynn Holmes 1975, 378; Moran 1992, 107–08 [EA 35:30–4, 35–9]; Kopanias in Mantzourani et al. 2019, 107.

42 Cf. Sparks 2003 (in relation to exported Egyptian stone vessels).

melting them down and distributing the raw material rather than the actual artefacts;[43] this makes it difficult to accept such an origin for the *wesekh* of Enkomi.

Gift exchange between royal courts, on the other hand, was the main mechanism behind the circulation of prestige objects.[44] The distribution of luxury goods at an international level through this highly formalised practice has been seen as a diplomatic disguise for essentially commercial enterprises;[45] it is, nonetheless, sharply differentiated from the import of other products in bulk quantities through more commercial modes of trade. Gifts were personal and indented for specific recipients, giving rise to special social and political bonds. In a letter sent from Babylonia to the Pharaoh, the king is very explicit in this respect: *[Between] kings there is brotherhood, friendship, alliance and [good] relations [if] there is abundance of precious stones, abundance of silver, abundance of [gold]*.[46] Letters from Egypt, Ugarit and elsewhere refer to the exchange of gold jewellery between courts,[47] occasionally as part of larger consignments of gifts relating to royal marriages. The Amarna Letters, for instance, record that the Mitannian king Tushratta dispatched various valuable items for the marriage of his daughter to Amenhotep III, including two necklaces made of gold and lapis lazuli.[48] Could such an occasion be a viable explanation for the arrival of the broad collar in Cyprus? And what would this mean for the status of the individual(s) buried in Enkomi Tomb 93?

Eastern texts relating to Cyprus (as Alashiya) inform us that this land was ruled by a king, but the exact nature of this kingship remains elusive.[49] The fact is we lack any incontestable archaeological signs of a royal presence on the island in this period. We have no idea how the palace or tomb of a Cypriot king might have looked, and indeed some other tombs at Enkomi, such as Tomb 66, are much more elaborately constructed than Tomb 93 and also have their share of gold grave goods, albeit in lesser quantities.[50] Thus, even if the *wesekh* from Tomb 93 would have befitted a king, we should not insist too much and there are alternatives. Even in Egypt such items were also worn by courtiers. More importantly, kings were not the only beneficiaries of gift exchange, as textual evidence indicates the same practice among state officials and their counterparts abroad.[51] The offices held by these individuals, including men from Alashiya, ranged from the political and diplomatic (governors, ambassadors and messengers) to the economic (merchants).[52]

The same texts record that, next to the king, Alashiya was also governed by a chancellery, headed by an official with important political and diplomatic responsibilities who bore the title of *rabisu*, usually translated as "governor", "commissioner" or "prefect".[53] These officials were authorised to manage state affairs in the name of the king and to write directly to their peers in Egypt or Ugarit.[54] In an Amarna Letter, the Alashiyan governor corresponds directly with his opposite number in Egypt, addressing him as his brother and reporting the exchange of greeting gifts between them.[55]

Since the *wesekh* from Enkomi is of a type relatively rarely found *per se* even in Egypt and, given that it is the only example excavated anywhere beyond Egypt, we can assume that it was not made to be exported in a

43 Phillips 1992; Strudwick 2013.

44 Liverani 1990; Zaccagnini 2000; Kopanias in Mantzourani et al. 2019, 111–16.

45 Panagiotopoulos 2001, 275–78; Manning and De Mita 1997, 110–11.

46 Zaccagnini 1987, 61–3; Moran 1992, 22 [EA 11:19–23].

47 E.g. Cochavi-Rainey and Lilyquist 1999, 11, 24, 32–3, 141–42, 150–2, 154; Matoïan 2019, 755.

48 Goring 1983, 258–59; Moran 1992, 50 [EA 21: 33–41]; Panagiotopoulos 2001, 275–78.

49 For the issue of kingship in Cyprus in the LBA, Manning and De Mita 1997; Peltenburg 2012; Knapp 2013a, 432–47; Mantzourani et al. 2019.

50 Crewe 2009, 28–30.

51 Heltzer 1978; Zaccagnini 1987; Manning and Hulin 2005.

52 Lynn Holmes 1975, 376.

53 Singer 1999, 721; Peltenburg 2012, 11–2; Peltenburg and Iacovou 2012, 346–50; Knapp 2013a, 438–47; Kopanias in Mantzourani et al. 2019, 110–16.

54 Peltenburg and Iacovou 2012, 348.

55 Moran 1992, 113 [EA 40:1–15]; Kopanias in Mantzourani et al. 2019, 114–16.

commercial transaction. Such artefacts typically remained in the treasuries of temples and palaces and in the hands of Egyptian nobility. Then again, commercial activity was a source of economic and social power that could make the acquisition of such an object possible, albeit not as part of market-oriented trade. Near Eastern and Egyptian texts provide important information on traders, occasionally also on some from Cyprus.[56] In the international mercantile environment of the LBA Eastern Mediterranean, there was enough scope for trading individuals to amass wealth, either as private entrepreneurs or as royal envoys.[57] Some of these wealthy merchants would have been in a position to build long-term relations with their peers in foreign lands, with the result that they could take on responsibilities as royal representatives and act as ambassadors or envoys, as stated in an Amarna Letter sent from Alashiya to Egypt.[58] In fact the texts often alternate or couple the terms used for ambassadors and envoys with that used for merchants.[59] Such influential mercantile groups were not uncommon in the Eastern Mediterranean,[60] but the inclusion of their business in royal correspondence, in which the king writes directly to the Pharaoh to secure the interests of his commercial agents, is uncharacteristic and indicative of their eminence in Alashiya's state affairs. Peltenburg even suggested that it was Alashiyan individuals in charge of the copper trade who were conferred with the political office of *rabisu*.[61]

Any individual belonging to one of these circles would have been in the economic and social position to acquire an Egyptian broad collar, and it can be no coincidence that this link to the land of the pharaohs comes from the richest LC tomb found on the island. But if this was the means, what was the motivation?

THE SOCIAL IMPORTANCE OF GOLD AND *EXOTICA*

Whatever the source of the wealth of the individual buried with the Egyptian *wesekh*, and those with him/her in Tomb 93, they seem to have accumulated an unparalleled quantity of gold during their lives. Gold and silver jewellery was always a reserve of portable wealth, which could be worn to advertise a privileged economic and social position, but also hoarded, deposited in tombs, passed down for generations, or transferred across long distances.[62] The large number (ten) of gold diadems/strips found stacked in a White Slip (WS) bowl in Tomb 93 (Fig. 2),[63] for instance, suggests that these items were not there to adorn the dead but rather as reserves of wealth, as were broken gold items from the same tomb, of the kind we would expect in a hoard.[64] In addition, gold served as evidence of contacts with the cultures of Egypt and the Near East,[65] and there is a distinct correlation of rich burial assemblages with exotic luxury objects. In Cyprus, such objects appear to have had a prominent social role.[66]

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56 Lynn Holmes 1975, 379–80.

57 Zaccagnini 1987; Singer 2011, 9; Gestoso Singer 2015, 92–97; Liverani 2015.

58 Moran 1992, 112–13 [EA 39:14 20 and EA 40:16–20]; Ahrens 2006, 28–9; Singer 2011, 79–80; Kopanias in Mantzourani et al. 2019, 107.

59 Zaccagnini 1987, 58; Knapp 2006, 60; Brysbaert and Vetters 2013, 178; this is also verified by the Alashiyan king himself, when he writes to the Pharaoh: "*My brother, let my messengers go promptly and safely so that I may hear my brother's greetings. These men are my merchants…*" (Moran 1992, 112 [EA 39:10–20]).

60 Heltzer 1978, 121–28, 139–42; Manning and Hulin 2005; Kopanias in Mantzourani et al. 2019, 110, 118.

61 Peltenburg 2012, 11; Peltenburg and Iacovou 2012, 348.

62 Keswani 2004, 126–27; Voutsaki 2012, 161–62, 182–84.

63 Tatton-Brown 2003, 53.

64 This does not mean that this material represents the cache of a goldsmith, either, since such accumulations of scrap metal stood for something more than reserves of raw material: They were a form of storing wealth as they always kept their market value in exchanges; cf. Gestoso Singer 2015, 97–9.

65 Renfrew 2012; Voutsaki 2012, 184; Legarra Herrero and Martinón-Torres 2021.

66 Manning and Hulin 2005; Bevan 2007, 152–56; Kiely 2010, 55; Knapp 2013a, 427–32.

Much older and recent research has been devoted to the study of the social roles of luxury imports and the complex mechanisms of their manufacture, exchange and consumption.[67] The prevalent perspective maintains that imported prestige goods were mainly obtained through gift exchange, controlled by elite circles that had established personal links in distant places. By promoting a commercial advantage, they were able to convey messages of social privilege, which were then translated into political power.[68] Most of these ideas have proven useful in describing the social role of *exotica*, although it is acknowledged that there are important limitations in their application. As there is extreme temporal, spatial and typological variability and heterogeneity in the classes of *exotica*, it is evident that a single approach cannot cover all cases. What is needed most is the contextualised, individual history of specific items, rather than general notions applicable to all imports.[69] In the case of the *wesekh* of Enkomi, an isolated find on the island so far,[70] it would be better to focus on the specific item and to discuss a rather neglected aspect of the study of exotica, notably the ways in which they could be related to specific individuals.

Discussions of the social power of the exotic are increasingly combined with the influential concepts of "cultural biographies" and the "social lives" of things,[71] reminding us that some of these imports both had a past in other places and times and acquired new meaning in their new setting.[72] In this particular case, the deposition of the broad collar in Tomb 93 at Enkomi was but the final episode in a longer genealogy, associated with the life not only of its last, Cypriot owner, but with the lives of those who had made and used it in Egypt. We cannot connect all the dots, but we can perhaps appreciate its importance for LC society without losing sight of its foreign character.

THE SOCIAL IMPORTANCE OF THE BROAD COLLAR FROM ENKOMI

The discussion of the possible identity of the owner of this find from Enkomi, and its capacity to confer power and prestige, do not explain *how* this was affected. In other words, what did it mean for a Cypriot to display it around his/her neck or to take it to his/her grave? Was it important only because of its material and aesthetic value, or was there something more to it?

The importance of the *wesekh* from Enkomi is evident in the fact that, as noted above, no other example has been found outside Egypt.[73] The only somewhat comparable case that I am aware of is that of two pectorals of gold foil and of a different type from a Middle Bronze Age (MBA) context at Byblos, which, however,

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67 Sherratt and Sherratt 1991; Knapp 2006, 56–7; Panagiotopoulos 2012; Brysbaert and Vetters 2013.

68 Broodbank 1993; Helms 1993, 145; Keswani 2004, 136–37; Webb 2005, 178–81; Knapp 2006; Colburn 2008; Arrington 2015, 2–3.

69 As argued e.g. in Knapp 1998; 2006; Laffineur 2005; Colburn 2008; Foster 2008; Panagiotopoulos 2012; Brysbaert and Vetters 2013; Arrington 2015; Legarra Herrero and Martinón-Torres 2021. One of the main shortcomings of some theoretical approaches to the exotic is that they often dismiss the importance of geographical or chronological differences between imported items and present oversimplified theories that are indiscriminately applied to all periods, from the Bronze to the Iron Age, and in all places, from Mesopotamia to the Levant and from Egypt to the Aegean.

70 In Cyprus, broad collars made a second, unrelated to the first, appearance in art in later times, on some Cypro-Archaic, Egyptianizing statues (Faegersten 2005, 268–71, pls. 37:1, 39:5, 40:6–7). It must also be noted that the three gold, spoon-shaped beads from Enkomi, Swedish Tomb 3 may have once belonged to a disentangled, similar collar (Åström and Åström 1972, 507 no. 7, 509 no. 35; Goring 1983, 264, 371).

71 Appadurai 1986; Kopytoff 1986.

72 Helms 1993, 145; Knapp 1998; 2006, 49–59; Gosden and Marshall 1999; Sparks 2003, 40–3; Cline 2005; Laffineur 2005, 53; Panagiotopoulos 2012, 54, 58; Brysbaert and Vetters 2013.

73 For other rare Egyptian objects with royal connotations found in the Levant, mainly stone vessels, rings and scarabs, see Sparks 2003; Ahrens 2006; 2015.

are Egyptianising imitations rather than actual imports.[74] The recovery of this example on the island not only demonstrates the appreciation of Cypriots for Egyptian prestige goods, but also raises questions about the value and meaning it had for its Cypriot owner and the people of Enkomi. Would Cypriots confronted with this object have known anything about its intimate association with gods and pharaohs in Egypt, or have been able to recognise it as Egyptian at all?[75]

For a foreign object to work as a marker of social distinction in a new environment, it must be able to communicate some information, not necessarily accurate, on its provenance and use in its place of origin. Certainly, no-one would have had a problem in realising that a *wesekh* was to be worn around the neck, or in acknowledging its exotic character. Far more important than its material or practical value, however, was its symbolic one. Such external attributes and ornaments, worn close to the body and dominating the wearer's appearance, were markers of identity and status intended for an audience, as they transmitted notions of wealth and privileged access to it. To wear such an Egyptian artefact in Cyprus would have been primarily a performative act and a statement of distinction and extraordinary status. No other personal possession from Tomb 93 or elsewhere at Enkomi could challenge the splendour of the broad collar. As magnificent as any Mycenaean gold necklace would appear (and there were at least two in Tomb 93),[76] it would be no match for this Egyptian jewellery piece.

Any Cypriot man or woman wearing such an extravagant jewel would not only attract immediate attention and admiration, he/she would also look like an Egyptian, at least in the eyes of those who had seen one in real life or in an artistic representation. Nothing would have had more effectively associated this individual with the land of the Nile. To look like an Egyptian king or courtier was sought after even by foreign rulers. King Niqmaddu of Ugarit in the 14th century BC, for instance, ordered the manufacture of an alabaster vessel showing him and his queen in a typically Egyptian manner and style. Going a step further, he not only fancied to be depicted as an Egyptian king, but also had his name written on the vase in Egyptian hieroglyphs.[77] Egyptian images and symbols were, apparently, highly desirable in other lands, not only because of their material value, but because they advertised close relations with Egypt and the Pharaohs.[78] Royal courts and the elites of surrounding cultures had, thus, developed an appetite for Egyptian luxury goods, often leading to an aesthetic, as well as symbolic, "Egyptomania".[79]

This is most evident in the case of Egyptian statues circulating in the Near East, as witnessed in royal correspondence recording requests for Egyptian statues of deities and kings made directly to the Pharaoh by various rulers.[80] The Mitannian king Tushratta received from Akhenaten two statues depicting himself and his daughter, apparently in an Egyptian style,[81] while a king from Ugarit asked the Pharaoh Merneptah to send him a sculptor to carve a statue of the Egyptian king, to be set opposite a statue of the god Baal in his Ugaritic temple, itself also dispatched from Egypt.[82] This "Egyptomania" was extended from things to people, or this is the impression we get from an Amarna Letter revealing that a king of Babylon asked the Pharaoh to send an Egyptian princess to be his bride. When the Pharaoh declined, the Babylonian king suggested that he could instead dispatch any Egyptian beauty to Babylon, whom he would present as a daughter of the Egyptian monarch.[83] It was not imperative that things were genuinely Egyptian, as long as their owners could effectively claim them to be so. The

74 Montet 1928–1929, 166–69, nos. 619–20, pls. XCV, XCVI; Ahrens 2006, 25–7.
75 Cf. Sparks 2003, 45–6.
76 Tatton–Brown 2003, 53–4.
77 Feldman 2002; Matoïan 2019, with references.
78 Foster 2008, 328; Brysbaert and Vetters 2013, 176–77.
79 For this term, albeit for later times, Radner 2009, 226 n. 27.
80 Morris 2015, 320–21; Ahrens 2011; 2016.
81 Moran 1992, 84–6, 86–90 [EA 26:30–48 and EA 27:19–34, 43–4]; Papasavvas 2018, 237.
82 Lackenbacher 2001; Morris 2015, 316–17; 320–24.
83 Zaccagnini 1987, 59; Moran 1992, 8–9 [EA 4:4–22]; Feldman 2002; Foster 2008, 328; Panagiotopoulos 2012, 58.

connection to Egypt and its power was perhaps enough, with the specific circumstances of objects and their acquisition left for viewers to imagine.[84]

In sum, the Egyptian *wesekh* from Enkomi must have publicised the close association of its owner with the most eminent royal court of the LBA. In Egypt itself not many objects were as illustrative of high status, or more precious in symbolic and economic terms as gold broad collars. When this example reached Cyprus, it was incorporated into local social practices, a re-contextualisation that added considerably to its value and expanded its already complex biography. It linked its holder to the international world of the Eastern Mediterranean and demonstrated his/her privileged communication with powerful partners abroad. All objects that find their way to a distant place implicate human agents. Exceptional and singular objects, however, may further signify an intimate relationship between persons at each end of the exchange, whose social identity, prestige and authority were expressed through the same extraordinary object, albeit in different (Egyptian and Cypriot) contexts.[85]

The possession and display of this spectacular artefact in life and death must have offered a significant spectacle to its owner's contemporaries at Enkomi. Much more than just a personal adornment, it would have greatly enhanced the social status of its owner. It seems that the occupant of Tomb 93 had, to an extent, fashioned his/her public image in accordance with Egyptian court dress and manners. We do not know his/her identity or the kind of occasions during which the broad collar was worn or displayed, but the sight of this individual attired in an Egyptian style would have created a powerful image for local audiences, a visual code able to communicate messages of wealth and authority by association with a prestigious foreign culture. In fact, this Egyptian symbol of high social status from Enkomi is probably the closest we can get to a material manifestation of a ruling ideology on LBA Cyprus.[86] Its display would have assisted anyone from one of the leading elite circles discussed above, and those around him/her, whether from the king's house, or from groups of people with political and administrative liabilities or top-level economic pursuits, to proclaim their membership in the ruling sector of society, whether within Enkomi or beyond it.

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84 Cf. Feldman 2002, 78.

85 Cf. Keswani 2004, 138–39; Colburn 2008; Foster 2008, 327–29; Voutsaki 2012, 182–84.

86 The only other known similar case is that of the disputed gold sceptre from Kourion *Kaloriziki* Tomb 40 (Goring 1983, 355–59; Paule 2018, 93).

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Cyprus, Egypt and the Levant during the Late Bronze Age

New evidence from Enkomi

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To the memory of Christian Vonhoff (1975–2021),
a promising young scholar and a good friend

ABSTRACT

There is still a large corpus of unpublished archaeological finds from the excavations undertaken by the French at Enkomi before the catastrophe of 1974 – despite J.-Cl. Courtois' and J. Lagarce's valuable publications of tomb groups and small finds in the 1980s. The author had the opportunity to study a significant number of metal objects from these investigations in the Cyprus Museum and to consult the notebooks, which are now kept in the Collège de France.

The results were surprising, as types of metal vases, stands and implements which are rare or unknown in Late Bronze Age (LBA) Cyprus were identified. Some of them find prototypes in the Levant as well as in Egypt and underline the close interrelations of the island of Aphrodite with these regions around 1200 BC – alongside local traditions and the well-known Mycenaean influences.

INTRODUCTION

In the following lines bronze objects found during the 1966 season at Enkomi –a miniature tripod and diagnostic vessel types– as well as one vase from the 1965 excavations will be discussed.[1] These artefacts, although preserved in heavily corroded fragments only, throw new light on the cultural interrelations of the island of Aphrodite with Egypt as well as the Levant during the years around 1200 BC.

The French season of 1966 at Enkomi concentrated on clearing a number of pits of various types – either ancient wells, entrances of looted tombs or simply pits dug by previous excavators. We will examine one find group, from the so-called Pit 3, located in Quartier 6W, south of Bâtiment 18.[2] The pit was identified as the vertical entrance shaft of a tomb with two chambers, a type well-known at Enkomi and in LBA Cyprus in general.[3] At the bottom of the shaft a collection of scattered bronze fragments was unearthed, among them some weapons

1 For previous publications of tomb groups and small finds from Enkomi, see see Courtois et al. 1986; Courtois 1981; 1984; Lagarce and Lagarce 1985.

2 The bronzes which are discussed here are stored in a box inscribed "ENK 66". Another hand has added "Pit 3". Unfortunately, there is a small label in the box giving "T. 112" as the find spot. Thus, the provenance is not fully secure. The excavation notebooks do not describe the bronzes from Pit 3 and Tomb 112 in detail. The excavation of Pit 3 started on September 20, 1966, that of Tomb 112 on October 7, 1966. For the 1966 season cf. Karageorghis 1967, 314–15.

3 As J. Lagarce has informed me, it was comparable to Enkomi, French Tomb 1907 (published in Lagarce and Lagarce 1985).

as well as the leg of a small bronze tripod and vase fragments. Most of the latter are parts of hemispherical bowls, the most common of all Cypriot vessel types during the LBA, but some are of shapes which are either unique or at least extremely rare in the island.

The following items will be discussed here: a) – d) from Pit 3, season of 1966 at Enkomi, e) from Tombe du point topographique 1394, season of 1965.

CATALOGUE

a) Upper part of the loop-handle of a wide, flat, one-handled platter, two joining fragments as well as a small part of the lip and wall (Fig. 1). The lip is directed outside, the handle extends from the rim, which means that it was manufactured together with the vessel body from one piece of metal, not separately and riveted to the vessel. The size and the nearly horizontal upper part of the loop-handle allow an absolutely certain identification of the vessel type. The handle, heavily corroded, seems to be undecorated. Length of handle 5.8 cm, width of rim 6.9 cm. Estimated diameter of vessel 20–22 cm. The reconstruction in Fig. 1 is based on a parallel from Deir Al-Balah (see below).

b) Oval attachment-plate of a bowl with a spool for the insertion of a now lost ring-shaped swing-handle (Fig. 2). Fixed to the rim with two rivets, rivet heads not visible in the interior, due to corrosion of the fragment. Greatest length of fragment 6.9 cm, length of attachment-plate (damaged at the right side) 5.5 cm, length of spool 2.5 cm, greatest height of rim 2.3 cm. Estimated diameter of bowl ca 20 cm.

c) Three fragments of the rim and wall of a small bowl, two of them joining (Fig. 3). Rounded shoulder, lip turned outside, probably a bowl of hemispherical type. Width of joining fragments 5.1 cm, height 2.4 cm; width of smaller fragment 2.3 cm, height 1.9 cm. Estimated diameter of bowl 10–12 cm.

d) Cast leg of a miniature tripod (Fig. 4). Not the usual triangular shape, but rather slender, slightly widening in the middle, three barely visible horizontal ridges above the footplate. Profile S-curved. Section D-shaped. Height 6.9 cm, greatest width 2.0 cm. The fragment allows the reconstruction of a tripod of about 11 cm in diameter; it is not certain whether the lower parts of the legs were connected by horizontal struts, as proposed in Fig. 4, right; the shape of the ring is, of course, mere conjecture.

e) Two fragments of a fluted bowl (Fig. 5). Vessel of hemispherical shape; broad (0.95 cm) horizontal rim, wide hammered flutings. Base lost. Width of larger fragment 6.0 cm; height 4.2 cm. Width of smaller fragment 5.5 cm, height 3.2 cm. Estimated diameter of bowl ca 18–20 cm.[4]

Platter[5]

This is a very rare type of bronze vase in the island of Cyprus. Its origin may be traced back to Egypt. Two variants of this type evolved in Egyptian metalwork:

A) A simple shallow platter with a wide flat or rounded base, low curved wall and out-curving lip; one loop-handle usually tapers outwards from the rim (i.e. rises together with the body of the vessel in one piece). The broad upper part of the handle may display an incised lotus flower or fine vertical fluting. The diameter of the vases varies between 15 and 28 cm. From Egypt there is one example of this variant from Thebes, in the tomb of Cha (Deir el-Medina, Tomb 8, vessel with figural decoration in the interior), and another one possibly from

4 Published by Courtois 1981, 279 no. 12, figs. 171, 12 and 173, 4.

5 The term "platter" was introduced by Dothan 1979, 68.

Fig. 1. Enkomi, French excavations 1966, probably Pit 3. Fragment of bronze platter, handle and part of rim preserved. Nicosia, Cyprus Museum.

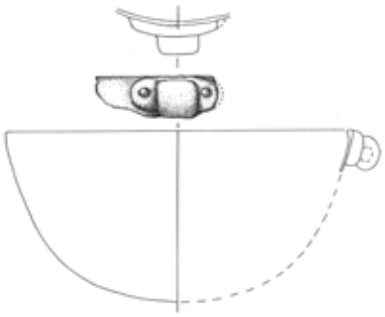

Fig. 2. Enkomi, French excavations 1966, probably Pit 3. Spool-shaped attachment-plate and rim of bronze bowl. Nicosia, Cyprus Museum.

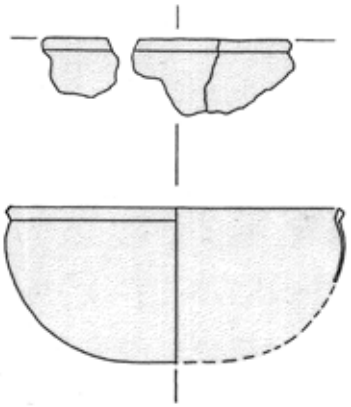

Fig. 3. Enkomi, French excavations 1966, probably Pit 3. Fragments of bronze bowl with rounded shoulder and out-turned rim. Nicosia, Cyprus Museum.

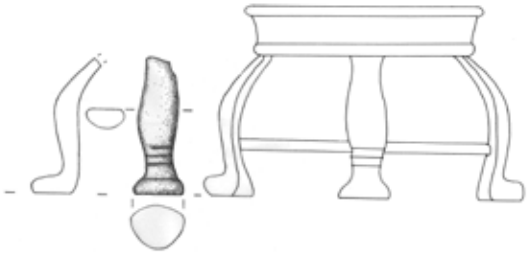

Fig. 4. Enkomi, French excavations 1966, probably Pit 3. Cast foot of miniature tripod. Nicosia, Cyprus Museum.

Fig. 5. Enkomi, French excavations 1965, Tombe du Point topographique 1394. Two fragments of fluted bronze bowl. Nicosia, Cyprus Museum.

Thebes (in the Musée du Louvre).[6] In the Levant a platter with engraved lotus decoration on the handle came to light in Tomb 118 at Deir Al-Balah/Israel,[7] in an anthropoid terracotta sarcophagus (with two skeletons) furnished with rich jewellery, scarabs, alabaster vases and metalwork.[8] A bronze jug with the same type of lotus ornament was found standing in the platter. Without doubt the two vases constitute a small set,[9] which has a convincing parallel from Hala Sultan Tekke in Cyprus (see below). The platter from Deir Al-Balah has been used as a parallel for our reconstruction in Fig. 1.

B) A more elaborate variant with a flat bottom, a hammered ring encircling its centre, a rounded lower body and a vertical upper body. The handle may be cast separately and riveted to the vessel, with an elegant lotus ornament in low relief, or extends from the rim as in variant A. Vases of this type, with a diameter of 22 to 35 cm, have been discovered in Egypt – at Matmar and Gurob (two similar specimens).[10] There is one parallel in Cyprus itself, from Hala Sultan Tekke near the south coast, in Tomb 23.[11] This platter has a fluted body, and is associated with a jug of identical decoration as well as an undecorated hemispherical bowl, forming a set comparable to that from Deir Al-Balah.[12] Hala Sultan Tekke Tomb 23 has a very unusual grave assemblage in comparison to standard Cypriot tombs, with jewellery and scarabs of Egyptian or Levantine type as well as a large bronze tripod with parallels in the Near East. It is possibly the burial of a foreigner from the East, who died in Cyprus.

Tomb 118 of Deir Al-Balah can be dated to the final Late Bronze, the 13th century BC; the tomb of Cha was built in the mid-18th dynasty; the finds from Gurob are probably of 19th dynasty date (13th or beginning of the 12th century BC). The burial of Hala Sultan Tekke is securely dated to Late Cypriot (LC) IIIA, the twelfth century BC. Regarding these parallels, the fragment from Enkomi should be contemporary, 13th or 12th century BC (LC IIC or LC IIIA). The function of these flat basins has not been determined with certainty. At Deir Al-Balah a platter is combined with a jug, at Hala Sultan Tekke with a jug and a small drinking bowl, which may point to the serving of food.

Spool-shaped attachment-plate

Spool-shaped attachments, designed for the insertion of a movable ring-handle, are rare in LBA metalwork. Minoan and Mycenaean metalwork preferred fixed, riveted handles, not swing-handles. Accordingly, parallels can be traced only in the Eastern Mediterranean, in Egypt, for example, at Tell el-Yahudiyeh, El-Lisht, Esna, Thebes and Beni Hassan, all of them hemispherical bowls dating to the 19th or 20th dynasty (13th to beginning of the 12th century BC).[13] The Egyptian attachment-plates are of a more elegant design, their finials usually decorated with palmettes, although simpler versions are also attested. In the Levant, variants closer to the Egyptian prototypes can be found, for example on a bowl from LBA Hama.[14] There is a unique variant from Tell Deir ʾAllah, the spool transformed into a bull figure,[15] and a rather simple undecorated version of this handle construction on a small strainer from Deir Al-Balah, Tomb 114, datable to the 13th century BC.[16] Spool-shaped attachment-plates

6 Radwan 1983, 115 no. 332, 334, pl. 60, 332 and 334.

7 Dothan 1979, 68–70, figs. 150–51, 153; Gershuny 1985, 14 no. 107, pl. 9, 107. Cf. also Dothan 2008.

8 Dothan 1979, 46–91.

9 Dothan 1979, 66–8, figs. 148–49, 152; Gershuny 1985, 19 no. 127, pl. 12, 127.

10 Radwan 1983, 115–16 nos. 335–36, pls. 60–1, 335 and 336, 148 no. 310, pl. 56, 310.

11 Niklasson 1983, 171–213. Platter: Niklasson 1983, 172–73 no. N 1220, figs. 436–38, 488; Matthäus 1985, 194–95 no. 469, pl. 52, 469.

12 Niklasson 1983, 173 no. N 1222, figs. 440–42, 490.

13 Radwan 1983, 109–10 nos. 314–22, pls. 56, 314–15 and 57, 316 A. B, 322 as well as p. 116 no. 337, pl. 61, 337. These types should be distinguished from those bowls with two attachment-plates, usually with palmette decoration, and a swing-handle of omega-shape, although of approximately the same function and date: Radwan 1983, pl. 58, 323–25; Montet 1951, 101, fig. 42.

14 Riis 1948, 137, fig. 183, B.

15 Franken 1992, 42, fig. 4–5, bottom.

16 Dothan 1979, figs. 37, 38, 40; Gershuny 1985, 15–6 no. 116, pl. 11, 116.

continue into the Early Iron Age (EIA) in the Near East as well as in Cyprus.[17] The fragment from Enkomi provides the first extant evidence that bowls of this type were adopted by Cypriot metalworkers at a rather early date, around 1200 BC.

Hemispherical bowl with rounded shoulder and out-turned rim

Although this seems to be a very simple type –a hemispherical bowl without handles and without decoration– there are in fact very few Late Bronze parallels, and in Cyprus only a vessel from the last burial period of Tomb 9 at Kition (9: 196), probably of LC IIC or early LC IIIA date (around 1200 BC)[18] and contemporary with the bowl fragments from Enkomi. The type has forerunners in Egypt. We may cite examples from Tell el-Yahudiyeh, Abydos and El-Lisht, some, according to A. Radwan, probably of 20th dynasty date (12th to beginning of the 11th century BC).[19] Comparable shapes may have been known in the Levant as well, as a fragmentary bowl from Tell es-Sa'idiyeh, Tomb 101 may indicate, although its typology is not precisely defined.[20] There are no known parallels from Late Minoan (LM) or Mycenaean Greece. In Cyprus bowls of this type continued to be manufactured, although rarely, in the Cypro-Geometric (CG) period, with examples from Amathus, Swedish Tomb 15 and Lapithos *Kastros*, Swedish Tomb 420.[21]

Cast tripod

Cast tripods (H.W. Catling's terminology) are miniatures, with a diameter of ca 9 to 12 cm and a height of 6.5 to 10 cm. They are characterised by broad cast legs, which usually narrow towards the foot, and are S-curved in profile. The ring, which carried a vase, may be a simple rod or a band with ajourée or relief decoration. With some exceptions, horizontal inner struts typically connect the lower part of the legs and stabilise the construction. The type has a wide distribution, although it is not as common as the rod tripod, in the Levant and in tombs and sanctuaries in Cyprus itself but is rare in Greece (attested only by an heirloom in the sanctuary of Zeus at Olympia). There may have been a production centre outside Cyprus in the Levant, as some of the Levantine tripods show typological idiosyncrasies.[22] The types of Cypriot tripods in general –the most ambitious creations of Cypriot metalworkers (rod tripods as well as cast tripods)– have forerunners outside Cyprus in the Near East. In Cyprus cast tripods start in LC IIC (13th century BC) and continue (probably as heirlooms) into the CG period (at Amathus and Palaepaphos). The type has been discussed in detail by H.W. Catling and H. Matthäus.[23]

As far as the tripod leg from Enkomi is concerned, the best parallel seems to be offered by a tripod from the sanctuary of Myrtou *Pigadhes*, of LC IIC date (13th century BC), one of three tripods which represent the earliest find context in the island.[24] The Myrtou tripod shows comparable undecorated legs, although of the more typical elongated triangular type, S-shaped in profile, with three horizontal ridges just above the foot.

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17 Tell Halaf: Hrouda 1962, 65–6, 69, pls. 47, 2 and 50, 17; Cyprus (Amathus, Kouklia/Palaepaphos): Matthäus 1985, 112–14 nos. 325–28; Karageorghis 1983, pls. LX 10, CLVIII 27; figs. LXXXVIII 10, CLVI 27; Chavane 1990, 5 nos. 37–8, pls. II 37, XX 37; Karageorghis and Raptou 2016, pls. XIII 8, LXXIX 8. Cf. Matthäus 2016, 193–94.

18 Karageorghis 1974, 73 no. 196, pls. LXXXI 196, CLXVII 196; Matthäus 1985, 109–10 no. 309, pl. 18, 309.

19 Radwan 1983, 97–8 nos. 255–60, pls. 48, 255 and 49, 256–60.

20 Pritchard 1980, fig. 4, 16; Gershuny 1985, 2 no. 7, pl. 1, 7.

21 Matthäus 1985, 108–9 nos. 308, 310, pls. 18, 308, 310.

22 Matthäus 1985, 327.

23 Catling 1964, 199–203; Matthäus 1985, 309–13, 326–34. New finds since 1985: Yon 1987, 240 no. 80/102, fig. 17, 80/102; 18, 80/102 (Ugarit, Temple aux rhytons); Kunstwerke der Antike 2007, 119 no. 198; Hemingway 2007 (without provenance, Harvard University Art Museum); Karageorghis and Raptou 2014, 32 no. 82, p. 40, pls. XII 82, LXXXII 82 (leg of tripod, Palaepaphos *Plakes* Tomb 142).

24 Matthäus 1985, 310 no. 696, pl. 99, 696.

Fluted bowl

This is one more bowl from the excavations of the French Mission which has prototypes in Egyptian and/or Levantine toreutics. In 1965 in Quartier 4E the so-called "Tombe du point topographique 1394" was discovered, a tomb built of ashlar masonry in the vicinity of the famous British Tomb 66. The architecture points to a date not later than LC IIC. The tomb contained a large collection of interesting bronze fragments, including pieces from a beak-spouted jug and an unusual strainer with swing-handle.[25] In the context of our discussion two fragments of the rim and wall of a fluted bowl, described by J.-Cl. Courtois as "à parois ornée de godrons verticaux larges", are of extreme importance. Unfortunately, in Courtois' catalogue of finds, they are illustrated only from the inside, and –as far as I can see– they have never been noted in any further study of Cypriot metalwork.[26] The fragments have a wide horizontal rim and wide hammered vertical ribs. The bottom part of the bowl, which must have had a diameter of about 18–20 cm, has been lost. The type is not known in the Minoan and Mycenaean world, but there is a long tradition of vessel manufacture, of bowls as well as other types of vases, during the 3rd and early 2nd millennia BC in the Near East.[27]

During the LBA vessels of various types with fluted decoration were manufactured by artists in Egypt, the Levant and Asia Minor. Egypt seems to have been a major production centre. We may mention a flask with this kind of decoration from Dendereh (probably 19th dynasty),[28] and jugs, of bronze, silver or gold, from Dendereh and Edfu (bronze),[29] from the treasures of Tell Basta (silver)[30] and the tomb of Pharao Psusennes (ca 1044/3–994/3 BC) at Tanis.[31] A bronze jug from Tomb 23 at Hala Sultan Tekke (LC IIIA, 12th century BC), part of a set with a platter with identical decoration, has a delicate lotus ornament of Egyptian type in low relief on its handle and may therefore be an import from Egypt.[32] In Asia Minor, in the Hittite realm, a jug of obviously local type with fluted decoration has come to light among an extensive group of bronze vessels from Kınık.[33]

At Kınık the jug is part of a small set, together with a bowl with fluted decoration.[34] Unfortunately, a very small number of Hittite metal vessels have come to light to date, and the repertoire of Hittite metalwork is virtually unknown. The situation in Egypt is different. Gold bowls of excellent quality with fluted decoration, characterised by a low vertical rim, are among the treasures of the tomb of Pharao Psusennes.[35] A hemispherical bronze bowl from Egypt, of unknown provenance, is held by University College London.[36] To these may be added some evidence from the Levant, for example a fragmentary vessel from Ugarit-Ras Shamra[37] and a fragmentary bronze bowl with out-turned rim and fluted decoration from LBA Hama (probably 12th century BC), the latter perhaps providing the best parallel for the Enkomi fragments.[38]

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25 Courtois1981, 279–84.
26 Courtois 1981, 279 no. 12, figs. 171, 12 and 173, 4.
27 Hasserodt 2009, 163–71. She also discusses vessels of comparable type in faience and stone.
28 Radwan 1983, 140 no. 402, pl. 70, 402.
29 Radwan 1983, 135 no. 385, pl. 68, 384, 385 and pl. F, 384.
30 Lilyquist 2012, 22–3, figs. 39–41, 59, fig. 79.
31 Montet 1951, pl. LVI (chalice) and LXIX, top (jug).
32 Matthäus 1985, 235 no. 532, pl. 532. Cf. also a jug from Kition, Tomb 9, of inferior workmanship, with grooves down the body instead of regular flutings: Karageorghis, 1974, 78 no. 283+286, pls. LXXXV 283+286, CLXVIII 283+286; Matthäus 1985, 234 no. 531, pl. 70, 531, certainly of local Cypriot workmanship.
33 Emre and Çınaroğlu 1993, 681 no. 14, fig. 13, pl. 131, 3a–b.
34 Emre and Çınaroğlu 1993, 683–84 no. 24, fig. 21, pl. 126, 1.
35 Montet 1951, 82, fig. 30, pls. LIV, top, LXIX, bottom; Sciacca 2005, 29–30, figs. 1–2.
36 Radwan 1983, 116 no. 337, pl. 61, 337.
37 Schaeffer 1938, 254, fig. 41.
38 Riis 1948, 18, fig. 184.

LBA bowls of this type are extremely important, as they are the predecessors of the well-known and very widely distributed fluted bowls of the EIA, which were produced in many regions of the Near East and the Mediterranean, from Iran in the East to Italy and the Iberian Peninsula in the West.[39]

CONCLUSIONS

When Hector Catling published his masterly monograph *Cypriot Bronzework in the Mycenaean World* in 1964 he was able to identify two main tendencies in Cypriot metal vase production – a strong local tradition, represented especially by the huge number of simple hemispherical bowls as well as some local types (e.g. Base Ring bowls and wall-brackets), and a quite characteristic group of vases which imitate or adopt LM and Mycenaean prototypes (e.g. amphoroid kraters, beak-spouted jugs, lavers etc). It was only during the following decades of research that a third component of Cypriot toreutics became visible, the impact of Egypt and the Levant.[40]

As far as sophisticated metalwork is concerned, artistic developments in Egypt and the Levant proceeded more or less in parallel. During the 19th and 20th dynasties, in particular, a koine evolved, based, of course, on the impact of superior Egyptian craftsmanship and –this should not be forgotten– on the political dominance of Egypt in the Levant. Such a koine is visible not only in bronzework but also in other arts and crafts, jewellery, faience, ivory etc. A culturally pluralistic society at this time demanded elaborate and precious status symbols from all parts of the Eastern Mediterranean,[41] and Cyprus became part of this network of exchange. The finds from Enkomi, which have been published here for the first time, underline this position of the island, which, thanks to its immense copper production, had the necessary economic resources to become an international centre of trade and exchange.

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39 Cf. the excellent monograph: Sciacca 2005.

40 Cf. Matthäus 1982, 1985.

41 Cf. Lilyquist 2012, 41.

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Tracing Cypriot connectivity with the Eastern Mediterranean and beyond through the trade of copper and other metals

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ABSTRACT

Cyprus is rich in natural resources, but the most important are without doubt the extensive copper ore deposits out of which massive quantities of the metal could be extracted. Since at least the beginning of the second millennium BC, if not earlier, the island produced enough copper to satisfy the needs of the local inhabitants but also the voracious appetite of the Bronze Age cultures of the Eastern Mediterranean. It is well known that the search for metals acted as an incentive for exploration and for establishing trading networks and systems. Cyprus, as one of the main sources of copper, became a central node in these trade networks. Cypriot copper would be exported in exchange for other metals that the island's inhabitants needed or wished to own but were not locally available, namely tin, lead, gold and silver. The aim of this paper is to bring together information deriving from ancient texts and discoveries on land and in the sea that bear witness to how intimately connected Cyprus was with the world overseas, because of the metals' trade.

Cyprus is rich in natural resources. These include the abundant forests of the Troodos, rocks and minerals used as pigments[1] or in the production of medicines,[2] salt[3] and of course extensive copper ore deposits[4] out of which massive quantities of the metal could be extracted. Since at least the beginning of the 2nd millennium BC, if not earlier, the island produced enough copper to satisfy the needs of the local inhabitants but also the voracious appetite of the Bronze Age cultures of the Eastern Mediterranean. The Bronze Age is after all the "period when copper or copper alloys served as the primary material for the production of tools, weapons and ornaments".[5] In fact, the Bronze Age is better seen as the time when a polymetallic metallurgical technology emerged, as it is already from the earliest phases of this archaeological period, in the 3rd millennium, that all metals known in antiquity were extracted from their ores and mixed to form alloys and sophisticated metal artefacts.[6] It is thus not surprising that, as pointed out by Muhly: "Trade in metals, notably the precious metals gold and silver, and the base metals copper and tin, represents one of the major aspects of Bronze Age commerce".[7]

1 Bear 1963, 162–68.
2 Michaelides 2011, 93–4.
3 Bear 1963, 175–81.
4 Constantinou 1982, 15–7.
5 Harding 2011, 328.
6 Muhly 1980, 25.
7 Muhly 1977, 73.

Fig. 1. Silver ingots (Inv. No. 113 and 114) from Pyla *Kokkinokremmos*. Photograph by George Papasavvas.

Thus Cyprus, as one of the main sources of copper, became a central node in the trade networks which were established at this time. Cypriot copper was exported in exchange for other metals that the island's inhabitants needed or wished to own but were not locally available, namely tin, lead, gold and silver. The aim of this paper is to bring together information deriving from ancient texts and discoveries on land and in the sea that bear witness to how intimately connected Cyprus was with the world overseas, because of the metals' trade. It goes without saying that Cyprus' connectivity with the surrounding world in order to procure exotic and precious raw materials begins already from the earliest phases of prehistory.[8] Nevertheless, this paper will focus on the Late Bronze Age (LBA)/Late Cypriot (LC), namely the 16th to the 11th centuries BC.

Metals, and other raw materials such as glass,[9] were cast into ingots to be traded. That different ingot shapes were used simultaneously throughout the LBA is revealed not only by actual finds but also by depictions of ingots in numerous Egyptian wall-paintings.[10] Gold, for example, seems to have been traded in the form of ring ingots, as well as in bags probably filled with dust or nuggets of alluvial gold.[11] One such gold ring was found on the Uluburun shipwreck.[12] Silver seems also to have been traded in the form of rings, but bar and bun ingots are also known.[13] Some of the earliest examples of small silver bar ingots are those found in the Tôd Treasure which dates to the beginning of the 2nd millennium BC.[14] Silver rings and two long silver bar ingots, measuring 20.8 cm in length, were part of the Amarna Hoard,[15] while fragments of silver ring and bar ingots were also recovered from Uluburun.[16] Two oval bun silver ingots were found at Pyla *Kokkinokremos* (Fig. 1).[17] Silver was also traded

8 For example, obsidian imported from Anatolia appears already from the Early Aceramic Neolithic (8350–6400 Cal BC). For a recent review of the evidence see Moutsiou 2018. It is at the same period that the first beads made of imported carnelian appear, but the provenance of the semi-precious stone remains unknown (Moutsiou and Kassianidou 2019, 258–60).

9 Glass ingots in the shape of truncated cones in four different colours were among the cargo of the Uluburun ship (Pulak 2008 293, 313–14).

10 Gold and silver ingots being weighed are shown in the Tomb of Rekh-mi-re (Davies 1973, 35 pl. 55) and in the Tomb of Paheri (Klemm and Klemm 2013, 23, fig. 2.3). Also often depicted are oxhide ingots of two different colours –red and grey– believed to indicate copper and tin (Bass 1967, 62–7; Papasavvas 2009, 108–11). In the scene depicting the casting of bronze doors from the Tomb of Rekh-mi-re apart from oxhide ingots there are also small grey ingots brought in baskets which must surely be tin ingots (Wainright 1944, 94).

11 Klemm and Klemm 2013, 23.

12 Pulak 2008, 297.

13 Moorey 1994, 238.

14 Shaw and Nicholson 1995, 291; Pierrat-Bonnefois 2008, 65.

15 Pendlebury 1931, 236; Singer 2013, 254.

16 Pulak 2008, 297, 357, fig. 114.

17 Karageorghis and Demas 1984, 64–5.

Fig. 2. Detail from the Tomb of Rekh-mi-re showing men bringing copper oxhide ingots and baskets with smaller ingots which are grey colour and believed to be tin ingots to be cast into bronze doors (from Davies 1935, Plate XXII).

in small broken up pieces of scrap metal given the name "Hacksilber" by archaeologists.[18] Until the discovery of the Uluburun shipwreck, even though tin ingots seemed to be depicted in Egyptian wall paintings (Fig. 2), it was not clear whether tin was traded in metallic form, as no ingots had been found up to that point.[19] It was postulated that perhaps cassiterite (the tin oxide mineral) was traded instead and added directly into molten copper. But the Uluburun ship was carrying one ton of metallic tin in a variety of ingot forms: there were oxhide ingots (complete and in fragments), bun ingots, rectangular slab ingots, thick wedge-shaped sections cut from large ingots of indeterminate shapes, halves of elongated ovoid loaves, and a unique ingot shaped like a stone anchor.[20] Hemispherical and smaller plano-convex tin ingots have been found in the shipwreck of Hishuley Carmel off the coast of Israel.[21]

Copper was also traded in a variety of forms as illustrated again by the cargo of the Uluburun ship. The ship carried 121 bun or plano-convex ingots, oval-shaped ingots, pillow-shaped ingots and 354 oxhide ingots, which formed the bulk of the ship's metal cargo.[22] The oxhide ingot is the most characteristic type of LBA copper ingot, as it does not appear before or after that period (Fig. 3). The oxhide ingot may well have been the trademark of Cypriot copper[23] as provenance studies have shown that all oxhide ingots dating after 1400 BC and some that are earlier are consistent with the Apliki ore deposit.[24] Furthermore, in Cyprus the oxhide ingot appears regularly in the iconographic repertoire of works of art, such as the well-known four-sided stands, the two figurines standing on ingots, the cylinder seals and the miniature ingots.[25]

Based, however, on currently available evidence, the type was probably not invented in Cyprus. The reason why Cyprus cannot (yet?) claim the patent of the oxhide ingot shape is because it is another island, namely Crete, which to this day boasts the earliest oxhide ingots and the highest number of complete examples found

18 Singer 2013, 249.
19 Muhly 1985, 278.
20 Pulak 2000, 150–55; 2008, 307–9.
21 Galili et al. 2013, 6–8.
22 Pulak 2000, 143–46; 2008, 308–10.
23 Papasavvas 2009, 112; Stos-Gale 2011, 222.
24 Gale 1999, 117; 2011a, 218. This will be discussed further below.
25 Papasavvas 2009.

Fig. 3. Copper oxhide ingot (Inv. 1939/VI-20/4) from Enkomi. Photograph by the Department of Antiquities and drawing by Clara Vasitsek.

on land: 25 complete ingots and many fragments have been found at various Minoan sites.[26] With only a few exceptions, they date to Late Minoan (LM) IB, namely ca 1500–1450 BC. The most recent find is an oxhide ingot broken into two pieces that was discovered during the excavations on Chrysi island just last year.[27] But Crete does not have copper ore deposits and, therefore, copper would have had to be imported, most probably already in the shape of an oxhide ingot. The question is from where?

Catling first questioned whether Cyprus could have been the principal source of copper for Crete in the Neopalatial period, which roughly corresponds to Middle Cypriot (MC) III–LC IIA.[28] His doubts were based on three arguments: first, according to the archaeological evidence available at the time, metal activity on Cyprus was rather limited in this period especially in comparison to Minoan Crete; second, Cypriot society did not seem to be sophisticated enough to have been involved in long-distance trade; and third, trading relations between the two islands did not seem to be very strong, as Minoan finds on Cyprus were limited, as were Cypriot finds on Crete.[29] Forty years later, his concerns can to a great degree be addressed.[30] The number of Cypriot

26 Hakulin 2004, 19; Kassianidou 2014a, 309–10.

27 The discovery has been announced in a press release by the Greek Ministry of Culture https://www.culture.gov.gr/el/Information/SitePages/view.aspx?nID=3022

28 Catling 1979, 69.

29 Catling 1979, 71–4.

30 Betancourt 2012, 131–32.

imports found on Crete has increased, but only slightly.[31] It has, however, been argued that the connections between the two islands, as indeed between Minoan Crete with the rest of the Eastern Mediterranean, is reflected in manifestations of material culture other than pottery.[32] As regards the Cypriot copper industry in this period, the finds from the primary smelting workshop at Politiko *Phorades* show that copper smelting technology on the island was already very advanced, at this time.[33] Furthermore, a detailed study of the archaeometallurgical assemblage from the extensive workshops excavated by Dikaios in Enkomi's Area III,[34] but more importantly the interdisciplinary study of metallurgical ceramics found there, has shown that the largest assemblage of crucibles and tuyères dates to this early phase of the LBA, and that these were used to melt pure copper rather than copper alloys.[35] This suggests that the workshops of Enkomi in the 16th to 14th centuries BC could very well have been producing oxhide and other types of ingots for export and for the local market. Although no oxhide ingots dating to this period have been found on the island,[36] they appear on some of the earliest cylinder seals from Cyprus, dating to the end of LC I.[37] This suggests that the oxhide ingots were already an integral part of the island's economy. Furthermore, there is textual evidence for the export of copper in Egyptian hieroglyphic texts dating to the 15th century BC. The texts state that the ruler of Isy, which is believed to be another form of the name for Alashiya, sends diplomatic gifts to the pharaoh Tuthmosis III (1479–1425 BC).[38] They include at least 150 ingots of copper. A new shipwreck loaded with copper oxhide ingots, as well as discoid bun ingots, that was recently discovered off the coast of Antalya, shows that such shipments are realistic. According to the preliminary evidence (mainly the shape of the oxhide ingots)[39] the shipwreck dates to the 16th–15th centuries BC.[40] During the last season of excavation 94 oxhide ingots and five bun ingots were recorded on the surface of the seabed, but more may be lying below them.[41] A few examples were lifted and upon conservation an inscribed sign was revealed on one of the oxhide ingots.[42] The shipwreck, therefore, promises to enhance our understanding of the metals' trade in this early phase of the LBA.

Thanks to Lead Isotope Analysis the metal used to make copper oxhide ingots found on Crete can be provenanced: the analysis shows that most of the earliest oxhide ingots were made with copper from a hitherto unknown source.[43] But, more importantly, four of the six complete ingots from Zakros as well as fragments from Gournia and Mochlos were found to be consistent with the ore deposit of Apliki on Cyprus.[44] Also consistent with a Cypriot provenance are the pillow-shaped ingots from Kyme[45] which are probably of the same date but unfortunately very little is known about their archaeological context.[46] No Lead Isotope Analyses of the new ingots from Antalya have yet been published but they are scheduled for the future.[47] The hope is that the Lead Isotope Analysis will provide more information on the unknown source of the Cretan ingots and perhaps

31 The evidence has been compiled in a book edited by Karageorghis et al. 2014; see also Papadimitriou 2015, 426–28.
32 Papadimitriou 2015, 429.
33 Knapp and Kassianidou 2008, 144.
34 Kassianidou 2012; 2016.
35 Ioannides et al. 2021, 12.
36 But small pieces of copper ingots dating to this period have been found during rescue excavations in Limassol (Charalambous and Kassianidou 2012, 302–3).
37 Graziadio 2003, 42; Papasavvas 2009, 90.
38 Kitchen 2009, 5; Ockinga 2006, 42.
39 Buchholz (1959, 7) was the first to suggest a typology of oxhide ingots which was later refined by Bass (1967, 53). The earliest type is pillow-shaped without extremities and is known from Crete and Kyme (Buchholz 1959, 36–37).
40 Öniz 2019, 12.
41 Öniz 2020, 175.
42 Öniz 2020, 177.
43 Stos-Gale 2011, 226.
44 Stos-Gale 2011, 223–26.
45 Gale 1999, 117.
46 Buchholz 1959, 36–37.
47 Öniz 2020, 179.

confirm that Cyprus was already, from the 16th–15th centuries BC, producing such large shipments of copper and shipping them to the north and to the west.

Catling was of course right regarding the state of the Cypriot metalworking industry in this early phase of the LBA but there are reasons for this. The evidence derives mainly from tombs of LC I–LC II, which in contrast to MC tombs did not receive large numbers of copper alloy artefacts.[48] According to Papasavvas,[49] bronze appears to have been less important for the production of prestige artefacts in this earliest phase of the LC. This is because gold and silver, precious metals that had to be imported, were much more appreciated by Cypriots than artefacts made from copper, which was locally produced and readily available.[50] Rich burials at this time, therefore, were provided with gold artefacts sometimes in remarkable quantities instead of bronzes.[51] And there, in plain sight, is hidden the evidence that Cypriot society was sophisticated enough to have been involved in intricate long-distance trading networks, even in this earliest phase of the LBA. It takes the form of metals that were not locally available, namely tin, lead, silver and gold, and yet begin to appear, in some cases in large quantities, in the tombs of this period.

The most important and valuable imported metal was without doubt gold.[52] It is almost certain that the gold came from Egypt which possessed the richest gold deposits, but also vast amounts of the metal accumulated as booty or tribute from conquered regions.[53] Gold extraction, which according to Klemm and Klemm[54] was a matter for the pharaoh and his administration, expanded significantly in the LBA.[55] Apart from local consumption, gold was required by the king for his foreign affairs: some of it was given as a gift to rulers of the neighbouring lands.[56] The Amarna archive records this formal gift exchange in detail and shows that the amount of gold sent by the Pharaoh was sometimes staggering[57] – and yet on several occasions the sovereigns who were on the receiving end wrote letters to complain that the shipment was not as large as they had expected.[58] This suggests that at least in the earliest phases of the LBA gold cannot have been imported to Cyprus as part of private mercantile activity – gold became available because the island was already involved in the international trade of metals at the highest level.[59]

The most substantial proof of Cyprus' connectivity with the wider world in the LBA is the predominance of bronze. Analytical studies of Cypriot copper alloy artefacts dating to different periods have shown that the first bronzes appear already in the Early Bronze Age (EBA),[60] but in the 3rd millennium and the first half of the 2nd, arsenical copper was the alloy of choice.[61] With the transition to the LC, arsenical copper was abandoned and

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48 Keswani (2004, 119) found that the per capita consumption of copper-based artefacts as recorded in the deposition of grave goods in tomb groups of the earliest phase of the LC (LC I–IIB) decreased in relation to the MC period.

49 Papasavvas 2012, 118.

50 Papasavvas and Kassianidou 2015, 233.

51 This is clearly illustrated by Tomb 11 at Ayios Dhimitrios (LC IIA–LC IIB) which had received many gold artefacts weighing almost 0.5kg, but only one bronze item (a dagger) (Goring 1996) and by Enkomi Tomb 93 (no later than the LC IIC), the richest of all LC tombs, if the quantity of gold is taken into consideration, which contained no bronzes at all (Keswani 2004, 236, 243).

52 See Papasavvas (2018, 608) for evidence that the value of gold in relation to copper was 1:200 in Egypt for most of the New Kingdom period and as high as 1:800 in Ugarit in the 14th–13th centuries BC.

53 Klemm and Klemm 2013, 23.

54 Klemm and Klemm 2013, 22.

55 Klemm and Klemm 2013, 606–9.

56 Klemm and Klemm 2013, 26.

57 Moran (1992, xxv n. 63) calculated that in the letter EA 14 the list of Egyptian artefacts sent as gifts to the king of Babylon amounted to over half a ton of gold.

58 For example, the king of Assyria in letter EA 16 states: *Is such a present that of a Great King? Gold in your country is dirt; one simply gathers it up. Why are you so sparing of it? I am engaged in building a new palace. Send me as much gold as is needed for its adornment.* (Moran 1992, 39).

59 See also Papasavvas in this volume.

60 Webb et al. 2006, 274.

61 Weinstein Balthazar 1990, 161. A recent comprehensive study of metal artefacts from Lapithos, dating to the MC, has shown

artefacts were made of bronze, namely copper mixed with different amounts of tin (depending on the nature of the artefact).[62] Tin was not locally available and could only be acquired through international long-distance trade.[63] The question of where the tin used in the Eastern Mediterranean came from and how the trade was organised has been discussed for decades and remains an open issue.[64]

Moving on to the 14th century, the extent of Cyprus's connectivity with neighbouring regions because of the copper trade becomes even clearer thanks to written documents. The most important are the letters found in the archive of Akhenaten's capital at Tell el Amarna.[65] In five of the eight letters sent from Alashiya to Egypt shipments of copper are recorded.[66] The fact that among those who correspond with the pharaoh, the king of Alashiya is the only one who sends copper, has often been used as an argument to support the identification of Alashiya with Cyprus.[67] The Amarna letters are important for several reasons. First, as vividly explained by Kitchen: "One other item of importance in these few letters is the political status of the King of Alashia vis-à-vis the pharaoh of Egypt. He actually greets the pharaoh –wealthiest and most prestigious monarch of the time– as "Brother", just as did the kings of Hatti, Babylon, and Mitanni (if not Arzawa). Not for him, the snivelling, grovelling in the dust: "my lord, I am the mere dirt under your feet, I flatten myself in obeisance 7 times each on my back and my belly" kind of talk! Not here."[68] Undoubtedly this political importance stems from the ability of the king of Alashiya to provide the pharaoh of Egypt with copper. Both the king and the governor of Alashiya mention in their letters ships that belong to the king and Cypriot merchants who are stationed in Egypt.[69] Most importantly, in letter EA35[70] the king of Alashiya apologises for sending only 500 unspecified units of copper explaining that this is because the god Nergal has "slain all the men in my country, and there is not a (single) copper-worker."[71] This shows that the copper was locally produced and sent directly from Alashiya to Egypt. If we accept that the Amarna letters refer to numbers of ingots of copper, then according to the six letters a total of 29,000 kilos of metal was shipped in about 15 to 30 years.[72] Letter EA35 is interesting for other reasons as well. It indicates that Cyprus also exported timber to Egypt and that the king of Alashiya expected to be paid in silver (although the payment is masqueraded as a gift).[73] The king of Alashiya demands silver in two letters, EA35 and EA37,[74] and he is the only one to do so. As pointed out earlier most other kings write to ask/demand gold![75]

The discovery of Uluburun shipwreck with its cargo of 354 oxhide ingots and 121 plano-convex ingots, showed that large shipments of copper, such as the ones mentioned in the Amarna letters, are plausible.[76] Furthermore, Lead Isotope Analysis found that the oxhide ingots and the plano-convex ingots on board are consistent with a provenance from the mine of Apliki.[77] This shows that Cypriot workshops could produce ten

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that, although there is a marked increase in the use of bronze, the alloy of choice was still arsenical copper (Charalambous and Webb 2020, 4).

62 See for example Charalambous and Kassianidou 2012; 2014; Charalambous et al. 2021.

63 Muhly 1985, 277; Kassianidou 2003, 111–12.

64 For a review, see Pigott 2011; Constantinou 2012; Berger et al. 2019.

65 The archive consists of 382 tablets, the vast majority of which, namely 350, are letters exchanged between the Pharaoh of Egypt and rulers of the neighbouring countries (Moran 1992, xv). Among these letters there are seven which were sent by the king of Alashiya and to the Pharaoh of Egypt and one which was sent by the "governor" of Alashiya to the "governor" of Egypt.

66 Knapp 2011, 250.

67 Knapp 1996, 8.

68 Kitchen, 2009, 4.

69 In letter EA 39 (Moran 1992, 112) and EA 40 (Moran 1992, 113).

70 Moran 1992, 107–8.

71 Translation by Moran 1992, 107.

72 Knapp 2011, 251.

73 Kassianidou 2009, 49.

74 Moran 1992, 110–11.

75 Kassianidou 2009, 54.

76 Knapp 2011, 252.

77 Stos 2009, 172–73.

Fig. 4. Tin oxhide ingot from the Uluburun shipwreck. Courtesy of the Institute of Nautical Archaeology.

tons of copper for a single shipment. Considering the probability that this was not the only ship loaded with Cypriot copper that sailed that year, then the scale of the importance of Cyprus as a source of copper for the Eastern Mediterranean in this period is clear.[78]

If we accept that the oxhide ingot shape is the trademark of Cypriot copper, then we should contemplate what it may mean that some of the tin ingots on the Uluburun ship are also cast in the shape of an oxhide (Fig. 4), and the fact that Egyptian wall paintings depict grey oxhide ingots which are believed to portray tin ingots.[79] Moreover, several of the tin ingots bear inscribed signs, some of which may be identified as belonging to the Cypro-Minoan (CM) script.[80] CM signs have also been detected on tin ingots found off the coast of Israel. Following Hirschfeld's argument for Aegean pottery bearing inscribed CM signs, I have argued elsewhere that the marking of metal ingots, whether they are copper oxhide ingots, copper bun ingots, tin oxhide ingots or tin plano-convex ingots, indeed even lead ingots, seems to be a specifically Cypriot practice which implies that the ingots had either been routed via Cyprus or handled by people familiar with the Cypriot marking system.[81] This, in other words, suggests that Cyprus played a significant role in the trade of tin from the Syro-Palestinian coast, where it arrived from overland routes to reach areas across the sea, such as the Aegean.[82]

Here I would like to acknowledge the contribution of Lead Isotope Analysis and the work of Noel Gale and Zofia Stos-Gale in highlighting the extent of the trade of Cypriot copper throughout the Eastern Mediterranean and beyond.[83] Their analysis of many oxhide ingots from all over the ancient world showed that all those which date after 1400 BC are consistent with a Cypriot provenance.[84] In 1991, Gale estimated that 130 ingots had been found in archaeological sites on land.[85] Since then, there have been several more discoveries, which have not only increased this number but also stretched the geographical distribution of these finds, to the west and to the north.[86] All new finds which have been analysed, for example those that have been found at sites in the Balkans,[87]

78 Kassianidou 2013, 138.

79 Grey oxhide ingots are shown in the Tomb of Puyemre, the Tomb of Useramon, the Tomb of Rekh-mi-re, and the Tomb of Nebamun and Ipuky (Bass 1967, 63–7).

80 Sibella 1996, 10; Pulak 2000, 146; 2008, 309; Kassianidou 2003, 114–15.

81 Kassianidou 2003, 116.

82 Kassianidou 2003, 116.

83 Gale 1991; 1999; 2005; 2011a; Gale and Stos-Gale 2005; Stos 2009; 2011.

84 Gale 1999, 117; 2011a, 218.

85 Gale 1991, 200.

86 For recent reviews see Sabatini 2016a; 2016b.

87 Athanassov et al. 2020, 325.

or in Israel,[88] are also consistent with a Cypriot provenance. What is noteworthy is that Cypriot copper in the form of oxhide ingots was sought after even in areas which possessed rich copper ore deposits of their own (for example Anatolia, the Southern Levant, the Balkans and Sardinia). The reason may be that Cypriot copper had an advantage – it was free of impurities such as lead, arsenic, antimony etc.[89]

In the 13th–12th centuries BC there is a significant change in the way that metals and other commodities were circulated. This is the time that the monopolistic control and state level trade which characterised the previous centuries gives way to small-scale trade private mercantile enterprises.[90] The two shipwrecks off the coast of Anatolia have often been used to illustrate the change.[91] Dating to ca 1300 BC, the Uluburun ship was carrying ten tons of copper and one ton of tin, as well as other exotic raw materials, and is believed to have been on a royal mission.[92] Dating to ca 1200 BC, the ship of Cape Gelidonya also carried copper in the form of oxhide and plano-convex ingots and probably tin but the size of the metal cargo was significantly smaller. Recently re-calculated to 1,135 kg, the copper cargo is only a tenth of the one from Uluburun,[93] while 32% of the metal was in the form of fragments of ingots of various types.[94] The Cape Gelidonya ingots are isotopically identical with the ingots from Enkomi and slag from Kalavasos *Ayios Dhimitrios*, so they too are consistent with a Cypriot provenance.[95] Furthermore, the ship carried metal objects, such as agricultural and other types of tools and scrap metal,[96] closely resembling Cypriot founders' hoards and the cargo of a ship of Alashiya, described in a text from Ugarit (UT 2056).[97] The presence of scrap metal sets the two shipwrecks apart and led Bass to suggest that the ship found at Gelidonya was that of a private merchant, that carried an itinerant metalsmith on board.[98] Two shipwrecks excavated off the coast of Israel, the one at Hahotrim[99] and the other at Kfar Samir North,[100] seem to have carried a cargo like that of the Cape Gelidonya ship, namely fragments of oxhide and other ingots and scrap metal and are believed to be contemporary with it. In addition, the oxhide ingot fragments from Kfar Samir North are consistent with a Cypriot provenance and have a lead isotope fingerprint similar to that of the ingots from Cape Gelidonya.[101]

The trade in Cypriot copper continues well into the 12th century BC, as indicated by oxhide ingot fragments recovered from Mycenaean sites, such as the ones from the excavations at the site of Kanakia on the island of Salamis,[102] the ingot fragment from Late Helladic (LH) III Emporio on Chios,[103] and the quarter of an oxhide ingot found in the sanctuary of Piazzale dei Sacelli at Ayia Triadha.[104] The hoard of oxhide ingot fragments and other bronze artefacts in a fragmentary state found at Lipari has also been dated to the 12th century BC. Weighing a total of 75 kg, this is one of the largest hoards ever found in the central Mediterranean.[105] But the widest distribution of Cypriot copper oxhide ingot fragments dating to the last phase of the LBA is found in

88 Galili et al. 2011, 70; Yahalom-Mack et al. 2014, 173.
89 Kassianidou 2001, 110.
90 Sherratt and Sherratt 1991, 373–75; Sherratt 2000, 88–9; Monroe 2009, 151–57.
91 Sherratt 1998, 299.
92 Pulak 2008, 298.
93 Lehner et al. 2020, 166.
94 Van Brempt 2016, 387.
95 Stos 2009, 172.
96 Bass 1967, 84–117.
97 Linder 1972, 163.
98 Bass 1967, 163–64; 1991, 73.
99 Galili et al. 2011, 67–8; Wachsmann 2020.
100 Galili et al. 2011, 67.
101 Yahalom Mack et al. 2014, 173.
102 Lolos 2002.
103 Hood 1982, 664.
104 Lo Schiavo et al. 2013, 53.
105 Lo Schiavo et al. 2009, 147–221.

Sardinia, where such ingots have been discovered at 40 sites spread all over the island.[106] The chronology of many of the hoards is not precisely defined, but several date to the 12th and even the 11th century BC.[107] All oxhide ingots found in Sardinia are consistent with a Cypriot provenance.[108] This shows that in the 12th century and even through the 11th century BC, Cypriot copper in the form of oxhide and bun ingots was apparently still exported far and wide.

Lead Isotope Analysis shows that, at least in the Aegean, Cypriot copper was not only hoarded in the form of ingots but also used. A study of bronze weapons from Achaia has found that bronze artefacts of the LH IIIC are consistent with a Cypriot provenance,[109] as are three metal artefacts, namely a sword, a grieve and a tripod cauldron, deposited in a tomb of a warrior in Acarnania dating to the 11th century.[110] This suggests that the metal was still exported to the Aegean in the Early Iron Age (EIA).

One major change that occurs in this last phase of the LBA is the fact that, apart from Cypriot copper as raw material, finished metal objects begin to be a part of the Cypriot repertoire of exported goods. One such group of artefacts are the rod tripods and four-sided stands, which were exported and imitated in the Levant, the Aegean and in the central Mediterranean. According to Papasavvas,[111] out of a corpus of 65 such objects found in Cyprus and overseas, two thirds, including some examples found outside the island, were undoubtedly produced in Cypriot workshops. Also exported were Cypriot bronze amphoroid craters, at least two of which have been found in the Aegean.[112] Apart from these objects of high craftsmanship, the evidence from the shipwrecks and from hoards in the Aegean, namely the Athens Acropolis hoard and the Anthedon hoard from Boeotia, indicate that agricultural tools were also exported from Cyprus.[113] The Cape Gelidonya ship carried many different types of tools, such as picks, hoes or ploughshares and pruning knives.[114] Although many were clearly scrap, as they were broken, some were finished objects of Cypriot types, for example the ploughshares and the pruning knives. They would clearly have been traded in the ports that the ship would have visited, had it not sunk.

What was Cyprus getting in return for the copper exported: tin, lead, silver and gold, what else! The metal of two silver ingots found in Pyla *Kokkinokremos*, which according to Papasavvas' calculations would have had the equivalent value of nine copper oxhide ingots in prices valid in Egypt during most of the New Kingdom or about 18 copper oxhide ingots in prices valid in Ugarit,[115] came from Laurion.[116] I have also argued that silver may have been one of the Sardinian commodities traded for Cypriot copper but there is not yet any direct evidence for this.[117] Lead consistent with a Sardinian provenance, on the other hand, has been found at Maa *Palaeokastro*[118] and Pyla *Kokkinokremos*,[119] where Sardinian pottery has also been found.[120] Sardinian pottery was recently discovered in Hala Sultan Tekke as well.[121] These finally show that the exchange was reciprocal.

106 Lo Schiavo 2009; Sabatini and Lo Schiavo 2020, 3.
107 Sabatini 2016b, 37–9.
108 Gale 2006, 7; Hauptmann 2009, 510.
109 Jung et al. 2008, 90, 102, fig. 3.
110 Stavropoulou-Gatsi et al. 2009, 259.
111 Papasavvas 2014, 56 n. 5.
112 One was found in Pantanassa in central Crete and the other in Lefkandi, Euboea (Papasavvas 2017, 151).
113 Catling 1964, 81.
114 Bass 1967, 84–102.
115 Papasavvas 2018, 615.
116 Gale and Stos-Gale 1984, 97.
117 Kassianidou 2006, 11.
118 Zwicker 1988, 429.
119 Gale 2011b; Bretschneider et al. 2017, 82–3.
120 Karageorghis 2011, 89–91.
121 Bürge and Fischer 2019; Gradoli et al. 2020.

I have argued elsewhere that this later phase of the LBA, which is characterised by turmoil in the Eastern Mediterranean, may have led Cypriot traders to the west in search of tin.[122] Some of the richest tin deposits lie in the Iberian Peninsula and the British Isles known in the Classical world as "Kassiterides nesoi".[123] A recently published study on tin ingots from the LBA in the Eastern Mediterranean has identified Cornish tin in the shipwrecks of Haifa and Kfar Samir, which also carried Cypriot oxhide ingots.[124] Interestingly, many of these tin ingots bear CM signs.[125]

After the 11th century the oxhide ingot type, so characteristic of Cyprus, was no longer used. This trademark was lost and so was the visibility of Cypriot copper overseas.[126] But Cyprus remained connected with the outside world as it continued to have access to gold and tin which was used to make the extraordinary bronze grave goods deposited in the EIA tombs of Palaepaphos.[127] The absence of this trademark and of textual evidence related to the circulation of Cypriot copper in the Eastern Mediterranean makes any discussion of the trade of Cypriot copper in the Iron Age a much more complicated matter.

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122 Kassianidou 2003, 116.
123 Muhly 1985, 276, 286–89.
124 Berger et al. 2019, 35.
125 Berger et al. 2019, 6.
126 Kassianidou 2014b, 265.
127 Charalambous et al. 2014, 213.

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Disentangling the relationships between Cyprus and Lebanon during the second millennium BC

What Sidon can bring to the table

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ABSTRACT

The excavations at the site of Sidon College Site in southern Lebanon have yielded a large funerary and cultic complex dated to the Middle (MBA) and Late Bronze Ages (LBA). As of 2019, more than 172 tombs were found associated with a feasting area as well as a temple in use throughout the Bronze and Iron Ages. During the MBA, dozens of Cypriot ceramics were unearthed either in tombs or in rooms associated with cultic or feasting rituals. A LBA underground cella also yielded dozens of Cypriot pottery vases. These imported vessels belong to nearly all Cypriot styles commonly exported to the Levant, attesting to vigorous trade interactions between the coastal Levantine city of Sidon and Cyprus. This paper presents the latest account of these imports, categorises, using the available data, the first occurrences of Cypriot wares at Sidon and compares the representativeness of this assemblage with other sites regionally (Lebanon) and interregionally, leading to an initial attempt at understanding the network patterns that governed the trade of these vases to southern Lebanon.

More than 25 archaeological sites in Lebanon have yielded Bronze Age pottery imported from Cyprus (Fig. 1). One of the major sites that produced hundreds of such vases is Sidon, located 30 km south of Beirut. Excavations on a parcel of land owned by the Lebanese government and named *College Site*, after a modern academic establishment, started in 1998 and are still ongoing under the directorship of Claude Doumet-Serhal.

The excavations at Sidon *College Site* uncovered a large funerary[1] and religious complex dated to the MBA[2] and LBA.[3] More than 172 tombs were found in an open area and were connected to clay ovens, a ritual channel and remains of animal bones indicating feasting activities. Indeed, evidence for communal feasting associated with tombs was found everywhere on the site. The necropolis adjoins a temple that was constantly in use throughout the Bronze Age.[4] Remains of the MBA temple include an enclosure wall –42 m long– and a series of five rooms[5] which all produced evidence for feasting activities, with intentionally smashed ceramic vessels

1 Doumet-Serhal 2004b; 2014.

2 Doumet-Serhal 2004a, 66; 2011, 197–99; 2013, 101–4, fig. 93a; 2016, 113–25; Doumet-Serhal and Shahud 2013, pl. 1 (plan). Most of the temple lies today under a modern cemetery and thus cannot be further excavated.

3 Doumet-Serhal 2011–2012.

4 A temple dating to the Iron Age was found at another location on the site (for location and architectural details see Bordreuil and Doumet-Serhal 2013; Doumet-Serhal 2013, 108–12).

5 Unfortunately, the rest of this monument lies to the east under a modern cemetery, beyond the excavation perimeter, and cannot therefore be dug.

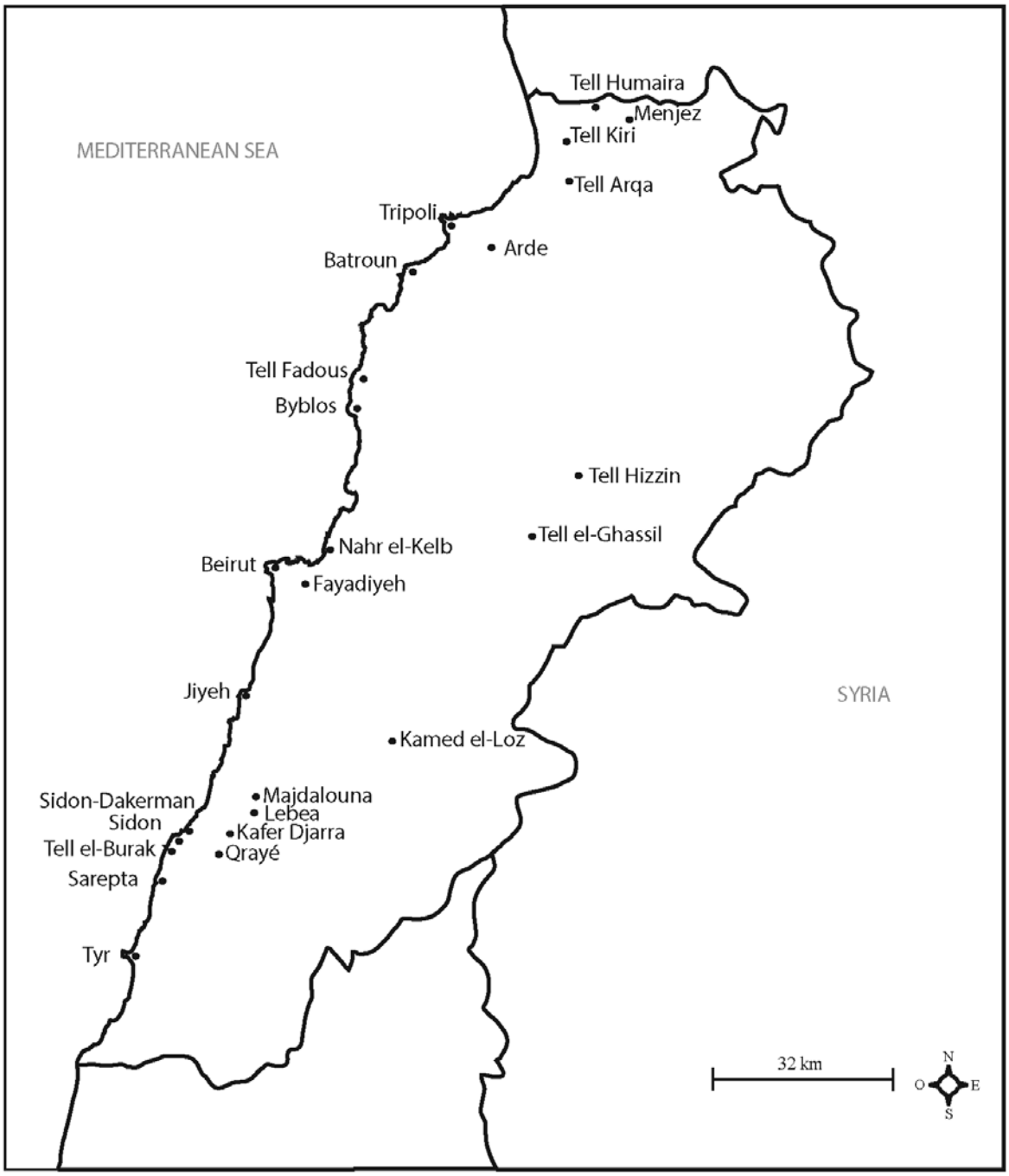

Fig. 1. Map of Lebanon showing the main Bronze Age sites (© Hanan Charaf).

on the floors that included Monochrome bowls and Bichrome Wheelmade (BichrWM) Ware kraters. By the end of the MBA, feasting rites became more of a public exercise and were held near the temple in areas where commemorative ceremonies took place.

A few vestiges from the LBA II period were isolated; they belong to the time of the Amarna period when Sidon was mentioned in 16 tablets. However, they have not yet been fully studied, pending completion of the excavations in these areas. From the 13th century, a LBA temple is attested by an underground cella analogous to the cella of Temple V of Alalakh (but dated to LB I). Walls and floors were built with ashlar limestone blocks

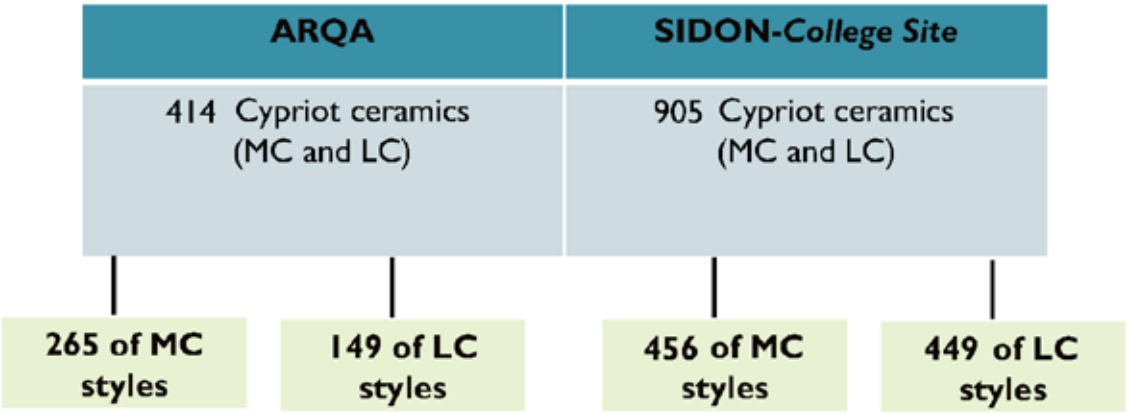

Fig. 2. Distribution of MC and LC ceramics at Sidon and Arqa.

joined by dovetail clamps.[6] Pits filled with ash and pottery indicate some sort of ritual sacrifices. The entire building was destroyed by fire sometime during the 13th century BC.[7] This underground room yielded some Cypriot imports, including White Shaved (WSh) juglets and White Slip (WS) II and WS III bowls, found together with Mycenaean Late Helladic (LH) IIIB stirrup jars, lentoid flasks and bell kraters, confirming the 13th century BC date of this room.

BRONZE AGE CYPRIOT CERAMICS AT SIDON *COLLEGE SITE*

More than 905[8] Cypriot Bronze Age ceramic vessels have been found at Sidon *College Site*, mostly in tombs or in rooms associated with cultic or feasting rituals (Fig. 2): 456 of these belong to Middle Cypriot (MC) styles while 449 are associated with Late Cypriot (LC) styles.[9] For comparative purposes, Cypriot imports from Tell Arqa, a site in northern Lebanon, are included in the chart, showing a clear preponderance of MC styles over the LC ones. This difference reflects faithfully the occupation pattern at the latter site where the MBA is better represented than the LBA, when settlement evidence is reduced to flimsy vestiges dated to the end of the 13th and the beginning of the 12th centuries BC.[10] The Sidon imported material belongs to nearly all Cypriot styles commonly exported to the Levant – except for Black Lustrous Wheelmade (BLWM) Ware juglets which were not identified at the site,[11] attesting to a steady and vigorous influx of imports to this coastal city. Indeed, 26 Cypriot styles were identified in the assemblage covering the MC and LC periods (Fig. 3).

6 Doumet-Serhal 2013, 105–7.

7 Calibrated C14 dates gave 1300 BC for the felling of the carbonised wooden ceiling beams.

8 This number was determined during research and after gluing together all fragments belonging to the same vase. The fragmentary vase was then considered as one vase or item. Sherds that could not be joined were each considered as one vase. Despite its limitations and risks, this quantitative method using the Minimal Number of Individuals (MNI) suited the nature of the Bronze Age Cypriot assemblage in Sidon, which was dispersed in a complicated stratigraphy that included disturbances from later constructions.

9 Note that this count is until 2018 and the total amount should increase when additional material from 2019, still inaccessible because of the Covid-19 pandemic, is processed. The precise stratigraphic location of the Cypriot material awaits finalisation of the general stratigraphy of the site by the excavator. An extensive report on the Cypriot imports to Sidon will appear in the final publications. However, the location of some vases will be included here where stratigraphic information is available.

10 Charaf 2020.

11 They are, however, part of the Grave 2 kit at neighbouring Tyre (Bikai 1978, pl. LIII: 1–2) and possibly also in the MB/LB I levels of Area IV (Temple area) at Tell Kazel (Badre et al. 2018, pl. XXXIII: 378, listed as local).

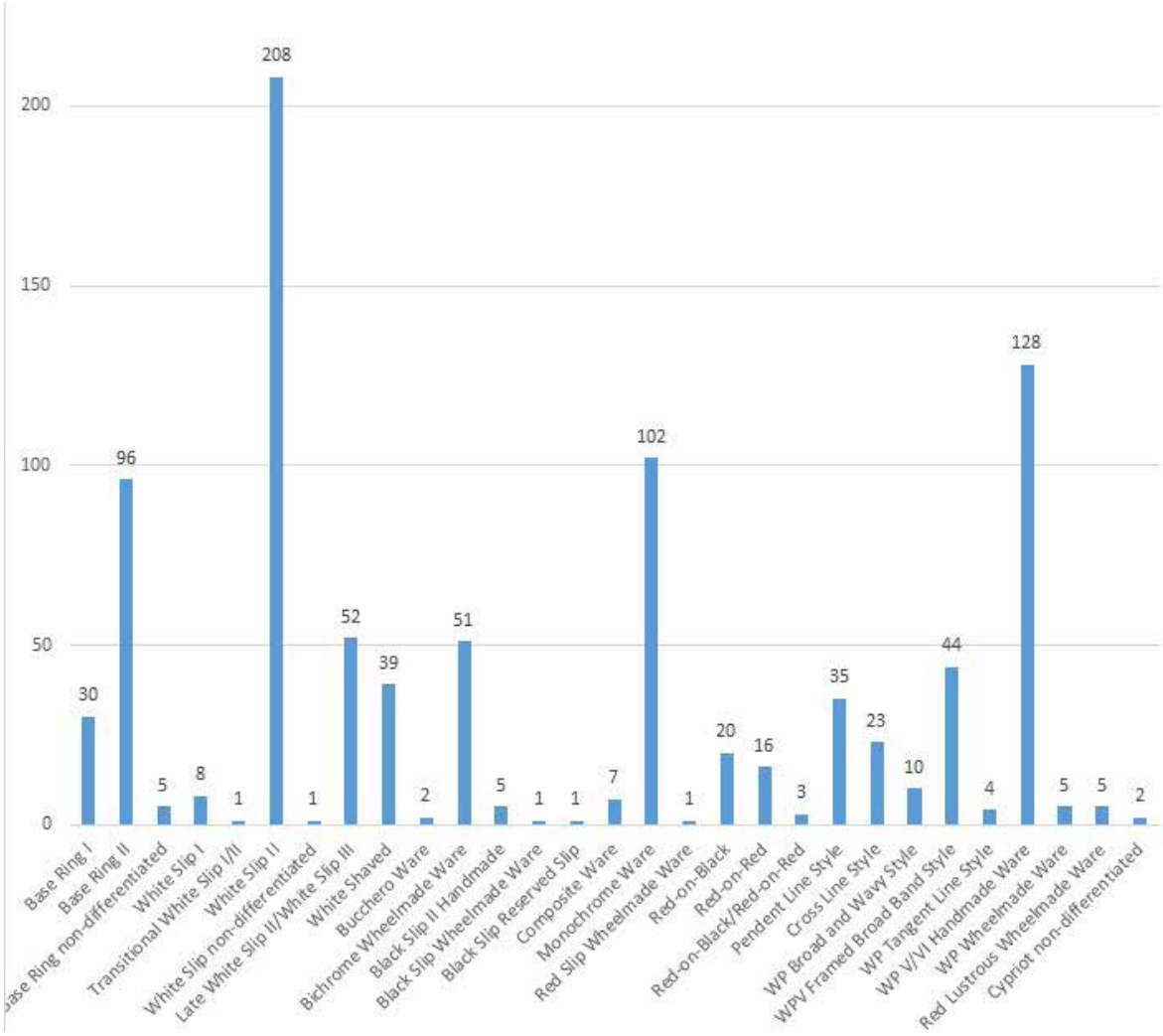

Fig. 3. Distribution of Cypriot wares at Sidon.

THE EARLIEST APPEARANCE OF CYPRIOT STYLES AT SIDON *COLLEGE SITE*

The earliest Cypriot import to Sidon is a jug of Pendent Line Style (PLS) found in Burial 54 in Stratum 5 dated to MB IIB (Fig. 4:1).[12] The following Stratum 6, dated to the end of MB IIB and the transition to MB IIC, witnesses the import of the Cross Line Style (CLS)[13] with a complete juglet deposited in Burial 73 (Fig. 4:5), as well as White Painted (WP) V and Red-on-Black (RoB) Wares. By Stratum 7 (MB IIC), all other MC styles are attested at Sidon. However, they are particularly abundant in Stratum 8, dated to the MB IIC/LB I transition. Monochrome bowls appear in contexts dated to the very end of MB IIC or early LB I (Fig. 4:7), coinciding with their first appearance elsewhere in the Levant. The timing of the arrival of the LC styles is difficult to determine accurately, since the stratigraphy of the LBA levels is still awaiting study. Nonetheless, they seem to adhere to

12 The relative chronology used in this paper follows the one employed by the excavator of the site and should equal the new proposed one: MB IIA=MB I, MB IIB=MB II and MB IIC=MB III. Note that the Early Bronze Age stratigraphy employs a similar system numbered Strata 1–5 (Doumet-Serhal 2006, 56–60). Since the stratigraphy of Sidon *College Site* is still not finalised, stratigraphic attributions of the MBA burials presented in this paper as given by the excavator might change in the future.

13 P. Åström (1972a, 276–77) considers that CLS derives from PLS and is a product of eastern Cyprus. This is also the view of D. Frankel (1974, 49) in his study of the WP styles of the MC period.

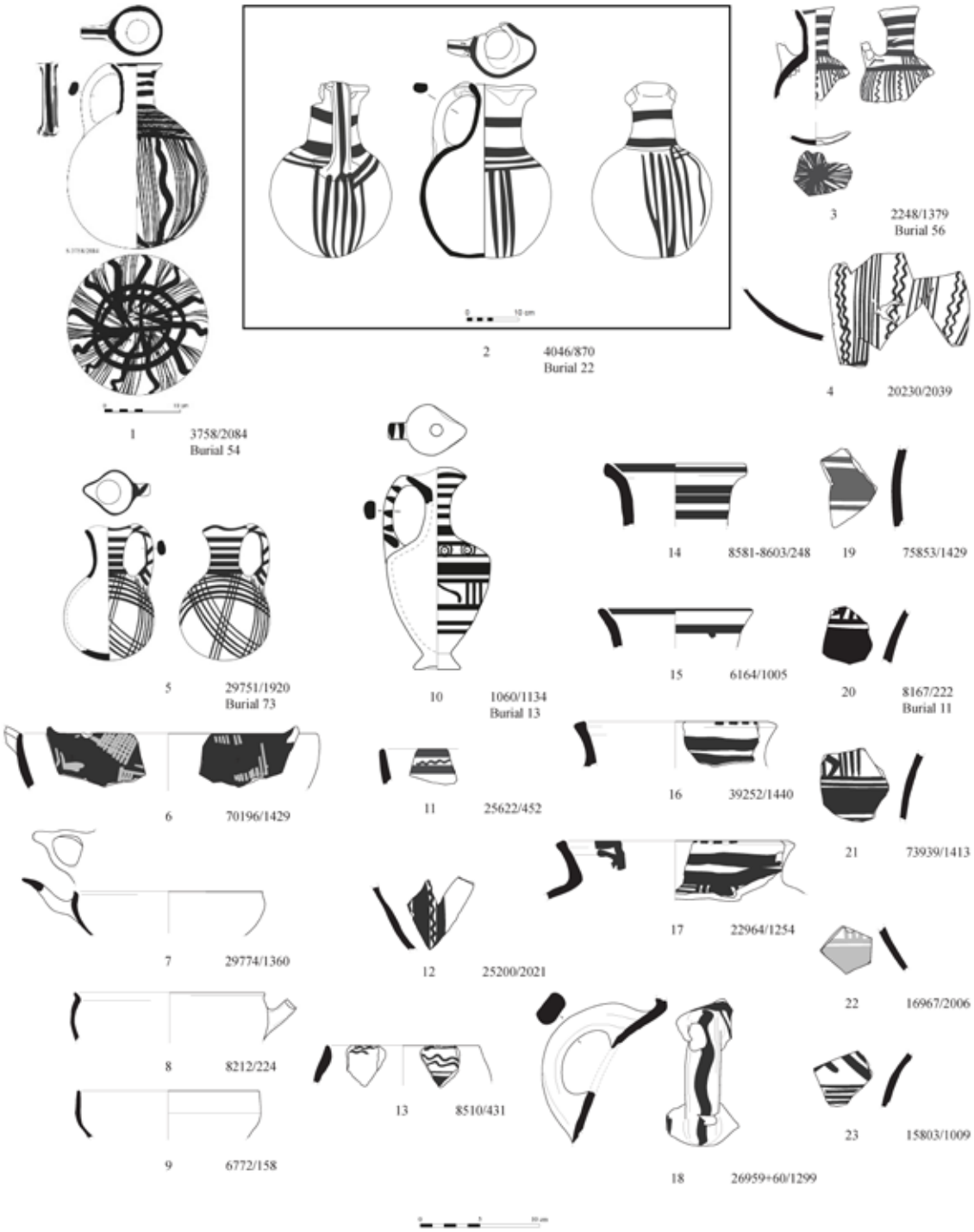

Fig. 4. Selection of MC wares from Sidon (courtesy of Claude Doumet-Serhal).

known patterns from other Levantine sites. For example, BichrWM Ware, quite abundant on the site with 48 vessels, appears in closed contexts during MB IIC/LB I (Stratum 8) and continues to be attested throughout LB I. From the available data, WS I appears also in Stratum 8 (Fig. 5:3). Unfortunately, identifying the first arrival of Red Lustrous Wheelmade (RLWM) Ware is still impossible because the few sherds found on the site come from disturbed contexts. Even though WS II, Late WS II and WSh were all found on the floor of the LBA underground cella, they were certainly imported to the site earlier than the 13th century BC.

CYPRIOT VASES IN BRONZE AGE TOMBS AT SIDON *COLLEGE SITE*

A few MBA tombs also yielded Cypriot ceramics in a fragmented or complete state. Of the 172 burials uncovered up to 2019 at Sidon *College Site*, 16 yielded 19 Cypriot vases of Bronze Age date (Table 1). While PLS and CLS jugs and juglets are the most favoured Cypriot commodity in Sidon's tombs,[14] the WP V/VI style is also well represented but only in incomplete shapes. Four tombs produced complete vessels of different WP styles (Fig. 4:1–2, 5, 10). The large WP PLS jug from Burial 54 is, as mentioned above, the earliest Cypriot import to Sidon. It is painted on the shoulder in red/brown with horizontal bands alternating with thin wavy lines while the body is covered with thick vertical wavy bands and groups of eight lines. The PLS continues into MB IIC (Stratum 7) with a fragmentary juglet from Burial 56 painted in black and displaying the typical handle inserted into the body (Fig. 4:3). The WP CLS appears at the transition MB IIB/IIC (Stratum 6) in Burial 73 with a complete juglet painted with intersecting groups of three and five black lines (Fig. 4:5). Two tombs from Stratum 7 dated to MB IIC each yielded a complete Cypriot jug: Burial 22 produced an intact WP V Tangent Line Style jug[15] painted with horizontal lines on the shoulder and pendent vertical bands on the body (Fig. 4:2), together with a Tell Yehudiyeh Ware juglet and a Canaanite combed MB II jar, while from Burial 138 came the only example of a WP V ovoid jug known from Lebanon that fits the category of the Eyelet Style,[16] even though the Sidon example lacks the painted eye on the rim (Fig. 4:10). It is decorated with horizontal bands covering the entire body and a row of concentric circles on the shoulder. It has exact parallels in MB IIB/IIC tombs at Ugarit[17] and Tell Tweini,[18] which contain PLS, CLS and MBA Levantine carinated bowls and dipper juglets, and in an MB IIC tomb at Megiddo.[19] A fragment of a WP V closed vessel, possibly of the Framed Broad Band Style, appeared in Burial 11 in Stratum 8, dated to the MB IIC/LB I transition (Fig. 4:20). Jars and jugs of this style appear also in MB IIB/IIC (Tell Tweini[20]) and LB I (Tell Arqa[21]) tombs.

14 It is likely that Cypriot jugs and juglets contained unidentified precious liquids or ointments. L. Maguire (1995, 55) suggested this possibility for the imported PLS jugs to Tell Dab'a.

15 With parallels from Tomb 00170 at Tell Tweini (Jans and Bretschneider 2019, fig. III.9: TWE–A–00177–C–032) but considered WP V Composite Style by S. Vilain (2019, 317, fig. 11: a–b) because of the addition of the wavy line to the Tweini jug.

16 Åström 1972a, Fig. XVI: 15–16, Type VBIbα.

17 Schaeffer 1949, fig. 108: 15, 17, Tomb LXXXV dated to Ugarit Moyen fin 2 or 3 (ca 1750–1700 BC). It was found together with a PLS jug and MB II elongated dipper juglets and carinated bowls. See also fig. 130: 19, 21.

18 Jans and Bretschneider 2019, fig. 33: TWE–A–00177–C–083, TWE–A–00177–C–88, TWE–A–00177–C–121, Tomb 00170, Level 8AB, MB IIB/C.

19 Loud 1948, pls. 34: 16, 41: 29 (Tomb T3065), 41: 30 (Tomb T3046, Stratum X).

20 Vilain 2019, 317, fig. 11: a–b, Tomb 00177.

21 Charaf 2010–2011, fig. 10; 2012, pl. 212: 1, Tomb 12.57, Level 12B.

Tomb No.	Cypriot Wares found in the tombs
Burial 2	Base Ring I- Monochrome
Burial 4	WPV Handmade Style
Burial 12	WPV/VI Handmade Style
Burial 13	WPV/VI Handmade Style
Burial 20	Base Ring II- White Slip II-White Shaved
Burial 22	WPV
Burial 54	Pendent Line Style
Burial 56	Bichrome Wheelmade Ware- Pendent Line Style
Burial 63	Pendent Line Style
Burial 65	Pendent Line Style
Burial 67	Cross Line Style
Burial 73	Cross Line Style
Burial 74	Cross Line Style
Burial 111	WPV Framed Broad Band Style
Burial 112	Cross Line Style
Burial 138	WPV ovoid juglet
Total: 16 Tombs	**21 vases**

Table 1. Distribution of Cypriot wares in Sidon tombs.

OVERVIEW OF CYPRIOT STYLES AT SIDON *COLLEGE SITE*

Final analyses of the Bronze Age Cypriot wares of Sidon, including in-depth stylistic studies and an investigation of the site's international connections, will appear in the planned final publications. However, the rich corpus warrants a brief overview here of the main styles attested at the site. The wares are arranged by their frequency of occurrence in the excavations and follow P. Åström's typology.[22] The 905 vases found to date at Sidon belong to 26 styles covering the MC and LC periods.

White Slip (WS) Wares

The WS Wares were the most popular Cypriot import to Sidon with 270 vases (30% of the Cypriot corpus). This is not unusual as this pottery was the most popular Cypriot ware in the Levant,[23] for example at Tell Tweini,[24] Tell Kazel,[25] Sarepta[26] and Tyre.[27] In Lebanon, hemispherical bowls with wishbone handles account for all WS I

22 Åström 1972a, 1972b.
23 Gittlen 1981, 54.
24 Vilain 2019, 332.
25 Badre et al. 2018, 166.
26 Anderson 1988, 517, table 18 with 57 WS imports to the site.
27 Bikai 1978, 55.

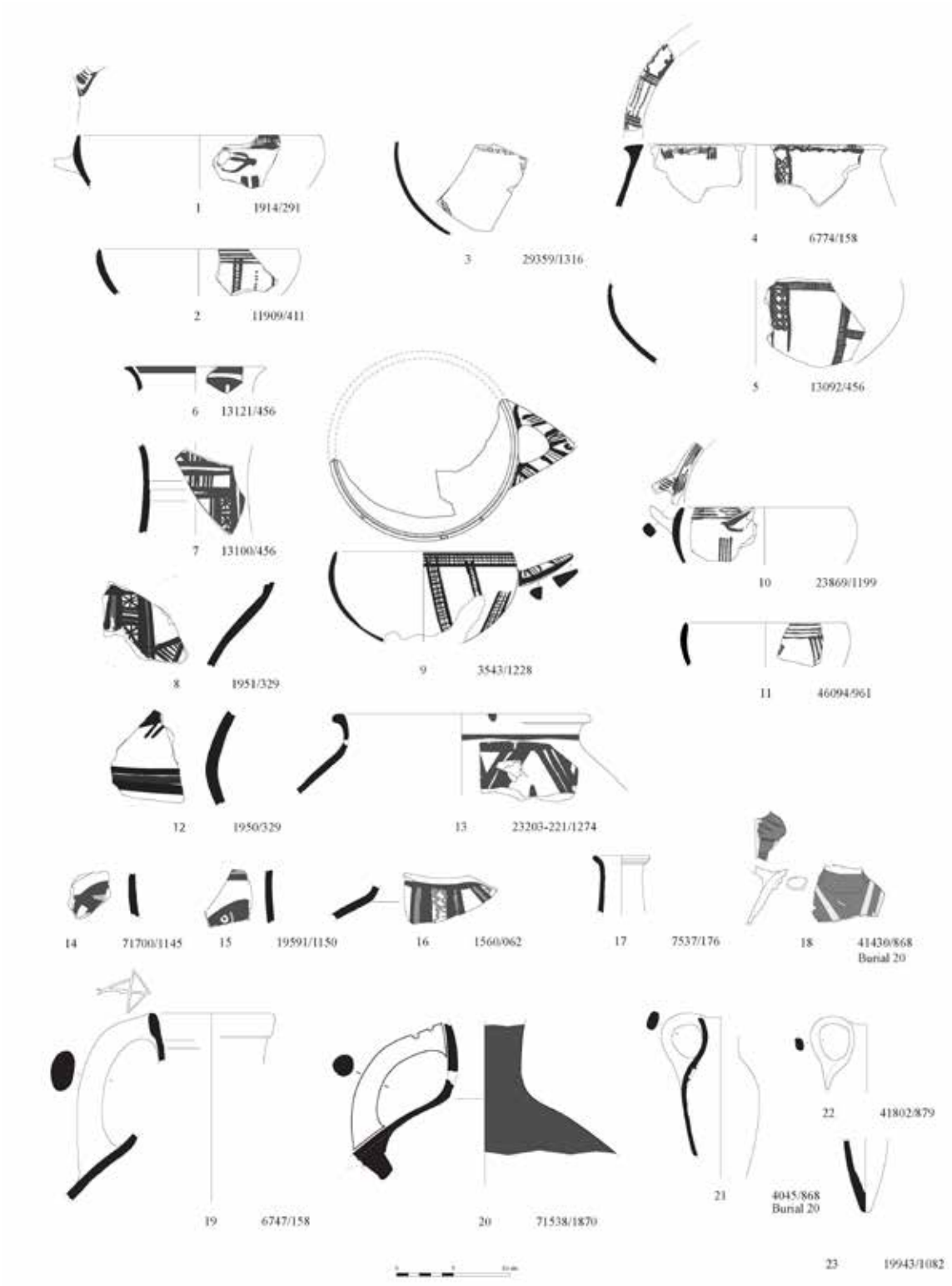

Fig. 5. Selection of LC wares from Sidon (courtesy of Claude Doumet-Serhal).

vessels, with the exception of a WS I juglet at Sarepta[28] and one tankard at Sidon. The excavations did not yield any Proto White Slip (PWS), but a few sherds belong to WS I bowls painted in monochrome or bichrome (Fig. 5:3). WS II is the most common imported LC ware at Sidon, with all sherds belonging to small and medium size bowls (Fig. 5:1–2, 9), with the exception of a krater[29] (Fig. 5:4) and a large deep bowl/krater (Fig. 5:5).[30] WS continued to be imported to Sidon in substantial quantities during the 13th century BC with more than 52 Late WS II bowls (Fig. 5:10–11).

White Painted V–VI (WP V–VI) Wares

As expected, the WP V–VI handmade Wares rank second among the imports with 128 vessels forming almost 14% of the total number of Cypriot imports to the site. WP V and WP VI, as defined by E. Gjerstad[31] and P. Åström,[32] have both been identified at Sidon. The last phase in the development of the Bronze Age handmade WP Ware is WP VI, which does not appear before the beginning of LC I and is characterised by a simplification of the WP V decoration, now reduced to linear bands and parallel lines.[33] Since it was frequently hard to differentiate between WP V and WP VI, the tally of the WP ceramics at Sidon covers both styles. WP V–VI is essentially represented by jars and jugs (Fig. 4:14–18), with the exception of a bowl decorated with a horizontal band and wavy lines (Fig. 4:13). Black paint is predominant, a trend also observed at Tell Arqa where 65% of the WP V–VI assemblage is decorated in black.[34] Jars with both narrow (ca 10 cm) and wide (ca 20 cm) openings are attested in the corpus, decorated with a series of parallel bands on the rim and shoulder. The wide-necked jars (Fig. 4:16–17) have exact parallels at Tell Kazel,[35] Tell Arqa[36] and Gezer[37] and in an MB IIC level at Hazor,[38] while narrow-necked examples (Fig. 4:14–15) are attested at Sukas,[39] Tell Kazel,[40] Tell Arqa[41] and Kafer Djarra.[42] A few strap handles belonging to jars were also found in the excavations. Similar handles are known from Enkomi[43] and Tell Arqa.[44]

Base Ring (BR) Ware

BR Ware was popular at Sidon with 131 vessels of BR I and BR II, with the majority belonging to BR II shapes (96 vases). Not a single identifiable vase of Proto Base Ring (PBR) was recorded from the *College Site* excavations. BR I is predominantly attested by bowls covered with a burnished black or orange slip and fitted with a wishbone handle. These bowls were exported to the Levant and Egypt in great numbers as early as MB IIC,

28 Anderson 1988, pl. 22: 24, Stratum K.
29 See Åström 1972b, fig. 53: 9.
30 See Åström 1972b, fig. 55: 6.
31 Gjerstad 1926, 171.
32 Åström 1972a.
33 Karageorghis 1965, 48.
34 Charaf 2012, 429.
35 Badre et al. 2018, pl. VII: WP:49.
36 Charaf 2008, pl. 1: a–b; 2012, pl. 217: 1, 3.
37 Macalister 1912, pls. XXX: 49, 51, CXL: 9.
38 Garfinkle 1997, fig. III.1: 13. Although Y. Garfinkle did not recognise the Cypriot origin, he still suggested a foreign source for the jar.
39 Buhl 1983, pl. XVII: 278.
40 Badre et al. 2018, pl. VII: WP.23.
41 Charaf 2012, pl. 217: 2, 4–6, 8, 10.
42 Guigues 1938, fig. 48, jar to the left on the photo.
43 Dikaios 1969, pl. 52: 4518/3.
44 Charaf 2012, pl. 219.

judging from occurrences in Egypt[45] and Tell el Ajjul,[46] but certainly more frequently during LB I. Similar bowls were found in Lebanon at Tell Arqa,[47] Sarepta[48] and in Grave 1 at Tyre.[49] Up to 2019, not a single BR I juglet has been found at Sidon, which is unusual since these juglets or *bilbils* are quite frequent elsewhere.[50] Unlike BR I, the BR II shapes are more diverse (bowls, jugs, juglets and spindle bottles). The globular jug covered with white lines painted over a brown slip and with an inserted strap handle incised with three lines (Fig. 5:18) is widely known on Eastern Mediterranean sites. No zoomorphic BR II askoi have yet been found at Sidon.

Monochrome Ware

Sidon has yielded 102 Monochrome vases, all belonging to hemispherical bowls with wishbone handles covered with a reddish matt slip. In Lebanon, only Tomb K1 at Byblos[51] and Sarepta[52] have certainly produced Monochrome jugs. Monochrome Ware was one of the most popular Cypriot imports to Sidon, in particular, and to Lebanon in general. At Sidon and Tell Arqa, it is fourth in popularity after WP V–VI, WS and BR.[53] Two types of Monochrome fabric occur at Sidon: fine and coarse. The fine fabric, however, is considerably more common than the coarse fabric. Bowls with everted and thinned rims were found in Stratum 8 (Fig. 4:7–8); they are closely paralleled at many Levantine sites from Alalakh[54] and Tell Kazel[55] to Tell Arqa,[56] Sarepta,[57] Tyre,[58] Lachish[59] and Tell el Ajjul.[60] Bowls with simple upright round rims (Fig. 4:9) were also popular and were produced in both fine and coarse fabrics. They were also very popular on many other sites, including Alalakh,[61] Tell Kazel[62] and Tell Arqa.[63]

Bichrome Wheelmade (BichrWM) Ware

The quantity of BichrWM at Sidon is the largest to date in Lebanon. By comparison, Tell Arqa has yielded only 15 vases. Most BichrWM vases are kraters with carinated bodies and splayed rims (Fig. 5:13, 16), but tankards (Fig. 5:6), globular jugs and even one bowl complement the corpus of this ware at Sidon. The Union Jack motif was very popular (Fig. 5:7–8), followed by figurative motifs such as fish (Fig. 5:12, 14–15).[64] Other kraters are

45 Merrillees 2001.
46 Bergoffen 2001, 48.
47 Charaf 2008, pl. 2: d; 2012, pl. 196: 1–11.
48 Anderson 1988, pl. 22: 26.
49 Bikai 1978, pl. LIIA: 6.
50 They represent the most common Cypriot pottery found in Egypt in tombs dated to the reign of Thutmose III (see Charaf-Mullins 2006, 176–77 for a list of these tombs). They are also popular at Tell Kazel (Badre et al. 2018, pl. III: 1st row).
51 Salles 1980, 24.
52 Anderson 1988, 261. Four jug fragments were identified by W. Anderson.
53 At Sarepta, Monochrome is ranked third among imports (with 40 vases) after WS and BR.
54 Bergoffen 2005, pl. 7: d–e.
55 Badre et al. 1994, fig. 62: d, Chantier II, bâtiment II, Niveau 7a; Badre and Gubel 1999–2000, fig. 9: h, Temple cella, Level 6, fig. 11: a–b, upper floor of Temple cella, Level 6.
56 Charaf 2008, pl. 1: k; 2012, pl. 201: 7, Level 12, LB I.
57 Anderson 1988, pl. 23: 31.
58 Bikai 1978, pl. LIIA: 5, Grave 1.
59 Tufnell 1958, pl. 79: LII.168, 827.
60 Fischer and Sadeq 2002, fig. 13: 5, Horizon 2, fig. 19: 3–4, Horizon 5.
61 Kozal 2010, fig. 4.1: 5–6, *Area* 1, fig. 4.3: 23, 27, *Area* 2.
62 Badre et al. 2018, pl. IV: upper 3 rows.
63 Charaf 2012, pl. 201: 6, 12.
64 Fish depictions were also popular in Lebanon at Tell Arqa (Charaf 2008, pl. 2: b; 2012, pl. 215: 1–3) and Tell el-Ghassil (Doumet-Serhal 1996, pl. 114: 4), and on other Levantine sites such as Alalakh (Woolley 1955, pl. XCV: ATP/48/64), Ugarit and its port Minet

decorated with chequered patterns[65] or running spoke wheels. BichrWM was found at Sidon in the entrance to the MB IIC/LB I temple together with Monochrome bowls.[66]

White Painted V Framed Broad Band Style

As at Tell Arqa, where this ware is well attested in the MB II and early LB I strata,[67] the WP V Framed Broad Band Style was very popular at Sidon with 44 vases. All fragments found on the site belong to large jars with wide or narrow necks decorated with geometric designs comprised of wide bands and thin lines covering the entire vessel (Fig. 4:19–22). Black paint was clearly favoured over red paint. Because of their size, these jars are seldom found in complete form except for one jar from Alalakh and another from the Cesnola Collection at the Metropolitan Museum of Art in New York.[68]

White Shaved (WSh) Ware

With Sarepta, Sidon has yielded the largest amount of WSh in Lebanon. Many of the juglets were found inside the cella of the 13th century BC temple. Deposits of WSh juglets in ritual contexts are also attested at Alalakh,[69] Tell Kazel,[70] Byblos[71] and Athienou in Cyprus.[72] The Sidon juglets are made of buff or greenish fabrics. Their shape copies the Canaanite dipper juglet with elongated body, pointed base (Fig. 5:23) and pinched mouth.[73] Handles are simply affixed to the shoulder (Fig. 5:22) or, more frequently, inserted into the body wall (Fig. 5:21).

Pendent Line Style (PLS)

This handmade ware, produced in eastern Cyprus,[74] is present at Sidon with 35 globular jugs and juglets with tall narrow necks, round bases and handles attached from the rim to the shoulder. The clay is light brown to buff and usually covered with a light beige matt slip on the exterior. At Sidon, clays are fired pink, buff or whitish-buff. Red, brown or black matt paint covers the exterior surface. The Sidon examples are decorated with

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el-Beida (Cluzan 1983, pls. 72: 1, 73: 1, 74: 1, 75: 1, 77: 1–3, 78: 1–2), Tell Kazel (Badre et al. 2018, pl. VII: WP:74), Hazor (Yadin et al. 1961, pl. CCXLIII: 21–22), Megiddo (Loud 1948, pls. 53: 1, 56: 6–7) and Tell el-Ajjul (Petrie 1931, pl. XXVIII: 5).

65 Doumet-Serhal 2004a, pl. 7: 3.

66 Doumet-Serhal 2004a, 70–1, Locus 1254.

67 Charaf 2008, fig. 5, pl. 2: k; 2012, pl. 211.

68 Karageorghis 2000, fig. 34.

69 In an article published in 2017, M. Akar compared WSh to north-central Anatolian pointed juglets which have similar shapes but are made from Anatolian clays. He argued that after WSh was introduced to Alalakh in the LB IIA period, local versions of these Cypriot juglets adopting the shaved exterior were made but were used for the same ritual functions (Akar 2017, 2). Akar also thinks that ritual practices common to Cyprus and central Anatolia were adopted in Alalakh in the mid-14th century BC and are visible in the ceramic production with the local WSh. He argues that connections between Cyprus and Anatolia began much earlier with the production, in both areas, of RLWM during the 16th century BC (Akar 2017, 7) and that these connections, whether ceramic or cultic, must have transited through Cilicia (ancient Kizzuwatna).

70 Badre and Gubel 1999–2000, fig. 12: g, upper floor of area east of cella, Level 6, fig. 24: c–e, lower floor of Courtyard, Level 6, fig. 29: c, lower phase of the Northern Complex, Level 6. L. Badre mentions in her 2003 article more than 100 WSh juglets found in the courtyard of the LB II temple (Badre 2003, 85). See also Badre et al. 2018, pls. V–VI: lower two rows for local imitations of these juglets.

71 Dunand 1950, pl. CXLI: 13436, Temple of the Obelisks.

72 Dothan and Ben-Tor 1983, fig. 42: 8, Locus 50 (floor), Stratum III.

73 B. Gittlen (1977, 343) thinks that they were produced in Cyprus to satisfy a Levantine demand for the traditional dipper juglets and A. Bevan (2007, 213) suggests that the form and colour derive from the Levantine gypsum juglets.

74 Merrillees 1971, 72.

fine lines or thick bands (Fig. 4:1),[75] in black or less frequently in red. Single wavy lines are the most common decoration but Sidon has produced three examples of double wavy lines (Fig. 4:4), found also to the north at Tell Arqa.[76] PLS jugs and juglets appear on the site in MB IIB, are still attested in MB IIC (Stratum 7), in Burial 56 for example, together with typical Canaanite pottery (Fig. 4:3), and disappear at the end of Stratum 8, marking the transition to LB I.

Cross Line Style (CLS)

Shapes and fabrics are identical to PLS but the decoration differs, with intersecting groups of straight lines. Hence the designation Cross Line Style. The number of parallel lines in a group varies from three to ten with groups of five parallel lines the most frequent. At Sidon, CLS is 30% less frequent than PLS (23 CLS vs. 35 PLS vases), while at Tell Arqa it is 50% less frequent (20 CLS vs. 44 PLS vases). Black paint is most common, being found on 19 vases compared to just four painted in red. The majority of vessels are large globular jugs, with a few juglets similar to the complete example found in Burial 73. Identical juglets have been found in MC tombs in Cyprus,[77] in MB II tombs at Arqa[78] and on the sites of Megiddo,[79] Tel Kabri,[80] Gezer[81] and Tell Dab'a.[82]

Red-on-Black (RoB) and Red-on-Red (RoR) Wares

RoB and RoR are two Cypriot fabrics that were not frequently exported to the Levant. They usually represent less than 3% of the imported Bronze Age Cypriot material at a site. RoB is typically more common than RoR or the elusive combination RoB/RoR.[83] It was exported in bowl and jug forms even though other shapes were produced in Cyprus.[84] The hemispherical bowls of RoB from Sidon (Fig. 4:6), attested as early as MB IIC, have perfect parallels but in LB I levels at Tell Arqa,[85] Tyre[86] and Sarepta,[87] making the Sidon vases the earliest examples of RoB and RoR in Lebanon and contemporary with their appearance elsewhere in the Levant (Tarsus,[88] Gezer[89] and Tell el Ajjul[90]).

Composite Ware

This eastern Cypriot ware[91] was exported to Sidon sometime toward the end of MB II. The hemispherical bowls are all slipped on the exterior and painted on the interior with black or, more rarely, red paint. The decoration

75 This jug has good parallels at Tell Kazel (Badre et al. 2018, pl. VII: WP:29), Tell Arqa (Charaf 2008, pl. 1: d), Sarepta (Koehl 1985, fig. 13: 4) and in Tomb 240 at Enkomi (Courtois 1981, figs. 2: 12, 3: 1–2).
76 Charaf 2012, pl. 200: 30, Level 13, MB II. This decoration is also attested in Cyprus at Dhiorios (Åström 1972a, 29).
77 For example, at Enkomi (Courtois 1981, fig. 4: 10, pl. 5: 12, Tomb 240; Schaeffer 1936, fig. 30: 3, Tomb 11).
78 Charaf-Mullins 2006, pl. 131: 6 (Tomb 13.69)–7 (Tomb 13.68); 2008, pl. 1: i–j.
79 Loud 1948, pls. 26: 15, 34: 9.
80 Kempinski et al. 2002, figs. 5.19 (photo), 5.35: 12 (drawing), Tomb 498.
81 Macalister 1912, pl. CXL: 5.
82 Maguire 1995, figs. 5–8.
83 See an identified example at Sarepta (Herscher 1975, fig. 51: 1).
84 R. Merrillees (1979, 122) thinks that hemispherical bowls and jugs were exported because they were part of the table service and could, thus, easily be included in the funeral kit.
85 Charaf 2012, pl. 202: 1.
86 Bikai 1978, pl. LA: 16–17.
87 Anderson 1988, pl. 22: 25; Herscher 1975, fig. 26: 1.
88 Goldman 1956, pl. 293: 946.
89 Macalister 1912, pl. CXL: 8.
90 Fischer and Sadeq 2002, fig. 23: 1; Merrillees 1974, fig. 2: 26, 29.
91 According to Åström 1972a, 229.

on the Sidon bowls consists of bands and wavy lines (Fig. 4:11–12) and is closely paralleled at Enkomi,[92] Tell Arqa,[93] Tell Sukas[94] and Megiddo.[95]

Minor WP imports: WP Broad and Wavy Line Style and WP Tangent Line Style

These two wares are related to the WP family and share the same fabrics and decoration as WP V, making them difficult to identify accurately when found in sherd form. Indeed, some fragments with broad bands and wavy lines may simply be part of the decoration on shoulders of WP jugs or on WP V Framed Broad Band jars. This ware appears in the Levant and Egypt in MB II levels (Arqa[96] and Tell Dab'a[97]) and continues to be attested occasionally until LB I. In Lebanon, only four sites (Arqa, Sidon,[98] Sarepta[99] and Tyre[100]) have produced WP Broad and Wavy Line Style vessels. On the Tangent Line Style the decoration consists of groups of tangent bands painted in black or red on globular jugs. Some of the jugs have a distinctive cross painted on the shoulder (Fig. 4:23), found also at Tell Arqa,[101] Megiddo[102] and in Tomb 240 at Enkomi.[103] Like the WP V handmade vases, the Tangent Line Style was exported during MB II to the Levant. Both Sidon and Tell Arqa produced these jugs in their MB II levels.

Red Lustrous Wheelmade (RLWM) Ware

RLWM[104] is rare at Sidon with only five vases, all belonging to spindle bottle types well known from Cyprus and the Near East (Fig. 5:17). They are all made from foreign clays, finely levigated and fired bright orange. This situation is also observed at other Lebanese sites where this fabric is attested by only a handful of examples, some manufactured with Levantine clays, for example at Arqa.[105] To date, only 24 RLWM vases have been found at 11 sites in Lebanon, with 23 belonging to bottles (Byblos,[106] Beirut,[107] Sidon-Dakerman,[108] Tyre[109] and Kamid el–

92 Dikaios 1969, pls. 53: 7, 54: 24, 76: 19.
93 Charaf 2008, figs. 21–2; 2012, pl. 214: 3–11; Charaf-Mullins 2006, pl. 131: 19–20.
94 Buhl 1983, pl. XVI: 261.
95 Loud 1948, pl. 19: 15.
96 Charaf-Mullins 2006, pl. 131: 19–20; 2008, fig. 4; 2012, pl. 2–18.
97 Maguire 1995, 54, fig. 6.
98 Karageorghis 2009, fig. 1.
99 Koehl 1985, fig. 1: 1.
100 Bikai 1978, pl. XVIIIA: 21.
101 Charaf 2008, fig. 15; Charaf-Mullins 2006, pl. 131: 9.
102 Loud 1948, pl. 34: 13.
103 Courtois 1981, fig. 5: 6.
104 Debates on the geographic origins of RLWM started in the early 20th century with different locations proposed, from Lebanon (see references in Eriksson 1993, 7 and Merrillees 1963, 17; see also Goren in Yannai et al. 2003, 101–7), to Syria (Gjerstad 1926; Schaeffer 1936, 71; Sjöqvist 1940, 86; Dikaios 1961, 32), to Cyprus (Eriksson 1993, 1; 2007, 55; in light of new evidence from Anatolia, Eriksson nuanced her theory in 2007 and suggested Cyprus as one of the production centres). Today, the Anatolian origin already advocated by Courtois (1981, 96; 1989, 84) seems to be the most plausible, at least for the fabric made of fine, bright orange clay (see Kozal 2016, 55–6; 2018, 223–24). However, Neutron Activation Analyses (NAA) indicate also the region of Kyrenia in Cyprus as another production centre (Knappett and Kilikoglou 2007, 133). In this paper, I chose to include the five RLWM bottles from Sidon with the Cypriot material on the assumption that they were imported from Cyprus together with the 900 other vessels from the island. Of course, definitive geographical attribution will only be determined with petrographic and chemical analyses.
105 Charaf-Mullins 2006, pl. 132: 1. Local productions were also identified at Tell Kazel (Badre et al. 2018, pl. VI:RL 1:10, RL 1:9).
106 Dunand 1937, pl. CLXXI: 6508.
107 Badre 1997, fig. 29: 5.
108 Saidah 2004, figs. 5: 2, Tomb 1, 28: 63, Tomb 13, 38: 87, Tomb 19.
109 Bikai 1978, pl. LIIA: 9, Grave 2, Stratum XVIII.

Loz[110]) and only one example of a lentoid flask marked with a sign at Arqa.[111] It would be very interesting to pinpoint, once the stratigraphy is finalised, the earliest occurrence of this ware at Sidon, but elsewhere in Lebanon RLWM does not appear before LB I, a date which coincides with its appearance at Alalakh[112] and Tell Dab'a.[113]

Less than 17 other vases round up the tally of Bronze Age Cypriot wares in Sidon. They include a Black Slip (BS) Wheelmade Ware jar (Fig. 5:19), as yet unattested anywhere else in Lebanon. This jar has an incised mark on the handle. A BS II jar with two round impressions on the inserted handle (Fig. 4:20) was also found at Sidon.

CONCLUSION

As seen from the Cypriot material, Sidon has no PWS, confirmed PBR or BLWM Ware or WP VI Soft Triglyphic Style. PBR and PWS are also non-existent at Ugarit, Tell Tweini and Tell Arqa, and very scarce in eastern Cyprus.[114] But all other major MC and LC wares exported to the Levant are attested at the site, albeit in different percentages. The first imported Cypriot vases in Stratum 5, dated to MB IIB, all belong to closed shapes (PLS jugs). The second half of MB IIB to MB IIC (Stratum 6) sees the appearance of open shapes with RoB bowls. New open shapes are added during MB IIC (Stratum 7) and MB IIC/LB I (Stratum 8) with, respectively, RoR and Monochrome bowls. However, the MC corpus is still predominantly made up of closed shapes (jars and jugs). The LC material is largely comprised of open shapes belonging to three wares (BichrWM kraters and WS and BR bowls). Since the features where the Cypriot material was found belong essentially to ritual and funerary contexts, it is safe to assume that these vessels were intended for local consumption.

The temporal and stylistic distribution of Cypriot pottery at Sidon is similar to that seen at Arqa and Tell Tweini[115] and quite comparable –but with much larger assemblages– to Ugarit and Megiddo. On the Lebanese coast, a comparison of Sidon with Arqa shows a similar pattern of imports to both sites, except for the noted frequency of BR and WS II bowls at Sidon and the absence of WP Wheelmade and WS I at Arqa. Additionally, the spatial distribution patterns of certain types at these two sites are largely identical, with PLS and CLS vases restricted to tombs. However, most of the Monochrome and WS II vessels at Sidon occur in ritual contexts, ceremonial rooms of the MBA temple or in the cella of the LB II temple, a type of architectural structure that has not been found at Arqa. For comparison, at Tell Kazel, Monochrome bowls (together with BR juglets) were mainly found in the temple[116] but WS bowls are equally frequent in the temple and in the residential areas.[117] The similarity of the types and frequency of imported wares at a southern site (Sidon) and a northern one (Arqa) suggests that they come from the same Cypriot trading port, most probably located in the eastern part of the island.

It is still difficult to identify the exchange network that governed movements of people and goods between Cyprus and Lebanon, much less between Cyprus and Sidon. During the MBA, Cypriot goods mainly reached coastal sites that acted also as trade ports (e.g. Ugarit, Tell Abu Hawam, Ashkelon), funnelling commodities to secondary or tributary sites as well as to the Beqaa Valley where MC pottery (limited until now to WP V–VI and BichrWM) occurs in small quantities Given its location and circumstantial archaeological evidence, Enkomi is the likely candidate for the emporium that stewarded this economic activity. A longstanding consensus has

110 Hachmann 1970, pl. 23: 9.
111 Charaf 2012, pl. 209: 8. It comes from an unstratified context.
112 Kozal and Novák 2017, 307.
113 Maguire 1995, figs. 4, 8; Hein 2007, 84.
114 Vilain 2019, 335.
115 Vilain 2019. S. Vilain counted 531 MC and LC vases from Field A, a number similar to Bronze Age Cypriot occurrences at Arqa but less than the Cypriot material at Sidon *College Site*.
116 Badre et al. 2018, 47.
117 Badre et al. 2018, 45–46, 181.

established Ugarit –and its well-documented port Minet el-Beida– as the inevitable north Levantine emporium that monopolised trade with Cyprus, Greece and Anatolia. Any foreign objects discovered on north Levantine sites were assumed to have been obtained from Ugarit via an interregional distribution network yet to be fully identified. This was certainly cheaper and more convenient for polities that did not occupy a prominent and wealthy position in the Near Eastern political landscape. One might argue that mighty Byblos would then represent an exception given the presumed scarcity of Cypriot pottery from this site. But this picture is misleading for two reasons. First, it is based solely on the available publications (series *Fouilles de Byblos*) that exclusively privileged complete shapes. The fact is that both local and imported pottery is still largely unknown, since the ceramic material from the Dunand excavations is yet to be published. Second, Necropolis K[118] provides plenty of evidence for the robust presence of Cypriot material at Byblos, a proof that is often disregarded. Whether Byblos imported material directly from Cyprus or obtained it from another port of entry is still unknown. One might also posit that Byblos' connectivity network was focused more on Egypt to the detriment of other destinations, as attested by the hundreds of Egyptian artefacts found on the site by both the Dunand and the recent Franco-Lebanese excavations. If that was the case for Byblos, then Sidon, a city equipped with two harbours where dozens of Egyptian pottery vessels have also been found, could have followed suit in privileging Egyptian trade connections.

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118 Salles 1980.

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Late Bronze II Cypriot counterparts from the Tell Abu Hawam anchorage

The White Slip Ware

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ABSTRACT

Tell Abu Hawam is situated in the northeastern approaches to the modern city of Haifa, between Mount Carmel to the south and the Qishon River outlet to the north, on the southern side of Haifa Bay. The Late Bronze Age (LBA) landlocked anchorage below the tell was located in a salvage excavation. Successive layers of coastal sand, beach rock, riverbed clays and pebble surfaces, as well as evidence of human intervention, have been exposed. Abundant ceramic fragments among other small finds were collected in all the layers, identifying them as successive anchorage floors. The ceramics include "local" wares transported via the Qishon River but mainly imports arriving via maritime trade.

The impressive number of Cypriot White Slip (WS) Ware sherds found in the landlocked anchorage agrees well with results reported from other sites along the Syro-Lebanese coast as well as from some of the terrestrial routes connecting the inland to the coast. More than 99% of the sherds attributable to this ware are of bowls. At least 1500 identifiable sherds were found in the barely three and a half 4 × 4 m squares excavated. The few sherds from large WS II bowls appear only in the lower anchorage floors. The rest are attributed to the usual WS II smaller bowls bearing various motifs.

Tell Abu Hawam (TAH) is situated in the northeastern approaches to the modern city of Haifa, between Mount Carmel to the south and the Qishon River outlet to the north, on the southern side of Haifa Bay (Fig. 1). Today, the site is located some 1.5 km from the sea, due to geomorphological processes such as sediment transport from the sea and the river, and modern human intervention. During the LBA, however, TAH was situated on the coast, and in the second part of the LBA it played an important role in the international maritime trade network. It was a small site, barely 15 dunams (1.5 hectares), but because of its location on the southern side of Haifa Bay, in the estuary of the Qishon River and the Salman spring, and because it was guarded from southwesterly winds by the Carmel Ridge, it was a significant maritime and terrestrial transhipping hub.[1]

The position of the site created a dynamic environment influenced by geomorphological processes that depended on the river's fluctuations and seasonal flow regime, on sea level, climate and human intervention. The flow regime of the river affected the sediment transported by the stream, leading to watercourse-silting, narrowing of the stream channel and marshes forming near the riverbank and in the vicinity of the tell. The transport of great quantities of sediment in the form of sand caused a similar impediment to the flow of the river and hence affected the estuary. To these should be added the possibility of changes in sea levels and the site's position on a fault line,

1 Artzy 2006, 45–64; 2013, 7–24; 2016, 97–110; Artzy and Martin-Garcia (forthcoming).

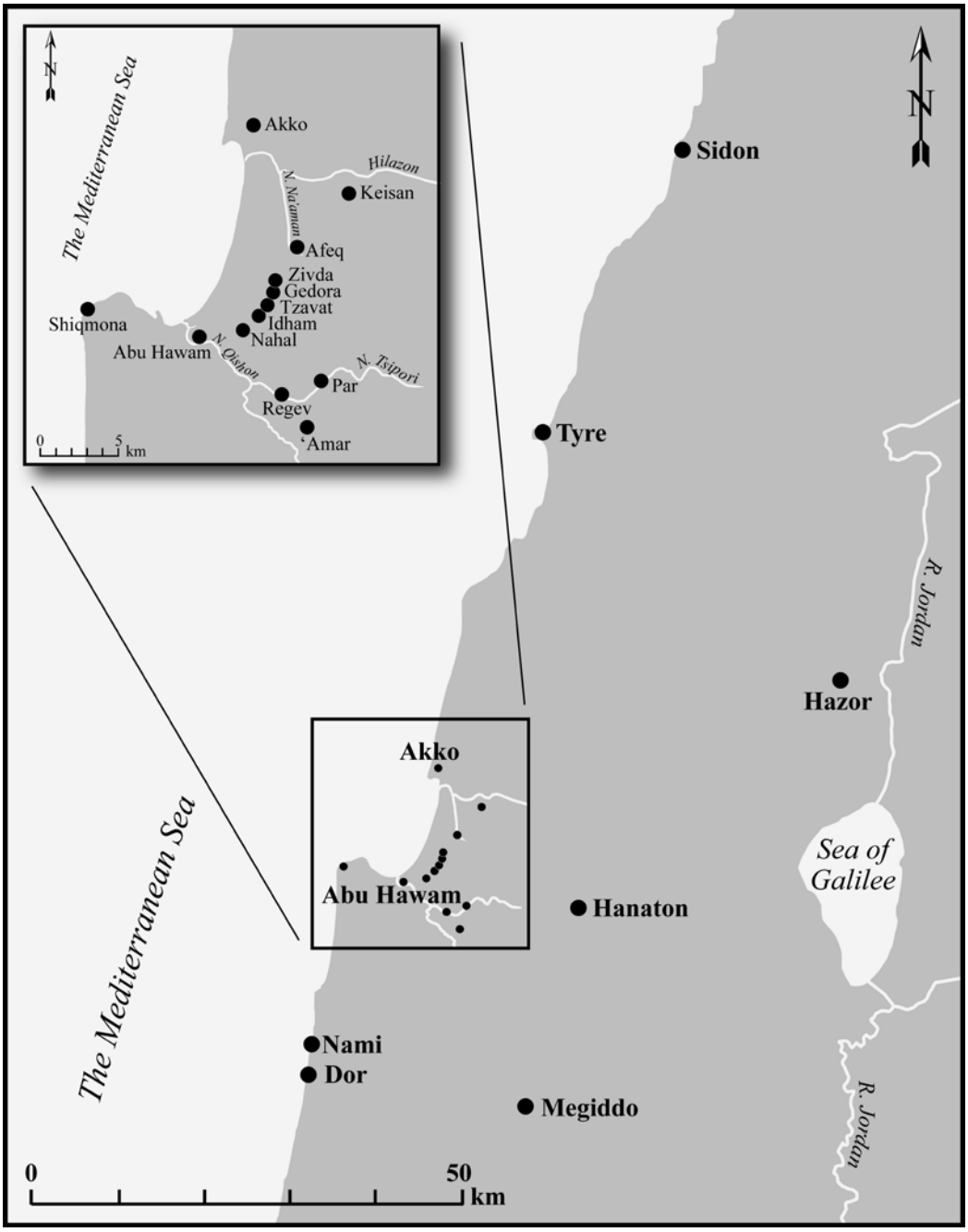

Fig. 1. The position of TAH in the Bay of Akko/Haifa (drawn by R. Stising).

rendering it susceptible to possible seismic activity. Thus, the agricultural hinterland and the LBA burial grounds situated to the north of the site were affected. In previous studies, it has been shown that the sea covered areas in the Zevulun Valley to almost 5 km inland following the LBA,[2] creating a wide estuary. With time, reverse processes were noted. Coring, carried out by Galantee et al.[3] showed that the Qishon estuary narrowed until ca AD 1500. This process allowed for the foundation of the site of TAH, a coastal settlement with a close connection to the sea, with a cemetery that was located during the LBA in the area which in later times became a marsh or was inundated and went out of use.

2 Zviely et al. 2006, 849–61, fig. 96.

3 Galantee et al. 1990.

Who controlled the trade at TAH? Was it the Mycenaeans,[4] the Egyptians[5] or the Canaanites[6] and what was the role of the Cypriots?[7] What was shipped from the anchorage in return for the goods arriving via the maritime route? Was it *Pistacia* spp resin, as seems to be indicated by the numerous Maritime Transport Containers (MTCs) found in the Uluburun wreck that originated on the Carmel Coast, perhaps even at the TAH anchorage?[8] Provenance analysis on the MTCs from the wreck has shown that more than 150 of the storage jars originated on the Carmel Coast, likely at TAH.[9] In addition, the majority of the anchors came from this area.[10] Another open question is which political forces contributed to the prosperity of the site. Could the struggle between Ramses II and the Hittites over the "balance of power" before and after the battle of Kadesh and the shipping of grain have promoted the focal position of the harbour site of TAH?

Towards the mid-13th century BC, or slightly later, the settlement on the tell experienced a noticeable decline, which is reflected in a deterioration in the wealth of imported material and in significant changes in the architectural remains. By ca 1230 BC, the settlement became peripheral, having lost its important position as a leading entrepôt. The date of the transformation has been, and still is, a subject of debate among archaeologists and historians. For instance, B. Mazar[11] placed it in ca 1180 BC, as did E. Wright[12] and Anati;[13] while Balensi and Herrera[14] and Gershuni[15] proposed the date of 1230 BC, following Hamilton, the excavator of the site.[16] The decline eventually ended in a hiatus in settlement, the timing and duration of which, once again, have been contested by scholars, as noted below.

A salvage project during the early 2000s, directed by Artzy, Yankelevitz and 'Ad, led to the discovery and excavation of an area which had not been explored by any of the previous projects. It is located northwest of the tell, in an area assumed by Balensi,[17] who relied on a map of the area produced in the early years of the 20th century, to be the "lower city". Indeed, during the Persian period (mid-1st millennium BC), it was an extension of the habitation on the tell itself. However, during the LBA the area lay within the ancient coastal zone of the site and served as a safe haven, an anchorage. The landlocked LB II anchorage was partially excavated, as far as the salvage project allowed, and unique, superimposed, clear harbour floors were found. Exceptional new data were added during this excavation, that can now be applied to a holistic unravelling of the transition between Hamilton's Strata V and IV –the LBA to Early Iron Age (EIA)– a period often associated with the enigmatic "Sea Peoples". The settlement's prosperity depended on the geopolitical and geomorphological context and, of course, its contact with the sea. A more particular possible explanation is the accession of Ramses II to the throne in 1279 BC, and his involvement in the political sphere in which the Hittite kings Muwattalli II and Hattushili III played an active role in the "balance of power" before and after the battle of Kadesh, as well as the focal position of the harbour site of TAH. Subsequently, in the mid-13th century BC or a few years later, as the merchant city of Ugarit was weakening ca 1230 BC, the settlement of TAH ceased to exhibit the same vigour. On the contrary, as noted above, it seems to have become a peripheral settlement, losing its important position as a leading entrepôt.

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4 Harif 1974, 83–90.
5 Anati 1970.
6 Weinstein 1980, 43–6.
7 Artzy 2016, 97–110.
8 Serpico et al. 2003, 365–75; Stern et al. 2008.
9 Pulak 2008, 319; Goren 2013, 58.
10 See n. 8.
11 Mazar 1951, 21–5.
12 Wright 1961, 73–112.
13 Anati 1970.
14 Balensi and Herrera 1986, 82–128.
15 Gershuni 1981, 33–44.
16 Hamilton 1935, 1–69.
17 Balensi 1985.

Successive layers of coastal sand, beach rock, riverbed clays and pebble surfaces, as well as evidence of human intervention, were exposed. Abundant ceramic fragments among other small finds were collected in all the layers, identifying them as anchorage floors. The ceramics included "local" wares transported via the Qishon River as well as imports arriving via maritime trade.

The imports include the handle of a MTC of Egyptian manufacture bearing a cartouche of Ramses II. There were few other ceramics attributable to an Egyptian provenance, but bones of fish of Egyptian origin were found,[18] as were molluscs.[19] Ceramics from Mycenae, Crete, western Anatolia and the Syro-Lebanese coast were noted. Among the Syro-Lebanese imports were remains of various cooking pots of Canaanite types, originating from different locations along the coast. By far the greatest number of imports, however, originated in Cyprus, including the usual Base Ring (BS), Monochrome and White Shaved (WSh) Wares as well as Plain White Wheel-made (PWWM) Wares. Provenance and typological studies carried out on some of the Cypriot wares found in the anchorage[20] point to an origin on the south-central coast of Cyprus.

While it is difficult to estimate the exact date of each of the anchorage floors, it became clear that there were differences in the distribution of the types of wares between them. For instance, the few examples of Red Lustrous (RL) Ware were found in the lower levels of the anchorage, while White Lustrous (WL) Ware, in a very similar shape to its RL counterpart but produced in the coastal Levant,[21] was found in a higher level of the anchorage.

The impressive number of Cypriot WS Ware sherds agrees well with results reported from other sites along the Syro-Lebanese coast, and from some of the terrestrial routes connecting the inland to the coast. The fact that more than 99% of the sherds attributable to WS are of bowls supports an argument that these were part of the mariners' personal "sailor trade".[22] A total of at least 1500 identifiable sherds were found in the barely three and a half 4 × 4 m squares excavated. The few sherds which could be attributed to large WS II type bowls appear only in the lower two anchorage floors, namely V5 and V4. This agrees with Popham's[23] and Kromholz's[24] studies, which attribute these bowl types to the earlier production period of the ware. The highest number of sherds of WS were found in the second lowest anchorage floor, V4, although they continue to appear in considerable numbers and constitute an overall high percentage in the upper two anchorage floors, V3 and V2.

While the study of the exact provenance of the WS found in the anchorage is not yet concluded, it seems likely that most, if not all, Cypriot imports originated on the south-central coast of the island. Two anchorages could vie for the origin of the boats. One is in the vicinity of Maroni and the other, Hala Sultan Tekke. Visual examination of the sherds' fabric and decoration showed particular similarities to ceramics from Kalavasos *Ayios Dhimitrios* and Maroni. These include the various decorative motifs and the style of the finials of the WS bowl handles. Handle finials may well be markers of production centres, yet surprisingly few, if any, studies dealing with WS bowl handle shapes have been published. In a publication from 1995 it was noted that the composition of WS found in the Vasilikos and Maroni River valleys resembles the Sanidha reference group.[25] Bearing in mind that most of the WS found at Hala Sultan Tekke and reported by Renson et al.[26] points to the Moni formation as the potential clay source, or to the alluvial clay from the Sanidha region, the short distance between these two possible anchorages is worth noting. The presence of the Sanidha ceramic workshop in the vicinity of Kalavasos *Ayios Dhimitrios* and Maroni, where many wasters of WS were found, should be taken into consideration.[27]

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18 Zohar and Artzy 2019, 900–9.
19 Baruch et al. 2005, 132–47.
20 Barkai 2003; Rozenblum 2006; Artzy and Martin-Garcia (forthcoming).
21 Artzy 2007, 11–18.
22 Artzy 2001b.
23 Popham 2001, 45–8.
24 Kromholz 1978.
25 Gomez et al. 1995, 113–18.
26 Renson et al. 2001, 37–57.
27 Todd and Hadjicosti 1991, 37–74; Todd and Pilides 2001, 27–44.

Fig. 2. TAH anchorage, profiles of large WS II bowls.

At this juncture, we cannot determine the regional or chronological differences between the material from the four "anchorage floors" in the anchorage of TAH. The fact is that certain ceramics, such as BR and WS Wares, were produced of special clay, originating in the Troodos Mountains. This type of clay could have been imported to different production centres on the island. There were also attempts to imitate certain Cypriot ceramic shapes in the Levant, at coastal sites from Ugarit to the Gaza strip, one example being the so-called "Palestinian" Bichrome Ware. The earliest examples of this ware originated in Cyprus, but it was partially successfully imitated in areas such as Megiddo and Gaza.[28] Thus, its lifespan as an export was not as long as that of WS and BR, for which no similar clay could be found outside Cyprus. The ancient consumers, like modern archaeologists, were able to discern that these imitation vessels of BR and the WS could not possibly be Cypriot products.

A stylistic analysis was carried out on the thousands of WS sherds to establish whether there were differences in the types and styles between the different levels. Did the assemblages assigned to levels V1 and V4 and to the anchorage floors in between show homogeneity or are there statistical differences? Are the statistical differences associated with production sites in Cyprus or a result of temporal changes? Answers to these questions and identification of the sub-quarries will only be possible with further research, especially if finer provenance analysis of the Cypriot imports allows a better understanding of the origins of the ceramics in the four superimposed floors of the LB II anchorage of TAH.

We used the division proposed by Popham[29] for Cypriot ceramics and maintained it throughout this study, but with some slight adjustments. All the WS sherds found at TAH are of WS II, with the exception of one WS I body sherd. They comprise only two vessel types of slightly different size and shape. The first type is the typical hemispherical bowl, which constitutes more than 90% of the WS. The second type corresponds to the Very Large Bowl (VLB) group (Fig. 2) as classified by Kromholz.[30] The hemispherical bowl is further divided into three major groups according to the decorative pattern, all belonging to the WS II family: Normal, Parallel Lines (PL) and the so-called WS II Late. Three sub-groups of WS II Normal were defined: Ladder Lattice (LL), Dotted Row (DR) and Hooked Chain (HC). The PL group was further sub-divided into Normal PL and Simple PL. In Figure 4 we

28 Artzy et al. 1978; 2013; Artzy 1985, 2001a.
29 Åström 1972.
30 Kromholz 1978.

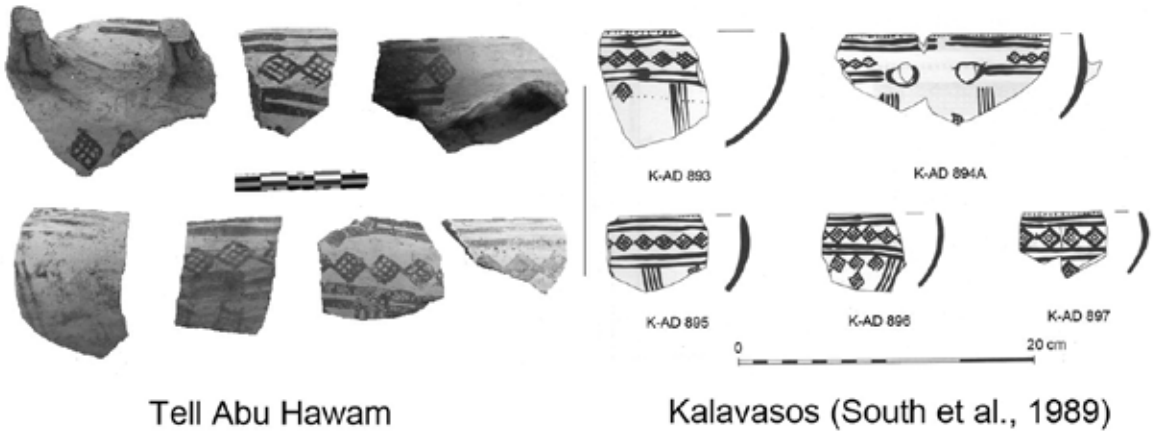

Fig. 3. TAH anchorage, WS II PL decoration compared to examples from Kalavasos *Ayios Dhimitrios*.

present a comparison of the WS groups including their occurrence in each layer. In order to generate accurate data, we selected 446 rim sherds, for which the decoration and vessel shape are not in doubt. Since almost every WS II Normal hemispherical bowl has a horizontal LL band below the rim, we used only the DR and HC patterns as representations of the WS II Normal group in the table, in order to avoid over-representation of this group.

When examining the PL group, especially the Normal PL sub-group, fabric and decoration similar to those of samples from Kalavasos *Ayios Dhimitrios* (Fig. 3) were noticed. Nine sherds of PL bowls have been discovered at TAH, belonging to at least seven vessels (Fig. 3). Russell[31] noted that the PL style, which is rare compared with other groups, exists "in abundance in Kalavasos *Ayios Dimitrios*" and dominates "approximately one-third of the WS sherd", suggesting that "the Vasilikos Valley was a production centre of this distinctive style".[32]

Among the WS II Normal group, no significant difference regarding quantities was observed between the layers. Layers V2, V3 and V5 have similar proportions of DR and HC, as illustrated in Figure 4. Layer V4 yielded the most abundant WS. This may imply sustained commercial relations between TAH and Cyprus, as well as a consistent preference for certain types of WS such as DR and HC.

Regarding the distribution of VLB, Figure 5 is revealing in several ways. Only eight VLB sherds were found, constituting 0.5% of the complete WS collection. They comprise seven rim sherds and one handle, belonging to seven or eight vessels. The VLB sherds only appear in the two lower floors of the anchorage, namely layers V5 and V4. Most are from the lower V5. The possibility that the Kalavasos region was the point of origin of the VLB was suggested by Kromholz in his 1978 study of WS mentioned above. In his computational-mathematical study, more than 16 complete VLB were measured and analysed. By correlating VLB numbers with different sites in Cyprus and comparing the results, Kromholz found that the concentrations of VLB at Kalavasos and Maroni are much higher than at other sites in Cyprus (ratio 15:2), confirming a strong connection between VLB and the Kalavasos-Maroni region.

The rather small quantity of VLB at the TAH anchorage could be explained in more than one way. It may, for example, have to do with the economics of trade. It is hard to believe that WS had considerable economic value.

31 Russell 1989.

32 South et al. 1989, 3.

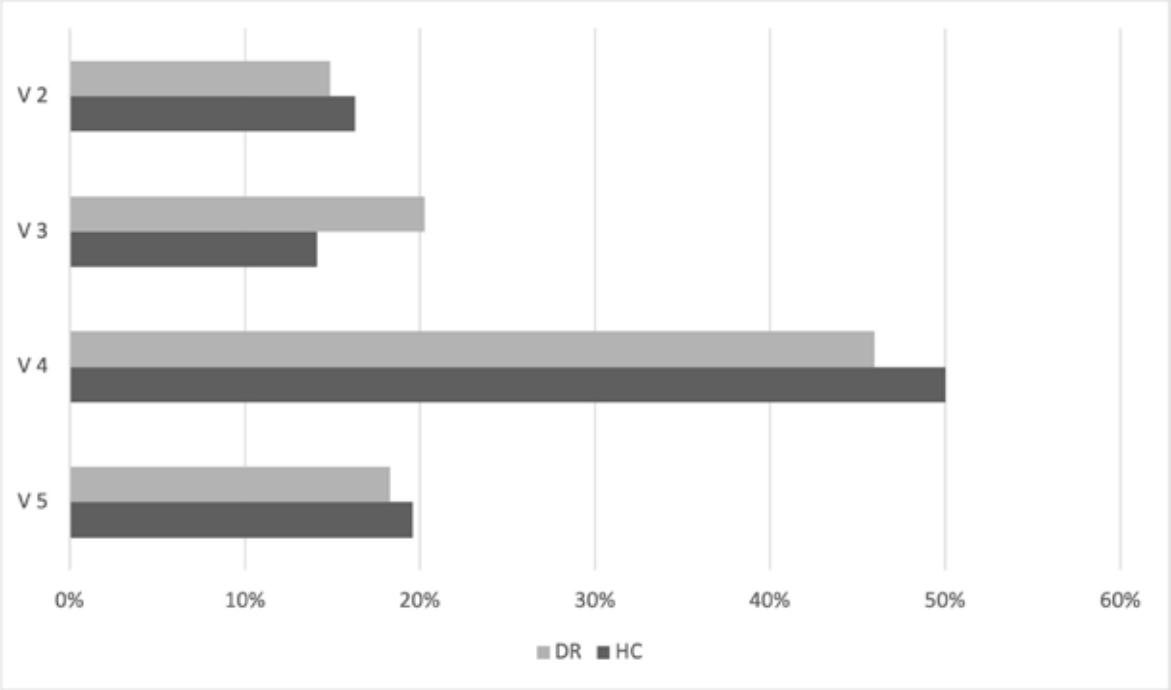

Fig. 4. TAH anchorage, WS II distribution of DR and AC.

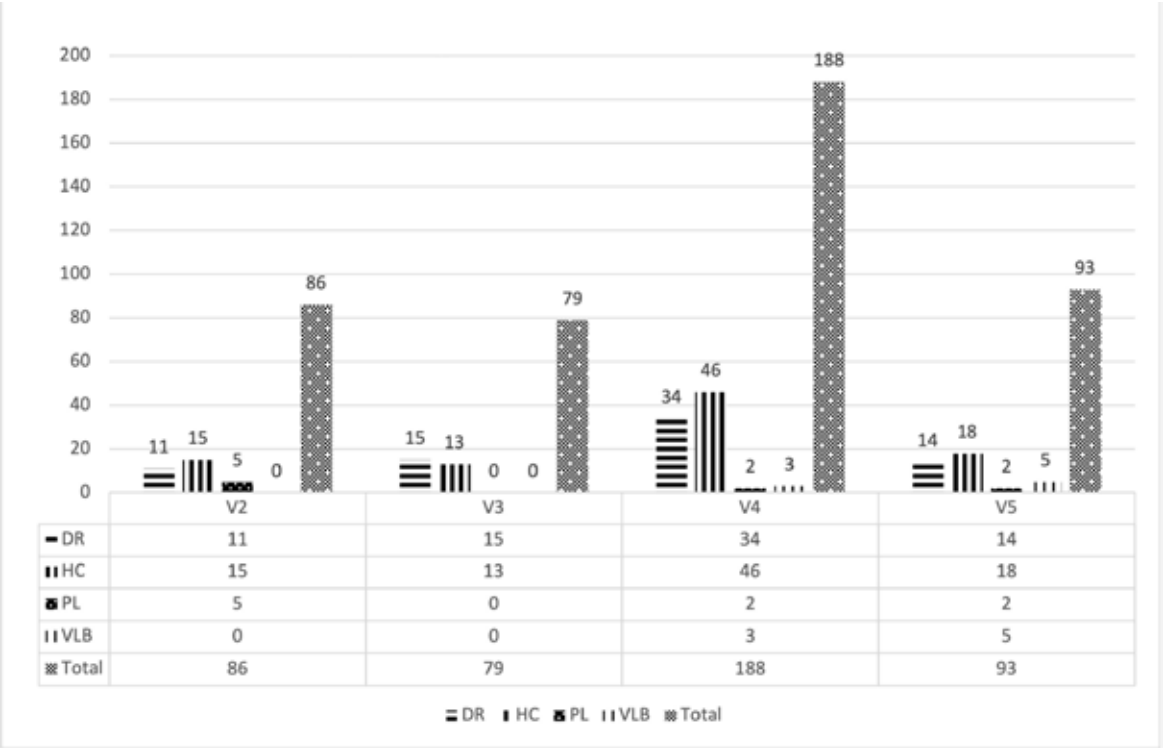

Fig. 5. TAH anchorage, WS II large bowl distribution within the anchorage levels.

It is more likely that it was taken on board to accompany more valuable goods. As noted in the past,[33] these wares cannot, by any means, be considered as elite trade, but were more likely components of "sailor trade", based on a "cottage industry" which was carried out *en route* by operators such as mariners and seafarers for their private profit. In support of such an argument, the economic calculation of the mariners/sailors as to which goods to add to the main load for their own financial benefit should be considered. Light open vessels are easy to stack and stow on the ship and suit the purpose well. The size of VLB, with an average diameter of 24 cm, makes these bowls a less attractive commodity than the smaller hemispherical ones. Not only do they occupy more space, but the chances of breakage and damage during transport are higher than for their smaller counterparts.

The limited distribution of VLB in the two lower anchorage floors at TAH is indicative of the earlier period in which it was in circulation. In this case, it seems to be a chronological marker of the appearance and disappearance of the trade in VLB. As has been discussed, the morphology of VLB and the "economics of transportation" led to a diminishing export of these bowls. The results of the analysis which appear in Figure 4 reveal that only a very limited number of WS vessels of the VLB type were found, already in level V4, in which the greatest number of ceramics was noted.

Considering the resemblance between the unique PL pattern of TAH and Kalavasos *Ayios Dhimitrios*, we agree with Kromholz that local potters from the Kalavasos and Maroni region "may have been less bound by canons of conventional WS II Ware and had more scope to express a creative spirit".[34] Participants involved in the economic networks between south-central Cyprus and TAH seem to have succeeded in identifying markets for these unusual products.

Thirteen "WS Late" sherds have been identified, all from layers V2 and V3 in a ratio of 7:6. Further study regarding this type needs to be conducted in the future. The production site of Sanidha provides comparable information as noted by Eriksson – the WS Late alongside the WS II Late bowls at Maroni *Vournes* "confirms the extensive links" between these two areas, *Ayios Dhimitrios* and the south-central coast.[35]

The different TAH anchorage floors undoubtedly tell the story of maritime exchange networks in the later part of LB IIa and LB IIb in the Eastern Mediterranean. Cyprus and its mariners were important players in the network and WS was an important element, even if not a significant economic component in the elite trade of the period. The importance of the remains from the landlocked harbour at TAH lies in allowing a glimpse into the economy of the sailors and the cottage industries which were without doubt important for the lifestyle of LBA mariners in the eastern Mediterranean.

33 Artzy 2001b; 2006, 45–64.

34 Kromholz 1978, 211.

35 Eriksson 2001, 152–53.

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Canaanite jars in Cyprus in the 13th–12th centuries BC

Transfer of goods, transformation of networks

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ABSTRACT[1]

Canaanite jars are well attested in Cyprus between the 13th and 12th centuries, during a period of socio-political and economic transformation and change. An examination of the specimens found at the two key sites of Maa Paleokastro and Pyla Kokkinokremos allows us to define the spread of the different morphological types of coastal Levantine origin. Contrary to what one might expect, the commercial amphora with angular shoulder is less common in Cyprus, where, on the other hand, bellied jars of coastal Syrian origin are found. From an overview of the Canaanite jars, it would seem reasonable to assume that Cyprus, during the transitional Late Bronze Age (LBA) to Early Iron Age (EIA) period, was part of a trade network involving the island itself, the Syrian coast and the southern Anatolian area.

The so-called "Canaanite jar" is a well-known category of storage and transport container, typical of the Levantine coast (Fig. 1), broadly dated from the Middle Bronze (MBA) to the Iron Age, with particular success in LB II.[2] The study of this category of pottery offers many suggestions on the continuity/discontinuity of the exchange networks and maritime trade routes in the "age of transformations", formerly called the "crisis years", a period of transformations and change, nevertheless rooted in a basic cultural continuity.[3] In this paper, the focus is mainly on the 13th and 12th centuries, which represent the end of the LBA and the transitional period between the LBA and EIA. The island of Cyprus played a key role in this crucial phase: the island does not seem to suffer from the crisis of the 12th century, but rather flourishes in the age of transformation, being among the areas least affected by the crisis.[4] An investigation into the presence of Canaanite jars in Cyprus in the 13th and 12th centuries can contribute to the study of the changes in trade patterns and their impact on the economy.

Canaanite jars include types with rounded shoulders and types with slightly or sharply carinated shoulders. In any case, defining morphological types must not be limited solely to examining rim fragments, given that similar types of rims are used for very different jars. The chronological sequences and functional and cultural interpretation of vessels should, where possible, be based on the complete form, that corresponds to the potter's initial "mental idea".[5]

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1 This contribution is a product of the Project PRIN 2017 "Peoples of the Middle Sea. Innovation and Integration in the Ancient Mediterranean (1600-500 BC)", Ministero dell'Università e della Ricerca (MUR), Italy.

2 The Canaanite jar of LB II represents a wide category of amphoras characterised by a generally tapered bottom, with a maximum diameter in the upper half of the body. Grace 1956; Parr 1973; Sagona 1982; Killebrew A. 2007; Pedrazzi 2007; 2016.

3 On the cultural interconnections in the LBA, see Badre 2011. On the crisis and transformations, Bachhuber and Roberts 2009; Knapp and Manning 2016. On the crisis-induced mobility in the Mediterranean, see also Jung 2018.

4 Knapp and Manning 2016, 137; Broodbank 2013, 473.

5 The examination of morphological types of jars presented here is based on the complete typology of full shapes: Pedrazzi 2007. For

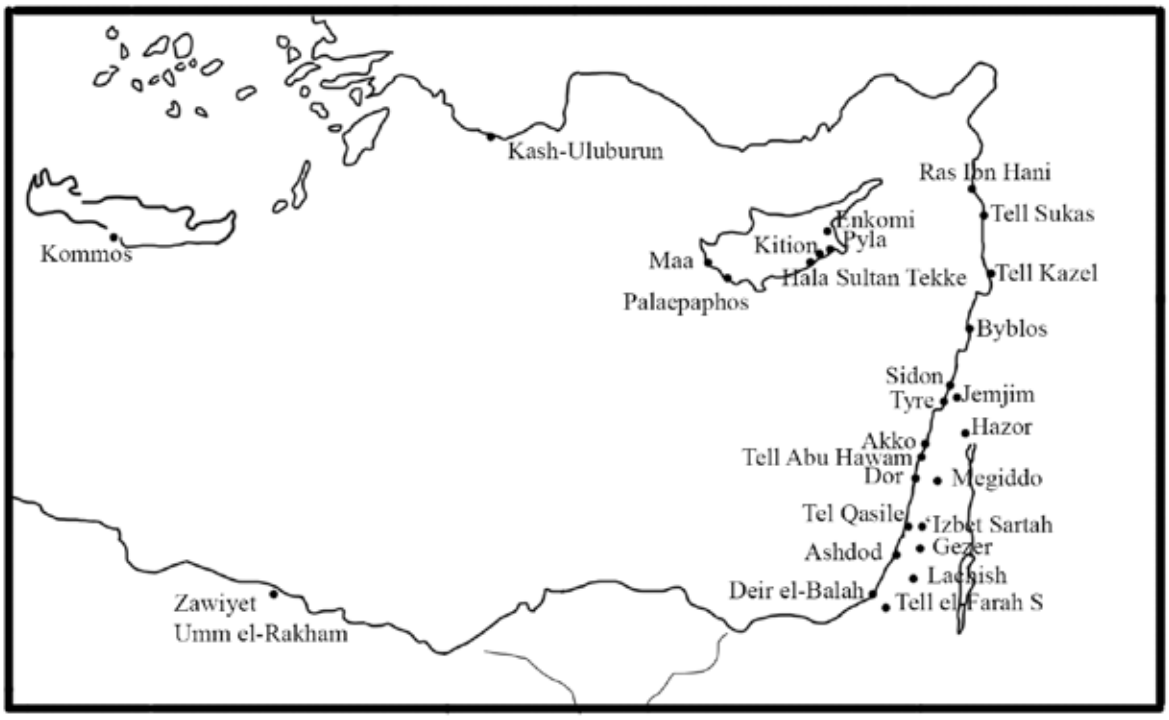

Fig. 1. Map showing the main sites cited in the text (drawn by the author).

Our brief investigation of Canaanite jars in Cyprus during the "transformation years" starts with a few questions. Firstly, which specific morphological types were present in Cyprus and where are they likely to have come from; what purposes did these jars serve and for the transport of what commodities; and, lastly, was there local production of Canaanite jars in Cyprus? Two case-studies, Maa *Palaeokastro* and Pyla *Kokkinokremos*, are discussed here, as both sites are "cultural indicators" of the "transformation years".[6] In fact, Maa and Pyla are two key sites for understanding connectivity in the transition from Late Cypriot (LC) IIC to IIIA, when the island was a sort of "patchwork" of autonomous entities. A few political centres survived after the crisis at the end of LC IIC (e.g. Enkomi, Hala Sultan Tekke, Kition, Paphos). Maa and Pyla were founded at the end of LC IIC near two major centres, Palaepaphos and Kition. Nevertheless, Maa and Pyla are clearly short-lived settlements: spanning the last decades of the 13th to the first half of the 12th century. The Canaanite jars from Maa were studied by Hadjicosti more than 30 years ago, with the petrographic and Neutron Activation Analyses (NAA) carried out by Jones and Vaughan;[7] a new study was undertaken by Jung, with NAA by Mommsen and myself.[8] Canaanite jars from Pyla were first published by Karageorghis and Demas,[9] and then by Karageorghis and Kanta, with a contribution by Georgiou, in the volume of 2014.[10] Recent excavations at Pyla, by Kanta, Bretschneider and Driessen, have brought to light more Canaanite jars.[11]

The Canaanite jar assemblage at Maa is comprised of ten reconstructed jars and a totality of 5022 potsherds that possibly represent 84 whole vessels. Hadjicosti identified three main types: her first type (Hadjicosti type 1) is a jar with a slightly carinated shoulder and button-toe base; a second type (Hadjicosti type 2) is an ovoid vessel

the study of Canaanite jars in Cyprus I am grateful to Reinhard Jung who involved me in his research project focused on Cypriot materials. Some results of this collaborative work are now in press: see Jung et al. (forthcoming).

6 Georgiou 2012; 2015.

7 Hadjicosti 1988, 340–85; Jones and Vaughan 1988, 386–98.

8 Jung et al. (forthcoming).

9 Karageorghis and Demas 1984.

10 Karageorghis and Kanta 2014.

11 Bretschneider et al. 2015.

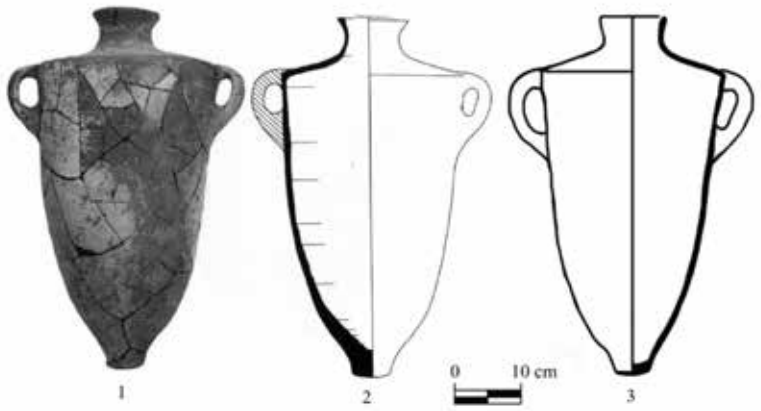

Fig. 2. Angular shouldered jars (Type 5-4): 1–2. Pyla, photo and drawing from Georgiou 2014, pl. Xi, cat. N. 138; 3. Megiddo, drawing from Guy 1938, Pl. 17:4 (redrafted by Pedrazzi 2007, fig. 3.24:d).

with a rounded base; and the third type (Hadjicosti type 3) is a four-handled jar; a further type corresponds to the Egyptian variant of the Canaanite jar (Maa jar no. 585).[12] Maa's collection also consists of other sherds belonging to different types: some pierced bases, a few fragments of painted jars and one fragment of an angular shoulder, belonging to the commercial angular-shouldered jar of LB II, a well-known transport container used in the maritime trade. In fact, this angular-shouldered jar (Pedrazzi Type 5-4, see Fig. 2)[13] is a very typical and well-known LB II commercial container: this specific category was manufactured in various parts of the coastal Levant. Hundreds of complete jars have been found at Minet el-Beida, the port of Ugarit, and about 150 have been recovered in the Kash-Uluburun shipwreck (most of them belong to this type). Although this vessel was used for maritime transport and travelled to Mycenaean centres and to Egypt, it has been recovered in Cyprus in relatively small numbers.[14]

The fragment of angular shoulder from Maa could also belong to another shape (Pedrazzi Type 5-2),[15] a jar with a very flat shoulder, a shorter neck and a rounded base. This is the evolution of the LB angular-shouldered jar in the Iron Age: it is known from Tyre stratum XIII, Tel Dor, Tel Qasile stratum X, and in Cyprus at Palaepaphos *Skales* in the 12th and 11th centuries.[16] In any case, looking at the rim sherds from Maa, we do not find examples of these truly short necks. Thus, we can argue that the small fragment of shoulder can safely be attributed to the standardised Type 5-4 of the 13th century. We ascribe to the same type also the stump base, described by Jones and Vaughan as "imported".[17] A complete example of Type 5-4 has been found at Pyla and published by Georgiou in 2014, confirming the presence of the commercial jar on the island.[18]

If this commercial jar *par excellence* was not so common at Maa and Pyla, another morphological type was appreciated on the island: the Canaanite jar with a slight carination on shoulder and a "bellied" profile (Pedrazzi

12 Hadjicosti 1988.

13 Pedrazzi 2007, 75–7, type 5-4.

14 A full study of Canaanite jars from Tiryns is now being published by Day, Barak and others, and this study will confirm the origin and production in a number of centres in the Levant (Day et al. 2020).

15 Pedrazzi 2007, 72–3.

16 Bikai 1978, pl. 35:12; Raban 2000, fig. 9.24:7, 18–9; Mazar 1985, pl. 47:11; Karageorghis 1983, pls. CLXVI:40, CXIV:2, CLIV:46.

17 Hadjicosti 1988, 347 cat. no. 73; 366 no. 24, pl. C:19; Jones and Vaughan 1988, 387, 393.

18 Georgiou 2014, pl. XI:138.

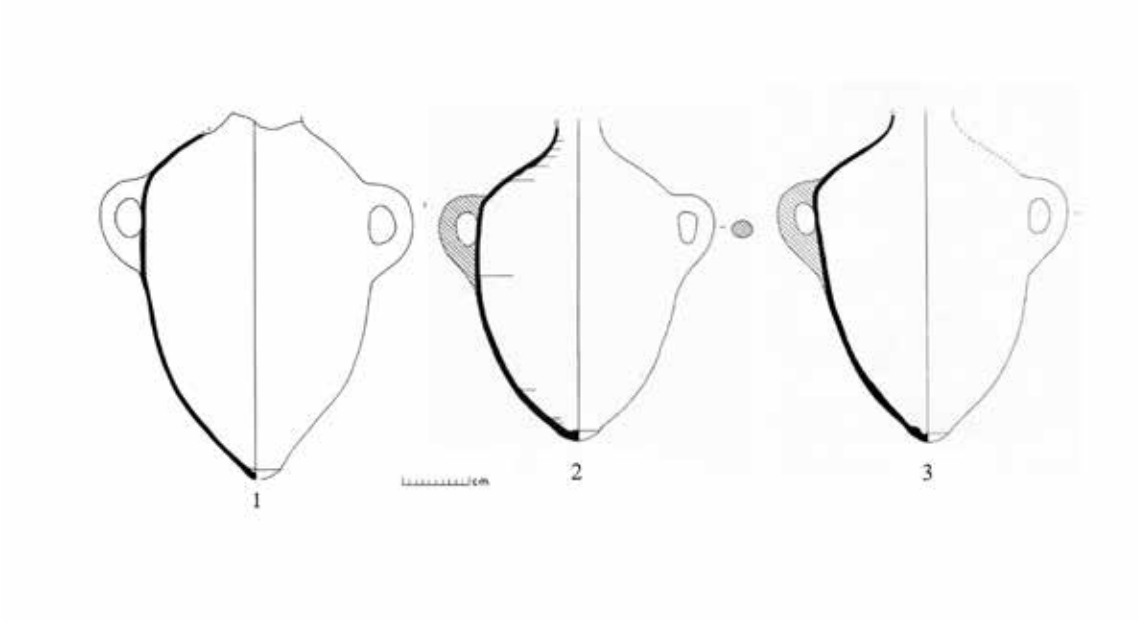

Fig. 3. Bellied jars with sloping shoulder (Type 4-2): 1. Maa, after Hadjicosti 1988, cat. n. 658; 2. Pyla, after Georgiou 2014, Pl. XI:160; 3. Pyla, after Georgiou 2014, Pl. IX:49.

Type 4-2, see Fig. 3).[19] This shape is known mainly, but not exclusively, in the northern Levant, in the final stages of LB II, and during the transition LB–Iron Age.[20] Excavations in Areas II and IV at Tell Kazel, in coastal Syria, provided a significant number of similar vessels.[21] It is less frequent in the central-southern Levant area: a few examples have been identified, such as a complete vessel at Hazor (LB II). It should be noted that the necks and rims are very similarly shaped to the necks and rims of the angular Type 5-4, which is the reason why these two separate types can be confused in the site typologies.

The bellied type with sloping shoulder (Type 4-2) is widespread in LB II and Iron I. A variant (Pedrazzi Type 4-3), attested at Tell Kazel in LB II–Early Iron transitional levels, has a different rim. This shape of rim is well-known and widespread: many examples come from Pyla.[22] In any case, it is worth remembering that the rim is not enough for a correct morphological and typological attribution.

In the EIA, a few transformations occur: the shoulder becomes more convex and rounded; the slight carination is preserved. The renewed shape in the EIA, with rounded shoulder (Pedrazzi Type 4-1), already produced in the very last phase of the LBA in centres such as Ugarit and Tell Kazel, circulated in a more restricted network, virtually limited to the northern Levant and Cyprus, where it is known at Kition (both in Floor II and I).[23] We can suggest that none of the complete examples from Maa belongs to Type 4-1.

A number of vessels preserved at Maa and Pyla, and also at Hala Sultan Tekke,[24] therefore, are representative of Type 4-2, with a sloping shoulder; rim fragments and bulbous bases seem relevant to this type, too. The "bellied" jars, in Floor II and Floor I at Maa, and at Pyla, are represented mostly by the ancient shape (Type 4-2), rather than by the recent one (Type 4-1). As we have seen, the bellied jars definitely outnumbered the angular "commercial" jars: this means that jars commonly and widely used at Maa and Pyla did not belong to

19 Pedrazzi 2007, 66–9, fig. 3.17.

20 Type 4-2 is also documented at Zawiyet Umm el-Rakham in Egypt (Snape and Wilson 2007, fig. 3.21:C2.7).

21 Badre et al. 2018, pl. XXVII.

22 In Lebanon, at Tell Jemjim in the hinterland of Tyre, this shape of rim is also known, as the recent excavations by Oggiano and Khalil revealed; petrographic and chemical analyses on jars from Tell Jemjim (Lebanon) are currently in progress.

23 Kition: Karageorghis 1985, pl. CCXXXVII:4637, Floor I, *bothros* 24; Karageorghis 1985, pl. LI:839, Floor II–I, room 22A.

24 Bürge and Fischer 2018, 225, fig. 3.16 (CAN 2).

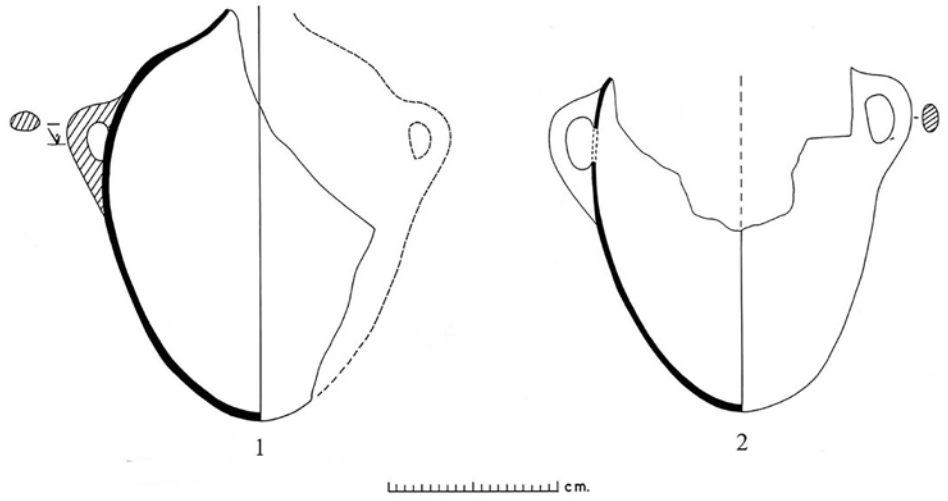

Fig. 4. Ovoid jars (Type 2-1): 1. Maa, after Hadjicosti 1988, cat. n. 265+500; 2. Maa, after Hadjicosti 1988, cat. n. 339.

the standardised type used in the long-distance trade managed by the palaces. It cannot be a mere coincidence that, at Ugarit, the 80 jars found in the storeroom in the port area (Minet el-Beida) belong to the standardised commercial Type 5-4 (the jars are practically identical to those of the Kash-Uluburun shipwreck), whereas in tombs or in residential contexts the bellied jars (Type 4-2) are better represented.[25] A functional difference is evident, which also emerges from the different contexts of discovery. In the light of these considerations, one would expect to find a large quantity of the commercial and "international" type (5-4) in Cyprus; but, on the contrary, it is the "bellied" type of coastal Syria that also spread to the island. The scarcity of commercial jars in Cyprus shows that, within the distribution network of this shape, the island's role cannot have been that of the destination and sale of the products contained in these specific jars (terebinth resin, as in the Kash-Uluburun jars, or resinated wine). Conversely, in the last decades of the 13th century Cyprus must have been what in network analysis can be defined as a *crossing point* in the international trade network of the end of the LBA.

The petrographic analysis of the jars from Kash-Uluburun suggested that 80% come from the Carmel coast, the rest from the Tyre-Sidon area and Ugarit; the reference to the Carmel coast is confirmed also by the number of jar sherds from Tell Abu Hawam discussed by Artzy.[26] Moreover, analyses indicated different origins for the 32 Canaanite jars from Kommos (Crete): the northern Syrian coast, the Akkar plain; the coast between Sidon and Akko, the Jezreel valley and the Carmel-Sharon coast.[27]

Jars from Maa and Pyla also included the ovoid shape, derived from Middle Bronze models. This ovoid type (Pedrazzi Type 2-1, see Fig. 4)[28] appeared at the beginning of the EIA in the Levant, as at Tell Sukas in coastal Syria (Period H2).[29] It was also produced in a variant (Pedrazzi Sub-Type 2-1-1) showing an added button-like base, as at Pyla and Kition.[30] In 1995, Eriksson proposed that a number of the Maa jars (Hadjicosti type 2b),

25 Ugarit (Monchambert 2004, fig. 56: 820), from a domestic context; Monchambert 2004, fig. 56: 826, from a tomb, and Courtois 1969, figs. 1:C, 2:E (tombs).

26 See Artzy 2007.

27 Gilboa et al. 2015.

28 Pedrazzi 2007, 57–8, fig. 3.8.

29 Tell Sukas (Riis 1970, fig. 10:h; Buhl 1983, fig. I:11).

30 For Pyla, see Karageorghis and Demas 1984: trial A/2. For Kition, see Karageorghis 1985, pl. LXII: 230/1, 231.

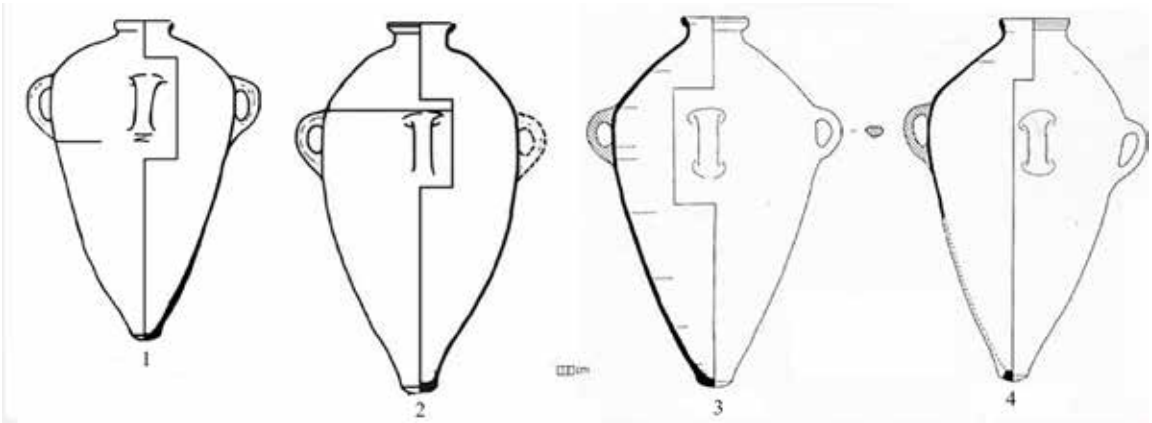

Fig. 5. Four-handled slender jars (Type 6-2): 1. 'Izbet Sartah, after Finkelstein 1986, fig. 9:2; 2. Byblos, after Salles 1980, Pl. 27:9; 3. Pyla, after Georgiou 2014, Pl. X, n. 136; 4. Pyla, after Georgiou 2014, Pl. X, n. 137.

found in Area III, Floor I,[31] may have originated from Egypt, since their fabric (Fabric 8) petrographically pointed to an Egyptian source. Eriksson also suggested that the neck (missing in the example from Maa) may have initially been high, large and cylindrically shaped: this hypothesis cannot be correct, since the width of the orifice is not compatible with that of Egyptian high-necked jars. Instead, this morphological type probably comes from the northern Levant. An incomplete jar from Pyla could possibly also be ascribed to this type, although Georgiou has suggested the presence of a slight carination at the shoulder.[32]

As for the four-handled jar, Hadjicosti reconnected it to a Levantine tradition originating in the MBA. Nonetheless, the four handles must not be taken as a distinctive feature which could be used in establishing a single morphological model, as many Levantine jar types have a four-handled version.[33] At Maa, the presence of a specific type (Pedrazzi Type 6-2, Fig. 5) can be recognised: this is a "slender" jar, taller than the commercial type (about 60 cm high), with rounded shoulders and a tapering base.[34] At Maa, these jars are known mostly from Floor II (and in one case from a pit in Floor I). The same type was found at Pyla.[35] The best comparison with the specimens from Pyla is a jar from Byblos, found in a LBA tomb.[36] Type 6-2 is a specific jar that spread in LB II and in the EIA. The EIA specimens, such as those from 'Izbet Sartah, feature a shorter neck, a typical development of that period. This morphological type seems to have a southern Levantine origin: in LB II, the shape is found at Lachish (in Stratum VI, and in a tomb), in the Deir Al-Balah cemetery, and in a tomb at Tell el-Farah South in Palestine;[37] the northernmost find is at Byblos; in the EIA, the type is also documented at Ashdod (Stratum 6) and at 'Izbet Sartah in the central hill country.[38] One may wonder whether this type was used for

31 Eriksson 1995; see Hadjicosti 1988, cat. nos. 265+500, 339.

32 Georgiou 2014, pl. XI:158.

33 E.g., the cylindrical jars with a slightly carinated shoulder, of the EIA, at Gezer were also produced in the four-handled version (Pedrazzi 2007, 83, fig. 3.34 (Type 5-5); Dever 1986, pl. 27: 1-2).

34 Pedrazzi 2007, 90–1.

35 Georgiou 2014, cat. nos. 136–37.

36 Salles 1980, 95, pl. 27:9.

37 Lachish: Tufnell 1958, pl. 87:1020; Deir Al-Balah: Dothan 1979, 16–7; Tell el-Farah South: Duncan 1930, pls. XIX, 43:W2.

38 Ashdod: Dothan 1971, fig. 83:1–2; 'Izbet Sartah: Finkelstein 1986, fig. 9:2.

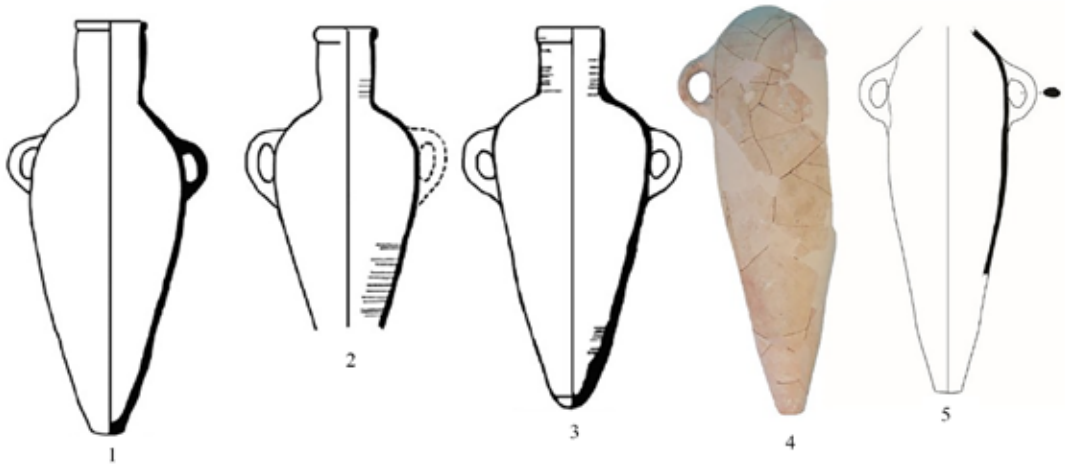

Fig. 6. Egyptian-type storage jar (Type 7-1): 1. Gurob (Egypt), after Thomas 1981, Pl.7:195; 2. Akko, after Ben Arieh and Edelstein 1977, fig. 10:9; 3. Malqata (Egypt), after Wood 1987, n. 7; 4. Maa, cat. n. 585 (photo: courtesy of Reinhard Jung); 5. Maa, cat. n. 585 (drawing: courtesy of Reinhard Jung).

specific purposes or for particular contents. Possibly, the tapered and elongated body and the four handles suggest something about the way these containers were moved and transported.

The greater height of the Type 6-2 jars does not correspond to a greater capacity: from a calculation made with Autocad, we can deduce that the capacity of Type 4-2 (considering both the Cypriot and the Levantine specimens) ranges from 26.5 to 28.5 litres, while for Type 6-2 the capacities are similar to Type 6-1 (which is identical in shape, even if two-handled), ranging between 22.7 and 28.7 litres.[39] Therefore, the four-handled jars at Maa and Pyla appear to have similar capacities to those of the bellied jars. The ways in which these containers were transported and moved, however, change: the four handles imply that the jars may have been loaded, unloaded and moved by two people together.

If we look at the coexistence of different types in the same contexts in the Levant, we can highlight some specificities in function. In the burials at Deir Al-Balah, on the southern Palestinian coast, in the 13th century, the presence of the commercial jar (Type 5-4) recalls the importance of the economic context and maritime traffic; the presence of the Egyptian amphora points to contacts with the Nilotic area, while the tapered jar with four handles (Type 6-2) appears as a less common type that seems more directly intended for rituals, since it is always placed near the head of the sarcophagus.[40]

At Maa, a more elongated jar (Pedrazzi Type 7-1, Fig. 6) should be considered as an Egyptian evolution of the Canaanite jar. The NAA have recently confirmed the Egyptian origin of the fabric.[41] Numerous specimens have been recovered from the coastal sites of the Levant, predominantly in burial contexts.

A type less common on the island, even if attested at Pyla and also at Enkomi (Level IIIB), is the cylindrical type with a slightly carinated shoulder (Pedrazzi Type 5-5), widespread in the southern Levant, between Galilee and Philistia (at both Tell Keisan and Tel Qasile) during the EIA.

39 We suggest this capacity range according to the calculation of the capacities of Type 6-1, which are morphologically similar and only differ in the fact that they have two handles instead of four.

40 See Dothan 1979.

41 Jung et al. (forthcoming).

At Pyla, a Levantine domestic jar, also referable to the Canaanite shape, is documented: this small globular jar (Pedrazzi Type 12-1)[42] has been found in the settlement.[43] Recent NAA carried out by Mommsen have not provided attribution to an already known class.[44] This type appears in LB II, in coastal Syria (at Tell Kazel), but it is widespread mainly in Galilee, at the Canaanite site of Hazor.[45] It was intended for domestic use, as its morpho-functional features make these containers useful more for household purposes than for transfer or exchange. These domestic jars probably also travelled by sea, perhaps as part of the personal belongings of the merchants who moved between the Levant and Cyprus.

Painted jars would require a full discussion, which is not feasible here. But it is important to recall that painted decoration can be applied on different morphological types, almost all types. As for the inscribed jars, Cypro-Minoan (CM) signs were incised after firing, as on a few jars from Pyla. When an amphora arrived on the island from the Levantine coast, it could be marked with the local signs, probably in order to indicate the contents of the vessel.

Some scholars have suggested a Cypriot production of a few "Canaanite jars", as Jones and Vaughan at Maa, but, as recent NAA show, no match with Cypriot chemical groups has been found.[46] Only one sample (jar no. 656) corresponded to a group close to a chemical group of the central Levant. In any case, we have to consider, also, the poor availability of chemical and petrographic data for the Syrian area. Gilboa, Waiman-Barak and Jones have recently suggested that "some complete jars at Maa Floor II (not sampled) must also be Syrian".[47]

In conclusion, the identification of the different morphological types present in Cyprus in the period between the 13th and 12th centuries leads us to some preliminary remarks on the circulation and use of Canaanite jars in Cyprus between the end of the LBA and the EIA. At this stage, the diffusion of bellied jars (Types 4-2 and 2-1) and the low incidence of commercial jars (Type 5-4) might suggest that Cyprus, during the LBA–EIA transitional period, was part of a trade network involving the island itself, the Syrian coastal area and the southern Anatolian area. On the other hand, a privileged connection also seems to emerge with Egypt, thanks both to the appearance of the Egyptian jars (Type 7-1) and to the presence of the four-handled slender jar (Type 6-2), a unique container, widespread especially in southern Palestine in the areas affected by Egyptian influence. The cylindrical jar with a slightly carinated shoulder (Type 5-5), which was produced and used in Galilee and Philistia in the EIA, seems less frequent in Cypriot 12th century strata, although in Galilee (at least at Tell Keisan) this type was already in use in the 12th century.

Moreover, to further clarify, in the future, the significance of the presence of Canaanite jars on Cyprus, it would be useful to have stronger data on the possible local production, on the island, of at least a few specimens, and more data on the provenance of fabrics. For the 12th century, the evidence is scant: as mentioned, analyses conducted by Jones and Vaughan on the storage jars from Maa suggested that a few vessels (eight samples) came from the southern Levant and others (five vessels) from a region including Lebanon and the Akko plain; but recent analyses by Mommsen did not confirm this picture.[48] Furthermore, as discussed in this paper, the morphological tradition behind the jars found in 12th century levels at Maa (and Pyla) recalls the Syrian coast more than the southern Levant. Even if the Carmel coast surely was "one of the most active regions in inter-regional exchanges following the LBA collapse", as Gilboa and Sharon have stated,[49] nonetheless the Syrian coast, in the years immediately after the collapse, was not excluded from the network of commercial and cultural relations with Cyprus. The morphological "model" of storage jar preferred (and selected) at Maa *Paleokastro* might sug-

42 Pedrazzi 2007, fig. 3.63.
43 Karageorghis and Demas 1984, pl. 38:109.
44 Jung et al. (forthcoming).
45 Tell Kazel: Badre 1994, figs. 42:a, 44:a. Hazor: Yadin et al. 1960, pls. CXXXVIII:7–8, CXCIX:18, CCXCIII:5–6.
46 Jung et al. (forthcoming).
47 Gilboa et al. 2015, n. 27. Looking at the shape, we agree; they belong to Pedrazzi Types 4-2 and 4-1.
48 Jung et al. (forthcoming).
49 Gilboa and Sharon 2017, 291.

gest that such relations between Cyprus and the Syrian coast continued *before and after* the collapse of major Syrian sites such as Ugarit.

In any case, the cultural context in which Canaanite jars were used, between LC IIC and IIIA, as we see at least at the key sites of Maa and Pyla, was clearly a mixed and open one: encounters, cultural mixtures, migration of human groups, exchanges of goods and ideas are suggested by the presence of many objects with an iconography and style of Minoan, Mycenaean, Canaanite, Anatolian, Sardinian or Egyptian derivation, together with local Cypriot products and traditions. It is certainly fashionable to talk about *entanglement* and *hybridity* or *hybridisation* and *creolisation*; this persistent "fashion" in our studies, at least, has enabled us to avoid over-simplified mono- or bidirectional reconstructions of intercultural relations.[50] What role the so-called Sea Peoples had in this context is not yet quite clear. For sure, an accurate analysis of the different types of Canaanite jars in circulation in the Eastern Mediterranean, together with their provenance, can help us to understand a part of the complex economic and social patterns of the "transformation years".

50 "Use of terms hybridity, creolization, and entanglement, when studying changes in material culture, emphasized the complexity of the outcome of intercultural contacts and acted, to a degree, as a deterrent to simplistic reconstructions of past contacts": Yasur Landau 2017, 143.

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Cypriot products and Cypriots away from the coast?

A view from Late Bronze Age Tell el-Hesi

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ABSTRACT

The site of Tell el-Hesi in the southern Levant was originally excavated by W.F. Petrie (1890) and F.J. Bliss (1891–1892) and revealed a number of Late Bronze Age (LBA) vessels and terracotta objects from Cyprus and the Aegean. Further excavations that took place between 1970 and 1983 yielded more pottery sherds, although a number of them seem to come from layers dating to later chronological periods. The Cypriot and Aegean pottery from the 1890–1892 seasons, now stored at the Palestine Exploration Fund (PEF) in London, was recorded by Bergoffen for her doctoral thesis (completed in 1989) and re-examined by the author in association with the Mycenaean pottery from the same excavation. In addition, new material from the Joint Expedition provides a more comprehensive insight into the trade networks of the region. Given that Tell el-Hesi is not a coastal site, the significant number of sherds from Cypriot vessels reveal a certain level of consumption and distribution of this type of object. Some of the Cypriot objects found appear rarely in the Levant and might therefore provide information on the nature, if not the identity, of the merchants themselves.

INTRODUCTION

This study discusses the presence of LBA Cypriot material culture at Tell el-Hesi in modern Israel and investigates the reasons for its presence there, as the site is considered to be away from the trade routes. More specifically, Tell el-Hesi is located near the border of the Shephelah and the Negev desert (Fig. 1). The settlement consists of a 10 ha terrace and 1.5 ha mound at its northeast corner. Its occupational lifespan extends from the Chalcolithic to the Hellenistic period, with what seems to be a disruption during the Middle Bronze Age (MBA), while the data from the LBA are scarce. The PEF, under the direction initially of W.F.M. Petrie in 1890 and subsequently of F.J. Bliss in 1891 and 1892, conducted excavations at the site. The next excavation project was undertaken from 1970 to 1983 by the Joint Archaeological Expedition, which was affiliated with the American Schools of Oriental Research (ASOR).[1]

Both expeditions discovered pottery originating from Cyprus and the Aegean and the main aim of an ongoing project led by the author in collaboration with the PEF and Dr Jeffrey Blakely (University of Wisconsin–Madison) is to bring the two datasets together in order to compare them, so that aspects of chronology, social practices and even deposition processes can be discussed. The presence of these assemblages in association with

1 Petrie 1891; Bliss 1894; Toombs 1990; Blakely and Toombs 1985; Bryce 2009, 309–10.

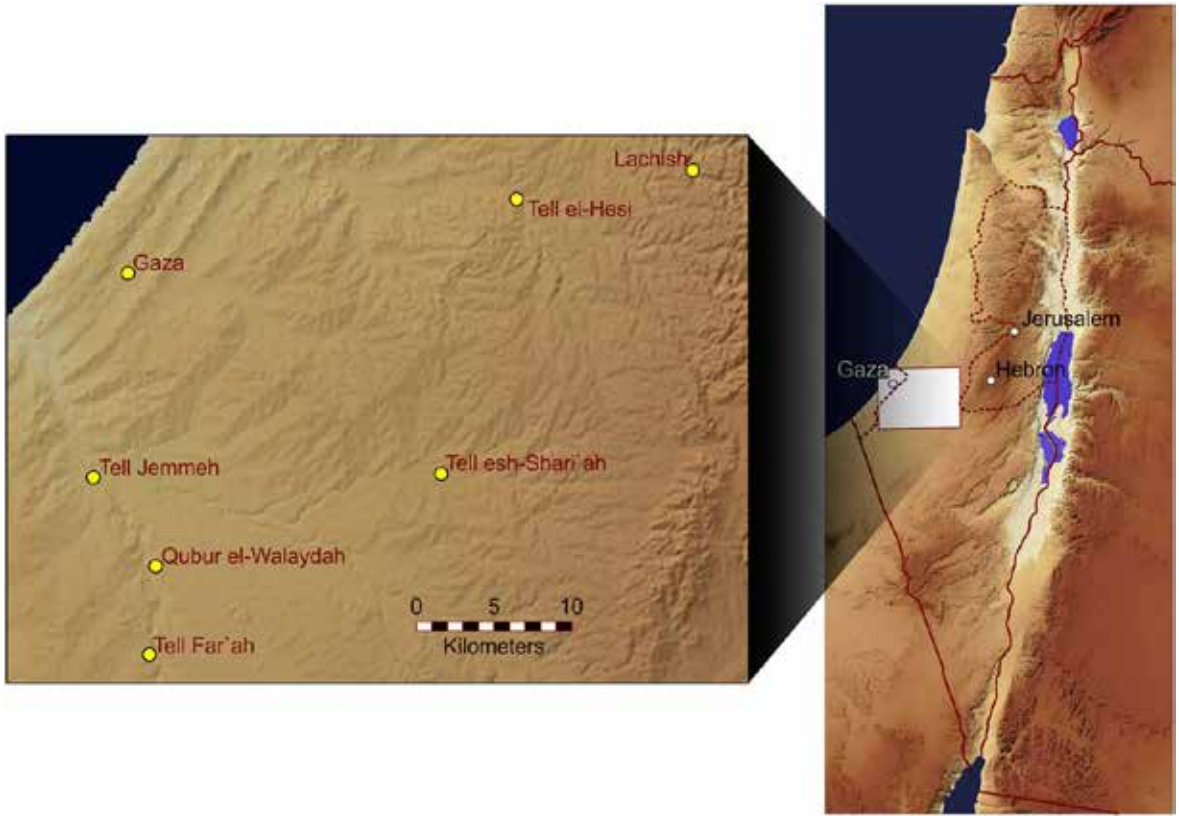

Fig. 1. Map of Tell el-Hesi and region (Blakely 2018, 272, fig. 1). Courtesy of J. Blakely).

the geographical location of the site is worth exploring as the import of these pottery items (vessels and some clay figurines) shows that there was a certain level of consumption by the local inhabitants, who appreciated these types of exotic imports.

IMPORTED POTTERY FROM CYPRUS AND THE AEGEAN AT TELL EL-HESI

The presence of Cypriot (and Mycenaean) pottery along the Syro-Palestinian coast has been the subject of numerous studies focusing on the material of particular excavations, for example on the Cypriot pottery found at Tell Atchana and Tell Keisan,[2] as well as on the Mycenaean pottery discovered at Megiddo and Tell Aphek.[3] At the same time, synthetic works attempting to bring together the data and discuss the distribution and appreciation of these imports by local societies and the relevant trade networks have also been conducted.[4] The majority of these pottery assemblages come from coastal sites throughout the LBA.[5] However, it was during Late Cypriot (LC) II (see Table 1 for a chronological concordance) when large quantities of pottery from the Aegean and the island of Cyprus reached the harbour towns of the Levant and were distributed beyond them.

2 See Bergoffen 2005 (Tell Atchana); Burdajewicz 2020 (Tell Keisan).

3 Leonard and Cline 1998 (Megiddo); Guzowska and Yasur-Landau 2007 (Tell Aphek).

4 See for example van Wijngaarden 2002 and Maguire 2009. Also Steel 2002; Bell 2006; Papadimitriou 2017.

5 Papadimitriou (2012) has produced a detailed study discussing the types and quantities of these pottery assemblages.

Papadimitriou's stages	Cyprus	Aegean	Levant
Stage 3	LC IB	LM II/LH IIB	LB 1 late (LB IA)
	LC IIA	LM/LH IIIA1	LB IIA early
Stage 4	LC IIB	LM/LH IIIA2	LB IIA late
	LC IIC	LM/LH IIIB	LB IIB

Table 1: Papadimitriou's Stages 3 and 4 (adapted from Papadimitriou 2012, 95). [LC: Late Cypriot; LM: Late Minoan; LH: Late Helladic; LB: Late Bronze].

From the Petrie/Bliss excavations a number of artefacts come from the so-called "cemetery" area located to the west-southwest of the town enclosure.[6] These include Base Ring (BR) I and II jugs and juglets, White Slip (WS) II "milk-bowls", Bucchero Ware and White Shaved (WSh) vessels, wall brackets, two terracotta figurines of female individuals and one or possibly two clay bull-shaped rhyta (Figs. 2–3).[7] From the Joint Archaeological Expedition, based on the preliminary study by Blakely, BR II and WS II vessels appear to be predominant, while White Painted (WP) and WSh pottery needs to be confirmed at a later stage.[8] It is clear that the sherds from the latter expedition are numerous (more than 300), yet no well-preserved vessels have been found and it has not been possible to establish a minimum number of vessels.[9] They date predominantly to the LC II period. Interestingly, the contexts of these finds are various as they come from the rooms of the houses of the town, a possible "cemetery" and from mudbricks; for the latter complicated case Blakely, in his discussion of Petrie's Pilaster Building, comments that certain pottery was "in some manner residual, either deriving from the collapsed mudbrick walls and roof, or, in fewer cases, isolated sherds that were in the floor at the time of destruction".[10]

More generally, significant quantities of Cypriot BR and WS handmade pottery have been identified at a number of Levantine sites. An interesting case study is that of the small BR juglets that functioned as liquid containers and vessels of WSh type which appear in large quantities, as Bushnell has demonstrated.[11] Work by Papadimitriou has shown that during late LC IB and LC IIC thousands of Cypriot vessels found their way to the Syro-Palestinian coast.[12] According to Papadimitriou, already from the late 18th century BC, Cypriot ceramics were transported in limited numbers to the Syro-Palestinian coast and Egypt, while later the exports number thousands in the Levant and hundreds in Egypt. The pottery that was exported included primarily bowls, tankards, jugs and juglets of BR I and II, WS II and WSh types, similar to the repertoire found at Tell el-Hesi. As a result, it is no surprise, as noted by Matthers, that the material from the Tell el-Hesi "cemetery" area (as a group) fits well "into Kenyon's Late Bronze Age Group D …, the best parallel being found in Tomb 2016 at Tell ed-Duweir … and Tombs 8144–8145 at Hazor".[13]

Both excavation projects have yielded limited amounts of fragmentary pottery from the Aegean dating to the 14th and 13th centuries BC. From the Petrie/Bliss excavations the body of an animal figurine has been identified, as well as two piriform jars and part of a flask. From the Joint Archaeological Expedition comes a handful

6 Matthers 1989, 61 n. 5.

7 Matthers (1989) mentions that 20 vessels were part of the collections at the PEF in London, while Bergoffen (1989) identified 29 and Papadopoulos (2017) recorded 34.

8 Personal communication, March 2020.

9 The material under study has been exported temporarily to the headquarters of the PEF in London with the permission of the Israel Antiquities Authority. However, Covid-19 restrictions have not as yet allowed a detailed study. Dr Fraser (British Museum) kindly took photographs of all the material and sent them to me.

10 Blakely 2000, 74–5.

11 Bushnell 2013.

12 Papadimitriou 2012; also 2017, 163–68, tables 4–7. Tell el-Ajjul alone has produced more than 950 Cypriot samples (Bergoffen 1989; Eriksson 1993).

13 Matthers 1989, 61 n. 5, with references.

Figs. 2–3. Sherd of a WS "milk-bowl" (2678) and a BR juglet (2871) from Tell el-Hesi (© A. Papadopoulos/Palestine Exploration Fund).

of pieces. Two sherds have been identified as parts of flasks and perhaps a third from a piriform jar, with the possible existence of a stirrup jar, while further shapes need to be confirmed. Mycenaean pottery dating to Late Helladic (LH) IIIA–B seems to arrive in Levantine sites in large numbers (Papadimitriou's Stage 4: LC IIB–LC IIC/LH IIIA2–IIIB), following a more limited number of imports from the Aegean during the previous period (Papadimitriou's Stage 3: LC IA–IIB/LH II–IIIA1).[14] The limited presence of Mycenaean pottery at the site needs further investigation.

A SMALL COLLECTION OF UNUSUAL CYPRIOT OBJECTS

Of special interest is the presence at Tell el-Hesi of the two female terracotta figurines and the one or two bull-shaped rhyta, as they are rare finds and perhaps can be associated with certain individuals. I have argued elsewhere that by attempting to identify personal belongings, which may have served as identity indicators, it is possible to acquire a sense of the whereabouts of Cypriot merchants outside Cyprus, especially in the Aegean and the Levant.[15] This methodological approach has combined the study of material culture from Cyprus found outside the island with data from the documentary record, where available, for example at Ugarit. Although Cypriot BR and WS pottery, copper ingots, balance weights and wall brackets have been included in the synthesis, it seems that the female figurines (Type A and B), the clay bull-shaped vessels, as well as a limited number of large pithoi, when examined in their find spots, can provide useful insights as they may be considered the personal objects of Cypriots. Tell el-Hesi with its finds may be included within the handful of sites in the Aegean (Tiryns) and the Levant (Tell Abu Hawam and Ugarit) that are good candidates for being areas that hosted Cypriot individuals, perhaps merchants or other travelers. However, bearing in mind the "fluid nature of ethnic identity",[16] it should be acknowledged that "constructing an ethnic identity might involve the intentional use

14 Papadimitriou 2012; 2017.
15 Papadopoulos (forthcoming).
16 Voskos and Knapp 2008, 677.

Fig. 4. BR female figurine (2916) from Tell el Hesi (© A. Papadopoulos/Palestine Exploration Fund).

of specific material features as identifying markers, which can be reflected in household organisation, ritual or mortuary practices …".[17]

To be more specific, during the early excavations by Petrie and Bliss, two small female terracotta figurines were identified. Bliss clearly describes the discovery of the two pieces and the coincidental identification of the clay head of one of them at a later stage.[18] These two figurines stand out from the rest of the Cypriot finds as they appear to be extremely rare in non-Cypriot contexts and especially from domestic areas. Although now only one is stored at the PEF (Fig. 4), the two artefacts appear together on a photograph from the early years and come from a domestic context.[19]

Handmade BR female figurines of Types A (Bird-faced) and B (Normal-faced)[20] were produced on the island of Cyprus and have been discovered both in mortuary and settlement contexts, yet they appear rather randomly in the Levant. Perhaps this is an indication that either there was no great demand from the Levantine clientele or that they were indeed personal belongings of their Cypriot owners. During the LC II period, only a very small percentage of tombs in Cyprus contained figurines, and during LC III only one.[21] Alexandrou, following Webb, notes that this could mean that the figurines do not constitute a consistent or necessary element in funerary practices and that the same can be suggested for residual cult assemblages.[22] According to Alexandrou the rare appearance of these figurines in both mortuary and sacred contexts is indicative of their use as votives or as valued possessions of the deceased.[23] Knapp, in his thorough discussion of the problems regarding the contextual analysis and interpretations of Cypriot Type A and B female figurines, concludes that "they would have been used in life as well as in death, and may be regarded –at the very least– as valued possessions of those who owned them".[24]

17 Knapp 2014, 37. See Papadopoulos (forthcoming) for full discussion and bibliography.
18 Bliss 1894, 68–9, fig. 111.
19 For a full account of the Tell el-Hesi photographs, see Gibson and Rajak 1990.
20 Knapp 2009.
21 Webb 1992.
22 Webb 1992; Alexandrou 2016.
23 Alexandrou 2016, 43, for references as well.
24 Knapp 2009, 140.

Cypriot terracotta figurines (Types A and B)[25] appear outside the island in only a handful of sites. Alexandrou has identified figurines at Ugarit, Tyre, Tell Abu Hawam, Deir el Balah, Tell Ta'annek and Tel el-Hesi.[26] Notably, however, for Tell el-Hesi only one female figurine is mentioned and not two. The function of these figurines is not very clear even in their place of production, i.e. within Cyprus, yet the fact that they are extremely rare outside the island and were perhaps not considered as objects of value, as they might have been if made of metal or a precious stone, may suggest that they were appreciated only by a few individuals, who were able to understand their symbolism and (perhaps original) use. These individuals could have been Cypriots who brought the objects with them or non-Cypriots who appreciated them for the same or other reasons.

The combination of the two female figurines and the one bull rhyton (with the possibility of a second) from Tell el-Hesi is a rather interesting one due to the rarity of the recovery of such items together in Eastern Mediterranean contexts. Knox, in her study of Cypriot human and animal figurines, points out their scarcity in the Levant and suggests that "it seems likely that these few objects were not specifically traded but may have travelled outside Cyprus as gifts or souvenirs collected by foreign traders or as the personal possessions of Cypriot merchants who sailed to the Levant".[27] Knox sees the random distribution of these figurines, as well as their predominant presence in burial contexts that contain several other Cypriot objects, as an indication that these items "may have travelled with Cypriot people, perhaps merchants, working temporarily overseas or more permanent migrants who settled outside the island but retained certain objects from their homeland".[28]

In summary, it seems that only a small number of LBA Cypriot female and zoomorphic figurines and vessels have been identified outside Cyprus.[29] Knox records a total of 86, comprising ten different types, although she does not include the bull vessel from Tell el-Hesi. These objects are never found in large quantities at single sites, with the exception of 14 found at Ugarit. It is worth mentioning that no local Levantine imitations of these figurines have been found (to date), perhaps an indication of the lack of interest by the locals in this type of object. Although an admittedly unusual case study, Tomb 216 at Tell el Duweir is an example of how BR bull figurines outside Cyprus may appear in contexts with many more Cypriot imports.[30] This could suggest that Cypriot figurines occur outside the island primarily as the personal belongings of (Cypriot?) individuals rather than as objects of trade.[31]

SOME PRELIMINARY THOUGHTS AND CONCLUSIONS

It is generally accepted that Aegean and Cypriot pottery appears frequently together in Syro-Palestinian contexts during LC II. It also seems plausible that "for most of the 2nd millennium BC, maritime circulation of pottery took place along distinct *regional* circuits of exchange".[32] This brings to mind the question of who was behind this maritime circulation, given that (to my knowledge) there are no sites in the Levant where only Cypriot or Mycenaean pottery from this period has been identified. Based on quantitative analysis, it has been

25 Alexandou 2016, table 1, 321–22. See also Knapp 2009.

26 Alexandrou 2016, 45; for Tell el-Hesi, see Papadopoulos 2016; 2017.

27 Knox 2012, 162.

28 Knox 2012, 171–72.

29 Knox 2012, 205, table 20. Ugarit–14, Lachish–10, Alalakh–10, Tell Abu Hawam–9, Gezer–9, Hebron–5, Tell el-Ajjul–5, Quibejbeh–3, Megiddo–3, Heliopolis–2 and Ialysos Mavra-Vouno–2, while Beth Shemesh, Deir Al-Balah, Jaffa, Shiqmona, Tel Batash, Tel Mor, Tell Abu Zureiq, Tell es-Safi, Tell Kazel, Tell Ta'annek, Tell Zakariya, Tyre, El Amarna have each yielded one example.

30 Tufnell 1958.

31 See also Nys 2001; Knox 2012, 205–6.

32 Papadimitriou 2012, 128.

suggested that Aegean pottery was arriving in Syria via Cyprus as Cypriots were more directly involved in this local exchange network; on the contrary, people from the Aegean, perhaps via Egypt, would have developed closer ties with regions outside Hittite influence and control, showing different mechanisms regarding the imports from the west.[33]

The amount of Cypriot pottery that reached inland Tell el-Hesi shows that these artefacts were not consumed and appreciated (or even re-distributed) only by groups residing in Levantine coastal sites. They were transported and distributed via land routes to the hinterland and perhaps some of them, namely the two clay female figurines and the bull figurine(s), were brought by Cypriots themselves or used by individuals who appreciated rare Cypriot items. This point, however, contradicts to some extent the view that Cypriots were more active in the region of Syria than in the southern parts of the Levant (see above). Could Cypriots or individuals somehow connected to Cyprus have been travelling to south Canaan? According to Bergoffen "the contextual distribution of vessels … indicates that they were of only moderate value and not prestige objects. In southern Canaan they were used by rich and poor alike".[34] For this reason, Bergoffen argues that LC vessels probably circulated freely and that northern Sinai was getting its Cypriot pottery via southern Canaan. This could have happened via an official system run by Egypt to supply military outposts and thus the role of the army in expediting caravans has been highlighted.[35] At this point, it is worth mentioning the suggestion put forward by Blakely that Tell el-Hesi was in fact the outpost of an Egyptian garrison, as the area seems to have been valued for its good quality water.[36] Perhaps this explains why there was no Mycenaean (and most likely Cypriot) fine pottery related to dining sets, like kraters or drinking cups/kylikes, but rather the predominant repertoire of Cypriot BR and WS pottery with only a handful of Mycenaean artefacts (although the presence of the Mycenaean animal figurine deserves thorough investigation). The presence of the rare female and bull figurines could also be a further hint that individuals from Cyprus or well acquainted with Cypriot material culture found their way to Tell el-Hesi. This could also explain the rather modest variety of types of Cypriot pottery (bowls, jugs and juglets), while it brings to attention the matter of client preferences and the appreciation of (modest) Cypriot pottery in regions like Tell el-Hesi that may have functioned as intermediate areas in the circulation of these vessels, despite not being a major market like the near-by ports-of-trade. It is hoped that the study of the pottery from the Joint Archaeological Expedition will further clarify these issues.

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33 Papadimitriou 2017, 180–81; See also Bell 2006, especially chapter 3.
34 Bergoffen 1991, 69.
35 Bergoffen 1991, 72–3.
36 Blakely 2018.

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Towards a reassessment of Levantine and Egyptian jugs and juglets related to Cypriot Base Ring Ware

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ABSTRACT

Cyprus' insularity does not equate to isolation during the Cypriot Bronze Age. The discovery of a broad range of Cypriot wares in the Levant and in Egypt attests to their extensive trading connections with the island. As exchanges increase, local populations develop a growing interest in these exogenous vessels, especially Base Ring (BR) jugs and juglets. Soon, imitations develop as do new ceramics inspired by their distinctive shapes and decorative motifs. The dexterity and inventiveness of Levantine and Egyptian craftsmen lead to new productions of Cypriot-inspired or Cypriot-influenced vessels. Although most are made of clay, Cypriot BR shapes are occasionally transposed in other raw materials. Whereas Levantine productions offer a wide range of variations, Egyptian imitations reflect the area's highly specialised trade with Cyprus. This paper investigates the various ways in which Cypriot BR shapes and motifs were adopted and adapted in both Egypt and the Levant and how they mirror the societies that produced them.

INTRODUCTION[1]

During the 2nd millennium BC, the presence of Cypriot ceramics in the various areas with which the island interacted show extended connections between Cyprus and the continent. However, while the circulation of these ceramics provides us with information about trading patterns, imitations of Cypriot shapes provide a much more complex and multi-faceted picture. While local imitations related to BR Ware in the Levant and in Egypt have often attracted the attention of scholars,[2] they have never been studied through the prism of regional variations, which constitute the main topic of this paper. BR Ware was created in Cyprus, in the Ovgos Valley, during the transition between Middle Cypriot (MC) III and Late Cypriot (LC) IA. Relying on shape and decoration, Åström identified an initial Proto Base Ring (PBR) stage, followed by the BR I and BR II phases.[3] Further petrographic analyses by Vaughan distinguished at least four fabrics, suggesting that multiple production centres

1 This paper is a part of the Marie Skłodowska-Curie project ITEM "Imitations and Interactions in the Eastern Mediterranean" held from December 2020 to November 2022 at the Université Paris Nanterre (UMR 7041 ArScAn), in France. ITEM investigates imitations and other types of artefacts related to Cypriot wares during the 2nd millennium BC.

2 See for example Bergoffen 2006; Karageorghis and Merrillees 2007; Höflmayer 2011.

3 Åström 1972a, pls. XVLVII–LI (BR I), pls. LII–LIII (BR II) and Åström 1972b, 700. BR I developed in Cyprus from LC IB to LC IIA:2, while BR II developed from LC IIA:1 to the end of LC IIC:2. The repertoire of shapes includes bowls, jugs, juglets, bottles, flasks, tankards and zoomorphic rhyta, with relief or incised decoration in BR I and white painted motifs in BR II.

existed at various stages in the LC period.[4] As a result, jugs and juglets soon inspired Levantine and Egyptian potters and craftsmen, who quickly imitated them or integrated some of their features into their own works.

IMITATION, INSPIRATION, INFLUENCE

A common issue when dealing with imitations is the use of this term to characterise all types of vessels with any degree of relation to Cypriot wares.[5] It is therefore critical to define some of the terms to be used. In this work, an artefact is considered to be an imitation when both its shape and decoration are copied from a Cypriot model. On the other hand, an object is considered to be "Cypriot inspired" or "Cypriot influenced" when only selected elements of shape or decoration are borrowed from the prototype. The use of a Cypriot vessel as "inspiration" implies that potters likely acknowledged the original model. However, at the end of the Late Bronze Age (LBA), shapes and motifs were circulating so broadly that potters and craftsmen might not always have been aware of the origin of the morphological or stylistic features they were using, leading to the production of consciously or unconsciously "influenced" artefacts. This distinction between "inspiration" and "influence", which cannot be archaeologically verified, is worth mentioning to highlight the difficulties inherent in the interpretation of such artefacts. Another matter of interest is the use of shapes borrowed from the Cypriot ceramic repertoire to create vessels in other raw materials, such as alabaster or even glass. This phenomenon is considered to be "transposition", meaning the process of transferring and adapting features from one domain to another.[6] Transpositions mainly occurred during the 18th Dynasty in Egypt and LB IB–IIA in the Levant and are concomitant with the *floruit* of the circulation of BR imports in the Eastern Mediterranean.

CLAY VESSELS RELATED TO CYPRIOT BASE RING WARE IN THE LEVANT AND IN EGYPT

Levantine clay vessels related to Cypriot BR Ware seem to have been created soon after the arrival of the first imports. At Tell Atchana, a local juglet in a BR shape has been identified in Level V, attributed to LB IA, which also yielded the earliest well stratified BR I imports discovered at the site.[7] According to Bergoffen, this juglet is hand-made but the handle does not pierce the wall of the vessel, in contrast to the well-documented Cypriot technique.[8] The surface is covered with a red slip, carefully burnished, a treatment also observed on examples from the Akkar Plain and the northern Lebanon area. In Ugarit, BR related juglets display their own original features. According to Schaeffer's description, the buff surface is left unslipped and undecorated.[9] The use of the main elements of shape was likely enough for these vessels to be associated with the originals by Ugarit's inhabitants, who were familiar with Cypriot imports.[10] A juglet displaying similar features was discovered a few

4 Vaughan (1991) distinguishes Metallic Slip Ware and Red Burnished Ware, associated with PBR and BR I, and Matt Slip Ware and Uncoated Ware, associated with BR II. Red Burnished Ware occurs at sites that yielded the earliest BR attestations, while Uncoated Ware is encountered at the most prominent LC II sites. The distribution of Metallic Slip Ware and Matt Slip Ware is less exclusive.

5 An in-depth discussion on imitation and cultural encounters theories is unfortunately beyond the scope of this paper. For references, see *inter alia* Stockhammer 2012a; Stockhammer 2012b; Forberg and Stockhammer 2017.

6 For a discussion about the meaning of "transposition" and further insights on this phenomenon in Egypt, see Marchand 2011.

7 Bergoffen 2005, 40.

8 Bergoffen 2005, 44, 92, B90. The clay is definitely not Cypriot: "Beige clay, light red to the surface, many minute black and white grits, extremely worn, corroded surface but had a red, vertically burnished slip".

9 For an example of a local imitation from Ugarit, see Schaeffer 1949, fig. 82 no. 37. "Cruche en t. c. chamois. Ht. 16 cm 5. M. B. 1930. Tr. Aux lampes. Dépôt dans latrine près d'un escalier".

10 Ugarit yielded one of the largest assemblages of Cypriot imports in the northern Levant. However, Cypriot ceramics only

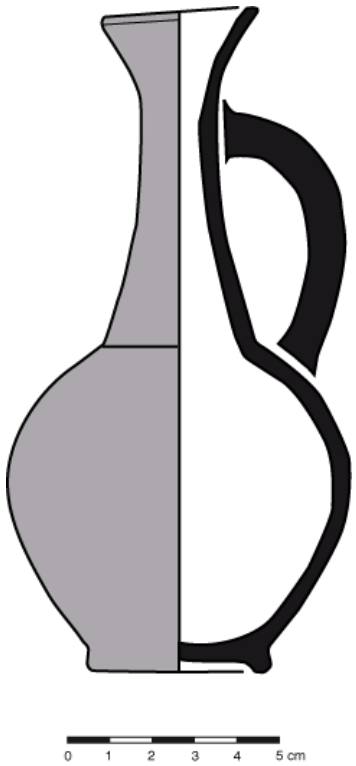

Fig. 1. Levantine red burnished juglet in BR shape, Tell Kazel, LB II. Ht. 18 cm (redrawn by the author, after Badre et al. 2018, pl. VI).

kilometres further north, in Tomb 4 of Tell Shamiyeh. The assemblage also contained genuine Cypriot BR II and White Shaved ceramics, suggesting that both local and imported vessels had similar functions.[11] These imitations were apparently not meant to replace the originals or to compensate for a lack of imports. The clay of the juglet discovered at Tell Shamiyeh is clearly non-Cypriot; however, without petrographic analysis, it cannot be determined whether it was locally made at the site or could have come from the main workshop located at Ugarit.[12]

Levantine juglets in a BR shape and covered with a red burnished slip seem to have been a trend during the LBA (Fig. 1). At least ten examples were discovered at Tell Kazel.[13] They are all wheelmade, unlike the example from Tell Atchana mentioned above. They were concentrated in the "treasury" of the Temple of Area IV and in the large Building II of Area II, where they were present alongside genuine Cypriot imports.[14] One has a horizontal belt on the neck at the junction with the handle, a feature typical of BR I juglets.[15] Following Bergoffen, it seems likely that the choice of this specific surface treatment is the result of a fondness for this kind of finish, which is well-documented in the Levant from Middle Bronze (MB) IIB.[16] In such a case, the contents of these juglets might even have been similar to those of traditional MB juglets with a red burnished slip.[17] Thus, the use

constitute a minor part of the pottery discovered at the site. Quantitative data were provided by Monchambert (2004, 11) who stated that, for example, imports represented only 0.6% of the pottery of the 1975–1976 excavation seasons.

11 Dib 2010–2011, juglet SH. A. 27. A. 55.

12 Schaeffer 1936, 148. Excavations at Ugarit and its harbour, Minet el-Beida, yielded a misfired local bowl copying Cypriot White Slip Ware and interpreted by Schaeffer as a sign of the possible presence of a "Cypriot workshop". The clumsiness of the execution was attributed by the excavator to an inexperienced work force.

13 However, the overall number of imitations is low compared to the 896 BR imports discovered at the site (Badre et al. 2018, 169).

14 Badre 2006, 71, fig. 5 no. 12; Badre et al. 2018, 180, pl. couleur 1b, 216, BR IM:1–10.

15 Badre et al. 2018, 216, BR IM:2.

16 Bergoffen 2005, 44.

17 Levantine Red Burnished juglets might have contained some kind of aromatic oil or other precious commodity. See Maguire 2009, 55, fig. 15.

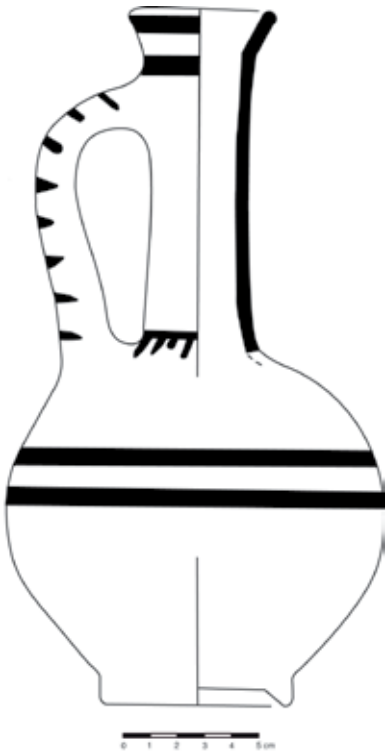

Fig. 2. Jug with a "collar decoration", Sidon-Dakerman, LB II. Ht. 27.3 cm (redrawn by the author, after Saidah 2004, fig. 37, no. 86).

of a BR shape may have been a way to follow a fashion, while the reddish slip may have been a tool to advertise the contents in a way with which the local population was familiar. Similar juglets have been identified at Necropolis K at Byblos[18] in the northern Levant, and at Jatt and Megiddo in the southern Levant.[19] The example from Jatt was discovered in the earliest burial phase of Grave 7, dated from the 15th century BC, where it was present alongside a genuine BR I import. Petrographic analyses confirmed that these juglets originate from the Syro-Lebanese coast, from an area between the Akkar Plain in the south and Bassit in the north.[20] As the capital city of the Kingdom of Amurru, Tell Kazel was the main centre of the Akkar Plain during the LBA. Considering the concentration of red burnished juglets in a BR shape discovered at the site, it is likely that these juglets were made in Tell Kazel or its vicinity.

Apart from these vessels, another specific production developed in the northern Levant, the extent of which is still being investigated by the author. These wheelmade jugs and juglets have a general shape strongly reminiscent of BR, but they are painted with a very distinctive "collar decoration", as shown by the example from Grave 18 at Sidon-Dakerman (Fig. 2).[21] This motif is characteristic of Levantine Painted Ware that developed during the MB IIA and was produced at many places in the northern Levant, especially in the Akkar Plain.[22] Other jugs and juglets with this specific combination were identified at Barkai, Jatt and 'Ara.[23] Petrographic analyses confirmed that they originate from the northern Lebanese coast or the Syrian coast.[24] The popularity of Cypriot BR imports then triggered a new production, specifically created to cater to the tastes of the local population.

18 Salles 1980, 48, pl. XV no. 6.
19 Yannai et al. 2003, fig. 2 nos. 9–10 (Jatt) and 11 (Megiddo).
20 Yannai et al. 2003, 112.
21 Saidah 2004, fig. 37 no. 86.
22 Bagh 2013, 22.
23 Yannai et al. 2003, fig. 2 nos. 3–7, 12–3.
24 Yannai et al. 2003, 106–7.

Fig. 3. Jug in BR style, Gezer, LB II. Ht. 20.4 cm (AO 6996, Musée du Louvre © 2007 RMN-Grand Palais (Musée du Louvre) / René-Gabriel Ojéda).

A similar phenomenon, extensively studied by Bergoffen, occurred in the southern Levant.[25] Located in the Shephelah Plain, the Tel Lachish site yielded at least 68 jugs with a BR shape.[26] In Cyprus, BR II jugs are coated with a black slip and painted with contrasting white linear motifs.[27] In contrast to the Cypriot versions, the surface of the Lachish jugs is either left unslipped or coated with a white slip, and they are painted with a contrasting linear decoration in black, brown or red. Some of the motifs are strongly reminiscent of Bichrome Wheelmade (BichrWM) Ware (Fig. 3), the origin of which has been highly debated. It is now accepted by most scholars that BichrWM Ware originated in eastern Cyprus, where it developed during LC IA, before being produced in the Levant, especially in the area of Tell el-Ajjul.[28] Levantine potters were thus used to reproducing Cypriot motifs and shapes and combining them with their own traditions and techniques, and likely to take advantage of a trend.[29] Apart from an example discovered in Fosse Temple III at Lachish,[30] these jugs have primarily been discovered in funerary contexts. Most were found in the tombs of non-elites, and they likely performed a similar function to imported BR Ware. Both co-existed during the 14th century BC and the local jugs even continued to be produced in the 13th century BC, when BR vessels ceased to be imported in such quantities.[31]

25 Bergoffen 2006.

26 According to Tufnell, in a corpus of 1983 vases (Tufnell 1958, 176), 210 BR imports (Tufnell 1958, 204) and 71 imitations (among them 68 jugs, Tufnell 1958, 209) were discovered.

27 Åström 1972a, pl. LIII, nos. 2–3.

28 Artzy (2001, 168, 170) offers an overview of research on the origin of BichrWM Ware and suggests that various centres of production might have existed.

29 Bergoffen 2006, 333. These jugs have been identified at at least 17 sites in the southern Levant.

30 Tufnell 1940, pl. LIB, 284.

31 Tufnell 1958, 209–10.

Levantine imitations of Cypriot BR Ware might have occasionally reached Egypt according to D. Aston, who identified such a juglet in a funerary context at Hebwa, in the northern Sinai.[32] In contrast to what was observed in the Levant, most of the Egyptian imitations are faithful copies. Both the shape and decoration of Cypriot juglets are reproduced, even though discrepancies are occasionally observed, undoubtedly due to the potters' inexperience in elaborating such shapes.[33] They are made of Nile silt or Marl clay[34] and have been identified at sites such as Abydos, Aman Daud, Gurob, Harageh, Maidum, Mazghuna, Quban and Sedment, where they were produced during the 18th Dynasty.[35] A peculiar juglet from Gurob is covered with a highly lustrous red slip, a popular New Kingdom fashion. This juglet is also reminiscent of Red Lustrous Wheelmade (RLWM) Ware,[36] often discovered alongside imported BR I juglets in funerary contexts during the early 18th Dynasty.[37]

BASE RING STYLE TRANSPOSITIONS

Although clay imitations of Cypriot BR juglets have been identified in Egypt, transpositions in stone seem to have been favoured. They are made of so-called Egyptian alabaster, serpentine or other types of stone available as waste from sculptors' workshops.[38] They have been recorded from the very beginning of the 18th Dynasty but are better documented during the reign of Thutmose III.[39] Unlike the clay imitations, which copied BR juglets, most of the stone vessels are in the shape of BR jugs. One such jug in Egyptian alabaster, discovered in the Grave of Three Foreign Wives of Thutmose III, still contained hardened ointment (Fig. 4).[40] Another example, from the Tomb of Yuya and Thuya, was found sealed with a cloth to ensure the preservation of the contents.[41] The storage of cosmetic oils and ointments was the main function of Egyptian stone vessels, as their thick stone walls helped to keep the fatty substances cool. Craftsmen especially chose BR jug shapes to fulfil the traditional purpose of Egyptian stone vessels and occasionally adapted them to meet Egyptian trends.[42] These stone vessels might have been used as customary gifts from the pharaoh to members of his family, worthy officials and other favoured individuals. They were also part of the burial equipment alongside other types of stone vessels, such as

32 Aston 2012, 15–6. Rescue excavations undertaken by the Austrian Archaeological Institute in Cairo at the site of Hebwa IV, uncovered a number of graves dated from the reign of Thutmose III to Amenhotep III. N/6 Tomb 1 yielded a Levantine imitation of a BR I juglet (Aston 2012, 18 no. 32) associated with a genuine Cypriot BR I import (Aston 2012, 16, 38 no. 7) and local Egyptian pottery.

33 For example, in the proportions of a juglet discovered at Abydos. See Merrillees 1968, 99, Abydos no. 10.

34 Aston (2012, 15 no. 3) mentions the discovery at Hebwa of an imitation made in Marl clay A4.

35 Merrillees 1968, Abydos nos. 10, 27, 66; Aman Daud no. 1; Gurob nos. 8–9, 21, 23, 32; Harageh no. 5; Maidum no. 10; Mazghuna nos. 2–3; Quban no. 11; Sedment no. 10.

36 RLWM is a distinctive LBA ware produced from high quality red clay and characterised by a carefully lustred red slip. Its distribution includes Anatolia, Cilicia, Cyprus, the Levant and Egypt. Following Eriksson (1993), a Cypriot origin of the ware was generally accepted. However, recent studies suggest that the production centre might have been located in Rough Cilicia (Kibaroğlu et al. 2019).

37 For example: at Gurob, Point Q, Tomb 27, Tomb 003, Point W Tomb 472 (Eriksson 1993, 69, 93, 94); Saqqara, Tomb NE. 1 (Eriksson 1993, 73); Aniba, Cemetery S Tomb S 48 (Eriksson 1993, 76); Abydos, Cemetery D, Tomb D9, Tomb D114 (Eriksson 1993, 80–81) and Cemetery E, Tomb E10 (Eriksson 1993, 83); in the Tomb of Maket in Kahun (Eriksson 1993, 86), in Mastaba 17, Tomb 261 A (Eriksson 1993, 88) at Maidum and at Tell el-Yahudiyeh, in Tomb 66 (Eriksson 1993, 94).

38 Some scholars prefer to call it travertine, although the typical travertine does not share the distinctive translucency of Egyptian alabaster. For the history of stone-vessel making in Egypt, see Aston 1994.

39 One of the earliest examples attested in Egypt was discovered in Dra'Abu el-Naga (Tomb AN B) in western Thebes. The assemblage is dated to the reign of Amenhotep I by B. Aston (1994, 151, type 174). The creation of stone vessels in BR style from the very beginning of the early 18th Dynasty is also accepted by Sparks (Sparks 2007, 36).

40 Lilyquist 1995, cat. nos. 83–4, 145. Jug MMA 26.8.18, Metropolitan Museum of Art, New York.

41 Quibell and Smith 1908, pl. XXVI.

42 For example, the compressed body of some of the vessels is reminiscent of Egyptian footed class jars (see Lilyquist 1995, fig. 141).

Fig. 4. Jug in BR style, Egyptian alabaster, Grave of the Three Foreign Wives of Thutmose III, Thebes, 18th Dynasty. Ht. 20.7 cm (MMA 26.8.18, Fletcher Fund, 1919, courtesy of the Metropolitan Museum of Modern Art, New York).

canopic jars. Their production declined during the Amarna period, as suggested by the discovery of two likely reused BR style stone vessels, inscribed with the names of Amenhotep III and his wife Tiyi, in the famous tomb of Tutankhamun.[43]

In Cyprus, the relationship between BR pottery shapes and metallic vases has long been discussed.[44] Remarkably, even more than their clay counterparts, Egyptian BR style stone jugs show features that one would expect on metal vessels, such as narrow belts resembling metal wires on the neck or a scroll design at the lower terminus of the handle. These details might suggest that stone vessels were modelled after Cypriot metallic vases, rather than ceramic imports.[45] However, apart from a bowl discovered at Assasif,[46] metallic vessels with features resembling those of BR pottery are absent from Egypt. The scarcity of such metal vessels in the archaeological record might be explained by the common practice of recycling and recasting metallic artefacts.

Furthermore, several of the BR style stone vessels borrow elements from traditional Egyptian stone forms, creating a hybrid product with a distinct identity. BR style stone juglets have also been encountered, though much less commonly than the jugs. Slight modifications are sometimes applied to the shape due to the technical limitations inherent to the material.[47] Typical Egyptian features, like a petal-shaped mouth, are also occasionally added.[48] The predominance of transpositions in the shape of jugs, compared to juglets, is easily explained by

43 Höflmayer 2011, 349–50.

44 Merrillees 1982, 233 ff.

45 Bevan 2007, 136; Höflemayer 2011, 353 n. 5.

46 This bronze bowl of BR I style was discovered by the Egyptian Expedition of the Metropolitan Museum, New York, during the 1915–1916 season, in the Assasif at Thebes, in Egypt (MMA 16.10.438). Whether it was made in Cyprus and then imported to Egypt, or made in Egypt from a Cypriot clay model, has long been discussed (see Merrillees 1982, 243; Karageorghis and Merrillees 2007, 147, fig. 9).

47 Karageorghis and Merrillees 2007. For example, an upright neck instead of a sloping one.

48 Merrillees 1968, pl. XXXV, nos. 1–2.

technical criteria. The shape of BR jugs could easily be adapted from the local repertoire and was more suitable to the traditional purpose of Egyptian stone vessels as ointment jars. It is noteworthy that, in Egypt, documented BR style stone vessels almost outnumber clay imitations, perhaps because the latter were not always recognised. Merrillees, and then Hulin, suggested that Cypriot ceramic imports were used by a category of middle-class Egyptians to conform to the display of social status consistent with their rank.[49] Following this idea, stone transpositions might have been perceived by high-ranking Egyptians as more appealing and suitable than ceramic BR shapes.

Stone vessels in a BR style are also encountered in the Levant,[50] where they are mostly, but not exclusively, associated with funerary contexts. In Ugarit, two such vessels were present in the "Fosse 1237", which yielded many fragments of stone vessels, the result of the plundering of the "Temple aux rhytons", to which they likely belong.[51] Other examples, used as prestige items, were discovered at Ras Ibn Hani in room IV of the North Palace,[52] in Qatna at the entrance of the Royal Tomb 1[53] and at Kamid el-Loz in the "Schatzhaus", a mortuary complex used by relatives or family members of the Egyptian governor ruling Kumidi.[54] Local production cannot be excluded, but some of them appear to be Egyptian, based on comparisons with material recovered from Egypt and on the techniques by which they were produced. They might have reached the northern Levant as diplomatic gifts or prestige items. In the southern Levant, at least six specimens of stone vessels were found in the mortuary complex at Amman, which was discovered during bulldozing operations in 1955.[55] Further examples come from funerary contexts in Beth Shan[56] and Tell el-Ajjul.[57] In the Levant, BR style stone vessels have been identified as early as LB IA,[58] but most are encountered in contexts dating from LB IB–IIA, a period contemporaneous with their main *floruit* in Egypt. Ultimately, they developed into simplified shapes, in which all allusions to these prototypes were lost.[59]

WHY IMITATE? WHAT TO IMITATE?

The fondness for Cypriot BR shapes prompted not only the production of faithful imitations but also the creation of "entangled objects",[60] inspired or influenced by Cypriot models, which combine both foreign and local features. They are often isolated artefacts, the result of individual initiatives by local potters to take advantage of a trend. However, at times they triggered a completely new production, the attributes of which varied according to the local tradition of the region from which they originated. In the Levant, copying the main features

49 Merrillees 1968, 195; Hulin 2009, 44.

50 Sparks (2007) provides an exhaustive study of stone vessels in the Levant, while Ahrens (2020) offers an overview of *aegyptiaca* discovered in the northern Levant.

51 Caubet 1991, 214, pl. V, RS 4.138 (Minet el-Beida, tranchée 2V pt. 43, Louvre AO 15721); RS 78.109 + 81.3284 (Ras Shamra, Centre de la Ville, fosse 1237); RS 84.005 (Ras Shamra, Centre de la Ville, fosse 1237), RS 37.[…] (Ras Shamra).

52 Sparks 2007, 305 no. 320; Bounni et al. 1998, 33–4, fig. 128, no. 5. The example from Ras Ibn Hani likely comes from the plundering of the grave located under Room V.

53 Ahrens 2011, 260–1.

54 The "Schatzhaus" or "Treasury" yielded four stone vessels in BR shape, two in calcite and two in serpentine (Hatchmann 1989, pl. 7, nos. 1–2; pl. 8, nos. 1–2).

55 The so-called "airport-temple". See Sparks 2007, 304 no. 306, 314–16, 323.

56 Level IX, Locus 1385, Sparks 2007, 305 no. 317.

57 Cemetery 1000 and Tomb 1037, Sparks 2007, 304–5 nos. 312–13.

58 Tell el-Ajjul yielded one of the earliest examples of a stone vessel. Discovered in Grave 1157, it was associated with a Black Lustrous Wheelmade (BLWM) Ware vessel and a toggle pin and was likely deposited during LB IA. Examples from the "Schatzhaus" of Kamid el-Loz, Beth Shan Level IX and the Fosse Temple II at Lachish can be dated from LB IB–IIA (Sparks 2007, 304–5). These forms appear to have remained in circulation later in the Levant than in Egypt, continuing to appear in deposits of LB IIB date.

59 One such Levantine jug was discovered at Lachish. See Sparks 2007, 306 no. 329.

60 Stockhammer 2012a, 89–90.

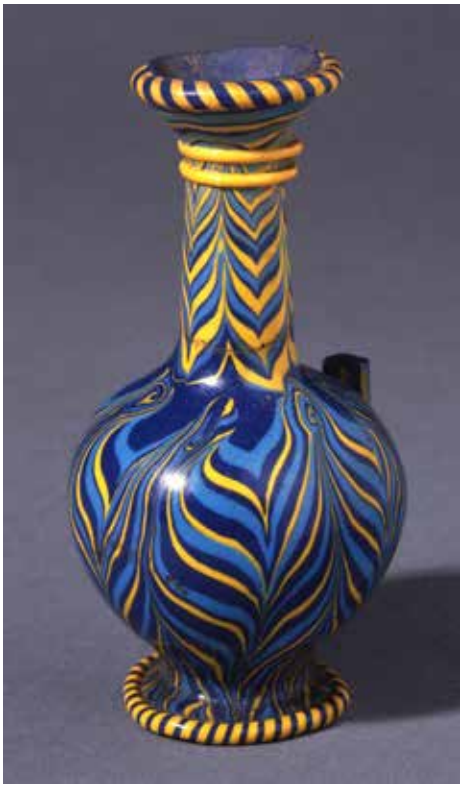

Fig. 5. Juglet in BR style, glass, Egypt, 18th Dynasty. Ht. 9.3 cm (EA 22819, British Museum © The Trustees of the British Museum).

of "otherness" seems to have been enough for an association between the originals and the "entangled object" in the acquirer's mind. In Egypt, greater importance seems to have been placed on the accuracy of the copy, while Levantine productions offer more variations. Local imitations and BR related vessels in clay are often discovered alongside imports and seem to have had a similar function. We can then raise the question of the extent to which the acquirers were aware of the various origins –Cypriot, Levantine or Egyptian– of the juglets. The presence of both a Levantine BR imitation and an imported Cypriot BR I juglet in n/6 Tomb 1, in Hebwa,[61] in Egypt, suggests that people were not making a significant distinction between them, or at least not in the way that we as archaeologists are doing so.

The contents of local vessels related to Cypriot BR jugs and juglets were likely made on the spot. Their nature, and whether or not they were similar to those of imported BR vessels, is still hypothetical. Concerning the specific case of the northern Levantine juglets covered with a red burnished slip, the contents might have been similar to those of traditional MB Red Burnished vessels. Cypriot BR juglets, which are particularly connected to funerary assemblages, especially in Egypt, are thought to have contained aromatic oils or some kind of opium-based substance.[62] The qualities and preciousness associated with the contents might have progressively been associated with the containers themselves, giving a particular aspect to this distinctive shape. Such a phenomenon would explain the choice of the transposition of BR shapes in precious raw materials. Possibly, in some cases, imitations as well as other BR related artefacts might have even been deposited empty in graves, their shape being significant enough for them to be associated with the qualities or properties attributed to genuine Cypriot BR imports.

61 Aston 2012, 16, 18, 38, 41, 45 (no. 7, no. 32).

62 The nature of the contents of BR juglets has long been discussed. Merrillees (1968, 154, 157) has argued that it was a kind of opium-based substance diluted with water, wine or honey. This theory seems to be supported by results of recent residue analysis by Koschel 1996 and Smith et al. 2018.

Ultimately, Cypriot BR juglets were transposed in faience and even glass, another trend that developed during the New Kingdom.[63] As a new material, glass seems to have enjoyed a relatively high status.[64] Almost from the very beginning glass vessels were made in a wide range of colours, imitating semi-precious stones such as lapis lazuli and turquoise. A vivid example of a glass juglet in BR style is kept at the British Museum (Fig. 5). While its exact discovery location is unknown, the applied thread decorations in yellow and light blue suggest an origin at Medinet Ghurab.[65] The yellow colour, reminiscent of gold, was obtained by using lead antimonate colourant, which was likely made from lead derived from galena from the area of Gebel Zeit.[66] The choice of this specific foreign shape to create a luxury cosmetic juglet, using the newly mastered glass technology, shows how valued the original Cypriot model must have been.

Thus, in Egypt, Cypriot imports represented a highly specialised trade, but they had a long-lasting influence on New Kingdom craftsmanship. Whether in Egypt or in the Levant, imitations as well as locally made BR related vessels or transpositions have much to reveal not only about Cyprus' connectedness, but also about the specific tastes, needs and beliefs of the societies that produced these vessels.

63 The corpus of glass and faience vessels in a BR shape is currently being reinvestigated by the author. For an overview of occurrences, see Karageorghis and Merrillees 2007, figs. 1, 3, 4, 8; Nolte 1968, 162, k "bilbils".

64 The glass technology, which originates from Mesopotamia, was quickly mastered by Egyptian craftsmen. While they might have been manufactured from the very beginning of the New Kingdom, glass vessels are better attested from the reign of Thutmose III. Evidence of glassmaking or glass working activities has been identified at Malqata, Amarna, El-Lisht and Qantir. See Shortland 2009, 2–3; 2012, 49–51; Nicholson 1993; 2011, 1–2; Lilyquist and Brill 1993.

65 EA 2219, British Museum. See Karageorghis and Merrillees 2007, fig. 3; Taylor and Strudwick 2005, 168; Nolte 1968, pl. XIII, 10. Shortland (2012, 97) highlights the fact that several glass beads and vessels have been found at Medinet Ghurab, but there is no direct evidence of an actual workshop.

66 Shortland 2012, 80, 113–16.

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Pottery fashion in the Bronze Age

An overview of the stylistic similarities between Cypriot and other local wares in the Mediterranean

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ABSTRACT

During the Bronze Age, the island of Cyprus was involved in a broad network of maritime contacts that embraced a large part of the Mediterranean. These are securely traced in the archaeological record and can be approached also via a wide range of ceramic products of Cypriot origin or inspiration occurring at numerous sites around the Mediterranean. The paper provides a comprehensive overview of the main Cypriot pottery wares, as well as their locally produced imitations, found in Mediterranean contexts of the Middle (MBA) and Late Bronze Age (LBA) and examines them as evidence for understanding aspects of trade networks and cultural interaction. Discussion is arranged geographically, with the main entities examined being the Syro-Palestinian coast, Egypt, Anatolia, the Aegean and the central Mediterranean. Imitations of Cypriot wares form an important aspect of this study, since they demonstrate a special familiarity with the wares they imitate. Discussion is complemented by a comparative chronological table (Table 1) of the Cypriot MBA and LBA and corresponding periods in the eastern and central Mediterranean.

The manufacture of imitations is a widespread phenomenon that is attested in various periods. Imports, imitations and objects locally made by foreigners help us understand connections between groups, trade networks, the movement of peoples and cultural diffusion.[1]

The presence of Cypriot pottery in the Near East and Egypt has been the focus of many studies both in terms of chronology and cultural interaction.[2] A considerable number of Cypriot wares have been found in various areas of the Mediterranean and especially in the Levant from as early as the late MBA.[3] White Slip (WS) and Base Ring (BR) constitute almost half of the imported vessels, with WS especially favoured by the Mediterranean market.[4]

1 For an analysis of the terms, cf. Bauer 2008, 89–92.

2 Hein 2018, 125–26.

3 Stewart 1955; Gittlen 1977; Hein 2018.

4 Bergoffen 1991; Maguire 1995, 55; Karageorghis 2001; Eriksson 2001; 2007a.

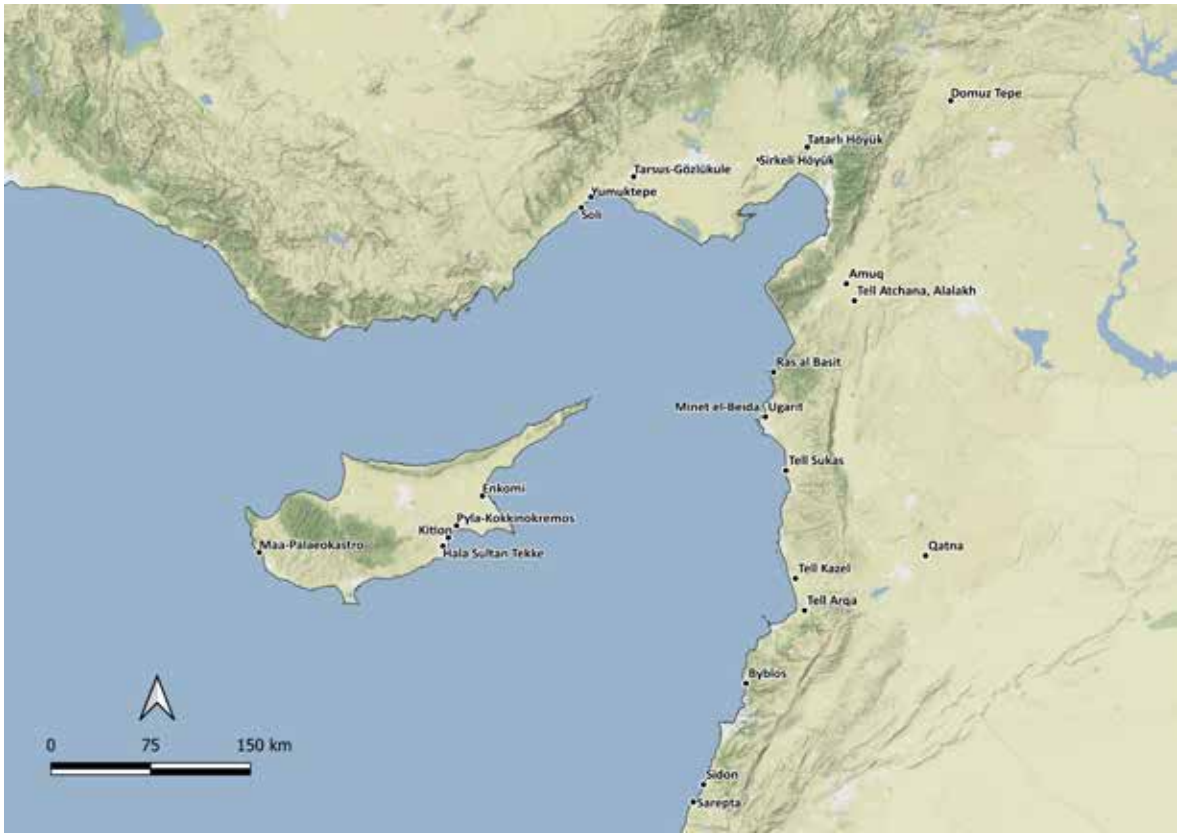

Fig. 1. Map of Cyprus, Cilicia and the Northern Levant.

THE SYRO-PALESTINIAN COAST

The diffusion of Cypriot pottery on the Syro-Palestinian coast is greater in the LBA than it was in the MBA (Figs. 1–2). It includes a great variety of wares and shapes and is found at a plethora of sites.[5] The most commonly encountered wares are WS II "milk" bowls[6] and BR I juglets; sometimes even rarer types are found.[7] The discovery of BR I juglets and to a lesser extent of WS II bowls in ritual contexts is indicative of the value of Cypriot pottery; such pottery has been found, for instance, in a temple at Tell Abu al-Kharaz.[8] BR juglets, bowls

5 Oren 1969; Bergoffen 1989; Yon 2001; Maguire 2009; Charaf 2013. For example: Alalakh (Bergoffen 2003; 2005; Kozal 2010), Ashkelon (Pythian-Adams 1923; Bergoffen 1988), Byblos (Salles 1980, 24–5, pls. 9:6–9, VIII:3–9; Merrillees 1983), Dor (Stidsing and Salmon 2018, 21–5), Hazor (Albright 1932), Lachish (Tufnell 1940; Prag 1985), Megiddo (Loud 1948; Gittlen 1975, 112–13; Oren 2001, 129–31), Qatna (Luciani 2008), Ras al-Bassit (Courbin 1986, 184; Darcque 1996), Ras Shamra-Ugarit (Courtois 1969; Maguire 1990; 1995, 54; Yon 1997; 2001, 118–20; Montchambert 2004), Tell Abu al-Kharaz (Fischer 2000b; 2001);Tell Abu Hawam (Balensi 1980, 381, pl. 27; Oren 2001, 129; Artzy 2016), Tell Beit Mirsim (Maguire 1990; 1995, 54), Tel Akko (Maguire 1990; 1995, 54; Artzy 2001, 108–12; Montchambert 2004), Tell Arqa (Thalmann 1978, 95, 102, fig. 49:4; Charaf 2013), Tell el-Ajjul (Bergoffen 1989; 2001a; 2001b; Tufnell and Kempinski 1993; Oren 2001, 130–40; Fischer 1999, figs. 7–10; 2000a), Tel Burna (Shai et al. 2019), Tell es-Sa'idiyeh (Pritchard 1980, Tombs 117, 119), Tel Kabri (Maguire 1987; Bergoffen 2020), Tell Kazel (Dunand and Saliby 1957, 12, pl. VI; Yon 2001, 120), Tell Keisan (Burdajewicz 2020), Tel Mor (Barako 2007), Tel Nami (Artzy and Marcus 1992), Tell Simiriyan (Yon 2001, 120), Tell Sukas (Lund 1986, 20, 24, fig. 10; Buhl 1983, 58–60, figs. 38–9), Sarepta (Koehl 1985).

6 WS bowls are more widely diffused in the southern than in the northern Levant.

7 Josephson-Hesse 2008, 38–41. A small number of WS II kraters: Tell Azekah (Yasur-Landau et al. 2014), Tell Abu Hawam (Balensi 1980, pl. 28:20), Gezer (Gittlen 1977, 477).

8 Fischer 2008, 207. For WS pottery from Tell Abu al-Kharaz, cf. Fischer 1992; 2000b; 2001.

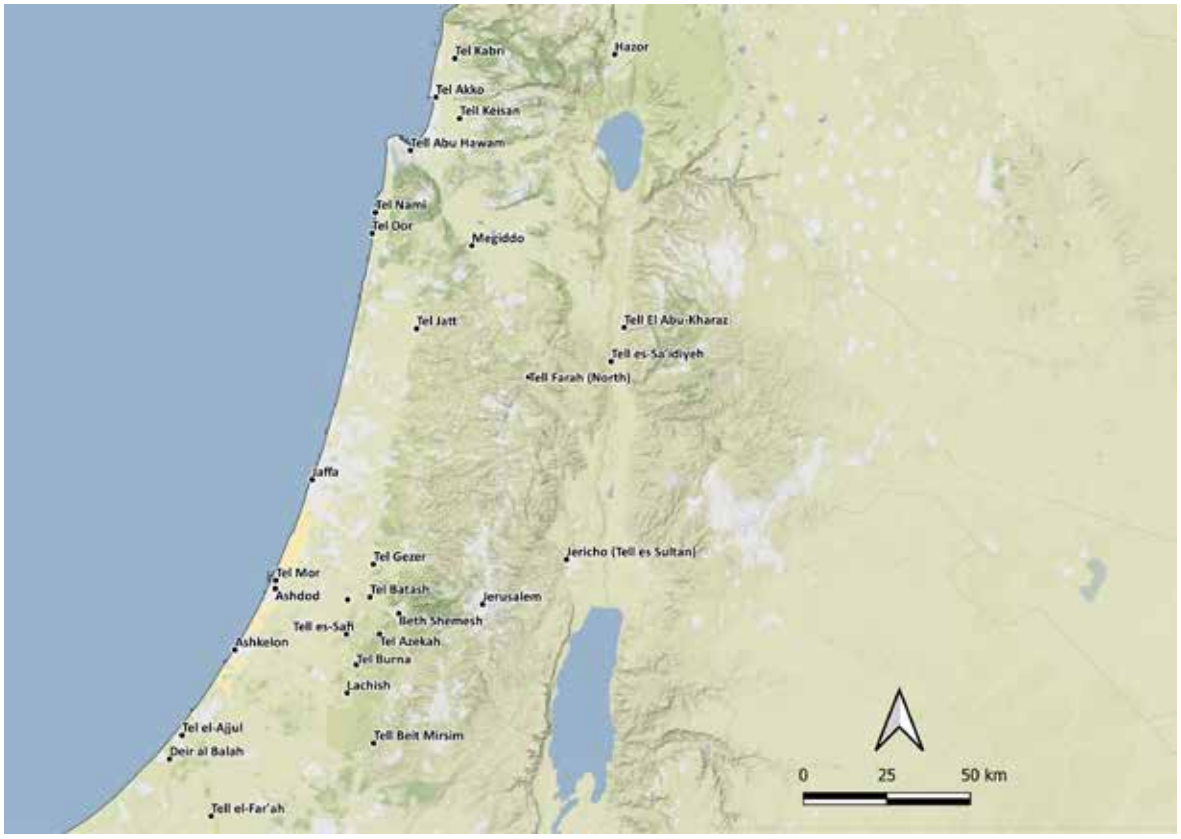

Fig. 2. Map of the Southern Levant.

and a great quantity of White Shaved (WSh) juglets have been discovered in the Fosse Temples at Lachish.[9] In addition to graves and settlements, Middle Cypriot (MC) – Late Cypriot (LC) pottery has been recovered in ritual contexts at Sidon.[10] A juglet with pointed base, possibly an imitation of a WSh juglet, was found in Tyre[11] and another at Arqa.[12]

Excavations at Alalakh yielded an immense Cypriot pottery assemblage along with local pottery;[13] the earliest such imports appear in Level VI (mid-15th century–14th century BC).[14] During LB IIA (ca. 1400–1300 BC), in addition to Cypriot WSh ware and North-Central Anatolian (NCA) pointed juglets, there is a hybrid type which assimilates characteristics of both.[15] In particular, locally made NCA pointed juglets adopt the shaving technique.[16] Given their find contexts, scholars associate these with ritual practices.[17] Due to the similarity of this Cypriot type with equivalent types in the Levant, various proposals have been put forth to explain its presence; one such proposal is that the ware was manufactured in Cyprus to meet a Levantine demand for a vase that was similar to the MBA Canaanite dipper juglets;[18] another is that its prototype was the Palestinian gypsum

9 Bergoffen 1990, 217.
10 See Charaf in this volume.
11 Bikai 1978, pl. XLVIIA:1.
12 Charaf 2008, 137, fig. 20.
13 Kozal 2010; Yener 2013, 17.
14 Kozal 2010, 69; Mullins 2010, 62; Kozal et al. 2020.
15 Akar 2017, 2.
16 Akar 2017, 3.
17 Akar 2017, 2.
18 Gittlen 1977, 343; 1981, 513.

dipper juglet,[19] especially if one takes into account the contacts of Cyprus with this area during the early phase of the LC period. As regards the use of these juglets, it is interesting that in Level VI of the Temple at Tell Kazel plaques depicting male and female figures were found in the interior of such jugs.[20]

The quantity of Cypriot pottery at Tell Abu Hawam is also impressive. It includes Plain White Wheelmade (PWWM) vessels, which, along with Canaanite jars, were used as containers. As Artzy notes, it is difficult to distinguish Cypriot PWWM jars from those that were produced locally for maritime transport at Tell Abu Hawam.[21] She also argues that Cypriot potters moved to this metropolitan trade centre or had close contact with local potters. The presence of both Cypriot pottery and its imitations, especially of shapes used as maritime transport containers, in such an important emporium of the Eastern Mediterranean gives us an idea of the role the Cypriots played in the shipping trade.

On the Syro-Palestinian coast we encounter wheelmade imitations of hand-made Cypriot pottery such as BR and WS. Such imitations have been found at Qatna,[22] Ugarit, Byblos, Lachish, Megiddo, Beth Shemesh, Hazor, Gezer, Jaffa, Jericho, Jerusalem, Tell es Safi/Gath, Tell Far'ah, Tel Jatt and also north of the Sinai peninsula at Tell Hebwa,[23] dating from the 16th to the 13th centuries BC.[24] During the 14th century local imitations are found with imported ware in graves.[25]

Among the most characteristic local imitations of Cypriot pottery are the wheelmade Canaanite jugs that imitate BR II jugs both in shape and in the linear decoration of black and red on a light-coloured surface. Bergoffen reports 158 vases from 17 sites.[26] The earliest date to the 15th century and appear at the same time as the earliest imports of BR II ware. Eleven jugs imitating BR ware have been discovered at Tell el-Ajjul.[27] The shape lasted for a long period and is found in both Cypriot and Levantine assemblages (Fig. 3a).

A group of BR, Black Lustrous (BL) and Red Lustrous Wheelmade (RLWM) jugs, found in graves at sites including Megiddo, Jatt, Ara, Gezer, Lachish and Jerusalem, constitute a different category since they were made in Syrian workshops and imported during the 15th and 14th centuries.[28] These jugs are similar in shape to BR jugs, but have linear decoration in red and black: a series of bands and small lines in a radial arrangement run around the body or the neck.[29] This decoration is characteristic of the workshops of the Syro-Lebanese coast from as early as MB IIA.[30] They have been found in graves at Syrian sites except for Ugarit.[31] Another category are jugs with a red surface; in this case, however, the colour is not the result of ceramic technology, as with the Cypriot ware, but of the paint colour (Fig. 3b–c).[32]

At Byblos, in a MB IIA layer, a BR jug was found that imitates in decoration Cypriot prototypes of White Painted (WP) Cross Line Style (CLS).[33] Imitations of WS II milk bowls have been found at Ras Shamra-Ugarit,[34]

19 Bevan 2007, 213.
20 Badre 2006, 71–6, figs. 6, 8. For their probable use in rituals, see Akar 2017, 6, 11.
21 Artzy 2016, 103; see also Artzy and Sha in this volume.
22 Luciani 2008, 120–21.
23 Aston 1996; 2012, 13; Dorner and Aston 1996.
24 Prag 1985, 160; Yannai et al. 2003.
25 Prag 1985, 159.
26 Bergoffen 2006, 331 n. 3.
27 Bergoffen 1989, 255.
28 Yannai et al. 2003.
29 Yannai et al. 109–10, fig. 2.
30 Yannai et al. 2003, 110 n. 2.
31 Yannai et al. 2003, 109.
32 Yannai et al. (2003, 109–10, fig. 2:9–14) classify these jugs as imitations of BR and refer to them as Red Polished or Red Burnished.
33 Bagh 2013, 125–26, fig. 78c; Maguire 2009, 48, fig. 19.1.
34 Courtois 1969, 132, fig. 6: D; Yon 2001, 123, fig. 3.

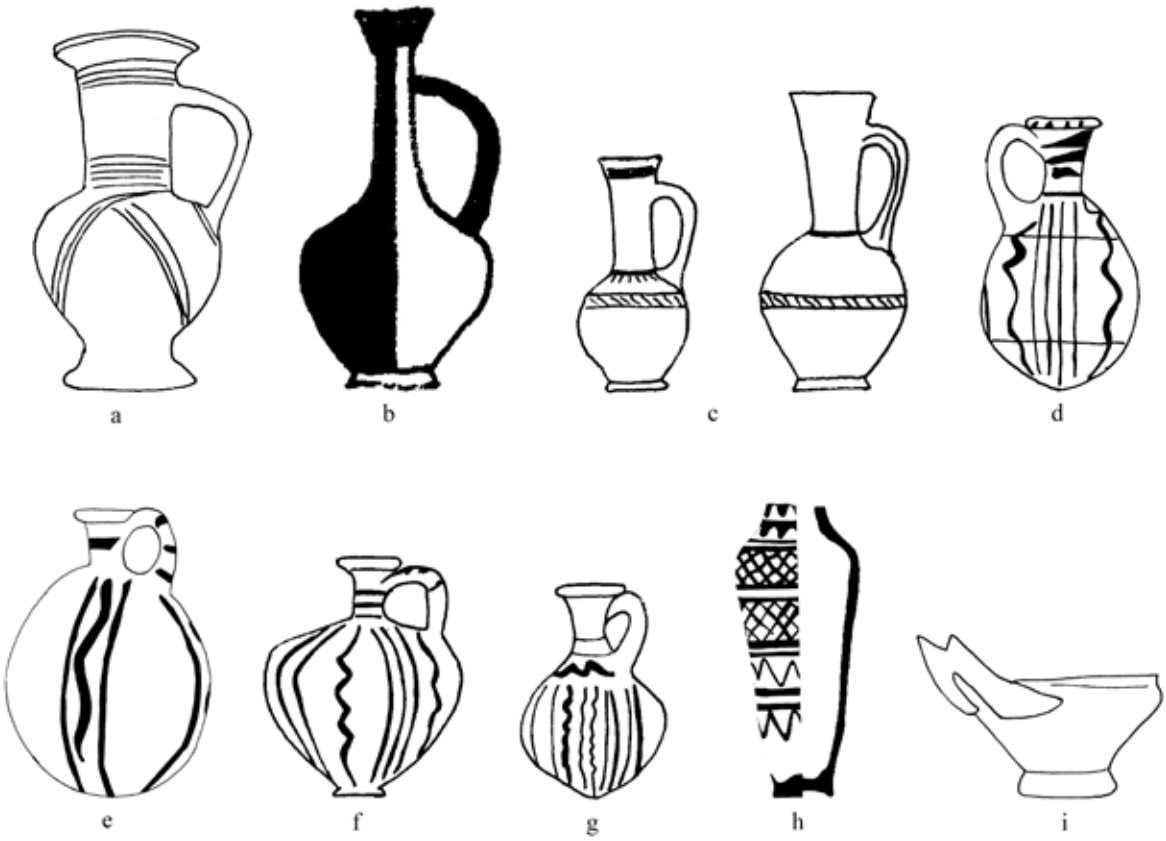

Fig. 3. a. Imitation BR jug from Lachish (redrawn after Bergoffen 2006, 1).
b–c. Syrian jugs imitating BR (redrawn after Yannai et al. 2003, fig. 2).
d–e. Imitations of WP PLS (d. redrawn after Petrie 1914, pl. VIII:15, Tarkhan; e. redrawn after Vilain 2018, fig. 6, Tell el-Yahudiyeh).
f–g. Imitations of WP PLS from Tell el-Dab'a (redrawn after Maguire 2009, fig. 50).
h. Imitation of a RL spindle bottle (redrawn after Karageorghis and Marketou 2006, fig. 3:18).
i. Imitation of a BR bowl (redrawn after Karageorghis 1995a, fig. 5:1). Not to scale.

Beirut,[35] Megiddo,[36] Beth Shemesh[37] and the Potter's Workshop at Lachish,[38] while a Pink ware bowl with strong Cypriot influences has been found at Hazor.[39] The imitations of WS bowls maintain the basic characteristics of the shape, such as the round base and wishbone handles. Their Syro-Palestinian attributes consist of red decoration on a brown to pink surface and the fact that all are wheelmade.[40] In terms of decorative technique and motifs, however, they lack the quality of the Cypriot prototypes. In the case of imitations of BR, some characteristics of the type were also maintained, such as the ring base, the ridge at the base of the neck and the loop handle. The most important difference is that the linear decoration is rendered in red paint, as opposed to the Cypriot white, while there is also a category with bichrome decoration in black and red on a light ground.[41] The production of local imitations was perhaps a response to increased demand for shapes that were in fashion, but their co-presence with imported pottery of the same type and their diffusion does not strongly support such a hypothesis.[42] The characteristics of these vases are fully adapted to the local production of Canaan, both in terms of manufacturing technique (wheelmade as opposed to their handmade Cypriot prototypes) and style.

35 Saidah 1993–1994, pl. 27:2a+b; Charaf 2008, 131.
36 Yasur-Landau 2013, 458, 462, fig. 11.1:3.
37 Amiran 1969, 182 no. 198, pl. 56:2, 4.
38 Tufnell 1958, 293, type 909.
39 Yadin et al. 1960, pl. CIX.12.
40 Prag 1985, 157.
41 Bergoffen 2006, 334, fig. 3.
42 Prag 1985, 160–63; Bergoffen 2006, 333; 2013, 282.

Local potters appear to have "taken advantage" of the popularity of these pots to manufacture imitations that were easy to channel to the markets. The popularity of these ceramic types led to "experimentation" and the combination of different characteristics, as is the case with two BR spindle bottles that echo attributes of Red Lustrous (RL) Ware.[43] Bergoffen uses the term "variants"[44] to describe these isolated examples which, nevertheless, are characteristic of the work of local potters, such as the WSh vase from Tel Batash.[45]

Bichrome Ware was manufactured in Cyprus[46] in shapes and motifs similar to WP Ware,[47] but there are also imitations in Canaan[48] and Egypt.[49] In Egypt tankards were adopted within the Egyptian repertoire of wide-mouthed jugs, whereas kraters are rarer. Bichrome decoration also influenced Egyptian pottery of the 18th Dynasty. The appearance of Bichrome Ware in the Levant predates that of WS and BR. An analysis of ceramic assemblages from Tell el-Ajjul[50] and Megiddo shows similarities with local wares.[51] In the Levant drinking vessels, kraters, tankards and bowls were imported from Cyprus. At Megiddo[52] jugs were locally manufactured as a substitute for Cypriot tankards, as were goblets in Bichrome technique, a shape not encountered in Cyprus.[53]

As Bergoffen points out, it is not yet clear whether the potters of the Levantine coast pursued the imitation of Cypriot types, or simply assimilated some characteristics[54] and thus created hybrid forms from different traditions.

Cypriot influence is also visible in the typology of Levantine cooking pots.[55] Spagnoli distinguishes three categories, the third of which consists of hand-made and wheelmade vessels found in LC II–III levels at Kition, Enkomi and Maa *Palaeokastro* and on the Syro-Palestinian coast at Tyre, Sidon and Sarepta. The cooking jug is attested in LB II–III contexts at Maa *Palaeokastro* and Pyla *Kokkinokremos* and in 12th century BC contexts at Ashdod and Ekron, where it co-exists with locally produced Coarse Ware.[56] The presence of a utilitarian ware with Aegean and Cypriot characteristics on the Syro-Palestinian coast shows strong interactions between the two regions, especially at the end of the LBA, of different character from those observed in earlier periods.

EGYPT

Merrillees,[57] Maguire[58] and Vilain[59] have discussed the presence of imported and local imitations of Cypriot White Painted Handmade (WPHM) Ware in Egypt (Fig. 4).[60] The consequences of the fall of the Hyksos are reflected in the diffusion of jugs produced in the Levant and in Egypt.[61] In the following period there was a de-

43 Merrillees 1962, 191, 196, fig. 2:17; Yon 1983, pl. 29:4; Bergoffen 2013, 282.
44 Bergoffen 2013, 282.
45 Steel 2006, 160, 169, photo 74, pl. 45:9.
46 For views on the Cypriot provenance of the type, see. Artzy et al. 1973; 2013.
47 Artzy 2002, 3, 5.
48 Charaf 2008, 137.
49 Artzy et al. 1973; 1978; Artzy 2001, 168; 2002, 3; Bietak 2001, 175; Hein 2001, 140; 2009.
50 Artzy et al. 1973, 452.
51 Artzy et al. 1973, 461; 2013, 179.
52 Artzy et al. 2013, 180, fig. 2: 3.
53 Artzy et al. 2013, 181, 182, fig. 4: 4–7.
54 Bergoffen 2006, 331.
55 Spagnoli 2010, 101.
56 Spagnoli 2010, 108.
57 Merrillees 1968; 1975; 1981; 1983.
58 In addition to the imported Cypriot WPHM Ware Maguire (2009, 37–39) published 25 local imitations.
59 Vilain 2017; 2018.
60 Maguire 1990; 1995, 54.
61 Maguire 1995, 54.

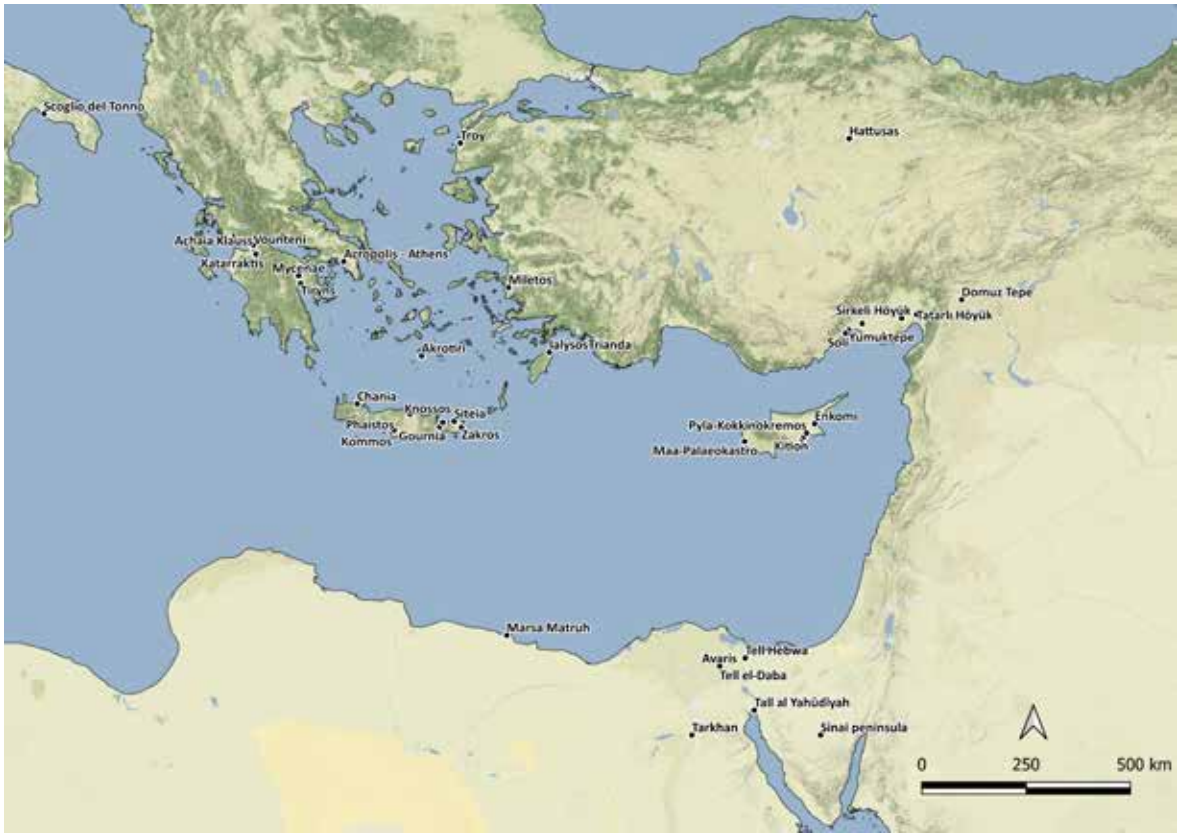

Fig. 4. Map of the Eastern Mediterranean.

crease in the demand for jugs and their possibly valuable contents. WPHM jugs and juglets and Red-on-Black (RoB) jugs were aesthetically superior to the Monochrome Wares of the Syro-Palestinian coast and Delta region. This explains why they became so popular, to the extent that local potters began to imitate these wares. The earliest evidence for connections with Cyprus dates to the 13th Dynasty and is represented by a group of Tell el-Yahudiyeh juglets with Cypriot characteristics both in decoration and shape.[62] Juglets of Tell el-Yahudiyeh Ware also belong to a painted variant, Painted Tell el-Yahudiyeh Ware,[63] found largely in tombs. It continues the Levantine painted tradition, but is also inspired by Cypriot pottery. There are no parallels outside Egypt. Their decoration of wavy and straight lines is influenced by the WP Pendent Line Style (PLS). Juglets from Tarkhan,[64] Tell el-Dab'a[65] and Tell el-Yahudiyeh are clearly imitations of the widely distributed Cypriot vessels.[66] In Cyprus there are no parallels for these Tell el-Yahudiyeh juglets with globular body. According to Maguire, however, it is possible that a Cypriot potter working in the Delta imitated this ware with the bilobed handle made of local clay, while keeping many Cypriot characteristics such as the globular shape and decorative motifs.[67] The globular jugs of Painted Tell el-Yahudiyeh appear in the same assemblages as Cypriot WP PLS jugs.[68] While the imported Cypriot ware comes from the southeast of the island, the decorative characteristics that the Delta potters imitated were indigenous to the northwest.[69]

62 Maguire 2009, 21.
63 Bagh 1988, figs. 32–41.
64 Petrie 1914, 12, pls. IX.23, LXXI; Merrillees 1978, 30.3:2–3.
65 Maguire 1995, fig. 9; 2009, pl. 17.2.
66 Bagh 2013, 59, figs. 27–8.
67 Maguire 2009, 24.
68 Bagh 1988, figs. 32, 42; Maguire 2009, 38–9.
69 Maguire 2009, 24.

The distribution of MC jugs with narrow necks was widespread in the Eastern Mediterranean, both on the Syro-Palestinian coast[70] and in Egypt. Vases belonging to the WP tradition (WP V Ware, WP PLS, CLS, Broad Band and Tangent Line Styles) have been found at over 30 sites in the Levant and at Tell el-Dab'a.[71] Maguire singled out 25 vases that imitate WP PLS, CLS and WP VI Wares.[72] Vilain distinguishes two categories of vases from Tell el-Dab'a that are related to the WPHM Ware of Cyprus: one that imitates the WP PLS and one which seems to be the result of inspiration from this category of pottery rather than its imitation,[73] as we have seen above in the case of jugs from the Northern and Southern Levant (Fig. 3d–g). There are some differences in the technique of manufacture but, in general, shapes and decoration follow Cypriot prototypes with some variation in the arrangement and density of linear motifs.

In the settlement assemblages of Tell el-Dab'a additional types of Cypriot pottery were found, while in middle-class tombs of the 18th Dynasty, BR I and II jugs[74] were found and sporadically WS Ware; the latter is also found in settlement contexts.[75] During the era of the New Kingdom there are imitations of Cypriot ware in other material until the LC IA period (18th Dynasty).[76]

ANATOLIA

One of the largest assemblages of LC II pottery in Anatolia[77] (Fig. 4) comes from Troy: fragments from 62 vases of WS II, BR II, PWWM, WSh and Pithos Ware.[78] A Proto White Slip (PWS) sherd was found in Miletos.[79] There are only a few examples of Cypriot pottery from Rough Cilicia, whereas significant quantities have been found in Plain Cilicia,[80] dated from MB II to the end of the LBA.[81] Pottery found at Kinet Höyük includes WP, BoR, Bichrome, Monochrome, WS I–II, BR I–II and WSh Wares. Many examples were also found at Tarsus-Gözlükule.[82] At this site Buff-Painted Ware, which makes its appearance in LB II, exhibits a mixture of elements of the MB Amuq-Cilician and Cypriot traditions.[83] These consist of bichrome decoration, a characteristic trait of Levantine Painted Ware,[84] and decorative elements of WS as well as Cypriot shapes: the small jar and carinated bowls are reminiscent of Cypriot kraters and carinated bowls. This phenomenon extends to the Early Iron Age, when Cypro-Cilician Painted style pottery appears at sites such as Tarsus-Gözlükule and Kilise Tepe.

70 Johnson 1982; Maguire 1990.
71 Maguire 1991, 64; Hein 2009, 30, 32. The majority of vases found at Tell el-Dab'a came from southeastern Cyprus (Maguire 1991, 64; 1992, 118).
72 Bagh 1988, DAB 818–841. Maguire 2009, 37, fig. 11.
73 Vilain 2018, 489–91, pl. 1, fig. 6, 7; see also Vilain in this volume.
74 Merrillees 1974, 13–42.
75 Bergoffen 1991, 64–5, figs. 2–3.
76 Karageorghis and Merrillees 2007; Höflmayer 2011. For the relations between Cyprus and Egypt during the 18th Dynasty, see Karageorghis 1995b.
77 Pieniazek et al. 2018, 384, figs. 13–4.
78 Pieniazek et al. 2018, 385.
79 Niemeier and Niemeier 1997, 234, fig. 66.
80 Mersin-Yumuktepe, Mersin-Soloi, Ceyhan-Sirkeli Höyük, Ceyhan-Tatarlı Höyük, Kabarsa, Domuztepe and Tarmil (Kozal 2016, 54).
81 Todd 2001; Kozal 2005, 137; Jean 2019–2020, 13, 29; Kozal 2017, 124, table 22, 268, map 7a.
82 Goldman 1956, 205, 220, fig. 329:1248–252; Åström 1980, 26; Todd 2001, 207; Kozal 2005.
83 Karacic 2014.
84 Bagh 2013, 25, fig. 2.

RLWM Ware[85] exemplifies the difficulty of discerning the origin and diffusion of a ceramic category. Taking into account its earlier appearance,[86] greater period of circulation, the quantities found in graves and the shape repertoire, Eriksson argues for a Cypriot provenience.[87] It appears in Cyprus in LC IA. Two variants of this ware, namely White Lustrous (WL)[88] and Black Lustrous Wheelmade (BLWM), are rather rare. It is possible that they were produced in Anatolia, starting from the coast of Cilicia. The presence of "arm-shaped" vessels almost exclusively in Anatolia leads to a similar conclusion.[89] Imitation spindle bottles in coarse fabric have been found in Egypt and the Syro-Palestinian region.[90] Their surface is deep red in contrast to the orange shades of Cypriot and Anatolian examples. In Egypt examples made of Nile clay have been found at Tell el-Dab'a.[91] Bergoffen connects them with rituals associated with child burials.[92]

THE DODECANESE

The Dodecanese (Fig. 4) has a long tradition of connections with Cyprus. Imports of Cypriot ware date from LB I.[93] A significant number of sherds from jugs and bowls of local production imitating Cypriot wares,[94] such as WS, BR[95] and RLWM,[96] have been found on Rhodes at Ialysos (Trianda) in LM IB–IIA levels (Fig. 3h).[97] The WS imitations are wheelmade, their decoration is rendered in red to brown paint and they have a wishbone handle and an off-set rather than rounded base.[98] In addition, there are three jugs imitating BR I.[99] Local potters imitated the red surface of this ware. A group of bowls imitating Red Slip (RS) Ware have also been found.[100] A spindle-shaped bottle, a well-known shape in RLWM, was found among ceramics influenced by Cypriot prototypes; in this case, however, the bottle has linear decoration.[101] In addition to imported Cypriot pottery,[102] some graves could be characterised as Cypriot since they contained exclusively Cypriot artefacts.[103]

85 Åström 1972, 220; Eriksson 1993; 2007b; Knappett 2000; Kozal 2003; 2007; 2015; Yannai et al. 2003, 111; Knappett et al. 2005; Hein 2007; Knappet and Kilikoglou 2007, 133–34; Mielke 2007; Akar 2017, 7; Kozal and Kibaroglu 2017.

86 More recent studies question the chronology proposed by Eriksson and argue for an earlier appearance of RLWM in Anatolia (Mielke 2007, 161–62; Kozal 2015, 55). See also Bergoffen 2013, 284.

87 Other scholars consider Anatolia as the source of this pottery on the basis of assemblages from Kinet Höyük, Kilise Tepe, Alalakh and other sites (Kozal 2015, 54–6).

88 Eriksson 2007b. είναι White Lustrous Wheelmade (WLWM) has been mainly found in Cyprus with some examples from Cilicia, Syro-Palestine and Egypt (Mersin, Minet el-Beida, Avaris, Quban) and three at Bogazköy (Kozal 2010, 69).

89 Manuelli 2009, 263.

90 Eriksson 1993, 157–63; Yannai et al. 2003, 111–12; Charaf 2008, 142; Bergoffen 2013, 286–89.

91 Bergoffen 2013, 286.

92 Bergoffen 2013, 289–90.

93 For Cypriot imports in Rhodes and Cos, see Monaco 1941, 58, 94; Furumark 1950, 165–66, 175–76; Marketou 2009, 49–50.

94 Marketou et al. 2006, 16 ns. 142–45, fig. 1. For the type of clay used for the manufacture of the imitations in Rhodes, see Marketou et al. 2006, 53.

95 Imitations of BR were classified as Ware F (Marketou et al. 2006, 25).

96 Karageorghis and Marketou 2006, 455–57; Marketou 2009, 48–9.

97 Marketou et al. 2006, 32, 38, 52.

98 Karageorghis and Marketou 2006, 455, fig. 3:19–23, pls. 19–33.

99 Karageorghis and Marketou 2006, 455, figs. 2:13–4, 3:15–7.

100 Karageorghis and Marketou 2006, fig. 2:10–2, pl. II:13–7.

101 Karageorghis and Marketou 2006, 456, fig. 3:18, pl. III:18.

102 Åström 1988.

103 Mee 1982, 22; Girella 2005, 133.

THE AEGEAN

In the Aegean imports of Cypriot pottery are rather sporadic.[104] According to a recent study, there are no Cypriot imports at Akrotiri.[105] Sherds of WS were, however, found on the Acropolis at Athens,[106] and fragmentary WS vessels and two WS juglets at Mycenae and Tiryns.[107] At Tiryns, Cypriot pithoi were identified during the excavation of the Lower Citadel in Late Helladic (LH) IIIB2 contexts.[108] Moreover, at Tiryns ca 20 wall brackets of Cypriot type should be considered of local manufacture, since they are decorated with finger impressions,[109] a typical characteristic of Tirynthian ceramics from LH IIIB to early LH IIIC.[110] There are also Mycenaean vessels with Cypriot characteristics such as wishbone handles.[111] Wall brackets have also been found at Mycenae.[112]

Isolated Cypriot imitations have been found in the rest of mainland Greece. At Pagona in Achaia six bowls with the typical wishbone handles of Cypriot vases were found in deposits of the transitional to Mycenaean phase and LH I–II.[113] They seem to imitate BR I bowls rather than those of WS I.[114] The presence of Cypriot imitations in an area like Achaia, which had trade connections with the rest of Mycenaean Greece as well as with the Ionian Islands and the central Mediterranean,[115] is of great interest. Two bronze bowls with handles reminiscent of BR bowls[116] have been found in tholos Tomb B at Katarraktis in Achaia. In the Mycenaean cemetery at Trypes, Elis, a vase of Cypriot type in the shape of a horn was found in a late LH IIIC tomb.[117] This imitation of an unusual Cypriot shape might have been used as a perfume container. While there is some evidence for connections with sites in western Cyprus,[118] it is clear that there was no great interest in Cypriot ceramic products in Mycenaean Greece where customers preferred locally produced vessels.

The earliest Cypriot import in Crete is a Red Polished III amphora from Knossos.[119] Many Cypriot imports have been found at Siteia,[120] Chania,[121] Kato Zakros,[122] Knossos,[123] Poros-Katsambas,[124] Pseira,[125] Gournia[126] and Phaistos.[127] At Kommos there are 80 Cypriot vases of almost all wares, with three quarters of WS.[128]

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104 For examples from Akrotiri and Phylakopi see Atkinson 1904, 158; Popham 1963, 93 n. 16; Merrillees 2001, 89–94, 98. It is possible that the "absence" of Cypriot ceramics is due to their lack of identification by excavators or their misidentification as Coarse Ware.

105 Dawson and Nikolakopoulou 2020, 162.

106 Myres and Ohnefalsch-Richter 1899, 18, 39; Gjerstad 1926, 325; Polychronakou-Sgouritsa 1997, 186; Merrillees 2001, 99.

107 Kilian 1981, 184, fig. 40.5; Stockhammer 2015, 181.

108 Maran 2009, 246, fig. 2; Stockhammer 2015, 178.

109 Rahmstorf 2003, 65; Maran 2004, 26.

110 Touchais 1983, 761, fig. 31; Kilian 1988a, 121, fig. 24; 1988b, 127; Cline 1999, 121–22; Maran 2004, 11–18.

111 Podzuweit 1981, fig. 17.

112 Cline 1994, n. 787.

113 Stavropoulou-Gatsi 1998, 200; Stavropoulou-Gatsi and Karageorghis 2003, 98, fig. 2. On the adoption of the wishbone handle in the Aegean, see Graziadio 1999. Lolos (1987, 334–35) viewed them as a development from earlier, local Middle Helladic (MH) examples.

114 Stavropoulou-Gatsi and Karageorghis 2003, 100.

115 Jung et al. 2008.

116 Papadopoulos 1985, 145, pl. 5.

117 Vikatou and Karageorghis 2006.

118 Stockhammer 2015, 184.

119 Catling and MacGillivray 1983; Russel 1985; Maguire 2009, 223; Graziadio 2013; MacGillivray 2014, 208.

120 Graziadio 2013.

121 Tzedakis 1966, 426, pl. 463a; 1972, 163–66; Andreadaki-Vlazaki 1998, n. 14, 62; Hallager and Hallager 2014, 31–3.

122 Popham 1963, 89–91, fig.1, pl. 26: a.

123 MacGillivray 2014, 208; Popham 1963, 91–3, fig.2, pl. 26: b.

124 Alexiou 1955, 319–20, fig. 3; Cadogan 1972, 5–13; Shaw et al. 1978, 128 n. 30; Dimopoulou-Rethemiotaki 1998, 62–3 n. 15; Dimopoulou-Rethemiotaki 2014, 267–69.

125 Banou 1995, 110, 114–15; Shaw 1998b, 60 no. 6; Betancourt 1999; 2014, 275–77; Floyd 2009.

126 Boyd-Hawes et al. 1908, 42, pl. VIII, no. 25; Popham 1963, 93 n. 16; Cadogan 1972, 7; Karageorghis et al. 2014, 64.

127 Girella 2010.

128 Russel 1985; Shaw 1998a, 14 n. 8, 23; 1998b, 56 no. 1, 61 no. 10; M. Shaw 1996, 50; Rutter 2006, 655–56, 1147 pl. 3.54, 51/4;

THE CENTRAL MEDITERRANEAN

In the central Mediterranean limited quantities of Cypriot pottery and imitations have been found in Sicily and Sardinia (Fig. 5). The activity of Cypriot merchants in Italy, Sicily and Sardinia during the 14th and 13th centuries BC was quite different to that in the Aegean in terms of product circulation and seems to have been connected with the copper trade. The earliest Cypriot material in Sicily dates to Mycenaean IIIA2.[129] Both Cypriot pottery and imitations have been found in the cemetery of Thapsos, in the wider area of Syracuse, which dates to the Sicilian MBA (1450–1250 BC).[130] A WSh juglet[131] and two BR type juglets[132] come from Tomb D at Thapsos. There has been much debate about whether they are local imitations or imports from Cyprus or the Syro-Palestinian coast.[133] According to Karageorghis, the BR type juglets are probably imitations.[134] A BR type juglet from Tomb 7 at Thapsos[135] was found with a great variety of ceramics of different provenience.[136] Many imitations of Cypriot ware were found in Tomb 48 at Thapsos.[137]

Another BR type juglet was found in a tomb in the centre of the city of Syracuse,[138] while three more were discovered in Plemmirio of Syracuse (Tombs 16, 19, 48); of these one is a Proto Base Ring (PBS) imitation.[139] Four more examples belonging to two jug types come from Tombs 13 and 23 at Cozzo del Pantano.[140] A group of imitation BR bowls belonging to both types, namely with carinated and semi-globular body, were found at various sites in Sicily.[141] In particular, ten examples come from Tombs 10, 19, 22 and 41 at Thapsos[142] (Fig. 3i), two from Tomb 17 at Cozzo del Pantano and two from Tomb 1 at Matrensa.[143] Of special interest is an imitation of a small krater from Tomb 22 at Cozzo del Pantano.[144] As Alberti points out, it probably imitates Bichrome Wheelmade (BichrWM) and has a similar decoration of triangles around the shoulder which, on the Sicilian example, are rendered with incision. It is possible that examples from Tomb 23 at Cozzo del Pantano[145] and Tombs 48 and 62 at Thapsos also belong to this type.[146] Fragments of 13th century BC Cypriot pithoi[147] come from Cannatello in the region of Agrigento[148] and Portella in the Aeolian islands of Salina.[149] As Vagnetti[150] points out, the discovery of the same types of pottery, including Cypriot pithoi,[151] in Sardinia and of Nuragic

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1148 pl. 3.55, 52a/12; 1150 pl. 3.57, 52g/2; 1176 pl. 3.83, 75/7; 1187 pl. 3.94, d; 2014, 212–35; Maguire 2009, 223, Kom 815, Kom 816; Graziadio 2013, 168. Tomlinson et al. 2010; Stockhammer 2015, 178.

129 Graziadio 1997, 684.

130 Voza 1973; 1985; Tomasello 1995–1996, 153–56; Alberti 2008, 131–32, fig. 5B–C; Zebrowska 2016, 77; Sabatini and Lo Schiavo 2020, 10.

131 Voza 1973, 36, pls. 7, 87; Lo Schiavo et al. 1985, 5 no. 1, fig. 2. 1 (Syracuse Museum, inv. no. 69335).

132 Voza 1973, 36 nos. 85–56, pl. 7. 85–6; 1985, figs. 597–98; Lo Schiavo et al. 1985, 5 nos. 1–2, fig. 2.2–3 (Syracuse Museum, inv. nos. 69336–69337); Portale 1996, 664, nos. XI, XII, XIII; Vagnetti 2001b, 101; Alberti 2015.

133 Alberti 2008, 132.

134 Karageorghis 1995a, 94.

135 Graziadio 1997, 683–84, 696 (Orsi excavations 1894); Alberti 2015, 3.

136 Voza 1971, 26, pls. VII–III; 1973, 31, 34–40; 1985, 550, figs. 597–98; Vagnetti 2001a, 81; 2001b, 102; Vagnietti and Lo Schiavo 1989, 219; Portale 1996, 662–64; Alberti 2008, 132; Sabatini and Lo Schiavo 2020, 10.

137 Alberti 2005, 344, 346.

138 Near the altar of Hieron B′. Wilson 1988, 112; Vagnetti 2001a, 78; 2001b, 101; Vianello 2005, 179.

139 Alberti 2005, 345 n. 34; 2008, 133, fig. 6A.

140 Orsi 1893, tav. II, 8; Alberti 2005, 346 n. 34, 39.

141 Karageorghis 1995a; D'Agata 2000, 65, fig. 3.4; Vagnetti 2001a, 79.

142 Karageorghis 1995a, 94–5; Alberti 2005, 344 n. 16, 18.

143 Orsi 1903, fig. XII:10; Alberti 2005, 345.

144 Orsi 1893, 19, tav. I, 22; Alberti 2005, 346 n. 44 as a carinated bowl with high tapering base.

145 Orsi 1893, 22; Alberti 2005, 346.

146 Orsi 1895, 127, 134; Alberti 2005, 346.

147 For the use of Cypriot pithoi as transport containers see Vagnetti 1999, 189–90.

148 Karageorghis 1993, 584, fig. 3; Deorsola 1996, 1037, pl. VI, a; Vagnetti 1999, fig. 4.3; 2001b, 101.

149 Martinelli et al. 2003, 883; Jones and Levi 2004, 180–81, fig. 8; Martinelli 2005, 255, 260.

150 Vagnietti and Lo Schiavo 1989, 221.

151 Analytical evidence suggests they originate from south-central Cyprus, see Jones and Day 1987, pl. 14.3; Jones and Vagnetti

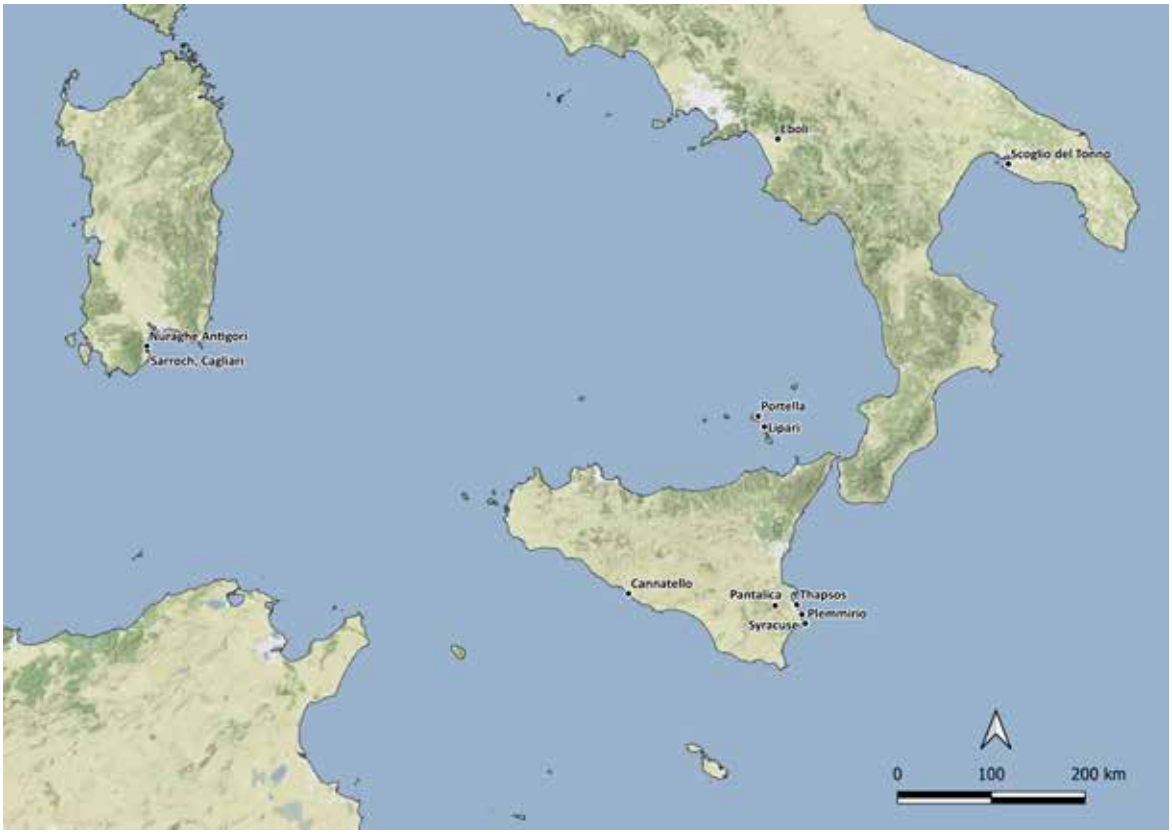

Fig. 5. Map of the Central Mediterranean.

pottery at Kommos,[152] Crete, and at Pyla *Kokkinokremos*[153] and Hala Sultan Tekke in Cyprus[154] is significant for the detection of trade routes. Fragments of pithoi found in the central Mediterranean have common traits with pithoi discovered in shipwrecks and ports of the Eastern Mediterranean such as Kommos in Crete, in Egypt at Marsa Matruh and in south-central Cyprus.[155] In Nuraghe Antigori, Sarroch in Cagliari province,[156] pithos fragments and fragments of BR have been found.[157] Other types of Cypriot pottery were found in MBA and LBA layers at Cannatello.[158] BR II juglets have been found in tombs at Thapsos and Syracuse and in settlement contexts at Cannatello. Notably, Aegean type pottery found at Cannatello,[159] at Scoglio del Tonno of Taranto in Apulia[160] and at Nuraghe Antigori[161] is of Cypriot provenience.

In addition to imitations, of special interest is the production of ceramic types at Thapsos which are influenced by Cypriot types, such as the small jug with tubular spout and vertical handle,[162] the prototypes of which

1991, 134; Graziadio and Guglielmino 2011, 316.

152 Watrous 1989; Watrous et al. 1998.

153 Gale 2011; Bretschneider et al. 2017; Sabatini and Lo Schiavo 2020, 10.

154 Bürge and Fischer 2019; Gradoli et al. 2020.

155 Jones and Vagnetti 1991, 134; Graziadio and Guglielmino 2011, 311.

156 Farrarese Ceruti et al. 1987, 16, figs. 2.4.2, 2.5, 20; Vagnetti and Lo Schiavo 1989, 220–21, fig. 28.1a–b; Vagnetti 1999, 190, fig. 4.1–2; Jones et al. 2014.

157 Lo Schiavo et al. 1985, 5 nos. 3–4, pl. 2. 1, 5.

158 De Miro 1996, 999 no. 33, 139, 235, pl. VII; Graziadio 1997, 684, 695–96; Vagnetti 1999, fig. 6; Alberti 2008, 135; Graziadio and Guglielmino 2011, 316; Sabatini and Lo Schiavo 2020, 9.

159 De Miro 1992, 25–32; De Miro 1996; Vianello 2005, 112; Alberti 2008, 134.

160 Lo Schiavo et al. 1985, 7 no. 1, pl. 2. 7.

161 Farrarese-Ceruti 1981, fig. M4.

162 D'Agata 2000, 71–2, fig. 4.2–3.

are to be found in WP VI jugs.[163] One more example comes from Scoglio del Tonno of Taranto.[164] It is a cup with painted linear decoration of Aegean inspiration and a wishbone handle inspired by WS Ware. A strainer jug belonging to the Pantalica I culture (1250–1050 BC) was found in the necropolis of Pantalica in Syracuse.[165] It is a type of Mycenaean IIIC ware which reached Cyprus via the Dodecanese and became popular during the 12th century BC. A similar jug and bowls with a wishbone handle have been found in Ausonian I–II phases at Lipari.[166] The presence of this pottery indicates that southeast Sicily was an important trade hub and supports the hypothesis that it may have been a trade centre of Cypriot character.[167] Cypriot type sherds have been found elsewhere in Italy, for example a fragment decorated in Pastoral Style from Eboli in southern Campania.[168]

CONCLUDING REMARKS

During the LBA pottery of varied provenience circulated among the cosmopolitan sites of the Eastern Mediterranean and potters produced ceramics to satisfy clients with various aesthetic preferences and needs. The cosmopolitan character of the Eastern Mediterranean from the MBA to the LBA is shown on the one hand by the presence of a variety of imported products and luxury goods, and on the other by imports and imitations of various ceramic types. Imitations usually followed imports and potters experimented by assimilating Cypriot characteristics and their own techniques and preferences. Imitations are perhaps more important than the imports themselves because they show familiarity with the wares they imitate and the satisfaction of a need or an aesthetic preference leading to the imitation. The same holds true for examples that do not clearly imitate Cypriot types but rather indicate that potters were inspired by these types and created products that were highly marketable. Notably, WS bowls, which were very popular in the Levant, were not widely imitated. While these vessels satisfied the aesthetics of the local clientele, since they are similar in shape to local types, it appears that imports were preferred for their high quality. Cypriot type vases are wheelmade, the handle does not penetrate the body, rounded bases are avoided, and the colours used are those found on local wares.[169] Thus, they either cover a gap in production or provide the market with a type in demand at a lower price. During the 13th and early 12th centuries BC, when imports were no longer easily accessible, the production of imitations increased.[170] They were not mass produced, however, as was the case with Aegeanising pottery. Some imported jug types and their imitations were probably valued for their contents. In these cases, the vessel type may have functioned as an advertisement for and guarantee of its contents.[171] Nevertheless, the distinction between authentic commodities and imitations and the assimilation and perceived value of the former cannot be easily defined.[172]

The distinction between authentic products and their imitations, between an import and a product inspired by it and the assimilation of characteristics of the prototype with local traits depend on many factors. Among these are the rules of supply and demand, the aesthetic preferences of the public and the aesthetics of potters, who often experiment by combining preferred and familiar characteristics with the manufacturing techniques of any given region.

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163 Åström 1972, 61–2, pl. XLI, 4–9.
164 Lo Schiavo et al. 1985, 7 no. 2, pl. 2. 6.
165 Syracuse Museum, inv. no. 121355.
166 Lo Schiavo et al. 1985, 8.
167 Jones and Levi 2004. For a discussion of trade in the west Mediterranean, see Vagnetti 2001b, 102–3; Alberti 2008, 135. For the role of Cypriots in the diffusion of Mycenaean pottery, see Gilmour 1992; van Wijngaarden 2002, 275–77.
168 Lo Schiavo et al. 1985; Vagnetti 1986; Vagnietti and Lo Schiavo 1989, 219, fig. 28.1c; Graziadio and Guglielmino 2011, 316.
169 Josephson-Hesse 2008, 45.
170 Bergoffen 2006, 336.
171 Artzy 2001, 122.
172 van Wijngaarden 2008, 125–29; Kotsonas 2012, 160; Antoniadis 2021, 77.

CYPRUS	LEVANT		ANATOLIA		EGYPT		AEGEAN	SICILY		AEOLIAN ISLANDS	SARDINIA
2000–1900 Middle Cypriot I	2000–1750	Middle Bronze Age I	2000–1900	Middle Bronze Age I	2181–2055	7th – Mid 11th Dynasty	2000–1600 Middle Bronze Age	2200–1500	Early Bronze Age	2200–1500 Early Bronze Age	2000–1800 Chalcolithic period
1900–1800 Middle Cypriot II	1900–1700	The Rise of Amorite Kingdoms	1900–1800	Middle Bronze Age II	2055–1773	Middle Kingdom Mid 11th – Mid 13th Dynasty					
1800–1700 Middle Cypriot III			1800–1700	Middle Bronze Age III (Assyrian Kings)							1800–1500 Early Bronze Age Nuragic I
1700–1650 Late Cypriot IA	1700–1600	Middle Bronze Age II (Amorite Rule)	1700–1600	Middle Bronze Age IV (Hittite Old Kingdom)	1773–1650	2nd Intermediate period 14th – 16th Dynasty					
1650–1550 Late Cypriot IA	1600–1530	Middle Bronze Age III (Pax Amoritica)	1600–1500	Late Bronze Age IA	1650–1548	15th – 17th Dynasty	1600–1500 LHI				
1550–1450 Late Cypriot IB	1550/30–1450	Late Bronze Age IA	1500–1400	Late Bronze Age IB (Middle Kingdom)	1548–1457	New Kingdom Early 18th Dynasty	1550/00–1450 LHIIA	1500–1250	Thapsos Middle Bronze Age	1500–1250 Middle Bronze Age	1500–1200 Middle Bronze Age Nuragic II
1450–1375 Late Cypriot IIA	1450–1400	Late Bronze Age IB	1400–1300	Late Bronze Age IIA (New Kingdom) Imperial period	1457–1390	Mid 18th Dynasty	1450–1390 LHIIB				
1375–1300 Late Cypriot IIB	1400–1300	Late Bronze Age IIA			1390–1301	Late 18th Dynasty	1400–1300 LHIIIA				
1300–1200 Late Cypriot IIC	1300–1200	Late Bronze Age IIB	1300–1200	Late Bronze Age IIB	1301–1198	19th Dynasty	1300–1200 LHIIIB	1250–1000	Thapsos/ Late Bronze Age (North Pantalica I)	1250–1050 Late Bronze Age (Ausovian I)	
1200–1100 Late Cypriot IIIA	1200–1150	Iron Age IA	1200– 900	Iron Age I (Neo–Hittite period)	1198–1136	Early 20th Dynasty	1200–1100 LHIIIC				1200–900 Late Bronze Age Nuragic III
1100–1050 Late Cypriot LCIIIB	1150–1150	Iron Age IB			1136–1086	Late 20th Dynasty	1100–1050 Sub–mycenaean	1000–900	Late Bronze Age (Pantalica II)		

Table 1. Comparative chronological table of the Cypriot MBA and LBA and corresponding periods in the eastern and central Mediterranean.

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Cyprus and the Aegean in the Late Bronze Age

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ABSTRACT

In the course of the 2nd millennium BC, interactions between Cyprus and the Aegean saw considerable fluctuations. This was due to the distance that separated the two areas, varied conditions of navigation, shifts in international relations (mainly between Egypt and the Hittite empire), and also changes in the economic organisation of Aegean polities. The paper summarises the available evidence for exchanges between the Aegean and Cyprus from the Middle Bronze Age (MBA) to the end of the Late Bronze Age (LBA). It is suggested that the Minoan and Mycenaean societies adopted very different approaches towards Eastern Mediterranean trade. The Minoans were probably involved in reciprocal exchanges with royal courts, but remained rather uninterested in exchanges of low-cost commodities (e.g. ceramics). By contrast, the Mycenaeans were very active in ceramic trade, and probably in the trade of metals, but remain almost invisible at the level of royal exchanges or correspondence. By examining various pieces of evidence, it is argued that in the 13th century BC Mycenaean access to Syria was heavily mediated by Cyprus – in contrast to Palestine and Egypt, which seem to have had direct contacts with the Aegean.

Interactions between Cyprus and the Aegean were intense in the LBA. But they were not uniform through time. During this long period there were fluctuations both in the intensity and in the nature of Cypro-Aegean relations.[1] This was partly due to changing international conditions. The prevailing currents and winds in the Eastern Mediterranean did not allow for direct sailing between lands, instead they imposed a roughly circular route: a ship travelling from Egypt to Crete had to pass through Levantine, Cypriot and Anatolian ports.[2] This means that trade depended heavily on international relations.

Regional politics were also crucial. In this paper, I will argue that Cypro-Aegean relations differed substantially between the periods of Minoan and Mycenaean dominance in the Aegean, most probably due to divergent modes of economic organisation and/or political priorities. To examine how local and international conditions affected trade, I will look at the entire 2nd millennium BC and divide it in two major phases: (a) the time when Cretan centres dominated Aegean affairs (comprising the periods of the Old and New Minoan Palaces and the intermediate Late Minoan (LM) II–IIIA1 period) and (b) the time when Mycenaean centres controlled maritime exchanges (see Table 1).

Before that, some general remarks about 2nd millennium BC trade should be made.

1 For recent general overviews, see Cadogan 2005; Graziadio 2005; Papadimitriou 2012; 2015; 2017. For Aegean exports to Cyprus, see Åström 1972, 709–54; van Wijngaarden 2002, part 3; Sørensen 2008. For Cypriot exports to the Aegean, see Cline 1994, 60–7; Karageorghis et al. 2014.

2 For the most detailed discussions, see Sauvage 2012, 273–88; Avilla 2018, 35–42.

Phase	Developments in the Aegean	Aegean ceramic phases	Cypriot ceramic phases	Approximate dates
A	Period of Minoan dominance	MM IB–LM/LH IIIA1	MC–LC IIA	1925/00–1390/70
B	Period of Mycenaean palaces	LH IIIA2–B	LC IIB–C	1390/70–1200/1190

Table 1. Chronological divisions used in this paper. [MM: Middle Minoan; LM: Late Minoan; LH: Late Helladic; MC: Middle Cypriot; LC: Late Cypriot].

GEOGRAPHY AND THE MECHANISMS OF TRADE

The distance between Cyprus and the Aegean was great by LBA standards. The nearest island of Rhodes lies ca 220 nautical miles (NM) to the west of Cyprus, and the eastern coast of Crete ca 300 NM. Broodbank has calculated that a trip from the northern Levant to the Aegean in the 2nd millennium BC would have taken 7–10 days with perfect sailing conditions,[3] and one should imagine a similar duration for a trip from Enkomi. A trip the other way round, i.e. from Crete to Cyprus, would have taken longer due to unfavourable winds and currents.

Cyprus interacted much more easily with neighbouring lands, especially Syria and Palestine. The distance between Cyprus and Syria is less than 100 NM, perhaps requiring two days of sailing. Systematic exchanges with the Levant, and also with Egypt, started in MC III or perhaps in late MC II[4] – although Cypriot copper had been traded in earlier times.[5] By the end of the MBA, Cyprus, the Levantine coast and the Nile Delta comprised a well-connected network, along which considerable quantities of Cypriot, Levantine and Egyptian ceramics and other goods circulated.[6] The network continued to flourish with increasing intensity until the end of the Bronze Age, as testified by archaeological data[7] and textual evidence.[8] Anatolia also lay close to Cyprus, but was less well-connected, either due to the rugged nature of the Cilician coast or because of the general abstention of Hittites from international trade.[9]

Cypro-Aegean relations, on the other hand, belonged to the category of "long-distance exchanges". Long distance trade-missions were feasible in the 2nd millennium but required complex infrastructure and significant capital investment.[10] The risks of navigation were high: C. Monroe has estimated that the economic loss caused by the sinking of the Uluburun ship was ca 12,000 shekels of silver, which was equal to the yearly payment of 1000 workers.[11] Such an investment could probably have been made only by royal authorities or by wealthy merchants.[12] But to make such an investment, rulers and/or traders should have expected significant economic (or political) gains. Aegean polities had certainly much to benefit from their participation in the lucrative networks of the Eastern Mediterranean. The question is what the Cypriots or the Levantines had to gain from dealing with the Minoans and Mycenaeans. This is a question that has not been answered satisfactorily so far.

3 Broodbank 2013, 374.
4 See Papadimitriou 2012, 109–14 with references; Villain 2015; see also the papers by Charaf and Villain in this volume.
5 Knapp 1996, 17–9 (text by J. Sasson).
6 Maguire 2009, 50–62.
7 For Cypriot exchanges with the Levant in the 2nd millennium BC, see Gittlen 1977; 1981; Johnson 1982; Bergoffen 1989; Maguire 2009; Charaf 2010–2011; Papadimitriou 2012, 109–19; Villain 2015; 2019; Artzy 2019a; 2019b; various papers in this volume. For Cypriot exchanges with Egypt, see Merrillees 1968; Bergoffen 1989; Jacobsson 1994; Eriksson 2007.
8 E.g. Knapp 1996, 21–50; Moran 1992; Monroe 2009.
9 For Cypriot exchanges with Anatolia, see Todd 2001; Kozal 2006, 113–31; 2016; Eriksson 2007, 165–68.
10 As we learn from the study of Assyrian trade with Anatolia (19th–18th century BC) and from the archives of Ugarit (13th century BC), see Heltzer 1978, 121–56; Monroe 2009, 105–26; Liverani 2014, 213–17; Larsen 2015, 218–27.
11 Monroe 2010, 26–7.
12 See Pulak 2008, 297–99; Monroe 2009, 14–5, 94–100, 105–26.

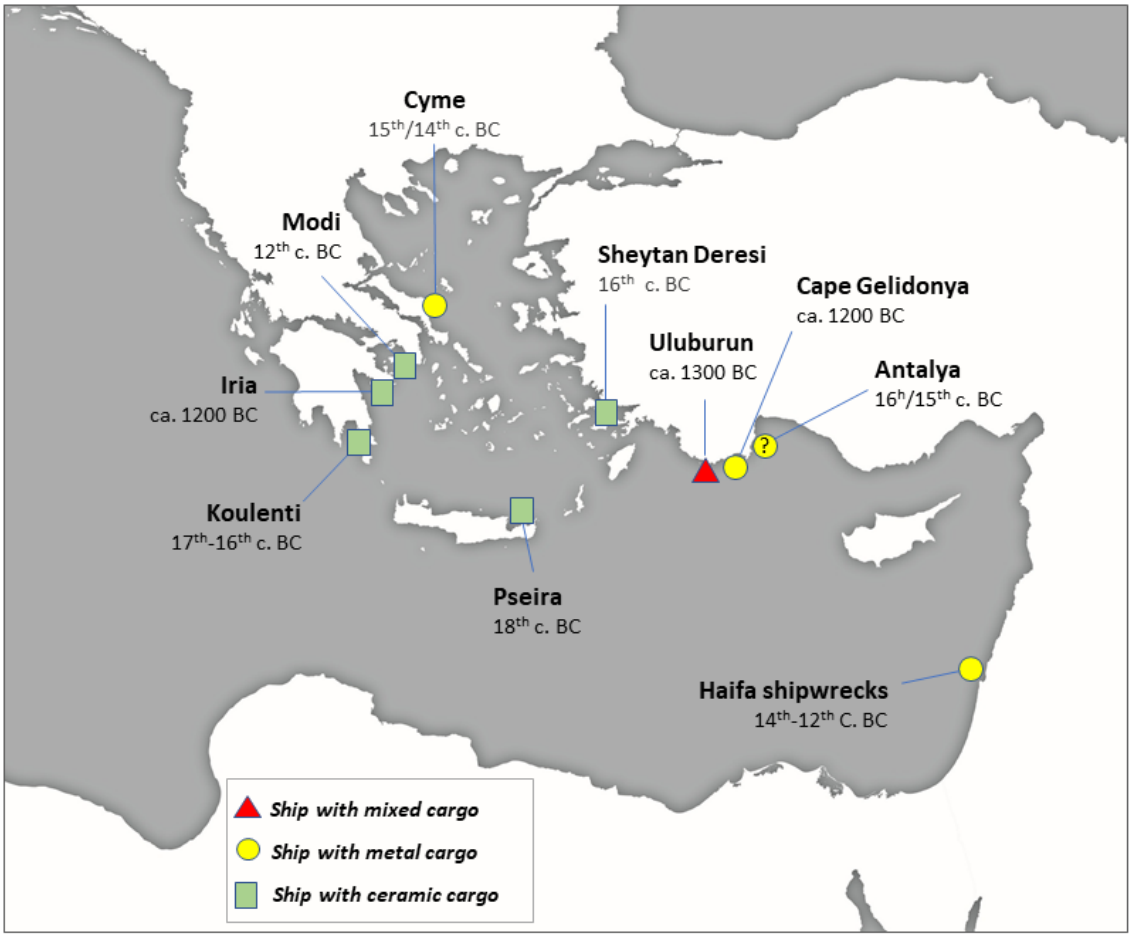

Fig. 1. Known 2nd millennium BC shipwrecks in the Eastern Mediterranean (map drawn by the author).

We should finally bear in mind that not all goods travelled along the same sea routes. Among excavated 2nd millennium BC shipwrecks, only Uluburun had a mixed cargo consisting of high-value raw materials (metal and glass ingots, ivory tusks etc.) and considerable quantities of containers with low-cost commodities; the other sunken vessels carried either only ceramics or cargos consisting primarily of metals (Fig. 1).[13] Uluburun is usually considered as a "royal cargo" and is associated with practices of gift exchange among rulers, such as those recorded in the Amarna tablets.[14] Trade in ceramics, on the other hand, was less centralised, more commercialised and much more widespread.[15] Exchanges in metals and raw materials among royal courts are recorded already in the Mari tablets, which date to the 19th and 18th centuries BC.[16] By contrast, ceramic trade by sea started only in the 17th century BC.[17] Although one should avoid drawing sharp lines between the two forms of exchange, it is clear that trade in ceramics and trade in precious materials are not to be equated. The latter was certainly much more closely controlled by ruling authorities.

13 See Sauvage 2012, 65–9 and 114, fig. 47; Papadimitriou 2017, 174–75 and fig. 12; Avilla 2018, 30–4.

14 Moran 1992. Gift-exchange is defined as a system of non-commercialised reciprocity, which does not make use of prices and equivalencies, see Zaccagnini 1987.

15 Sherratt 1999, 178–80.

16 Knapp 1996, 17–9 (entry by J. Sasson); Sørensen 2009, 14–7; for early metal trade via overland routes, see Larsen 2015.

17 Papadimitriou 2015, 430. For the earlier development of trade in "high-value, low-bulk raw materials", see Sherratt and Sherratt 1991, 358.

A. PERIOD OF MINOAN DOMINANCE IN THE AEGEAN (MM–LM/LH IIIA1)

Aegean ceramic exports to the Eastern Mediterranean prior to the period of the Mycenaean palaces were limited in number and economically rather insignificant. Based on published data, fewer than 80 vases (cups and jugs) dating to the Cretan Old Palace period (19th–18th centuries BC) have been identified in the East, among which only one or two were found in Cyprus.[18] In the New Palace period (late 18th/early 17th–early 15th centuries BC) more sites imported Aegean ceramics, but most have yielded only one to two examples.[19] The majority of imports were tableware, with only a few containers (Fig. 2a). In total, <50 Aegean vases of this period have been found in Cyprus, a tiny amount for a phase that lasted more than two centuries (Fig. 3). Cypriot ceramic exports to the Aegean at the same time were also sporadic (<50 vases in total).[20]

This does not mean that the Minoans did not interact with the Eastern Mediterranean. They certainly did, but probably at a higher economic or political level, focusing on materials which were under the control of ruling elites. The Mari tablets mention Cretan traders at Ugarit receiving tin from king Zimri-Lim in exchange for manufactured luxuries in the late 19th/early 18th century BC.[21] And at Malia Cypriot copper has been identified in levels of the Old Palace period.[22] In Neopalatial times, mostly in LM IB, oxhide ingots made of Cypriot ore were imported in several palaces and towns of Crete.[23] Ingots of similar type (pillow-shaped) have been found in the recently excavated shipwreck near Antalya, which is tentatively dated to the 16th–15th centuries BC.[24] The provenance of the ingots has not been identified yet, but the very location of the shipwreck suggests a cargo heading to the Aegean (Fig. 1).

It is possible that, together with raw copper, advanced metallurgical technologies came to the Aegean. As Lina Kassianidou has shown, at the beginning of the LBA bellows and bellow pipes were introduced in Cypriot metallurgy to increase the output of the air blasted in furnaces and thus to support the growing copper industry of the island;[25] numerous finds of that type have been uncovered in LC I contexts at Politiko *Phorades* and at Enkomi in Area III (the "Fortress"). In the Aegean, tubular bellow pipes of a type similar to the Cypriot ones have been found in small numbers at major Cretan harbours (Palaikastro, Poros, Kommos) and at sites with strong Minoan affinities (Ayia Irini, Thorikos, Koukonisi), in MM III–LM I contexts (Fig. 4).[26] Given that such equipment was otherwise uncommon in the Aegean of that period, it is possible that these finds were of Cypriot inspiration. Exchanges in technological know-how were not uncommon in the LBA. The so-called "Minoan" frescos found in several Eastern Mediterranean palaces indicate that skills and cutting-edge technologies were things to share among elites of the period.[27]

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18 For detailed discussion with quantitative data, see Papadimitriou 2012, 97–9; 2017, 163, fig. 4.

19 Papadimitriou 2012, 99–104 and tables 1–3; 2017, 163–65 and fig. 5; very few new finds have been added since then, e.g. Fischer 2019, 241–43 and fig. 10.

20 Cadogan 2005, 314–15; Papadimitriou 2012, 114 (for the Old Palace period), 116–17 (for the New Palace period); Karageorghis et al. 2014.

21 Sørensen 2009, 27–33, with full references.

22 Poursat and Loubet 2005.

23 Stos-Gale 2011, 223, table 22.1; Kassianidou 2014.

24 Öniz 2019a; 2019b.

25 Kassianidou 2011; 2013, 133–37.

26 *Palaikastro*: Evely 2012, 256–57, fig. 8.21, 275 no. 5897 and fig. 33. *Poros Katsambas*: Dimopoulou 1997, 434–35 and pls. CLXIXc, CLXXc. *Kommos*: Shaw and Shaw 2006, 729 nos. 81–2 and figs. 4.12–4.13. *Thorikos*: Papadimitriou 2020, 175–76, 206 cat. no. 29. *Ayia Irini, Kea*: Cummer and Schofield 1984, 39, 60–1 nos. 252, 272 and pl. 45; Georgiou 1986, 46, 50 no. 186 and table 22. *Koukonisi, Lemnos*: Boulotis 2009, 201–3 and fig. 23d.

27 Niemeier and Niemeier 1998, 93–6; Pfälzner 2013, 210–11; Steel 2013, 118–21; also Broodbank 2013, 375–76 (exchange of metal-working specialists); Peltenburg 2012, 8 (scribes); Liverani 2008, 163; 2014, 286 (specialists in general).

Fig. 2. The range of Aegean ceramic exports in the East (a) in the Minoan Neopalatial period, and (b) in the Mycenaean Palatial period; the most common forms of each period are highlighted in grey (diagram drawn by the author, based on Papadimitriou 2012, fig. 1a).

As to what the Minoans had to offer in exchange for the precious copper and its technology, there are two possible answers. One is metals, silver in particular. The New Palace period saw an intensification in the exploitation of the rich lead/silver mines of Laurion in Attica.[28] As we learn from the chronologically later Amarna tablets (14th century BC), silver was in high demand in Cyprus and was acquired in exchange for copper and other goods.[29] And since two silver ingots of possible Laurion origin have been found at 13th century BC Pyla *Kokkinokremos*,[30] it is possible to imagine Aegean silver being exchanged in the earlier period.

28 Stos-Gale and Macdonald 1991, 267–71.

29 Kassianidou 2009a.

30 Gale and Stos-Gale 1984, 97; Kassianidou 2009a, 50.

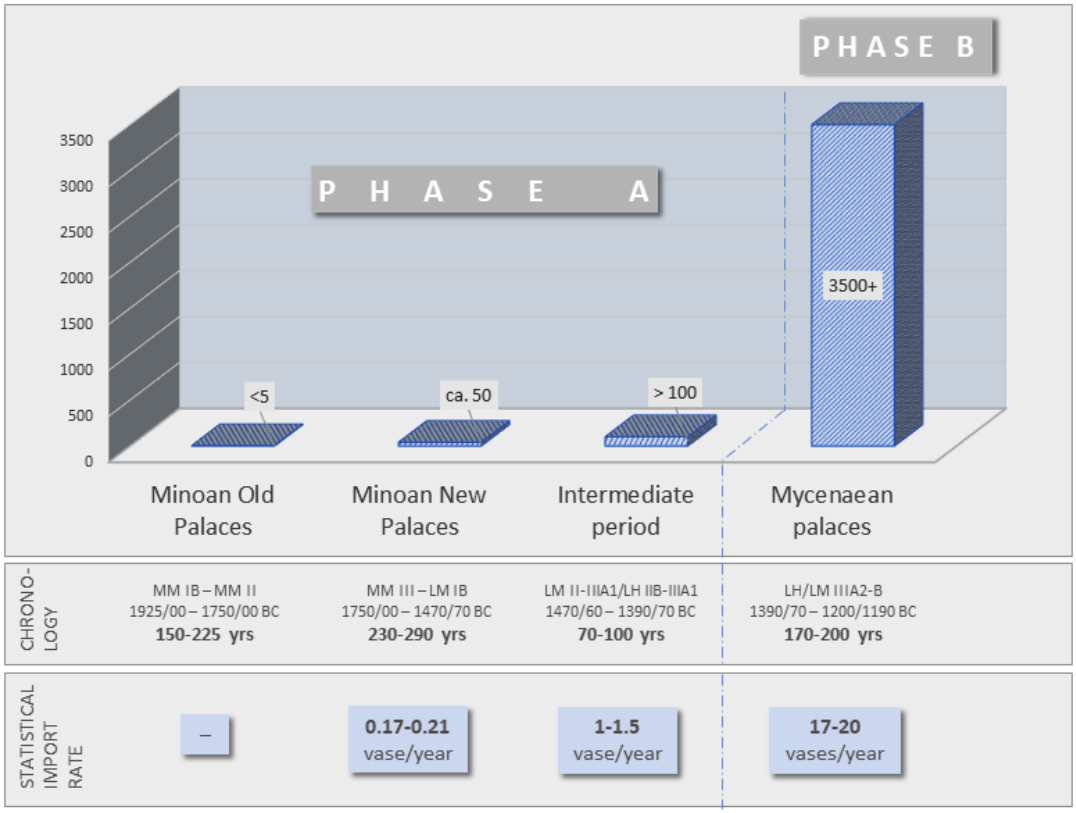

Fig. 3. Chart showing changes in the quantities of Aegean ceramic imports in Cyprus in the various phases and sub-phases of the 2nd millennium BC (upper part: actual numbers per period; middle part: chronology; lower part: statistical import rate per period).

The second thing that Minoans might have offered in exchange for copper is writing technology. Specialists agree that the Cypro-Minoan (CM) script derived from Linear A.[31] Given that there was no earlier scribal tradition in Cyprus, a direct transfer must have taken place at the beginning of the LBA, i.e. in LC I, when the earliest CM documents appeared.[32] This is also the time when Cypriot ingots started arriving in Minoan palaces. Given that the earliest CM tablet has been found in a metallurgical context at Enkomi,[33] a reciprocal link would not be impossible.[34] Enkomi has yielded abundant remains of copper smelting and copper working in LC I (including bellow pipes),[35] as well as the greatest numbers of oxhide ingots and CM documents in Cyprus.[36] It is therefore the most likely candidate for exporting oxhide ingots to Crete and for being the place where the new script was first adopted. The recent discovery of a possible CM sign on a clay loom-weight of MM III/LM I date at a site near Rethymnon may throw some fresh light on the process of script transfer.[37]

The collapse of the Minoan economy at the end of LM IB affected the commercial networks of the Aegean and caused unrest, which took time to settle. Crete remained the focus of attention in LM II–IIIA1, with Knossos as the main centre, but gradually other Aegean stakeholders gained access to Mediterranean sea-routes. Cypriot copper continued to be traded through the Aegean, as suggested by the oxhide ingots found

31 Ferrara 2012, 44–6 and table 2.1; Steele 2019, 35–9.
32 Steele 2019, 6.
33 Ferrara 2012, 50–6; Steele 2019, 11–2.
34 Cf. Cadogan 2005, 316; Sørensen 2008, 160.
35 Kassianidou 2012.
36 For ingots, see Kassianidou 2009b. For CM documents, see Ferrara 2012, 19–22.
37 Tzigounaki and Karnava 2020, 324–25 cat. no. 6.

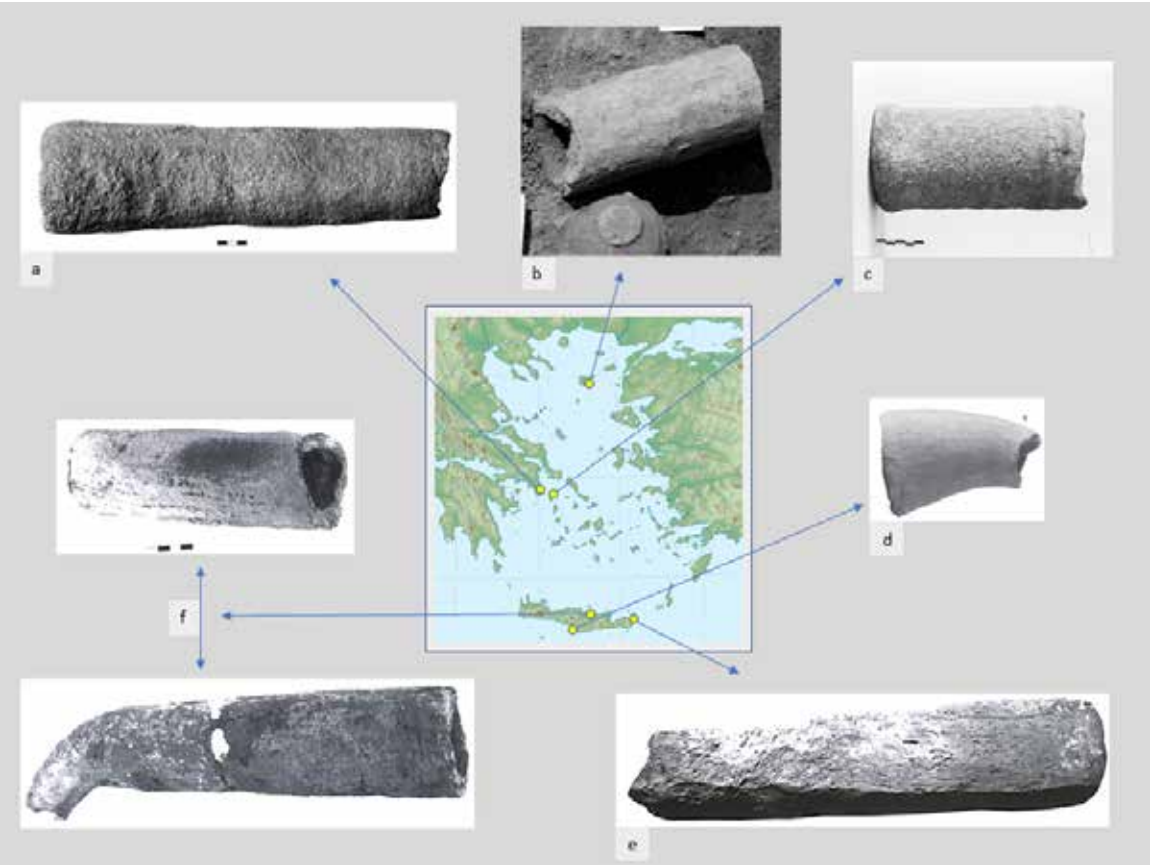

Fig. 4. Ceramic bellow pipes from Neopalatial contexts in the Aegean (a) Thorikos, Attica, (b) Koukonisi, Lemnos, (c) Ayia Irini, Kea, (d) Kommos, Crete, (e) Palaikastro, Crete, (f) Poros Katsambas, Crete (photos courtesy of (a) the National Archaeological Museum, Athens, Papadimitriou 2020, fig. 38a; (b) the Athens Academy, Boulotis 2009, fig. 23d; (c) the Department of Classics, University of Cincinnati, Georgiou 1986, pl. 22 no. 186; (d) Kommos excavations, University of Toronto, photograph by Taylor Dabney, Shaw and Shaw 2006, pl. 4.12; (e) The British School at Athens, Evely 2012, pl. 33 no. 5897; (f) Herakleion Archaeological Museum – Hellenic Ministry of Culture and Sports – Hellenic Organization of Cultural Resources Development, Dimopoulou 1997, pls. CLXIX:c, CLXXX:c).

near Cyme (Euboea) and in various sites of the Eastern Balkans, which are typologically dated to the 15th and early 14th centuries BC.[38] Ceramic exchanges, on the other hand, remained limited. Aegean imports in Cyprus increased a little (a few more than 100 vases from ca 15 sites are known for a period of almost a century) (Fig. 3: Intermediate period) but now, for the first time, containers slightly outnumbered tableware.[39] Cypriot ceramic imports in the Aegean are very few in that period (ca 20 vases) and have been found mostly in Crete.[40]

B. PERIOD OF MYCENAEAN DOMINANCE IN THE AEGEAN (LH IIIA2–B)

Major changes took place after the establishment of palatial states in Mainland Greece. Exchanges in metals and other precious materials continued uninterrupted, to judge at least from the number of Egyptian, Levantine and Near Eastern luxuries in Mycenaean palaces,[41] the Cypriot ingots found in Mainland Greece and the East

38 For Cyme, see Mangou and Ioannou 2000, 208, with earlier references. For the Eastern Balkans, see Athanassov et al. 2020, 319–22.

39 Papadimitriou 2012, 105–6.

40 Papadimitriou 2012, 118.

41 Cline 1994, tables 4–18.

Balkans,[42] the Uluburun shipwreck (which probably followed a westward route),[43] and the metal artefacts or ingots of possible Aegean origin found in the Eastern Mediterranean.[44] But now the Aegean participated also in low-cost trade. At least 7,000 vases of LH IIIA2–B date from all over the Eastern Mediterranean have been identified as Aegean exports,[45] more than half of which come from Cyprus (from 70+ sites). Although some of them may have actually been produced in Cyprus (where Mycenaean-style pottery was manufactured in the 13th century BC),[46] the majority are certainly of Aegean origin,[47] with the actual figure exceeding 3,500 vases for a period of almost two centuries. The change is best expressed in statistical terms (Fig. 3): while in previous phases Aegean vases reached Cyprus at a rate of 0.2–1.4 per year, in Phase B the figure rose to at least 17–20 vases per year. A similar rise in the quantities of Mycenaean ceramics is attested in the Levant and Egypt.[48]

This reflects a radical shift in Aegean approaches to low-cost trade. Unlike the Minoans, who exported mostly tableware, the Mycenaeans specialised in the production of containers for liquids (Fig. 2b). More than 60% of Mycenaean ceramic imports in Cyprus and the Levant and more than 90% in Egypt were small stirrup jars and flasks for wine and perfumed oils.[49] Such goods had been circulating in the Eastern Mediterranean in Cypriot, Levantine and Egyptian pots since the end of the MBA.[50] Consequently, the mass production of ceramic containers in Greece from LH IIIA onwards should probably be seen as an attempt to adapt to the demands of an international trade in low-cost commodities.[51] Related to this effort may have been the well-known specialisation of the Mycenaean palatial economy in the production of wine and perfumed oil.[52]

That the Mycenaeans made conscious efforts to address the needs of an Eastern Mediterranean clientele (and probably to fill gaps in the market) is clearly indicated by the case of pictorial kraters. Such kraters are found mostly overseas and are thought to have been made in the northeast Peloponnese specifically for export to Cyprus and the Levant.[53]

Cypriot ceramic trade did not respond in the same way. Fewer than 100 Cypriot vases of this period are known from Aegean sites, and ca 200 vases from shipwrecks.[54] One may thus wonder whether part of the huge output of Aegean packed goods sent to Cyprus was exchanged for precious materials. This is not impossible but cannot have been a standard practice.[55] Copper and other raw materials must have been exchanged for goods of similar value. Again, Laurion silver is a possibility, but one should also consider the case of gold, since numerous Cypriot ingots have been found in the gold-rich region of the Eastern Balkans.[56]

To understand better the nature and intensity of economic/political relations between Mycenaean Greece and Cyprus, we should briefly examine Aegean trade with other parts of the Eastern Mediterranean and make comparisons with Cyprus.

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42 See Kaiser 2013, 25; Athanassov et al. 2020, 319–22.
43 Pulak 2008.
44 See Papadimitriou 2017, 171–72 with references.
45 van Wijngaarden 2002; Steel 2013, 130–35.
46 E.g. Artzy and Zagorski 2012; Steel 2013, 136–38.
47 van Wijngaarden 2002, 131–32 with references to earlier archaeometric analyses; Cadogan 2005, 317–18; Zuckerman et al. 2010. For recent finds from Hala Sultan Tekke, see Fischer and Bürge 2018, 250–54.
48 For Egypt, see Judas 2010. For the Levant, see Leonard 1994; van Wijngaarden 2002.
49 Papadimitriou 2012, 106–9; 2015, 431–36.
50 Maguire 2009, 50–62.
51 Cf. Sherratt 1999, 177 n. 34; Steel 2013, 131–135.
52 Shelmerdine 1985; Palmer 1994.
53 Sherratt 1999, 187–88; Steel 2013, 135–36; for pictorial kraters in general, see Vermeule and Krageorghis 1982.
54 Papadimitriou 2012, 119–20.
55 At Ugarit some documents describe the exchange of perfumed oil with lead ingots, Fappas 2012, 161–62, 171.
56 For Laurion silver, see above nos. 28–30, 44. For Balkan gold, Athanassov et al. 2020, 341.

1. Egypt: It has been observed that the repertoire of Aegean ceramic imports in Egypt differed from that of the Levant and Cyprus in that it consisted almost exclusively of closed shapes.[57] Moreover, while in Cyprus and the Levant many Aegean vases were marked with CM symbols (a practice indicating the active role of Cypriot middlemen in the circulation of Aegean pottery), in Egypt very few vases had such markings.[58] This suggests that Aegean ceramic trade with Egypt was conducted independently of, Cypriot or Levantine merchants.[59]

2. Levant: Aegean exports in the Levant were fewer than in Cyprus and had a more restricted repertoire.[60] Within the Levant, there were variations in distribution, which may reflect different mechanisms of exchange. For example, Aegean vases were much more widely spread in Lebanon and Palestine (with the ports of Sarepta and Tell Abu-Hawam functioning as major distribution points) than in Syria (where they were mostly concentrated at Ugarit).[61] In addition, Cypriot pot-marks were far more common in Syria than in Palestine.[62] This may suggest that Aegean ceramic trade with Syria (focusing mainly on Ugarit) was actively mediated by Cypriot merchants. In contrast, it is possible that the southern Levant enjoyed unmediated contacts with the Aegean: analysis of Aegean transport stirrup jars from Tell Abu Hawam has shown their provenance to be south-central Crete,[63] while similar analysis of Canaanite jars from Kommos has shown that several of them derived from the area of Haifa;[64] this is a pattern that may suggest quasi-direct exchanges between the two areas. [65]

Here we need to consider a number of epigraphic facts, which may help us to illuminate the relations between the Aegean and the Levant in this period. These facts are:

– that the vast archives of cosmopolitan Ugarit make no mention of Aegean merchants trading in the city (which Singer considers to be not accidental but due to the fact that trade with the Aegean was in the hands of Syrian and Cypriot merchants),[66]

– that the same archives attest to very close trade relations between Cyprus and Ugarit[67] and contain several tablets inscribed with CM texts;[68]

– that the Linear B tablets of Mycenaean Greece have no ethnic names which can be certainly associated with the northern Levant,[69]

– that the late 13th century BC treaty between the Hittite king Tudhaliya IV and the King of Amurru mentions explicitly that Ahhiyawan ships were prohibited from approaching Syrian ports,[70]

– that a late 13th century BC letter from the House of Urtenu at Ugarit mentions an Aegean (Hiyawa) merchant who is stationed at Lukka (Lycia?), waiting for copper ingots to be sent to him.[71]

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57 Papadimitriou 2012, 106–7, 123–24. The same is true for the (chronologically earlier) Cypriot imports in Egypt, the vast majority of which are closed shapes, see Merrillees 1968.

58 Hirschfeld 1999, 211–13.

59 The active role of Cypriot merchants is also documented in Ugaritic texts, see Malbran-Labat 1999.

60 Gilmour 1992, 121–25; van Wijngaarden 2002, 31–2; Papadimitriou 2012, 107–9.

61 van Wijngaarden 2002, 312 map 6. For Sarepta, Bell 2006, 52–6. For Tell Abu Hawam, Ben Shlomo et al. 2011, 348.

62 Hirschfeld 1990, 16, table 2, 18–22; Bell 2006, 59.

63 Ben Shlomo et al. 2011.

64 Day et al. 2011, 549, fig. 11, 553–54.

65 Although ceramics from the Peloponnese also reached major ports of the southern Levant, see Zuckerman et al. 2010.

66 Singer 1999, 675–76.

67 Bell 2006, 65–7.

68 Yon 2007.

69 While there are ethnics associated with Cyprus, Egypt and with areas in western Anatolia and perhaps in Palestine, see Palaima 1991, 279–81; Yasur-Landau 2010, 39–42.

70 Beckman et al. 2011, 50–68, 279–80.

71 Singer 2006, 250–58.

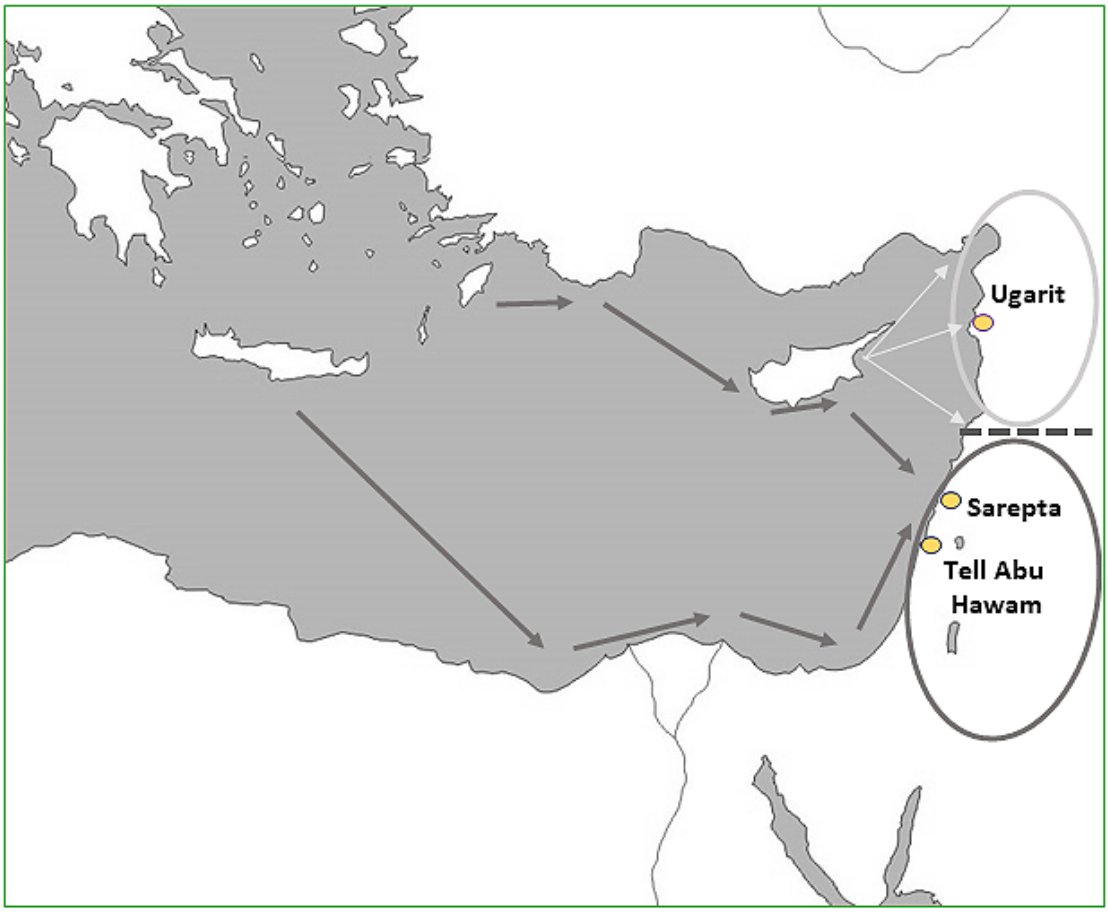

Fig. 5. Suggested routes of Mycenaean trade in the Eastern Mediterranean (a) (dark grey) direct routes towards Cyprus, Egypt and Palestine, (b) (light grey) spread of Mycenaean products in Syria via Cyprus. The ovals indicate the spheres of control: Hittite (light grey) and Egyptian (dark grey). Dots mark the three sites with the largest number of Aegean imports in the Levant (map drawn by the author).

If we examine these facts together with the ceramic evidence, we may plausibly assume that at least in the mid-13th century, Syria was largely inaccessible to Aegean traders, and contacts with Ugarit and neighbouring areas were mediated by Cypriots.[72] In contrast, Lebanon and Palestine were much more easily approached, probably via the Egyptian coast (Fig. 5).

This pattern may reflect the international conditions of the late 14th and 13th centuries BC, when the Levantine coast was divided into a Hittite sphere of control (comprising modern Syria) and an Egyptian sphere (from Lebanon to the Nile Delta).[73] The Mycenaeans seem to have been excluded from the Hittite sphere (for reasons unknown), while they were welcome in the lands controlled by Egypt. Cyprus held a peculiar position: its trade relations with Egypt declined in the late 14th, and with the southern Levant (also controlled by Egypt) in the 13th century BC, possibly due to the Egypto-Hittite conflict.[74] But the island remained open to Mycenaean products and transported them to Syria. This suggests that Cyprus had close relations with the Hittites but retained its independence and ability to interact with the Aegean.

72 Cf. Bell 2006, 90–1.

73 Liverani 2014, 337–41 and 336, fig. 19.5.

74 For Egypt, see Merrillees 1968, 190, 202; Eriksson 2007, 32–3. For the southern Levant, see Gittlen 1981, 51–2; Bergoffen 1989, 288–89, 313–14.

Such a scenario outlines the complexities of international trade and suggests that Cyprus played a twin role for the Mycenaean export economy: as a primary market and as a gateway to lands farther east. At the same time, the large number of Cypriot copper ingots directed toward the Aegean and the Balkans (including those in the Uluburun ship, which probably travelled westwards) suggest that the wider area of the Aegean was also crucial for the well-being of the Cypriot export economy.

Cypro-Aegean interaction was intense in the later part of the LBA and relied on a sophisticated infrastructure, which was probably provided –at least partly– by state-controlled systems of production (of copper in Cyprus, of oil, wine and probably of metals in Mycenaean Greece). Once this infrastructure collapsed, at the end of the 13th century BC, the system could no longer operate.

In the centuries that followed the collapse of the Mycenaean states ca 1200 BC, exchanges continued but they were diminished, decentralised and focused mostly on trinkets.[75] There is no secure evidence for bronze ingots or Cypriot amphoras arriving in the Aegean after LH IIIC *early*. With no organised states, large-scale exchanges were no longer possible. Perhaps for this reason, the Cypriot metal trade sought new markets in Sicily and Sardinia in the 12th century BC. From an economic point of view, maritime exchanges played a very small part in the 12th century BC Aegean, and this continued to be the case for two more centuries. Irrespective of a possible Mycenaean migration to the East, the "special" relationship that had developed between Cyprus and the Aegean in the late 14th and 13th centuries BC would not revive until much later in the 1st millennium BC.

75 For a detailed account, see Murray 2017, ch. 2.

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Cypro-Minoan abroad, Cypriots abroad?

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ABSTRACT

This article analyses the Cypro-Minoan (CM) inscriptions found at Tiryns, evaluating whether they demonstrate the presence of the CM scriptworld, i.e., Cyprus-trained writers and their institutions, at Tiryns. The small number of CM inscriptions from Tiryns belies their import for understanding the Cypriot presence at Tiryns. This article develops a methodology for revealing the people behind the inscriptions and their networks by drawing on two theoretical concepts. The first is the concept of scriptworld, which shows how a script's use is bound to institutions. The second is the theory of diplomatics, which treats the material features of a document as indicative of their institutional production. A diplomatics analysis of the Tirynthian inscriptions shows that even the locally produced examples belong to the CM scriptworld of Cyprus. The people who wrote the documents at Tiryns may or may not have been ethnically "Cypriot", but they certainly had mastered the CM scriptworld and had established its institutions at Tiryns.

The transmission of a script from one milieu to another requires more than just the teaching of sign forms. It involves the transmission of what Damrosch calls a "scriptworld". A "scriptworld" comprises not only the script itself but also the materials, genres, languages and institutions associated with that script.[1] A clear example of this can be seen in the cuneiform script and what Near Eastern scholars call "cuneiform culture".[2] The syllabic cuneiform script, which was developed in Sumer in the 3rd millennium, eventually spread from modern-day Iraq through Anatolia and persisted for three millennia. During that time, the script was adapted to write numerous languages – Akkadian, Hittite, Luwian, Hurrian, Hattic, Canaanite, to name a few. In each new place and time period people made changes to the script but the writing medium (clay and wax tablets), genres (mythology, etc.) and milieus (elite administration) in which the script was used as well as its method of instruction (scribal schools) marched in lockstep along with the spread of the script itself. When cuneiform came to Hatti along with it came Gilgamesh and instructions for forming clay tablets, writing lexical lists and forming scribal schools.

Two pressing questions surround the development and spread of CM, the undeciphered Late Bronze Age (LBA) script of the island of Cyprus; first, whether it belongs to the Aegean, cuneiform or some other scriptworld, and second, whether the CM inscriptions found outside of Cyprus participate in the CM scriptworld. This paper focuses on the latter question but will briefly address the former. While the people who wrote CM seem to have adopted sign forms from Linear A (see Fig. 1), they did not adopt from their Cretan counterparts the main writing media used in Linear A, its clay administrative tablets or libation vessels. They may have adopted some elements of the Linear A scriptworld, such as the habit of inscribing pithoi, but the overall scriptworld of CM

1 Damrosch 2007, 200.

2 See, for instance, Radner and Robson 2012. For a critique of the concept, see Boyes 2021, 85–7.

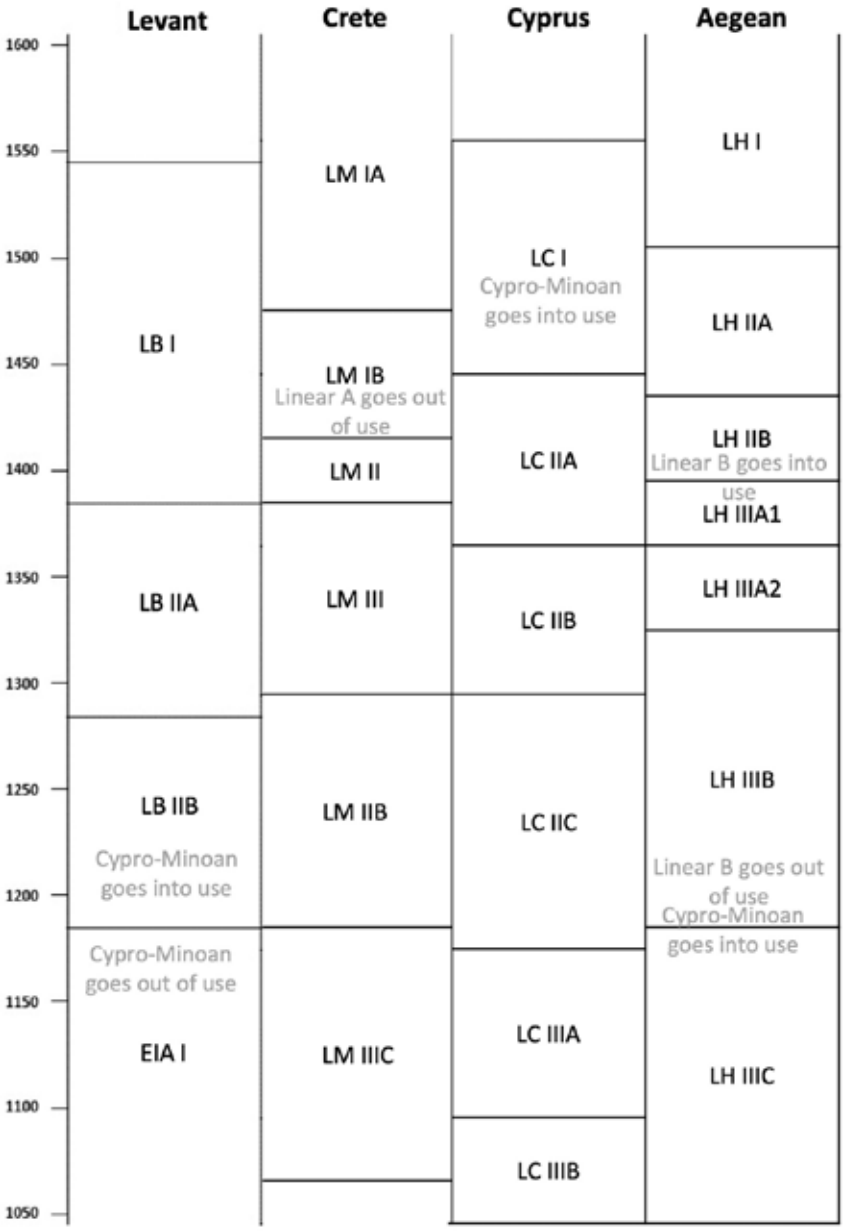

Fig. 1. Comparative chronological chart showing the use of CM and related scripts in the LBA Eastern Mediterranean. Adapted from Hesse 2008, 3, fig. 1.1.

differs considerably from Linear A's. Similarly, CM exhibits some influence from cuneiform culture in the Enkomi tablets, but otherwise differs significantly from it.

The discovery of the Enkomi tablets in the early 1950s initiated a discourse about the "cuneiformisation" of CM, a term Palaima used to describe the comparison Masson and others have made between the impressed (as opposed to drawn) quality of CM signs on the Enkomi tablets and cuneiform.[3] In recent years, the discourse has turned away from the language of "cuneiformisation" to "hybridization" as a way to emphasise Cypriot agency

3 See Palaima 1989, 155 for a review of the early literature comparing CM to cuneiform.

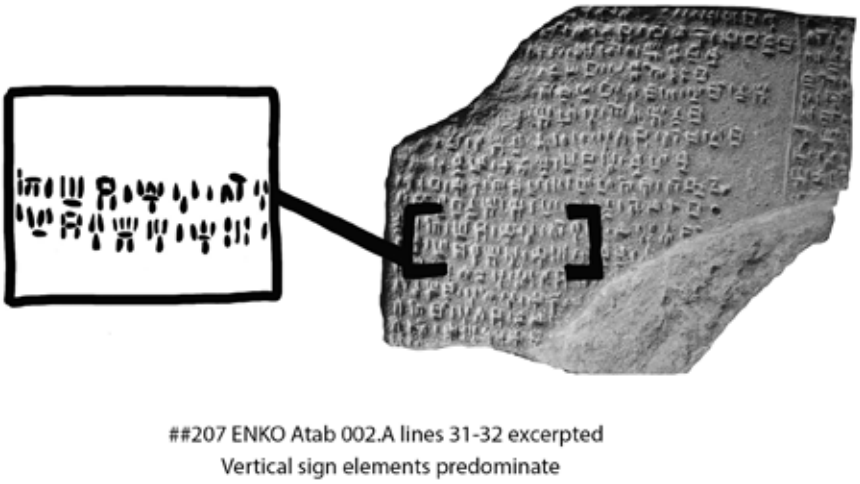

Fig. 2. Drawing of excerpted sign forms from Enkomi tablet ##207 ENKO Abou 002 and photograph of the same tablet (by the author). I thank the Cyprus Museum and the Department of Antiquities, Cyprus, for permission to publish my photograph and drawing.

in the adoption of the impressed style of writing seen on the Enkomi tablets and some other media.[4] Both terms, however, mask the superficial nature of the resemblance to cuneiform. The method and accoutrements for impressing the CM tablets are different than for cuneiform. To write cuneiform, the stylus works mainly along the horizontal axis. According to some reconstructions, vertical sign elements, as well as horizontal ones, are made with the stylus held along the horizontal axis, by rotating the stylus within the fingers to change the direction at which the stylus edge impresses the clay surface. Other reconstructions suggest that the wrist turns along the vertical axis to draw vertical sign elements.[5] In either scenario, the main writing axis is the horizontal one. Autopsy of the Enkomi tablets suggests that the main axis is the vertical axis, with horizontal sign elements being less frequent than vertical ones (see Fig. 2). To this can be added other differences such as the stylus shape (round-tipped vs. square- or triangular-tipped[6]), tablet shapes (rectangular vs. pillow) and the relative rarity of the tablet medium on Cyprus (only seven examples).[7] The resemblance to cuneiform is only visual.[8] The resemblance could mean that the writers of CM were inspired by or responding to the aesthetics of cuneiform, but the superficiality of the resemblance means that the Enkomi tablet writing tradition did not *come through* the cuneiform one. Even as regards the Enkomi tablets, the CM scriptworld is distinctive from cuneiform culture's scriptworld.

4 For hybridisation, see Ferrara 2012, 202, 278.

5 See Ellison 2015 for a step-by-step reconstruction of how the stylus would be held to inscribe cuneiform tablets based on the styluses found at the site of Ugarit.

6 For the use of square styluses at Ugarit, see Ellison 2015, 168. Triangular-tipped reed styluses were thought to be used in Mesopotamian contexts. Round-tipped styluses were found in Hittite contexts, but they were likely not used to write cuneiform. They were either used for drawing on waxed writing boards or writing on them in Luwian Hieroglyphs, though the latter claim is much debated. For an overview, see Cammarosano and Lippolis 2014.

7 Ferrara (2012, 192–95) has argued that two of the tablets, which were originally published separately, belong to the same tablet, ##207 and ##207bis. This count includes the two tablets from Pyla *Kokkinokremos* discovered in 2010–2011 that await publication and a tablet fragment from Galinoporni in the Turkish occupied north of Cyprus.

8 Ferrara 2012, 202. See Steele 2019, who goes so far as to say the Cypriots "shunned" cuneiform in their decision to adopt a linear script and continue to use it, especially when it is clear that Cypriots knew of, and engaged with, cuneiform culture.

The most popular CM writing media, such as the clay balls, inscribed vessels (excluding the pithoi) or the roundels, do not have significant corollaries either in the Aegean or cuneiform scriptworld. If a "scriptworld" comprises the materials, genres, languages and institutions associated with that script, as Damrosch has proposed, then a material analysis of the inscriptions themselves can provide us with a means to assess whether a CM inscription found abroad "belongs" in the CM tradition. Given the undeciphered state of CM, we cannot know the language underlying the script nor its genres. But, according to diplomatics, the material features of a document are indicative of its "form" regardless of a document's content. The material features of a document form, be it a letter, contract etc., result from the socio-historical circumstances of the humans who created the text for its intended readers and the institutions that mediated the relationships between writer and intended reader.[9] The material features of a document are indicative of its scriptworld. The material features include the writing medium, its size and shape, the preparation and formatting of the writing surface and the external features of the script itself such as sign shape, inscription method and punctuation.[10] Using a diplomatic analysis, we can therefore ask whether the inscriptions found abroad merely borrow the CM script or if they fit within the scriptworld, i.e., whether their material features fit the document forms attested on Cyprus. A concept of "scriptworld" focuses attention on the writers and institutions responsible for the production and maintenance of the script, not just the script itself.

This paper takes as its case study the inscriptions from Tiryns and asks whether the persons responsible for these inscriptions were active participants in the CM scriptworld. Tiryns has produced three recognised CM inscriptions. Tiryns has the second most CM inscriptions outside of Cyprus, behind Ras Shamra, Ugarit (see Fig. 1 for the spread of the script to Ugarit). Despite the small number of Tyrinthian inscriptions, the evidence suggests that the inscriptions were made locally by people trained in the CM scriptworld. It is therefore likely that the institutions responsible for the production of CM documents were present at Tiryns. Here, I use the term institution in the broadest sense possible to refer to formal or informal associations of persons responsible for transmitting the knowledge necessary to produce, write and interpret a given document form.

The material features of the three Tirynthian inscriptions fit the equivalent document forms attested on Cyprus. One of the inscriptions also carries a sign-sequence that circulated relatively widely in Cyprus, demonstrating a strong link between Tiryns and the island. In addition to the three inscriptions, there are around 50 potmarks, single sign marks with and without equivalents in the CM script incised or painted on vessels. As Hirschfeld has argued, the potmarks constitute a "Cypriot" practice, but one that was practiced locally at Tiryns.[11] There is also archaeological evidence in favour of arguing for a Cypriot presence in post-palatial Tiryns.[12] The cumulative picture suggests that the CM scriptworld was present at Tiryns, that it had replicated its institutions at the site and that it was integrated into the scriptworld on Cyprus.

THE INSCRIPTIONS

The site of Tiryns has produced three CM inscriptions. For the sake of this discussion, the term "inscription" refers to the documents that have been included in, or proposed for inclusion in, the official lists of CM inscriptions established by Olivier (*HoChyMin*) and Ferrara (*CM* II). Both Ferrara and Olivier adhere to the common definition of inscription used in Aegean scripts, two or more contiguous signs written on the same plane and of the same approximate height.[13] This definition is problematic in the case of CM. There are hundreds

9 See Duranti 1998.
10 Duranti 1991, 10.
11 Hirschfeld 1999, 53.
12 Vetters 2011, 53.
13 Olivier 2007, 16; Ferrara 2012, 18; 2013, 4.

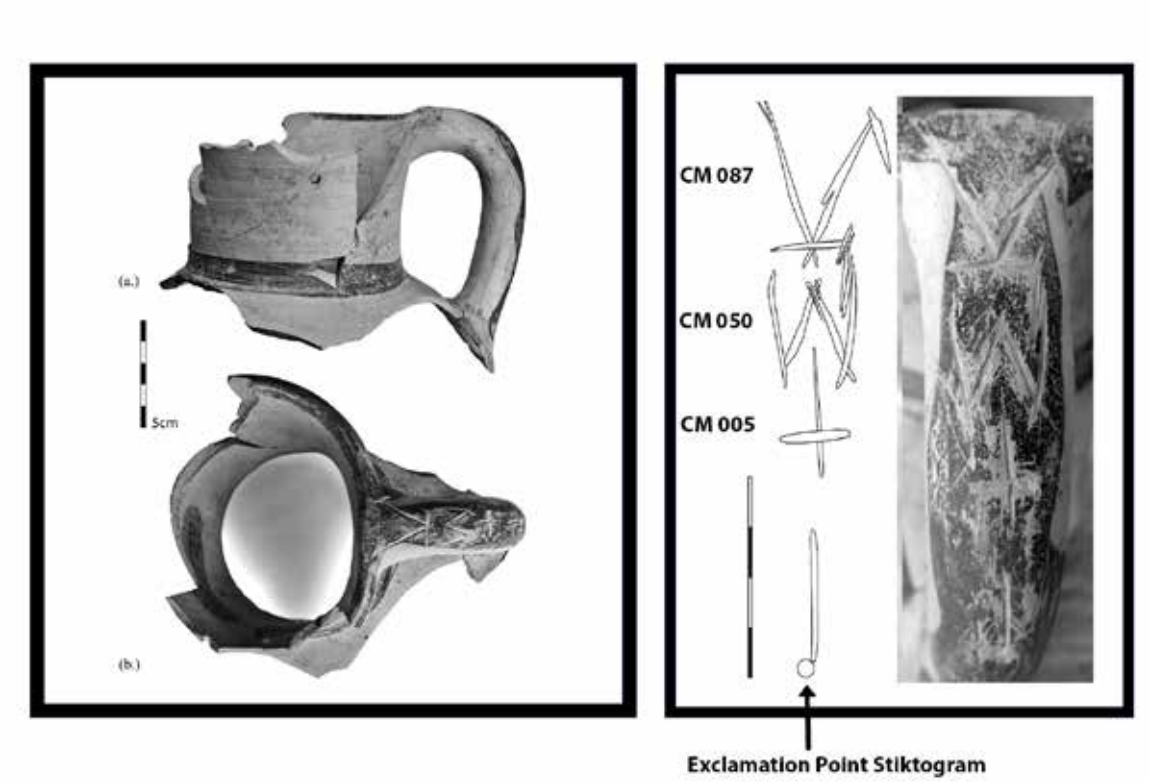

Fig. 3. Left: Photograph of ADD##246 by M. Kostoula in Davis et al. 2014, fig. 7; Right: Photograph and drawing of ADD##246 by B. Davis in Davis et al. 2014, fig. 8. I thank M. Kostoula, B. Davis and the DAI team for permission to republish these images.

of objects marked with single CM signs –many of them potmarks– that could be considered writing.[14] Until the status of the single-sign objects as writing is resolved, however, I will restrict the conversation here to the three texts considered definite examples of writing, clay ball ##244 TIRY Abou 001, an incised local jug handle ADD##246 TIRY Avas 002, and an incised Maritime Transport Container (MTC, also referred to as Canaanite jars) ADD##245 TIRY Avas 001. Two of the three Tirynthian inscriptions are published in full. Clay ball ADD##244 was published in 2011 by its excavator Vetters and is listed as an addendum to Ferrara's 2013 list of CM inscriptions. The local jug handle AD##246 was published by Davis et al. in 2014 and the MTC amphora handle ADD##245 is awaiting republication by Davis. As it awaits republication, I will limit my discussion of it to its general features.[15] The clay ball and the jug inscription were likely made locally. Though neither has undergone petrographic analysis, macroscopic analysis indicates that their clay fabrics match the characteristics of local Tirynthian clays, not clays from Cyprus. The local production of clay ball ADD##244 is further assured by the fact that it was inscribed when the clay was wet. The third inscription, the MTC ADD##245, could have been inscribed almost anywhere. The jar type suggests production in the Levant or southern Cyprus and the after-firing application of the inscription means that it could have been made at any point after the vessel's firing.

The inscribed local jug handle ADD##246 TIRY Avas 002 is a product of the CM scriptworld as its material features match the vessel handle document form seen in Cyprus (see Fig. 3). The jug, made from local Tirynthian clay, has a four-sign after-firing inscription running vertically down the spine of the handle. The inscription reads 87-50-5-!.[16] The inscription's sign sequence is not repeated elsewhere.[17] The vessel type and the

14 See Steele 2017, 157 for a critique of the distinction between multi-sign and single-sign potmarks.

15 See Olivier 1988, 255–56, 258, fig. 2 no. 13 and Hirschfeld 1999, 72, for the first mentions of the MTC handle.

16 Davis et al. 2014, 96.

17 The reading of the sign sequence is not in doubt. What is in doubt is whether CM 50 is a variant of other signs, including CM 051 (Valério 2016, 126) and CM 053-055, a tentative proposal made by Davis himself in 2011, 58. If CM 050 is a variant of CM 053-

Fig. 4. Photograph and drawing of ##013 ENKO Abou 012 showing an example of the exclamation point stiktogram (by the author). I thank the Cyprus Museum and the Department of Antiquities, Cyprus, for permission to publish my photograph and drawing.

method and placement of the inscription on ADD##246 all conform to the document form of inscribed vessel handles from Cyprus. There are 44 incised handles listed in *HoChyMin* and *CM* II. Inscriptions on vessel handles occur almost exclusively on Cypriot Plain ware jugs and MTCs. All except two handle inscriptions appear to be after-firing (as opposed to made before firing when the vessel was wet or in the drying stage before firing, sometimes referred to as "leather hard"). They are all incised into the clay with a sharp tool or file. Handle inscriptions follow one of two formats: vertical and horizontal. "Horizontal" and "vertical" in this context refer to the direction of the inscription when the vessel is upright. Vertical inscriptions begin at the top of handle, slightly back from where the handle attaches to the vessel. Signs go from the top of the handle and continue down along the handle spine one sign after the other.

Tiryns handle ADD##246 TIRY Avas 002 matches the material features exhibited in the inscribed vessel handles from Cyprus in its vessel type, inscription method and formatting. The inscription is on a local FS 105 jug, dated to Late Helladic (LH) IIIB2, incised post-firing by a file or sharp tool, and is vertically disposed, beginning at the handle curve and running vertically down the handle's spine. Only one feature of the handle is unique for the document form but is seen in a small number of other inscriptions from Cyprus. The last sign on the handle is not a syllabogram, but a stiktogram.[18] This is the only vessel inscription that ends in a stiktogram. It is also the only handle inscription that uses this particular stiktogram,[19] which I will call the "exclamation mark stiktogram" due to its resemblance to an exclamation mark. Both the exclamation point stiktogram and the presence of a stiktogram in word-final position are unique to the vessel document form, but occasionally present on other CM document forms. There are two examples of ball inscriptions whose final signs are stiktograms, ##003 ENKO Abou 002 and ##006 ENKO Abou 005. Both balls use the same exclamation point stiktogram seen on the Tiryns vessel (see Fig. 4). Exclamation point stiktograms are not very common in CM. They appear on a total of eight documents, five balls (including the one just mentioned), two tablets and the

055, then the first two signs of the Tiryns pot handle are attested on a seal from Hala Sultan Tekke ##201 HALA Psce 001, which reads ·-87-53. A tablet from Ras Shamra, ##216 Atab 004.B.15, contains a four-sign sequence that ends 87-51. Lastly, a tablet from Enkomi, ##208 Atab 003.A.12, has a four-sign sequence that reads 87-51-09-82. There is likely to be little significance between the two-sign partial matches in the tablets, since tablet sequences are rarely matches for the sequences on vessels. More consequential could be the match for the sequence on the Hala Sultan Tekke seal if CM 053 is proven to be a variant of CM 050. At this point in time, there is no conclusive evidence the two signs are variants of one another beyond the observation made by Davis that CM 050-055 seem to derive from the same sign Linear AB 80 or Linear B "ma".

18 The term stiktogram was coined by Olivier (2007, 426) as a neutral term to describe signs without any apparent phonetic or numeric function, such as a form of punctuation. The term is especially useful in cases such as this, where the function of the sign in question is not clear from its contexts.

19 Davis et al. 2014, 99.

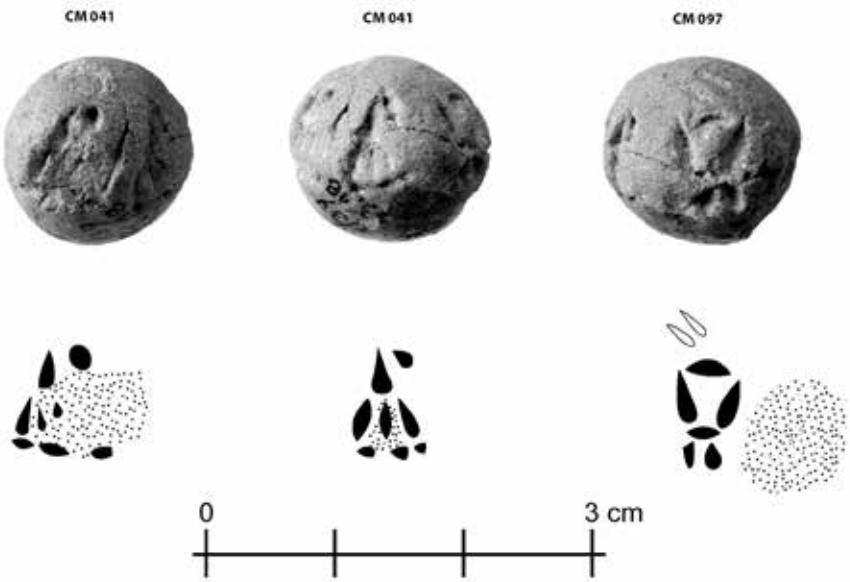

Fig. 5. Photograph and drawing of ADD##244 by M. Vetters in Vetters 2011, fig. 3. I thank M. Vetters for permission to republish this photograph and drawing.

Tiryns handle. Despite their relatively infrequent attestation, they are geographically widespread, appearing at Enkomi, Tiryns and Ras Shamra (##212 RASH Atab 001, ##214 RASH Atab 003).[20] Their geographic spread indicates that they are a firmly rooted, if infrequent, component of the script. Given that the material features of Tiryns handle ##ADD 246 match the Cypriot document form, the idiosyncratic final-sign stiktogram and its exclamation point form actually situate it more firmly in the CM scriptworld. Whoever made the inscription was well-versed enough in the script to apply a relatively rare stiktogram in a rare word position to the vessel document form, a form on which it is otherwise absent.

Tiryns clay ball ADD#244 TIRY Abou 001, like the jug handle, fits a known document type from Cyprus (see Fig. 5). In its size, inscription formatting and method of inscription, the Tiryns ball is a match for the Cypriot balls. Furthermore, its sign sequence is attested at two sites on Cyprus. There are 92 clay ball inscriptions (including the Tiryns ball), all but five of which come from Enkomi. Ball inscriptions are relatively uniform in their shape and size, ranging from 1.7–2.2 cm. All were inscribed before firing into wet clay. Their method of inscription shows some variability. Some inscriptions were impressed, other drawn and others a combination of impressed and drawn.[21] Most, if not all of the balls, were inscribed using a round-tipped stylus.[22] The inscriptions were all placed horizontally across the widest part of the ball. They contain on average four signs. The balls are made from fine, levigated clay. It is unclear whether the balls were intentionally fired, although the lack of evidence for in situ conflagration in most of their findspots may indicate that they were indeed intentionally fired. Only half of the clay balls come from stratified contexts. The majority date to the Late Cypriot (LC) IIIA or IIIB period, equivalent to the post-palatial period on the mainland (see Fig. 1). Their archaeological contexts

20 Davis incorrectly claims that the exclamation point stiktogram "has only been attested at Ugarit" (Davis et al. 2014, 99). The error seems to derive from Olivier's list of stiktograms (Olivier 2007, 426), which does not include the exclamation point stiktogram in its list of skitograms from Cyprus, HoChyMin, 426. For further discussion of the exclamation point stiktogram, see Donnelly 2020, 97–8.

21 Smith 2003, 278. Smith uses the term "punched" to describe the impression of the stylus into wet clay. I prefer to the term "impressed" to "punched".

22 Smith 2003, 282. An exception to this may be a ball from Kition, ##90 KITI Abou 001, which Smith (2003, 285) argues was made with a wedge-shaped stylus.

vary. The greatest concentration of balls was found in the Sanctuary of the Ingot God,[23] and the second greatest concentration was found in the Fortress Building at Enkomi,[24] often in rooms associated with metallurgy.[25] Balls have also been found in funerary contexts, in small numbers.[26] Their function is not known, but suggestions vary from name tags[27] to gaming pieces[28] to lots for sortition.[29]

The Tiryns ball has a diameter of 1.7–1.75 cm, and as such is on the small end of the range of the Cypriot balls but within it. The clay seems to have been sourced locally.[30] The inscription was made before firing and the component strokes of the sign were impressed into wet clay. These impressions match the general shape of the impressions made on Cypriot balls. Like them, they were impressed with a round-tipped stylus. The formatting of the inscription, disposed horizontally across the widest part of the ball, matches the Cypriot balls. The inscription consists of three signs, just under the average number of signs on the balls. As Vetters notes, its findspot, in a building associated with metallurgy dating to the post-palatial period (above LH IIIC Developed but below LH IIIC Advanced), recalls that of the Enkomi balls found in the Fortress Building.[31] The three-sign sequence, 41-41-97, is repeated elsewhere on Cyprus. By every metric, the ball demonstrates conformity to the ball document form, and, furthermore, in its archaeological context and inscription content. It is undeniably a product of the CM scriptworld.

The ball document form and the vessel document form were not necessarily attached to the same institutions. Inscribed vessels and balls are only rarely found together in the same contexts on Cyprus. The differing chronological periods and archaeological contexts of the Tirynthian ball and jug handle are therefore not unexpected. There may be two separate CM scriptworld institutions at Tiryns. Beyond the material features of ADD##244, possible further evidence for an institution related to the production of the clay ball document form can be found in an anepigraphic ball.[32] As Vetters observes, the presence of CM potmarks at Tiryns, but also of shared practices in the form of wall brackets in the metallurgical and workshop contexts of Tiryns, "imply that Tiryns maintained close contacts with Cyprus in LH IIIB2 surpassing long-distance trade."[33] The two vessel inscriptions and the potmarks might represent another institutional stream. That two different institutions from Cyprus could be replicated on Tiryns indicates that people from Cyprus had some ability to shape their environment within post-palatial Tiryns.

THE REPEATED SIGN SEQUENCE

The repeated sign sequence, 41-41-97, embeds the Tiryns ball in the larger Cypriot world. The sequence is repeated at least twice within Cyprus, in one certain example from Enkomi (and a second, less-secure unpublished example), and another certain example from Idalion. Both inscriptions tie the Tiryns ball to Cyprus, especially the example from Enkomi. The 41-41-97 from Idalion occurs on the shoulder of a pithos, which

23 ##42-##56, ##60, ##64, ##68-69, ##72.
24 ##02-018.
25 Dikaios 1969, 22.
26 ##21-##22, ##24 were all found near tombs.
27 Masson 1971, 29. Ferrara 2015, 105.
28 Dikaios 1971, 885.
29 Ferrara and Valério 2017; Donnelly 2021.
30 Vetters 2011, 18.
31 Vetters 2011, 8.
32 Vetters 2011, 18. There are in total four anepigraphic clay balls from Cyprus, the first too early (EH) and the latter two too late (Geometric) to be relevant. The second ball could, in theory, date to the LBA.
33 Vetters 2011, 27.

was, unfortunately, found mixed in the debris of a Hellenistic wall.[34] Based on the pithos fabric and form, the inscription has been dated to "the LC IIIC", approximately the same period as the Tiryns inscription (LH IIIC Developed).[35] There is little else to say about the significance of the inscription since it was not found it situ.

The inscription from Enkomi with the 41-41-97 sequence, clay roundel ##097 ENKO Arou 001, speaks to the significance of the 41-41-97 sequence. Though we cannot, of course, read the content of the inscription, its significance can be inferred from the presence of multiple sign sequences that repeat on other document types from other sites. The roundel, one of five from Cyprus and the only one from Enkomi, was likely an administrative document.[36] Little firm can be said about the findspot of the roundel. Published excavation records are patchy and even contradictory. The roundel was found by the French excavation team under the direction of Schaeffer, possibly in the same room as ##080 Abou 076. The excavators describe the findspot as a building with a conjectured LC IIA–IIB date (around the 14th century), but they specify no name or location for the building.[37] Ferrara reports that the roundel was found in Room 13, Level IIB, of Q4E at Enkomi, based, it would seem, on the findspot she records for ball ##080.[38] From the excavation notebooks, however, it is clear that the French did not excavate a building with a Room 13 in Q4E. Room 13, Level IIB, is a room and a level excavated by Dikaios in Q1W, where ball ##002 ENKO Abou 001 was found.[39] It is possible that Ferrara accidentally assigned the findspot of ##002 to ##080 and then applied its findspot to the roundel's.

The discrepancy between the excavator's report and the findspot assigned to ball ##080 and roundel ##097 by Ferrara is, fortunately, resolved by the excavation notebooks. According to Courtois' excavation notebook, the roundel was found along a north–south wall in Sector 113 in Q4E at topographic point 1619. The roundel was initially dated to the "Cypriot Early Iron I" or "around the early 12th century", based on its proximity to cylinder seal 1618, which was found with ceramics dating to that horizon.[40] Further excavation in the area where the roundel was found, taken up the day subsequent to its discovery, revealed a sealed concentration of "Late Bronze III" pottery immediately to the west of the roundel's findspot, upon which the excavators seem to have based their LC IIA–IIB dating of the cylinder.[41] The notebooks confirm that a ball matching the description of ##80 was found in an adjacent sector to the cylinder, Sector 114. There is no suggestion that the adjacency of the ball and roundel sectors is archaeologically significant nor is there any sense of the functions of the archaeological contexts in which the roundel and ball were found.[42]

Ferrara, among others, proposed that the first 15 lines of the inscription, in which the 41-41-97 sequence occurs, contain a list.[43] Within the list are at least two other sign sequences that, like the 41-41-97 sequence, are repeated on other writing media at other sites. One of these sequences, 27-08-110-97-23, is repeated in full on a haematite cylinder seal from the site of Kourion, ##202 KOUR Psce 001. The other sequence, 82-96-88-23, is repeated in part, or in full, on two clay balls from Enkomi (##37 Abou 034; ##71 Abou 068), a pithos handle from Enkomi (##112 ENKO Avas 005) and on an "ivory pipe (?)" from Kition (##161 KITI Iins 001.2). The chronology of the various documents with repeated sign sequences, when they come from datable contexts,

34 Olivier reads the third sign in the sequence as CM 068 not CM 097, though he admits the latter is a possible reading, Olivier 2007, 190.

35 Ferrara (2013, 64) provides a date of LC IIIC, a chronological term that is not in wide use. The inscription has not been independently published by its excavator. It is unclear exactly what period LC IIIC refers to, but it is reasonable to suppose that it is roughly equivalent to LH IIIC Developed.

36 Smith 2002, 24.

37 Schaeffer et al. 1968, 266–69.

38 Ferrara 2013, 44.

39 Ferrara 2013, 14.

40 Courtois 1967–1971, 38.

41 Courtois 1967–1971, 41.

42 Courtois 1967–1971, 44.

43 Ferrara 2012, 121.

is variable. For instance, the ivory from Kition, ##161, is dated to the LC IIIA period, the seal from Kourion is earlier, dated to LC IIB, and the ball from Tiryns, ##ADD 244, is later, dating to LH IIIC Developed.[44] The wide date range of the objects with the repeated sequences on the Enkomi roundel is a testament to the enduring relevance of whatever words the repeated sign-sequences record. Their wide geographic spread, both within and outside the island of Cyprus, indicates the broad importance of whatever they record for LBA Cyprus. The presence of the repeated sequence 41-41-97 on the Tiryns ball indicates that whoever inscribed the ball had knowledge of, and likely connections to, the island of Cyprus.

CONCLUSION

The limited number of inscriptions from Tiryns written in the CM script conform in their material features to the equivalent document forms attested on Cyprus. Whoever wrote the inscriptions at Tiryns were participants in the CM scriptworld, not merely writers of the script. They were trained in how to prepare CM documents, as demonstrated clearly by the clay ball, and how to format them, as demonstrated in the case of the jug. The writer of jug ADD##246 demonstrated knowledge of other CM document forms in their use of the exclamation point stiktogram and in the placement of the stiktogram at the end of a sign sequence. The writer of the clay ball shows themselves to be integrated into Cyprus-connected networks in their use of the 41-41-97 sign sequence. Though CM awaits decipherment, a study of its documents in terms of their material features can still tell us a lot about the people who wrote the script. We cannot say for certain that the people who wrote the documents at Tiryns were "Cypriots", whatever that means or would have meant in the LBA context, but we can say for certain that they were masters of the CM scriptworld and that their institutions came to Tiryns from Cyprus.

44 For the dates, with bibliography, see Ferrara 2013, 81 (for ##161) and 103 (for ##202).

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Cypriot seals and Cypriots overseas

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ABSTRACT

In the Late Bronze Age (LBA), cylinder seals provide an important form of evidence for Cypriot connections with the wider Eastern Mediterranean. As both amuletic and bureaucratic objects they reveal important information about people because seals were closely tied to their owners' identities. A Cypriot seal found outside Cyprus may attest to a person's activity beyond the island or, alternatively, bear witness to the appeal of the object following its transfer to a new owner in the Aegean or the Near East. The recarving of Cypriot seals also adds to their complexity. This reinvention of seal designs took place both on Cyprus and outside the island. Furthermore, some non-Cypriot seals became Cypriot as a result of the addition and modification of glyptic designs that originated in the Near East. Because of the breadth and complexity of the evidence, this paper will summarise the data and then focus on two case studies. The first case study, based on cylinder seals found at Ugarit in Syria, examines the find contexts and uses for sealing of cylinder seals in merchant houses and whether they attest to Cypriot activity in that city. The second case study, based on cylinder seals found at Thebes in Greece, examines the recarving histories of a cache of cylinder seals in a workshop and whether Cypriot were involved in the trade of these seals as well as their redesign.

Cylinder seals are an important and complex form of evidence about Cypriot connections outside Cyprus during the LBA. These amuletic and bureaucratic objects hold the potential for revealing important details about people because seals were closely tied to their owners' identities. The discovery of a Cypriot seal outside Cyprus thus could attest to a person's activity outside the island. Yet, instead it may attest to the appeal of the object after it was transferred to a different owner in the Aegean or the Near East. The frequent recarving of Cypriot seals adds to their complexity. This reinvention of seal designs took place on Cyprus as well as in places outside the island. Furthermore, some non-Cypriot seals became Cypriot through the addition and modification of seal designs that originated in the Near East. This paper addresses the question of what constitutes a Cypriot seal and compares the objects from the two largest concentrations of seals outside of Cyprus that have been considered to include Cypriot seals, the finds at Thebes, Greece, and at Ugarit, Syria.

CYPRIOT SEALS AT THEBES, GREECE

When thinking about the topic of Cypriot seals overseas, the cache of mostly lapis lazuli cylinder seals found at Thebes, Greece, comes to mind.[1] They were found in a late 13th century BC deposit in the Kadmeion. Porada

1 Davaras and Soles 1995, 63 nos. 102–46, with further bibliography; more recently, see Aruz et al. 2008, 281–87 and Aravantinos

published 38 of the cylinder seals from this deposit in detail in 1981.[2] Among them she identified 11 as Cypriot, nine of which are made of lapis lazuli. Several arguments for how the seals ended up at Thebes have been put forward, including when, by whom, as a single group or amassed over time, etc.[3] For this paper, the significant point is that Porada identified at least some of these seals as objects that passed through the hands of one or more Cypriot carvers.

On the Greek mainland, outside Thebes, and on Crete and Rhodes, ten other cylinder seals and one seal impression with some record of their find locations relate to styles of carving that have been connected with Cyprus. Most are described as Cypro-Aegean in style.[4] Others are of an "Elaborate" style,[5] being highly detailed, with frequent use of the drill and figures that fill the field.[6] Some, like most of the possibly Cypriot cylinder seals found at Thebes, draw on or are demonstrably carved out of seals that were first carved in the Near East.[7]

Among the lapis lazuli seals at Thebes that Porada classed as Cypriot, she recognised six as modified Near Eastern seals. Most easily recognised are three that were cut from Old Babylonian designs.[8] A puzzle for Porada was that while she identified the carving or recarving of some seals at Thebes as Cypriot, she found few parallels for them on Cyprus itself. She also noted that the Thebes seals are significantly larger than the average Cypriot cylinder seal, many over 3 cm in height.

The one seal at Thebes for which she thought she found a satisfactory comparison from Cyprus is one of these tall seals. It is the most fragmentary of the seals that she considered Cypriot. It includes a tree, a man holding animals, horned animals nibbling at the tree and Cypro-Minoan (CM) signs in the field (Fig. 1a).[9] She noted its similarity to a hematite cylinder seal said to be from a tomb at Sinda[10] that has the same features except for the man. There are also parallels for the compositions on both of these seals on a cylinder seal of copper sulphide from a tomb at Enkomi (Fig. 1b)[11] and a cylinder seal from a tomb at Kalavasos.[12] Their trees are carved differently but, like the other two seals, they draw heavily on Middle Assyrian compositions.[13]

2010, 69, 82–5, both with clear colour illustrations.

2 Porada 1981. While I have not yet had the opportunity to study these seals in person, the publication is remarkable for providing not only detailed descriptions and discussions, but also remarkably clear photographs, including details of the top, bottom and sides of the cylinders. I am grateful to Sidney Babcock for permission to study Porada's collection of impressions of these and other seals in the Pierpont Morgan Library and Museum, Department of Seals and Tablets. See their Corsair online catalog (http://corsair.themorgan.org/).

3 The two main chronological arguments appear in Porada 1981 and Kopanias 2008; further see Smith 2018a, 118–20.

4 Pini 1980; see also Aruz 2008, 201–22. Most come from Crete, see Davaras and Soles 1995, nos. 45, 47, 50, 56, 57, and one from the mainland, see Davaras and Soles 1995, no. 85. At Thebes, no. 203 (Porada 1981, no. 6; Aruz et al. 2008, no. 181) also falls into this group.

5 See Webb 2002, 118, drawing on groups in Porada 1948.

6 From Crete (seal impression), Rhodes and the mainland, see Davaras and Soles 1995, nos. 39 (impression), 66, 77, 94, 152.

7 On Crete, see Davaras and Soles 1995, no. 57, and on the mainland see Davaras and Soles 1995, no. 152 (for this also see Porada 1973, 266, pl. XXXIII).

8 Porada 1981, nos. 2, 3, 8.

9 Porada 1981, no. 5. I see three CM signs, whereas Porada included only one in her drawing. My drawing in Fig. 1a is based on an impression in the Pierpont Morgan Library, Department of Seals and Tablets, no. SISC 00928 (http://corsair.themorgan.org/vwebv/holdingsInfo?bibId=207644).

10 Louvre AM1639 (https://collections.louvre.fr/en/ark:/53355/cl010131034); Porada 1981, 19–21, fig. b, with further bibliography.

11 Kenna 1971, no. 86; British Museum 1900,0615.55 (https://www.britishmuseum.org/collection/object/G_1900-0615-55). My drawing in Fig. 1b is based on study of this seal and its impression. I am grateful to J. Lesley Fitton and Thomas Kiely of the Department of Greece and Rome for permission to study Cypriot seals in the collections of the British Museum. The identification of copper sulphide appears in Joyner et al. 2006, 139.

12 Smith 2002, 6–7, fig. 1, to be fully published in Smith (forthcoming). Whether this seal from Kalavasos is made of copper sulphide or hematite is still under investigation.

13 Smith (forthcoming); see Matthews 1990, esp. 91–6.

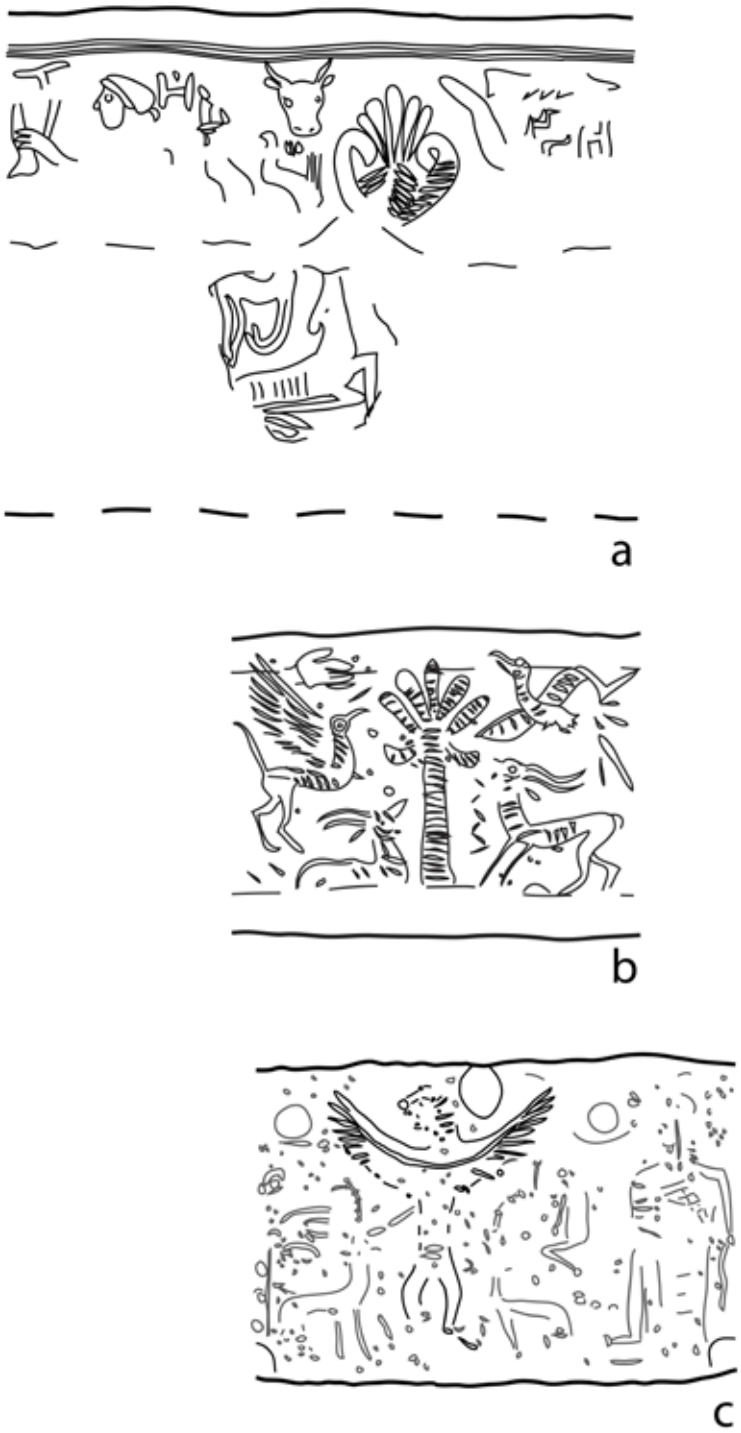

Fig. 1. (a) cylinder seal, lapis lazuli, height of upper preserved fragment 2.25 cm, dashed lines for breaks and estimated lower end (Thebes, Archaeological Museum of Thebes, no. 206); (b) cylinder seal, copper sulphide, height with both gold caps 3.08 cm, height with only bottom gold cap 2.77 cm, est. height with no gold caps 2.46 cm, dashed line showing how the scene is cropped by the gold caps at either end (Enkomi, British Museum, no. 1900,0615.55); (c) cylinder seal, lapis lazuli, height not recorded (Megiddo, current location unknown). Drawings by J.S. Smith.

The Thebes deposit presents several problems in terms of Cypriot seals and how they might be useful for understanding Cypriot involvement outside the island. Certainly, the materials had to have originated outside Cyprus. Also, the original carving of many of them was demonstrably outside the island. Robert Merrillees has rejected the idea that any of the cylinder seals in the Thebes deposit was cut or recut on Cyprus, stating that all "Cypriot" cylinder seals of "Elaborate" forms of carving in hard stones instead were products of Syria, with the examples found at Thebes possibly having come through Ugarit rather than Cyprus.[14] If he is correct, it would follow that none of the cylinder seals found in the Aegean were carved on Cyprus.

In view of this challenge to the Cypriot connection with seals at Thebes, it is useful to consider other cylinder seals of lapis lazuli in the Mediterranean region. Outside of the seals from Thebes, cylinder seals of lapis lazuli are rare. In the Aegean Sea region there are four other securely identified examples.[15] Two of the three found on Crete were recut from Near Eastern originals.[16] The example from mainland Greece is a recarved Old Babylonian cylinder that Porada identified as recut by a Cypriot carver.[17] Only one lazuli cylinder seal is published as found at Ugarit,[18] an Old Assyrian cylinder seal with a presentation scene. This low number is remarkable in view of the fact that estimates for the numbers of cylinder seals from Ugarit and its port at Minet el-Beida compare with the number of cylinder seals from all of Cyprus.[19] In her study of cylinder seals from the southern Levant, Parker listed five lapis lazuli cylinder seals that were in circulation during the LBA,[20] a recarved Old Babylonian seal from Beth Shan[21] and two Mitannian and two recarved seals from Megiddo.[22] The only other lapis lazuli cylinder seal from the Levant known to me is an Old Syrian example found at Kamid el-Loz.[23]

These small numbers of lapis lazuli cylinder seals in the Eastern Mediterranean underline how unusual the Thebes deposit really is. Notably, their frequency of recutting compares well with the Thebes seals. This background puts the three lapis lazuli cylinder seals with known find locations on Cyprus, all from Enkomi, in perspective.[24] Of the two found in excavations by the British Museum, both with gold caps, one went unrecognised as lapis lazuli because its character as limestone is more easily seen than its lazurite content.[25] This seal has two male figures wearing kilts holding animals and provides another parallel for the Thebes cylinder (Fig. 1a) in its subject and its reference to Middle Assyrian compositions.[26] The two other lapis lazuli cylinder seals found at Enkomi are recarved Near Eastern originals. The recarving of a tiny, worn lapis lazuli cylinder seal from Dikaios' excavations at Enkomi is evident in its stringhole that is off centre as well as a cross added to the scene.[27]

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14 Merrillees 2009, 130.

15 Smith 2018a, 119–20.

16 Davaras and Soles 1995, 53, 55 nos. 26, 35, 36.

17 Davaras and Soles 1995, 64 no. 152; Porada 1973, 266, pl. XXXIII.

18 Aleppo Museum, no. M4535, Hammade 1994, 66 no. 363. It is not among the cylinder seals from the French excavations published by Schaeffer (1983) and Amiet (1992).

19 Merrillees 2009, 131.

20 Her list updates and corrects an earlier list by Nougayrol (1939). See Parker 1949, nos. 3, 11, 12, 135 and 166. Her no. 7 postdates the LBA.

21 Penn Museum no. 29-104-141 (https://www.penn.museum/collections/object/127796); Parker 1949, no. 11.

22 For the Mitannian cylinders see Oriental Institute nos. A21119 and A21045 (https://oi-idb.uchicago.edu/id/315ec929-4802-4f30-8a83-42d0b4ed633d and https://oi-idb.uchicago.edu/id/879a04e9-aca8-4d56-9d85-d4a30e078a41); Loud 1948, pl. 160.7–8; Parker 1949, nos. 12 and 135; for the two recut seals see Guy 1938, pl. 90.8 and Loud 1948, pl. 161.17; Parker 1949, nos. 3 and 166.

23 no. KL67: 144, Kühne and Salje 1996, 37–8 no. 3, fig. 1.3, pl. 1.3. I combed through the literature for cylinder seals from Cilicia through the Sinai during my research to publish cylinder seals from Ashkelon (Smith 2020).

24 Another cylinder seal from *Toumba tou Skourou* that was originally published as lapis lazuli is now known to be of composite material, see Merrillees 2009, 128.

25 From the British Museum excavations, British Museum 1897,0401.96 (https://www.britishmuseum.org/collection/object/G_1897-0401-96); the identification of this object as lapis lazuli is in Joyner et al. 2006, 131, 149.

26 Smith (forthcoming).

27 Porada 1971, 785–86 no. 1 (object no. 780), pls. 179, 180, 185.

An Old Babylonian example found in the British Museum excavations has added elements such as a tree, a bucranium and signs similar to CM.[28]

Based on the numbers of lapis lazuli cylinder seals alone, it is just as feasible for the seals from Thebes to have passed through the hands of Cypriot carvers as it is for them to have been handled somewhere along the Levant. I comment further below on the subject of "Elaborate" seals in connection with Cypriot seals at Ugarit. Here, however, I want to draw attention to one of the recarved cylinder seals from Megiddo, which has not previously been discussed in connection with the lapis lazuli cylinders from Thebes. On its own it does not solve the problem about who carved them, where and when, but it is evidence for the circulation and recutting of a seal similar to those found at Thebes.

This cylinder seal (Fig. 1c)[29] has a composition that compares in part with one of the seals at Thebes (Fig. 1a) and a seal from Enkomi (Fig. 1b). Its winged standing lion has been carved over what must have been a tree. The quadrupeds that flanked and nibbled at the tree are still visible and now look as though they are controlled by the lion even though they are not held up and the lion does not touch them. This makes the scene recall Middle Assyrian compositions with a lion-headed figure at the centre.[30] The presence of a robed figure, in profile, holding a scimitar and facing left, as seen in impression, as well as the horns of the ibexes[31] suggest that the best parallels for its original design, however, lie among Kassite seals. Its original composition also recalls one of the seals found at Thebes.[32]

CYPRIOT CYLINDER SEALS

The Thebes deposit raises important questions about what constitutes a Cypriot seal. In 1948 Porada published an article that organised Cypriot cylinder seals into groups based on carving style and, when it was available, find context.[33] During subsequent years she built on and revised her ideas based on new finds and she noted some instances of recutting. While some of her groups still stand as useful today, others do not stand up to the scrutiny of later discoveries. This is not the place to review each group, but it is important to note that reevaluation includes not just the finely carved cylinder seals of "Elaborate" styles that Merrillees would ascribe to Syria. One example of Porada's "Common" styles[34] is her Group X, which features schematically carved rows of figures with hands in the air and a tree.[35] Reconsideration of this group, inspired by a study of a cylinder seal found at Ashkelon, shows them more likely to be products of the southern Levant.[36]

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28 British Museum 1897,0401.744 (https://www.britishmuseum.org/collection/object/G_1897-0401-744); Joyner et al. 2006, 133.

29 Communications with the Oriental Institute and the Rockefeller Museum as well as other colleagues have not led to the current whereabouts of this object so that its carving history could be studied in person. I thank Matthew J. Adams, Jean Evans, Amihai Mazar, Helen McDonald and Alegre Savariago for communicating with me about where this seal might be housed. My drawing of this object (Parker 1949, no. 166) is based on a high resolution copy of the photograph in the Oriental Institute's digital archive (see object no. C 560): https://oi-idb.uchicago.edu/id/3dd36477-dea1-4ad7-9da0-4b10478498cd. I thank Helen McDonald and Susan Allison for helping me to obtain this image. Neither Parker 1949 nor Loud 1948, 147, pl. 161.17 include its dimensions. I thank Anne S. Flannery for checking the original records in the archives of the Oriental Institute, but those also did not list the dimensions of this object.

30 As noted in Mazar 1971, no. 291. Yet note that this lion is clothed; for further discussion of this lion and comparison with another lion added to a LBA seal in the early Iron Age see Smith 2020, 628.

31 Porada 1981, nos. 27, 31.

32 Porada 1981, no. 29; although, as noted by Parker 1949, no. 166, the figure holding the scimitar is oddly reversed.

33 Porada 1948; for comment on the importance of seals from Kourion for this publication, see Smith 2012b.

34 For an overview, see Webb 2002, 118–19, 126.

35 Porada 1948, 193.

36 Smith 2020, 616–19.

There are two alternative approaches for determining what might constitute a Cypriot seal. One approach is the work by Merrillees and his colleagues to determine the materials of which seals found on Cyprus were made.[37] This includes Merrillees' study of the only seal carving workshop found so far on Cyprus.[38] They give preference to local materials and imported soft stones for the production of Cypriot seals and consider that carvers of softer stones imitated the carving styles found on imported seals of harder stones.[39] Another approach examines the layers of carving on cylinder seals on Cyprus and the copying of seals that provides us with a diachronic view of seal carving on the island.[40]

Local materials used for some cylinder seals found on Cyprus are connected with the geology of the island's Troodos Mountain Range. Picrolite is a light green to blue gray, soft stone that is found especially in the river valley at Kourion.[41] Merrillees notes that cylinder seals known to have been carved out of this soft material have designs that compare best with "Common" style groups, which have schematic, often abstracted figural forms, carved mostly without the use of a drill.[42] However, there are LBA stamp seals made of picrolite with more intricate carvings, including two double-sided tablet stamps from well-defined archaeological contexts at Kouklia and Kalavasos and a conoid from Kouklia.[43]

Another local material is copper sulphide, related to the copper deposits of Cyprus.[44] It is also soft in comparison with hard stones like hematite. Both schematic carvings and highly intricate carvings, some using a drill, were made with this material (e.g. Fig. 1b). Also associated with the copper resources of Cyprus is a copper/bronze cylinder seal found in a seal workshop at Enkomi.[45] In addition to copper-based material, this workshop included carved and uncarved cylinders of a soft black stone called chloritite that was imported to Cyprus.[46] Thus, while this is an imported material, it was used on the island for seal carving. On Cyprus there are also uncarved cylinders of hard stone, such as hematite, but not found within the context of a seal workshop.[47]

A third likely local material is wood. Large seals (rollers) used to mark pithoi look to have been made of wood based on traces of wood grain in the impressions.[48] The figural forms carved into these rollers are part of an unprecedented overlap among the figural arts of Cyprus during the 13th to 12th centuries BC.[49] The original rollers have not been found, likely having disintegrated in the archaeological record. Their carvings are usually flatter than on earlier cylinder seals. They often include high levels of detail and find parallels in stone seal carving, especially with conoid stamp seals.[50]

Cylinder seals of soft composite material and clay may also have been made on Cyprus. Yet, seals of these materials differ from stone, copper-based materials and wood in that they could not be recarved. The remainder of this discussion centres on seals that could be recarved, mostly seals of stone.

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37 Joyner et al. 2006; Merrillees 2009.

38 Merrillees 2006.

39 Joyner et al. 2006, 146.

40 Smith 2012a, 2012b, 2014, 2018a.

41 Xenophontos 1991; Joyner et al. 2006, 147–48.

42 Joyner et al. 2006, 147. One cylinder seal with more intricate "Elaborate" style carving looks like it was made of picrolite. Re-examination of this stone is still underway. It comes from a well-documented Late Cypriot IIA (1450–1375 BC) tomb context at Episkopi *Bamboula* (Kourion). Penn Museum no. 49-12-150. (https://www.penn.museum/collections/object/82601); Porada 1948, no. 23; 1972, no. B 1622; and Smith 2012b, appendix 2, cat. no. 1). Note also that one of the cylinder seals listed in Joyner et al. 2006, 14, Cyprus Museum 1935/IV-13/2, has both schematically carved elements and some finer details, including drillwork.

43 Maier 1969, fig. 31; Porada and Babcock (forthcoming); Catling 2020, 39, 338, no. AV:154. I thank the Department of Antiquities, Cyprus, Alison South and Marie-Louise von Wartburg for permission to study these objects.

44 Joyner et al. 2006, 144–46.

45 Porada 1971, 795 no. 10, pls. 179, 181, 186; Merrillees 2006, 238.

46 Merrillees 2006.

47 E.g., see Joyner et al. 2006, 140.

48 For overviews of this material see Webb and Frankel 1994; Smith 2007; Georgiou 2016. See below, Fig. 4c.

49 Smith 2007, 354–56.

50 Smith 2007, 354–55, and see below, Fig. 4b.

Just as with imported chloritite, an imported hard stone could be part of the Cypriot seal repertoire. At the very least an imported seal of hard stone might serve as the inspiration for similar designs in another material. For example, Webb has shown that a hematite cylinder seal from Quartier 3 East at Enkomi (Fig. 2a) was originally carved in the Levant.[51] It has a design of a striding pharaoh and winged Isis and Nephthis figures. The seal was chipped and recut, possibly at least partly on Cyprus, at some point. The recarving can be seen both at the point closest to the off-centre string hole where the more crowded figures were added and in the overlapping of a later sphinx (Fig. 2a, in black) that was added to the scene.

Adding to the story of this cylinder seal is another one also found in Quartier 3 East at Enkomi.[52] It is of soft dark stone (Fig. 2b).[53] Looking closely at the abraded part of the seal, one can make out part of an older design below the final scene of a seated figure holding a spear or staff. In the drawing (Fig. 2b) in gray are the traces of the old design: a winged creature with one wing up and one wing down, similar to the Isis and Nephthis figures on the hematite seal, and part of a striding figure wearing a kilt, similar to the pharaoh on the seal at left. Prior to its recarving, this seal bears evidence of having been a copy, interpretation or some other kind of version of the design on the imported seal in Figure 2a.

Interpretive copies of cylinder seals are known also outside Cyprus, for example at Ugarit where there was a copy of the design of an Old Babylonian royal seal executed in Kassite fashion.[54] This pattern of making interpretive copies is found several times in Cyprus with similar versions of a seal design even within the same household, as at Kition, where over time some examples had been recut.[55]

At Enkomi there were at least three close copies of a cylinder seal of chloritite found in the seal workshop (Fig. 2c).[56] All include a tree, a griffin and a standing figure, who appears to be male because the figure wears a short kilt. The man reaches up to the head of the griffin with a distinctive s-curve from the left hand to the right. While the workshop was in Quartier 1W at the northern end of the settlement, termed Area III by Dikaios, the other versions of this seal's design were found in tombs in Quartiers 6W and 7W in the central western part of the site.[57] One of these cylinder seals was recarved into a scene of a seated figure and an attendant (Fig. 2d).[58] The characteristic up-curved arm and lower body of the man, the hind part of the griffin and part of the tree, shown in gray, are still visible among the later, deeper engravings. These seals from Enkomi are just some of the clusters of seals of similar style in different parts of the settlement. They were made and remade locally. At Enkomi, and on Cyprus more broadly, Cypriot seal carving and recarving encompassed imported hard stone seals, some with recarving, local versions of imported seals, local designs and refashioned local designs.

Manufacture of near copies and seal recarving is found all across Cyprus in the LBA, even when there is no evidence that the "original" inspiration was a seal of hard stone originally crafted outside Cyprus. The consistent ways in which cylinder seals were redesigned over time makes it unlikely that they were sent off-island each time an owner on Cyprus wanted an alteration to a seal.

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51 Courtois and Webb 1987, 39–41 no. 3, pls. 1, 2. My drawing in Fig. 2a is based on study of this seal and its impression. I am grateful to the Department of Antiquities, Cyprus, for permission to study this object.

52 Courtois and Webb 1987, 9, 18, fig. 8.

53 Courtois and Webb 1987, 68–70 no. 17, pl. 6. My drawing in Fig. 2b is based on study of this seal and its impression. I am grateful to the Department of Antiquities, Cyprus, for permission to study this object.

54 Smith 2012a, 203–4; 2018a, 104–5.

55 Smith 2012a, 201–2; 2014, 214–17; 2018a, 109–10.

56 Porada 1971, no. 12. My drawing in Fig. 2c is based on study of this seal and its impression. I am grateful to the Department of Antiquities, Cyprus, for permission to study this object.

57 Two are: (1) in the Cyprus Museum: Sjöqvist 1934b, 545, pl. LXXXVII, Tomb 17, no. 75; and (2) in the British Museum: Kenna 1971, no. 114; https://www.britishmuseum.org/collection/object/G_1897-0401-690.

58 In the Medelhavet: Sjöqvist 1934b, 499, pl. LXXXI, Tomb 7A, no. 6; http://carlotta.smvk.se/carlotta-mhm/web/object/3205217. My drawing in Fig. 2d is based on study of this seal and its impression. I am grateful to the Medelhavet, Stockholm, for permission to study this object. Further study of this piece led me to find more stages of carving than I originally defined in Smith 2014, 226, fig. 7.

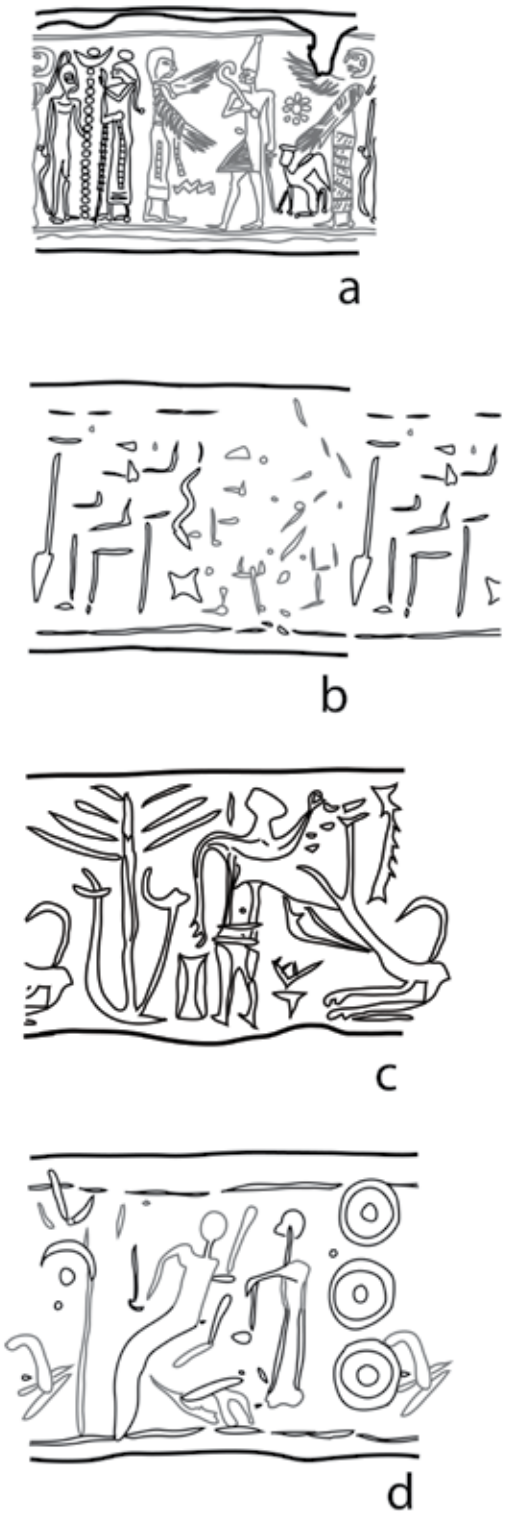

Fig. 2. (a) cylinder seal, hematite, height 2.0 cm, gray shows earlier stage of carving (Enkomi, Cyprus Museum, French excavations 1960 no. 35); (b) cylinder seal, chloritite (?), height 2.22 cm, gray shows earlier stage of carving (Enkomi, Cyprus Museum, French excavations 1962 no. 3); (c) cylinder seal, chloritite, height 2.2 cm (Enkomi, Cyprus Museum, Porphyrios Dikaios's excavations no. 1568); (d) cylinder seal, chloritite (?), height 2.34 cm, gray shows earlier stage of carving (Enkomi, Medelhavet, no. E.007A:006). Drawings by J.S. Smith.

One group of soft stone, likely chloritite, cylinder seals that stands out has versions of a scene of a woman, griffin and tree. Many were found in layers from the 15th to the 12th century BC at Episkopi *Bamboula*.[59] Some seals were refreshed, in that the same design was recut, some were partly redesigned leaving one or more of the original woman, griffin and tree. In the latest stages the seals were fully redesigned, leaving only traces of the original in the background.[60] Versions of this same scene are found all over Cyprus –as well as in the Levant– in carving styles similar to that at Episkopi and others clearly different.[61] At Kouklia, for example, the tree has palm tendrils and the carving of the griffin is less detailed.[62] At Enkomi the griffin is even longer in its body, eliminating the tree.[63]

CYPRIOT SEALS AT UGARIT, SYRIA

More cylinder seals of styles thought to be Cypriot have been found at Ugarit and its port at Minet el-Beida than in the whole of the Levantine area to the south. This Cypriot scene of a woman, griffin and/or tree, with its variations, is the most common Cypriot seal design found at Ugarit and in the Levant as a whole.[64] Yet no similar seals designs come from the Aegean region.

Amiet has published more than 500 stone cylinder seals from Ugarit and Minet el-Beida.[65] Of these he counted 35 as Cypriot.[66] Of those I would agree that at least 19 compare with seal designs that have been connected with Cyprus. These 19 seals include hard stone "Elaborate" style seals and soft stone seals connected with the scene of the woman, griffin and tree. Of his 35, some are instead more likely to have been made in the southern Levant.[67] The others he classed as Cypriot may be, but so far I have not found them to be so distinctive that they definitely fall into that category. This discussion centres on these 19 seals plus four seal-impressed clay texts. These provide a view into seals described as Cypriot and possibly Cypriots outside Cyprus through their seals.

Six of the seals are made of hematite. Five have the crowded figures in procession and fine drillwork related to "Elaborate" styles.[68] Amiet dates them mainly to the Ugarit Récent period 2, 1450–1350 BC. They were found mainly in the residential areas of the Quartier Résidentiel and the Ville Sud. Notably, one was found in the House of Rapanu, in association with a tomb there.[69] This scribe's house had an extensive archive that included a tablet inscribed in CM and correspondence with Alashiya.[70] These finely cut seals at Ugarit may be wholly or only partly Cypriot in design.

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59 Porada 1972.

60 Smith 2012b, 60–74; 2014, 218–21; 2018a, 110–12.

61 Webb 1989; Smith 2014, 222, 224, 227; 2018a, 112–13.

62 Maier and von Wartburg 1986, 182.

63 Porada 1971, no. 4b; see below, Fig. 3a.

64 On Ugarit see below; the other examples from the Levant known to me are from Gezer, Megiddo, Shiqmona and Tel Batash (Timna), see Smith 2006, full text and n. 6.

65 Amiet 1992.

66 Amiet 1992, 187–200 nos. 451–85.

67 E.g., Amiet 1992, nos. 479, 480; see Smith 2020, 616–19.

68 Amiet 1992, nos. 453–57. Amiet 1992, 458 is also made of hematite and has some features that compare with Elaborate style seals. Amiet 1992, no. 452 also has some similar features but seems largely to be a Syrian rather than a Cypriot product. Amiet specifies that the stone is "steatite", hence a soft rather than a hard stone.

69 Amiet 1992, no. 453. Note that Amiet 1992, no. 452 that has some Cypriot features was found north of the House of Rapanu.

70 Pedersén 1998, 77 and van Soldt 2000, 233–34, 243 with further references.

One example of these five seals serves to highlight their complexities.[71] It was found in a possible jewellery workshop. Amiet assigns it to Cypriot manufacture while Schaeffer thought it was made at Ugarit.[72] It preserves the upper part of a bearded figure that recalls naked heroes.[73] The figure looks out at the viewer in contrast with the more typical processional figures who are seen in profile. Looking at the photograph of the seal and its impression in Schaeffer's publication,[74] I note that the figure's beard and parts of the face appear to be more shallowly engraved than the rest of the body and the figures around it. Also, the seal is chipped and worn at both ends. Possibly this is a Syrian or Mesopotamian seal recut with "Cypriot" "Elaborate" style figures, including more deeply engraved facial features, new headgear and dress for the lower body of the hero. The deeply engraved arms seem to cut the beard short at the edges. The scene also includes what looks like a script sign squeezed in next to and partly over parts of the design. Single signs are a recurring feature of cylinder seals on Cyprus, where often a sign is added over another part of the design.[75]

The number of "Cypriot" "Elaborate" style seals at Ugarit and in the Levant more broadly is small, which lends little support to Merrillees assertion that they were products of Syria. To my knowledge in the rest of the Levant there is only one similar seal, from Lachish, known to be made of hard stone.[76] From Cyprus, however, there are at least 12 hematite examples with some record of their find location.[77] These seals were in circulation from Late Cypriot (LC) IIA into the Iron Age. While some retained their original form, one was reset in a necklace, several have gold caps, one was preserved as a fragment with a gold cap and one was cut in half in a votive context. From the perspective of find location, Cyprus is the most closely associated with seals of this kind of design.

The popular woman, griffin and tree design from Cyprus is found among seals of softer, dark stones at Ugarit. Interestingly, these all come from the eastern part of the settlement, both from the Acropole with its several temples and from residential areas to its north and south.[78] Note that Amiet assigned one or two the earlier contextual date of Ugarit Récent 1, 1550 to 1450 BC,[79] making their contexts earlier than the hard stone seals mentioned above. Two were deposited in Ugarit Récent 3 from the 14th to the 13th century BC.[80]

Also at Ugarit are dark, soft stone seals that compare with the woman, griffin and tree in that they include one or more of those elements.[81] These seals come from the eastern part of the settlement,[82] like those mentioned

71 Amiet 1992, no. 454.

72 Amiet 1992, 188; Schaeffer 1983, 48.

73 e.g., Porada and Collon 2016, 32 nos. CLS 1 and CLS 2, pls. 40–41. Another seal identified by Amiet as Cypriot (Amiet 1992, no. 452) has a similar figure who appears to be remodelled through recarving.

74 Schaeffer 1983, 48.

75 Smith 2002, 13–6.

76 It has one large and one small register of decoration: Beck 1983.

77 Not including Cypro-Aegean seals or seals with two equal registers of decoration that have "Elaborate" style features, examples from Cyprus are: Ayios Iakovos: Sjöqvist 1934a, 357 nos. 3, 12, pl. LXVII; for A.J. B.A.S. 012 see http://carlotta.smvk.se/carlotta-mhm/web/object/3200750; Athienou: Porada 1983b, 120–21; Enkomi: British Museum 1900,0615.53, https://www.britishmuseum.org/collection/object/G_1900-0615-53; British Museum 1897,0401.743, https://www.britishmuseum.org/collection/object/G_1897-0401-743; Porada 1971, no. 4 (Cyprus Museum, Dikaios, no. 1437); Hala Sultan Tekke: British Museum 1898,1201.198, https://www.britishmuseum.org/collection/object/G_1898-1201-198; British Museum 1898.1201.183, https://www.britishmuseum.org/collection/object/G_1898-1201-183; Karageorghis 1976, 85, pl. LXIII, Tomb 2 no. 232; Kalavasos: Porada 1989, 33, no. K-AD 455; Palaepaphos (Kouklia): Catling 2020, 61, 369, pl. 129 no. EIIIA.19; Porada 1983a, 407–9; Polis: Smith 2018b, 178, fig. 5a.

78 Amiet 1992, nos. 460, 466–70.

79 Amiet 1992, nos. 466, 468.

80 Amiet 1992, nos. 460, 467.

81 Amiet 1992, nos. 461–65, 472–73.

82 Amiet 1992, nos. 461, 464.

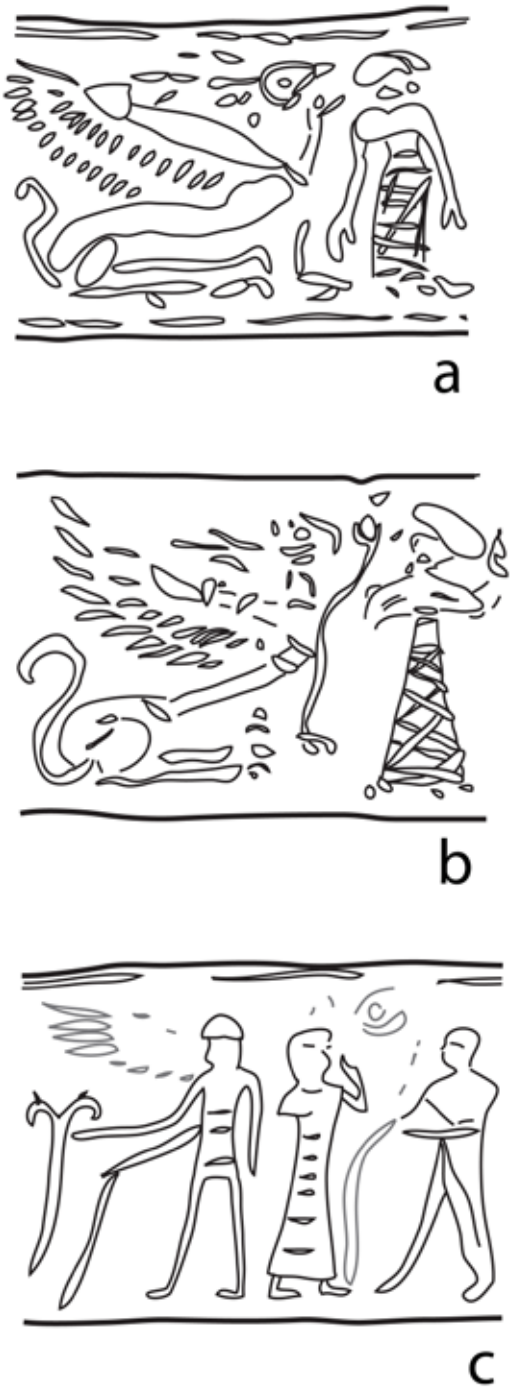

Fig. 3. (a) cylinder seal, chloritite (?), height 2.2 cm (Ugarit, Musée du Louvre, no. AO 18540 (R.S. 7.169)); (b) cylinder seal, chloritite (?), height 2.3 cm (Enkomi, Cyprus Museum, Porphyrios Dikaios's excavations no. 1694); (c) cylinder seal, chloritite (?), height 2.4 cm, gray shows earlier stage of carving (Ugarit, National Museum of Damascus, no. 2768 (R.S. 23.410)). Drawings by J.S. Smith.

above, with two from the western part of the settlement[83] and one from Minet el-Beida.[84] Similar modifications of the woman, griffin and tree design also come from Cyprus. Some variations are the result of recarving an original design of the woman, griffin and tree.[85]

Among the seals with the woman, griffin and tree at Ugarit (Fig. 3a)[86] there are several different carving styles similar to those found on Cyprus. There are especially good parallels with the types found at Episkopi[87] and Enkomi (Fig. 3b).[88] This suggests that the seals at Ugarit connect not just with Cyprus, but also with more than one part of the island. Seals of the woman, griffin and tree were also in circulation long enough to be recarved at Ugarit. For example, the seal from the Acropole (Fig. 3a) that most closely compares with a seal at Enkomi (Fig. 3b) is also similar to the earlier design of a seal from the Ville Sud (Fig. 3c).[89] The griffin's head with prominently outlined eye and the ends of its feathers still stand out behind the later, narrower figures.

Turning to seal impressions at Ugarit, seals of "Elaborate" style look to have been used more often than seals of softer stones. Two "Elaborate" style impressions appear on clay tablets[90] written in Akkadian from the House of Rashapabu, located in the residential quarter. Both of these documents concern legal matters of the clients and family of Rashapabu and date to the 13th century BC. His work was connected with the harbour of Ugarit.[91] In addition to these two seal-impressed tablets, from this house Schaeffer published other tablets that were impressed with cylinder seals of old Babylonian, Mitannian and Syrian styles.[92]

Both seals resemble seals of hematite found at Ugarit. There is nothing to suggest that the tablets were written or sealed anywhere but Ugarit. One tablet's seal impression[93] compares with figures on the "Elaborate" style cylinder seal from the house of Rapanu.[94] The other tablet[95] has a seal impression that also partly resembles seals of "Elaborate" style. The robed figures compare with an example from Minet et-Beida.[96] The greater spacing among the figures and the less intricate carving recall another hematite example from the Ville Sud.[97] However, this second impression also compares with a seal of soft stone that is thought to be Cypriot found at Ugarit.[98]

Another impression made by an "Elaborate" style seal appears on a label with an Akkadian inscription that records dry and liquid measures.[99] It comes from a tomb on the Acropole.[100] Like the tablets, this label was made, inscribed and sealed at Ugarit. The wings of the best preserved figure at the left part of the label are typical of figures on hard stone seals, as also seen on a robed figure on the seal from the Ville Sud found in the jewellery workshop mentioned above.[101]

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83 Amiet 1992, nos. 463, 465.

84 Amiet 1992, no. 472.

85 See Smith 2012b, 60–74.

86 Compare Amiet 1992, no. 468 with Fig. 3a (Porada 1971, no. 4b). My drawing in Fig. 3a (of Amiet 1992, no. 468) is based on a photograph on the Louvre Collections site (https://collections.louvre.fr/en/ark:/53355/cl010143316).

87 Compare Amiet 1992, no. 466 with seals in Porada 1972 and Smith 2012b, 60–74.

88 Porada 1971, no. 4b. My drawing in Fig. 3b is based on study of this seal and its impression. I am grateful to the Department of Antiquities, Cyprus, for permission to study this object.

89 Amiet 1992, no. 185. My drawing in Fig. 3c is based on the photograph published in Amiet 1992, 99, fig. 35 no. 185. Other seals found at Ugarit that have traces of the woman, griffin and tree design include Amiet 1992, nos. 335, 500.

90 Schaeffer 1968, 612–15, 617–18, figs. 4, 4A, 7, 8, 8A, nos. R.S 17.149 and R.S. 17.36.

91 Pedersén 1998, 77–8 and van Soldt 2000, 231–32, 243.

92 Schaeffer 1968, 607–29.

93 Schaeffer 1968, figs. 4, 4A, no. R.S. 17.149.

94 Amiet 1992, nos. 453, 457.

95 Schaeffer 1968, figs. 7, 8, 8A, no. R.S 17.36.

96 Amiet 1992, no. 455.

97 Amiet 1992, no. 458.

98 Amiet 1992, no. 473.

99 van Soldt 1989, 376, 382, 387 no. 4, no. R.S. 5.269.

100 Schaeffer 1934, 118–19, 123, fig. 8 bottom.

101 Amiet 1992, no. 454.

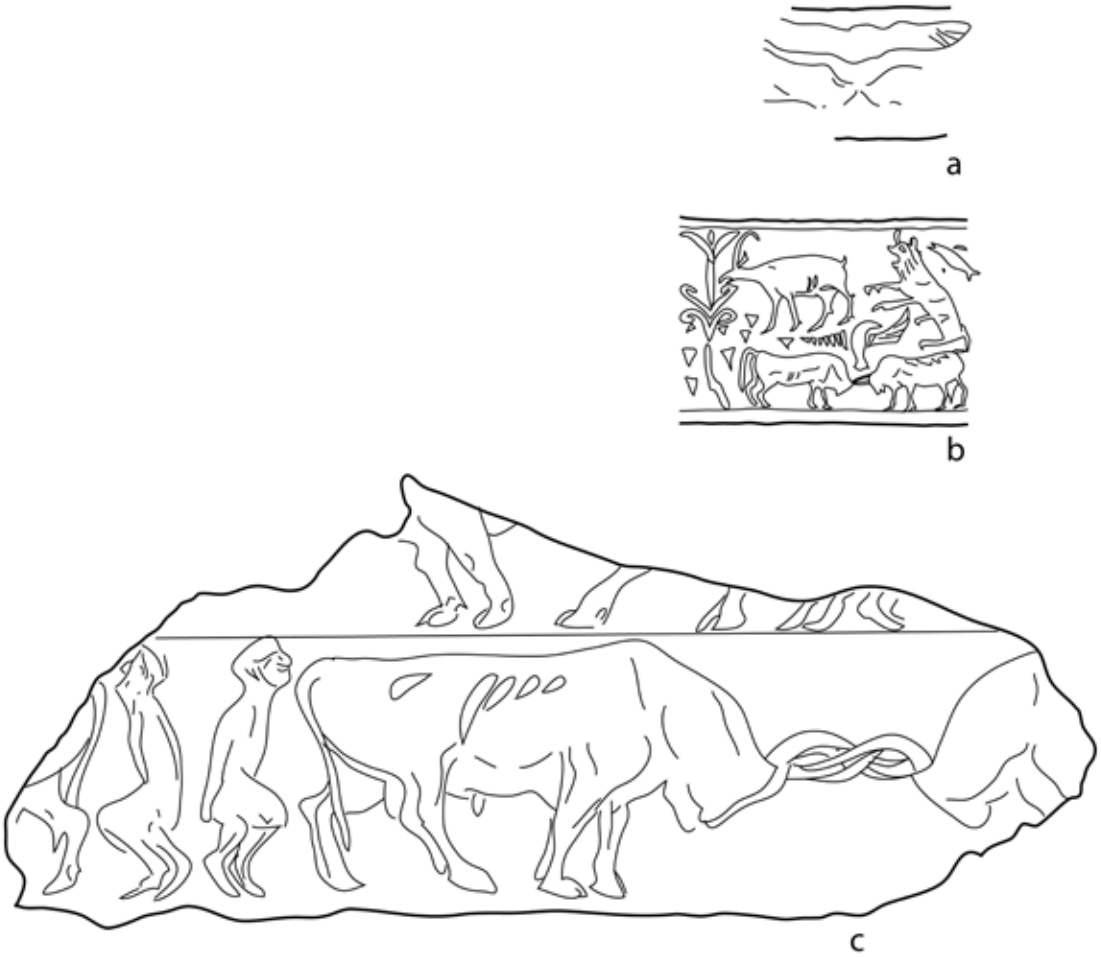

Fig. 4. (a) impression of cylinder seal of stone (?) on a clay label, label length 3.2 cm, seal height ca. 1.6 cm (Ugarit, no. R.S. 94.2328); (b) cylinder seal, chloritite, height 2.6 cm (Cyprus Museum, Kalavasos *Ayios Dhimitrios* (K-AD) no. 171); (c) impression of a roller (likely of wood) on a pithos body, preserved height 5.64 cm (Penn Museum, Episkopi *Bamboula* (Kourion), no. 54-28-7 (Sh 720)). Drawings by J.S. Smith.

A fourth text, however, differs from the others both in the type of script and the type of seal. It is a label found in the House of Ourtenou,[102] a scribe whose house contained the largest archive yet found at Ugarit.[103] The label bears two CM signs on one side. The cylinder seal used on the other side of this label (Fig. 4a)[104] parallels seals of softer stone found on Cyprus, such as an example found at Kalavasos *Ayios Dhimitrios* (Fig. 4b),[105] as well as large wooden seals used to mark pithoi on the island (Fig. 4c).[106] Its flat style of carving has little in common with seals found at Ugarit.

102 Yon 1995, 439–41, figs. 7a–b no. R.S. 94.2328.

103 van Soldt 2000, 240–43.

104 Yon 1995, fig. 7a. My drawing in Fig. 4a is based on the photograph published in Yon 1995, fig. 7a.

105 Porada 1989, 33–4 no. K-AD 171. My drawing in Fig. 4b is based on study of this seal and its impression. I am grateful to the Department of Antiquities, Cyprus, for permission to study this object. I also studied this object through an impression, no. SISC 06013 in the collection of the Morgan Library (http://corsair.themorgan.org/vwebv/holdingsInfo?bibId=234222); for another similar soft stone seal from Enkomi, see Porada 1971, no. 9; Smith 2014, 224, fig. 6f; 2018a, 112, fig. 7.7f.

106 Benson 1972, no. B 1436. My drawing in Fig. 4c is based on study of the original object in the Penn Museum's collections (https://www.penn.museum/collections/object/261376).

CYPRIOTS AND CYPRIOT SEALS OVERSEAS

It is important to be specific about criteria for determining whether a seal is Cypriot. In so doing it is also important to allow for the experimental and varied range of Cypriot seals. Cypriots imported, reworked, copied, adapted, invented and changed. They worked with local and imported materials, stones both soft and hard, as well as perishable materials like wood. A mixing of materials, techniques and subject matter that draws on island and off-island ideas is an integral part of Cypriot seal carving.

Taking into account the practices of interpretive copying and recarving, it becomes clear that seals often had long histories of ownership and design. These histories help us to learn about the complexity of seal carving on the island and this in turn helps us to understand the meaning of Cypriot seals overseas.

The Cypriot seals at Ugarit suggest that there was an integral relationship between Cypriots and Ugarit, perhaps more so than anywhere else in the Eastern Mediterranean. While not every Cypriot seal means that a person from Cyprus was behind its use, the spread of Cypriot seals throughout the settlement is telling. Furthermore, a good number of the seals are based on the distinctively Cypriot scene of the woman, griffin and tree. Possibly some were deposited as votives in cult spaces. And some were in circulation such that they themselves became subjects of recarving. Were some of the woman, griffin and tree seals that resemble seals on Cyprus used by people who were representative of different polities on the island?

Seals of "Elaborate" styles usually associated with Cyprus were used to mark texts, including tablets in the home of Rashapabu connected with the harbour. A distinctively Cypriot form of seal was used to mark a label written in CM found in the house of Ourtenou. The shapes of these texts, and the use of Akkadian on the clay tablets, have a distinctly local flavour, but Cypriots could well have been involved in local affairs as well as matters of overseas trade.

From Thebes –and the Aegean overall – there are none of the distinctively Cypriot seals with the woman, griffin and tree. Seals often are Cypro-Aegean rather than Cypriot in style. At Thebes the seals are often larger, are made of lapis lazuli and show a stage in carving where much of the original Near Eastern form to the seals remains. The Thebes deposit offers little evidence for direct Cypriot involvement in their internal affairs. Continued research shows that seals classed as Cypriot found on Cyprus and elsewhere have elements of an earlier Near Eastern form. It is possible that Porada correctly identified Cypriot carvers among the hands that handled the lapis lazuli seals found at Thebes. Where and when that work took place remains a subject of investigation.

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Social assemblages of things

Drinking practices and inter-cultural interaction between Rhodes and Cyprus in the Late Bronze Age

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ABSTRACT

Interregional interaction in prehistoric archaeology is traditionally studied through the evidence of imports and exports, as well as through the interpretatively more challenging identification of shared stylistic traits between distinct material cultures. Such a paradigmatic approach has been employed to date to examine the links between Rhodes and Cyprus in the Late Bronze Age (LBA), however it has not been too effective in moving beyond the simple assertion of "contacts", the nature of which remains undetermined. The nodal position of Rhodes makes it a virtually compulsory port-of-call for maritime traffic between the Aegean and Eastern Mediterranean, and so, accepting the island's importance for commerce, this paper asks whether the documented movement of objects was accompanied by some form of cultural exchange. To answer this question, it looks at the changes in the composition of drinking sets featuring Mycenaean kraters in the funerary assemblages of Rhodes and Cyprus. This practice-focused approach reveals a development of shared drinking practices in prominent coastal communities of the two islands. It is argued that the evidence presented attests to in-person encounters and cultural exchange between affluent social groups, a type of interaction that bespeaks a much closer connection than that of mere commerce.

INTRODUCTION

Historically, the archaeologies of LBA Rhodes and Cyprus have been shaped to a great extent by a scholarly preoccupation with the so-called Mycenaean pottery, large quantities of which have been recovered to date on both islands, predominantly from cemetery sites. This evidence fuelled a century-long and still ongoing debate about the nature of interactions between the Aegean and Eastern Mediterranean, which revolved mostly around the three grand narratives of Mediterranean archaeology – migration, colonisation and trade.[1] The debate focused primarily on issues of ethnicity and politico-economic dominance,[2] partly because of the prevailing classical and culture-historical paradigms,[3] partly because of their relevance for the concept of the Hellenisation of Cyprus, and, consequently, for modern identities and national politics.[4] Even so, since the 1990s, following broader developments in archaeological theory, some scholars working on the two islands began to explore

1 Knapp and van Dommelen 2010, 1.

2 Knapp 1993; Sherratt 2005.

3 Snodgrass 1985; Kotsakis 1992.

4 See Leriou 2002.

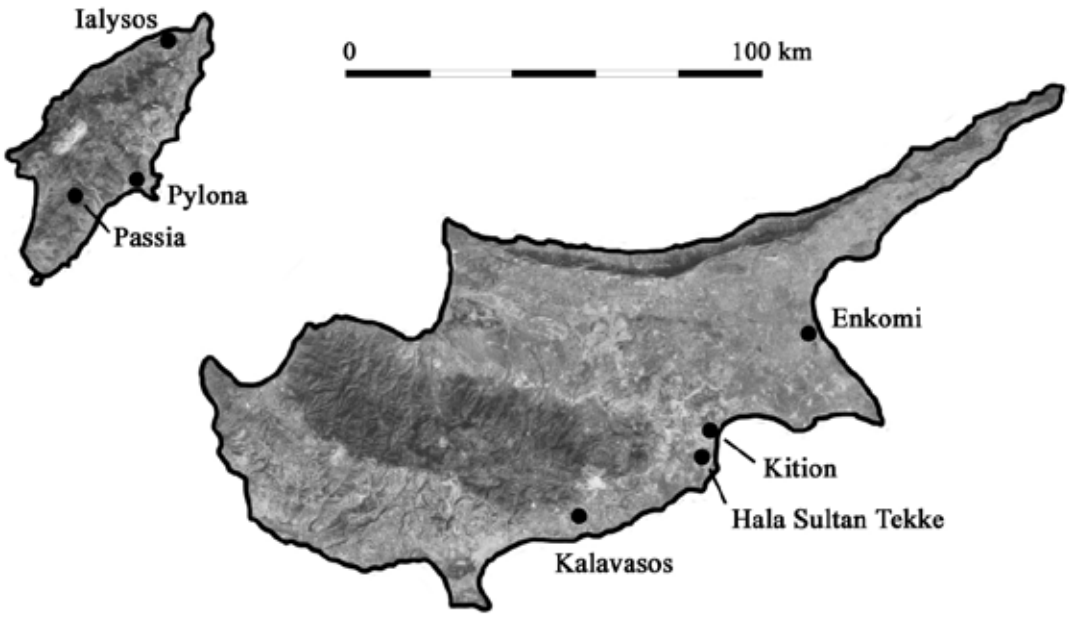

Fig. 1. Maps of Rhodes and Cyprus, with sites mentioned in the text. By author.

other questions that could be asked of the pottery exported from mainland Greece, such as its consumption and appreciation in recipient communities,[5] or its role in social competition[6] and the creation of group identities.[7] This focus on local contexts, however, can arguably distract from the significance of long-distance inter-cultural interactions. By emphasising differences and prioritising them in our quest to understand individual communities or societies, we may be overlooking meaningful similarities attested across seemingly distinct and separate archaeological cultures.

The evidence for contacts between Rhodes and Cyprus, as traditionally identified through imports and the stylistic similarities of certain objects, has been comprehensively summarised by Åström[8] and Marketou.[9] With this paper I seek to move beyond the assertion of contacts and explore their nature. This is achieved by examining the use of Mycenaean pottery in the funerary contexts of the two islands in the 14th and 13th centuries BC (Fig. 1). In particular, I try to show that what can be identified in the Rhodian context as a highly specific "extended drinking set"[10] may also be found on Cyprus. I argue that certain groups on both islands shared drinking practices associated with the consumption of (most likely imported) wine. I suggest that this evidence is indicative of in-person interactions and a two-way cultural exchange between prominent individuals and groups. Ultimately, my aim is to show the exciting possibilities stemming from the adoption of a practice-based approach, the consideration of objects in their original assemblages (i.e. in relation to other objects found in the same context), and the examination of pottery in terms of its size and functionality.

5 van Wijngaarden 2002.
6 Steel 1998; Keswani 2004.
7 Voskos and Knapp 2008; Eerbeek 2014.
8 Åstöm 1988.
9 Marketou 2009.
10 Analysis of funerary assemblages from the LBA tombs of the southeast Aegean forms the core of my ongoing PhD research, which started with the recontextualisation of objects from Alfred Biliotti's 19th century excavations of Ialysos.

Fig. 2. Original pottery assemblage from Biliotti Tomb ("Old Tomb") 28. Vessels not to scale. © The Trustees of the British Museum.

BEFORE THE 14TH CENTURY BC – DRINKING SETS OF RHODES AND CYPRUS

Some of the earliest (15th century BC) chamber tombs on Rhodes, found in the cemetery of Ialysos located at the north tip of the island, featured three functionally related vessels; a large piriform jar (storage), a jug (pouring) and a stemmed cup or *kylix* (serving) (Fig. 2).[11] These vessels, like the vast majority of pottery deposited in burial chambers at Ialysos before the 12th century BC, were imported from mainland Greece.[12] That the three shapes were indeed assembled together to form a defined drinking set (their co-occurrence not being merely an accidental pattern resulting from multiple depositional events) is confirmed by the well-preserved chamber tomb 74, dated to the early 14th century BC. There, this set was found accompanying an individual burial, together with an unguent container (alabastron) and bronze weaponry.[13] In fact, inhabitants of the associated settlement of Ialysos-Trianda had been using piriform jars, jugs and servings vessels of mainland Greek provenance from at least the 16th century BC onwards,[14] which means that by the time this set was included in burial assemblages it had already become an established part of local drinking practices.

Meanwhile, the contemporary drinking set included in the burial assemblages on Cyprus consisted of local wares (e.g. White Slip (WS), Base Ring (BR), Plain White Wheelmade (PWWM)), and comprised large open vessels (hereafter "kraters"),[15] bowls and/or cups.[16] Although jugs may have featured in the same tomb assemblages as this set, Steel has suggested that the established practice was to fill drinking vessels straight from

11 Tomb 36 and 37 (Maiuri 1924, 184–49; Benzi 1992, 317–19) and Biliotti Tomb 28 (assemblage reconstructed as a part of my PhD work – cf. Mee 1982, 123).

12 Jones and Mee 1978.

13 Jacopi 1931, 297–300; Benzi 1992, 383–84.

14 Marketou et al. 2006, 33.

15 This is the term of convenience, which is to suggest a similar function performed by large open vessels in drinking practices of different regions (the Aegean, Cyprus and the Levant), but not to imply *exactly* the same use or extrapolate it from the Homeric and classical traditions (Sherratt 2004, 325).

16 Steel 2004, 294.

the krater.[17] This view is supported by findings such as the Late Cypriot (LC) IB–IIA Tomb 4 at Kalavasos *Ayios Dhimitrios*, where BR cups were deposited inside WS II kraters.[18] The use of kraters in association with bowls and cups on Cyprus was a practice shared with other communities in the Eastern Mediterranean, notably those on the Levantine coast,[19] to which these three exact shapes of Cypriot wares were exported, alongside other vessel types.[20]

14TH CENTURY BC – ENTER THE MYCENAEAN KRATER

The 14th century BC marks the beginning of the truly large-scale export of mainland Greek pottery to the eastern Aegean and Eastern Mediterranean communities. One of the hallmark products was the krater, often bearing pictorial decoration, which is argued to have been specifically manufactured for the Cypriot and Levantine markets, regions from where the majority of known examples come (with relatively few attested in Greece itself).[21] The presence of kraters in Rhodian chamber tombs, coupled with the fact that some other shapes and a number of decorative motifs defining the Late Helladic (LH) IIIA2 style were found predominantly in Rhodes and Cyprus, led some early scholars to believe that Rhodes was the production centre of Mycenaean pottery found to the east.[22] Although provenance analyses subsequently disproved this claim,[23] it is nonetheless significant that both islands seem to have received ceramics from the same export batches, perhaps even supplied by the same intermediaries.

In the 14th century BC chamber tombs at Ialysos kraters appeared in burial assemblages exclusively alongside large piriform jars, jugs and kylikes and other serving vessels, which indicates that they were incorporated into pre-existing local drinking practices to form, what I have termed as part of my doctoral research, an "extended drinking set".[24] This new set appears in tombs that stand out in terms of their size or the deposition of precious metals and off-island *exotica*.[25] The 14th century BC funerary assemblages suggest that the use of kraters was a novelty, since no functionally similar vessels are attested in earlier tombs, and there is no decisive evidence for kraters of the earlier, LH or Late Minoan (LM) IIIA1 style in the associated settlement.[26]

In Cyprus, on the other hand, in certain contexts we see the replacement of local kraters with imported ones. This is illustrated well by Tomb 11 at Kalavasos *Ayios Dhimitrios*, which is of slightly later date (LC IIA–B) than the aforementioned Tomb 4. There, two Aegean kraters were found with locally-produced bowls deposited inside them.[27] Similarly, one of the (stylistically) earliest pictorial kraters attested at Enkomi, the so-called "Zeus Krater" from Swedish Expedition Tomb 17,[28] held a BR II bowl.[29] These examples demonstrate, in my view, continuity in drinking practices despite the influx of pottery from mainland Greece and show that imported kraters were recognised as having the same functionality as the ones of local wares. It is worth pointing out the inclusion of multiple kraters in many Cypriot tombs that contained them, in contrast to the contemporary tombs at Ialysos, which included only one per chamber.

17 Steel 2004, 294.
18 South and Russel 1989, 48.
19 See Liebowitz 1980.
20 Atzy 2001; Artzy et al. 2013.
21 Moutnjoy 1993, 73; Recht and Morris 2021, 4.
22 Stubbings 1951, 70, 106. See also Furumark 1941, 9.
23 Jones and Mee 1978; Jones and Catling 1986, 542–60.
24 Sienkiewicz (forthcoming).
25 Sienkiewicz (forthcoming).
26 See Furumark 1950; Marketou at al. 2006; Karantzali 2009.
27 Goring 1989, 102.
28 Vermeule and Karageorghis 1982, 13–5.
29 Gjerstad et al. 1934, 543.

The evidence of the Cypriot drinking sets seems to support the conclusion drawn some three decades ago by Cadogan, who pronounced that "the importing of (…) Mycenaean pottery, for ceremonial and funerary use, had little effect that we can detect on Cypriot life, except to tell us what was the smart thing to have."[30] What ought to be added here, however, is that, similarly to Rhodes, kraters were limited to funerary assemblages with more high-value objects and *exotica* than other contemporary tombs in the cemeteries where they appear – graves often labelled as belonging to the "elites".[31] So whilst they may have been used in different drinking practices, they were not merely a "smart thing to have" but became a part of the prestige vocabulary of affluent groups on both islands.

THE "EXTENDED DRINKING SETS" ON RHODES AND CYPRUS

Over the course of the 14th century BC, chamber tomb cemeteries, hitherto limited to the northwest part of Rhodes, appeared across the island. One of them was Pylona-Aspropilia, located near the east coast. Both the size of the burial chambers and the number and diversity of funerary offerings found in this cemetery attest to the relative affluence of the associated community.[32] Pylona-Aspropilia Tombs 1 and 3 (the latter dated to the late 14th–early 13th century BC) featured the extended drinking set, in addition to vessels of other shapes, including the quintessentially local ones, the so-called "braziers" and "basket vases".[33] Interestingly, these tombs also contained a small bronze handless bowl each, an object scarcely attested on Rhodes and rare in Aegean burials, but found in a number of tombs on Cyprus, especially at Enkomi.[34] Metal handless bowls are, in fact, characteristic of Eastern Mediterranean "aristocratic" drinking practices,[35] and their appearance in this cosmopolitan community that would be the first port-of-call for ships heading into the Aegean is not particularly surprising. The Pylona-Aspropilia assemblages not only constitute a combination of imported and local ceramics, but also show the blending of different practices, perhaps initiated through the acquisition of knowledge about the ways communities to the east used kraters in their dining and feasting.

Meanwhile, some interesting changes can be observed at Ialysos. Tomb 59, which was in use roughly in the same period as Pylona-Aspropilia Tomb 3, contained the extended drinking set with not one but two kraters,[36] something not attested earlier. Coincidentally, this same chamber also yielded a large Red Lustrous (RL) pilgrim flask, an import from the Eastern Mediterranean.[37] On the other hand, Tomb 5 (dating to the early 13th century BC), was the first one to contain a large piriform jar, a krater and multiple drinking vessels (kylikes, bowls and a cup), but no jugs.[38] These examples show a departure from the initially highly standardised set. Although subtle, these changes bring the composition of both assemblages closer to those found in Cypriot tombs. Early in the 13th century BC, the Ialysos cemetery appears to have been abandoned, perhaps in relation to the destruction of the associated settlement,[39] and chamber tomb burial declined in popularity across Rhodes. The custom of including the extended drinking set in tombs was maintained, however, in communities in the eastern part of the island (Fig. 3),[40] suggesting a continuity in drinking practices.

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30 Cadogan 1993, 94.

31 Steel 1998, 291; Keswani 2004, 126.

32 See Karantzali 2001; cf. Benzi 1992, 407–51.

33 Karantzali and Ponting 2000; Karantzali 2001.

34 See Keswani 2004, 233–36, table 5.9c. Note also the association of a gold handless bowl with the "Zeus krater" in Swedish Expedition Tomb 17 (note 29 above).

35 Yasur-Landau 2005, 174.

36 Maiuri 1924, 226, fig. 143.

37 Although RL pottery was probably produced in Rough Cilicia (Kibaroğlu et al. 2019), it is likely that Cyprus acted as its redistributor – see Eriksson 1993.

38 Maiuri 1924, 102–6; Benzi 1992, 239–40.

39 Marketou 2010, 786.

40 Tomb 4 at Passia (Dietz 1984, 37–50) and Pylona-Ambelia Tomb 1 (Jacopi 1931, 335–45).

Fig. 3. Pottery assemblage from Pylona-Ambelia chamber tomb. From Jacopi 1931, 336, fig. 84.

Interestingly, it is during the 13th century BC that we seem to witness the appearance of this set on Cyprus. The best example comes from British Expedition Tomb 66 at Enkomi. This grave is exceptional in many regards, being one of the few ashlar-built tombs and having the second wealthiest assemblage in terms of the overall weight of deposited precious metal items.[41] Additionally, it contained an atypically large share of Mycenaean vessels within the overall pottery assemblage, together with ceramic imports from the Levant and glass and faience vessels of likely Egyptian provenance.[42] I would argue that such a collection of non-local objects was assembled specifically to emphasise the off-island connections of the group to whom the tomb belonged. All the Mycenaean pottery was of the LH IIIB style, and featured, alongside smaller oil and unguent containers, a number of kylikes among other serving vessels, two jugs, two kraters and a large piriform jar (Fig. 4). On top of this, hemispherical handless bowls made of bronze, glass and gold were also included in the assemblage, and such a combination of different drinking traditions is reminiscent of the admittedly less lavish Pylona-Aspropilia tombs. More importantly, the presence of the extended drinking set in a context where special effort was apparently devoted to combining exotic, off-island elements in a funerary assemblage as well as to making them visible upon re-opening of the tomb,[43] bespeaks its special significance.

Another context from Enkomi that yielded the extended drinking set is a side chamber of Swedish Expedition Tomb 18. There, not one but multiple sets are identifiable, as this chamber contained several large piriform jars, together with Aegean transport stirrup jars, kraters, jugs and kylikes.[44] It is important to point out that the deposition of larger storage vessels, locally produced or imported, was rarely practiced in LC tombs at Enkomi,[45] and the concentration of so many in this particular assemblage makes it rather unique. As with British Tomb 66, here we also see a disproportionate amount of Mycenaean pottery in comparison to local wares, occurring once again in a burial chamber that included exceptional quantities of precious metals.[46]

41 Keswani 2004, 236, table 5.9c.
42 Murray et al. 1900, 35–6, figs. 63–4; Crewe 2009.
43 See Crewe 2009, 30–1.
44 Gjerstad et al. 1934, 554–57.
45 Graziadio and Pezzi 2009, 66.
46 Keswani 2004, 236, table 5.9c.

Fig. 4. Pottery assemblage from British Expedition Tomb 66 at Enkomi. Adapted by author from Murray et al. 1900, 35–6, figs. 63–4.

Notably, not only large storage vessels, but also kylikes are rare in the Enkomi tombs, where there was a clear preference for the deposition of other serving vessel shapes of Aegean origin.[47] Explaining a similar pattern attested in Levantine contexts, Yasur-Landau has suggested, based on iconographic evidence, that the use of kylikes involved holding them by the stem, which would contrast starkly with the handling of traditional Canaanite drinking vessels such as cups or bowls.[48] Although this interpretation has been questioned by Stockhammer, who argued that kylikes were seen in the Levant as incense burners whilst Aegean kraters were used for drinking beer from straws,[49] the observation about the handling of the kylix is rather important. In the Cypriot context, this vessel would constitute not merely an enrichment of ceramic assemblages, but an introduction of foreign gestures into local drinking practices – their presence perhaps indicating conscious borrowing of Aegean customs by some groups.

Returning to storage vessels, large piriform jars (35 cm in height or bigger), though rarely distinguished from their smaller versions in archaeological analyses, clearly had a different purpose, their association with tableware indicating that they served as containers for drinkable liquid, most likely wine.[50] The shape and size of these jars would prevent efficient stacking as cargo (unlike open vessels),[51] making them unsuitable for bulk trade in liquids,[52] yet also rendering them rather undesirable for maritime transport as pottery vessels in their own right. Considering their characteristic shape and, for LH IIIA2–B styles, rather standardised decoration, and following a similar argument developed for Aegean stirrup jars by Bevan,[53] I would argue that these vessels were a form of *branding* for their contents, perhaps indicating the special qualities of the wine within.[54] The implication of this hypothesis would be that the appearance of the extended drinking set at Enkomi was connected with the import of Aegean wines – the foreign drink called for consumption in a foreign manner.[55]

Actually, the extended drinking set is found not only at Enkomi but can also be identified among the assemblages from tombs at other prominent coastal settlements, notably Kition[56] and Hala Sultan Tekke.[57] In all these cases the set comprises pottery of LH IIIB style (in combination with Pastoral style kraters), which dates its introduction to Cyprus to the 13th century BC.

DRINKING SETS AS EVIDENCE FOR INTERACTIONS?

The evidence discussed here appears to show an interesting case of cultural blending that occurred between social groups living in prominent, well-connected coastal settlements of LBA Rhodes and Cyprus. It would seem that over the course of the 14th and 13th centuries BC these groups, which hitherto engaged in very different drinking practices involving different types of pottery, developed a shared understanding of the function of (and association between) certain shapes of imported mainland Greek ceramics. Although the flow of these ceramics occurred in one direction, eastwards, the example of the hybridising assemblages of Pylona-Aspropilia

47 See van Wijngaarden 2002, 140, table 10.9.
48 Yasur-Landau 2005; 2008.
49 Stockhammer 2012.
50 As opposed to smaller piriform jars, which likely contained unguents (Leonard 1981, 92–6).
51 See Artzy 2001, 122.
52 Cf. Twede 2002, 101–3.
53 Bevan 2010, 67–8.
54 For Eastern Mediterranean trade in wine see Leonard 1996. For wine varieties in the prehistoric and protohistoric Aegean see Sherratt 2004, 323.
55 Although once the wine was served and drunk the piriform jars may have been refilled, perhaps even with the 'local stuff', their form and decoration, matching that of other Mycenaean vessels, would still evoke associations with 'the foreign'.
56 Tombs 4–5 and 9 (Karageorghis 1974, 16–94).
57 Tombs 1 and 2 (Karageorghis 1976).

and the changes in the initially highly standardised extended drinking set at Ialysos suggest that the concurrent process of cultural exchange was a two-way one. The culmination of this process can be seen in the 13th century BC, when the extended drinking set can be identified at Enkomi and other Cypriot sites. The pattern of intensifying cultural exchange between Rhodes and Cyprus maps well onto a suggested increase in Cypriot maritime activity in the Aegean and more direct involvement of Cypriot traders in the shipping of mainland Greek pottery.[58] Rhodes would have played a key role in these ventures, and, in fact, the evidence from the 12th and 11th centuries BC attests to continued close relations between the two islands.[59]

More frequent interactions between coastal communities on Rhodes and Cyprus would naturally facilitate the conditions for cultural exchange. It is noteworthy, however, that this process seems to have also been encouraged by the shared use and appreciation for Mycenaean tableware. Although the evidence for the circulation of objects between these islands dates back as far as the 17th century BC, when Cypriot pottery began to appear at Ialysos-Trianda,[60] at present it is possible to argue that some changes in *practices*, at least in relation to drinking and dining, occurred only once a common material vocabulary in the form of LH style kraters was established.

Drinking holds an important role in acts of hospitality and in negotiating inter-cultural encounters,[61] and therefore it is not unexpected that it is the pottery sets associated with this activity that show evidence for a growing affinity between geographically distant groups. What we may be witnessing here is the development of a form of shared etiquette connected with the consumption of imported wine, which must have emerged via in-person encounters, during which people of Rhodes and Cyprus were exposed to each other's customs. In other words, some *mobility*[62] of people can be inferred as the process underlying the observed cultural convergence. Envisaging this type of interaction, comprising different types of movement, from stopovers during trading ventures to intermarriages and diplomatic visits, gets us away from simplistic distinctions between migration, colonisation and trade.[63] This, in turn, forces us to engage with the social and situational nature of interregional contacts – it is not territorial or archaeological entities that are interacting, but people. In fact, here I have begun to show how the shared drinking etiquette appears to have been confined to the most affluent members of their respective communities, and, consequently, how cultural exchange was occurring most visibly between the higher echelons of Rhodian and Cypriot societies. This is important not only for our understanding of interregional interaction – in the case of the extended drinking set the knowledge of foreign practices may have been actively employed in local contexts for the purposes of social differentiation,[64] creating in the process a new cosmopolitan identity.

CONCLUSIONS

With this paper I have attempted to show how interregional interaction may be approached through the study of practices involving shared material culture. As demonstrated by the earliest examples of Rhodian and Cypriot pottery sets that included kraters from the Greek mainland, these imports were incorporated into very different local drinking practices. By tracking the changing associations between kraters and other vessels, as reflected in burial assemblages on both islands, it is possible to suggest a process of cultural blending that eventually led to the adoption of the extended drinking set on Cyprus. This influence was not unidirectional, however, and

58 See Sherratt 2001, 223–24 with references.
59 Åström 1988, 77; Marketou 2008, 49; Zervaki this volume.
60 See Karageorghis and Makretou 2006.
61 Dietler 1990, 360–65.
62 See Lightfoot 2008.
63 Mokrišová 2016, 47.
64 See Helms 1988.

there are some indications that Cypriot customs were conversely reflected in certain Rhodian assemblages. The fact that the documented cultural exchange involved the most affluent social groups helps us to understand not only who had access to certain types of foreign tableware, but also how the knowledge about its use flowed through a narrow, if not to say *exclusive* network. The evidence discussed in this paper indicates a rather intimate connection between certain groups of these admittedly different cultures, one that was bound not merely by commercial exchange, but may have been much more social in its nature – a connection formed, quite literally, over a drink.

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From Cyprus to Rhodes and beyond

Cypriot imports and influence in Rhodes in the 11th and early 10th centuries BC. Links to the Aegean and the central Mediterranean

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ABSTRACT

New finds on the east coast of Rhodes –the cemetery at Ayia Agathe and two chamber tombs at Lindos– have shed some much-needed light on the transition from the Final Bronze Age to the Early Iron Age (EIA) on the island. Far from indicating a time of isolation, the new finds, including imported pottery, ivories and scarabs, bear witness to contacts with Crete and the Eastern Mediterranean, particularly Cyprus. Contacts between Crete and Cyprus during the 11th century BC are well attested, and Rhodes would certainly have played the role of an unavoidable port-of-call on the sea-route. There is, however, evidence indicating that the role of the island in this tug-of-war between Crete and Cyprus might not have been totally passive: the development of certain pottery forms and motifs in Cyprus might have also depended on the local Late Helladic (LH) IIIC late Rhodian pottery tradition.

Furthermore, certain finds provide elements new in the Aegean, but well-known in burial and cultic contexts in Cyprus and on the Syro-Palestinian coast by this time; these are also found at Italian sites during the Final Bronze Age and the Geometric period, indicating the transfer of social entities and religious ideas from the Eastern Mediterranean to the West.

INTRODUCTION

The geographical position of Rhodes makes it an unavoidable port-of-call for maritime travel to and from Cyprus and the Eastern Mediterranean. Contacts between Rhodes and Cyprus continued uninterrupted throughout the Bronze Age.[1] The imported Cypriot pottery in Rhodes, in the settlement of Trianda and the cemeteries of Ialysos, is the most significant concentration of Cypriot pottery exported to the Aegean;[2] in Late Bronze Age (LBA) IB a class of local imitations of Cypriot pottery was produced in Ialysos.[3] Cypriot, Egyptian and Syro-Palestinian objects, which probably reached Rhodes through Cyprus, provide evidence of overseas trade in the Eastern Mediterranean during the 14th–12th centuries BC.[4] After the collapse of the Mycenaean palatial system, Ialysos,

1 On imports from Cyprus to Rhodes starting in the Early Bronze Age, see Åström 1988.

2 For Cypriot imports in Rhodes, see Mee 1982, 22; Åström 1988; Benzi 1992, 11; Marketou 2009. Mee has suggested that Cypriots were buried in Tombs 76 and 86, which contained only Cypriot pottery.

3 For local imitations of Cypriot pottery in LB IB, see Karageorghis and Marketou 2006.

4 Weapons, tanged mirrors and personal items of bronze, jewelry of gold and silver, stone seals and mortars found in Rhodian Late Bronze cemeteries were also imported from, or though, Cyprus.

along with other Aegean coastal sites, experienced a period of affluence, during which trade with Cyprus and the Eastern Mediterranean continued. The presence of Cypriot and Egyptian imports in LH IIIC Rhodes is indicative of the continuation of maritime trade from ca 1200 to 1125 BC.[5]

There is, however, a very small number of vases from Rhodes that can be dated to the final phases of the Bronze Age;[6] no evidence of habitation of the 11th and the first half of the 10th centuries was detected on Rhodes until recently, suggesting that by the middle of the 11th century BC settlements were abandoned and all contact with the outside world had ceased.[7] This paper is a very brief overview of the finds from two recently excavated sites on the central-east coast of the island –the cemetery at Ayia Agathe and two chamber tombs at Lindos– which have come to cover the chronological gap until the Late Protogeometric (LPG), when the earliest Iron Age evidence appears. Special emphasis is given to imports or influences from Cyprus and to features which are present in Cyprus but not in the Aegean during this period. Some of these features are to be found in this or in subsequent periods in Italian contexts.

THE CEMETERY OF AYIA AGATHE

The cemetery of Ayia Agathe was excavated during three seasons of rescue excavations, between 2004 and 2014.[8] Seventy-five tombs were revealed, most of them along a rural road which very likely followed the route of an ancient footpath. Sixty of the tombs belong to an extended cemetery arranged in four clusters dating to the Final Bronze Age (LH IIIC late–Sub-Mycenaean).

In contrast to the numerous Mycenaean cemeteries on Rhodes, which consist almost exclusively of chamber tombs with a long *dromos*, the cemetery comprises 52 shaft graves, six pit-caves and two small pits containing cremations.[9] Most of the tombs found were damaged by the initial opening of the road in the 1980s and its subsequent widening. The material, both ceramic and skeletal, was also badly damaged by the soil type and the close proximity to the sea, which resulted in a sedimentary fill harder than the local bedrock. However limited and fragmentary the finds, it appears that the vast majority of the tombs were used for single burials. Almost all the identified skeletons belonged to children and women.[10] Burial gifts consisted mostly of pottery, with a few small vases accompanying each burial. Among the finds were also some beads, two bronze fibulae and an iron sickle-knife.

The pottery from the cemetery dates from the advanced and late LH IIIC. Some of the vases, especially from Tomb 3, belong to the previous developed phase of LH IIIC, while others can be considered Sub-Mycenaean. Some very fragmentary vases could be Protogeometric (PG). There are definite imports from Crete, of the Cretan Close Style, and influences, possibly imports as well, from Attica, the Argolid, Achaea and Kos. Apart from the imported vases, which include two Octopus Style stirrup jars, the shape and motif repertories of the Rhodian pottery are quite limited in comparison to those of the developed phase of LH IIIC. There is also a distinct category of closed shapes (belly-handled amphoras, stamnoi and amphoriskoi) of a style which apparently

5 Karantzali 2005; Marketou et al. 2006, 54.

6 Mountjoy (1999, II, 1044) dates only two vases to the LM IIIC late/Sub-Minoan phase; to these the finds of Tomb 3 at Pylona-Aspropilia should be added, see Karantzali 2001, 18–9; see also Benzi 2013, 541, who assigns more vases to this phase.

7 Kourou 2003, 249–50; d'Agostino 2006, 67; Marketou 2010, 788; Benzi 2013, 541.

8 For the cemetery of Ayia Agathe, see Zervaki 2011; 2014; 2020.

9 Desborough's association of the Sub-Mycenaean culture with the innovative practice of single burials in cist or pit tombs, with cist and pit cemeteries appearing for the first time during this period in Attica, Euboea and the Argolid, also holds for Rhodes, with the cemeteries at Ayia Agathe and possibly the little-known cemetery of Soroni. The information that in 1932 a "Late Mycenaean" cist grave cemetery was located south of the village of Soroni is mentioned by Laurenzi 1938, 51.

10 The skeletal material from the cemetery has been studied by Dr. Tina McGeorge and will be published as an Appendix in the full publication of the cemetery.

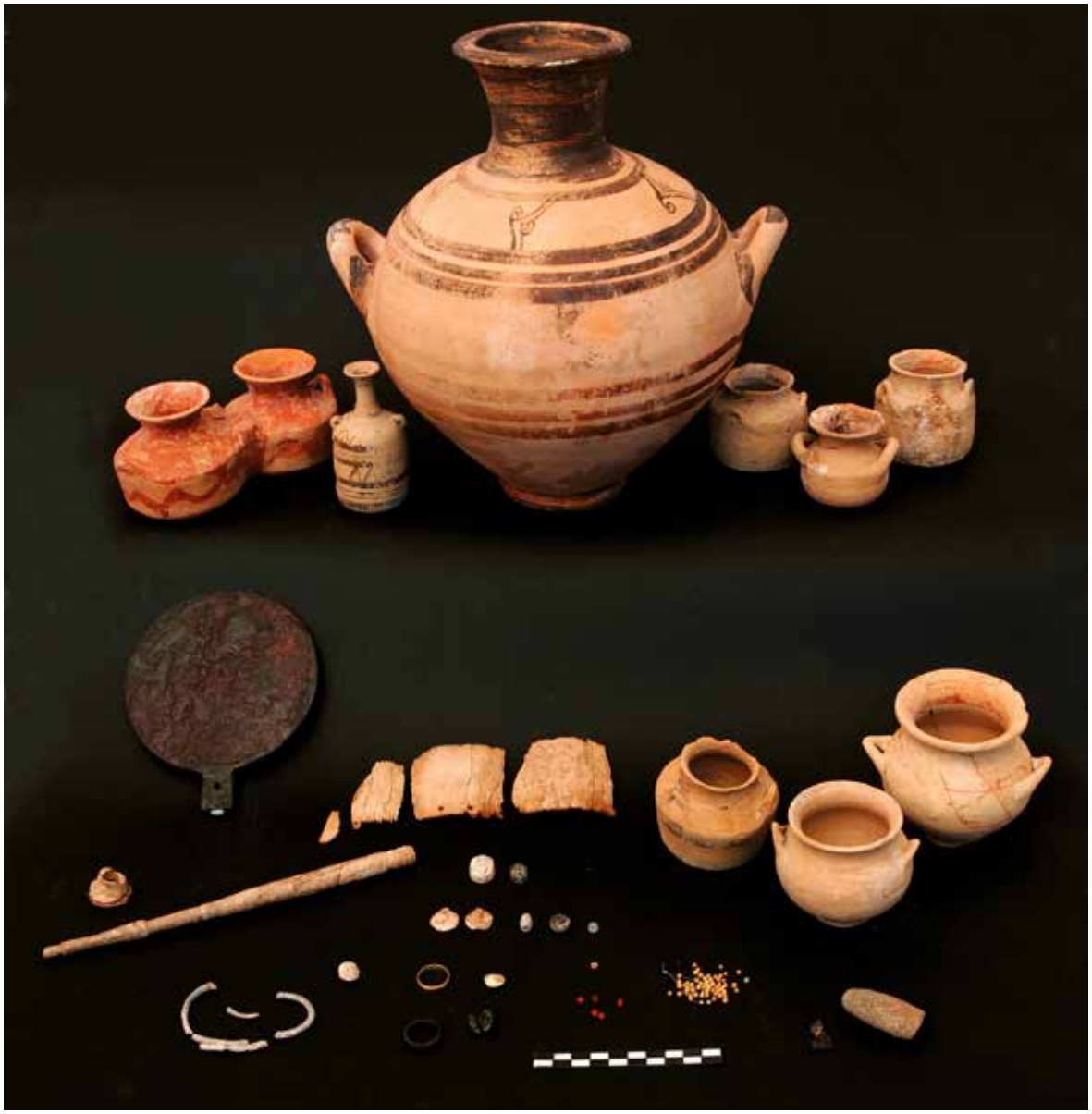

Fig. 1. The assemblage of Ayia Agathe Tomb 3 (Ephorate of Antiquities of the Dodecanese).

evolved in the Dodecanese and on the southwestern Anatolian coast, and quite probably influenced the emergence of the wavy-line pottery of Cyprus.[11]

Tomb 3, a pit-cave, was exceptional in the richness of the gifts accompanying the burial of an adolescent female. It contained a total of ten vases, mostly small unguent vessels, a bronze mirror, jewelry of gold, semiprecious stones and faience, weaving tools of ivory and two scarabs (Fig. 1).[12]

Among the vases, the small bottle Π25547 is a Cypriot import (Fig. 2). The provenance has been confirmed by clay analysis.[13] It is decorated with triangles filled with drop-shaped dots, instead of the hatched or

11 Zervaki 2020, 212–27, 303.

12 Zervaki 2011; 2014; 2020.

13 The sample, along with some more ceramic samples from the cemetery of Ayia Agathe and from the Lindos chamber tombs, was selected for Neutron Activation Analysis (NAA) and will published by Drs Anno Hein and Vassilis Kilikoglou.

Fig. 2. Bottle-vase Π25547, Ayia Agathe Tomb 3 (Ephorate of Antiquities of the Dodecanese).

double-hatched triangles usual in the Cypriot Proto White Painted (PWP) style. Similar in shape, but decorated with bands is the cylindrical bottle Π16796, found in Tomb 4 at Pylona-Aspropilia in Rhodes.[14] The closest parallels for the Ayia Agathe vase, in shape and decoration, are the PWP bottle no. 9 from Tomb 16 at Alaas in Cyprus (the only pit-cave in a cemetery of chamber tombs)[15] and Sub-Mycenaean bottle no. 507 from Tomb 97 at the cemetery of Kerameikos.[16] The Ayia Agathe bottle is the only known exampleof PWP Ware outside Cyprus[17] and actually one of the very few Cypriot imports of the 11th century BC in the Aegean and Mainland Greece.[18]

The ivory spindle shaft MA1395 from Tomb 3 has few parallels in LH IIIC burial contexts in the Aegean.[19] Ivory spindles are common in rich LBA burials on Cyprus, while at sites along the Syro-Palestinian coast they are also found in residential and cultic contexts.[20] In the subsequent periods of the EIA, ivory spindle-shafts

14 Karantzali (2001, 64) considers it a local, probably Rhodo-Mycenaean vase, showing similarities to Cypriot ware. The latest burials in the tomb date to LH IIIC late. The Pylona vase finds its closest parallel in bottle-vase no. 76 from Salamis Tomb I, see Yon 1971, pl. 24.76.

15 Karageorghis 1975, 12, 14 no. 9, pls. 10, 56. Also, the bottle no. 14 from the same grave (Karageorghis 1975, 14 no. 14, pls. 10, 56) and the bottles D6 and D7 in the Hadjiprodromou Collection which came from earlier looting of the same cemetery (Karageorghis 1975, 33 nos. 6, 7, pls. 29, 72).

16 On the bottle no. 507 from Tomb 97, north of Eridanos at Kerameikos, see Kraiker and Kübler 1939, 44 no. 507, pl. 27; Desborough 1964, pl. XVI.2.

17 A vase found in a burial context at Elis is considered a local imitation of a PWP Ware horn-vase, see Vikatou and Karageorghis 2006.

18 See Kourou 2016, 52–3.

19 At least five specimens were found at Perati and one at Asine, see Iakovidis 1969–1970 B, 350–52. Iakovidis comments on the short length of the shafts, which renders them non-functional, and considers them status symbols. The presence of wooden spindles in tombs, presumably of functional length, is assumed by the frequent whorls of different materials.

20 See Sauvage 2014. In Cyprus ivory spindles are found in burial contexts at Enkomi, Kition and Palaepaphos. On the Syro-Palestinian coast they are found in cemetery and settlement contexts as well as in sanctuaries at Hamma and Megiddo.

are no longer found accompanying female burials in the Aegean; they are, however, present in rich burials of women at Italian sites of the Final Bronze Age and the Geometric period,[21] indicating the authority of the lady-of-the-house and the economic significance of the cottage industry of cloth production.

Among the small finds from Tomb 3 at Ayia Agathe there were objects from Cyprus and the Eastern Mediterranean that carry symbolic value. The gold-sheet bead, M1674,[22] of the "cowrie-shell" type, has parallels in rich burial contexts in Cyprus, but none in Aegean sites outside of Rhodes.[23] The two faience plaques, MA1391α and β, in the shape of mandrake fruit,[24] are commonly used as spacer-beads in composite Egyptian necklaces; they are also found in rich burial contexts at Enkomi.[25] Both of the scarabs associated with Tomb 3,[26] MA1389 and MA1401, have parallels at Tell-el-Farah, of Syro-Palestinian manufacture, dating to the 19th or 20th Dynasty.[27]

Finally, the mirror M1669 from Tomb 3 belongs to Catling's tanged Cypriot type 2, as do all the other specimens known from chamber tomb contexts at Ialysos.[28]

The deposition of a large number of vases in rich female graves in Geometric contexts has been interpreted as a display of the wealth of the *oikos*.[29] Apart from the fact that Tomb 3 of Ayia Agathe was by far the richest grave of the cemetery, the great number of small containers for storing unguents and oils, in connection with objects carrying magical connotations (the scarabs and the plaques in the shape of mandrake fruit, a known hallucinogenic), possibly indicate that this was the burial of a young female trained to become a healer. Mirrors found in graves are usually considered toiletry accessories with symbolic and magical value.[30] The magical significance of the act of creating yarn is often referred to in ancient literature. The ivory spindle, ceremoniously held on the chest of the deceased in the right hand, should not be dismissed as a tool, even as a luxurious model of one, indicative merely of social and economic status, but rather as an emblem of rank, of her authority in the *oikos* and possibly even over a small number of dependent households.

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21 For spindles of the Final Bronze Age in Italy, see Borgna 2003. Spindle shafts of silver, bronze, ivory and amber from rich female burial contexts in Italy were exhibited in the exhibition *Princesses of the Mediterranean at the Dawn of History*, from the area of Rimini (cemetery of Lippi Tomb 24/2005 cat. no. 267846, see Stampolidis 2012, 257 no. 27, the Banditella cemetery Tomb II, National Archaeological Museum of Florence cat. no. 11138, see Stampolidis 2012, 272 no. 28), and from Etruria (Grosseto in Vetulonia, National Archaeological Museum of Florence cat. no. 7378, 7379, 11138, see Stampolidis 2012, 287 nos. 23 and 24 and Cerveteri, Regolini Galassi Tomb, Museo Gregoriano Etrusco cat. no. 20466, see Stampolidis 2012, 319 no. 6).

22 Zervaki 2014, 190 no. 22-2.

23 For a list of "cowry-shell" beads from Cyprus, see L. Åström 1972, 506 no. 11, fig. 65.32. See also Papasavvas in the present volume. P. Åström (1972, 577) considers the circular version a Cypriot creation. One other specimen comes from Rhodes, from the Biliotti excavations at Ialysos, see Marshall 1911, 59 no. 791; Benzi 1992, 187.

24 Zervaki 2014, 194 no. 22-14.

25 Friedman 1998, fig. 103. Mandrake fruit beads are among the different vegetal forms of the gold beads of the Egyptian pectoral from Tomb 93 of Enkomi, see Papasavvas in the present volume.

26 Zervaki 2014, 190 no. 22-12, 13.

27 On parallels from Tell el-Farah, see Giveon 1985, 34–5 nos. 37, 38, 44–5 no. 63. Compare also the scarab no. 44 from Salamis Tomb I in Cyprus (inv. no. 1340), Yon 1971, 14–7, fig. 3, pl. 16 (P. Barguet).

28 See Catling 1964, 224–27; for Cypriot mirrors, see P. Åström 1972, 611–12; for the five Ialysos mirrors, see Benzi 1992, 182; one more mirror from the Dodecanese, from a chamber tomb at Makeli on Karpathos, also belongs to the tanged type, see Melas 1985, 53, 153; also Paschalidis 2012, 554. See also Sienkiewicz in the present volume.

29 D'Acunto 2017.

30 Mirrors are depicted being used in ritual acts in Near Eastern and in Aegean iconography, as on the Pictorial Style conical rhyton from Kalavarda Aniphoros (Archaeological Museum of Rhodes cat. no. Π19731, see Benzi 1992, 417, pl. 130a–b). The magical connotations of mirrors are commonly represented in the literature and iconography of later periods. The belief that the soul survived after death as "*εἴδωλον*", a reflection, led to divination connected with reflective surfaces, like water. See Bremmer 1987, 73; Frontisi-Ducroux and Vernant 2001. For the Bronze Age mirrors, see Baboula 2000, 67–8.

Fig. 3. Pottery assemblage of Lindos Tomb 2 (Ephorate of Antiquities of the Dodecanese).

Rich female burials of the Mycenaean period, and also of the EIA, are usually found alongside male burials, either in the same chamber or in adjoining ones.[31] In the case of Tomb 3 at Ayia Agathe the rich female burial is not only autonomous but is also accompanied by symbols of authority and a number of artefacts connected with magic ritual and healing.

THE CHAMBER TOMBS OF LINDOS

The two chamber tombs of Lindos were uncovered in 2012, during cleaning work at the site of the early Hellenistic theatre.[32] In contrast with the single-burial shaft graves and pit-caves of Ayia Agathe, they indicate a reversion to the practice of family burials in chamber tombs observed in the Rhodian cemeteries of the LBA. Tomb 1 contained two burials and Tomb 2 the burials of a man, a woman and a six-year-old child.[33]

The pottery dates from the Sub-Mycenaean and Early Protogeometric (EPG) periods, providing a sequence following the Ayia Agathe pottery. The krateriskos and juglet from Tomb 2 are within the local ceramic tradition. The bell-shaped skyphos, Π30501, is a definite import from central or east Crete (Fig. 3).[34]

The large stirrup jar, Π30500, from Tomb 1 (Ht 44.5 cm) (Figs. 4–5) is possibly a vase of Rhodian manufacture;[35] it belongs to a long Cretan tradition that also shows continuity in Cyprus.[36] The Lindos vase

31 See for instance the female burials in the Tomb 200–202 complex at the Knossos North Cemetery, Catling 1995, or the princely burials at Toumba in Lefkandi, Catling 1993. See also D'Acunto 2017 for the rich burials of the Geometric period in Rhodes.

32 For the excavation of the Lindos tombs, see Vratsali and Farmakidou 2012; for a first presentation of the material, see Zervaki 2019.

33 According to the anthropological study, the deceased in the two adjacent tombs were probably blood relatives, see McGeorge 2019.

34 The provenance was confirmed by NAA by Hein and Kilikoglou, see above note 13. The development of the shape is followed in the Sub-Minoan and PG contexts of the cemeteries in the area of Knossos; see Coldstream and Catling 1996, 247, fig. 141.114, 368, 369. The shape becomes higher in EPG and remains the same in Middle Protogeometric (MPG), see Coldstream 2001, 51, fig. 1.16e–l, pl. 25a–l.

35 Hein and Kilikoglou (see above note 13) characterise this sample as of "unknown" provenance. This inconclusive reading is probably the result of the technique of adding crushed pottery in the clay, a practice observed in the manufacture of large vases, since it facilitates firing.

36 Concerning the motif of a triangle with concentric semicircles on its base, there has been some debate on whether it originated on Crete or on Cyprus. Desborough (1964, 26–7 ns 2–5) considered it a Cretan feature; *contra* Karageorghis 1968, 184. The Lindos vase appears to belong to an intermediary stage of the development of the motif.

4.

5.

Fig. 4–5. Stirrup-Jar Π30500, Lindos Tomb 1 (Ephorate of Antiquities of the Dodecanese).

bears definite Cretan features, both in its manufacturing technique and in its decoration.[37] Similar features are seen on somewhat smaller stirrup-jars in Cyprus, such as the PWP stirrup-jar from Kouklia Tomb 9,[38] and also on vases of PWP, Proto-Bichrome, White Painted (WP) I and Bichrome I, all styles belonging to the transition from Late Cypriot (LC) IIIB, characterised by the PWP technique, to Cypro-Geometric (CG) I, which has been dated to the middle of the 11th century BC.[39]

The most striking feature of Π30500 is definitely its size, which is extremely unusual for a decorated stirrup--jar in Crete. In Sub-Minoan and PG times the stirrup-jars used as grave offerings are small or medium-sized. Medium-large stirrup-jars are found in Cyprus in LC IIIB burial contexts; these are of similar proportions to Π30500, but smaller in overall size (24 cm high), featuring a wide disc with an air-hole at the centre and elaborate triangles with double outlines on the shoulder.[40] A stirrup-jar from a looted tomb at Alaas, in Cypriot Proto-Bichrome Ware, is larger (Ht 33 cm), and presents similar features.[41]

37 Its proportions, with a third of the total height corresponding to the spout-handles-false neck, do conform to the standard of SM stirrup-jars. The technique where the base and body of the vessel are wheel-thrown and the top part is made separately and then joined to the body is recognised as diagnostic of LM IIIC. In the case of the larger Lindos stirrup-jar, however, the entire vase appears to have been made in sections, which were then assembled. The spiked cone on the disk and the air-hole on the disk are late features. The unusual shape of the spout with the concave rim could have been influenced by the spouts of Rhodian strainer-jugs. Transverse strokes down the front of the spout and the back of the handles are also a feature of SM stirrup-jars, as are the elaborate triangles on the shoulder, with double or triple outlines and different fills, often with concentric arcs at the corners.

38 Karageorghis 1967, 6, fig. 8.15.

39 Gjerstad 1944, 88; Furumark 1944, 260–62; Desborough 1964, 241; Iacovou 1991.

40 Desborough 1964, pl. 18a.

41 Karageorghis 1977, 145–46, pls. XXXII, XXXVIII. According to Karageorghis, the Alaas stirrup jar was found together with PWP pottery, along with "the first real Bichrome vase" which allows for a late date. See also Karageorghis 1967, 23.

The closest parallel to Π30500, the almost as large (Ht 39 cm) stirrup-jar cat. no. 12502 in the National Museum of Copenhagen, featuring striking similarities in shape, fabric and decoration, also comes from the area of Lindos;[42] this supports the hypothesis of local manufacture. Dietz places this vase in a "post-Mycenaean phase and before the PG period" and states that it "should be considered representative of the renewed connection of Cyprus with the Aegean, which seems to have taken place after the end of the LH IIIC".

This deposition of large-sized stirrup-jars inside tombs at Lindos, also observed on Cyprus in the same period, should be linked to the diffusion of the Cretan transport stirrup-jars. In Cyprus and the Near East transport stirrup-jars are found in some numbers, both in domestic and burial contexts; some are decorated octopus stirrup-jars, others feature Cypro-Minoan characters. A number of these are found with pottery dating as late as LH IIIC late.[43]

The bronze spiral-ring, M1884, from Tomb 2 is of the coiled type with pointy ends, which is commonly found in Cyprus, both in the form of finger-rings and bracelets.[44]

The most conspicuous find from the Lindos tombs is the great number of ovicaprid astragali; a total of 86 are reported from Lindos Tomb 2, mostly surrounding the child burial, comprising the largest concentration of astragali found in the Aegean. One was found in Tomb 1. Unmodified or modified astragali, as well as imitation astragali, have been found in Bronze Age and Iron Age graves and stratified contexts in the Near East, Anatolia, Cyprus, Crete and the Aegean. They appear to have had both religious and secular use.[45] In Cypriot burial contexts both unworked and modified astragali are found from the Middle Bronze Age (MBA) onward, becoming more frequent at the close of the Bronze Age, when they appeared in sanctuaries and were used in divination rituals.[46]

In later periods gaming with astragali was related to certain deities and to rites of passage. Astragali, among other childhood toys, were offered at sanctuaries upon exiting adolescence or before marriage and were used in astragalomancy and erotic divination.[47] Large numbers are reported from graves in Italy, especially at Locroi Epizephyrioi, and in Spain, sometimes arranged in specific patterns around the deceased; it has been suggested that their function was to protect the living from the dead.[48]

CONCLUSIONS

The new finds from the Ayia Agathe cemetery and the Lindos chamber tombs show that Rhodes was not deserted at the end of the LBA, as was suggested until recently by the extreme lack of archaeological evidence. This was a time of severe setback on the island, evident in the change of the settlement pattern and the adoption of new

42 The vase was purchased by Kinch at Lindos during his visit in 1913–14. See Dietz 1984, 89–90, 109, 115, fig. 115, 116; also, Benzi 1992, 11, 221.

43 Haskell et al. 2011, 116–17.

44 Catling 1964, 232–34.

45 The greatest concentrations of astragali are recorded from south Levantine cultic contexts at Megiddo, Lachish and Taanach, dating from the 10th century BC. At Megiddo a krater was found containing 643 specimens. Astragali are reported also from Philistine sites at Tel Qasile, Tel Miqne-Ekron and Tel-el-Hammah. See Gilmour 1997, 168–69.

46 Reese 1985, 382–87; 1992, 127. A number of astragali and a bronze votive astragalus were located in sacred Area II at Kition. Reese (1985, 388–89) has argued that astragali were used in divination, based on the presence of other probable divination tools such as liver and kidney models and incised scapulae, comparing the finds from Kition with clay models from Ras Shamra and Megiddo of the 13th and 12th centuries BC and with similar evidence from sanctuaries at Tel Miqne and Tel Dor. Astragali were also found in the Sanctuary of the Ingot God at Enkomi (LC IIIB–CG I), and, in later periods, at the Temple of Astarte-Aphrodite at Tamassos, the Cypro-Archaic Sanctuary of Apollo Hylates at Kourion and the 5th–4th century sanctuary at Kition *Bamboula*.

47 Stampolidis and Tasoulas 2009, nos. 194, 225–26 (M. Filimonos-Tsopotou), with bibliography.

48 De Grossi Mazzorin and Minniti 2013.

burial practices and tomb types. Discontinuity is also evident in the local pottery sequence. Characteristic shapes and motifs of the Rhodian LH IIIC are absent from the pottery of Ayia Agathe and the Lindos tombs.[49] The new information provided by the recent excavation finds suggests that a series of successive installations of small groups took place at this time, establishing new sites. The short-lived settlement of Ayia Agathe in the first half of the 11th century BC was probably an impermanent installation of people on the move. It was succeeded by the foundation of Lindos. The Lindos tombs are the earliest safely dated indication for the establishment in the early 10th century BC of the site, which was to become the most important Rhodian harbour for trade with the Eastern Mediterranean.

Far from being isolated, Rhodes participated in the exchange networks that developed among the emerging elites in the central and Eastern Mediterranean. Contacts between Crete and Cyprus during the 11th century BC are well attested, and Rhodes would certainly have been a necessary port-of-call on the sea-route. Both the cemetery of Ayia Agathe and the Lindos tombs show links with Crete and Cyprus, evident in the imported pottery and small finds. The sequences of bottle-vases from Rhodes, Cyprus and Attica and of large-sized stirrup-jars from Crete, Rhodes and Cyprus presented here show that Rhodes contributed to the technological and artistic exchange between the Aegean and Cyprus that resulted in the development of the CG pottery wares.[50] The magic symbolism of the burial gifts accompanying the young woman in Tomb 3 at Ayia Agathe, and the great number of astragali from Tomb 2 at Lindos, indicate the adoption of Near Eastern magical-religious practices. They are evidence of the overseas interaction between commercial elites and attest to the expression of similar ideological and religious prototypes. Some of these features –the use of spindle shafts as markers of female authority and the abundance of astragali in burial contexts– were not to be continued on Rhodes in the following periods. They are, however, found in Italian contexts starting in the Final Bronze Age, bearing witness to the westward flow of social entities and religious practices along with prestigious objects. This evidence attests to the movement of people, not just the transfer of luxury items which indicate status and overseas connections.

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49 Their reappearance in Rhodian pottery in Geometric times is largely a counter-loan from Cyprus, see Zervaki 2020. The influence of Cypriot pottery on the evolution of Rhodian Geometric, as pointed out by Bourogiannis (2009; 2012), is unquestionable. However, these Cypriot ceramic styles are based to a large degree on the Mycenaean and Sub-Minoan decorative tradition, featuring elements that are present in the pottery of Ayia Agathe and the Lindos tombs in the 11th century BC.

50 See also von Rüden's view (2007) that any study of the relations and exchanges between Cyprus and Crete in the "Dark Ages" should take into account other participants in the exchange pattern in the Eastern Mediterranean area.

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3D model analysis of some Late Bronze Age and Early Iron Age swords from Cyprus

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ABSTRACT

This paper focuses on the study of ten swords from Cyprus of the Late Bronze Age (LBA) and the Early Iron Age (EIA). Using SolidWorks, a modelling computer-aided design and engineering program, we have produced 3D models of five bronze and five iron swords, based on their physical characteristics (mainly form and alloys). We ran tests on them by simulating cutting and thrusting blows at the maximum load of force, until their yielding point was identified. The iron swords were compared with their bronze predecessors and the benefits of using iron (as steel) instead of bronze were evaluated. This analysis offers new evidence on the old question of whether swords were used only as prestige objects by members of the elite or also as functional weapons. All the swords in our study were found to be capable of being used for both cutting and thrusting and we can therefore suggest that they were functional weapons, able to be used in battle.

INTRODUCTION

Our research project, entitled "*Swords in the Eastern Mediterranean from the Late Bronze Age to the Early Iron Age*", offers new evidence on an old question, namely whether swords were only prestige objects for the elite or functional weapons as well. Within the framework of this project, we explore the utilitarian aspects of swords by using the Computer Aided Engineering software SolidWorks, which examines the resistance of an object to applied force. By comparing bronze and iron swords, we investigate if iron swords were always better than bronze ones, as well as the reasons behind the predominant use of iron for this particular type of weaponry. Finally, we consider what, if any, relationships exist between socioeconomic changes and technological advances. In this paper we present some preliminary results from the mechanical simulations (tests) conducted on ten swords from Cyprus (Table 1) and discuss their implications.

METHODOLOGY

SolidWorks is a Solid Modelling Computer-Aided Design (CAD) and Computer-Aided Engineering (CAE) software, designed to evaluate the mechanical and physical properties of objects including heat transfer, motion and resistance to force. SolidWorks uses Finite Element Analyses (FEA), an approach for mathematically analysing the resistance to force of an object's form and material, based on mathematical equations. Miller was the first to use this software within the framework of his MA research on a group of Mycenaean swords, based on

Sword	Site	Context	Length	Reference
T.18 (Bronze)	Enkomi	Tomb 18	75 cm	Schaeffer 1952, pl. LXVIII
W.212a (Bronze)	Enkomi	Workshop-Well 212	60.9 cm	Matthäus 1985, taf. 140–41
W.212b (Bronze)	Enkomi	Work-shop-Well 212	59.2 cm	Matthäus 1985, taf. 140–41
Loizou Collection (Bronze)	Cyprus	Unknown	55 cm	Matthäus 1985, taf. 140–41
T.47 (Bronze)	Enkomi	Tomb 47	42.5 cm	Matthäus 1985, taf. 140–41
Idalion (Iron)	Idalion	W. Acropolis	79.7 cm	Åström 1967: 1, 89
T.76a (Iron)	Kouklia-Palaepaphos *Skales*	Tomb 76	67 cm	Karageorghis 1983, 216, 217, 230, pl. CXLIII, fig. CXLII; Vonhoff 2013, 202
T.76b (Iron)	Kouklia-Palaepaphos *Skales*	Tomb 76	54 cm	Karageorghis 1983: 216, 217, pl. CXLIII, fig. CXLII
T.210 (Iron)	Kouklia-Palaepaphos *Skales*	Tomb 210	64.5 cm	Karageorghis and Raptou 2016, pls. LXVI, XCVI
T.145 (Iron)	Kouklia-Palaepaphos *Plakes*	Tomb 145	45.5 cm	Karageorghis and Raptou 2014: 67, pls. XXXIX, XCII

Table 1. The swords chosen for our study and their contexts.

drawings from Sandars' typology.[1] We are adopting a much more detailed and diverse approach, also taking into strict consideration the methodological limitations of this software, when applied to ancient materials.

We designed 3D models of intact swords that are close to their actual and complete forms. We then ran tests by applying forces to these models, imitating sword blows, in order to determine their resistance. The applied forces simulate cutting and thrusting blows, applied to the sides of the blade and to the tip respectively. It should be noted here that SolidWorks shows the plastic deformation of an object, and not its breaking point. In our case, plastic deformation is sufficient to render a sword useless. SolidWorks gives one the opportunity to create and define new materials[2] and to evaluate the physical properties of a great variety of archaeological artefacts rapidly and without the expense of manufacturing them.

Two main factors affect the accuracy of our study. First, the models are more symmetrical than the originals because they are created by design software, and imperfections in the manufacture of the actual swords, both in materials and design, should also be considered. Second, although SolidWorks has a material library of bronze and steel alloys, none of them is an exact match to the ancient ones. It is possible to add new materials to the library of SolidWorks, but four basic mechanical properties need to be known: a) tensile strength, b) yield strength, c) ductility and d) Brinell Hardness. Unfortunately, these are not available for ancient alloys. In the future, we intend to conduct tests on metallic tubes made of recreated ancient alloys to define their mechanical properties more accurately. To overcome this present obstacle, we identified industrial alloys very similar to the ancient ones. Although this was a very tedious and time-consuming task, it enabled us to ensure a greater degree of accuracy in our study.

1 Miller 2017, 16–21.
2 Miller 2017, 16–7.

For the bronze alloy, we focused on two main factors in order to close the gap between the modern and the ancient alloys: first, the percentages of lead, tin and copper, and second the percentage of impurities and their influence on mechanical properties. It is worth mentioning here that one factor that affects mechanical properties, but cannot be measured exactly, is the very process of shaping the bronze object. The physical properties of the alloys dictate how the material should be worked by a metalsmith, but the exact process remains unknown in any detail, even though it seems that craftsmen followed a standard workflow, depending on the objects they wanted to create.[3] Experimental work regarding the techniques of manufacturing[4] and the metallography of some swords[5] helped us understand not only the process of hardening but also the most probable process of manufacturing.[6] Even so, overall, knowledge of the manufacturing process offers only limited assistance in understanding the variations in the values of the mechanical properties.

For our study we selected a bronze alloy after careful examination of 54 archaeometric analyses of swords from the Eastern Mediterranean.[7] The alloys range from 85–90% Cu and 9–11% Sn with <0.5 Pb. For bronze swords a high percentage of tin was used to increase their strength and elasticity,[8] while impurities were kept to a minimum to enhance performance.[9] Impurities such as Fe, Sb, P, Zn, As and Ni, below specific values, are considered either naturally present in the ore or an unintentional result of the smelting process. Their natural incidence may generally be set at Pb <0.3%,[10] Ni is an inadvertent impurity at <1%,[11] Fe <0.5%,[12] Zn <1.5%,[13] and Sb.[14] Some of these elements, as tests in modern alloys have indicated, can influence the mechanical properties of the artefact even in small quantities – thus P at >0.1%,[15] Zn >0.8%,[16] Sb >0.2%,[17] Ni >0.2%[18] and Fe >0.15%.[19]

Given the fact that swords were constructed from bronze with an insignificant quantity of impurities and with tin percentages ranging from 8–11%,[20] we decided to use an industrial bronze alloy with no impurities (UNS C90700). Every archaeometric analysis was matched with an industrial alloy from the Unified Number System (UNS) of the Copper Development Association. From these matches emerged two dominant groups of alloys, the first being Cu 87–90%, Pb <0.9% and Sn 9–11%, and the second Cu 82–85%, Pb <0.25% and Sn 15–17%. Each group corresponds to a UNS code of the American Copper Association. The applied type of alloy (UNS C90700)[21] has an average value of elements (Cu 89%, Sn 11%). It was chosen because in the majority of the archaeometric analyses tin does not surpass 10%. Every bronze 3D model sword in our study was "created" with this alloy.

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3 Nerantzis 2012, 238.
4 Nerantzis 2012; Sapiro and Bryan 2016.
5 Tselios 2013, 91–2, 109.
6 As Nerantzis (2012, 238) notes "three hammerings, intervened by two annealing stages appear suitable for working a range of compositions in tin bronzes at 600°C for a short period of time".
7 A detailed discussion will follow in the final publication of the results of our research project.
8 Tselios 2013, 91–2.
9 Tselios 2013, 93, 104.
10 Papadimitriou 1995, 151.
11 Cheng and Schwitter 1957, 351.
12 Papadimitriou 1995, 155; Garbacz-Klempka et al. 2016, 227; Gouda et al. 2019, 1.
13 Craddock 1978, 2.
14 Eggenschwiler 1932, 626, 633–34; Dardeniz 2020, 2–3.
15 Durowoju and Babatunde 2013, 1801–3.
16 Osakwe et al. 2017, 34; French and Staples (1929, 1037) mention changes from Zn >4%.
17 Eggenschwiler 1932, 634.
18 Nnakwo et al. 2017, fig. 14-7.
19 Papadimitriou 2001, 719; Garbacz-Klempka et al. (2016, 234), however, suggest the largest changes at Fe >0.8%.
20 Tselios 2013, 93,104.
21 "Tin Bronze Sand Casting Alloy" by Azo Materials.

The term "iron", when used in archaeology, covers many different forms in which the metal was used (iron bloom, wrought iron, steel etc.). Iron becomes superior to bronze when in the form of steel. To reach this state, it has to go through a complicated and difficult process (carburisation, quenching, tempering) in order to achieve its full potential. For the first phase of this experiment, and specifically for the Cypriot swords, we chose to use a medium-carbon steel alloy. There is evidence to suggest that the technological expertise to produce steel existed in Cyprus by the 11th–10th centuries BC at the latest.[22] More specifically, the alloy chosen from the existing material library is the AISI 1025 Carbon Steel (UNS G102500),[23] the chemical composition of which is most similar to the results of the archaeometric analyses, containing only carbon as its key alloying element. The percentage of Fe is very high, as it is in almost all the iron objects.[24] Other impurities do not affect the alloy properties. For example, manganese acts only as a deoxidiser, since it is considered an alloying element only when it exceeds 0.80%.[25] Therefore, the sole criterion for our choice was the percentage of carbon. There are specific examples from the metallographic analyses which give a percentage between 0.2 and 0.3% C.[26] When an iron object has been carburised and yields this percentage of carbon, it is considered a medium-carbon steel, which is a relatively hard metal, at least by ancient standards. Even with only the first step of the steeling process completed, the metal produced is still stronger than bronze.[27]

It is impossible to simulate a real-life battle environment and calculate all the applied forces on the swords. There are too many unknown variables which would influence the outcome: both regarding the environment of the battle and the user himself, namely his strength and training. Furthermore, the force applied to a sword depends on the velocity of the blow and the angle of impact, the warrior's mass, the kinetic energy and acceleration of the object as well as the distance from the target.[28] Fortunately, it is not necessary to try to guess all these variables, which would in any case be an impossible task. For our experiment it was sufficient to calculate the yield point of the swords. The yield point is defined as a point on the stress–strain curve beyond which the material enters the phase of nonlinear pattern and suffers irrecoverable strain or permanent deformation. If a greater force is applied, the sword will deform and finally fracture. If the same force is repeatedly applied, there is a very real danger of fatigue. This is a very significant aspect, since plastic deformation renders a sword useless.[29] We therefore decided to apply to our sword models the maximum force until their "yield point" was reached.

Swords were usually equally capable of being used in both cutting and thrusting motions. However, scholars in the 19th and early 20th centuries favoured the idea that swords were either used only for thrusting or for cutting, mainly based on their own experience of their "gentlemanly" use.[30] Nevertheless, this is far from proven. Thus, one of the aims of our research project was to explore whether swords were used for cutting, thrusting or both. In order to investigate this question, we applied the loading force to the tip of the sword (simulating a thrusting blow) and also laterally to the centre of percussion (simulating a cutting blow), where the harmonics are such that maximum force is transferred at the target.[31]

In Von Mises plots the region that sustains the maximum pressure –and therefore is a potential weak point in the effectiveness of the weapon– is depicted. The URES scales, both in the case of cutting and thrusting, indi-

22 Tholander 1971, 22; Karageorghis 1982, 299; Maddin 1982, 310–11; Stech et al. 1985, 200; Kassianidou 2012, 237–40.

23 By Azo Materials. Chemical composition: Fe 99.03–99.48%, C 0.22–0.28%, Mn 0.3–0.6%, S ≤0.05, P ≤0.04%.

24 When observing low percentages in element tables from analyses, one must remember that this is due to the extensive corrosion sustained by the artefact; under normal circumstances Fe is about 97–99%.

25 Singh 2016, 7–11.

26 For analyses of Cypriot iron objects with similar results see Åström et al. 1986; Tholander 1971. Also, there are analyses in progress of EIA objects in NCSR Demokritos by M. Roggenbucke (personal communication, December 2020), which yield an average of 0.2–0.3% C.

27 Maddin 1982, 303.

28 Molloy 2008, 118; Hermann et al. 2020.

29 Molloy 2011, 74.

30 Molloy 2008, 124; 2010, 421.

31 Molloy 2011, 75.

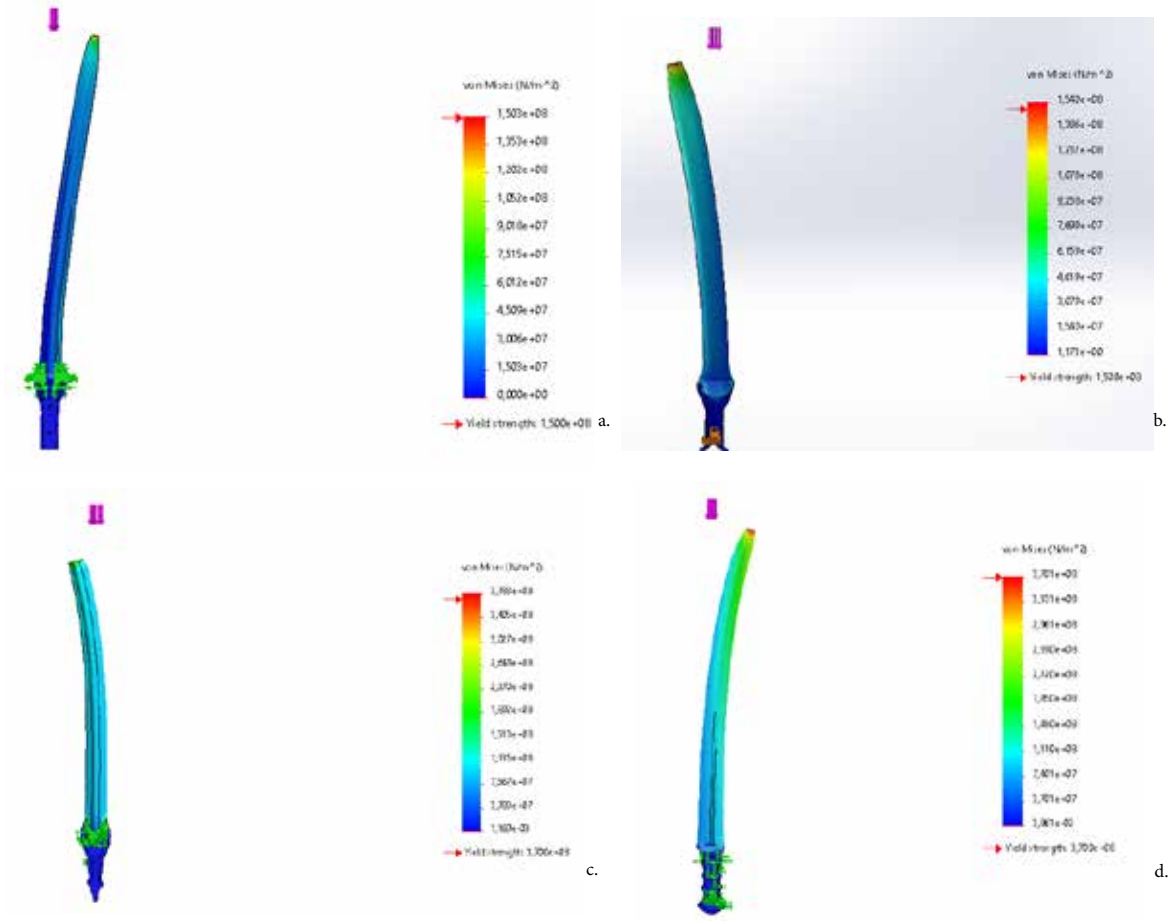

Fig. 1. Thrusting attacks: 1a: W.212a (upper left), 1b: W.212b (upper right), 1c: T.210 (down left), 1d: Idalion (down right)

cate the strain exerted on the sword due to the induced stress. The greatest deformation will occur on the tip and less towards the percussion point. It should be noted that the displacement results, as calculated by SolidWorks, are not one hundred percent accurate. Most of the millimetres of deflection will spring back to their original form (due to oscillation) and a low percentage may be residual. This applies to all swords; therefore, we will not present the URES scales for each individual case.

TEST RESULTS: BRONZE SWORDS

All the bronze swords in the study display a great resistance when employed in thrusting attacks, when forces of thousands of newtons result. Sword W.212b (Fig. 1b) and the example from the Loizou Collection present almost the same resistance in thrusting attacks, perhaps due to morphological similarities such as their length (ca 55–60 cm), width and the absence of a prominent midrib. It is surprising that in a thrusting attack sword T.18 can withstand double the force of sword T.47. A short blade like that of sword T.47 is very efficient for stabbing in a close-quarter thrusting attack.[32] Moreover, the significant discrepancy between the resistance of sword T.18 and sword W.212a (Fig. 1a) is very hard to interpret. Maybe these ambiguous observations are due to the fact that sword T.18 was reconstructed by Schaeffer from three fragments[33] or to the fact that it is heavier

32 Jung and Mehofer 2008, 121.

33 Schaeffer 1952, fig. 107; Jung and Mehofer 2008, 123.

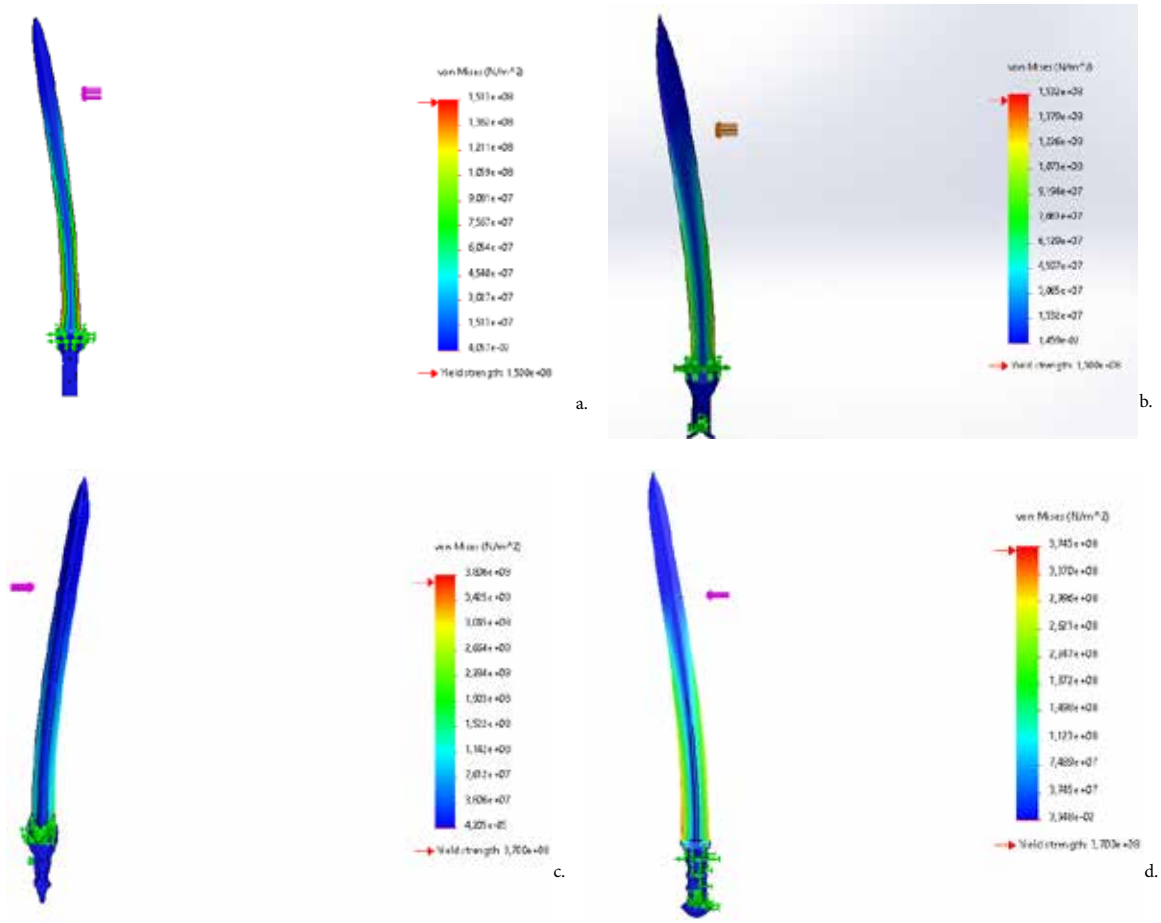

Fig. 2. Cutting attacks: 2a: W.212a (upper left), 2b: W.212b (upper right), 2c: T.210 (down left), 2d: Idalion (down right)

with a broad midrib, which provides greater penetrating power.[34] The difference between the resistances of the swords from Well 212, which are very similar to one another, is also problematic and further analysis is required (Fig. 3).

Sword T.47 shows good cutting performance, even though it is the shortest. As for swords W.212a (Fig. 2a) and T.18, although they are longer and thus theoretically better for cutting,[35] they are more prone to deformation after 100–150 N. This is probably due to their high or broad midribs and thin edges. As Molloy suggests,[36] the reduction or abandonment of the midrib enhances the cutting potential. Indeed, this is confirmed by W.212b (Fig. 2b) and the sword from the Loizou Collection, which do not have high midribs and are of a medium length.

There are similarities in the affected areas across the swords, depending on the type of blow. The tip of the blade is mostly affected during thrusting and the area beneath the guard when cutting. Nevertheless, our analysis shows that all the swords tested could be used both for cutting and thrusting (Figs. 3–4). It seems that swords T.47 and W.212b are equally suitable for both modes. Swords W.212a and T.18 are less effective when used for cutting.

34 Jung and Mehofer 2008, 123.
35 Snodgrass 1964, 109; Molloy 2010, 416.
36 Molloy 2010, 419.

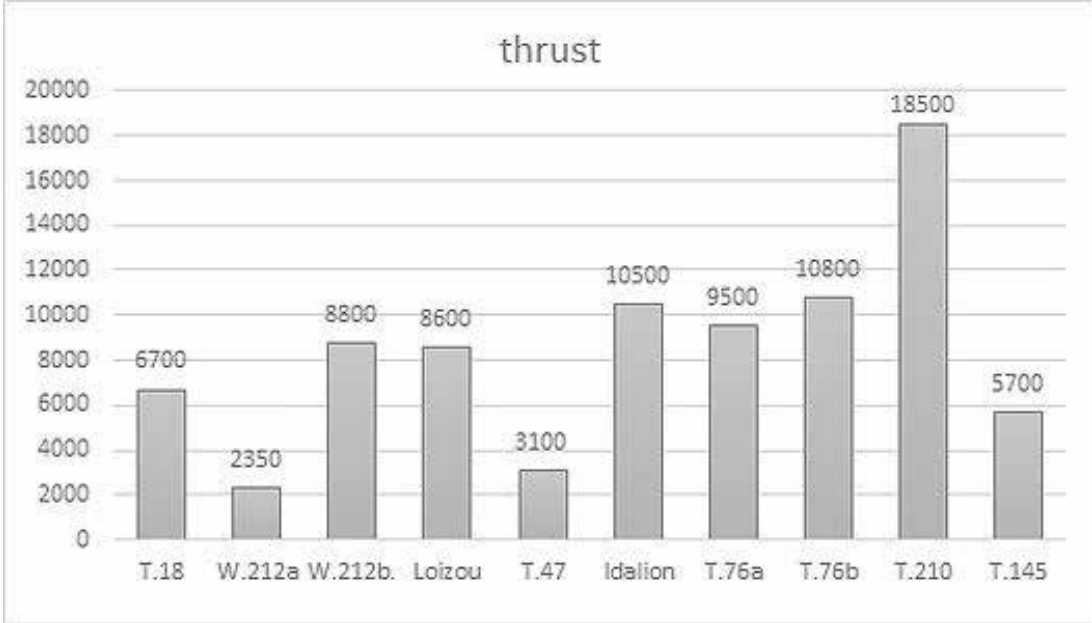

Fig. 3. The resistance to force (in Newton) of all swords in thrusting blows until the yield point.

TEST RESULTS: STEEL SWORDS

Regarding the steel swords, the same methodology was followed, and the yield point was identified. Therefore, the applied force in each case is the maximum sustainable before plastic deformation starts.

In thrusting attacks, all swords show great performance even though their length varies (Fig. 3). Sword T.210 (Fig. 1c) can handle almost three times the load of force of T.145, even though they belong to the same sub-type. The first sword is ca 20 cm longer and has a prominent midrib, while the second seems to lack one. Nevertheless, all the swords, as noted above, can handle large force loads while thrusting, thus this difference between the two swords is probably not an essential one. As for cutting attacks (Fig. 4), swords T.76b and T.145 have the greatest resistance, most probably due to the absence of a midrib on T.76b and the presence of a low one on T.145. On the contrary, T.76a and T.210 (Fig. 2c) present very low resistance due to their prominent midribs. The sword from Idalion is different morphologically to the other examples. The problematic area during the cutting blow is larger, but it can handle a significant force load (420 N) (Fig. 2d). Its surprisingly long length, at almost 80 cm, together with the fact that it has a midrib of rhomboidal section, may be the reason for this, since length with proper support is a great asset in a cutting weapon.[37]

CONCLUSIONS

The first conclusion that emerges is that all swords can handle a much greater force while thrusting than cutting (Figs. 3–4). Nevertheless, they are all capable of being effective in both modes, as has already been suggested.[38] Regarding the *thrusting blow*, the superiority of the iron swords is evident (Fig. 3). Among them, sword T.210 can sustain a truly impressive load of force. The bronze swords can also handle great force, but there are more

37 Snodgrass 1964, 109.
38 Snodgrass 1964, 93; Molloy 2011, 74.

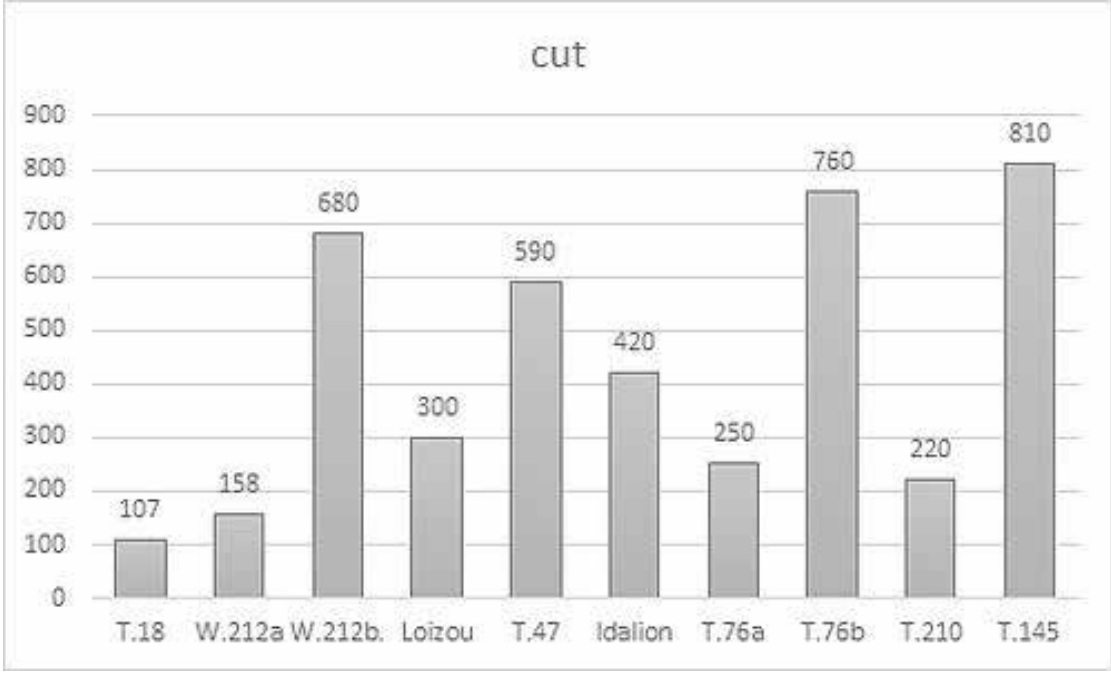

Fig. 4. The resistance to force (in Newton) of all swords in cutting blows until the yield point.

variations among the models. For example, the big difference in resistance observed between the two almost identical swords, Well 212 and T.18, and the rest of the bronze swords cannot be explained only by the geometry of their shape. It seems that thrusting attacks depend on many variables. The kinetic energy of a sword, calculated by its mass and the speed of delivery of the blow, and the fact that this energy goes to work (W) depending on force and distance, shows how many factors have to be considered. First of all, the weight of a sword affects its acceleration in thrusting,[39] as well as the location of the centre of the mass (or balance point).[40] Another parameter to consider is the moment of inertia, determined by the axis of the sword and the distribution of the mass along the sword.[41] Finally, the geometry of the blade, meaning its length, cross-section, width and elements like the pommel, seriously affect its thrusting capability.[42]

Regarding the *cutting blow* (Fig. 4), iron swords seem generally more efficient than bronze ones with the exception of bronze swords T.47 and W.212b. These can handle similar forces, perhaps because of their relatively short length and broad width (T.47) or the absence of a midrib (W.212b). This is an interesting observation in that it implies that bronze swords could be equally efficient for cutting as their iron successors. The reason for this might be a thickened cross-section which helps to absorb the impact force.[43]

The problematic areas are common to both materials when the same type of blow is applied. All swords are prone to damage in the area below the guard on each side of the midrib in the case of a cutting blow; this part needed to be of thicker construction, and so reinforced with more metal. In the case of a thrusting blow the problem is observed at the tip of the sword, but in this case the force they can handle is much greater. Thus, there is no problem with their functionality when used for thrusting. The Naue II swords show greater variability in length and shape. With respect to their morphology, the iron versions are more likely to have rounded shoul-

39 Turner 2002, 7.
40 Jung and Mehofer 2008, 118, 124; Molloy 2011, 74.
41 Turner 2002, 7.
42 Jung and Mehofer 2008, 118, 124.
43 See also Jung and Mehofer 2008, 131.

ders and a flat grip-tongue.[44] The sword from Idalion (Figs. 1d, 2d) is a special example with scalloped edges on the tang. Its mechanical performance is quite impressive, even though it dates to the beginning of the EIA. It resembles Levantine daggers, and it has therefore been suggested that it is not an early attempt to produce an iron Naue II sword.[45]

FINAL REMARKS

This paper has presented some initial results of our analysis of ten swords from Cyprus. We will continue our research by constructing more 3D models of swords from the Eastern Mediterranean and running mechanical tests on them. By the end of our research project, we hope to have a better understanding of the role of swords as status symbols and weapons, and to be able to assess possible links between technological advancements and the sociopolitical background of the transition from the LBA to the EIA.

One of the biggest problems we face is the limited number of existing archaeometric analyses, especially of iron swords. Metallographic analyses are necessary to reveal the steps in the process of making steel. Furthermore, mechanical testing of swords is not without its disadvantages, since we cannot assess a series of factors. These in many cases cannot be calculated even with the help of experimental archaeology. Another important limitation is the fact that SolidWorks shows the yield point of an object and thus the beginning of its plastic deformation, without being precise about its degree and oscillation. On the other hand, by using SolidWorks we can at least design the object and understand the advantages and disadvantages of a sword's morphology and its resistance to stress, which in some cases renders it almost useless after just a few blows.

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44 Vonhoff 2013, 202.
45 Palermo 2018, 235.

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Networks of similarities, worlds of shared practices

On the use of the term koine for the connections between Cilicia and Cyprus in the first centuries of the first millennium BC

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ABSTRACT

The aim of this paper is to discuss the use of the term koine applied to the connections between Cyprus and Cilicia in the first centuries of the 1st millennium BC. Referring to a recent consideration of this concept by Michael Dietler and using the pottery evidence from the settlement of Misis, in the lower plain of the Ceyhan, it is argued that the term suggests a form of homogeneity that never existed between the two regions.

Cilicia is a crucial region of the eastern Mediterranean that can be considered as a "third space" in between the Aegean basin and the Near East.[1] In the last decades cultural connections between Cyprus and Cilicia have been a common subject in scholarly debate. It was John Boardman who adopted the term Cypro-Levantine koine to explain the affinities in pottery decoration existing between Cyprus, Cilicia and the Levant at the beginning of the 1st millennium BC.[2] The topic was revived by Tamar Hodos in 2005, who replaced Boardman's term with "Cypro-Cilician koine".[3] Can the term koine, however, explain the many similarities in the ceramic production of Cyprus and Cilicia in the early 1st millennium BC? Applied to non-linguistic phenomena by Mediterranean archaeologists, the concept of a material or cultural koine has very often been adopted in the past to infer the existence of a *cultural unity and identity* resulting from interactions of some type, as if the term itself were a mechanism that could explain regional similarities in material culture.[4] In recent years, however, the concept has been critically discussed, with the result that the emphasis has shifted from the simple enunciation of similarities existing between regions to an understanding of the mechanisms that can justify supra-regional commonalities: in other words, the importance of searching for an explanation of the processes lying behind the patterns indexed by the term has been highlighted.[5]

I shall start by focusing on the concept of koine to explore how useful it is to apply it to the connections between Cilicia and Cyprus at the beginning of the 1st millennium BC. Then I will briefly compare the two

1 D'Agata 2019a; D'Agata et al. 2020.
2 Boardman 1999, 149.
3 Hodos et al. 2005, 81.
4 Cf. Dietler 2017, 21–2.
5 Dietler 2017, 24; see also D'Agata 2019a, 88–9.

regions in terms of ceramic production and discuss the processes that generated the pattern of similarities. As a short introduction to this discussion, it is relevant to highlight the fact that relations between Cyprus and Cilicia were not continuous in their intensity in antiquity. There were many periods when contacts were weak or non-existent, as in the 14th and 13th centuries BC. Geographical proximity does not necessarily coincide with sharing the same cultural identity. Political choices made by local communities usually form the basis of cultural links, even in neighbouring areas.

Despite the Cypriot and perhaps also Aegean presence at Tarsus in the 12th century BC, the Sea People phenomenon –which in the Amuq region seems to have fuelled the formation of the kingdom of Patina/Palistin and its Aegean-inspired material culture– did not produce a similar result in Cilicia. For the 12th, the 11th and probably most of the 10th centuries BC, the plain of Cilicia exhibits a modest material culture and a rather restricted pottery repertoire apparently linked to the local Bronze Age tradition: it seems to have been culturally isolated.[6] Imports from Cyprus and the Levant may have already reached the region in these years. However, unambiguous stratigraphic sequences and rich, related pottery assemblages within extensive settlement excavations, which could clarify the matter and reveal the real nature of the connection with Cyprus, are still pending.

A sudden and dramatic change in the archaeological record can be clearly detected only in the 9th century BC, when from Kilise in the west to Kinet in the east a sudden growth in site size and population bears witness to a significant urban development, and the formation of a cosmopolitan culture well integrated with Cyprus, the Levant and the Aegean. Up to the end of the 8th century BC, the material culture of Cilicia, or better its ceramic production, presents a strong affinity with the island of Cyprus and is generally described by the term Cypro-Cilician koine.

To start with, we have to investigate how strong the similarities are between the ceramic production of the two regions, what kind of similarities we are talking about, and, at the same time, we must highlight the main differences that we can detect. For this purpose, the archaeological evidence available for Misis offers an excellent perspective. Misis is a multi-period mound in the lower plain of the Ceyhan,[7] which in these centuries emerged as a commercial hub to take advantage of its strategic location in control of the trade routes connecting the region with Anatolia and northern Syria, the Mediterranean and the Levantine coast. The excavations carried out at Misis have brought to light a stratigraphic sequence that roughly covers the second half of the 9th and 8th centuries BC and includes Greek, Cypriot and, to a much lesser extent, Levantine imports. Three main architectonic phases and related pottery assemblages have been identified, which roughly correspond to Cypro-Geometric (CG) III/Cypro-Archaic (CA) I (Phases 13–12), CA I early (Phase 11) and CA I late (Phase 10).

At Misis the entire range of ceramic production seems to be mostly manufactured locally. The repertoire includes vessels produced in all the main ceramic classes that are typical of Iron Age Cyprus, i.e. White Painted (WP), Bichrome, Black on Red (BoR), Red Slip (RS), Black Slip (BS) and Plain Ware. Kitchen ware (Fig. 1.5) and mortaria (Fig. 1.6), in coarse ware, are also common. All these classes are specialised and exhibit unequivocal affiliations with Cypriot production with strong stylistic, and even technological, similarities. That ceramic production at Misis is primarily local is suggested by a macroscopic examination of the materials and the identification of local fabrics with compositions compatible with the geology of the Misis complex. It is worth remembering that contemporary evidence from other sites in Cilicia leaves no room for doubt that much of the pottery in Cypriot style during the early 1st millennium BC was produced locally.[8] In addition, at Misis, vitrified ceramic waste found in many Iron Age levels points to the existence of production areas in the vicinity of the settlement.[9]

6 A similar opinion is also expressed by Lehmann 2017a, 247.

7 D'Agata 2019a, 89.

8 Cf. D'Agata 2019a, 103.

9 Cf. in general D'Agata 2017, 2019b.

Fig. 1. Main pottery shapes at Misis in the 8th century BC 1a: 1071_22; 1b:1071_23; 2a:1796_8; 2b: 1758_7; 2c: 1767_23; 3: 1757_18; 4a: 1071_ 31, 32, 35; 4b: 1071_ 36, 37, 38; 4c: 1071_43, 44, 16, 46; 5: 1758_5; 6: 1804_1.

An interesting result of the macroscopic analysis conducted on a large sample of Misis pottery is that similar clay recipes and forming and firing techniques were used for the production of different wares and vessel types. This evidence can be linked to a production system in which there is a high degree of interaction between potters and/or workshops. It suggests the existence of communities of practice, where potters share methods and procedures within the boundaries of one or more groups. This kind of interaction may well reflect the vitality of the local ceramic workshops and their ability to integrate different stylistic traditions, and/or to change systems and modes of production.

In terms of production choices, limiting our discussion to the 8th century BC, the relatively small range of vessel shapes within each ware may be contrasted with the great variety of shapes and types that characterises Cypriot production with its many regional preferences.

Specific types of WP deep bowls that can be considered a regional proxy are a Cilician feature. The most common ones, which at Misis constitute our *fossile guida* for Phase 11, show a high and everted rim or a simple rim and semiglobular profile (Fig. 1.1).[10] Almost all were manufactured in WP and, rarely, in Bichrome, BoR or Plain Ware. The type with a high and everted rim was produced in imitation of the Greek skyphos. There are three main types of jugs (Fig. 1.2): the collar-necked jug in WP,[11] the barrel jug in WP and Bichrome,[12] and the plain jug with high tapered neck in Plain Ware.[13] The krater (Fig. 1.3) is a shape that is not as common or as standardised as in Cyprus.[14] It was produced in different sizes, in WP or Bichrome, and is also attested among the imported Greek vessels. Plates and dishes (Fig. 1.4a–c) were mainly produced in RS, BoR and Plain Ware.[15] Very few shapes, mostly jugs of medium to small dimensions, were produced in BS. Finally, at least two classes of storage vessel are documented: a high-necked, two-handled and ring-based one, produced in a semi-coarse fabric with buff slip, which is stylistically of Cypriot origin; and a much coarser one, probably with a flat base, characterised by an unoxidised gray core, which may be attributed to the local tradition of storage vessel manufacture. To conclude, ceramic classes are of Cypriot derivation, as are most of the relatively few shapes of the local repertoire and the applied decorative patterns. It must also be noted that in contrast to the wide diffusion they achieved in Cyprus, figured vases, both imported and locally produced, are very rare in Cilicia.

At Misis the most common imports are drinking vessels of Greek, probably Euboean, manufacture (Fig. 2.1–2):[16] they must be associated with the spread of sympotic habits and the dissemination of a well-known cultural phenomenon which involved the entire Mediterranean. The nature and origin of the early Greek imports at Misis are very similar to those known for Cyprus. This might, in itself, imply that the influx of Euboean ceramics at Misis was connected to a special link that the site had established with some Cypriot polities which may have been responsible for the distribution both of Greek and Cypriot pottery, and even of material of Levantine origin. In contrast to the Greek and Cypriot imports, Levantine pottery is rarely found at Misis, and the same observation seems to be valid for Cilicia.[17] To date, just one Levantine jar (Fig. 2.7) and a few handleless cups have been identified at Misis.[18]

Cypriot imports at Misis are mainly BoR juglets, most of which seem to have been produced at Paphos[19] and which must be related to the commerce of perfumed oils (Fig. 2.3–4). Cypriot vessels in different wares are

10 Cf. D'Agata 2019a, fig. 9A.
11 D'Agata 2019a, fig. 9C.
12 D'Agata 2019a, fig. 11C.
13 D'Agata 2019a, fig. 12, bottom right.
14 D'Agata 2019a, fig. 9B.
15 D'Agata 2019a, figs. 10, 12.
16 D'Agata 2019a, figs. 3, 15.
17 Cf. Lehmann 2008, 228. See also Sørensen 1997.
18 Levantine jar: MH18B1824_1: cf. a vessel from Salamis Royal Tomb 1, Bikai 1987, 50, pl. XXIII, 612; Martin 2016, 123; handleless cups, cf. D'Agata 2019b, fig. 9.
19 Cf. D'Agata 2019b, fig. 3.

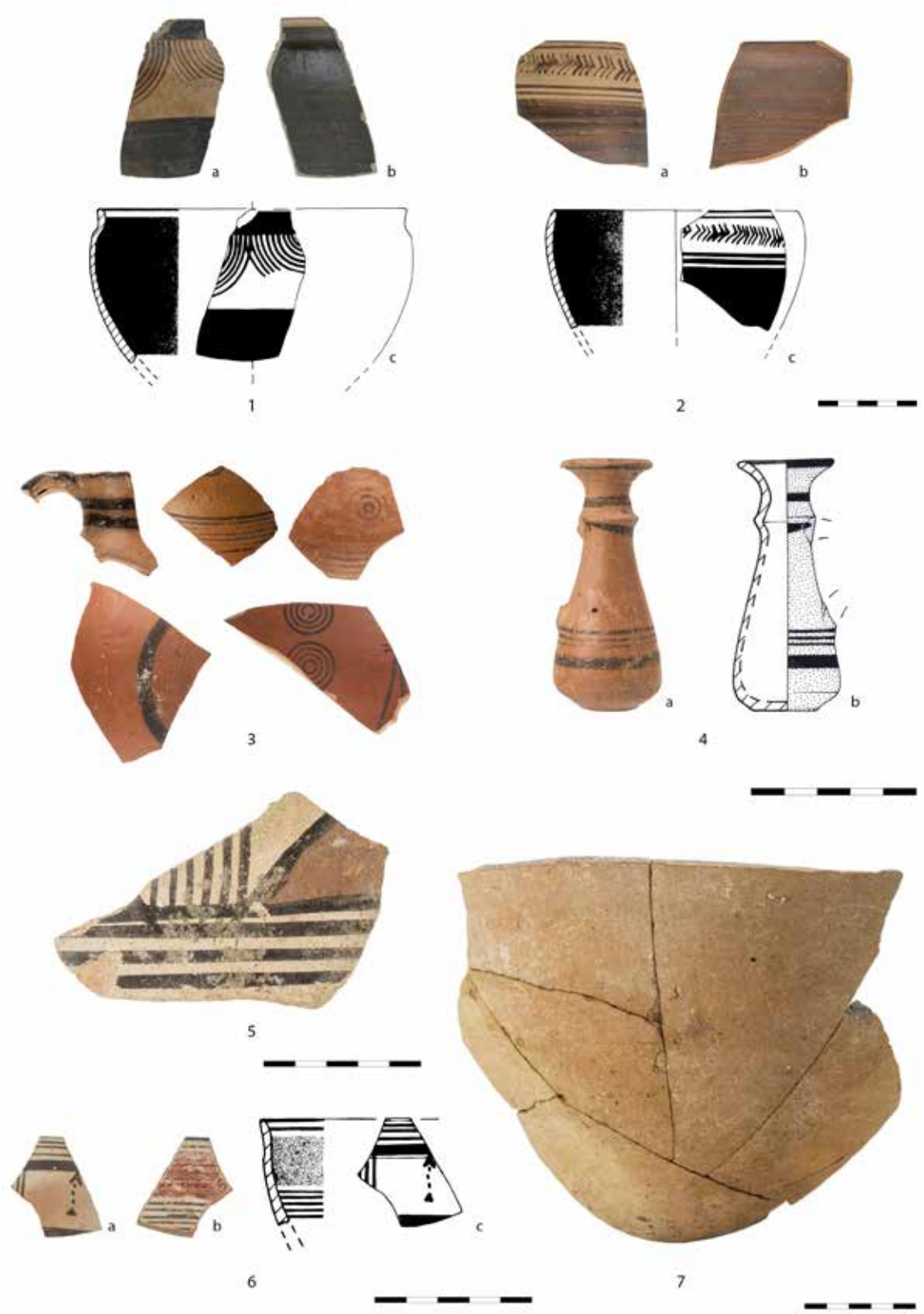

Fig. 2. Pottery imports at Misis in the 8th century BC 1a-c: 1757_4; 2a-c: 633_8; 3: 905_8, 1718_2, 962_1, room L1 cleaning, 790_19; 4: 1821_1; 5: 1710_1; 6: 1757_19; 7: 1824_2.

also present: deep bowls (Fig. 2.6) and barrel jugs from Salamis, as well as a few imitations of Greek skyphoi, which may perhaps be attributed to Cypriot workshops; a couple of Bichrome amphorae in coarse ware, with a red butterfly within metopal decoration, and a Bichrome deep bowl bearing a similar motive, supposed to have been imported from Amathus (Fig. 2.5). This is a widely exported type, found also in the Amuq as well as in the Levant, at Sarepta.[20] The close connection between Misis and some of the Cypriot polities is exemplified by the handle of a coarse container inscribed with Cypriot Syllabic signs found in 2016 at Misis. Petrographic analysis suggests that the origin of the vessel –an amphora in Plain Ware– may be traced to the eastern Mesaoria, indicating a potential connection with the town of Salamis. In addition, the small corpus of the earliest texts in Cypriot Syllabic now includes three pieces discovered in Cilicia. They are among the best indicators of the importance that this region took on as an area of expansion for the economy of the most dynamic Cypriot polities.[21]

The numbers of imports from each of the regions mentioned above that have been identified to date in Misis are summarised in Figure 3.

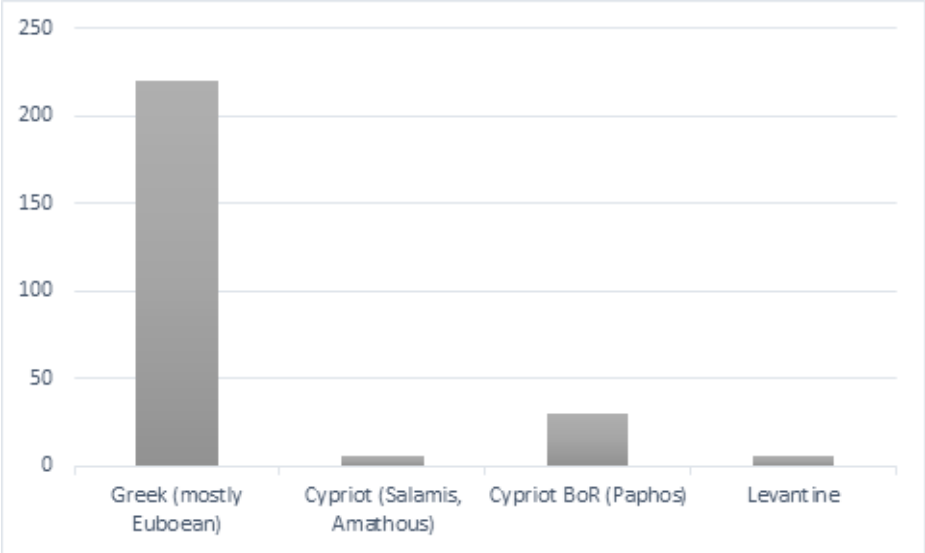

Fig. 3. Distribution of pottery imports at Misis in the 8th century BC.

It is important to stress that Levantine jars are rare at the site, as well as in Cilicia. We should interpret this evidence as documenting the existence of an exclusive commercial link between the Cilician towns of the Iron Age and the major Cypriot urban centres.

Generally speaking, and judging from the few publications devoted to the subject, the *main* features of the pottery sequence reconstructed for Iron Age II Misis find some correspondence at other sites in Cilicia, notably Tarsus, Sirkeli, Karatepe, Kinet and probably also Kilise.[22] To date, Misis has yielded the largest number of Greek imports, but this may be due to the current state of Iron Age publication for the region. It is also relevant to underline that the material cultural entanglement developed with Cyprus is a phenomenon that concerns Cilicia and partially also the northern Levant, where the imitation of Cypriot pottery is attested, while it is unknown in the southern Levant, where the link was merely commercial and limited to imports.

20 Amuq: Karacic and Osborne 2016, fig. 2.10; Sarepta: Georgiadou 2016, 93, fig. 2.6.

21 D'Agata et al. 2020.

22 Cf. Tarsus: Hanfmann 1963; Sirkeli: Kulemann-Ossen and Mönninghoff 2019; Sollee et al. 2020; Kinet: Hodos 2000a; 2000b; Lehmann 2017b; Karatepe: Çambel 2014; Kilise: Bouthillier et al. 2014.

To sum up: the roots of the material culture that suddenly develops in Cilicia in the first centuries of the 1st millennium BC must be looked for outside the region. With the exclusion of RS, the origin of which dates back to the Bronze Age, all the painted ceramic classes that became common have a long and consolidated ancestry in Cyprus, whilst in terms of manufacturing traditions they turn out to be foreign to Cilicia. Therefore, the impetus for the development of the material culture that characterises the Iron Age in Cilicia must be sought in Cyprus. Taking the lead from this, the development of the ceramic classes of the Cilician Iron Age cannot be detached from what was being produced at the same time in the main centres of Cyprus, and the adoption of many traits of Cypriot material culture must be considered an intentional and selective choice by the local, Cilician communities.

As Maria Iacovou has pointed out,[23] it was probably the aggressive economic policies of the Assyrian Empire that pushed some of the Cypriot polities, in reaction, to transform themselves into political entities able to play a role on the international scene of the Eastern Mediterranean. One of the results of this process must have been the cultural and economic expansion in the plain of Cilicia in the 9th and 8th centuries BC. This may explain why in Cilicia such an important aspect of local material culture as the pottery assemblage took inspiration from the Cypriot production of Salamis and Amathus. The ceramic assemblage characteristic of Misis finds parallels at Al Mina and probably also at Sidon, one of the most important harbours on the coast of the northern Levant: as in the case of the Cilician towns, these were important economic partners for the major centres of Cyprus and may have developed a special relationship with Salamis and Amathus, at least.[24] They suggest the existence of a chain of coastal gateway communities from Tarsus at least as far as Sidon, sharing a similar deep link with Cypriot culture.

In conclusion, there was no koine between Cyprus and Cilicia in the sense of parallel and independent developments in the pottery realm: on the contrary, Cilician pottery production was consciously modelled on that of some of the polities of eastern Cyprus, and this is a clear proxy for the deep cultural and political links between Cyprus and the plain of Cilicia in the 9th and 8th centuries BC. As Donnellan put it when referring to the so-called Euboean koine, "koine as a concept cannot address this form of interaction because it departs from cultural similarities only and ignores differences."[25] The concept should not be used for the many reasons I have already stressed, and for two more good reasons: material koinai do not represent a form of explanation by themselves, and cannot be viewed as one and the same phenomenon that can be elucidated by a common explanation. In other words, applying the concept of koine to the ceramic similarities which existed between Cilicia and Cyprus does not add anything to the interpretation of the connections between the two regions in the Iron Age and may even be misleading, suggesting a form of homogeneity that did not exist. On the phenomenon of interaction between Cilicia and Cyprus, it is useful to quote Michael Dietler's general assumption: "inter-cultural consumption of objects or practices is not a phenomenon that takes place at the level of social, culture formations. Nor is it a process of passive diffusion. It is an active process of creative appropriation, transformation, and manipulation played out by individuals and social groups with a variety of competing interests and strategies of action embedded in local political relations and cultural perceptions. People use alien contacts and goods for their own strategic political agendas and they give new meanings to borrowed cultural elements."[26]

As I have stated elsewhere, in the 9th and 8th centuries BC Cilician culture was shaped by continuous cultural interactions with neighbouring cultures, and fed by the presence of groups of different origins: a variety of objects and, consequently, diverse social traditions and languages were in use, helping to form the new entangled identities of the local inhabitants.[27] According to the present state of knowledge, the limited presence of materials imported from Cyprus or from the Aegean in the lower plain of the Ceyhan seems to suggest that, in the exchange network of the 8th century BC, imports of Greek tableware and small containers of perfumed oil were aimed more at

23 Iacovou 2002, 82–3.
24 Cf. Orsingher, this volume.
25 Donnellan 2017, 61.
26 Dietler 2017, 25.
27 D'Agata 2019a, 106; D'Agata et al. 2020, 20–1.

meeting the needs of the local elite at Misis than at regional distribution. Obviously, pottery was neither the main nor the only reason behind the connection between Cyprus and Cilicia throughout the Iron Age. The nature of the other commodities and services that were exchanged between the two regions remains, for the time being, elusive.

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Ancient migration or ancient mobility?

Perspectives from Cyprus

Anastasia Christophilopoulou

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ABSTRACT

This paper addresses the topic of population movement and mobility by closely examining a specific period of antiquity and a specific area, which was the central node in the system. The period under examination is the Iron Age (ca 1200–600 BC) in the Eastern Mediterranean, when, arguably, sweeping movements between the Aegean and the Near East, but also dynamic individual and entrepreneurial movement occurred, while the focus area is the region of Cyprus-Cilicia.

The aim of this paper is to study the evidence for people moving in, to, and through the Cyprus-Cilicia area during the Iron Age; and to use this to draw conclusions about the nature of population movements at this time. We approach the subject with a wide lens perspective, incorporating evidence from archaeology, material culture studies and ancient history; addressing two core questions: socio-political changes in the Mediterranean and their influence on Cypriot activity overseas, and how did Cypriot connections with each area differ? Finally, we hope this paper will generate a discussion on the implications of mobility and migration through history up to the present day.

INTRODUCTION

Issues of population movement and mobility during the Iron Age (ca 1200–600 BC) in the Eastern Mediterranean are of considerable importance. In this paper we examine evidence for population movement and mobility (or the absence of) in the combined region of Cyprus-Cilicia; the crucial crossroads between the Levantine city-states and Mesopotamian empires on the one hand (and onward to the rest of the Near East), and the emerging polities of Anatolia and the Aegean on the other (and onward to the rest of the Mediterranean and continental Europe).

Questions of mobility and a framing of the Mediterranean regions based on connectivity, rather than disciplinary and modern political boundaries, as well as a diachronic consideration of migration, are central to *Being an Islander*, a four-year research project resident at the University of Cambridge, Fitzwilliam Museum, which aims to elucidate what defines island identity versus mainland identity in the Mediterranean.[1] Under the aegis of this project, we also explore the topics of migration and mobility during the Iron Age, with an emphasis on

1 The research project *Being an Islander: Art and Identity of the Large Mediterranean Islands* 2019–2023 aims to elucidate what defines island identity in the Mediterranean, by exploring how insularity affected and shaped cultural identities using the examples of ancient Crete, Cyprus and Sardinia. Research is being undertaken by a team of eight specialists. For full information see: https://beta.fitz.ms/research/projects/being-an-islander-art-and-identity-of-the-large-mediterranean-islands

the regions of Cyprus and Cilicia, aiming to highlight various historical situations in which insularity worked to diminish boundaries and promote a sense of "all around connectivity".[2]

I begin with a very brief survey of polities and communities during the Iron Age in the two regions, before discussing evidence of interaction between them and considering broader questions of insularity and mobility in the wider region.

THE VIEW FROM CYPRUS

In Cyprus, archaeological evidence has revealed the existence of several settlements with a leading role during the Early Iron Age (EIA). The politico-economic segmentation of the island continued after the Late Bronze Age (LBA) with sites, either at a small distance from the coast (e.g. Kition) or inland (e.g. Alassa), developing into leading administrative centres.[3] Archaeological research has demonstrated that material and cultural continuities and discontinuities define the relationship of the EIA (ca 1125–707 BC) with the preceding period.

By the start of the Cypro-Archaic (CA) period (ca 750–ca 480 BC), although settlement evidence remains poor, royal inscriptions and coins struck by state leaders constitute a remarkable guide for the identification of the polities of this period.[4] While we need to be cautious when employing methodological models tailored for the "international era" of the LBA states to the EIA evidence, fundamental settlement continuities define the transition from the LBA to the EIA.[5] Several sites that were not abandoned and continued to accommodate urban settlements in the Iron Age, and others established late in the LBA with continuous habitation into the Cypro-Geometric (CG) period, testify to this.

Cypriot administrative centres, such as Palaepaphos and Kition, were not abandoned and continued to accommodate urban settlements.[6] Idalion was established late in the LBA (the Swedish Cyprus Expedition posited a Late Cypriot (LC) III, 1200–1050 BC, foundation for the structures on the west acropolis, and an occupation consisting of a fortified settlement with a shrine) and in the Iron Age acquired the status of a leading regional centre.[7] The thriving LBA urban settlement of Enkomi gradually relocated towards the end of LC IIIA (ca 1200–1150 BC) to Salamis, the city that was destined to become an Iron Age metropolis.[8] Like Salamis, new settlements emerged throughout the island, such as Kourion, Amathus Marion and Soloi.[9] Most of the newly founded sites of the EIA were in command of natural harbours and indicate that the economy continued to be based on sea-borne trade and that the inception of the Age of Iron did not end the copper industry.[10]

Equally, Cypriot pottery and its circulation abroad imply that Cypriot harbours continued to participate in trade networks in the Mediterranean during the EIA, maintaining contact with sites to the east, almost without interruption.[11] Looking westwards, during the 12th century BC contacts with the Aegean were reduced progressively and, finally, before the beginning of the 11th century, they appear to have been interrupted.[12] Crete seems to be the main exception here. During the 11th century BC, Cypriot luxury metalwork objects similar to those

2 Horden and Purcell 2000, 225: for relevant discussion, see also D'Agata in this volume.
3 Iacovou 2007, 461–65; 2008, 625–57; Knapp 2007, 37–62.
4 Satraki 2012, 182–294.
5 Feldman 2018.
6 Iacovou 2007, 466.
7 Hadjicosti 1999, 35–54; Gaber 2008, 54.
8 Yon 1999, 17.
9 Satraki 2012, 182–294.
10 Snodgrass 1982, 285–95; Kassianidou 2012, 229–61.
11 Bell 2006; Mountjoy 2018, 179–96.
12 Iacovou 2020, 247–72: for a recent discussion on Cypriot imports and links to the Aegean and the central Mediterranean, see also Zervaki in this volume.

deposited in rich CG I tombs at Palaepaphos, Salamis, Amathus and Lapithos were placed in Cretan tombs.[13] This led to the suggestion that connections between the two islands exclusively involved the elite levels of the respective societies.[14] However, these contacts seem more to be one-way exports of Cypriot artefacts to a specific area and should not be described as interconnections.

THE VIEW FROM CILICIA

The Limonlu River naturally divided ancient Cilicia into Cilicia Trachaea (Rough Cilicia) and Cilicia Pedias (Plain Cilicia). Cilicia Trachaea is a rugged mountain district formed by the spurs of Taurus, a feature that, in classical times, made the coast a string of havens for pirates. Plain Cilicia (Κιλικία Πεδιάς; Assyrian Que), to the east, is an alluvial fan covering approximately 8000 sq. km and one of the most fertile regions in modern-day Turkey (Fig. 1). Natural passes through the mountains give access to the neighbouring regions, e.g., the Göksu Valley connects Plain to Rough Cilicia.[15] While the influence of the Assyrian empire in Cilicia before the 8th century BC needs to be assessed in the context of the manifold intercultural contacts in the region, around the late 8th and beginning of the 7th century BC Cilicia became subject to the Assyrians.[16] Under the Persians (from the 6th to the 4th centuries BC), the district enjoyed semi-autonomous status until it came successively under Macedonian and Seleucid rule.[17] In the 1st century BC, Cilicia became a Roman province and the city of Salamis became part of the Roman administration of the region of Cilicia during the Roman period.[18]

The fertile alluvial plain (Cilicia Pedias) allows both dry farming and irrigation agriculture, which have supported a dense settlement pattern since the Neolithic period.[19] Archaeological exploration of the area, as well as research on the relevance of the archaeological picture of Cyprus to that of Cilicia, started in the 1930s, when Gjerstad conducted surveys looking for parallels to what he had found in Cyprus.[20] The archaeological richness of the region has been well known since the early excavations at Tarsus Gözlükule, Kinet Höyük, Mersin-Yumuktepe, Kazanlı Höyük, Sirkeli Höyük, Karatepe Aslantaş and Tatarlı Höyük as well as in Misis.[21] New data has been steadily accumulating, providing insights into the cultural history and archaeology of the Cilician plain. These include the results of a number of recent workshops which have established a solid Cilician chronology, based on a thorough comparative stratigraphy of all old and newly investigated sites.[22]

Tarsus (Gözlükule) was excavated in the late 1930s and again after World War II by Goldman, revealing a quantity of Aegean-type material, found mostly in post-Hittite levels.[23] Further work was undertaken after 1974 with the aim of assessing the Tarsus material and establishing the relationship between the Aegean-type wares and the local material but these efforts did not prove very successful.[24] Garstang conducted surveys at Kazanlı Höyük and a small test excavation in the late 1930s, in which evidence of Helladic and Hellado-Cilician wares of the 12th century BC was found.[25]

13 Kourou 2009, 361–73; Satraki 2012, 182–294.
14 Matthäus 1998, 141.
15 Novák et al. 2017, 151.
16 Lanfranchi 2005, 481–96; Oreshko 2013, 19–33; Kopanias 2018, 69–95.
17 Fox 2009, 216.
18 Karageorghis 1969.
19 Gjerstad 1934, 155–203.
20 Gjerstad 1934, 155–203; French 2013, 479–85.
21 Gates 2013, 485–87.
22 Novák et al. 2017, 152.
23 Goldman 1937, 262–86; 1963.
24 French 2013, 480, Mommsen et al. 2011, 900–15.
25 Garstang 1937, 52–68; 1938, 12–23; 1939, 89–158.

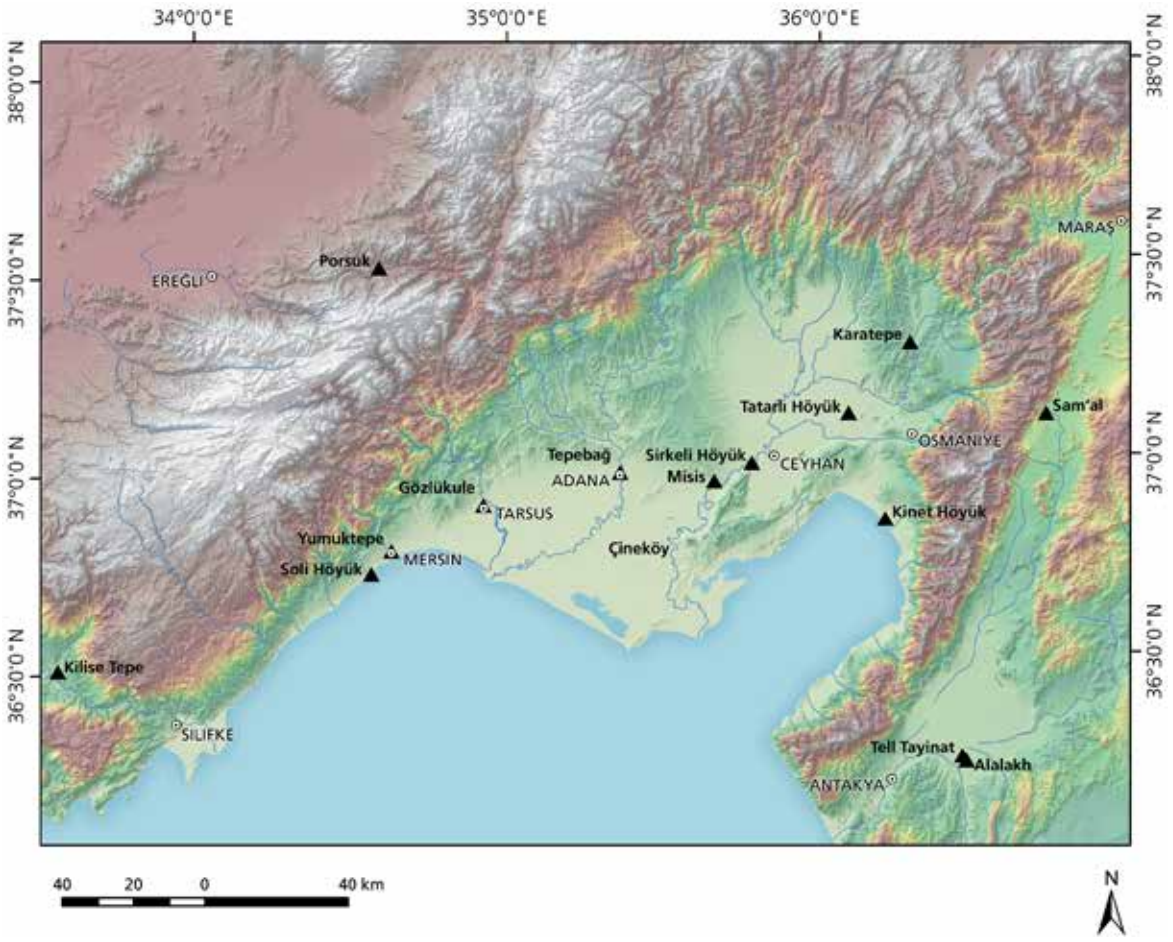

Fig. 1. Map of Plain Cilicia with sites mentioned in the text. Image copyright © Susanne Rutishauser, Bern University. Originally published in Novák et al. 2017, 151.

Kilise Tepe, a mound that dominates the valley of the River Göksu, is a site that offers a prime opportunity to monitor the changing relationship between the Anatolian interior and the coast at different periods of time. Postgate led a rescue excavation in the 1990s, while a second phase of the project was conducted jointly by the Universities of Cambridge and Newcastle until 2012.[26] Late Iron Age occupation revealed around the southeast and southwest areas of the Stele Building was associated with a number of kilns, one containing a mass of homogeneous ceramics in the style of Cypriot "White Painted (WP) IV" and "Plain White (PW) IV", dated around 700–650 BC.[27] Petrographic analysis of these assemblages confirmed that they were made on site. However, the compressed stratification of the area made it impossible to understand the exact sequence of events during the half millennium before 650 BC on the site.[28]

Kinet Höyük is a steep, triangular mound, located on the modern seashore at the rear of Iskenderun Bay (İskenderun Körfezi). Excavations were conducted on the mound's top, slopes and in its immediate periphery by a Bilkent University (Ankara) project from 1992–2012, revealing continuous occupation from the Early Bronze Age to the Late Iron Age and also evidence of Hellenistic and Medieval occupation.[29] By the late 11th or early 10th century, Kinet reached an urban format and was reintegrated into a common Cypro-Cilician culture that marked the onset of the Middle Iron Age in this region.[30]

26 Postgate 2008, 166–87; Postgate and Thomas 2007.
27 Postgate 2008, 166–87; Stone 2017, 62–96.
28 Postgate 2017.
29 Gates 2015, 81–104; Novák et al. 2017, 178–81.
30 Gates 2013, 488.

The EIA (Phase III.3) period at Kinet Höyük, a phase that is predominantly non-architectural, has produced excavated pottery which includes local variants of Late Helladic (LH) IIIC, as well as CG I/II and other 11th century ceramic material.[31] The Middle Iron Age period (Phase III.2) produced some CG II–III vessels and CG III imports dated around the 9th and early 8th centuries BC. The late 8th century BC period revealed monumental architecture associated with Cypro-Cilician pottery and destruction levels associated with Euboean imports. During the last phase, Aegeanising types and imports from the Aegean but not from Cyprus characterise the ceramic assemblage.[32]

The picture emerging from sites such as Tarsus Gözlükule, Kilise Tepe and Kinet Höyük is that they hold key evidence for our understanding of Cilicia's economic interaction in the Eastern Mediterranean and with Cyprus in particular. The excavated data so far suggest limited imports from the Aegean and possibly Cyprus during the period of the Late Hittite Empire (1400–1200 BC) in Cilicia and a significant increase during the 12th and 11th centuries BC when LH IIIC pottery was also produced locally.[33] The relatively narrow trade may have been the result of a positive restriction by authorities, a situation that seems to correspond with evidence from western Anatolia.[34]

EVIDENCE OF INTERACTION BETWEEN CYPRUS AND CILICIA DURING THE IRON AGE

In this section, we present evidence for the interaction between Cyprus and Cilicia during the Iron Age, as well as a few later examples that help to frame the debate. We are interested in whether this interaction can be understood by assuming that the two regions shared cultural characteristics or practices, based on architectural evidence and material culture.

This interaction is mostly manifested by the presence of Cypriot Iron Age WP and Bichrome wares in Cilicia. The long timespan of Cypriot WP Ware (1050–300 BC) has largely been interpreted chronologically rather than in a regionally meaningful way.[35] As examples of this ware typically occur from the Karpas Peninsula to the Troodos and from there to the west coast, more work that integrates contextual and petrographic studies is needed to clarify regional sub-groups of this large ware family.

Cilicia shows evidence of contact with Cyprus through a variety of imported Cypriot shapes found locally (open and closed forms, bowls, jugs, footed cups, amphorae and amphoriskoi). Large quantities of WP ware at Kinet Höyük suggest extensive local production in imitation of Cypriot Iron age styles until the 8th century BC, while later the influence seems to shift to Aegean types.[36] The cultural assemblage of Kinet Höyük's initial Iron Age settlement indicates a departure from its LBA urban structure, which was oriented around harbours and maritime business. Instead, the site seems to have been newly occupied by a population for whom animal processing was a major activity.[37] The arrival of Kinet Höyük's pastoralists can be linked to the breakdown of formal territorial boundaries along the Hittite Empire's southeast periphery after 1200 BC.[38]

Another typological category relevant to the interaction of Cyprus and Cilicia is the so-called "basket-handle" amphora spanning the 7th to the 3rd centuries BC. "Basket-handle" amphorae originated in Cyprus and for a long time were considered purely Cypriot. However, it seems that they were also manufactured in Rough Cilicia

31 Novák et al. 2017, 179–80.
32 Novák et al. 2017, 180.
33 French 2013, 482–83; Kopanias 2018, 69–95.
34 Mee 1998, 137–49; van Wijngaarden 2002, 31–37; Kozal 2007, 141–48.
35 Gjerstad et al. 1935; 1948; Knapp 2008.
36 Karacic and Osborne 2016.
37 Gates 2015, 81–104; Novák et al. 2017, 178–81.
38 Sader 2000, 72–5.

Fig. 2. Scaraboid stamp seal showing a fish-man holding a necklace above a cross-hatched exergue. Made of chert, dated ca 700–401 BC, found in Cilicia (exact findspot unknown), probably made in Cyprus. Collection of the Fitzwilliam Museum (ANE.97.1955), University of Cambridge. Image copyright © The Fitzwilliam Museum, 2021.

and perhaps other centres, such as Phoenicia, the southern coast of Israel and Alexandria.[39] While the Egyptian "basket-handle" containers are easily recognised by their fabric, other fabrics and therefore regions of production are difficult to distinguish. They typically carried olive oil and wine as well as occasionally solid foods and, while more integrated pottery and residue analysis is needed in order to understand the relationship between transport vessels and the movement and interaction of people in this region, we can assume that wine or olive oil transported in these containers was produced in the Cypro-Cilician area.[40]

Other isolated types of material also testify to this interaction. At the Fitzwilliam Museum a scaraboid stamp seal featuring a fish-man accompanied by a Cypriot (Greek) syllabic inscription, dated around the 7th to the 5th centuries BC, was discovered in Cilicia (Fig. 2). The inscription is incorporated into the object's decoration, next to the fish-man's head. The owner of the seal is named as Philos. Common seals, such as this example, were associated with different social classes and are indicative of the identity of craftsmen or, more generally, of people with high mobility across the Cyprus-Cilicia region. Another isolated example is a sherd containing a short Cypro-syllabic inscription discovered during the 2007 excavations at Kilise Tepe.[41] The sherd was part of a shallow bowl with incised signs on the interior, just below the rim, linked to an Iron Age deposit containing WP IV pottery. In the 8th century BC, the region's multicultural character –unified under the rule of the dynasty of Mopsos– was reflected in bilingual inscriptions written both in Indo-European hieroglyphic Luwian and West Semitic Phoenician.[42]

Three further examples of bilingual inscriptions from Cilicia and Cyprus help advance the discussion on the interactions of the two regions. The first one is the Karatepe bilingual inscription, also known as the Azatiwada inscription, written in Phoenician and Luwian langage and dated to the 8th century BC.[43] The second example is

39 Novák et al. 2017, 180.
40 Novák et al. 2017, 178–81.
41 Postgate 2017.
42 Postgate 2008, 166–87; 2017; Oettinger 2008, 63–8.
43 Novák and Fuchs 2020, 23–91; Çambel 1998.

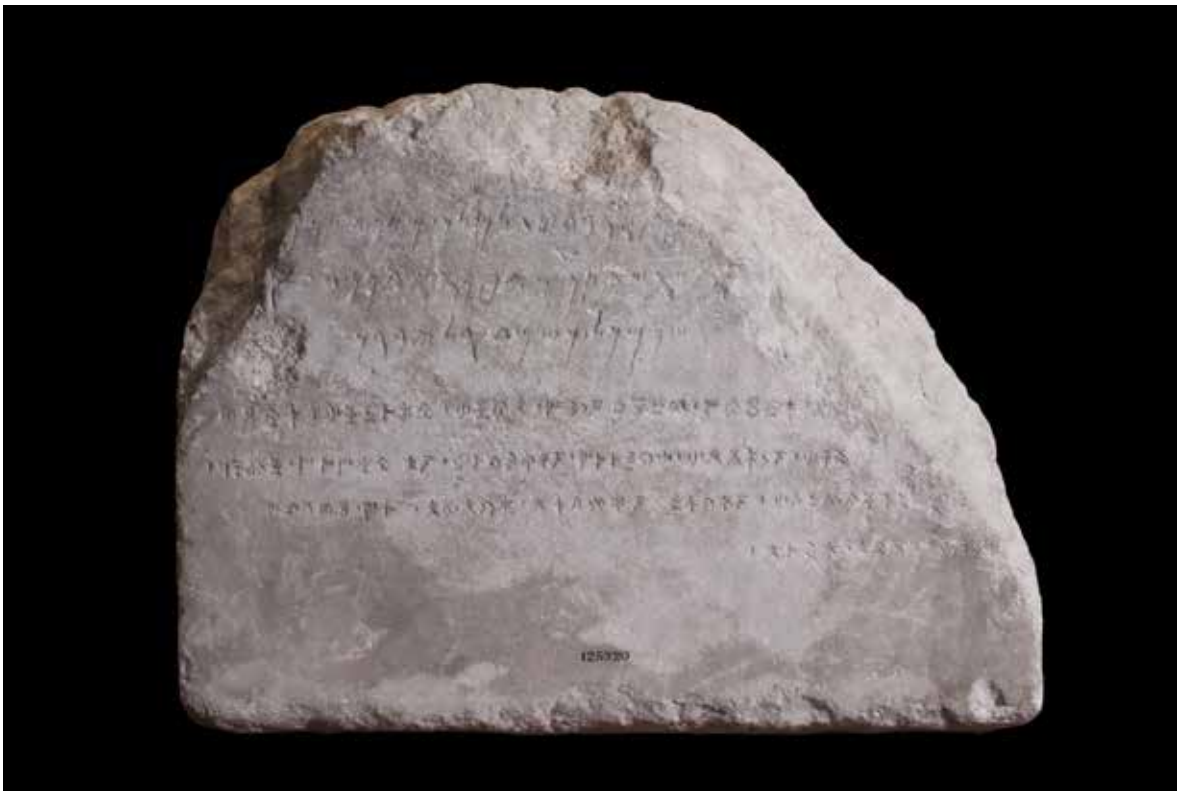

Fig. 3. Rectangular limestone statuette base with a carved bilingual and bigraphic inscription in Greek (Cypro-Syllabic) and Phoenician (Phoenician alphabet). Found at the Sanctuary of Reshef-Apollo, Idalion, Cyprus, dated 389 BC. The British Museum (ME 1872, 0816.84). Image copyright © The Trustees of the British Museum, 2021.

the Çineköy inscription, another Hieroglyphic Luwian-Phoenician bilingual inscription, discovered near Çine, Adana, also dated to the 8th century BC.[44] Both the Karatepe and Çineköy inscriptions trace the activities of the kings of ancient Adana from the "house of Mopsos".[45]

Albeit from a much later period (389 BC), I would like to discuss the previous two inscriptions in relation to another case of a bilingual inscription from Cyprus – the inscription from the Sanctuary of Reshef-Apollo at the city of Idalion. The inscription, now in the collection of the British Museum, is a statue base bearing writing in Phoenician (top) and Cypriot Syllabic (bottom) (Fig. 3). Both texts record the dedication of a statue of a worshipper by Lord Baalrom son of Abdimilk in the fourth year of the reign of King Milkyaton of Kition and Idalion. The statue is offered to Reshef in the Phoenician text and to Apollo in the Greek text.[46] The site of Idalion, influenced by both Greek-speaking and Phoenician-speaking areas, initially produced inscriptions in Greek and later also in Phoenician. The Idalion inscription dates from the reign of king Milkyaton, when the city was a thriving settlement with an ethnically mixed population sharing cult places.

Looking at the above, it remains difficult to present firm evidence for Cyprus-Cilicia interactions during the Iron Age. Some researchers have suggested the existence of a koiné between the plains of Cilicia and Cyprus, but this cannot be proven based on the evidence we currently possess.[47] Imported Cypriot pottery is rare, and none has been discovered in funerary contexts in Cilicia. More material needs to be analysed from other contexts and sites in order to establish the percentage of Cypriot imports versus local imitations; more studies are needed to better understand the role of Cypriot imitations in Rough Cilicia, as well as the role of pottery in interregional

44 Hawkins 2017, 211–16.
45 Lanfranchi 2007, 179–217.
46 Ulbrich 2008, 258–61.
47 Novák 2010, 408.

exchange between Cyprus and Cilicia in general.[48] Moreover, further work is needed to establish patterns of new burial customs (e.g. rock cut tombs with long *dromoi*) that appear in Cilicia at the time and suggest the arrival of new customs.[49]

CONCLUSIONS

Cyprus has long been a focus of debate in terms of settlement evolution and socio-political organisation during the Iron Age. Research in Cilicia is quickly adapting to addressing the same topics and a growing community of researchers is examining these themes across the two shores. However, migration and the hybridisation of cultures across Cyprus and Cilicia still need to be considered more deeply and applied to the changing body of evidence. One reason for the reluctance to address these topics is the overemphasis on the large migrations from the western Aegean to the eastern Aegean during the EIA.[50]

It has also been suggested that the mainland of Cilicia and the island of Cyprus may be understood as a single integrated region during the EIA, or operating under a cultural koiné, based on cultural commonalities shared across the two regions.[51] These interpretations, however, can be challenged, given how limited the supporting evidence is.

Others have argued that the prevailing trend in Cyprus already during the 11th century BC represents a new kind of elite identity and that the identities of migrants and local peoples were therefore altered because of cultural encounters and mixings – social processes here defined as aspects of hybridisation. This makes the visibility of any other migrants or migrant communities even more difficult. The widespread use of Proto White Painted (PWP) pottery in EIA Cyprus reflects an amalgamation of Cypriot and Aegean trends, and along with new mortuary traditions may represent the migrants' attempts to adopt a local Cypriot identity.[52]

Whether we consider it from an island or a mainland perspective, the theme of migration in archaeology remains divisive and elusive. In fact, it remains divisive in other disciplines as well, whether we examine the phenomenon in an organised and substantial way, or observe it in a "random walk" (to use the term first introduced by Pearson in 1905) or a "Brownian motion" way (borrowing the term from the study of population movements in sociology).[53] In its modern sense, there is not a universally accepted definition for migration; or rather, there are many definitions of human migration. For instance, migration can be defined as the process of moving, either across a defined border or within a state; it is a population movement, encompassing any kind of movement of people, whatever its length, composition and causes; it includes migration of refugees, displaced persons and economic migrants.[54] One could argue that the scale and synthesis of possible migration in the context of the EIA Cyprus-Cilicia region was far more linear than the paradigms of modern day migrations.

No matter its definition, migration remains a crucial characteristic of both the ancient and modern worlds. Today migration is a defining global issue and documenting it requires examining both quantitative and qualitative aspects, many of them interdisciplinary by nature. Recent evidence of large-scale migrations shows that, when these flows are undocumented, it is very hard to prove that they happened, as they leave very little ma-

48 Karacic and Osborne 2016.
49 Knapp 2008, 381.
50 Huxley 1966; Hodos 2009, 221–41; Mac Sweeney 2016, 411–12.
51 Mac Sweeney 2016, 411–28.
52 Knapp 2008, 381.
53 Pearson 1905, 294–342.
54 Opeskin et al. 2012, 18–22; Knapp 2021.

terial trace.[55] Two recently documented examples of migration to the Aegean from the Near East testify to this situation. Migrants arriving at the Moria migrant camp in Lesbos, Greece, reached 20,000 persons in February 2020. The camp was originally built as temporary accommodation with a maximum capacity of 3,100.[56] These latest figures include more than 1,000 unaccompanied minors, while a similar situation emerges for the migrant camp of Karatepe, also on the island of Lesbos.[57] When a devastating fire broke out at the Moria camp in September 2020, leaving 13,000 migrants without shelter, the destroyed camp was dismantled within days and the migrants were relocated to different temporary facilities.[58] These recently documented examples indicate that even large-scale migrations and population movements leave very little material traces. This observation, paired with the fact that ancient migrations were not accompanied by modern-day statistics and a large digital footprint, shows that our ability to construe the scale of ancient migrations based on architecture, material culture or textual remains alone can be considerably flawed.

Another contemporary example is the wave of Cypriot immigrants to the United Kingdom, that started in 1902 and increased dramatically during 1955–1959, when violence on the island intensified during the anti-colonial struggles. Today, the exact size of the Greek Cypriot expatriate community is difficult to determine, as is any concrete evidence of the ethnolinguistic character of the community versus the wider population.[59] Language is a key characteristic here, because, although these heritage communities still proclaim it as an important part of their island identity, it is almost completely assimilated, as English with certain Cypriot idioms is the main form of communication.[60] Looking back to the examples of the Çineköy and Idalion bilingual inscriptions, it appears that strong material and linguistic evidence may appear in the archaeological record to be indisputable proof of the presence of a foreign/migrant, culturally or ethnically different group, but could have been perceived by the contemporary population as already part of their local, hybrid and shared identity. Secondly, a migrant community may project strong cultural ties and memory with the motherland, while no longer displaying material or linguistic evidence of these affinities. This is demonstrated by the contemporary example of the Cypriot heritage community and urges us to think it could be more prominent in the case of past societies, where the absence of clear material culture makes the presence of migrants even more invisible to us. This assumption leads us to consider a bigger question. To what extent does material culture distribution correlate to the actual movement of people? We also need to consider the type of material culture people carry when they relocate, as these kinds of artefacts may not always indicate the presence of incoming groups in the archaeological record (e.g., portable artefacts).[61]

Following Knapp's suggestion that the rich Mediterranean archaeological record, and within that the Cypriot in particular, could benefit enormously from comparative approaches that engage deeper research issues and priorities around insularity, connectivity and migration, I argue that the use of contemporary examples, helping us to rethink our understanding of migration and ancient migrant communities, may be of benefit.[62] In order to better understand processes of population movements and migrations in the ancient world, particularly where we lack concrete evidence of how exactly these might have taken place, we need to think of migration in a broader diachronic context, including introducing analogies from contemporary waves of migration.

Moving away from longstanding assumptions of equal rates of cultural progress and change between mainlands and islands and, conversely, in the EIA to the Classical Cypriot horizon, the insistence on focusing on

55 Eurostat Official Report on Migration and migrant population statistics accessed March 2021.
56 De Berker 2020.
57 United Nations High Commissioner for Refugees, web publication, December 2017.
58 BBC News article, September 2020. https://www.bbc.com/news/world-europe-54189073.
59 Constantinou 1990, 151–52; Constantinides 1990, 87–138.
60 Karatsareas 2019, 145–69.
61 Kotsonas and Mokrišová 2020, 217–47.
62 Knapp 2008, 374–76.

Greek and Phoenician "colonisation" episodes, we also need to pay attention to the influence migrant groups or individuals had in vibrant Cypriot centres, like Enkomi, Paphos and Kition.[63] These groups were neither invaders nor colonists but they subsequently contributed a lot in producing hybridised identities across the island.[64] The key to understanding the elusive interactions of Cyprus with the Near East and Cilicia, in particular, also lies in reconceptualising peoples' movements and memories in terms of connectivity, maritime interactions, materiality and co-presence.[65]

63 Snodgrass 1980; Iacovou 2008, 625–57; Held 1993, 25–33.

64 Iacovou 2012.

65 Knapp 2008, 287, 382–83.

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Cypriot (?) gods beyond Cyprus

Some notes on the western Phoenician evidence

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ABSTRACT

The present paper offers some reflections on the attestation in the western Phoenician Mediterranean of certain deities –namely Pumay, Pygmalion, Eshmun-Melqart and Reshef-Melqart– which may testify to connections of some kind with Cyprus. Its main goal is to provide food for thought on the contribution that the island culture may have made to the formation and development of the Phoenician West.

INTRODUCTION: CYPRUS OUTSIDE CYPRUS

The contribution of Cyprus to the cultural formation and development of the Phoenician world(s) of the West was undoubtedly significant. While it appears evident in relation to the most ancient phases of the Levantine migrants' arrival in the central-western Mediterranean (and the periods immediately before), for some years now it has also begun to be plainly distinguishable in the data concerning later ages.

Regarding the period from the 11th to the 9th centuries,[1] at the end of which the Phoenician presence in the West appears very clear, the "Cypriot colour" of many attestations found in certain regions, such as Sardinia, is evident.[2] As recently summarised by T. Pedrazzi, in addition to the circulation of the celebrated oxhide ingots, "tra l'XI e il IX sec. a.C. si diffondono i bronzetti figurati, ma anche i tripodi, i recipienti metallici, gli strumenti da metallurgo (…). Oltre agli oggetti, si trasmettono le competenze tecniche, i modi di lavorazione del metallo, gli strumenti, i modelli cui ispirarsi in un processo di imitazione spesso libera. L'isola di Cipro, fra XII e XI–X secolo, riveste il ruolo di "cerniera" della prosecuzione (o del rinnovamento) dei traffici marittimi e di *medium* dell'arrivo in Sardegna di genti dell'area egeo-orientale".[3]

As mentioned above, in relation to later periods, too, the Cypriot impact on the "colonial" regions can be widely recognised. After all, the assertion of Persian hegemony over the cities of Phoenicia from the end of the 6th century allowed those settlements to look again towards the western Mediterranean after a period of

1 This research work is a product of the PRIN 2017 Project: "People of the Middle Sea. Innovation and integration in the ancient Mediterranean (1600–500 BC)" [C4. Gods and Rituals in the Western Mediterranean], funded by the Italian Ministry of Education, University and Research. Unless otherwise indicated, all dates are BC.

2 The bibliography on the role of Cyprus in the movements from East to West is very extensive, especially concerning the most ancient phases of the Levantine presence in the western territories. See the questions and bibliographical indications in Botto 2008, 124–27; 2021.

3 Pedrazzi 2016, 132–33; cf. Bernardini 2005a; Lo Schiavo 2012.

interruption due to Assyrian and Babylonian dominion. At that time, then, products, peoples, ideas and cultural stimuli coming from the Levant and, of course, from Cyprus again reached the "colonial" world(s).[4] Once again, Sardinia was one of the main regions involved in these new movements. Such a position is clearly discernible in one of the most suggestive expressions of the art of those times: the famous high-relief figure in tomb number 7 of the Sulci necropolis (dated to the second half of the 5th century), which borrows from the Levantine, Cypriot and Egyptian figurative languages.[5]

Aware, therefore, of the fundamental function that the culture(s) of the "copper island" must have performed in the construction of the Phoenician West in its different phases, I would like to devote the following observations to certain divine figures worshipped in the "colonial" settlements, whose cults –attested as a whole between the 9th and the 4th centuries– seem to show Cypriot connotations or at least Cypriot connections of some sort. The study of these superhuman figures, then, may help us to perceive the cultural composition that marked the establishment, growth and progressive characterisation of the Phoenician "colonial" regions. Before beginning, however, I must clarify one point: most of the data that will be discussed in the following pages present many problems, to the extent that in some cases the attestations of certain divine names in the epigraphy –precisely those names that will be the protagonists of my reflections– have been the subject of debate or even of neglect. I will, therefore, be obliged to reason on a hypothetical level, trying to distinguish between what can be understood as (almost) certain –and forming the basis of my line of reasoning– and what, by contrast, remains too vague and doubtful. My intention, then, is simply to offer some food for thought and contribute to the present debate concerning the role that Cyprus played, as stated above, in the construction of the multifaceted culture of the western Phoenicians.

PUMAY AND PYGMALION

The first two documents on which I would like to reflect are represented by the celebrated stele of Nora (Sardinia), with the possible dedication to the god Pumay (Fig. 1), and the almost equally famous gold medallion from Carthage, which probably records an offering to the god Pygmalion (Fig. 2).[6] Both documents have been so widely debated that it is impossible to summarise in a small space all the studies that have considered them (especially the Nora stele) and, of course, all the problems they have raised. Nonetheless, in pursuit of our aims, certain elements can be described and commented on.

Starting with Nora,[7] the stele bears the most ancient complete Phoenician inscription found so far in the western Mediterranean.[8] Unfortunately, it was discovered (in 1773) out of its original context of use: at that time, it was incorporated into the enclosure wall of the vegetable garden of a convent owned by the Mercedarian friars, at the periphery of the town of Pula (not far from the ancient settlement of Nora). Although the dating and meaning of the text are still much discussed, at present there is a tendency to place the epigraph –and it is

4 Oggiano and Pedrazzi 2013, especially 71–86; cf. also Bondì 1996.

5 Bernardini 2005b; Garbati 2010; cf. Oggiano 2013.

6 In addition to the specific bibliography mentioned in the following notes, an overview of the two inscriptions and gods can be found in Cannavò 2011, 70–3 and Cannavò (forthcoming a and b).

7 *CIS* I, 144 = KAI 46 = Guzzo Amadasi 1976, Sardegna 1; Amadasi Guzzo 1990, Sardegna 1. The extensive bibliography on the stele and its various readings and interpretations is critically collected in Casti 2019 (with the exception of Mosca 2017 and the recent Puech 2020); see also Schmitz 2012; Garbati 2014b, with references, and Amadasi Guzzo 2019.

8 Actually, not all scholars agree about the fragmentary or complete nature of the epigraph (cf. recently Puech 2020, who has suggested that various lines, now lost, may have been present at the beginning of the text). However, it seems rather clear that the top part of the stone is completely preserved, with the exception of just a small portion in the right corner: see the analysis and pictures in Casti 2019, 24–8.

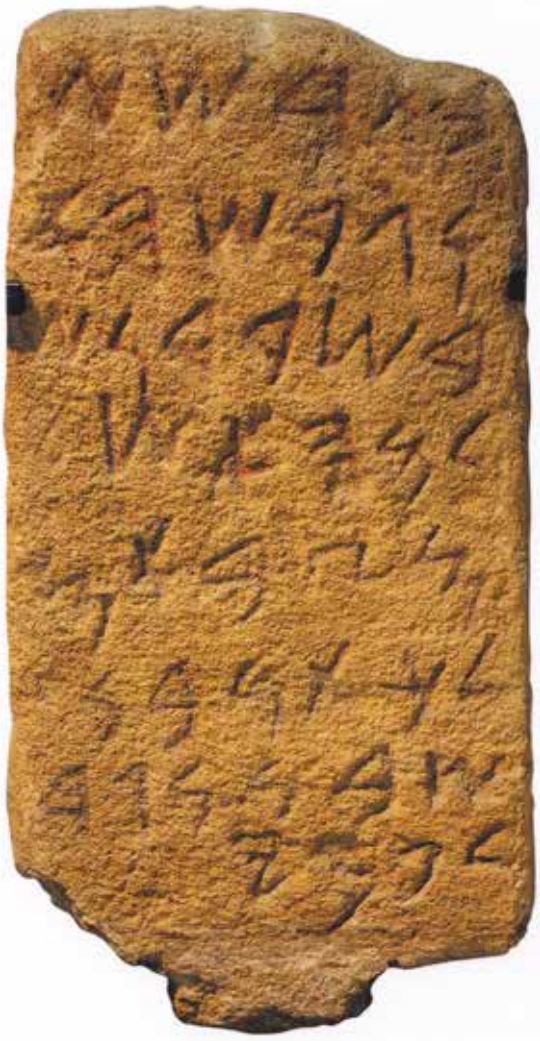

Fig. 1. Nora stele; dedication to Pumay (after Casti 2019).

hard to disagree– in the early stages of the Phoenician presence in the West, and specifically between the last quarter of the 9th and the first half of the 8th century.[9]

As regards the interpretation of the inscription, many paths of study have been opened since the discovery of the stele. The numerous and varied proposals have depended above all on the transliteration and word division of the first line.[10] The expression *btršš*, with which the text begins, has mainly been read as *b-tršš* ("from/at Tarshish")[11] or as *bt rš š* ("Temple of the cape, which …" or "Main temple, which …"). According to these

9 On the Levantine writing tradition, to which the stele must have belonged (and of which other famous texts were a part, such as the inscription of Kilamuwa, king of Sam'al, dated to ca 830–825), see Amadasi Guzzo 2014 (especially 80–1).

10 The majority of the interpretations are summarised in Del Castillo 2003; but see also Casti 2019 which, as mentioned, analyses in depth almost all the different readings and interpretations of the epigraph that have been proposed since its discovery (and also suggests a new hypothesis).

11 According to some scholars, this name may have corresponded to the name of Tartessos in southern Spain. However, this identification remains totally unproven. For another interpretation of the text (linked to a supposed Phoenician conquest of

Fig. 2. The Carthaginian medallion; dedication to Pygmalion (after Carthago. Il mito immortale. La mostra, edited by. A. Russo et alii, Rome: Electa).

translations, the various interpretations of the epigraph can be generally summarised from two different perspectives (with, however, some points of contact):[12] the first sees the monument as the record of an expedition and/or military episode (involving Tarshish) and possibly linked to a cultic deed;[13] the second prefers to relate the entire epigraph to a religious circumstance, concerning the construction of a sacred building, i.e. a temple to the god Pumay (as probably shown by the word *bt* that opens the text and by the final expression *lpmy*, "to/for Pumay").[14]

On the whole, it is the religious perspective that nowadays appears the most satisfying: even if it is not accepted by all scholars, the reading of the dedication in the last line –with the citation of that specific divine name– seems rather clear, emerging as one of the surest elements of this much-debated monument.[15] Of course, one must remark, as several others have done before, that the divinity is practically unknown as such in the Phoenician world: beyond the Nora find, only anthroponymy testifies to his existence. Indeed, *pmy* is attested as a component of proper names in Carthage and in Cyprus, and once in Tyre, too;[16] in Cyprus, in particular, the

Nuraghe Antigori, not far from Nora), which is neither proven nor widely shared, see Pilkington 2012.

12 As underlined in Pilkington 2012.

13 Just to mention the most recent proposal by way of example, Puech (2020, 318) has suggested the following translation: "[*En souvenir / de l'expédition du comman- / dant du royaume / allé(e) combattre*] / à Tarsis / mais il/elle fu refoulé(e). / En Sardaigne il / fut sauf, sauve / l'armée de *notre* roy- / aume. Le monument / qu'a édifié le commandant / à Pumaï" (the first part, in italics, is the author's addition to the inscription, which, as mentioned, he considers incomplete).

14 See for instance Amadasi Guzzo 1990, 41–2.

15 Moreover, the dedication to the god at the end of the text seems consistent with the formulary adopted in Phoenician inscriptions until the beginning of the 6th century: Amadasi Guzzo 1990, 41–2, 72–3.

16 Benz 1972, 391–92; Lipiński 1995, 297–306. Carthage: *pmyytn* in *CIS* I 617, 670, 2106, 5690; *pmyšmr* in *CIS* I 2379; *pmyṣrn'* and *pmyḥwy'* in *CIS* I 5981; *pmy*, in *CIS* I 4777. Cyprus (apart from *pmyytn*; see below): *'bdpmy* in *CIS* I 88; *'mtpmy*, in *CIS* I 55. On the Cypriot data see also Amadasi Guzzo 2007, 200. In an inscription from Delos, a man from Tyre is named *pmy* (ID 2322): Lipiński 1995, 298 n. 66. The etymology of *pmy* remains obscure; possibly it has to be ascribed to the Cypriot substrate.

theonym appears in the name of the last king of Kition and Idalion, Pumayyaton (362–312 BC), known from literary sources and various inscriptions.[17]

The passing reference to King Pumayyaton gives us an opportunity now to shift our focus from the stele to the medallion from Carthage. A passage by Diodorus Siculus, in fact, remembers that sovereign as "Pygmalion".[18] As mentioned above, the name *pgmlyn* qualifies the (possible) divinity that is cited in the inscription on the Carthaginian medallion.[19] The jewel was found in a tomb belonging to the necropolis of Douimes, dated to between the 7th and early 6th century.[20] The monument, which has been ascribed to the "tombeau bâti" type, well known in the North African city and beyond,[21] was built underground, 9 m below the present surface, and included two skeletons lying next to each other. It is possible, therefore, that the jewel was part of the personal goods of one of the two deceased (called Yadamilk, according to the name recorded on the item itself).[22]

As in the case of the Nora inscription, the dating and interpretation of the text on the medallion remain uncertain.[23] Firstly, as regards the chronology, the inscription has been alternatively assigned, in the various studies that have been devoted to it, to between the 9th and the 7th/6th centuries. After all, as stressed by C. Kunze, two possibilities are the most trustworthy: on the one hand, the epigraph and its text could be contemporaneous with the tomb, which, based on the ceramics it contained, should be placed, as stated above, between the 7th and the early 6th century;[24] on the other hand, the jewel could have been kept by its owners "for several generations before its final deposition as a grave good" (maybe around the 8th century).[25] Secondly, concerning the meaning of the inscription, if the reading of the letters does not pose too many difficulties, the sense of the text is still the subject of discussion (although it seems very probable that it deals with the "salvation" or "liberation" of the person involved [Yadamilk]).[26] In the past, in particular, it has been questioned whether it is possible to see in the formula that opens the texts –*l'štrt lpgmlyn* ...– the names of two deities.[27] Indeed, the second component of the expression has been interpreted, in addition to being understood as a theonym, as a man's name: according to E. Lipiński, for example, *lpgmlyn* should be understood as "on Pygmalion", with the *l* to be considered as a preposition with a locative value (that is, "[C'est consacré] à Astarté, [ce qui est] sur Pygmalion").[28] P. Schmitz, in turn, ascribes the name to the king of Tyre, brother of princess Elissa, the founder of Carthage, suggesting for the character a historical relevance, "despite the legends surrounding him".[29]

Regarding these last ideas, in fact, it has to be admitted that the name Pygmalion is given by different literary sources to various royal personages or men, especially linked to Cyprus (again) and to the goddess Astarte.[30]

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17 E.g. *CIS* I 10, 11, 14; cf. Lipiński 1995, 300; recently Minunno 2019b.

18 Diod. XIX 79,4: "But Ptolemy, now that the matter of Cyrenê had been disposed of according to his wishes, crossed over with an army from Egypt into Cyprus against those of the kings who refused to obey him. Finding that Pygmalion was negotiating with Antigonus, he put him to death; and he arrested Praxippus, king of Lapithia and ruler of Cerynia" (*Loeb Classical Library*, 1954). In Athen. 4,167c, the sovereign of Cyprus is named *pymaton*.

19 *CIS* I 6057 (= KAI 73).

20 Chelbi 2007; Kunze 2002–2003; Minunno 2019a; Xella 2019 (all with references).

21 Benichou-Safar 1982, 135–65.

22 The exact original position of the jewel is unknown: the medallion was found during sieving of the deposit.

23 See, recently, Schmitz 2008, Amadasi Guzzo 2015, 206–7 and Xella 2019 (all with references).

24 Kunze 2002–2003.

25 Kunze 2002–2003, 30. To mention just some studies, according to Paolo Xella (2019), palaeography suggests dating the object to the end of 8th or 7th century BC; on the other hand, a higher chronology has been indicated, based again on palaeography, by Philip C. Schmitz (2008, 171): 800–775 BC.

26 Xella 2019. According to *CIS*, for instance, the interpretation should be: "To Astarte to Pygmalion, Yadamilk son of Padai. Free (oh Astarte!) the one who frees Pygmalion".

27 The name *pgmlyn* is mentioned twice in the inscription.

28 Lipiński 1995, 304. G. Garbini (1967,8), on the other hand, has interpreted the first sequence as "Astarte di Pigmalione …".

29 Schmitz 2008, 172; see also, in this direction, Krahmalkov 1981.

30 Cf. Gibson 1982, 69–70; Bondì 1988; Lipiński 1995, 298 n. 66; Minunno 2019b; Cannavò (forthcoming b).

For example, one can think of the sovereign who was Adonis' grandfather and Kinyras' father-in-law,[31] or of the sculptor who fell in love, thanks to the intervention of Venus, with an ivory statue he had made,[32] or, as already mentioned, of the celebrated king of Tyre, brother of Elissa;[33] another Pygmalion, perhaps connected with the Tyrian one, is mentioned by Philostratus:[34] according to the author, he offered a golden olive tree to the celebrated temple of Heracles in Gadir. All these men, however, belong to myth; as rightly stressed by M.G. Amadasi, none of them "ha una consistenza storica sicuramente accertabile";[35] their figures, then, cannot be used to postulate some sort of historicity of that *pgmlyn* mentioned on the Carthaginian jewel (as proposed by Schmitz in his comparison with the Tyrian Pygmalion). Despite the discussions, therefore, the interpretation of *pgmlyn* as a mythological or divine name –thus, a superhuman being, paired with Astarte in the dedication– remains the most convincing, as indeed his presence in a votive inscription indicates.[36] After all, within the context of literary passages again, two other (supernatural) characters who are possibly connected with Pygmalion cannot be forgotten: Esychios identifies a certain *Pygmaion* with "Adonis among the Cypriots",[37] while the Anonymous Laurentianus, in turn, makes reference to a *Pygmaios*, recognised by the author as Apollo (a central deity in Cypriot religion).[38] In substance, it seems, as in the case of Pumay, that the available data trace the figure of the Carthaginian *pgmlyn* back to a superhuman, if not divine, dimension and, most of all, to a Cypriot context.[39]

A nebulous net of connections

The testimonies summarised above sketch out a rather complex picture, with several shadowy areas relating to the traits of the figures involved, their Cypriot colours and their ties. However, if we attempt to bring some order to the documentation –albeit perhaps somewhat schematic– two networks of relationships, which overlap in almost all their elements, can be identified. The first refers to *pmy* and consists of the data from Nora (*pmy* as god), Carthage, Cyprus and Tyre (in all cases *pmy* in anthroponymy, with *pmyytn* at the head). The second network, on the other hand, is based on the name Pygmalion, known in Carthage (as the name of a deity or superhuman entity), in Cyprus and in Tyre (as the name of mythological characters). As is well known, according to the most widely shared opinion, the two characters –*pmy* and *pgmlyn*– protagonists of these networks, must have been closely associated.[40] More specifically, the second one would represent the Phoenician transcription of the Greek Pygmalion; in Diodorus, as stated above, the latter describes the last king of Cyprus, called *pmyytn* in Phoenician. In some ways, therefore, the name on the Carthaginian medallion –*pgmlyn*– must have been a sort of Phoenician outgrowth of a Greek name –Pygmalion– which, corresponding to the Phoenician *pmyytn*,

31 Pseudo-Apollodorus III 14,3.

32 Ovidius, *Met.* X 243–97. The poet was inspired by the Pygmalion who –according to various authors (e.g. Clem. Alex. *Protr.* IV 57,3)– experienced an insane passion for a statue of Aphrodite (recalling, then, the association with Pygmalion–Astarte in the medallion from Carthage).

33 E.g. Joseph, *Ap.* I, 125; probably the most famous passages on the sovereign of Tyre appear in the *Aeneid* (I 347, 364; IV 325).

34 *Vita Apolloni* V 5.

35 Amadasi Guzzo 2015, 207.

36 See Kunze 2002–2003, 30, who emphasises that the "alignment with Astarte makes it very unlikely that a secular Pygmalion (…) is meant".

37 Hesych. s.v. *Pygmaion*.

38 *Duodecim deorum epitheta* II 33,267.

39 In the past, a Cypriot origin has been proposed for the medallion (particularly based on the Cypriot connection recognisable in *pgmlyn*); at present, however, it seems reliable that the object was made in the West, probably in Carthage itself: on these problems see Ferron 1958–1959 (who changed his interpretation in Ferron 1968, 258–59) and the discussion in Peckham 1968, 119–25; cf. also Cannavò 2011, 73.

40 Müller 1988 (in particular 192–97, 202–3); cf. Cannavò 2011, 72–3 and 409 n. 30. For some rare Greek names (as *pygmachos* or *pygmas*) possibly connected with our two protagonists, see Cannavò (forthcoming a and b).

would represent a form, a particular version, of a name that includes the name of a Cypriot (?) deity, who is known as *pmy* in the Nora stele.[41] Thus, although these correlations remain highly problematic, it does not seem coincidental that the two networks outlined above overlap extensively (with *pmyytn* as their central hub). Last but not least, the Cypriot connotations of the main components of such relations would be suggested also by the above-mentioned *Pygmaion* (i.e. "Adonis among the Cypriots") and *Pygmaios* (Apollo); these two characters may correspond –potentially at least– to both *pmy* and *pgmlyn* (or to one of the two?).[42]

It seems evident, then, that we are faced with a very intricate set of connections, the largest part of which remains unclear. Nonetheless, I would like to focus attention on a particular element that emerges strongly from the data. I am referring to a sort of extemporaneous, or occasional, characteristic taken on by the cult(s) in question. Indeed, to date, evidence of the spread of *pmy*/*pgmlyn* in the Phoenician West remains limited to Nora and Carthage: the two settlements have yielded the only direct testimonies of the cult of the two (?) gods. One therefore has the impression that such scarcity cannot be explained simply and directly by the lack of data; rather, it almost seems that the deity(/ies) did not experience much popularity (disappearing or changing profoundly) over time in the Phoenician context, both within and outside Cyprus.

Moreover, particularly in the case of the Nora stele, this aspect is a little surprising: by virtue of both the type of support (a monumental stele) and what is understandable in the text, the object attests to the existence of a community cult (to Pumay) – a cult, then, that should be primary for the local group of migrants. Thus, the divine figure to whom the monument was addressed must have played a leading role for the first eastern groups that settled in the peninsula, perhaps representing one of the main focuses of their ideologies and activities.[43] According to a forthcoming study by M. Botto, which accepts the dating of the stele from the end of the 9th to the middle of the 8th century,[44] this particular situation –i.e. the (possible) central position of Pumay for the first Phoenician presence in Nora and then the god's "disappearance" in the times that followed– could be explained through the reconstruction of the early stages of the Levantine presence at the Sardinian site.[45] More specifically, following Botto's indications, different groups would have settled in Nora from the end of the 9th to the 7th centuries. The first arrivals should be traced back to the most ancient Cypro-Phoenician attendance of the southern coasts of Sardinia; it is to them, then, that the cult of Pumay should be ascribed.[46] The later groups, in turn, would have reached the peninsula from the second half of the 8th century: at present, the oldest Phoenician materials found in Nora, apart from the stele, date back to that period (while the first structural evidence related to a well-organised settlement can be ascribed to the following century).[47] This second group, therefore,

41 According to A. Cannavò (forthcoming a), it is possible that Pumay "was a kind of local deity, one of the main incarnations of the 'Great God of Cyprus'".

42 It is worth remembering that, according to Lipiński (1995, 298), "il faudrait en conclure que Pumay est un dieu chypriote, pré-grec et pré-phénicien, que les Grecs ont appelé Apollon, mais que les Phéniciens ont assumé dans leur panthéon à l'époque de leur première installation dans l'île (= Sardinia, a.'s. n.)".

43 In this sense, the cult of Pumay was certainly not something "invented" in the West: on the contrary, it represented one of the main traditions that the first Phoenicians (in Nora) brought from their homeland to the new territory in which they settled.

44 Botto 2021, 271–77.

45 It must be said that almost nothing is currently known about Nora's gods (with a few particular exceptions, such as Tinnit *gd* in the tophet); however, the specific "destiny" experienced by the cult of Pumay seems to be confirmed by the absence of data in all the Phoenician settlements of the West (except for the problematic case of the Carthaginian medallion).

46 Botto 2021, 271–77. Cf. also Botto 2008, 124–27. This opinion is also partially proposed in Botto 2007, 110: "A nostro avviso, la stele di Nora non deve necessariamente indicare una fondazione coloniale, ma testimoniare più verosimilmente una frequentazione commerciale dell'area molto antica, che si concentra in un determinato momento storico intorno ad un luogo sacro." See also Amadasi Guzzo and Guzzo 1986 (in particular 67).

47 A new panorama is gradually emerging thanks to archaeological research. According to J. Bonetto (forthcoming), one of the most important acquisitions is represented "dalla già matura complessità funzionale del centro fenicio almeno dal pieno VII sec. a.C.; da allora sono attivi tre ben separati e caratterizzati nuclei adibiti rispettivamente ad abitato, a centro di culto e a necropoli in un orizzonte di stabilità e sedentarietà insediativa più marcata di quanto intuito fino ad anni recenti"; cf. Bonetto et al. 2009).

was probably culturally differentiated from the former and, specifically, less characterised by Cypriot components; thus, it was possibly less "interested" in the cult of Pumay. In essence, among the various explanations, the attestation of the god in Nora only on the famous stele could be attributed to the different composition of the peoples who followed one another in the occupation of the site, with a strong Cypriot presence in the most ancient phases (to which the stele almost surely belongs).

Now, this hypothesis is certainly plausible; it has the merit of suggesting some reasonable –and sharable– clarifications of the particular situation recorded in Nora.[48] However, it does not solve the problem of Pumay's (and Pygmalion's) absence in Cyprus (and elsewhere); therefore, I cannot rule out also the possibility, as suggested above, that the god(s) underwent some transformations or experienced some kind of "decline" over time; or he (they) may also have been worshipped under different names (one might recall, for instance, that *Pygmaion* was identified in the literary sources with "Adonis among the Cypriots"). After all, it is difficult to ascribe the lack of evidence on Pumay (and Pygmalion) to pure coincidence since, as is well known, Cyprus has yielded many materials –inscriptions above all– that attest to the local devotion of Levantine, particularly Phoenician, deities.[49] Last but not least, to complicate the picture further, one should note that both in Cyprus and in Carthage *pmy* continued to characterise the local anthroponymy. Thus, the possibility that the cult of the god retained some effectiveness over time, at least at the level of private devotion (as the Yadamilk medallion seems to testify), should be evaluated as well.

BETWEEN CYPRUS AND IBIZA

The other documents that I would like to examine here are represented by two Phoenician inscriptions found in Ibiza. Unlike the data from Nora and Carthage, the attestation of the divine names in the two texts does not pose too many problems, although it is not immune from discussion. Moreover, here we are not dealing with virtually unknown superhuman entities but with primary Levantine gods (even if they are connected to each other in particular forms).

The first inscription is the oldest epigraphic find discovered on the Balearic island. Engraved on a bone tablet and dated to the first half or middle of the 7th century,[50] the text bears an offering to the "Lord" (*ʾdn*) *ʾšmnmlqrt* (Eshmun-Melqart), on the occasion of the construction of a door (Fig. 3).[51] Unfortunately, we cannot know the original context of use of the document: it was found, together with another inscription,[52] in the "solar Maimó" in a landfill of materials from different periods (mostly ascribable to the Roman Imperial era), not far from the

Unfortunately, it is not possible to reconstruct the original context of the stele; nonetheless, various parts and buildings of the Nora peninsula could be good candidates for such a role, including the eastern sanctuary (Area F) and the so-called "tempio di Esculapio" located on the opposite (western) side: while the former has yielded blocks of stone that probably came from a more ancient construction (i.e. preceding the end of the 6th century), the latter, according to the most recent research, could be related to the first Phoenician presence in the peninsula: cf. respectively Oggiano 2009 and Bonetto and Marinello 2018.

48 And this situation could be hypothetically translated to that of Carthage with Pygmalion. I wonder if the Carthaginian medallion could be read as the attestation of a form of private devotion linked to a past and specific cultural dimension (related to the Cypro-Phoenician presence at the beginning of the Phoenician establishment in the West).

49 Fourrier 2021, 129–30; cf. Ioannou 2009.

50 Amadasi Guzzo and Xella 2005; Esquembre Bebia et al. 2005; Estanyol i Fuentes 2010, 238; Ramon et al. 2010, 233; Costa and Fernández 2012.

51 According to Amadasi Guzzo and Xella 2005, the text says: "Al Signore Eshmun-Melqart, questa porta ha fatto *šmnʾb* figlio di *ʾbdʾmn* figlio di *ʾbdtwyn* figlio di *ḥyd/ry* figlio di *bdgd* figlio di *dʾmlk* figlio *di ḥʾb*, poiché egli ha ascoltato la voce delle sue parole".

52 This second inscription also concerns the cult of Melqart (though it is more recent, being dated to the 3rd century). Found about 10 m from the other, it celebrates an offering addressed to *mlqrt ʾl ḥṣr*, therefore using an epiclesis that is well known in the epigraphy of Sardinia: it means "on/above the rock/Tyre" and it is always ascribed to Melqart (Garbati 2014a; 2021).

Fig. 3. The Ibiza bone tablet; dedication to Eshmun-Melqart (after Ramón et alii 2010).

necropolis of Puig des Molins.[53] Beyond the problem of its original context, interest in the epigraph mainly lies in the particular cult it attests to and in its possible elements of contact with Cypriot culture. At present, in fact, the divine "couple" Eshmun-Melqart, apart from the document from Spain, seems to be attested exclusively in Cyprus, thanks to some inscriptions found at Kition, in the hill sanctuary of Batsalos, dated to the first half of the 4th century.[54] For that matter, as suggested (with caution) by M.G. Amadasi and P. Xella in their study of the Ibiza tablet, such a connection could be corroborated by the use of the demonstrative *ʾz* in the dedication, widely attested on the "copper island".[55]

The second inscription comes from the Cueva d'Es Cuyram. Dated to the 5th or the end of the 5th to 4th centuries and recorded on a bronze plaque,[56] it contains the offering of a *mqdš* to the "Lord" "Reshef-Melqart" (*lʾdn lʾršpmlqrt*) (Fig. 4a).[57] On the opposite side there is a second inscription, belonging to a more recent age (2nd century BC), dedicated to the goddess Tinnit (Fig. 4b).[58] As is well known, both the provenance and the formula used in the older epigraph are still debated. It has in fact been assumed by several scholars, even recently, that the find did not originally belong to the Cueva; it would have become part of the local cult only after a process of re-functionalisation. Such a position has been principally founded on the difference between

53 According to some scholars, both the inscriptions may originally have been placed in a temple that was probably built for Melqart at the foot of the Puig des Molins hill (Costa and Fernández 2012, 618–20). In the opinion of other scholars, however, the two finds would have reached Ibiza only in the Roman age (Ramon 2012, 254–55).

54 Guzzo Amadasi and Karageorghis 1977: A3; A5 (B); A10–A15; A25 (?); D10 (?).

55 Amadasi Guzzo and Xella 2005, 51.

56 M.G. Amadasi places the inscription in the 5th century (ICO, Spagna 10A = KAI 72); in Costa and Fernández 2012, 616, the find is dated between the end of the 5th and the 4th century BC.

57 In ICO (Spagna 10A), the translation is "Al Signore Rešep-Melqart, questo è il santua[rio] che ha dedicato *šʾdr*, figlio di *yš[y]*, figlio di *brgd*, figlio di *ʾšmnḥl[ṣ]*". The use of the term *mqdš* in this text has been variously interpreted (see Costa and Fernández 2012, 616, with references).

58 ICO, Spagna 10B (= *CIS* = KAI 72).

Fig. 4. The Ibiza bronze plaque; dedications to Reshef-Melqart (a) and to Tinnit (b) (after Richey 2019).

the date of the text, assigned to the 5th–4th centuries on the basis of palaeography, and the period in which the Cueva was (theoretically) attended, traditionally identified with the Hellenistic age;[59] the confirmation of such a process would be clearly shown by the dedication of the object to Tinnit, as recorded on the opposite side of the plaque. Moreover, as regards the interpretation of the first inscription, it was proposed for some time that one should read in the opening line the sequence *l'dn l'rš bny qrt* ("To the Lord, to Eresh, the city builder") rather than *l'dn l'ršp mlqrt*; the text would therefore mention a local hero, Eresh.[60] Although this proposal was accepted by some scholars –without being subjected to criticism[61]– the traditional reading of the inscription is perhaps to be viewed as the most reliable.[62]

Unlike the case of the other Ibiza text, here the possible connection with Cyprus is not so immediate. In fact, it can only be hypothetically deduced from the specific diffusion of the Reshef cult. The god remains almost unknown both in the East and the Phoenician West.[63] Firstly, in Phoenicia there are no direct testimonies to date; in addition to some anthroponyms, which come from Egypt, the only datum is provided by the expression "Land of the Reshefs" (Reshef in plural: *'rṣ ršpm*), recorded in the Bodashtart inscription (mid-5th century) and probably indicating a particular district of Sidon.[64] Secondly, for the "colonial" world, only two texts are known

59 Costa and Fernández 2012, 616. The sacred place and all the materials found there are now the subject of a new, comprehensive study; we therefore await its publication for further detailed indications (cf. Ceballos et al. 2020).

60 Lipiński 1983, 154–58. According to the author, Eresh is to be recognised also in the toponym Eresos remembered for Ibiza by Diodorus Siculus V 16,2.

61 Cf., for example, Bonnet 1988, 236–38; Münnich 2013, 257.

62 I warmly thank José Ángel Zamora for providing me with important clarifications on this inscription. Cf. also Costa and Fernández 2012. The dedication to Reshef-Melqart is accepted also in Richey 2019, 231–32.

63 Münnich 2013; cf. also Lipiński 2009. Recently Ribichini 2018.

64 KAI 15. On the various interpretations of the expression and the attempts to recognise a specific area of the city see Lipiński 2009, 236 and, specifically, Münnich 2013, 241 (with references). Also admitting the possibility of reading "Land of Reshefs" as a toponomastics indication, Münnich states that "one cannot draw the conclusion that the inscription speaks about the existence of some temple dedicated to various local hypostases of Resheph" (Münnich 2013, 241).

at present that might mention the deity's name: the first is represented by a stele from the tophet of Carthage, which seems to record the existence of a "Temple of Reshef";[65] the second, again from Carthage, cites the name Abdreshef.[66] However, the origin of this Abdreshef is also specified: he is called "Egyptian", which brings us back to the Phoenicians of Egypt. Nothing else, as we said, is known in the Levant and in the West. The only exception is represented by Cyprus: currently, the island has yielded the majority of the first-millennium data relating to the Syrian god. Without entering into the merits of each attestation, it is sufficient to recall here that the divinity assumed a leading position in the Cypriot religion for about a millennium, from the 14th–13th to the 3rd century; his name is often accompanied by epicleses, which show the variety of the deity's traits and cults (*sh [...]; 'lyyt; 'lhyts; ḥṣ; (h)mkl*).[67] The god is also identified on the island (and *only* on the island, at present) with Apollo.[68]

Divine couples (?)

If we concentrate now on the two particular divinities attested in the inscriptions just described –Eshmun-Melqart and Reshef-Melqart–, it must be said, first of all, that they respond to a phenomenon –that of the cult addressed to "double deities" – which is rather well known in Phoenician settlements.[69] The "construction" of these particular entities has often been interpreted as the result of a relationship of kinship or dependence between two characters (according to the model: DN "of" DN) or even by virtue of a common form of worship, possibly in the context of a single temple, arising from functional affinities.[70] Focusing on the detail of our cases, while specific and convincing readings have not been proposed for *ršpmlqrt*,[71] with regard to *'šmnmlqrt* it has been suggested that its formulation might be ascribed to the leading position that the two gods, Eshmun and Melqart, must have occupied in the major cities of Phoenicia, respectively Sidon and Tyre (as polyadic gods).[72] After all, the two divinities were very similar to each other, albeit with different specialisations.[73] They are mentioned side by side, for example, in two Assyrian treaties; in particular, in the document signed by Baal I of Tyre and Esarhaddon of Assyria, they are called on to perform the same functions.[74] Such a similarity, therefore, may have contributed to the construction of a sort of divine "couple".

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65 *CIS* I 251. However, once again, Lipiński refers this to the cult of Eresh.

66 *CIS* I 2628.

67 All the data in Münnich 2013, 246–56. On Reshef/Apollo *'lyyt*; *'lhyts* see the recent Amadasi Guzzo 2021.

68 This identification helps to construct a sort of triangular connection: in Apollo, in fact, one recognises the Cypriot Reshef (in the inscriptions) and, as we saw above, a certain *Pygmaios* (of whom the Anonymous Laurentianus speaks). Without creating superimpositions that are too direct –e.g. Apollo-Reshef-*Pygmaios*– we can learn from these relations about the complexity of the cultural Cypriot dimension (made up of local, Greek and Levantine contributions) and also about the possibility, in such a multifaceted context, that a certain god could assume different faces and names (or different gods could assume the same denomination).

69 Xella 1990.

70 Cf. Ribichini and Xella 1979; Amadasi Guzzo 1991; Garbati 1999–2000. Ribichini 1976, 49 is rightly critical of overly simplistic interpretations (as in the case of "genitival" relations).

71 Cf. Fulco 1976; Fernández-Miranda 1983.

72 Their association would have depended on "due ordini di ragioni: parità di ruoli e di rappresentatività politica, da un lato; affinità morfologica, fondata sull'esercizio di un potere analogo e indirizzato essenzialmente alla sopravvivenza dei loro fedeli, dall'altro" (Amadasi Guzzo and Xella 2005, 50).

73 Garbati 2018; 2021.

74 Parpola and Watanabe 1988, 2, VI 22; 5, IV 10–17. Garbati 2018. The Esarhaddon treaty mentions Melqart and Eshmun after the evocation of a group of three Baals (Shamim, Malage and Safon) and immediately before Astarte. All the gods are called on to violently intervene if the Phoenician king does not respect the pact. To the first group is delegated dominion over atmospheric agents and natural elements, particularly the sea. By contrast, Melqart and Eshmun control the human dimension: the text states that the violation of the agreement will result in their terrible intervention against the country and the people, affecting the primary subsistence goods (food, clothing and oil). Finally, Astarte is evoked as a warrior goddess.

One cannot exclude the additional possibility, as recently proposed for other cultural spheres,[75] that the modelling of the entities in question was driven by a sort of assimilation process between the two divine personalities involved (which, moreover, does not preclude acceptance, at least in part, of the interpretations mentioned above). Dynamics of this kind would have followed, in different cases, two possible paths.[76] On the one hand, assimilation would have had a reciprocal character on some occasions: the two components would be assimilated by each other (one into the other), leading to the construction of a new "product" characterised by original features, similar but not identical to the two individual divinities. On the other hand, the process would have meant on other occasions the assignment of a more active role to one of the two gods: this god would have assimilated the other. Based on this second possibility, only one divinity would have maintained the original identity, but his/her personality would have been enriched thanks to the acquisition of characteristics previously absent (derived from the assimilated god). In the cultic formalisation of this second option, one of the two divine names would therefore have functioned as a "determinative" of the other and would have responded, in the concrete dimension of ideologies and ritual practices, to particular devotional interests: the result, in essence, would not have been a new divinity, as in the previous case, but a different (new) version of a known deity.

As regards *ʾšmnmlqrt* and *ršpmlqrt* specifically, their formulation could be traced back to a complex process of assimilation – a process in this case related to the second type described above, characterised by a path (analogous to that followed by the construction of the epiclesis) in which one of the figures involved is given a more incisive role. Melqart could have exercised a similar function: as I suggest elsewhere, in Ibiza the god appears as the common denominator of different forms of worship.[77] Therefore, he must certainly have been invested with a privileged role within the insular religious dimension – a position that must have resulted, at least in certain circumstances, in some deities becoming characterisations of his manifestations.[78] Certainly, with regard to this particular phenomenon (and specifically the Ibiza data), a number of elements remain obscure. We do not know, for example, if and to what extent possible assimilation processes (perhaps partial) –of Eshmun and Reshef by Melqart– actually meant the total "disappearance" of the assimilated components under the guise of the other, or how much the individual profiles of the deities concerned maintained, in the eyes of the devotees, some portion of autonomy. Moreover, we do not know whether the theological processes that guided the construction of the two double theonyms responded to an entirely local dimension, developed specifically in Ibiza, or whether they were elements of a more generalised phenomenon (of which we currently find no attestation). However, it is difficult to believe that the presence on the Spanish island of two double theonyms, both with the form "ND + Melqart", is purely coincidental; rather, the construction of the two "couples" appears to be more easily attributable to a common cultural and cultic fund.

Returning, then, to the question of Cypriot connections, I wonder if the particular religious dimension attested on the Spanish island and manifested in the two inscriptions (and in similar divine couples) could be traced back to some sort of influence coming from Cyprus, given the possible correlation of Eshmun-Melqart (directly attested) and Reshef-Melqart (suggested by the centrality of the cult of Reshef) with the island's culture. Certainly, one should keep in mind that, with regard to Eshmun and Melqart, the profound proximity of the two figures is well documented primarily on the Levantine coast, albeit in different forms from those found in Kition (as in the above-mentioned Assyrian treaties). Hence, it is likely that the very possibility of giving

75 Wallenstein 2014.

76 Wallenstein 2014; cf. also Baines 2000.

77 In addition to the two double theonyms, we must consider the *mlqrt ʾl ḥṣr* of the more recent inscription from Puig des Molins; on these questions see Garbati 2018, 146–49; 2021.

78 One can think, for example, of the exaltation, through Eshmun and Reshef, of traits that are absent or less marked in the figure of Melqart (perhaps also as a consequence of some mythical link between the various protagonists, of which nothing has been preserved). On the other hand, one cannot rule out the possibility that *ʾšmn* and *ršp* were "determined" by the name (and traits) of the Tyrian god. From this point of view, it may be useful to recall that, before the Ibiza discoveries, E. Lipiński (1995, 291) proposed that one might see in the Cypriot *ʾšmnmlqrt* a sort of Heraclean Eshmun "dont les caractéristiques ne correspondaient pas à celles d'un dieu phénicien déterminé".

the two gods a common cult, formalised in the double theonym, partially depended on this functional affinity: therefore, the principles underlying the formulation of this association should be sought in Phoenicia, even if one wishes to recognise in it –as is quite possible– some Cypriot connotations. As regards the elaboration of the Reshef-Melqart association, in turn, one can envisage that it would preferably have taken place within a cultural framework that was deeply familiar with the cult of the two gods involved (as Cyprus was).[79] Moreover, the double theonym closely recalls the Eshmun-Melqart "construction", well known in Cyprus, with which it shares both its structure and one of its two components (*mlqrt*). From this perspective, it must also be stressed that the chronology of the inscription –between the 5th and 4th centuries– raises the question of the times when some possible Cypriot traits of Reshef would have reached Ibiza. It is likely, for example, that the double theonym Reshef-Melqart is an indicator of beliefs rooted on the island from ancient times, of which we could recognise some echoes in the dedication to Eshmun-Melqart (which can be placed at the beginning of the Phoenician history of Ibiza).[80] On the other hand, it is not unlikely that, admitting a Cypriot derivation, such devotional forms were accepted in more recent times, that is to say, around the 5th century. As mentioned at the beginning of these notes, it is precisely in this period that a renewed cultural influence from the East –Cyprus included– is well attested in the "colonial" settlements.

CONCLUDING REMARKS

Attempting now to retrace the data collected, we can briefly suggest some overall considerations. According to the interpretations proposed, we are dealing with three/four deities attested in the western Phoenician sites who, for various reasons, are thought to have had some relation with Cyprus. As regards *pmy*/*pgmlyn*, a possible link with the island can be recognised in the anthroponymy and in the contribution of literary sources; with respect to Eshmun- and Reshef-Melqart, Cypriot traits are suggested, above all, by the epigraphic data from Batsalos and by the wide success of the Reshef cult in the island; furthermore, one should also consider the similar structure of the two double theonyms, which could be due to a common cultural matrix.[81]

Thus, if we admit a Cypriot colouring with regard to the divinities in question, the documentation leads us in two possible directions: on the one hand –as for Pumay and Pygmalion in Nora and Carthage– a direct and original contribution from Cyprus can be supposed, perhaps to be ascribed to certain insular beliefs that were adopted by the Phoenicians or that matured through cultural interconnections, accompanying, then, the beginning of the Phoenicians' stable presence in the West; such contributions, however, seem to remain limited to the first stages of the migratory movements. In any case, *pmy*/*pgmlyn* must have also retained some importance in Cyprus, especially in private devotion, as suggested by the presence of the theonym in the name of King Pumayyaton.[82] On the other hand, the cults of Eshmun- and Reshef-Melqart in Ibiza tell us about the possibility of some sort of Cypriot connection that could be sought in the traditions of the Phoenician communities that settled in the Spanish island. I wonder, therefore, if the formulation of the two double theonyms could have found its main inspiration precisely in Cyprus, based on Levantine ideologies, but possibly with some form of participation by the local culture: Cyprus, in this sense, could have played the role of a sort of laboratory in which different cultural components came together and produced original products, born out of interaction.[83]

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79 On Melqart in Cyprus see Bonnet 1988, 313–41.

80 Costa Ribas 2018.

81 We may say that the connection with Cyprus of Pumay, Pygmalion and Eshmun-Melqart can be understood as credible; the connection between the island and Reshef-Melqart can be defined just as possible. However, it must be said that some analogies would probably have existed (or were constructed) also between Reshef and Pumay/Pygmalion, considering their identification with or proximity to Apollo.

82 Moreover, an echo of such a tradition can be found in the literary figure of Elissa's brother Pygmalion.

83 From this point of view, it must be stressed that the presence of a deity such as Eshmun-Melqart in different places does not

In essence, the data allow us to perceive some aspects of the Cypriot contribution in certain elements of the religious dimension of the western Phoenician world(s). Theoretically, this contribution is to be ascribed partly to the local culture and partly to the Phoenician communities of the island, with different results. At the same time, however, the documentation argues against drawing excessively clear-cut cultural distinctions that, on the contrary, could produce artificial limits and boundaries. The perspective of encounters and interrelations, then, is the one that should be privileged.

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necessarily imply that the divine entity maintained the same traits in those places, even if one can admit a common origin for the different attestations: the characteristics of the deity were probably actualised each time, based on local devotional interests.

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Sailing east

Networks, mobility, trade and cultural exchanges between Cyprus and the central Levant during the Iron Age

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ABSTRACT

The proximity of the Levantine coast to Cyprus is at the origin of the multiple connections between these two regions and their polities over millennia. Their relationship during the Iron Age (ca 12th–6th century BC) is usually analysed from the perspective of the central Levant, a region conventionally identified with ancient Phoenicia, and under the premise that the Phoenicians played a major role in the island. Conversely, this paper attempts to reverse the perspective by analysing the Iron Age Cypriot decorated wares that were imported in Phoenicia, which represent the main marker of the relations between these two regions, and providing their first diachronic overview. Although their provenance can currently only tentatively be suggested on stylistic grounds, a major role for Salamis and Amathus emerges in these maritime connections.

PROLEGOMENA: PROXIMITY, RESOURCES AND SHORTCOMINGS

From as early as a continuous connection between the Levant and Cyprus emerged, and especially since the Middle Bronze Age (MBA, ca 2000–1600 BC), this relationship was based on three main intertwined elements. First, the proximity of these two regions made the movement of people and goods via their harbours almost inevitable. The second one is their position in the eastern Mediterranean: Cyprus –from a Levantine perspective– acted as the main gateway and crossroad to the Aegean and the western Mediterranean, while the coastal cities of the Levant –from a Cypriot perspective– played a similar role, ensuring access to the products and trade networks of Egypt, Mesopotamia and even regions further east. Finally, their resources and products represented the principal reason behind their long-lasting relationship. On Cypriot resources and products exported abroad, there is some textual evidence from the Late Bronze (LBA) and Iron Ages attesting that –during this period– they remained almost the same ones: copper, which was certainly the most important of the island's resources, timber (as a building material, but also used to make luxury objects), other metals, textiles, olive oil, unguents and perfumes. Each Cypriot polity had access to and control over its own copper mines, and probably also to timber, as they were both located in the Troodos mountains.[1]

During the Iron Age, the main actors involved in the overseas trade and in the relations between the mainland and the nearby island seem to have been the coastal cities of the central Levant. This region is usually

1 Iacovou 2008.

defined as Phoenicia during the Iron Age and conventionally identified with the coastal area roughly between the territory of Arwad in the north and those of Tyre/Akko in the south, although admitting that its "territorial and ethnic borders were flexible and fluctuating, subject to change over time".[2]

Phoenicia was poor in raw materials, which consisted mainly of timber (especially cedarwood) and resins from the forests in the Lebanon and Antilebanon mountains.[3] Wine and oil are usually assumed to be the products exported abroad. In this regard, the recent evidence from Tell el-Burak, although dating to the late 8th–mid-4th century BC, assumes particular importance.[4]

Thus, most of the resources from Cyprus and Phoenicia are archaeologically very difficult to identify. Furthermore, in most cases, they cannot be currently pinpointed to specific territories or cities. This kind of perspective, at present, can only be obtained by looking at the pottery thanks to the considerable progress in the characterisation of Cypriot regional pottery productions that has been achieved in the past few years.[5]

However, this way of proceeding implies facing several problems. First, Iron Age Cypriot regional pottery productions have usually been distinguished on stylistic grounds, while petrographic analysis has only very recently started (such as that on the finds from Tel Dor and other sites in the southern Levant[6] or the workshops of Salamis[7]). This explains why –when investigating Cypriot pottery abroad– the focus is currently limited to Cypriot decorated wares. Accordingly, Cypriot and Cypriot-type plain wares appear to be more rarely attested, but they are also more difficult to identify in the Iron Age Levant. Exceptions, as recently argued by Gilboa,[8] are limited to Iron Age I "wavy-band" pithoi,[9] and –from later periods– flat base mortaria and basket-handled amphorae.[10] Secondly, statistical observations aimed at calculating the flows of imports should consider that the published material –especially in the case of old excavation reports (such as those of Tyre[11] and Sarepta[12])– only shows a minority of the finds. As the quantitative tables in these reports are not accompanied by illustrations, their typological attributions cannot always be evaluated.[13] In this regard, the assemblage from the necropolis of Tyre al-Bass represents a relevant contribution.[14]

Finally, additional problems have long been recognised in the typology established by Gjerstad[15] and in the chronological discrepancies between the periodisation of these two regions.[16] However, they are not considered in the present article, which provides a diachronic analysis of Cypriot decorated wares that were imported in the central Levant, attempts at identifying some regional productions on stylistic grounds and, consequently, drawing some conclusions on the main centres involved in these connections and their specificities.

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2 Lehmann 2019, 466. This occurred especially to the south, as indicated –for instance– by the case of Tel Dor.

3 Sader 2019, 13.

4 Orendi and Deckers 2018; Schmitt et al. 2019; Sader 2019, 258, 280–82, 288–94; Orsingher et al. 2020.

5 Fourrier 2006; 2008; 2009; 2014; 2015; Georgiadou 2011; 2012a; 2012b; 2014; 2016; 2017; 2019; Daniel et al. 2007.

6 Shoval and Gilboa 2016; Waiman-Barak et al. 2021. Also, see the petrographic analysis on the imports from Khirbet Qeiyafa (Gilboa and Waiman-Barak 2014), some wavy-pithoi from Tel Dan (Waiman-Barak and Gilboa 2019), and single finds from Megiddo (Kleiman et al. 2018) and Tell es-Sarem/Tel Rehov (Waiman-Barak forthcoming).

7 For an introduction to the ongoing research project MuseCo, see: https://www.ucy.ac.cy/museco/documents/Public/MuseCo-Poster_Comp.pdf (accessed on 24/09/2021).

8 Gilboa 2015, 483.

9 Most recently, see Waiman-Barak and Gilboa 2019, 396–97.

10 Among the Cypriot plain wares, one can include a fragment from Tell Kazel (Yon and Caubet 1990, 104, 111 no. 144) and –following Gilboa (2015, 483)– a jug found at Tel Kabri. The existence of a group of Cypriot plain wares at Tel Dor is mentioned in Waiman-Barak et al. 2021, 256.

11 Bikai 1978, 17–18.

12 Anderson 1988, 465–517.

13 For a similar observation, see Gilboa and Sharon 2003, 45.

14 Aubet and Núñez 2008.

15 Gjerstad 1948; Georgiadou 2011, 86, with references.

16 E.g., Kleiman et al. 2019, 532–34.

A CERAMIC PERSPECTIVE

Inevitably, the starting point for addressing this topic can be identified with Tyre. This city is acknowledged in the literature as the site that has currently yielded one of the largest published assemblages of Cypriot pottery in the Iron Age Levant during the longest period of time. Tel Dor represents another pivotal case,[17] as this site appears to have played a major role in overseas trade and the connections with Cyprus.[18]

According to Bikai, imports at Tyre correspond to "more than 4% of the total number of diagnostic sherds",[19] with most of them coming from Cyprus. A similar percentage is indicated at Tyre al-Bass, where the proportion of Cypriot imports amounts to around 4% of the total.[20] Looking at the evidence from Bikai's excavations at Tyre (Fig. 1), it can be observed that, from a very early stage (i.e., strata XIII–XI), Cypriot ceramics can be related to three different categories: open vessels,[21] juglets[22] and amphorae.[23] However, shallow and, especially, deep bowls appear to have been the majority, which is a trend already recognised in the southern Levant.[24]

On the contrary, Levantine ceramic imports in Cyprus remained limited –until the advanced Cypro-Geometric (CG) III period (ca 900–750 BC)– to closed vessels, even though with an increasing variety of types (e.g., transport amphorae, strainer- and tubular-spouted jugs, pilgrim flasks, dippers, neck-ridge jugs, craters). This observation may indicate a trade primarily limited to the sale of one or more specific products. Wine is a likely candidate as the content of many Levantine-type amphorae found on the island, mostly because these containers have been frequently found in association with or imported at the same time as other vessels that may have served as a drinking set.[25] Furthermore, the presence of oil in some of these amphorae cannot be overlooked, while scented oils and perfumes are usually considered the original contents of the variety of jugs and juglets imported from the Levant.

Cypriot imports in Tyre strata XIII–X, when their provenance can be attributed on stylistic grounds, seem principally to have been produced at Kition and, more rarely, at Salamis.[26] As this period corresponds to some contexts excavated by the French Mission at Salamis that have yielded Levantine-type amphorae, flasks and jugs (i.e., Tomb I[27] and the soundings below the Basilica of Campanopetra[28]), it would be interesting to identify these vessels' area of manufacture.

An apparent change in the provenance can be observed from Tyre stratum X and Tyre al-Bass period II, when rim-handled amphorae from Amathus were also attested.[29] This shift –in terms of absolute chronology– would correspond to around the middle/third quarter of the 9th century BC.[30]

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17 Gilboa 2015, 484.

18 Gilboa and Goren 2015; Gilboa et al. 2015; Waiman-Barak et al. 2021.

19 Bikai 1978, 53.

20 Aubet and Núñez 2008, 72; Núñez 2014, 263–64. These estimates do not include the last group of graves that have been excavated (Tombs 175–290), where other Cypriot imports are known (e.g., Aubet 2015, 53, figs. 30, 35).

21 Bikai 1978, pls. XXXIV:2–3, 9, 12; XXXII:10.

22 Bikai 1978, pl. XXXII:7.

23 Bikai 1978, pls. XXXIV:4, XXX:2.

24 Gilboa 2015, 483.

25 Orsingher et al. 2021.

26 On stylistic grounds, a Kitian manufacture could be tentatively assigned to Bikai 1978, pls. XXXII:10, XXXIV:12, while an amphora (Bikai 1978, pl. XXX:2) probably came from Salamis.

27 Yon 1971, 30 no. 60, 45 no. 94, 47–8 nos. 104–6, pl. 20, 27, 29.

28 Calvet 1980, 116–21, figs. 1, 3–5; Fourrier et al. 2021, 296–300, figs. 25–33.

29 Bikai 1978, pl. XXIII:20; Núñez 2004, figs. 93:1, 100:1; Aubet et al. 2014, fig. 2.16:U.73-1, 2.33:U.107-12, 2.36:U.111-1, 2.52:Dep. 5-4.

30 As TT73/74 belongs to the middle part of al-Bass period II and TT110/111 to its second half (Núñez 2014, 291), while similar finds come from Tyre stratum X-1, one may wonder if this change occurred in an advanced stage of al-Bass period II (ca 925–815 BC). On its dating, see Núñez 2014, fig. 3.44.

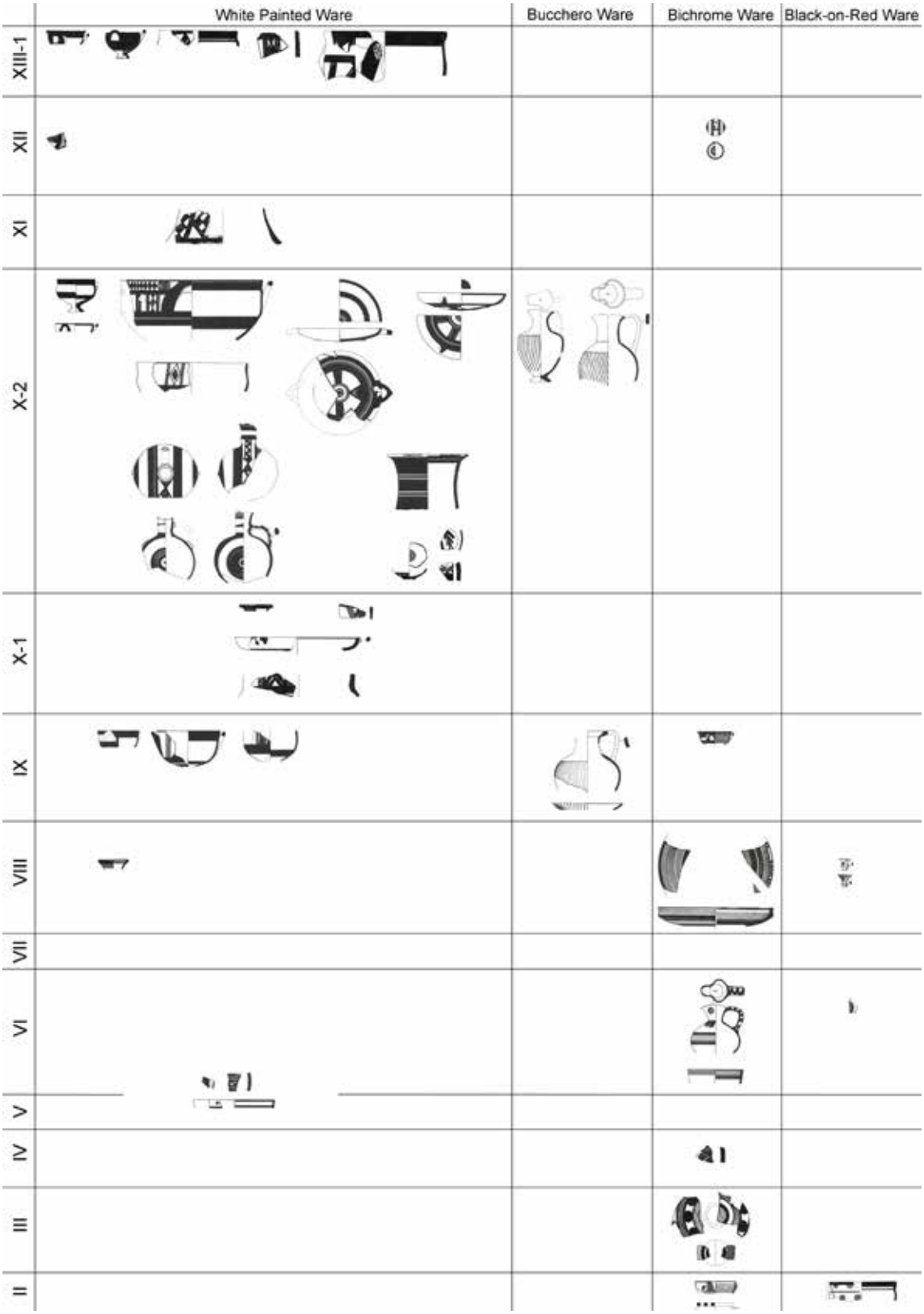

Fig. 1. Tyre, strata XIII–1/II: a selection of Cypriot decorated ware (adapted by A. Orsingher after Bikai 1978, pls. X:27; XIA:21, 23; XIV:17; XVIIIA:16–18, 21–22; XX:3; XXI:6; XXIIA:9–13, 15–17; XXIII:9, 19–20; XXIV:3; XXVIII:1–11; XXX:2; XXXII:7, 10; XXXIV:2–4, 9, 12; XXXVII:7).

Tyre al-Bass currently provides the best-preserved and published assemblage of Cypriot pottery from the Iron Age central Levant (Fig. 2), which mainly consists of amphoroid kraters, namely rim-handled and belly-handled amphorae.[31] Not only vessels from different Cypriot production centres, but also a larger variety of pottery types was employed during period II at Tyre al-Bass. Single specimens of a Bichrome shallow bowl probably from Kition[32] and a barrel juglet from Salamis[33] are documented. Tyre al-Bass periods III and IV (ca late 9th–the second third of the 8th century BC) provide evidence of an increasing number of ceramics from Amathus,[34] with exceptions probably to be connected to Salamis.[35] The existence of a trade route between Tyre and Amathus during these decades has already been pointed out by various scholars when analysing the distribution of Euboean pottery in the Eastern Mediterranean.[36]

This data represents the counterpart of the large quantity of Phoenician pottery in Amathus, mainly from the burial grounds surrounding the city.[37] Unlike Palaepaphos and Kition, Levantine imports are attested at Amathus in almost all tombs and not only in those of the richest families.[38] The case of Cypriot pottery at Tyre al-Bass, which the excavators considered the cemetery used by the middle class of Tyre, is similar.[39] Additionally, this phase corresponds to what appears to have been the period of use of the so-called Four Season Necropolis of Amathus, which is an area to the west of the settlement, where some urns containing cremated skeletal remains were found.[40] Both the use of incineration and the deposition patterns have immediately emphasised the non-local character of this place, which is usually recognised as a burial ground used by a Phoenician-speaking community living in Amathus or its proximity.[41] The strong connection between Amathus and the central Levant would also explain the introduction and adaptation of various Phoenician-type open vessels in the local repertoire.[42]

The nearby cemetery of Tell el-Rachidiyeh, just 4 km to the south of Tyre,[43] shows a similar trend, having yielded mainly amphoroid kraters probably manufactured at Amathus.[44] The few tombs excavated here, unfortunately only partially known, seem to represent a group of higher social status than those buried at Tyre al-Bass, at least based on the burial assemblage from Tomb IV, which –although used for about two centuries– also contains a Euboean plate decorated with pendent semi-circles, some pieces of jewellery and a so-called Naue II-sword.[45]

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31 Aubet and Núñez 2008; Núñez 2014, figs. 3.12:c, e–f, 3.14, 3.43, 3.71, 3.73, 3.74, 3.89, 3.117:c–d. In addition, other Cypriot imports are included among the finds from illegal diggings at this cemetery (Seeden 1991, figs. 3–6, 17–8).

32 Núñez 2004, fig. 102:2.

33 Núñez 2004, fig. 102:4. A Salaminian provenance could be probably assigned also to an amphoroid krater (Aubet et al. 2014, fig. 2.36:U.111-1), whose decoration resembles those on some vessels from Salamis Tomb 31 and particularly of one example of the same shape (e.g., Karageorghis 1967, pl. CXXX:72).

34 Núñez 2004, figs. 83:1, 5, 87:1, 89:1, 94:1; Aubet et al. 2014, figs. 2.6:U.78-1, 2.8:U.65.1, 2.13:U.70-1, U.71-1, 2.19:U.77-1, 2.42:U.118-1, 2.64:U.153:1, 2.76:U.170.1.

35 Núñez 2004, fig. 74:1.

36 E.g., Coldstream 2000; Lemos 2002, 228–29.

37 Seminal is still the corpus collected in Bikai 1987.

38 Georgiadou 2018.

39 Núñez 2017, 181.

40 Christou 1998; Agelarakis et al. 1998. Most recently, see Fourrier et al. 2021, 296.

41 Iacovou 2014, 122.

42 Fourrier 2006, 52, 55–6, 61–2, 68–9, 85, 87.

43 Doumet-Serhal 2004.

44 A provenance from Amathus can be tentatively assigned, for instance, to Doumet-Serhal 1982, figs. VI, 17, VII, 22; 2003, figs. 14–9; Bordreuil 2004, figs. 2, 4, while possible products of Salaminian workshops could be identified with Doumet-Serhal 1982, fig. XIII, 106; 2003, fig. 12.

45 Doumet-Serhal 1982, 124–25, 129–30, figs. XVII:9, XX:97.

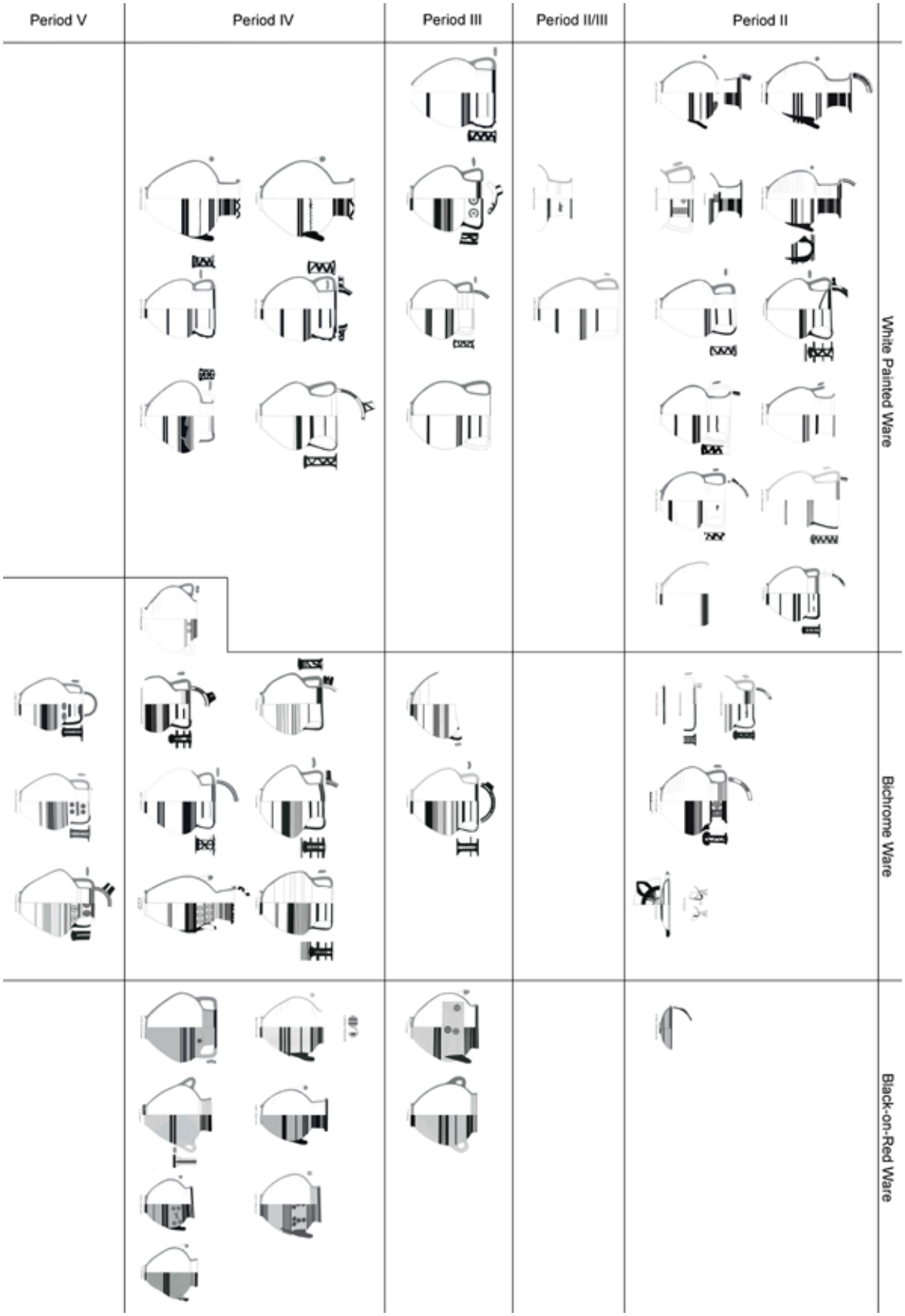

Fig. 2. Tyre al-Bass, periods II–V: a selection of Cypriot decorated ware (adapted by A. Orsingher after Núñez 2004, figs. 52:1; 54:1; 56:1; 58:1; 70:1; 74:1; 76:1; 83:1, 5; 84:1; 87:1; 89:1; 94:1; 95:1; 96:1; 98:1; 99:1; 100:1; 102:2, 4; 106:1; Aubet et al. 2014, figs. 2.3:U.61-1; 2.6:U.64-1, U.78-1; 2.8:U.65; 2.10:P.23; 2.13:U.70-1, U.71-1; 2.15:U.72-1; 2.16:U.73-1, -2; 2.19:U.77-1; 2.26:U.97-1; 2.32:U.103/U.104-2; 2.33:U.107-1, -2, -12, -13; 2.35:U.108-1; 2.36:U.111-1; 2.42:U.117-1, U.118-1; 2.49:U.130-1; 2.50:U.131-1; 2.52:dep.5-4, -21; 2.60:U.145-1, U.146-1; 2.64:U.153-1; 2.66:U.155-1; 2.72:U.164-1; 2.75:U.167-1; 2.76:U.170-1; 2.79:dep.1-5).

The evidence from Ras al-Bassit,[46] a site at the foot of Mount Casius on the northern coastal Levant, indicates that –even though on a more limited scale– the import of Cypriot painted amphorae and their secondary use as cinerary urns was a phenomenon that was not limited to the central Levant.[47]

Gilboa has observed that small containers, allegedly used for precious liquids, became abundant in the southern Levant during this period.[48] However, this type of Bichrome, White Painted (WP) and Black-on-Red (BoR) juglets are currently scarcely attested in the central Levant. Achziv represents the main exception known so far,[49] raising the question as to whether it should be attributed to a different commercial circuit, consumption pattern or –only– to the chance nature of archaeological discoveries.

The current dataset indicates an increase in the number and distribution of Cypriot ceramic imports in the central Levant during the initial part of the Cypro-Archaic (CA) I period (ca 750–600 BC). Moving from north to south, the overall picture seems to be rather consistent, although some sites have currently yielded only a few Cypriot vessels. At Tell Kazel, Cypriot decorated wares are attested earlier, but most of the finds are assigned to the 8th–7th centuries BC.[50] Scanty evidence is preliminarily known from Tell Arqa[51] and Tell Mirhan.[52]

Of the capitals in this region, Byblos is the only one where almost no Iron Age remains have been identified.[53] However, the scanty corpus of Cypriot ceramics from this site includes the usual pottery types: amphoroid kraters represent the largest group,[54] while smaller is the number of bowls[55] and BoR closed vessels.[56] Given the limited extent of excavations in Beirut and its territory,[57] the quantity of Cypriot ceramics from areas BEY 003[58] and BEY 032[59] seems to be in line with proportions known from more extensively investigated sites.

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46 Courbain 1993, 60–6, figs. 12–6.

47 Apart from Tyre al-Bass and Tell el-Rachidiyeh, another necropolis yielding a consistent number of these containers reused as urns is the so-called "Tophet site" of Achziv (Mazar 2010).

48 Gilboa 2012a, 10–2; 2015, 487.

49 E.g., Dayagi-Mendels 2002, 137–40 nos. CP5-CP11, figs. 5.14–5.15; Mazar 2003, figs. 10:6–12, 11, 12:1–5, 21:1–7, 26:1–6; 2004, 46–7, figs. 16:2–8, photos 93–6; 2010, fig. 112:35; Yasur-Landau et al. 2016, 219; Meir et al. 2018, 163, 170.

50 Yon and Caubet 1990, 103–4, 110–13 nos. 120–88, appx. figs. 2–3, 5.

51 Thalmann 1978, 84–5, where BoR ceramics are mentioned. Most recently, Charaf showed additional BoR and WP fragments at the webinar held on 05/05/2021 and entitled "From Tell Arqa to Byblos: Tracing the Footsteps of Anis Chaaya in Lebanese Archaeology", which was part of the lecture program "ARWA/Archaeology in Action".

52 Kopetzky et al. 2019, 121.

53 Sader 2019, 38. The only exception is necropolis K, where there is some evidence of occupation during the Iron Age II (Salles 1980, 20–1, pls. 9:1–5, VIII:1–4), but some finds (out of context) from Dunand's excavations should also be acknowledged (Homsy 2003; Kilani 2020, 24, 255–56).

54 Four of them are decorated with rows of concentric circles (Dunand 1954, 217 no. 8743, fig. 187; 508 no. 12271, fig. 563; 557 no. 12870, fig. 642; Salles 1980, pl. 9:4), which may point to a provenance from Palaepaphos. One WP example (Dunand 1954, 923–24 no. 17467, fig. 988) finds a parallel at Tyre (Bikai 1978, pl. XXX:2), which has already been identified as a product of a Salaminian workshop (Georgiadou 2016, 96, fig. 4:5). Finally, another WP example has ears-and-lozenges painted on the neck (Dunand 1954, 400 no. 10867, fig. 423bis), which may also come from Amathus (for a parallel, see Fourrier 2006, fig. 327).

55 Among them, there are two skyphoi of the so-called Al Mina Ware (Dunand 1954, 225 no. 8892, fig. 243; Chirpanlieva 2015, 55, 59, pl. I:1), a possible bichrome skyphos with crossed-hatched decoration (Dunand 1939, 23 no. 1086, fig. 11) and three BoR deep bowls (Dussaud 1930, 179, fig. 7; Dunand 1954, 182–83 no. 8246, fig. 139).

56 The BoR repertoire includes neck-ridge jugs –one from necropolis K (Salles 1980, pl. 9:1) and one from the surface (Dunand 1954, 99 no. 7429, fig. 86)– pinched-mouth jugs (i.e., wall and handle fragments (Salles 1980, pl. 9:3, 5), and the rim/neck of a non-identified BoR closed vessel (Salles 1980, pl. 9:2).

57 Additional finds are known from the cemetery of Khaldé, which is located south of the settlement (e.g., Saidah 1966, 61 no. 21; 1971, 194, 197b–c), while only the upper part of a BoR neck-ridge juglet and bowl rim with concentric circles is currently known from Jiyeh (Wicenciak 2012, 447, fig. 1:2–3).

58 Badre 1997, 68, 72, 74, 76, 86, figs. 35:9–14, 38–39, 46.

59 Jamieson 2011, 24–6, 95–100, figs. 7:1–10; 54–9. On the dating of this find-context and additional remarks, see Gilboa 2012b, 107–9.

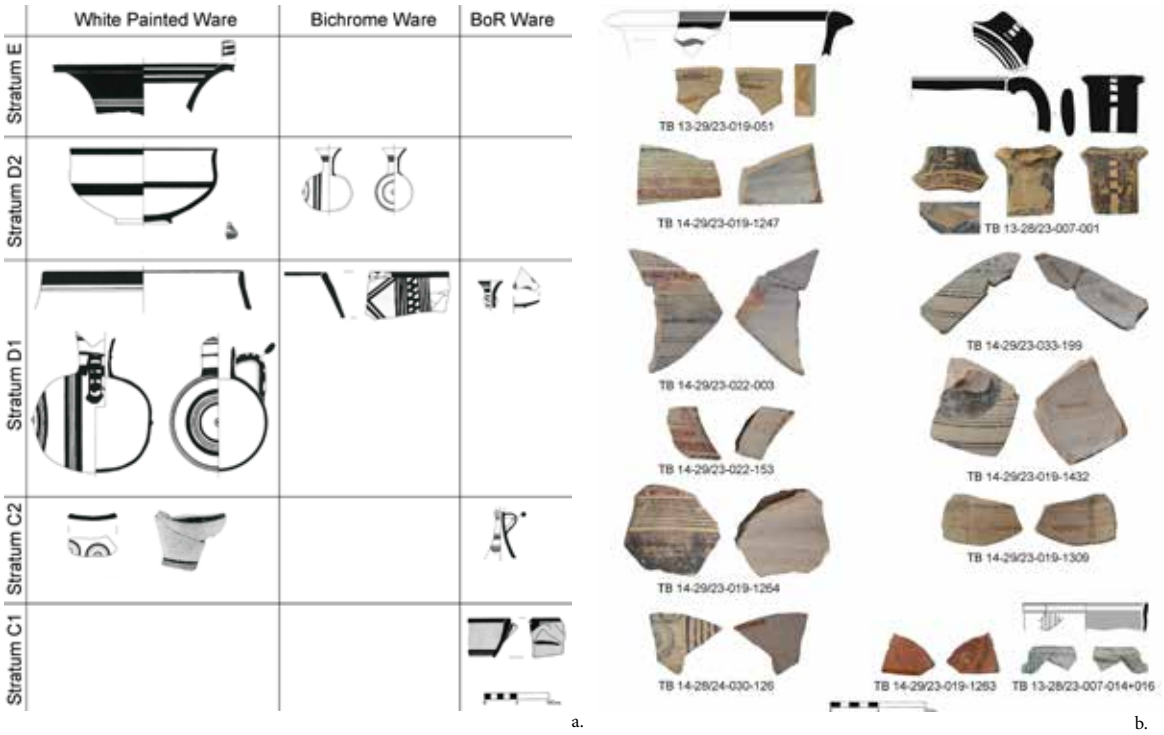

Fig. 3a. Sarepta, Area II/Y, strata E/C1: a selection of Cypriot decorated ware (adapted by A. Orsingher after Anderson 1988, pls. 32:2, 19–20; 34:6, 13–15, 17; 36:11–12; 38:11; 43A:10–11). Fig. 3b. Tell el-Burak: a selection of Cypriot decorated ware (adapted by A. Orsingher after Kamlah et al. 2016, pls. 4:7, 5; 6:1–4; courtesy of the Tell el-Burak Archaeological Project).

In the region of Sidon, particularly significant are the data from Tell el-Burak and Sarepta (Fig. 3a–b). The first one provides a reliable stratigraphic and architectonic sequence, allowing for a more refined chronological characterisation of a small group of Cypriot imports dating to between the late 8th and the mid-7th century BC,[60] while Sarepta gives –although through the low number of vessels[61] from soundings Y[62] and X[63]– a snapshot over a larger period.[64]

According to a few Assyrian inscriptions, this period corresponds to the insertion of Cyprus into the trade network of the Assyrian empire, which may explain the growing flux of goods reaching the Levant from the island and vice versa.[65] Phoenicians have usually been assumed to have played a mediating role between the

60 The ceramic inventory published so far includes rim, handle and wall fragments of nine Bichrome and WP amphoroid kraters, which currently represent the most attested Cypriot shape at this site (Kamlah et al. 2016, 87, 103, pls. 5, 6:1–2). It cannot be excluded, however, that some of these fragments originally belonged to the same vessel. Based on Georgiadou's guidelines (Georgiadou 2017, 103, figs. 2–4), a provenance from a Salaminian workshop can be suggested for a wall fragment with a black painted triangular checkerboard pattern (Kamlah et al. 2016, pl. 5:6). Additional shapes are two open vessels –a Bichrome skyphos of the so-called Al Mina Ware and the lower part of a BoR shallow bowl (Kamlah et al. 2016, pl. 6:3–4)– and a wall fragment of a WP trefoil-rim jug (Kamlah et al. 2016, pl. 4:8).

61 Herscher 1975, 92–6 figs. 26:13, 52:2, 4–5, 53:1–4; Koehl 1985, 148.

62 Anderson 1988: 274–78, 517, table 18.

63 Koehl 1985, 124–36, figs. 9–12, 21–2. However, the stratigraphic provenance of many finds is not provided, allowing only a typological examination of these ceramics. Particularly, the find-contexts are indicated, but it is very rarely possible to connect them to the Iron Age periodisation of sounding X, which, in any case, includes phases (i.e., Periods VII and VIII) spanning two or more centuries (Khalifeh 1988, 160).

64 Most recently, Georgiadou (2016, 93, 96, 98–9, figs. 2:6, 4:4, 5:1, 6:3) has suggested a provenance from Amathus for a Bichrome bowl and a WP amphora, while two Bichrome barrel jugs were considered as typical products of Salaminian workshops.

65 Cannavò 2018.

Assyrians and Cypriot polities, often recognising Tyre as having a primary position in these endeavours. The discovery of about one thousand Cypriot pottery fragments in the Iron Age layers at Sidon[66] may lead to questioning whether or not only Tyre played a major influence in the relations with the island, if this position may have changed over time and whether the Phoenician coastal centres were collaborating or competing –and if so, to what extent– in the use of the sea routes and in the marketing of goods.

The inventory of Cypriot ceramics from area Bey 003 at Beirut[67] (Fig. 4) and some published pottery examples from the urban excavations at Sidon[68] –which differ from those attested in other sites– may suggest that various coastal cities in the central Levant were independently active in the trade with the Cypriot polities. Through these harbours, Cypriot and other imports would have reached minor sites in the nearby territory.[69] Accordingly, Sidon would have been the port of entry for Cypriot ceramics found at Sarepta and Tell el-Burak, as well as in the cemetery of Qrayé,[70] located to the east of the city.

Apart from Amathus, Salamis also appears to have been highly involved in the Eastern Mediterranean trade networks during the CA I period. According to the Neutron Activation Analysis (NAA) carried out by Vacek and Mommsen,[71] skyphoi of the so-called Al Mina Ware would have been produced in this part of the island. Likewise, southeastern Cyprus, and particularly the area around Salamis, has been suggested –based on the results of petrographic and NAA analyses– as the area of provenance for the basket-handled amphorae from Tell Keisan.[72] A Cypro-Syllabic inscription to be translated as "olive oil" is painted in black on the shoulder of a basket-handled amphora from Salamis Tomb 3 (ca late 7th century BC), supporting the involvement of southeastern Cyprus in oil production.[73] These maritime transport containers, which are assumed to have contained either wine or olive oil,[74] were produced only from around the late 8th century BC and were immediately attested abroad if one considers a recent find from Megiddo.[75] However, as local production of Levantine-type amphorae is documented on the island during the LBA, one may wonder whether or not a similar phenomenon also took place during the Iron Age,[76] particularly in the period preceding the creation of the basket-handled amphorae.

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66 The study of the Cypriot assemblage from the British Museum's excavation at the College Site in Sidon was started by von Rüden, continued by Spathmann and is currently carried out by Büyükyaka. Most recently, see Spathmann 2021–2022, which I was not able to examine.

67 See above note 58.

68 Doumet-Serhal 2006, 21, 23, 25, figs. 25:14–8, 28:16–8; 35:1–7. They include BoR and WP bowls, barrel jugs and the upper part of a rim-handled amphora (Doumet-Serhal 2006, fig. 35:1) with a close parallel at Tyre al-Bass, which has been given a provenance from Amathus (Georgiadou 2016, 96, fig. 4:7). Most recently, one WP amphoroid krater and one WP spouted jug have also been published (Bordreuil and Doumet-Serhal 2013, 96–7, pl. 10:1–3).

69 In the central Levant, there is currently no evidence of Iron Age Cypriot decorated wares at inland sites. The possible mention of some sherds at Kamid el-Loz from old excavations (Heinz et al. 2004, 8) does not seem to find confirmation (Jihad al-Daire, personal communication 15/12/2020).

70 Cypriot finds from this cemetery include a BoR deep bowl (Chapman 1972, 145, fig. 31:308), two bichrome barrel-shaped closed vessels –one jug (Chapman 1972, 146 no. 310) and one juglet (Chapman 1972, 146 no. 311)– and a WP basket-handled spouted juglet (Chapman 1972, 146, fig. 31:309), which is a shape rarely attested outside Cyprus, but it can be compared with imports from the southern Levant (Gilboa 2015, 487 pl. 4.2.5:11–12, particularly an example from Azor).

71 Vacek 2020, 1176, n. 1, 1180.

72 Most recently, see Knapp and Demesticha 2017, 131, with references.

73 Knapp and Demesticha 2017, 131–32, where it is assigned to Salamis Tomb 2.

74 Knapp and Demesticha 2017, 130–31.

75 Kleiman et al. 2018, 697, where occasional and later examples from Tel Dor and Tel Kabri are also mentioned. The cargoes of some shipwrecks off the coast of Lycia and Caria support the trade of basket-handled amphorae along the Anatolian coast during the 7th century BC (Knapp and Demesticha 2017, 131).

76 Orsingher (forthcoming).

Apart from Al Mina Ware skyphoi, which are currently attested in various coastal sites in the central Levant[77] and beyond,[78] further coeval vessels possibly originating from the workshops of Salamis can be recognised. Especially noteworthy is a bichrome footed bowl with a bird motif from Qrayè.[79] It represents one of the very few Cypriot Iron Age vases of the Pictorial style so far known in the central Levant,[80] thus confirming Gilboa's observation that "floral and figurative motifs" rarely occurred on Cypriot pottery imported in the Levant. According to the study of this group by Karageorghis and des Gagniers,[81] the bowl from Qrayè can be compared with an example from Sinda,[82] suggesting its possible provenance from eastern Cyprus, and particularly from Salamis.

From the late 7th century BC, the quantity of Cypriot decorated ware in the central Levant started to decrease. This gradual process reaches its peak in the following century, when Greek vessels became the main imported pottery group.[83] The reason behind this drop in the number of Cypriot decorated wares in the Levant remains uncertain, although it has been recently explained as a possible consequence of political and economic changes, particularly due to Cyprus becoming part of the Fifth Persian satrapy.[84] However, not only did the relations between Cyprus and the mainland continue, but the Levant provides evidence of occasional Cypriot mobility,[85] locally-manufactured Cypriot-style sculptures[86] and, even, the possible involvement of Cypriots in pilgrimages and ritual activities.[87] When examining the Greek vessels later imported in the Levant,[88] one can observe that they include the same functional categories previously documented among the Cypriot decorated ceramics: handled bowls still represented the major group, while jugs/juglets were attested in lower numbers. The main difference regards the large containers, with the apparent absence of something substituting the amphoroid kraters. This variation in the pottery trends very probably depends on a large-scale phenomenon according to which Greek vessels become fashionable and were largely adopted in the entire Mediterranean, without the necessity of relating this change of habits to political events.

CONCLUSION

From a long-term perspective, the variety of ceramic shapes among Cypriot Iron Age imports, which cover a limited range of functions (e.g., bowls, jugs/juglets), seems to be in line with what has already been observed for the Cypriot ceramics imported in the Levant during the LBA.[89] The main difference entails the importation of large containers, such as painted amphoroid kraters probably used as storage vessels, and –in later times– plain ware basket-handled transport amphorae.

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77 As mentioned above, they are known from Byblos (Dunand 1954, 225 no. 8892, fig. 243; Chirpanlieva 2015, 55, 59, pl. I:1), Beirut (Badre 1997, fig. 38:1–2, 4–5), Sarepta (Herscher 1975, fig. 26:13), Khaldè (Saidah 1971, 194, 197b–c; Doumet-Serhal et al. 2008, 42, figs. 60–2) and Tell el-Burak (Kamlah et al. 2016, pl. 6:4).

78 For an inventory of this type from Levantine sites, see Lehmann 1996, 467 no. G3, which should be complemented with one fragmentary example from Ashkelon (Waldbaum 2011, 151–52 no.17).

79 Chapman 1972, 145, fig. 31:307.

80 The other one comes from Achziv (Gilboa 2015, 488, pl. 4.2.8:4). Additional examples are known from the northern Levant (e.g., Nys 2019, 398–99, fig. 13).

81 On the Cypriot bowls with bird motifs, see: Karageorghis and des Gagniers 1974, 66, 71, 272–88; 1979, 94–106, 121–24.

82 Karageorghis and des Gagniers 1979, 123–24.

83 For a similar trend in the southern Levant, see Gilboa 2015, 488–89. In the northern Levant, this decline in the quantity of Cypriot pottery seems to be attested earlier and it has been connected to the Neo-Assyrian expansion (Grave et al. 2008, 1990; Nys 2019, 401).

84 Burdajewicz 2020.

85 A few Cypriot Syllabic inscriptions dating to the 5th–4th centuries BC come from Sidon, Sarepta, Tyre and Dor, which –apart from a coin– consist of votive dedications (Egetmeyer 2010, 847–48).

86 E.g., Karageorghis 2007, 48–50, figs. 7–9, with references.

87 Sauvage 2015.

88 For a glimpse of the Greek ceramics in the Levant, see Chirpanlieva 2013.

89 E.g., Millek 2019, 190–99, with references.

Fig. 4. Beirut, Bey 003: a selection of Cypriot decorated ware from (top) the third destruction layer over the Glacis II; (centre) the level of abandonment; (bottom) storage room e (adapted by A. Orsingher after Badre 1997, figs. 35:9–14; 38–39; 46:1).

From a functional perspective, two groups can be distinguished within the Cypriot pottery attested in the central Levant. First, the types that are absent from the local ceramic repertoire, such as the handled bowls, which implies new gestures in the consumption of beverages, and the amphoroid kraters. However, while bowls were not locally adapted, amphoroid kraters were included in the Phoenician ceramic repertoire. The second group includes the vessels that can be compared to local shapes such as jugs/juglets. The import of juglets is typically connected to their content, which is usually assumed to have consisted of scented oils or perfumes. Bowls, jugs and juglets, intended as vessels for pouring and consumption of liquids, have been explained as components of the elite feasting assemblage in the northern Levant.[90]

The large distribution of amphoroid kraters raises the question of whether the demand for these containers may have depended on their original contents or on their shape, which appears to have been suitable for a variety of uses. These amphorae are generally assumed to have been intended for the storage and transport of products,[91] particularly foodstuffs.[92] In this regard, the frequent presence of ears of wheat as a motif decorating the Amathusian examples could perhaps be understood as a reference to the contents,[93] which would imply that Amathus and its territory played some role in large scale agricultural activities or in the redistribution of its resources.

As early as (at least) the 10th century BC, there is some evidence that Cypriot ceramics were locally adapted in the central Levant. At Sarepta, they have been cautiously distinguished based on their fabric (resembling local ones), poor slip and careless decoration.[94] Similar observations have been made for the finds from the territories of Tyre[95] and Sidon.[96] However, the general framework remains rather fragmented and it is not possible to determine whether the production and consumption of local adaptations followed the same patterns observed in the Amuq Valley[97] and in other areas of the northern Levant,[98] where the locally-produced Cypriot-style vessels are a minority only documented in main centres.

Overall, the Cypriot decorated wares in the central Levant can be tentatively traced back to a variety of coastal sites on the island (e.g., Palaepaphos, Kition, Amathus and Salamis).[99] However, most of the finds seem to come from Amathus and Salamis, which show the most consistent and durable trade relations with Phoenicia. Worthy of note is the apparent paucity of imports from Kition from about the early 8th century BC onwards despite the close relations between this city and the central Levant.[100] A possible explanation would be that the growing influence of Phoenician-type pottery in the ceramic repertoire of Kition would have made local vessels unfashionable for the Phoenicians living in the central Levant.

Through Amathus, Aegean drinking bowls reached the Levant, while Salamis probably provided their local adaptations (i.e., Al Mina Ware skyphoi). At the same time, the overseas distribution of barrel juglets and –on

90 Karacic and Osborne 2016.

91 Georgiadou 2019, 85.

92 Georgiadou 2016, 95.

93 E.g., Fourrier 2006, figs. 347–49.

94 In both trenches, some local adaptations of WP and BoR wares have been reportedly identified (Koehl 1985, 49–50, 132–36, nos. 234–47, figs. 12, 22; Anderson 1988, 276, 278, 417, figs. 32:19, 34:6, 38:11).

95 Aubet and Núñez 2008, 80: "This is particularly the case of U.72-1, most probably a local crater that follows clear Cypriot morphological and decorative features. This could also be the case, although less so, of U.34-1, U.55-1 or U.22-1 (VII)". For possible local adaptations of BoR ware from the cemetery of Khirbet Silm, see Chapman 1972, 140–41 nos. 157–58, fig. 29; 145 no. 163, fig. 31.

96 For possible local BoR adaptations from the cemetery of Qrayé, see Chapman 1972, 141 nos. 305–6, fig. 29. Unknown also is the provenance of Chapman 1972, 192 nos. 35.60, which is presented as "local Black-on-Red Ware", but the vessel is not illustrated.

97 Karacic and Osborne 2016.

98 D'Agata 2019, 103–4; Montesanto and Pucci 2019–2020, 108–9.

99 For similar observations, based on the corpus of Tel Dor, see Waiman-Barak et al. 2021, 255.

100 E.g., Iacovou 2014; Cannavò 2015; Fourrier 2016; Orsingher 2017; 2019a; 2019b.

a minor scale and in a later period– basket-handled amphorae would also support the role of eastern Cyprus in the production and trade of olive oil, unguents and perfumes. The high number of possible Amathusian amphoroid kraters reaching the central Levant raises the issue of what they may have originally contained. While their use for transporting foodstuffs is an appealing but unsound hypothesis, it remains more likely that these containers may have been used for the shipping of large quantities of a variety of solid products. Certainly, the connections between Amathus and the central Levant deserve more attention than they receive here.

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External contacts and a reassessment of socio-political evolution in the Kouris region during the Late Bronze Age and Early Iron Age

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ABSTRACT

The Kouris Valley where the Iron Age kingdom of Kourion developed appears to have been densely inhabited during the Middle (MBA) and Late Bronze Age (LBA), offering important information on urbanisation processes, settlement hierarchies and socio-political evolution at the regional level. This paper provides a brief reassessment and comparative analysis of selected sets of mortuary data coming from various LBA and Early Iron Age (EIA) sites. The distribution patterns of local and imported prized objects and their association with variable evidence stemming from topographic, architectural, economic and other relevant categories suggest the integration of the broader area around the flow of the river Kouris in a complex socio-political system. On current evidence, none of the excavated settlement sites can be distinguished as the indisputable centre of this system. Nevertheless, several signs of centralised politico-economic control, administrative strategies and the systematic consumption of prestige goods suggest the existence of local interdependent elite groups that co-operated with each other in order to maintain their high status and promote their common interests.

INTRODUCTION

Kourion and its hinterland (Fig. 1) have been the focus of archaeological research since the late 19th century. Early "unscientific" excavations of the colonial period[1] were followed by more systematic research, mainly by American missions, while several recent and extensive archaeological investigations have resulted in the considerable aggregation of new data,[2] altering past views on Bronze Age habitation in this area. Given the ongoing archaeological activity in this region it should be mentioned that, with the notable exception of Swiny,[3] nearly all explorations were focused almost exclusively on the Iron Age acropolis and the area around the flow of the river Kouris. The fact that the hinterland remains largely unexplored creates an enormous gap in the attempt to trace the fluctuating degree of interdependence and integration within regional networks and to reconstruct settlement patterns and socio-political evolution in the broader area.

1 E.g. Walters 1900, 57–86.

2 See for example Swiny 1981; 1986; Flourentzos 1991; 2010; Swiny et al. 2003; Bombardieri 2010; 2017; Karageorghis and Violaris 2012; Hadjisavvas 1996a; 2017.

3 Swiny 1981; also Swiny and Mavromatis 2000.

Fig. 1. Map of the Kourion area and its hinterland with some of the most important Bronze Age–Early Iron Age sites.

The roots of these complex issues and relevant discussions in Cypriot archaeology go back to the earliest work on the island. Nevertheless, it was Catling's seminal research on habitation patterns that fuelled most of the relevant debates.[4] Nowadays, almost 60 years later, we are still very far from reaching a consensus on LBA socio-political organisation in Cyprus or the different paths that social groups and elites followed to consolidate and maintain their authority. The issue of the establishment of the Iron Age Cypriot kingdoms remains equally elusive. The discovery of two late 8th century BC inscribed stelai of Sargon II at Khorsabad and Kition, along with the later prism of Esarhaddon,[5] leaves no doubt that some kind of kingship existed in Cyprus during the late Cypro-Geometric (CG) and early Cypro-Archaic (CA) periods. On the other hand, there is a clear dichotomy of views concerning the initial appearance and development of the city-kingdoms on the island.[6]

In the light of previously mentioned research advances and given the scope of the current volume, which aims at approaching the issue of connectivity, with this paper we intend to discuss some points related to LBA economic organisation and socio-political structures in the Kouris area. Given the limited space, our analysis will be based on selected sets of mortuary data, mostly focusing on the distribution patterns of local and imported prized and status-bearing objects. Various topographic, architectural, economic and other categories of evidence stemming from older and newly excavated settlements and cemeteries will be also exploited.

4 Catling 1962.

5 E.g. Iacovou 2002, 81–3; Radner 2010; Satraki 2012, 266.

6 On this long-debated subject see, for example, Rupp 1998; Iacovou 2002; 2008; Satraki 2012.

MORTUARY PRACTICES AND THEIR SOCIO-POLITICAL IMPLICATIONS

There are several almost insurmountable problems for anyone who attempts to connect mortuary ritual with socio-economic structures, especially in prehistoric Cypriot contexts. The typical Bronze Age chamber tombs of the island were normally used for successive burials, obscuring the direct association of any interment with specific tomb gifts. This problem is exacerbated by other factors, such as competitive display or the promotion of particular interests by the living that may lead to misleading assumptions concerning the social status of the deceased.[7] On the other hand, valuable rank-related connotations and chronological associations may be inferred from the morphological characteristics of the tombs and the total numbers of metal artefacts or other prestige and imported goods.[8] Differentiation in the percentages of the latter through time might echo relevant changes in social trends or hierarchies.

THE MIDDLE CYPRIOT TO LATE CYPRIOT I TRANSITION[9]

Although there are several signs of pre-Late Cypriot (LC) activity at the site of Episkopi *Phaneromeni*, the excavated part of this small settlement (ca 1–2 hectares) is firmly dated to the LC IA period.[10] Various everyday activities are implied by the distribution and morphology of permanent fixtures and movable finds. In addition, the small number of recorded metal items were produced from arsenical copper,[11] suggesting exploitation of local ores most probably coming from the southern foothills of the Troodos. Thus, the existing architectural features and portable finds at *Phaneromeni* seem to have been primarily of a domestic character and no signs of specialised production or large-scale storage are reported. Limited indications of social inequalities are also reflected in the mortuary evidence. To be more specific, only a few bronze items and a small number of imported faience beads were collected from a total of 16 tombs at Erimi, Alassa and Episkopi (Table 1). Although the sample is admittedly poor and some of the recorded tombs appear to have been partly disturbed, the general sense is that disposal of wealth in burial contexts was not the priority of local social groups.

The recent excavations at Erimi *Laonin tou Porakou*[12] provide a rather different perspective. The extended workshop complex, which is interpreted as a facility for specialised textile production,[13] along with its position, careful planning and the growing evidence of the need to control and secure this area,[14] point to a different mode and scale of production.[15] The notion of a proto-urban centre[16] seems to be exaggerated in this case, since *Laonin tou Porakou* hardly exceeds 1–2 hectares and crucially lacks any evidence of population aggregation, monumental structures, centrality and other relevant features. On the other hand, the appearance of specialised processing activities and labour control certainly points to new supra-household economic strategies and the gradual emergence of new relations of production.

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7 See, for example, Vavouranakis 2009, 51–2.

8 Keswani 2004; cf. Kiely 2010, 58.

9 I.e. ProBA 1 (ca 1700–1450 BC according to Knapp 2013, 27, table 2).

10 Carpenter 1981.

11 According to Carpenter (1981, 64) none contained tin.

12 *Laonin tou Porakou* was initially dated to the late Early Cypriot (EC)–LC I periods (e.g. Bombardieri 2010, 40). Nowadays, however, the site is considered to be of exclusively Middle Cypriot (MC) date (see Webb 2017; also Bombardieri and Muti 2018, 27).

13 Bombardieri 2017; Bombardieri and Muti 2018.

14 Bombardieri (2017, 350) and Webb (2019, 91), for example, note the addition of locking devices and also the existence of the circuit wall which enclosed the settlement.

15 See also Webb and Knapp 2021.

16 Bombardieri and Muti 2018, 27.

SITE	DATE/ CHRONOLOGY	NUMBER OF RECORDED TOMBS	POTTERY (LOCAL WARES)	BRONZE ITEMS	GYPSUM/FAIENCE/ GLASS
ERIMI *LAONIN TOU PORAKOU*	MC	11	212	3	4
ERIMI *KAFKALLA*	MC III–LC I	2	11	5	-
ALASSA *PANO MANTILARIS*	LC I	1	3	1	-
EPISKOPI *BAMBOULA*	LC I	2	8	-	1

Table 1. Local pottery, bronze and imported goods from sites dated to the MC–LC I periods (Erimi *Laonin tou Porakou* tombs: 228, 230–232, 240–241, 247–248, 328, 427–428; Erimi *Kafkalla* tombs: 1, 9; Alassa *Pano Mantilaris* tombs: 5; Episkopi *Bamboula* tombs: 9, 11A).

THE LATE CYPRIOT II (CA 1450–1200 BC) AND LATE CYPRIOT IIIA (CA 1200–1125/1100 BC) PERIODS[17]

A rather different habitation pattern emerges in the Kouris river valley from the 17th–16th centuries BC onwards. The sites of *Phaneromeni* and *Laonin tou Porakou* were abandoned and new centres such as Episkopi *Bamboula*, Alassa and Erimi *Pitharka* developed in the area.[18] The existence of three fairly large LC II–LC IIIA sites within a radius of only a few kilometres reveals the increasing population rate, site density and a tendency towards settlement nucleation.

Erimi *Pitharka* is adjacent to the large cemetery of Erimi *Kafkalla*.[19] One of the most impressive features of this site is a series of subterranean cave-like chamber complexes carved into the soft limestone rock of Areas II and IV. They were interpreted as workshop and storage installations, apparently integrated in the economic and social life of the nearby settlement. Renewed excavations have also revealed some crude earlier remains, succeeded by at least one major building, partly imitating a kind of pseudo-ashlar masonry. Based on the size, layout and prominent position of this building, the excavator discusses the possibility of an administrative function.[20]

This situation is largely reminiscent of the recently published site of Alassa.[21] The latter extends over an area of ca 7[22] to 12.5[23] hectares and consists of two different excavated localities: *Paliotaverna*, where three monumental ashlar buildings were unearthed, and the more densely inhabited site of *Pano Mantilaris* with a series of domestic quarters comprising several special installations. Although on-site evidence for metal working is

17 I.e. ProBA 2–3 (ca 1450–1125/1100 BC according to Knapp 2013, 27, table 2).

18 It should be noted, however, that traces of earlier (MC–LC I) activity are observable at all the above mentioned sites or in their immediate vicinity (e.g. Erimi *Kafkalla*, Alassa *Palialona* etc).

19 For the site of Erimi *Pitharka* see Vassiliou and Stylianou 2004; Papanikolaou 2012.

20 Papanikolaou 2012, 310–11.

21 Hadjisavvas 2017.

22 Hadjisavvas 2017, 5.

23 Knapp 1997, 54; Smith 2012, 46. On the problematic nature of site size approximations at Cypriot Bronze Age sites see Iacovou 2007.

minimal, the abundance of tin-bronze items and some other rare finds were interpreted by the excavator as manifestations of a leading role and control over the regional copper industry.[24] Nevertheless, beyond some possible signs of ceremonial activity and social gathering, Hadjisavvas has highlighted the primarily agricultural economic basis of this centre, albeit with increasing control over large quantities of staple goods. Indeed, a number of recent papers have shown convincingly that not only copper, but also olive oil might have been the focus of the LBA Cypriot elite economy,[25] and Alassa is the only site known so far in the area with significant storage facilities and administrative buildings.

The third site, Episkopi *Bamboula*,[26] was considered for many decades to be the primary centre with urban characteristics in the Kouris Valley. Nevertheless, its rather small size[27] and the discovery of Alassa in the 1980s complicated our understanding of the settlement hierarchy in the area. The excavated building complexes at *Bamboula* show evidence of various domestic activities, such as food processing, small-scale and short-term storage, cooking, weaving etc.[28] Generally speaking, no sign of large-scale storage facilities or monumental architecture that one would expect in a primary coastal centre is documented in this settlement.[29] On the other hand, some kind of labour mobilisation in the case of major constructions, such as the circuit wall and the larger houses and street planning in Area E, might imply the existence of an authority and, hence, social inequalities at least at the communal level.

The latter evidence is partly in accordance with the mortuary data, since a notable number of rather rich burials were excavated within the limits of *Bamboula* (Table 2).[30] The tomb offerings include significant amounts of imported pottery along with a large array of prestige goods. Concerning Mycenaean pottery, the various vessels seem to have been evenly distributed in most of the existing tombs and no concentration of luxury commodities with specific burials is attested. Kiely[31] has noted the higher concentration of prestige goods in LC IIC–LC IIIA contexts, in comparison with their rarity in earlier tombs of the LBA. The present analysis, however, does not support such a conclusion. For example, all the relevant categories of luxury items seem to have been deposited in abundance since at least the LC IIA period.[32] This means that this coastal centre had already developed direct or indirect contact with foreign areas, apparently by participating in long-distance exchange networks as early as the 15th century BC. Contemporary LC II burials at Alassa *Pano Mantilaris* and Erimi *Kafkalla* do not exhibit the same attitude towards wealth display and, hence, the number of grave goods is rather limited (Table 2).[33]

Mortuary evidence from the subsequent 12th century BC at Alassa and Episkopi *Bamboula* exhibits some rather interesting developments (Table 3). Tombs 1–3 at *Pano Mantilaris* yielded significant numbers of burial offerings,[34] suggesting the existence of social groups powerful enough to bury their dead within the limits of the settlement and to deposit large amounts of prestige goods. Consequently, in contrast with the previous 13th century at Alassa, substantial numbers of metal objects and exotic commodities were now consumed in burial contexts. Concerning LC IIIA Episkopi *Bamboula*, at first glance a slight reduction in the quantity of precious

24 Hadjisavvas 2017, 463.

25 E.g. Manning and Fisher 2018; Keswani 2018. See also Hadjisavvas 1996b.

26 Weinberg 1983. On the stratigraphy of the site see also Benson 1969, 1970.

27 According to Knapp (2013, 355, fig. 95) the estimated size of *Bamboula* is six hectares. It should be noted, however, that the size of a settlement is not a decisive factor in determining its characterisation as an urban centre (e.g. Fisher 2014, 183–84).

28 Weinberg 1983, 56–7.

29 See also Knapp 1997, 54; Iacovou 2007, 14.

30 See Walters 1900, 79–81; Benson 1972.

31 Kiely 2010, 55.

32 See, for example, Tombs 12, 13, 18A, 19, 22 and 33A.

33 For example, only two imported Mycenaean stirrup jars were recorded at Alassa *Pano Mantilaris* (see Hadjisavvas 2017, fig. 3.42, T6–3 and T6–4). It should be noted, however, that the sample from tombs other than at the site of *Bamboula* is poor.

34 Hadjisavvas 2017, 71–107.

SITE	NUMBER OF RECORDED TOMBS	WPWM III POTTERY	IMPORTED MYCENAEAN POTTERY	BRONZE	GOLD	SILVER	IVORY	GYPSUM/ FAIENCE/ GLASS	ALABASTER	OSTRICH EGG	CARNELIAN	SEALS
ERIMI *KAFKALLA*	3	-	1	3	1	1	-	2	-	-	-	-
ALASSA *PANO MANTILARIS*	4	2	2	3	-	-	-	-	-	-	-	-
EPISKOPI *BAMBOULA*	22	2	72*	27	17	3	21	40	2	1	1	3

Table 2. Imported Mycenaean and local White Painted Wheelmade III (WPWM III) pottery, metal and other status-bearing objects from LC I–LC II contexts (Erimi *Kafkalla* tombs: 2, 4–5; Alassa *Pano Mantilaris* tombs: 4, 6–8; Episkopi *Bamboula* tombs: 2A, 5A–B, 6–7, 12–13, 15, 18A, 19–22, 24, 26, 28, 33A, 34, 36–40A–B).

* The assemblage includes 19 vessels coming from the online catalogue of the British Museum (British Museum excavations). The vessels are not mentioned in Benson's publication (1972).

SITE	NUMBER OF RECORDED TOMBS	WPWM III POTTERY	IMPORTED MYCENAEAN POTTERY	STONE VESSELS	BRONZE	GOLD	SILVER	IRON	IVORY	GYPSUM/ FAIENCE/ GLASS	CHLORITE	HAEMATITE	BLUE PASTE SCARABS	SEALS
ALASSA *PANO MANTILARIS*	3	56	1	10	18	8	-	-	2	1	7	-	-	1
EPISKOPI *BAMBOULA*	15	106	-*	5	15	12	3	3	17	11	-	1	2	6

Table 3. Imported Mycenaean and local WPWM III pottery, metal and other status-bearing objects from LC IIIA contexts (Alassa *Pano Mantilaris* tombs: 1–3; Episkopi *Bamboula* tombs: 2B, 3, 5C, 14, 16–17, 17A, 18B, 19, 23, 27, 32, 33B, 35, 40C–D).

SITE	DATE	NUMBER OF RECORDED TOMBS	STONE VESSELS	BRONZE	GOLD	SILVER	IRON	IVORY	FAIENCE/ GLASS	CARNELIAN	SEALS
KOURION *KALORIZIKI*	LC IIIB-CG I	10	1	48	3		7	3	1	-	1
KOURION *KALORIZIKI*	CG II-III	11	-	32	2	1	3	2	1	1	1

Table 4. Imported and metal burial goods from Kourion *Kaloriziki* (CG I tombs: 19, 22, 25–26, 36 East and West chamber, 39–41A, 42; CG II–III tombs: 20–21, 23–24, 27–28, 33–35, 37, 41B–C).

* All the imported Mycenaean vessels were dated to the LC II period according to Benson's chronology.

and imported burial offerings is observable. However, no significant change in the number of goods deposited can be argued since the total number of relevant tombs also decreased.[35] Equally, the number of different categories represented remains the same.[36] Thus, it seems that *Bamboula* retained its high status and wealth during the 12th century BC.

Overall, specialised production in various installations and "industrial" areas, large-scale storage of staple goods, the influx of significant quantities of Mycenaean pottery and various prestige goods imply remarkable economic development from the LC IIA period onwards. This seemingly stimulated further production intensification during the LC IIC–LC IIIA periods and full integration of the Kouris area in international exchange networks. The emphatic display of wealth in mortuary contexts, the reorganisation of built space through new and carefully planned architectural blocks, the appearance of administrative buildings and the existence of a sophisticated system of sealing and perhaps script use[37] point to a phase of intensified economic and political control, presumably imposed by powerful local elites. Ultimately, all the above, along with signs of emerging inequalities, seem to reflect a hierarchically divided society.

THE TRANSITION TO THE IRON AGE

If we turn now to the onset of the EIA, there seems to be an occupational gap somewhere at the end of the 12th and beginning of the 11th century BC. Steel's reassessment of the available material from the *Bamboula* and *Kaloriziki* cemeteries suggested that the LC IIIB period is almost absent in the area.[38] On the other hand, continuity and sporadic activity are indicated by the existence of some tombs with LC IIIB material at *Bamboula*, including characteristic Proto White Painted (PWP) vessels.[39] Alassa was also abandoned by the mid- to late 12th century BC[40] and only a few unstratified PWP sherds were located at Erimi *Pitharka*.[41] Thus, concerning habitation patterns, there was an apparent dislocation including a general socio-economic realignment. This is of course an island-wide phenomenon, but, in any case, the reappearance of a few CG tombs at *Bamboula*[42] and especially the rich burials at *Kaloriziki* reflect the rise of extremely affluent groups in the area already by the mid-11th century BC (Table 4). Although this extraordinary wealth should probably be connected with the revival of external contacts and trade networks in the Eastern Mediterranean, the complete absence of settlement data makes any attempt to approach the new situation speculative.

DISCUSSION AND CONCLUSIONS

Based on the above evidence, is it possible to support a hierarchical settlement organisation in the Kouris Valley during the LBA? And if yes, where were the leading elites residing? The highly monumental administrative complex at Alassa *Paliotaverna* and the available mortuary data certainly suggest the existence of institutionalised

35 There are about 15 LC IIIA tombs as opposed to 22 LC II tombs. Tombs that were in use during both periods are excluded from this discussion.

36 The recorded data include in both cases about ten different categories of prestige and imported goods (see Tables 2 and 3).

37 See, for example, Smith 2012.

38 Steel 1996; also Mountjoy 2018, 788.

39 See for example Christou (1994, 178–80) who suggests that most of the population might have moved to a new location.

40 Hadjisavvas 2017, 474; Manning 2017. But see Mountjoy (2018, 774) who dates the latest Aegean-style pottery at the site to the early 12th century BC (i.e. CypIIIC Early 1 or early CypIIIC Early 2, according to Mountjoy 2018, 28, table 4). For a more general discussion, see Iacovou 2013, 591–92.

41 Vassiliou and Stylianou 2004, 187–88.

42 Christou (1994, 178) refers to six CG I tombs. Also Steel 1996, 291–92, 299 and table 2. Mountjoy (2018, 782–88) also mentions several PWP-CG I sherds coming from settlement contexts.

power groups who maintained their status, perhaps based on a tributary system. This view, also corroborated by signs of centralised politico-economic control, is suggested by the enormous storage capacity of the buildings at *Paliotaverna*, the existence of sealing practices, along with iconographic representations bearing strong symbolic connotations,[43] and traces of specialised production. Moreover, Alassa and *Bamboula* employed the same administrative tool, namely wooden rollers, and there is ample evidence that they had a very similar bureaucratic system.[44] Based on this observation, Smith proposed that the occupants of Alassa *Pano Mantilaris* might have cooperated during the LC IIC period with those from *Bamboula*, in order to create an administrative complex at *Paliotaverna* to "safeguard the food resources for the larger region".[45]

The possibility of cooperation is also suggested by the fact that Alassa's elites could not have maintained their political and economic authority without controlling both the flow of goods in the Kouris Valley and at least one coastal centre which served as a gateway for foreign trade and imported goods. Equally, *Bamboula*, the prosperity of which is already observable in the LC IIA period,[46] must have been dependent on other sites in Kourion's hinterland in order to acquire staple goods and copper. *Bamboula*, of course, lacks the impressive ashlar masonry, large-scale storage facilities and relevant evidence for feasting and ceremonial consumption of food and drink that are normally connected with elite administration and display. Nevertheless, the available domestic and mortuary data do not show any sign of decline in this settlement until the mid- to late 12th century BC. Ultimately, Alassa and *Bamboula*, two important centres with urban characteristics, along with the supplementary site of Erimi *Pitharka*, seem to have been different links in the same complex socio-economic chain of sites which existed in the Kouris Valley.

On current evidence, then, it is difficult to prove the existence of a dominant centre whose prominence underpins the regional settlement hierarchy, with the possible exception of a short phase between the LC IIC and early LC IIIA periods when Alassa apparently gained in significance. Although it still lacks crucial determinants, such as large-scale metallurgical production or impressive numbers of prestige goods in mortuary contexts, Alassa is the only excavated site so far with massive facilities for the storage of olive oil and other staple goods, impressive administrative buildings and perhaps the performance of ceremonial activities. Apart from this episode of production intensification and strict socio-economic control, however, we are inclined to believe that a kind of heterarchical system was operating in the Kouris Valley, comprising multiple local power centres and co-operating groups of elites. The evidence, therefore, reflects fluctuating inter-site alliances, aimed at promoting common economic interests and the maintenance of elite status. From this point of view, the destruction of the *Paliotaverna* buildings could have been connected with internal competition and conflict between various social groups attempting to control the production and circulation of crucial raw materials and goods.

In any case, our analysis does not support the view of a sudden boost in imported goods and, hence, development of foreign contacts only in the LC IIC period as was previously suggested.[47] On the contrary, the roots of these socio-economic developments that peaked before the end of the 13th century BC should be sought in the beginning of the LC period if not earlier. Lastly, the catastrophic effects of the so-called "crisis years" are not directly observable in the Kouris Valley,[48] since social groups in this area were still depositing large quantities of imported and exotic goods in burial contexts of the 12th century BC. A real break seems to occur somewhere after the mid-12th century BC, since there is only sporadic evidence of LC IIIB and early CG material in the broader area. Although there is a huge gap in our knowledge concerning habitation patterns of the 11th and 10th centuries BC, the enormous wealth that accumulated in the *Kaloriziki* cemetery reflects the gradual consolidation of a new socio-political and economic reality, along with the rise of novel powerful groups in this region, perhaps the forerunners of the Iron Age Kourion kingdom.

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43 See, for example, Hadjisavvas 2017, 279–321.

44 Smith 2012, 40, 77.

45 Smith 2012, 78.

46 I.e. nearly two centuries before the erection of Building II at Alassa.

47 See for example Kiely 2010, 55.

48 Iacovou 2013.

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The Iron Age pictorial pottery of Salamis within and beyond

An overview of ceramic styles, wares and fabrics

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ABSTRACT

This paper provides a preliminary presentation of the stylistic, typological and fabric characteristics of the pictorial pottery that was produced by the polity of Salamis during the late Cypro-Geometric (CG) and Cypro-Archaic (CA) period. This pottery was decorated in various styles, such as the so-called "floral style", the "free field" and the "panelled" style, and exclusively produced in Bichrome Ware. The dominant association of these pictorial ceramic styles with Salamis is suggestive of the leading role of this potting region in their production and distribution within and outside the island. Iron Age pottery from tombs at the centre of Salamis and tomb groups across the broader region were compared with vessels bearing figurative representations from private and museum collections (which comprise by far the larger corpus), for a more comprehensive investigation of the full spectrum of known vessels in these pictorial styles. It is argued that such vessels were produced primarily for local consumption within the polity of Salamis, with only a limited number distributed to other regions of the island or overseas. This observation is in sharp contrast to the wider circulation of Salaminian pottery in abstract geometric style, and suggests differing modes of pottery production and distribution within the Cypriot polities, as well as the manifold purposes that were served by pottery styles.

INTRODUCTION

This study is set within the context of Iron Age Cyprus (11th–4th centuries BC), when the island was divided into a number of distinct politico-economic entities; these polities, known as city-kingdoms, were defined by a capital centre that controlled a broader region.[1] This paper presents the first results of an interdisciplinary study of pottery from the Iron Age polity of Salamis and its environs. It forms part of a broader research project entitled "Bringing Life to Old Museum Collections: The Interdisciplinary Study of Pottery from the Cypriot Iron Age polities of Salamis, Soloi, Lapithos and Chytroi" (*MuseCo*).[2] *MuseCo's* research focus is on unpublished pottery assemblages from funerary contexts discovered by the Department of Antiquities before 1974 in the occupied

1 Iacovou 2013; 2018. The segmented political geography of the island had been an enduring feature since the Late Bronze Age.

2 *MuseCo* is co-funded by the European Regional Development Fund and the Republic of Cyprus through the Research and Innovation Foundation (EXCELLENCE/1216/0093). The project is hosted at the Archaeological Research Unit of the University of Cyprus and coordinated by Associate Professor George Papasavvas, with Dr Anna Georgiadou as the principal researcher and Dr Maria Dikomitou-Eliadou as the project's research collaborator.

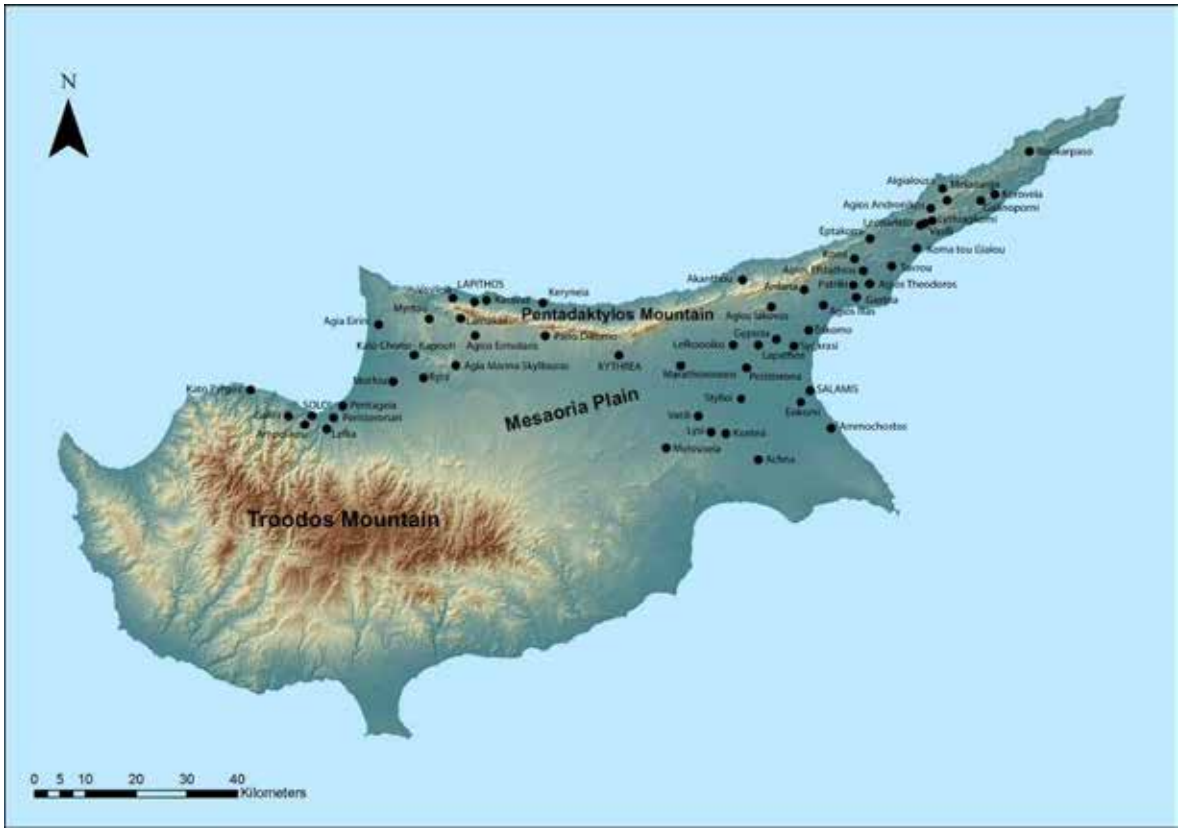

Fig. 1. Map of Cyprus with the archaeological sites under study in the occupied areas of the island (digital geological data courtesy of the Geological Survey Department, Republic of Cyprus).

area of Cyprus, kept in the Cyprus Museum in Nicosia (Fig. 1). Using a comprehensive, interdisciplinary study, this ongoing project aims at defining regional pottery production and the scale of pottery distribution during the Cypro-Geometric (CG), Cypro-Archaic (CA) and Cypro-Classical (CC) periods. *MuseCo's* overall objective is to define the cultural spheres of influence of the territorial polities in the eastern and northern parts of the island, as well as patterns of interaction at intra- and inter-regional levels within Cyprus and outside the island.

In the aftermath of the Turkish military invasion, and during the continuous illegal occupation of the northern part of Cyprus, fieldwork at Salamis has been discontinued. Our knowledge regarding the centre of Salamis and the polity's territory derives from excavations conducted prior to 1974 by the Department of Antiquities and the French mission.[3] The coastal settlement of Salamis, founded in the 11th century BC, was continuously occupied during the Iron Age. At the polity's centre, excavations have revealed a rampart, at least two sanctuaries and extensive burial grounds (the royal necropolis and the cemeteries of *Cellarka* and *Koufomeron*).[4] These represent part of the polity's monumental albeit still puzzling (because of the interruption of investigations) urban topography.[5] Outside the polity's capital, numerous extra-urban sanctuaries in both nearby and distant localities have been allocated by recent scholarship to the city-kingdom of Salamis. If this was indeed the case, then the periphery of Salamis encompassed most of the Mesaoria plain and the Karpas peninsula, forming, at least during the CA period, one of the largest polities in the eastern part of the island.[6]

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[3] For example, Karageorghis 1999; Yon 2014.

[4] Karageorghis 1967; 1970; 1973; 1978.

[5] Fourrier 2018.

[6] Fourrier 2007, 23–37, 114; Ulbrich 2008, 417–51, Satraki 2012, 239–58; Papantoniou and Satraki 2019.

Research undertaken in the archives of the Cyprus Museum has revealed a plethora of burial sites previously unknown to scholarship (Fig. 1). It should be noted that the limited visibility of settlement sites, as opposed to cemetery and sanctuary contexts, is a feature inherent to Cypriot Iron Age archaeology. All these burial sites were explored between 1934 and 1974 by the Department of Antiquities and the Cyprus Survey branch. If we focus on eastern Cyprus, the corpus of published material from these sites is very limited,[7] with most of the material being amassed, unprocessed, in the Cyprus Museum storerooms. Interestingly, several sites, such as Enkomi, Patriki, Lefkoniko and Achna, are known, in addition to burial grounds, as the locations of extra-urban sanctuaries.[8] Overall, these burial sites have yielded large assemblages of Iron Age pottery (11th to 4th centuries BC) and offer an excellent opportunity to investigate and define the regional identity of the pottery production of Salamis in morphological, stylistic, technological and compositional terms.

DEFINING SALAMINIAN POTTERY PRODUCTION

MuseCo's ongoing research on the identification, classification and complete documentation of the ceramic material under study has relied on earlier work which established criteria for distinguishing regional pottery production in Early Iron Age (EIA) Cyprus.[9] This large corpus of CG, CA and CC pottery amounts to approximately 1100 vessels, and comes from tombs at the centre of Salamis, as well as from sites along Famagusta bay, in the Mesaoria plain and on the Karpas peninsula. As presented in more detail below, this pottery is characterised by stylistic uniformity, suggesting the production and distribution of a homogeneous assemblage across this vast area. This corpus is currently being studied in order to establish a detailed typological and stylistic seriation of Salaminian pottery and compared with other regional ceramic repertoires. The study is complemented by compositional and technological analyses.

This project has also benefited from methodologically comparable studies on Cypriot Iron Age material found outside Cyprus, at sites such as Tel Dor.[10] The typological and stylistic study of the Cypriot material at Dor was complemented by a mineralogical examination. This combined methodology suggested that the majority of pottery at the site originated from the production centre of Salamis, while the remaining material derived from Kition, Amathus and Paphos.[11] The stylistic study of published CG and early CA pottery from other Levantine sites indicated that the same Cypriot production centres were exporting pottery to various Levantine areas, and that they were simultaneously involved in multiple maritime exchange networks.[12] Overall, it can be argued that regional products prevalent within Cyprus and characterised by wide distribution were also being exported overseas.

For this investigation into the regional identity of Salaminian pottery production, a large number of samples (170) were selected, following a rigorous sampling strategy that included the centre of Salamis and sites across its coastal zone, in the Mesaoria plain and the Karpas. It was ensured that all selected samples morphologically and stylistically belong to Salamis' regional production. They will be submitted to a series of technological, compositional and microstructural analyses, including ceramic petrography, wavelength dispersive X-ray Fluorescence Spectrometry, handheld energy dispersive X-ray Fluorescence Spectroscopy and Scanning Electron

7 For example, the necropolis of Stylloi: Gjerstad et al. 1935, 142–80; and the two built tombs respectively at Patriki and Trachonas: Christou 1996, 119–38 with references.

8 Cf. Fourrier 2007, 27–33 with references.

9 Georgiadou 2014 and 2017 on Salaminian Cypro-Geometric pottery production.

10 Waiman-Barak et al. 2021.

11 See also Georgiadou 2018, 63–4.

12 Georgiadou 2016. Georgiadou takes the opportunity to express her gratitude to the excavators of Tel Dor, Megiddo, Ras al-Bassit and Misis, Ayelet Gilboa, Israel Finkelstein, Frank Braemer and Anna-Lucia D'Agata respectively, for entrusting to her the study of Cypriot Iron Age pottery from their excavations.

Microscopy. These analytical methods will be used for the compositional (mineralogical and elemental) characterisation of the samples, their classification into fabric groups and the accumulation of technological information regarding raw material selection, their processing and firing and the application of slips and paints. Ultimately, it is anticipated that the new analytical data will shed light on the organisation of pottery production and distribution within and outside the potting region of Salamis. The analytical datasets will be compared with the results of earlier studies, such as those from the Tel Dor project, which included Salaminian pottery from Tel Dor and Salamis itself,[13] and the analytical study of Iron Age and Hellenistic pottery from the necropolis of Salamis conducted by Gautier in the 1970s.[14] It is also worth highlighting the importance for this study of the re-examination of the geomorphological profile of the area of Salamis by Constantinou in the recent publication of the sanctuary of Salamis *Toumba*.[15]

ASPECTS OF THE SALAMINIAN POTTERY STYLE

What follows is an overview of the typological, stylistic and technological characteristics of the predominant pottery from Salamis, focusing on a very specific category of painted tableware dated to the CA period – pottery bearing pictorial decoration. This type of pottery is among the most stylistically expressive of the period, and represents a distinctive category of regional pottery production typical of Salaminian craftmanship.

Bichrome Ware

Already from the very beginning of the EIA (11th century BC), the Salaminian workshops can be distinguished for their production of Bichrome Ware pottery.[16] Among the range of pottery wares produced during the Cypriot Iron Age,[17] Salamis shows a clear regional preference for this ware, which was produced in a specific repertoire of shapes and followed specific decorative styles (Figs. 2–4). This is best understood in comparison with contemporary regional workshops; for instance, the Paphian workshops produced barely any Bichrome Ware, but were strongly associated with an increased production of Black-on-Red (BoR) pottery that followed its own their specific parameters.[18]

At Salamis, the first peak in the production of Bichrome Ware is to be placed in the CG III period (ca 9th century BC). The use of this technique reached another peak in the course of the CA period, during the 7th and 6th centuries BC, with the so-called "floral style", typical of both Salaminian pottery and coroplastic art (see below).[19] The use of two different pigments in black and red creates a contrasting colour effect against the light-coloured ceramic surface. Most importantly, the red paint is not supplementary to the black paint, with a limited presence on the vessel surface in the form of horizontal bands as it is elsewhere on the island.[20] On Salaminian pottery, red paint is not only used as a fill colour for various geometric ornaments and figurative representations, but also for outlining them. As discussed below, during the late CG and the CA periods (9th to 6th centuries BC), Bichrome Ware, being at the very core of Salaminian production, was the characteristic technique used for the manufacture of pottery in both pictorial and abstract geometric styles.

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13 Waiman-Barak et al. 2021, 9–10.

14 Gautier 1977, and her mineralogical study on a sample of 158 sherds, dating to the CA, CC and early Hellenistic periods, from the necropolis of Salamis. These results are also discussed in Jones 1986, 329–30, 343.

15 Constantinou 2019.

16 Georgiadou 2017, 106.

17 Gjerstad 1948, 48–91.

18 Georgiadou 2014, 373–74, 381–84.

19 Yon 2005.

20 See, for example, Karageorghis and Raptou 2014, pl. VI, 20, 41.

The macroscopic study of ceramic fabrics

Within the framework of *MuseCo*, the macroscopic study of all the available ceramic material is used as the baseline for the subsequent mineralogical characterisation of the ceramic samples using ceramic petrography, so that macroscopic observations can be linked to microscopic data, and particularly mineralogical observations. Information on ceramic fabric texture, hardness, colour, voids and inclusions (size, shape, colour and sorting), as well as on the presence or absence of a core in cross-section, was documented in detail. All data were archived in a database designed especially for the purposes of this project.

Given the particularity of Bichrome pottery within the Salamis region, a significant percentage of the material selected for scientific analyses belongs to this ware (41%, 70 of 170 samples). Within this ware group, it was possible to sample a few vessels with a pictorial design (five samples, 7%). Bichrome Ware may be divided into two broad macroscopic fabric categories, one coarser than the other. The coarser fabric is mainly associated with large vessels (for example the CA amphora in Fig. 2a), and the finer fabric with small and medium-size vessels, including open (Fig. 2c and e) and closed shapes. In terms of colour, both fabrics exhibited the same hue, a red-yellow 7.5YR (with variations in chroma between 7.5YR 6/4 and 7.5YR 7/4).[21] The firing conditions of these vessels seem to have been consistent in terms of temperature and atmosphere, an argument that is supported by the consistency observed in the recorded fabric colours. A light-coloured core is also observed in cross-section (Fig. 2d), while in some cases there is no core at all. The presence of organics is attested by the presence of voids across the cross-sections, some of which are elongated in shape. Voids constitute up to 5% of each section's surface[22] and the orientation of the elongated voids is almost parallel to the vessel's walls. Some of these voids in large closed vessels were initially air bubbles in the clay that resulted in surface bloating.

Both coarse and fine fabric variants range from semi-hard to hard; the softer can be scratched with a fingernail (Mohs 2 or 2.5).[23] The texture of these fabrics varies from fine –for the finer version– to medium/irregular –for the coarser version– and the feel varies respectively from smooth to rough. The inclusions in the finer version are sparse, smaller than 0.25 mm in size, and primarily white in colour, while some black or greyish inclusions are also visible, following a moderate sorting with only very few reaching the maximum diameter of 0.25 mm (Fig. 2c, e).

In the coarser version, the inclusions are larger and more frequent. They are moderately sorted, and they reach up to 10% of the section's surface, with their size reaching 0.25 mm, exhibiting some bimodal size distribution. Most of the inclusions are white or greyish white in colour, while there are also some brownish red and black inclusions (Fig. 2a–b). Most of the white and greyish white inclusions both in the finer and coarser versions are rounded. Only a minimum number show some sort of angularity. From this first macroscopic examination quartz grains have been identified. It is assumed that a kind of sand, rich in quartz, was used in the production of the coarser version of Bichrome Ware at Salamis. Fabric similarities were recorded among these Bichrome Ware samples and White Painted (WP) ware.[24]

The surface of these vessels is characterised by a light-coloured wash or slip, often similar to the ceramic body, which varies from rough to smooth. In the coarser version, the black paint varies from black to brownish, while the red paint appears in darker or lighter colourations, such as purple, light red-brown or pinkish. In the case of the finer version, the vessel surface is very often covered by a relatively thick slip that ranges from whitish to yellowish in colour (Fig. 2b, d, e), and is well smoothed or burnished, creating a contrasting colour effect with

21 Colour readings were documented using a Munsell RM200 portable handheld digital colour matching Capsure instrument that is owned by STARC, The Cyprus Institute.

22 For visual charts and reference comparanda, see Orton et al. 2003, 132–51, 231–42.

23 Orton et al. 2003, 138.

24 See also Waiman-Barak et al. 2021, 9, who argue in their study of Salaminian pottery that the same fabrics were used for the production of different wares, including WP, Bichrome and BoR, as attested through petrography.

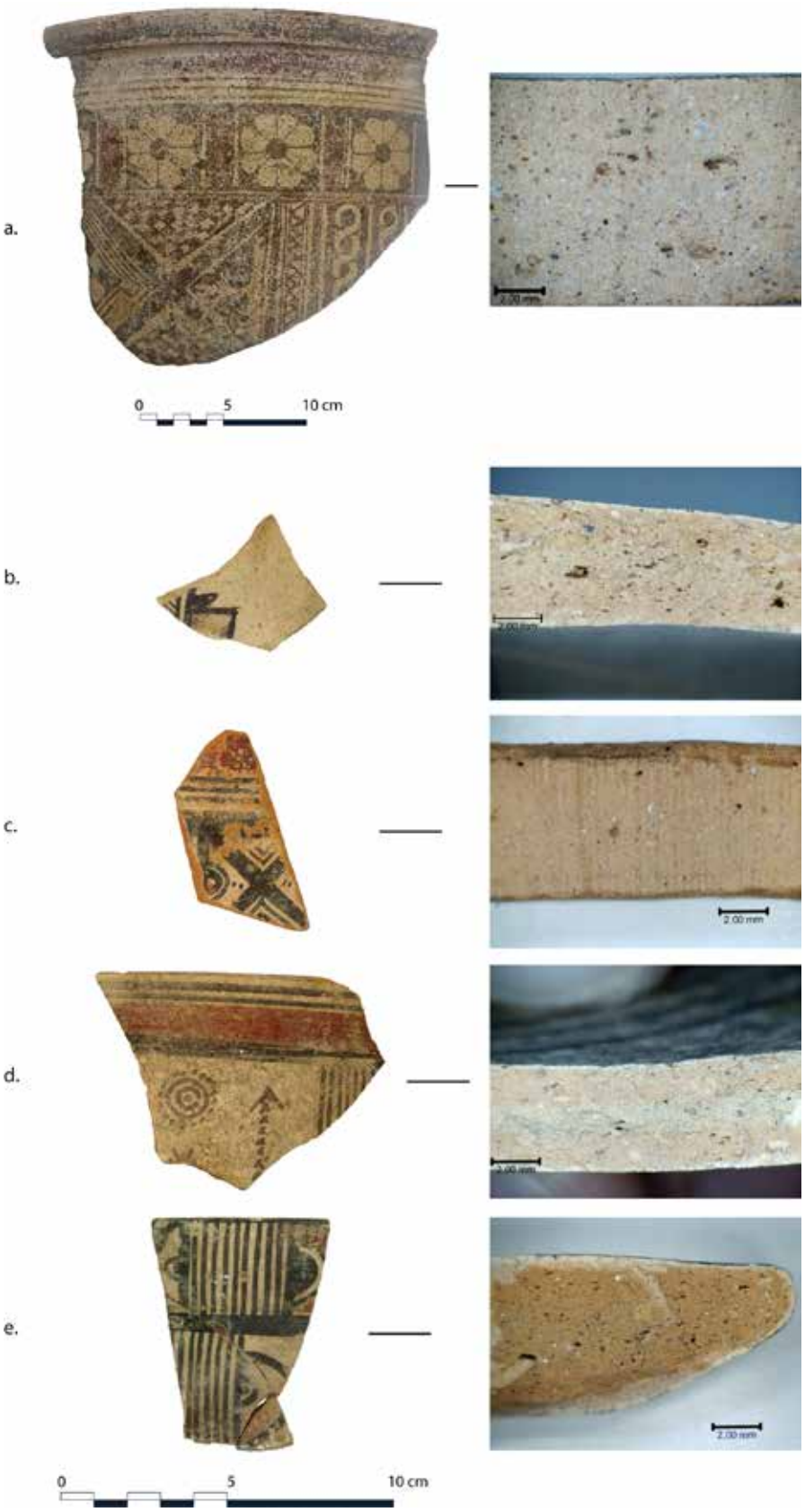

Fig. 2. Examples of Salaminian Bichrome Ware fabrics. a. Neck fragment of a Bichrome IV amphora in "floral style", from Ayios Georgios Spatharikou; b. Body fragment of a Bichrome IV jug in "free field style", from Salamis Tomb 1; c. body fragment of a small closed vessel in Bichrome IV Ware, from Salamis Tomb 1; d. Rim fragment of a footed deep bowl in Bichrome IV Ware, from Salamis Tomb 1; e. Rim fragment of a footed deep bowl in Bichrome IV Ware, from Galinoporni (photos by the authors).

the reddish ceramic body. The black paint can appear greyish and the red paint either dark red or pinkish. The latter is often applied in a rather thick layer.

Decorative styles: pictorial and abstract

In the 1960s, Gjerstad suggested the presence of two distinct stylistic zones on the island that appeared in late CG and thrived during the CA period. In his view, a geometric pottery style based on the motif of concentric circles prevailed in the western part of the island, while a pictorial style with "… lotus buds, flowers, rosettes, sacred tree, birds, quadrupeds and human figures …" characterised pottery produced in the eastern part of Cyprus.[25]

Today we are in a position to argue that the pictorial style, involving a wide variety of iconographic themes, was conceived and developed in the workshops of Salamis and prevailed in the eastern part of the island during the CA period. Amathus is the only other contemporary production centre where a pictorial style developed. The distinctive pictorial style of the Amathusian workshops also followed specific rules, regarding pottery wares, shapes, figurative motifs and imagery.[26] The establishment of a pictorial tradition in the CA period, as demonstrated by these two regional styles, is in sharp contrast to the modest occurrence of pictorial motifs in the CG period. Such motifs are scarcely attested in specific CG regional workshops; they seem to be broadly dispersed on the island, without representing an established tradition in pottery production.[27]

It is only in the Salaminian workshops, however, that the same pictorial style is encountered on vessels and medium- and large-sized terracotta statues during the CA period. This strengthens the argument that the development of this regional style is characteristic of Salaminian production and allows further arguments regarding the interaction and collaboration of different craftspeople, with potters, painters and coroplasts possibly operating within the same workshops,[28] and certainly within the polity of Salamis. It is anticipated that future analytical studies, conducted on both ceramic vessels and terracotta statues, will shed more light on the relationship between these crafts.

This shared decorative style between the ceramic and coroplastic arts follows the so-called "floral style" and was exclusively realised in Bichrome Ware (e.g. Figs. 2a and 3). It includes lotus flowers, rosettes and guilloche motifs (tresses), which are frequently combined with scenes depicting humans, animal or mythical creatures, such as sphinxes, lions, winged creatures, etc., indisputably of Near Eastern origin.[29] Within the corpus of painted Salaminian terracotta statues, "floral style" decoration is systematically applied on the corselets or the cuirasses of male statues,[30] and it has been suggested that it imitates textiles.[31]

Turning to the pottery repertoire, a typical series in Salaminian "floral style" are the belly-handled amphorae, which are characterised by a particular morphology, as illustrated for instance by a Bichrome IV amphora from Peristerona, in the Famagusta district (Fig. 3).[32] Of particularly large dimensions (90 cm in height), this amphora has a large neck that widens upwards and is topped by an everted horizontal rim; the horizontal handles are placed high on the shoulder zone of its large ovoid body.[33] As a rule, the decoration appears on the neck and in the shoulder zone, emphasising the amphora's size and structure. Typical features of this decorative

25 Gjerstad 1960, 105.

26 On the so-called "Amathus style": see Fourrier 2008 with previous references.

27 See, for example, the catalogue of Iacovou 1988; also Iacovou 2006.

28 Yon 2005, 46–7; Karageorghis and Kiely 2019, 123.

29 Yon 2005, 44–6.

30 Karageorghis and Kiely 2019, 116–18; see, for example, cuirasses from Salamis *Toumba* on pls. 15–16, 41–42, 53, which are similar to examples from Kazaphani *Mines*, pls 60–61.

31 Yon 2005, 43–4.

32 Amphora T.1/1. 1953/XII-29/1. This specimen is exhibited in the Cyprus Museum.

33 Cf. Karageorghis 1970, pl. CCLVI,13, Tomb 105.

Fig. 3. Salaminian Bichrome IV belly-handled amphora in "floral style", from Peristerona (© Department of Antiquities, Cyprus).

style are depictions of lotus flowers that vary in size and form, which are more or less elaborately designed and stylised and combined with recurrent zones of rosettes and guilloches, very densely arranged on the vessel surface. The "floral style" is also found on jugs (trefoil-mouthed jugs and large barrel-jugs), as well as on open vessels; footed deep bowls are a particularly common shape in this style.[34]

The same iconographic themes (human figures, animals, etc.), which are often integrated within a dense "floral" decoration as described above, are also attested in the so-called "free field" and "panelled" styles. These conventional terms describe the mode of arrangement of a pictorial scene; in the "free field style" the scene occupies the entire vessel surface, while in the "panelled style" figurative motifs are organised in horizontal zones or panels.[35] Both decorative modes appear exclusively in Bichrome Ware and are components of the Salaminian pictorial style, which was remarkably popular and became a trademark of Salamis' regional production during the CA period. The earliest occurrence of this pictorial style, which is documented in "panelled" syntax, can be dated to the CG III period (ca 9th century BC). The "free field style" appeared at the beginning of the CA period (ca 8th century BC) and the "floral style" during the 7th and 6th centuries BC. All these decorative modes overlap in the CA period.

The "free field style" appears to have been more common than the "panelled style". A wide range of iconographic themes were inspired by fauna (e.g., birds, bulls, goats, fish), mythology (e.g. sphinx, lions, centaurs)

34 Such as the examples in "floral style": Karageorghis and Kiely 2019, pl. 69 amphora and barrel-jug; Karageorghis 1967, pl. CIX, 11, Tomb 2, footed deep bowl.

35 Gjerstad 1948, 55, 64–5.

Fig. 4. Salaminian Bichrome IV trefoil-mouthed jug in "free field style", from Gypsou (photo by A. Georgiadou).

and everyday life (e.g., warriors, horsemen, hunting scenes, female figures dancing, holding or smelling a lotus flower).[36] A particularly popular iconographic subject is the "waterbirds", which are very common both in the "free field" and the "panelled" styles. They are depicted in an abstract geometric and stylised mode and in a variety of scenes, alone or in pairs, with lotus flowers, with a branch or catching a fish, etc.[37] The birds' anatomical details (the body, legs, neck, head and beak) and their wings are rendered in different combinations of silhouette technique and outline with linear and curvilinear fillings, as well as painted areas in black and red (Fig. 4).[38]

Pictorial scenes were employed on an even wider repertoire of shapes, including different types of amphorae (belly-handled, vertical-handled), jars, jugs (trefoil-mouthed, barrel-jugs) and footed deep bowls. A typical morphological variant of the trefoil-mouthed jug is, for example, a very common shape in "free field style". As illustrated by a jug from Gypsou (Fig. 4),[39] this variant is between 20 and 30 cm in height and characterised by an elongated ovoid or piriform body, a short neck and a large, pinched mouth. The figurative representation always occupies the front of the vessel, opposite the vertical handle; and the mouth is always decorated with eye motifs, arranged on each side of the pinched opening, with added eyebrows, as on the Gypsou jug, emphasising the anthropomorphic character of the vessel.

Although Salaminian pictorial pottery is very distinctive, the corpus of such vessels is far more limited than those bearing abstract geometric decoration. The ornamental repertoire of the Salaminian workshops involves an inexhaustive variety of geometric designs and combinations of them that are best documented by ware

36 For a comprehensive corpus of these iconographic themes, see Karageorghis and des Gagniers 1974; 1979.

37 Karageorghis and des Gagniers 1974, 66–79.

38 Compare, for example, the characteristic waterbird on contemporary pottery from Amathus: Fourrier 2006, 66–7, type B.2.1.

39 1939/IV-5/1a 13. See also Karageorghis and des Gagniers 1974, 393, with no mention of provenance.

category and pottery shape. For the purposes of this paper, the focus is on a number of very characteristic motifs which are mainly attested in Bichrome Ware. These include the dotted cross, the sun motif, a vertical chain of chevrons forming an arrow motif, pairs or groups of swastikas, groups of dots in panels, a quatrefoil motif and groups of M or W or Σ motifs (Figs. 2d, 4). These motifs, which appear on amphorae, jugs and footed bowls, are often very small and appear individually in panels or as supplementary ornaments, accompanying or flanking other larger geometric motifs or even pictorial designs.[40]

PATTERNS OF SALAMINIAN POTTERY DISTRIBUTION

Salaminian pictorial style vessels are much sought after by private and museum collections in Cyprus and abroad, apparently because of their original artistic style.[41] The unknown provenance of a large number of these vessels (which far outnumber pictorial vessels from known archaeological contexts) prohibits a comprehensive understanding of the full scale of their production and distribution. In the framework of *MuseCo*, vessels in the Salaminian pictorial style, including the "floral style", "free field style" and "panelled style", have been found in tombs at Peristerona, Gypsou, Ayios Georgios Spatharikou, Arnadhi, Lythrangomi and Rizokarpaso (Fig. 1). In addition, several vessels from Cypriot and foreign collections are of known provenance and can be allocated to the Salaminian pictorial style. A re-examination of the CG and the CA figurative pottery in the seminal volumes by Karageorghis and des Gagniers[42] is suggestive of an even broader distribution of Salaminian Bichrome pottery in pictorial styles in the Mesaoria plain and the Karpas peninsula, at sites including Vasili, Sinda, Achna, Stylloi, Trikomo, Akanthou, Ayios Theodoros, Achna, Ayios Iakovos, Komi Kepir, Aigialousa and Korovia.[43]

Beyond the region of Salamis, a few vessels in Salaminian pictorial style in museum collections are known to have been found in the neighbouring polities of Idalion and Kition.[44] In terms of excavated and published contexts, an interesting assemblage of amphoriskoi in Salaminian "floral style" was discovered at the acropolis of Idalion.[45] Vessels in Salaminian pictorial style are more rarely attested in more distant capitals, such as Palaepaphos. An example of such a Salaminian product is a Bichrome III–IV jar with a waterbird in "panelled style" from the necropolis of Palaepaphos *Plakes*.[46]

A small corpus of vessels in Salaminian pictorial style can be identified in the Levant. Two cemetery sites in Phoenicia have yielded two vessels that bear the same iconographic theme – a pair of waterbirds looking at each other in the "panelled style".[47] One is a Bichrome III–IV jar that was used as a cremation urn in Tomb 1 of the northern cemetery of Achziv, together with other Cypriot imports (Fig. 5a).[48] The second is a Bichrome III–IV footed deep bowl from a tomb at Qrayé (Fig. 5b).[49] Its pictorial decoration is further enriched with a range of typical miniaturised geometric motifs, as described above.

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40 Other examples in Georgiadou 2017, 103–5, figs. 4–5.

41 Browsing the catalogues of museums with Cypriot antiquities reveals the number of CA vessels in Salaminian pictorial style. See, for example, Karageorghis 2015 with a list of such publications.

42 Karageorghis and des Gagniers 1974; 1979.

43 For a selection of such vessels from these localities, see for example: Karageorghis and des Gagniers 1974, 81, 91–2, 125–26, 136, 146, 401, 407; 1979, 51, 90, 94, 114, 149, 152, 155.

44 Karageorghis and des Gagniers 1974, 75–6, 145, from the Cesnola collection.

45 Gjerstad et al. 1935, pls. CLXII, CLXIII.

46 Karageorghis and Raptou 2014, pl. XX,7 Tomb 144. Georgiadou would like to thank E. Raptou for permission to examine this vessel.

47 On the theme and parallels, see Karageorghis and des Gagniers 1974, 67.

48 Mazar 2004, 46, fig.16.1, photo 92.

49 Chapman 1972, 145, fig. 31, 307.

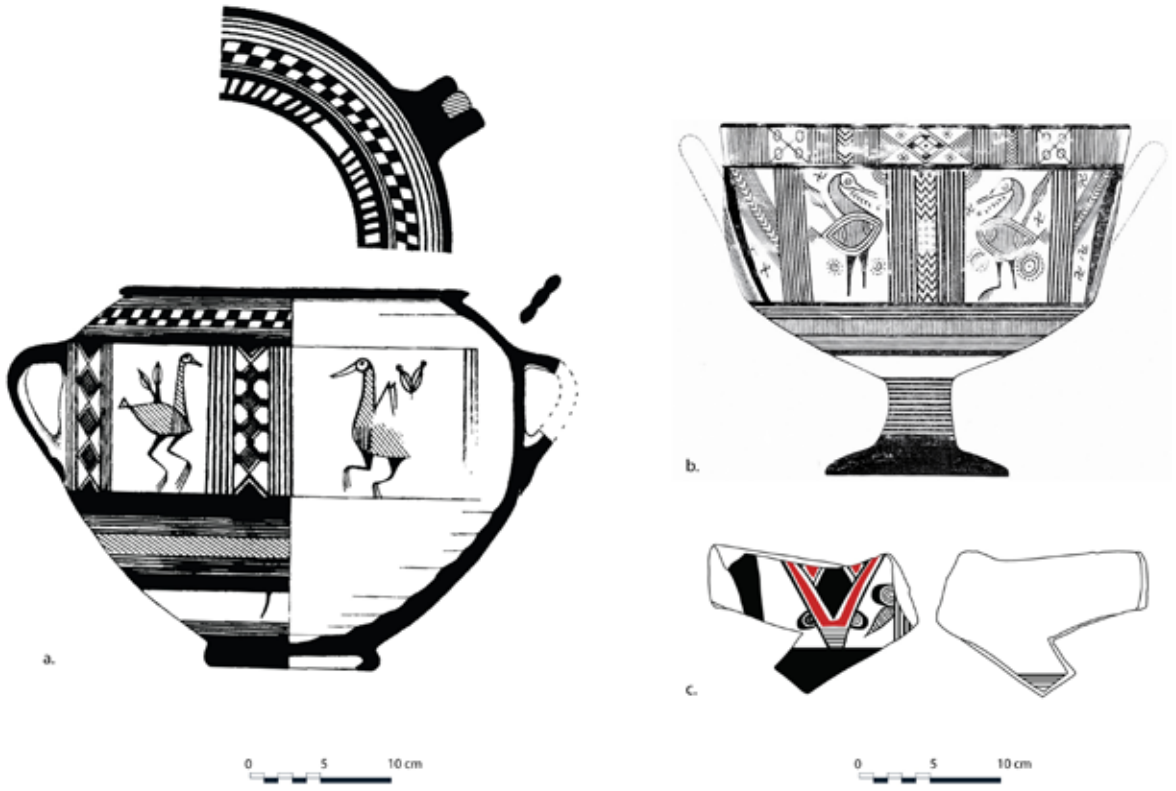

Fig. 5. Salaminian pictorial style vessels in the Levant. a. Jar in Bichrome III–IV Ware, from Achziv (after Mazar 2004, fig. 16.1); b. Footed deep bowl in Bichrome III–IV Ware, from Qrayé (after Chapman 1972, fig. 31); c. body fragment of a deep bowl in Bichrome IV Ware, from Tell Tayinat (after Karacic and Osborne 2016, fig. 2.9).

Although only a few settlements in the Levant have produced vessels with floral and figurative motifs in the Salaminian style, they occur in larger numbers than at burial sites. Al Mina has yielded the most varied assemblage of vessels in "floral style", all in Bichrome Ware, including deep bowls, amphorae, jugs and two fragmentary vessels with figurative scenes. The latter are a large amphora shoulder fragment with bulls flanking a large lotus flower and a jug body fragment with a female figure holding a lotus flower.[50]

At the settlement of Tarsus, in Cilicia, a few body fragments of closed vessels with depictions of birds have been identified. Although they evoke the Salaminian style, they were considered by the excavator to be local imitations rather than imports.[51] Several other fragments from Tarsus may be assigned to the Salaminian "floral style"; they have guilloche and lotus motifs combined with the meander motif,[52] as well as a sun motif on the neck fragment of an amphora.[53] From the southernmost Levant, Ashkelon has produced two small fragments from closed vessels in Salaminian "floral style".[54]

50 Du Plat Taylor 1959, 70, 73–4, pls. XX, 2–4, XXI, 2–3, XXII, 3a, 7. Also Karageorghis and des Gagniers 1974, 96, 155–56, 195. It is doubtful that the horizontal handle fragment with the depiction of a goat below the handle and a bird on the body is of Cypriot origin as argued in the publication (Du Plat Taylor 1959, pl. XX, 5; Karageorghis and des Gagniers 1974, 195). It could be an imitation, given the rendering of the bird and other geometric motifs.

51 Goldman 1963, 53, 114, 121, 136, figs. 64.335, 72.576, 82.1044.

52 Goldman 1963, 213, fig. 74.643, 644. A sherd with lotus flowers in Bichrome Ware has not been identified with certainty as a Cypriot import: Goldman 1963, 247, fig. 83.1076.

53 Goldman 1963, 215, fig. 75.671.

54 Stager et al. 2011, 109–10, body fragments identified as Polychrome Ware.

Salaminian style vessels with geometric decoration are far more common in the Levant and have a broader distribution pattern. Both published data and an ongoing stylistic study suggest that a varied repertoire of painted tableware pottery, mainly in Bichrome Salaminian style, circulated in the Levant in the late CG and early CA periods. Variants of deep and shallow bowls, amphorae and barrel jugs have been identified at numerous sites on the Levantine coast, from Al Mina to Ashkelon.[55] A large corpus of contemporary Cypriot-style pottery has also been documented in Cilicia and North Syria. However, it is not always feasible to distinguish Cypriot imports from imitations by local workshops in these regions.[56] Regarding the identification of Cypriot imports, a recently published analytical study of Bichrome and WP pottery from Tell Tayinat in North Syria has confirmed a Cypriot origin.[57] Considering the results of the elemental study of this material in combination with our own morphological and stylistic observations, we suggest that these vessels can be attributed to the Salamis workshops. The assemblage from Tell Tayinat consists of different types of WP and Bichrome bowls and barrel jugs in the Salaminian abstract geometric style; as well as a deep bowl body fragment in Bichrome IV decorated with a distinct lotus flower motif in Salaminian "panelled style" (Fig. 5c).

Iron Age Cypriot pottery appears in lower numbers in the Aegean and in a reduced repertoire of shapes. In fact, no Cypriot pictorial vessels have been documented to date in the Aegean, while a few Salaminian style late CG vessels can be identified in the form of barrel-juglets at Euboea and Rhodes.[58] On the whole, it appears that the Salaminian pottery series, principally in Bichrome Ware, which was traded in the Eastern Mediterranean during the CG and early CA periods, was popular within Cyprus itself. They were distributed at an island-wide scale, exemplifying the importance of Salamis as one of the most dynamic pottery production centres on Cyprus.[59]

CONCLUDING NOTES

This paper offers a concise presentation of the morphological, stylistic and fabric characteristics of figurative vessels in Bichrome Ware that distinguish them as recognisable products of the polity of Salamis. The iconographic repertoire and the manner in which the motifs are rendered jointly delineate the distinct decorative modes in "floral", "free field" and "paneled" styles, which in turn comprise a coherent regional pictorial style. This marked preference for pictorial decoration should be perceived as one of Salamis' production insignia during the CA period. Already from the beginning of the CG period, the eastern part of Cyprus can be associated with the production and broad distribution of stylistically identical and homogeneous ceramics. This dominant stylistic uniformity, comprising abstract geometric and figurative ornamental repertoires, can be identified and documented beyond the centre of Salamis, in the adjacent areas of the Mesaoria plain and the Karpas. This leads us to consider these areas as integral parts of the broader Salaminian potting region, with further socioeconomic and political implications regarding the polity's spatial structure and internal operation.

Examining the available evidence for the diffusion of pictorial pottery in Salaminian style within and beyond Cyprus in the CA period, taking into consideration that many known vessels are not provenanced, we conclude that these elaborate products of high craftmanship were produced and consumed primarily at Salamis and within its region, while only a small corpus circulated outside the polity. This suggests a specialised production primarily for internal distribution and consumption, in contrast to the broad circulation of contemporary vessels in abstract geometric Salaminian style, that are frequently found in other regions of the island and across

55 Georgiadou 2016.
56 See, for example, the contribution of D'Agata in this volume.
57 Karacic and Osborne 2016.
58 Georgiadou 2017, 107–8.
59 Georgiadou 2014, 381–82.

the Eastern Mediterranean. This pattern of localised production is also documented at Amathus, where vessels with Amathusian pictorial designs appear to have been intended for internal consumption, again without evidence of wide distribution.[60] Only a handful of vessels in the so-called "Amathus style" have, for example, been found outside the city-kingdom.[61] This is yet another conspicuous aspect of regionalism in pottery production and consumption in the Iron Age Cypriot polities, revealing at the same time the complex sociocultural milieu in which pottery workshops operated and the manifold purposes served by pottery styles; issues that can be addressed only after a thorough quantitative and analytical examination.

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60 On the "Amathus style", see Fourrier 2008, 567.

61 Fourrier 2008, 569–75.

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The beginning of the Cypro-Archaic I period

A revision proposal

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"… even with the latest possible date of this stratum…
the jug is c. 200 years older than the Cypriote B-o-R II (IV) ware"[1]

ABSTRACT

Since Einar Gjerstad established the sequential and chronological framework of the Cypriot Iron Age nearly a century ago, the initial date of the Cypro-Archaic (CA) I period has been a controversial issue. His original proposal was the result of three basic circumstances: his intention to turn the island into a reflection of the Aegean, the use of tombs and the foreign references existing at the time.

Several proposals, generated from different standpoints, tried to refine Gjertad's framework in general or some of its details in particular. These employed evidence from Cyprus itself, the Aegean and the Levant. This communication complements these proposals using evidence recovered at the Tyrian cemetery of al-Bass. The conclusion is to extend the start date of CA I to at least the third quarter of the 9th century BC. The alternative would be a revision and reformulation of the characteristics of the Cypro-Geometric (CG) III period and its chronology.

INTRODUCTION

An awareness of the circumstances that surround any situation is essential to analyse it. This not only affects the study of a particular archaeological context or stratum. It conditions the analysis itself.[2]

The formulation of a sequential and chronological framework requires the consideration of a series of factors. Five essential aspects become relevant in the analysis of the available evidence, its nature and evolution: the researcher's perspective, the conclusions reached by previous research, the nature of the archaeological contexts and their associations with other local or imported materials, the information provided by contexts or sequences generated by other regions or cultural milieus and, finally, the chronological data provided by non-archaeological methods such as radiocarbon analysis.

There is no doubt that Einar Gjerstad's formulation of the sequential and chronological framework of the Cypriot Iron Age[3] placed the Cypriot sequence among the Iron Age Mediterranean "Big Four": the Aegean, the southern Levant, Egypt and Cyprus. However, the factors mentioned above, including the absence of some

1 Gjerstad 1948, 250.
2 See Johnson 2010, 1–11.
3 Gjerstad 1948.

of them, played an essential role. One consequence soon became evident: the application of his formulation outside Cyprus led to contradictions and problems. As a result, the length and character of certain periods went through a series of refinements that enjoyed various levels of acceptance by Gjerstad himself and the rest of the research community.[4] One of those periods is CA I and, in particular, the issue of its initial date, which has been at the centre of the debate over the years.

The intention of these pages is not to criticise or minimise Gjerstad's monumental contribution to archaeology. Considering all the changing circumstances that have framed the evolution of research over the years, the purpose of this contribution is to put forward a series of questions raised by an analysis of certain Levantine contexts and the interpretation of their evidence.

THE CHRONOLOGY OF THE CYPRO-ARCHAIC I PERIOD AND ITS REVISIONS

Turning to the factors mentioned above, Gjerstad's sequential and chronological framework for the Cypriot Iron Age (Fig. 1) should be viewed within the context of the first half of the last century. It stood on three essential pillars.

The first one is a strong pro-Aegean approach, visible in his arguments and the terminology employed (CG, CA and Cypro-Classical/CC) as well as his chronological conclusions. This factor conditioned the analysis and, therefore, the results: the entire ceramic sequence adapted itself to the "Aegean" scheme.

Second, and very much like in the Aegean, the material base consists of a ceramic assemblage recovered in Cypriot cemeteries and, particularly, in monumental tombs. This led to two relevant problems. On the one hand, these tombs often contained multiple burials and the ascription of vessels to individual funerary events was complex and based on a comparison of their technical and stylistic characteristics. Later, this gave rise to the formulation of the sequential stages of the Cypriot Iron Age and Classical period based on the changing proportions of the different wares.[5] On the other, this general scheme could not be compared and complemented with stratified material recovered in Cypriot settlements.

Third, the ceramic and chronological references frequently consisted of particular readings of the evidence available at the time. In the first half of the 20th century, our understanding of the nature and evolution of the Levantine and Anatolian pottery sequences was still in formation. Besides, foreign influences, in particular those from the Levant, played a secondary role compared, for example, with Anatolia.[6] A review of the chronological references for the CA I period in Gjerstad's original publication shows this situation:[7] Tarsus, some tombs from the Rhodian necropolis of Ialysos, Tell Sheikh Yusuf, also known as Al Mina, Tell Tayinat, Lahum and some scarabs found at Ayia Irini. He did not take into consideration several Levantine sites because their chronology, as understood at the time, was thought too old to fit into his scheme.[8] This happened despite the fact that the assemblages recorded in certain Cypriot tombs displayed similar evidence.[9]

The date for the beginning of CA I, or Type IV, was originally set in 700 BC, coinciding with the initial date of the Archaic period in the Aegean. However, evidence collected in the Levant led to the first challenges to Gjerstad's chronology. One aspect at the centre of the discussion was the initial date of red-slipped surfaces and, in particular, of Black-on-Red (BoR) Ware. The use of red slip was a significant innovation and, to some extent,

4 See an interesting revision in Smith 2009, 220–43.
5 Gjerstad 1948, 186–206; 1960, 108.
6 Gjerstad 1948, 287–92.
7 Gjerstad 1948, 423–24.
8 Gjerstad 1948, 269–70 n. 1.
9 Gjerstad 1948: 277–78 n. 3.

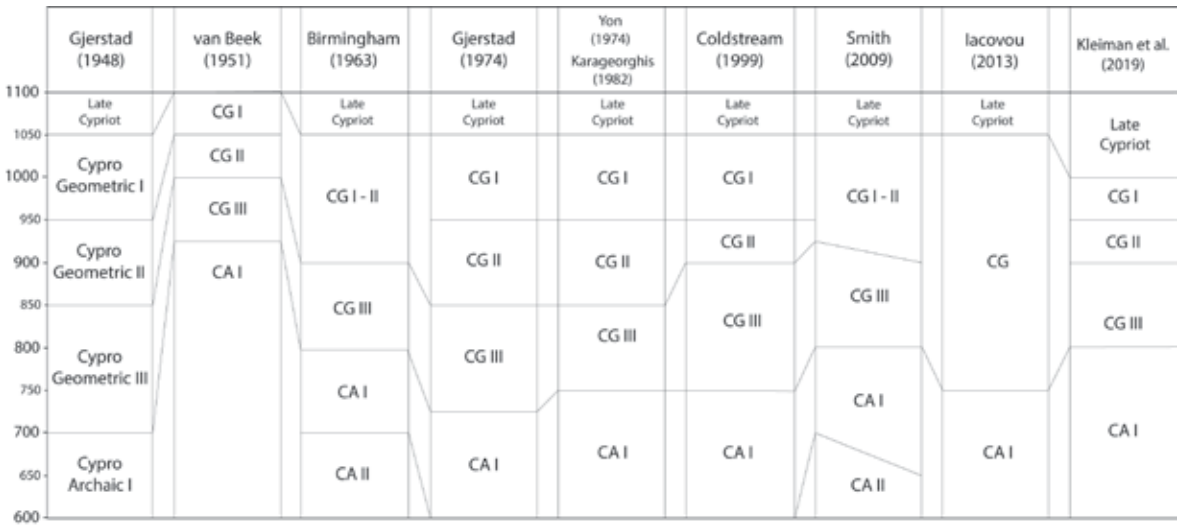

Fig. 1. Evolution of the Cypriot Iron Age sequential and chronological framework.

a turning point for Levantine Iron Age pottery in general, and the Cypriot ceramic repertoire in particular. This ware showed up for the first time in continental contexts, according to the parameters in vogue at the time, in the 11th century BC. However, in Cyprus it was dated to 850 BC and characterised the beginning of the CG III period.[10]

Soon after the publication of Volume IV.2 of the Swedish Cyprus Expedition in 1948, van Beek[11] (Fig. 1) highlighted the contradictions existing between the Cypriot chronology and the date of the Levantine contexts. He even proposed the 10th century for the beginning of CA I. Later, Albright and Gjerstad dealt with the same issue,[12] this time taking into consideration several vessels recovered at Megiddo, which at the time were dated to the 10th century BC. Despite the evident typological, morphological and decorative similarities with CA I vessels, Gjerstad considered them to be earlier Levantine versions (see below). As a result, the chronology of Cyprus remained unchanged[13] until Birmingham[14] (Fig. 1) proposed a new scheme for the Cypriot Iron Age. It was based on a re-evaluation of the Levantine contexts and their chronology, and sought to bring the two sequences closer together. One of her conclusions was the raising of the initial date of this period to 800 BC.

This suggestion was, initially, rejected by Gjerstad and not considered by most contemporary scholars. However, new evidence recovered in Cyprus, in particular the association with Aegean Late Geometric (LG) wares, confirmed again the need for a chronological revision.[15] Hence, after the results of an analysis of the stratigraphy of Al Mina (Fig. 1),[16] a slight modification took place: the beginning of CA I was set in 720 BC. However, this was deemed not high enough, and other authors suggested the year 750 BC (Fig. 1).[17] This date has since remained the reference point (for example, Iacovou,[18] although Smith has recently again proposed a date towards 800 BC, Fig. 1).[19]

10 See Schreiber 2003 for a review; Kleiman et al. 2019, 532–34 for an update; also Bourogiannis this volume.
11 van Beek 1951.
12 Albright and Gjerstad 1953.
13 Gjerstad 1960.
14 Birmingham 1963.
15 For example Karageorghis 1967, 16 n. 2; Christodoulou 1972.
16 Gjerstad 1974, 119 n. 38; 1977, 27 no. 62.
17 Yon 1976; Demetriou 1978; Karageorghis 1982, 9.
18 Iacovou 2013.
19 Smith 2009, xviii, table 4.

From the perspective of the Levant, the situation and, especially, the approaches are different. There, chronology is an issue in itself and two views soon became evident with respect to the conventional Cypriot chronology. One corresponds to the central and northern Levant, where acceptance of Gjerstad's framework has been more or less general and did not cause much controversy.[20] The second corresponds to the southern Levant, where Biblical Archaeology tends to adapt any import to fit their own chronological assumptions.[21] For this reason, and depending on the stage of the research and the chronological approach, the same CA I wares could be dated in the 10th or the 9th century BC. Some examples, among many, illustrate this situation;[22] notably a tomb from Tell Mevorakh[23] and Stratum II at Horvat Rosh Zayit.[24] In this regard, from an *outsider's* perspective, it is necessary to be aware of whether the chronological approach of any study relating to the southern Levant adopts the conventional view or shows a tendency rowards revision.[25]

In any case, with the circumstantial case of van Beek, the initial date of CA I did not receive special attention among scholars working in the Levant. As an example, Schreiber[26] did not deal with this issue directly, even though he recognised the original ascription to Gjerstad's type IV of certain vessels in contexts older than 750 BC. In fact, Schreiber established a diametrically opposed classification consisting of "Black-on-Red Phases". However, it is relevant that those phases depend on the chronological arrangement of the stratigraphies of Levantine sites, including those located outside its southern part, following the Biblical conventional chronology.[27] Hence, the features of the vessels do not dictate directly the "phase" to which they belong, but the date of the strata where they were found. This procedure includes, obviously, the CA I wares found at those sites,[28] which in some instances, and despite their theoretical classification in an advanced sequential stage, are classified in "Phase 1" after the date of their context of origin. Therefore, these CA I instances were, *de facto,* dated in the 10th century BC, always using a conventional chronological approach. However, since they were not recognised as such, this happened without consequences for the period itself either in the Levant or in Cyprus.

Despite these circumstances, and with the evidence currently at hand, the chronology of many of these sites should undergo relevant changes. For example, these modifications become obvious from the perspective of the revised chronology,[29] which tends to date in the 9th century BC many contexts otherwise considered older. However, this is not the only instance. The recent revision of the conventional chronology undertaken by Mazar[30] would place many of the strata, which were previously dated in the 10th century BC, before 830 BC. This new arrangement would affect, in particular, those strata whose end was connected with the campaigns of the Pharaoh Shoshenq against the southern Levant. Some of these, like Megiddo Stratum V/IVB, Hazor Stratum IX and Horvat Rosh Zayit, have produced CA I wares.

The latest proposal coming from the Levant affects, again, the earliest date for BoR Ware (Fig. 1).[31] This relates to recent excavations at Megiddo and focuses, in particular, on the initial date of BoR Ware. New stratigraphical arrangements combined with their respective ceramic associations and ^{14}C dates indicate that the beginning of this ware, and of CG III, occurred at the end of the 10th century BC. This would confirm the conclusion reached by Coldstream[32] and Schreiber,[33] although arrived at through their own approaches and the

20 For example Bikai 1978 for Tyre, or Courbin 1993 for Ras al-Bassit.
21 Kochavi 1998, 478.
22 See a list in Kleiman et al. 2019, 547.
23 Stern 1978, 62–3, pl. 31.
24 Gal and Alexandre 2000.
25 On this question see Levy and Higham 2005; Núñez 2016.
26 Schreiber 2003.
27 See Iacovou 2004 and, in particular, p. 65.
28 Schreiber 2003, 83–219, 184–219 and 333–39.
29 See Finkelstein and Piasetzky 2011 for a summary.
30 Mazar 2005.
31 Kleiman et al. 2019.
32 Coldstream 1999.
33 See above, n. 28.

interpretation of different evidence.[34] Regarding the impact of these new conclusions on the beginning of CA I,[35] the option of these authors has been to accept Smith's date of 800 BC. At the same time, the presence of Type IV wares in 9th century contexts has been explained avoiding Gjerstad's classifications. Instead, they focus on the possible existence of workshops whose characteristics remain elusive but which would justify any sequential contradiction.

In any case, Megiddo Stratum VA/IVB represents an essential reference for the beginning of the CA I period. Particularly relevant are the contexts 10 and 51 of Area C (Fig. 2),[36] which have produced a series of Cypriot Type IV vessels: a decanter with a globular body (Fig. 2a),[37] a single-handled neck-ridge jug (Fig. 2c),[38] a double-handled variation of the same jug type (Fig. 2b),[39] a bowl with horizontal handles on the rim (Fig. 2d)[40] and a deep bowl (Fig. 2e).[41] The local ceramic repertoire (Fig. 2) corresponds to an advanced stage of the Iron 2a,[42] while an analysis of ^{14}C determinations and historical events has set the destruction of this stratum around 840/830 BC.

A VIEW FROM THE CENTRAL LEVANT

As mentioned, and despite the evidence at hand, the recent analysis of Megiddo has maintained a cautious approach to the Cypriot periods and their (amended) chronology.[43] Recent research conducted in the central Levant, which previously had attracted attention to this chronological issue (see above), was also not considered. One of the sites in question is the Iron Age cemetery of al-Bass, in Tyre,[44] which offers one of the best repertoires of Cypriot Iron Age wares so far recovered in the entire Levant.[45] The association in burials at this site of these ceramics with local products offers interesting sequential data with chronological implications. The relevance of these assemblages is further highlighted by a more accurate knowledge of the evolution of the local central Levantine ceramic repertoire.

In the first place, four sequential periods (II to V) have been recognised at al-Bass, each one corresponding to a number of strata of P. Bikai's excavations at Tyre.[46] The chronology ranges from the late 10th to an advanced part of the 6th century BC.[47] The proportions of Cypriot imports in the cemetery are limited; they barely reach 4.3% of all the ceramics recovered at the site. Their representation is higher (a little over 8%) in Period II than in the following ones, which experience a marked decrease compensated by a slight increase in Period V.[48]

The typological array represented by the Cypriot wares at al-Bass matches the general character of the funerary gifts.[49] It includes a standard ceramic set, connected with the consumption of wine (Fig. 3): the urns,

34 Kleiman et al. 2019, 533, 550.
35 Kleiman et al. 2019, 548–49.
36 Lamon and Shipton 1939, 3–4, fig. 6.
37 Lamon and Shipton 1939, pl. 8: 176; Gjerstad 1948, fig. XXXIX: 2.
38 Lamon and Shipton 1939, pl. 5: 123; Gjerstad 1948, fig. XXXVIII: 9.
39 Lamon and Shipton 1939, pl. 17: 87; Gjerstad 1948, fig. XXXIX: 18.
40 Lamon and Shipton 1939, pl. 30: 140; Gjerstad 1948, fig. XXXVIII: 14.
41 Lamon and Shipton 1939: pl. 32: 169; Gjerstad 1948, fig. XXXVII: 23.
42 Kleiman et al. 2019, 535, table 1.
43 Kleiman et al. 2019.
44 Aubet 2004; Aubet et al. 2014.
45 Aubet and Núñez 2008; Núñez and Aubet 2009.
46 The correlation is as follows: al-Bass Period I, not identified as yet in the cemetery, corresponds to Tyre strata XIII to XI, Period II equals strata X to VI, Period III to strata V and part of IV, Period IV to the last part of IV and the entire III, Period V to strata II and I. Tyre strata refer to Bikai 1978.
47 For a recent re-evaluation of that relationship and its chronology, see Núñez 2018, 329, fig. 1.
48 Núñez and Aubet 2009, 414, fig. 4b.
49 Aubet and Núñez 2008; Núñez and Aubet 2009.

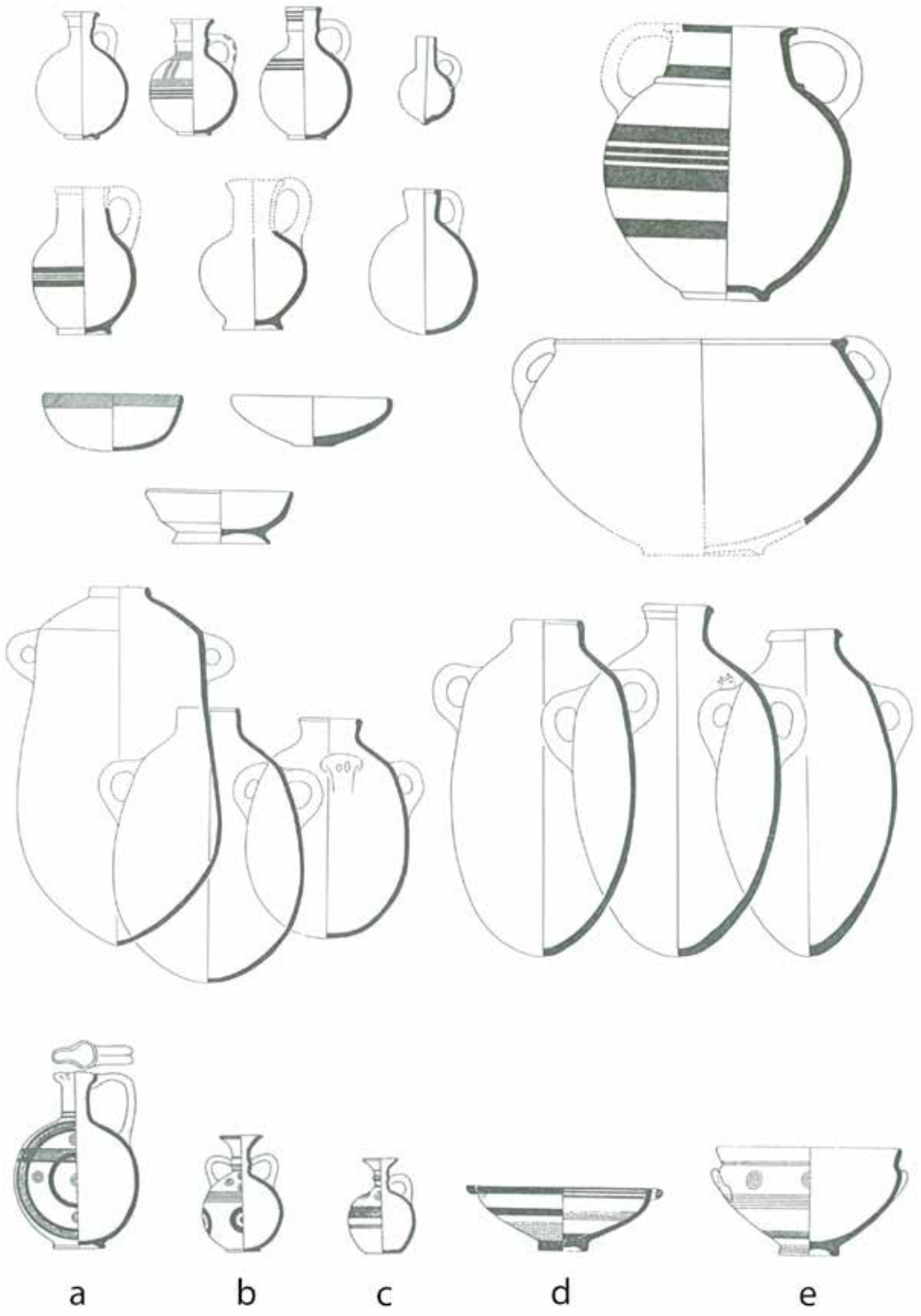

Fig. 2. Selection of ceramics from Megiddo Stratum VA/IB (a: Lamon and Shipton 1939: pl. 8: 176; b: Lamon and Shipton 1939: pl. 17: 87; c: Lamon and Shipton 1939: pl. 5: 123; d: Lamon and Shipton 1939: pl. 30: 140; e: Lamon and Shipton 1939: pl. 32: 169; the remaining vessels are Lamon and Shipton 1939: pl. 5: 124, pl. 6: 154, 156; pl. 7: 170, 172, 174, pl. 8: 177, pl. 20: 119–21, pl. 21: 122–23, pl. 22: 127, pl. 29: 112, pl. 30: 123 and 127, pl. 31: 143).

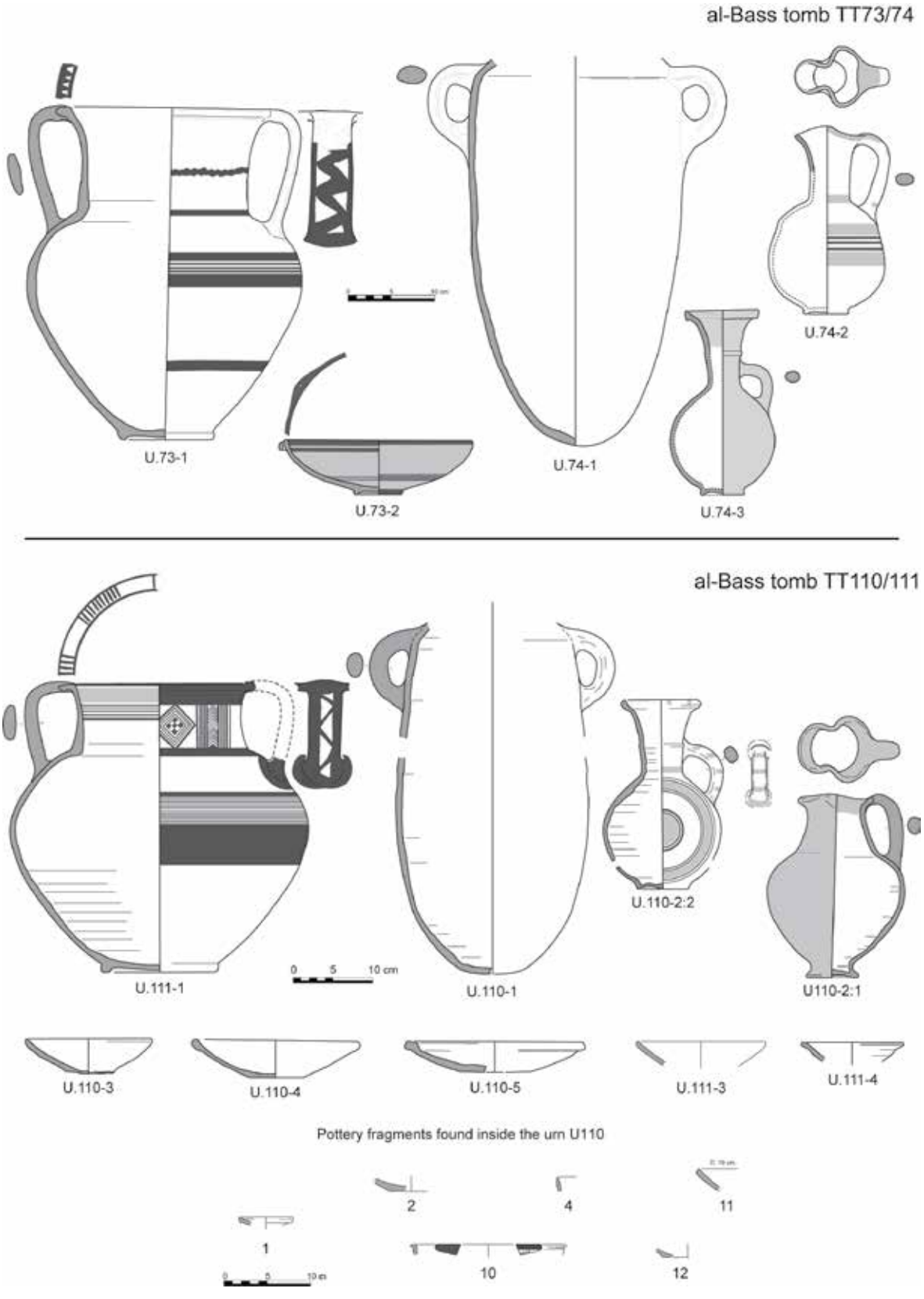

Fig. 3. al-Bass Tombs TT73/74 and TT110/111.

their lids, a neck-ridge jug, a decanter and a cup.[50] All these typological categories are represented by the Cypriot wares, although urns are the most common group.[51] These jars belong to three major forms, namely and employing Gjerstad's terminology: amphoroid-kraters, by far the most numerous, amphorae and jars. Regarding the rest of the formal groups, the jugs are represented by barrel and neck-ridge jugs,[52] while the open forms amount to two shallow bowls with horizontal handles on the rim.[53] Two Cypriot periods are represented: CG III and CA I. Furthermore, all the vessels belong to three major wares: White Painted (WP), Bichrome and BoR.

CA I wares at al-Bass are represented for the first time in Period II, which corresponds to Tyre Strata X to VI and coincides with the Middle Iron Age in the central Levant (end of the 10th to late 9th centuries BC) and broadly the Iron Age 2a in the southern Levant. The earliest instance occurred in Tomb TT73/74 (Fig. 3),[54] which produced a WP III Ware amphoroid-krater (Fig. 3: U.73-1)[55] together with a BoR shallow bowl provided with a knob-like handle on the rim (Fig. 3: U73-2).[56] Given the rounded outline of the handle, this bowl might belong to a very late stage of CG III or even to early CA I if we consider a tomb from Ktima.[57] Since Period II at al-Bass is divided into two sequential sub-phases,[58] the presence of horizontal decoration on the body of the decanter might constitute an argument for the inclusion of this tomb in an early stage of the second sub-phase.[59]

The next example is Tomb TT110/111 (Fig. 3),[60] this time typical of the second phase of al-Bass Period II and contemporary with Megiddo Stratum VA/IVB. Two cinerary urns were found in this tomb, one of which is a Bichrome IV amphoroid-krater (Fig. 3: U111-1)[61] that finds close morphological and decorative parallels in Salamis Tomb 31 (Fig. 4a and e).[62] Other vessels support the contemporaneity of these two tombs with Megiddo Stratum VA/IVB; for example, a decanter with a globular body similar to the example from Megiddo VA/IVB (Fig. 4c).[63] Moreover, and relevant from a sequential perspective, Tomb TT110/111 produced the rim of a Pendent Semicircle plate dated to the Sub-Protogeometric (SPG) IIIa period (Fig. 3: U.110.10).[64] Therefore, the final date of Stratum VA/IVB, 840/830 BC, represents a sound terminus ante quem for al-Bass Tomb TT110/111, at least one of the burials of Salamis Tomb 31 and, as a consequence, for the beginning of CA I.

However, the connections between some types included in Gjerstad's CA I and the ceramic repertoire of the Middle Iron Age in the central Levant do not end here. Other Levantine ceramic types are, for example, the decanters with long cylindrical necks and inverted piriform bodies,[65] also found in Salamis Tomb 31 (Fig. 4d),[66] and the neck-ridge jugs with long necks and concentric decoration (Fig. 4f),[67] or with conical necks (Fig. 4s).[68] Aegean vessels are likewise included, for example a skyphos (Fig. 4t)[69] with morphological characteristics that resemble those of Kearsley's Pendent Semicircle skyphos type 2b, dated in the Aegean SPG IIIa period.[70]

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50 Núñez 2015; 2017.
51 Aubet and Núñez 2008, 74–93.
52 Aubet and Núñez 2008, 93–5.
53 Aubet and Núñez 2008, 96–7.
54 Aubet et al. 2014, 68–70, 185, fig. 2.16.
55 Aubet et al. 2014, 68, 185, fig. 2.16: U73-1.
56 Aubet et al. 2014, 68, 185, fig. 2.16: U73-2; Aubet and Núñez 2008, 97; Núñez 2014, 288.
57 Deshayes 1963, 134, 205 no. 5, pl. LXIII: 7, Tomb VIII.
58 Núñez 2008, 38–49; 2014, 291; 2018, 146–56.
59 Aubet et al. 2014, 185, fig. 2.16: U74-2.
60 Aubet et al. 2014, 93–5, 205–96, fig. 2.36 and 37.
61 Aubet et al. 2014, 95, 205, fig. 2.36: U111-1; Núñez 2014, 271.
62 Karageorghis 1967, 62 no. 69; while for the decoration, see p. 62 no. 47, pls. LVIII and CXXX, both of Bichrome IV Ware.
63 Karageorghis 1967, pl. CXXXI: 20.
64 Aubet et al. 2014, 94, 206, fig. 2.37: U110-6: 10; Núñez 2014, 288.
65 Gjerstad 1948, fig. XXXIX: 6, fig. XLIII: 10–12 and 16; Núñez 2004a, 354–58; 2014, 277–78.
66 Karageorghis 1967, pl. CXXXI: 48 and 47.
67 Gjerstad 1948, pl. XXVIII: 23–4, pl. XXXIII: 9–11, 13, pl. XXXVIII: 16–7, pl. XLI: 6–7; compare Núñez 2014, 276, fig. 3.21.
68 Gjerstad 1948, fig. XXVIII: 25, WP IV; compare Núñez 2008, 48, fig. 18b and c.
69 Gjerstad 1948, fig. XXXI: 1.
70 Kearsley 1989, 90–1, fig. 36, 128.

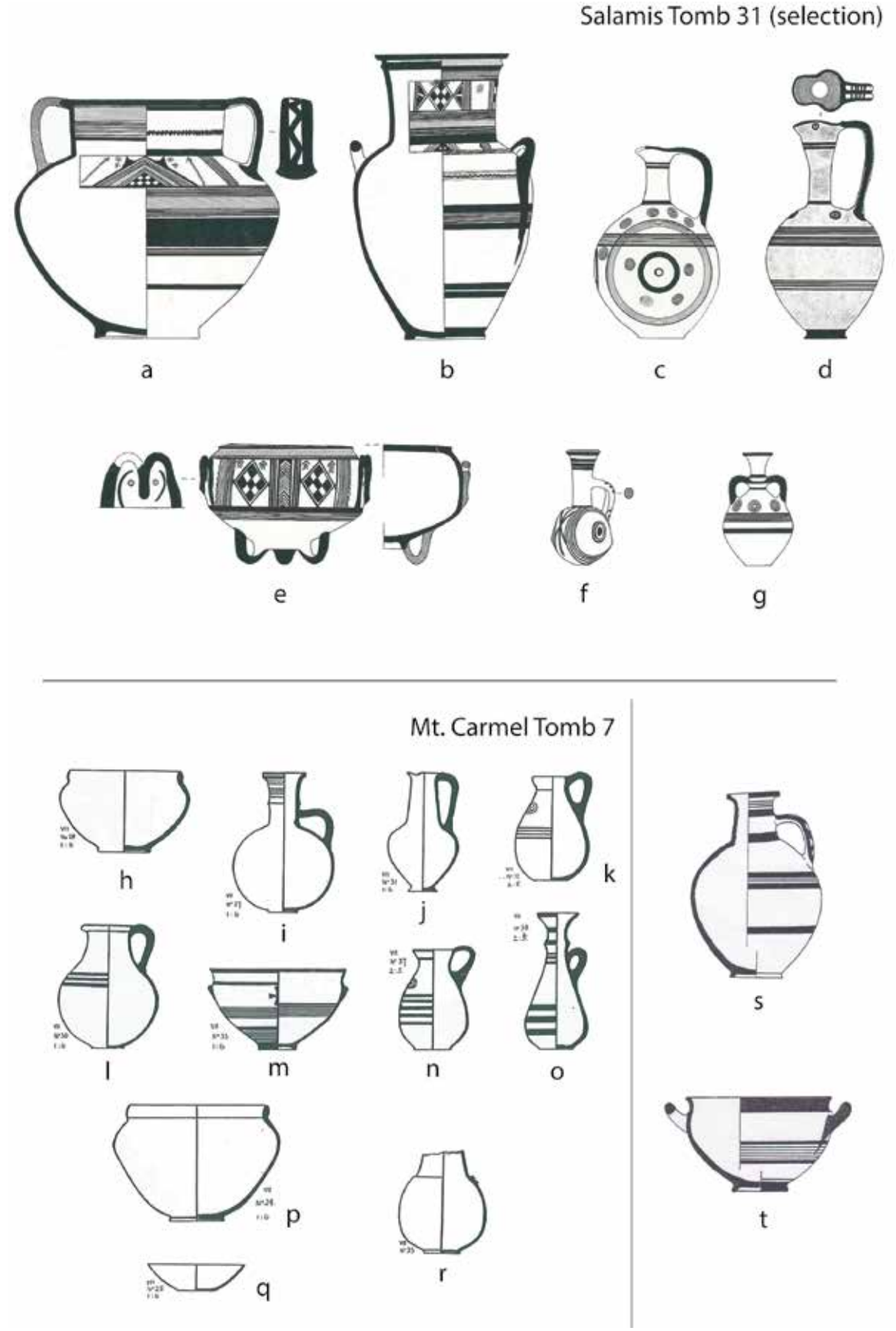

Fig. 4. Selected vessels from Salamis Tomb 31 (a: Karageorghis 1967: pl. CXXX: 69; b: Karageorghis 1967: pl. CXXX: 89; c: Karageorghis 1967: pl. CXXXI: 20; d: Karageorghis 1967: pl. CXXXI: 48; e: Karageorghis 1967: pl. CXXX: 47; f: Karageorghis 1967: pl. CXXXI: 52; g: Karageorghis 1967: pl. CXXXI: 53); Mt. Carmel Tomb 7 (Guy 1924: pl. III); s: Gjerstad 1948: pl. XXVIII: 25, White-Painted IV Ware; t: Gjerstad 1948: pl. XXXI: 1, Bichrome IV Ware.

Other tombs, at al-Bass and in other necropoleis of the central and southern Levant, have produced CA I ceramics in contexts dated to the last years of the 9th century BC, although slightly later than Tomb TT110/111. One is an as yet unpublished burial from al-Bass (TT205/206), dated to the initial stages of Period III. Its cinerary urns are, respectively, a WP IV amphora[71] and a BoR II (IV) amphoroid-krater.[72] These two jars were associated with a neck-ridge jug, which is very similar to an example from Tomb VII of the necropolis of Mount Carmel (Fig. 4i).[73] This last tomb also produced a late variation of a decanter with an inverted piriform body (Fig. 4j)[74] as well as several BoR II (IV) Cypriot imports consisting of two neckless decanters (Fig. 4l and n),[75] a neck-ridge flask (Fig. 4o)[76] and a deep bowl (Fig. 4m).[77] In this sense, the presence in Tomb Z XX at Achziv[78] of a similar neck-ridge flask in association with wares of the final stages of al-Bass II and early III (end of the 9th to the first quarter of the 8th century BC) might support the sequential character of Mount Carmel Tomb VII.

Finally, tombs of al-Bass Period III, which coincides with the first phase of the Late Iron Age in the central Levant, have also produced CA I wares. This is the case, among others, of Tombs TT3/5,[79] TT4/6[80] and TT45/46.[81] The chronology of Period III ranges from the final years of the 9th to the first quarter of the 8th centuries BC[82] and no CG III vessels have been identified in any of its tombs. This fact is another strong argument for the beginning of the CA I period somewhere in the third quarter of the 9th century BC.

CONCLUSIONS

The conclusions drawn from the arguments presented above can be summarised as follows.

A revision of the Cypriot sequence and chronology has become necessary. The data currently available are better in quantity and quality than the evidence at hand when the current framework was first established. This also holds for the diverse minor corrections that it has experienced in recent times. Not undertaking an in-depth typological and chronological reform implies continuing to mend only parts of the structure, something that will only lead to new problems in the long run.

The issue, no doubt, affects Cypriot archaeology and, therefore, its solution should be sought in Cyprus considering local circumstances. However, this revision must take into consideration data generated abroad as well. An open attitude is essential to do so. Also relevant for this fresh approach is an observation of the entire Cypriot ceramic assemblage of the Iron Age and the identification of foreign influences and loans that can be accurately dated.

These new data, recovered both in Cyprus and abroad, have shown the existence of strong arguments for an earlier start to the CA I period. Levantine contexts point to a transition between CG III and CA I somewhere in the middle decades or the third quarter of the 9th century BC. Obviously, this new sequential correlation and the consequent dates have direct repercussions for the relevant part of the Cypriot ceramic repertoire of the Iron Age in general and of the CA I period in particular.

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71 Morphologically comparable to Gjerstad 1948, pl. XXIX: 12.
72 Morphologically close to Gjerstad 1948, pl. XXXVI: 2.
73 Guy 1924, 55 no. 27.
74 Guy 1924, 55 no. 31.
75 Guy 1924, 55 nos. 32 and 37; Gjerstad 1948, pl. XXXVIII: 21 and 22.
76 Guy 1924, 55 no. 38; Gjerstad 1948. pl. XXXVIII: 12.
77 Guy 1924, 55 no. 33; Gjerstad 1948, pl. XXXVII: 23.
78 Dayagi-Mendels 2002, 30–5.
79 Núñez 2004b, 137, 139–40, figs. 52, 54–5.
80 Núñez 2004b, 138, 141, figs. 53 and 56.
81 Núñez 2004b, 180–81, figs. 95–6.
82 Núñez 2014, 304–5; 2018, 156–64.

A further consequence would be a reformulation of the ceramic repertoire of this period and the previous CG III. This reformulation would directly involve both the ceramic forms and their decorative treatment.

Another possibility, mentioned before and not incompatible with the previous one, could be a re-evaluation of regional production and styles within and beyond Cyprus. However, it is difficult to accept the existence of identical types in contexts that are far in time from each other. The explanation for such situations requires arguments backed by more accurate evidence and flexible approaches.

The final question refers to the possible consequences of this change for the established understanding of the history and archaeology of the 9th and 8th centuries BC in Cyprus in particular and in the entire Levant in general. This opens interesting potential avenues for research.

Finally, the research situation now is different to that existing in the first half of the 20th century. Fortunately, the growing corpus of evidence is complemented by new perspectives from which it might be analysed.

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Cypriot Black-on-Red pottery in Early Iron Age Greece

In search of a beginning and an end

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ABSTRACT

Black-on-Red (BoR) is one of the most extensively discussed pottery wares of ancient Cyprus. It is a distinctive class of pottery of the Cypro-Geometric (CG) and Cypro-Archaic (CA) periods, with black-painted geometric decoration on a usually shiny red or orange slipped surface. Due to its fine-quality fabric and decoration, BoR became one of the most popular ceramic products of Cyprus and was widely exported, especially during the 9th and 8th centuries BC. The Aegean holds a prominent position in the discussion of BoR, being an area where this pottery class was imported and, in certain cases, closely and copiously imitated. The typological uniformity of BoR vessels from Aegean contexts reflects specialised production and consumption patterns, during a period of increased contacts between Cyprus and Greece. Given the validity of BoR as a tool to examine questions that are pertinent to trade and cross-influence in the Early Iron Age (EIA) Mediterranean as a whole, the paper investigates the chronological range of BoR imports from the Aegean, with a focus on securely-dated contexts. The ultimate goal is to produce a reliable Aegean contribution to the discussion of BoR, with due consideration of questions related to its chronological range, extra-insular distribution and origins.

INTRODUCTION: A SHORT NOTE ON THE 11TH CENTURY BC

Early Iron Age Greece emerged from the debris of the Late Bronze Age (LBA) palatial system, after a long period of complex changes that affected social structures and economic activities.[1] Although it impelled major changes, the effect of the collapse was not equally felt in all parts of the Aegean. Evidence suggests that certain areas recovered from the post-palatial shock more rapidly than others. Such regional heterogeneity appears to have been closely linked to geographic factors: proximity to major intra-Mediterranean maritime routes facilitated external contacts and accelerated recovery from the post-palatial stagnation. Crete, Euboea and the Dodecanese are the three most commonly cited Aegean paradigms of such strategically-located entities. These areas feature prominently also in the discussion of BoR pottery from Greek contexts.

During the late 2nd and the beginning of the 1st millennium BC, maritime travel to and from the Aegean became less frequent and contacts with the eastern Mediterranean declined but were not entirely suspended. In the absence of the old palatial centres of economic authority, the Aegean became a large navigable space, open to small-scale entrepreneurial initiative. Even though the intricacy of ancient maritime contacts allows for multiple agents, archaeological evidence from Greece suggests that the Cypriots acted as primary instigators of the EIA

1 Lemos and Kotsonas 2020.

Aegean re-opening to the eastern Mediterranean, already in the 11th century BC. Pottery offers one of the most tangible bodies of evidence in support of this view, not only because Cypriot ceramics are easily distinguished, but also because they can be examined in tandem with the well-defined stylistic sequences of Aegean pottery.[2] We have a sound system of relative chronology for the latter, which, in spite of minor details in its periodisation, remains virtually unchallenged.[3] Therefore, stylistic sequences of Greek EIA pottery are well-defined and offer a reliable tool for the comparative study of non-Aegean ceramics. In addition, single and in most cases undisturbed burials at many Aegean sites provide sealed chronological units, within which imports can be securely dated and further examined.

The earliest post-Bronze Age evidence of contacts between the Aegean and the eastern Mediterranean is predominantly Cypriot and occurs sporadically in contexts of the second half of the 11th century BC. It includes bronze artefacts, such as a bronze bowl from a Sub-Mycenaean grave at Salamis,[4] a bronze amphoroid krater from a Sub-Minoan tholos "warrior grave" at Pantanassa Amariou in central Crete,[5] and a very fragmentary four-sided bronze stand from Sub-Minoan Tomb 201 at Knossos North Cemetery.[6] The latter, a Cypriot product of the mid-12th century BC at the latest, was manufactured about a hundred years earlier than its depositional context, although it is not possible to verify whether it reached Crete only some years before its funerary use, possibly with the male Cretan with whom it was buried, who had perhaps spent part of his life on Cyprus, or much earlier, in which case it may have been treasured as an antique.[7]

Cypriot and other Levantine pottery finds from 11th century BC Greek contexts are equally interesting, albeit elusive. The earliest post-Bronze Age pottery import from Cyprus, a Proto-White Painted (PWP) jug decorated with horizontal bands and triangles, was found in a rich Sub-Mycenaean female burial from Ayia Agathe, on the east coast of Rhodes. The vessel is securely dated towards the middle of the 11th century by the co-presence of a Late Helladic (LH) IIIC late belly-handled amphora.[8] Similar in date is a small dipper juglet with baggy baseless body from Tomb 46 of the Skoubris cemetery at Lefkandi.[9] It is dated to the second half of the 11th century by its local Euboean Early Protogeometric (EPG) context. Its porous yellow-orange fabric indicates a Syro-Palestinian origin. However, the type is well-attested as an import also in contemporary Cypriot contexts, for example in a CG I tomb at Kition,[10] suggesting that it could have reached Lefkandi from Cyprus.

THE 10TH CENTURY BC STAGE OF CYPRO-AEGEAN CONNECTIONS: TWO SELECTED CASES

The ceramic verification of contacts between the Aegean and Cyprus becomes clearer in the early 1st millennium BC. Crete, in particular, is home to a distinctive pottery class of small, trefoil-lipped juglets made in a gritty, red, micaceous fabric, usually decorated with incised lines on the neck and vertical grooves or ribs on the body. These juglets copy Cypriot Black Slip (BS) vessels, of which, however, no imported examples are currently known from Crete.[11] When inverted, the shape of their body recalls the capsule of *papaver somniferum* and thus may advertise its contents, possibly an opium liquid used as a pain-killer.[12]

2 For a more recent treatment see Kourou 2019; see also Sherratt 2020.
3 Kourou 2008, 305–7.
4 Kourou 2009, 362, fig. 1.
5 Kourou 2009, 364, fig. 2; 2016, 52–7. On the identification of the Pantanassa burial as a warrior grave see Kanta 2003, 180.
6 Antoniadis 2017, 76; Papasavvas 2017; Kotsonas 2018, esp. 14–22; Kourou 2019, 78.
7 Papasavvas 2017, 488. For a recent discussion of heirlooms, with a focus on Knossos, see Antoniadis 2020, 73–85
8 Zervaki 2011, figs. 7–8; Coulié and Filimonos-Tsopotou 2014, 190; see also Zervaki this volume.
9 Kourou 2008, 309–11; 2009, 365, fig. 4.
10 Georgiou 2003, pl. V:33.
11 Kotsonas 2013, 242–44; Kourou 2016, 61–4.
12 Merrillees 1962.

The earliest isolated Cretan example comes from the already mentioned tomb at Pantanassa in central-west Crete and is securely dated around 1000 BC.[13] The oldest example from the area of Knossos, featuring vertical grooves on the body, was found in Tomb VI at Fortetsa that contained nothing later than EPG and can thus be securely dated to the second half of the 10th century BC. Products of this "Creto-Cypriot"[14] class, however, become more plentiful in contexts of around 850–810 BC, when they are usually decorated with ribs. This relatively short duration is thought to reflect the work of approximately two generations of potters. The pattern of distribution suggests a workshop located in central Crete, perhaps in the area of Lyktos, as indicated also by macroscopic examination of the fabric.[15] Although it is impossible to ascertain whether or not these "Creto-Cypriot" jugs with standardised designs were made by Cypriot potters, they provide a strong connection to the pottery of Cyprus that may have originated in the LBA. Coldstream, who studied these juglets, argued for an affinity not only with Cypriot Iron Age BS I and II but also with Late Cypriot (LC) III Bucchero jugs with ribs on the body that in turn were derived from the handmade Base Ring (BR) juglets of LC I and II.[16] Affinities with LC IIIB (1100–1050 BC) Bucchero jugs, ornamented with ribs or grooves on the body, have been discussed anew in recent publications.[17] However, the time gap between the LC IIIB Bucchero and the Cretan juglets with ribbed or grooved decoration on the body, particularly those of the 9th century BC, is too wide to readily permit an uninterrupted ceramic tradition.[18]

Cypriot influence is also traceable on Rhodes and Cos during the late 10th and early 9th centuries BC. The Late Protogeometric (LPG) and Early Geometric (EG) pottery of these islands is clearly marked by the influence of Cypriot White Painted (WP) Ware, detectable in both the shapes and decorative patterns of local vessels.[19] Unlike the aforementioned class of Cretan juglets, in the case of the Dodecanese the source of Cypriot inspiration is verified by imports: two Cypriot WP II/III barrel juglets from Tomb 43 at Ialysos.[20] The two imported juglets have indisputable features of the pottery style of Salamis in Cyprus: namely, the barrel-shaped body with side nipples, the absence of a neck-ridge, the distinct buff to pinkish rather coarse fabric and the thick layer of cream slip on which the painted decoration is applied.[21] Notably, the same Salaminian connection has been identified in the case of a Bichrome III barrel juglet from the LPG Tomb 22 of the Palaia Perivolia cemetery at Lefkandi, which also dates to the second half of the 10th century BC.[22] Albeit thin, such evidence suggests a Salaminian dimension to these early first millennium BC contacts between the Aegean and Cyprus.[23]

DEFINING BLACK-ON-RED WARE: SOME AEGEAN REMARKS ON A CYPRIOT POTTERY CLASS

Although one could cite more examples of the ceramic visibility of the Cypro-Aegean interplay during the early 1st millennium BC, space restrictions force me to shift my discussion to the 9th century. This is a time when contacts between the Aegean and Cyprus had a new ceramic calling-card, BoR Ware. It is not my intention to discuss the origin and typological stages of Cypriot BoR, or to tackle the Cypro-Phoenician enigma, since I

13 Tegou 2001, 129 no. 6.
14 For the use and content of the term "Creto-Cypriot" see Kotsonas 2013, 242.
15 Kotsonas 2013, 243.
16 Coldstream 2000, esp. 466. Numerous products of Cypriot Base Ring II are known from Kommos: Kotsonas 2013, 243; Karageorghis and Kanta 2014, 227–29 nos. 47–55.
17 Karageorghis and Kanta 2014, 11–2.
18 Kourou 2016, 63–4.
19 Bourogiannis 2012b.
20 Bourogiannis 2012b, 69, figs. 1 and 2.
21 Georgiadou 2016, 98; 2017, 108; Kourou 2019, 80 no. 27.
22 Georgiadou 2016, 98–9; 2017, 108.
23 Georgiadou 2017, 107–8.

have done so on other occasions.[24] Suffice it to say that BoR has been studied in relation to various regions and pottery production centres in the eastern Mediterranean, representing different stylistic and chronological sequences, shape repertoires and decorative elements. All have one thing in common: the use of matt black paint over a usually lustrous red slipped surface.[25]

The technical characteristics of Cypriot BoR were thoroughly described by Gjerstad in 1948.[26] BoR is wheel-made, of finely-levigated reddish-brown, orange, sometimes light brown clay, with very small white or, more commonly, black inclusions. BoR vessels are thin-walled and well-fired, with their surface slipped all over. The slip is red, reddish-brown or orange and usually lustrous.[27] The carefully-executed ornaments are painted in matt black paint and usually consist of encircling lines or bands, concentric circles and intersecting lines.

These characteristics are detectable also in the case of BoR imports found in the Aegean and are easily distinguishable, not only from indigenous production but also from other imported wares, Phoenician pottery included. The distinct fabric and decoration of BoR from Greek sites make it possible to place them in their appropriate Cypriot cultural context, regardless of who were their carriers, a question that is impossible to answer in a fully satisfactory manner.

Our knowledge of BoR was greatly advanced by N. Schreiber's thorough study of the ware.[28] Based on an extensive examination of material from Cyprus and the Levant, Schreiber attempted to resolve problems of production and chronology. She ascribed a Cypriot origin to the technically accomplished version of BoR, although she considered that some of its technical and decorative features may have been inspired by earlier and coarser Levantine traditions. By assigning the first production of BoR on Cyprus to the CG II period,[29] Schreiber dissociated it from the Phoenician establishment at Kition, also because BoR pottery from Kition belongs to the middle and late phases of the ware, while there is little indication of significant stylistic cross-reference between Kitian BoR vessels and Phoenician pottery at the site.[30] This hypothesised CG II start of BoR on Cyprus, however, was convincingly challenged by a number of experts, who prefer Gjerstad's chronology, which assigns the beginning of BoR on Cyprus to CG III.[31] In any case, Cypriot manufacture of the technically accomplished BoR has never been seriously questioned and its production has been associated primarily with the area of Paphos.[32] BoR pottery from Levantine sites is also usually viewed as a Cypriot product,[33] although some studies insist on its Phoenician origins.[34] Therefore, I take BoR imports in EIA Greece to be Cypriot products and to display no Phoenician or "Cypro-Phoenician" features.[35] Accordingly, in what follows, the term BoR refers to the well-defined Cypriot ware, in particular to BoR I (III) and II (IV) of the CG III and CA I periods respectively. Following conventional chronology, CG III is dated between 900 and 750 BC, and CA I between 750 and 600 BC.[36]

The Cypriot origin of BoR is supported also by scientific analyses. Starting in 1978, a number of archaeometric studies have been carried out on BoR sherds from Cypriot and Levantine sites, including Tel Mevorakh,

24 Bourogiannis 2007, vol. 1, 32–42; 2012a.
25 Gürtekin-Demir 2011.
26 Gjerstad 1948, 68–73.
27 According to Gjerstad (1948, 68–9), the slip is lustrous or polished in BoR I (III), usually lustrous but never polished in BoR II (IV).
28 Schreiber 2003a.
29 Schreiber 2003a, 271–73; 2003b, 382–83. This conclusion was reached through a disputable methodology and by following an equally disputable high Levantine chronology.
30 Schreiber 2003b.
31 Gjerstad 1948, 422–24; Iacovou 2004; Georgiadou 2014, 383–84.
32 Georgiadou 2016, 99.
33 Gilboa 2015, 10; Georgiadou 2016, 100–1, 103; Kleiman et al. 2019.
34 Regev 2020, 114–17.
35 Bourogiannis 2012a, 199.
36 Kourou and Bourogiannis 2019, 85–7, 172–73.

Tyre and Al Mina.[37] Although the methods applied, the size of the sample and the contextual information were not always consistent, these studies indicated that BoR Ware originated in Cyprus, although a limited number of BoR products may have been produced in Syro-Palestine. The identification of different fabric groups indicates that Cypriot BoR was associated with different manufacturing centres on the island, with the area of Paphos possibly the most important. Recently, ten BoR sherds from well-stratified contexts in area Q at Megiddo were examined by Neutron Activation Analysis (NAA).[38] They fall into three distinct compositional groups, which probably represent different ceramic workshops. On the basis of connections with reference material from NAA data collections at the University of Bonn and the Lawrence Berkley National Laboratory, the samples from Megiddo must have been produced in at least two different workshops, probably located in Cyprus, perhaps in the areas of Palaepaphos and Marion.

In the case of the Aegean, scientific analyses of BoR pottery are rather minimal and focus on Cretan finds. Nine imported and six local imitations of BoR vessels from the North Cemetery of Knossos were examined by Atomic Absorption Spectrometry.[39] The results confirmed the Cypriot manufacture of all but one of the suspected Cypriot samples, and Knossian production of the rest of the suspected local imitations. Imported BoR from Knossos probably originated in the area of Palaepaphos. Further to this, a single BoR juglet from Kavousi on Crete has been studied scientifically, with the results indicating its production in the area of Amathus.[40] To these may be added the petrographic analysis of nine Cretan copies of Cypriot BoR from Eleutherna. These samples established that "Creto-Cypriot" pottery was produced at the site, although a number of pieces, assigned to as many as four fabric groups, were identified as not typically local (Eleuthernian), but from elsewhere on Crete.[41]

THE AEGEAN CONTRIBUTION TO THE BLACK-ON-RED NARRATIVE (FIG. 1)

The earliest BoR imports to Euboea

The earliest BoR import in Greece is a fragmentary juglet of BoR I (III) from Tomb 79 of the Toumba cemetery at Lefkandi.[42] The grave, described as a "warrior-trader tomb", is a rich shaft with the cremated bones placed in a bronze cauldron with a lid, together with the warrior's weapons and other finds.[43] The tomb was situated in the south extension of the cemetery where the burials are predominantly Sub-Protogeometric (SPG). The date of this special cremation is firmly fixed to SPG II, 875–850 BC, by its local pottery, and is confirmed also by the presence of two, nearly identical Attic EG II oinochoai.[44] Local SPG II pottery from Tomb 79 includes the parts of some six pendent semicircle plates with double handles, and two very fragmentary monumental kraters.[45] The ceramic reflection of the tomb's eastern connections is verified also by the presence of two Cypriot jugs of WP III and two Phoenician Bichrome jugs, the most complete of which has a ridged neck.[46] Although fragmentary, the BoR import most probably belongs to the type with globular body, wide disc base and funnel-shaped

37 For an overview of these scientific studies, see Schreiber 2003a, 234–39; Gilboa 2015, 486; Kleiman et al. 2019, 534.
38 Kleiman et al. 2019.
39 Liddy 1996, esp. 481–88.
40 Jones 2005; see also discussion in Kotsonas 2013, 251–52.
41 Kotsonas 2008, 66 nos. 447–49; Nodarou 2008.
42 Popham and Lemos 1996, pl. 79, 109, 125f, A13.
43 Popham and Lemos 1995. These included 25 iron arrowheads, two iron knives, one iron killed sword, a spearhead, two bronze earrings, a bronze grater, 12 stone weights, an antique North Syrian cylinder dated around 1800 B.C. and, of course, pottery vessels.
44 Popham and Lemos 1995, fig. 2.
45 Popham and Lemos 1995, 154–56; see also Kourou 2008, figs. 4–6.
46 Popham and Lemos 1996, pl. 79, A10, A11 and pl. 125e. For the assessment of the Cypriot White Painted jugs from Lefkandi Tomb 79 see also Georgiadou 2016, 112, fig. 7.2.

Fig. 1. Map of the main sites mentioned in the text. Black dots indicate Greek sites with BoR imports (© Giorgos Bourogiannis).

mouth. The entire neck is missing but it probably had a ridge.[47] The nature of the burial offerings from Tomb 79 at Lefkandi is somewhat reminiscent of similar practices attested in rich Cretan burials of the late 2nd and early 1st millennia BC, such as the aforementioned tomb at Pantanassa. This exceptional ability of certain high-status individuals to accumulate and destroy wealth, which seems closely connected to warfare and trade, was combined "with a taste for products deriving from Cyprus and the Syro-Palestinian coast".[48] Such imports were considered appropriate funerary gifts for some EIA Greek burials.

The earliest BoR imports to Cos

Situated in the southeast part of the Aegean Sea, close to the Halicarnassus Peninsula, Cos had an important position in maritime routes that was further enhanced by the island's fertility and accessible coastline. EIA Cos is a major source of Cypriot BoR imports found in single and undisturbed funerary contexts.[49] Most of these burials have been excavated in the area of Serraglio, within the limits of the island's present-day capital.[50] Serraglio is one of the few sites in the Aegean to provide a continuous sequence of burials from the Middle Protogeometric (MPG) (ca. 975–950 BC) to the Late Geometric (LG) period (ca. 720–710 BC).[51] Coldstream initially dated the earliest BoR imports from Cos "soon after 850 BC",[52] at the outset of the Middle Geometric (MG), although he later suggested a slightly later chronology, "well before 800 BC."[53]

47 Cf. Gjerstad 1948, fig. XXV.9 (3a).
48 Stampolidis and Kotsonas 2006, 339–40.
49 Bourogiannis 2000.
50 Morricone 1978.
51 For a recent overview of the Serraglio cemetery, Palmieri 2017.
52 Coldstream 1982, 268.
53 Coldstream 1998, 255.


2a.


2b.

Fig. 2a. Juglet from Serraglio Tomb 27 – Cos, inv. 753; Ht 6.8 cm (© Hellenic Ministry of Culture and Sports, Ephorate of Antiquities of Dodecanese).
Fig. 2b. Skyphos from Serraglio Tomb 27 – Cos, inv. 767, decorated with pendent semicircles; Ht 6.5 cm (© Hellenic Ministry of Culture and Sports, Ephorate of Antiquities of Dodecanese).

The first BoR imports from Cos occur in two burials in the Serraglio area: Pizzoli Tomb V and Sabrie Tomb A,[54] both dated to the MG. Pizzoli Tomb V contained three Cypriot BoR I juglets with spherical bodies, broad disc-shaped bases and ridged necks.[55] The tomb is dated around 800 BC, on the basis of a small pedestalled krater that follows Attic MG II prototypes.[56] The shape of the krater, which probably reached the Dodecanese via the Cyclades, is more common in advanced MG II Rhodian contexts. However, the Coan example from the Pizzoli tomb should be placed earlier in the Dodecanesian sequence of kraters, based on its heavy proportions and rather rough decorative style.

There is additional evidence from Cos to support the argument that the first BoR imports reached the island not much later than the middle of the 9th century BC. This is indicated by the introduction of the neck-ridge juglet, the shape par excellence of BoR imports in the Aegean, which marks the beginning of the MG style in the Dodecanese.[57] The earliest example occurs in Tomb 27 of the Serraglio cemetery at Cos (Fig. 2a). This Coan vessel clearly follows the shape of Cypriot BoR I juglets,[58] as evidenced by the heavy globular body, wide disc base, ridged neck and funnel-shaped mouth. Its decoration, consisting of encircling stripes on the body, is a simplified version of the equivalent decoration on Cypriot BoR juglets. Tomb 27 is firmly dated to the second half of the 9th century BC by the presence of an imported Euboean-Cycladic SPG IIIA skyphos with intersecting pendent semicircles (Fig. 2b).[59] The skyphos resembles Kearsley's types 4 and 5, dated to the last quarter of the 9th century.[60] The early placement of Tomb 27 within the Coan MG I sequence is confirmed by the presence of a small amphoriskos, a shape that is characteristic of EG Dodecanesian contexts but hardly survives into MG, except in a debased form in some early MG contexts on Cos.[61] Overall, Serraglio Tomb 27 contains vases that are decorated in a debased LPG or EG manner, with no clear evidence of the Atticising rectilinear motifs that reached the island soon after the middle of the 9th century.[62]

54 Morricone 1978, 303–9 (Pizzoli V) and 367–69 (Sabrie A).
55 Morricone 1978, 306, figs. 653–55.
56 Morricone 1978, 307, figs. 656–57; Coldstream 2008, 269–70.
57 Coldstream 2008, 268.
58 Morricone 1978, 205 no. 23, fig. 400.
59 Morricone 1978, 202–3 no. 16, fig. 394; Coldstream 2008, 267, who dates the tomb early in local MG I. The skyphos is discussed in Desborough 1952, 185–86; Kearsley 1989, 18.
60 Kearsley 1989, 96, 98, 128. Similar Euboean imports are of course known from the Levant, and they may have reached the area either directly from Euboea or via Cyprus. For a recent treatment, Mazar and Kourou 2019, esp. 384–87.
61 Morricone 1978, 198, fig. 379; Coldstream 2008, 269.
62 Coldstream 2008, 268. It is interesting that the new rectilinear ornaments of Attic MG origin were at once applied to the shoulder of the newly introduced neck-ridge juglets of Cypriot inspiration, even though their curved surface was unsuitable for ornaments of this sort.


3a.


3b.

Fig. 3a. Juglet from Sabrie Tomb A – Cos, inv. 843; Ht 9 cm (© Hellenic Ministry of Culture and Sports, Ephorate of Antiquities of Dodecanese).
Fig. 3b.Stamnos from Sabrie Tomb A – Cos, inv. 842; Ht 14 cm (© Hellenic Ministry of Culture and Sports, Ephorate of Antiquities of Dodecanese).

Sabrie Tomb A produced one Cypriot juglet of BoR I (Fig. 3a).[63] The tomb was found partly destroyed during the construction of the Coan sewage system in 1939, and not all its contents were retrieved. Nevertheless, the vases ascribed to it are homogeneous in terms of style. Among them is an austere, heavy-proportioned small stamnos that is almost EG in style (Fig 3b).[64] A date for Sabrie Tomb A is provided also by the ungainly lekythoi with trefoil mouths and broad flat bases, decorated with cross-hatched triangles.[65] The closest parallels are found among the vases of Tomb 27 at Serraglio[66] which is assigned to around 850/825 BC. A similar date seems reasonable for Sabrie Tomb A and its Cypriot BoR I import.

In conclusion, the comparative examination of Coan tombs Pizzoli V, Serraglio 27 and Sabrie A indicate that the first BoR imports reached the island at an early stage of local MG, no later than ca. 825 BC.

The earliest BoR imports to Rhodes

Rhodes is crucial to our understanding of BoR pottery in the Aegean, as it was one of the chief areas where this Cypriot ware was imported and closely imitated.[67] The island is marked by an almost complete gap in the archaeological record during the second half of the 9th century, which corresponds to MG I.[68] Whether this reflects a real break in the material record or is due to coincidence is hard to tell. The earliest burial from this period, Tomb 80 at Kamiros, belongs to a relatively late stage in the MG sequence and can be dated around 800 BC, at the transition from MG I to MG II.[69] This is also the time when the Cypriot-inspired juglet (or lekythos in Aegean parlance) with neck-ridge makes its first appearance on the island.

The first securely dated BoR from Rhodes comes from Tomb 3 of the Laghos cemetery at Ialysos, a rich primary cremation pit of the characteristic Dodecanesian type with four holes at the corners. The tomb contained a pair of two-handled neck-ridge juglets of BoR II (Fig. 4, first and second from the right).[70] Although the two vases were published as "Rhodio-Cypriot", suggesting local manufacture, their fabric and surface treatment, as well as the accuracy of their decoration are all indicative of Cypriot manufacture. The two Cypriot imports were found together with a locally-produced counterpart, a ridge-neck amphoriskos that imitates the shape and, to a certain degree, also the decoration of its Cypriot original from the same burial (Fig. 4, second

63 Morricone 1978, 367, fig. 797.
64 Morricone 1978, 367, fig. 798.
65 Morricone 1978, 368–69, figs. 799–803.
66 Morricone 1978, 199–201, figs. 381–88.
67 Bourogiannis 2009.
68 Coldstream 2008, 267; d'Agostino 2006, 60; Bossolino 2018, 55–6.
69 Coldstream 2008, 267, 274; Bourogiannis 2014, 109. See also Bossolino 2018, 26–7, who places the tomb entirely within MG II.
70 Grigoriadou et al. 2001, 393 nos. 3 and 4.

Fig. 4. Content of Laghos Tomb 3 – Ialysos/Rhodes; Ht from left to right 42.9 cm, 23.2 cm, 13.8 cm, 13 cm (© Hellenic Ministry of Culture and Sports, Ephorate of Antiquities of Dodecanese).

from left).[71] Laghos Tomb 3 is firmly dated to the transition between MG I and MG II, around 800 BC, by the presence of a MG I/II elongated neck-handled amphora, most probably of Attic origin (Fig. 4, first from left).[72] Together with two Attic MG cups *à chevrons* from Tomb 83 at Kamiros, it represents the earliest Attic import found on Rhodes.[73]

In Rhodes, therefore, the earliest BoR imports are of BoR II and date around 800 BC. They occur at Ialysos, the Rhodian site that has produced the most compelling evidence for contacts with the eastern Mediterranean, and were associated with Attic MG I/II pottery.

The earliest BoR imports to Crete

Crete is the the most prolific source of BoR in the Aegean and a major producer of close copies of the Cypriot class. Products of BoR reached Crete at some time during the second half of the 9th century BC, and the first local imitations appear by the end of that century. The latter are made in a fabric which is often harder than that of the Cypriot originals. Their surface colour is lighter and usually polished but carries no slip.[74] Problems arise, however, when one seeks archaeological confirmation for the date of the first Cretan BoR imports, not least because the 9th century BC chronology at Knossos, the principal source of the ware on the island, is inadequately documented.[75]

71 Grigoriadou et al. 2001, 392 no. 2.
72 Grigoriadou et al. 2001, 392 no. 1.
73 d'Agostino 2006, 61.
74 Kotsonas 2012, 166; 2013, 244; Karageorghis and Kanta 2014, 13.
75 For the chronological sequences at Knossos see Kotsonas 2008, 32; Antoniadis 2017, 25.

Chronological accuracy is hampered by Cretan burial customs during the first centuries of the 1st millennium BC. Knossian tombs in particular follow the Late Minoan tradition of single-chamber tombs approached by a *dromos*, a type of construction favoured by the soft white limestone (*κούσκουρας*) characteristic of the Knossos region. These chambers functioned as collective burial places used by successive generations, with the cremated remains placed in pithoi and the accompanying pottery and other offerings placed either inside the cremation urn or on the floor of the chamber. This arrangement does not always permit the secure association of burial offerings with their corresponding pithoi, unless found undisturbed inside individual cremation urns. When the floor space was filled up, a second burial tier was placed on top of the first. This often entailed moving some of the earlier burials in order to gain access to the back of the tomb. When the chamber became full, and sometimes at an earlier stage, new space was created by wholesale removal of burials and burial goods to the *dromos* or to a niche in the side of the *dromos*.[76] Although earlier burials seem to have been invariably treated with respect, the complex rearrangement of the inner space of the chamber often resulted in disturbance and affects the reconstruction of individual burials within the same tomb. This is the reason why secure associations are regrettably few.

Knossos has produced at least two securely dated burial contexts that contained early specimens of imported BoR. The first is the undisturbed chamber tomb TFT, one of the richest in the Fortetsa cemetery. It contained 15 burials, dated between Protogeometric B (PGB) and the Early Orientalising (EO) period, from the mid-9th to early 7th centuries BC.[77] A small juglet from Tomb TFT, of early BoR II, was found inside MG pithos 665/12 and can be securely dated to the early 8th century BC.[78] An impeccable local copy was found in the same tomb.[79]

The second securely dated Cypriot juglet of BoR I was found in Fortetsa Tomb VII,[80] an undisturbed chamber tomb dated between the MPG and the Orientalising period, corresponding to approximately the beginning of the 9th to the mid-7th centuries BC.[81] It had been placed inside a four-handled pithos that belongs late in the local MG sequence, and can thus be dated close to the middle of the 8th century BC.

The early 8th century date for the first BoR imports from Fortetsa is confirmed by the finds from the Knossos North Cemetery, where Cyprus is the second most frequent source of imported pottery after Attica.[82] Three juglets of BoR II were found in Tomb 285,[83] an undisturbed chamber tomb dated between the LPG and Late Orientalising (LO) periods (ca. 885/870–630/600 BC).[84] Their chronological context is sound, as they had been placed inside a robust cremation pithos of MG style, decorated with hatched meander, dotted lozenge chain and swastikas, dated to the early 8th century BC.[85] Less secure is the association of another BoR I juglet from the same tomb (T285.88).[86] It was found in a local PGB (850–810 BC) pyxis, of a mere 12 cm in height. The modest size of the pyxis makes it unsuitable for use as a container of other vessels. Since BoR juglets were normally placed in urns, it could be that both vessels had been removed from their original position to make space inside the chamber.[87] Furthermore, a BoR I juglet from Tomb 285 (T285.88) is one of the vessels analysed

76 For an extensive discussion of Knossian burial types and customs see Antoniadis 2017, 27–58.
77 Brock 1957, 60–1.
78 Brock 1957, 63, 190 no. 669, pl. 45; Hoffman 1997, 71–2 no. 79; Schreiber 2003a, 294; Karageorghis and Kanta 2014, 105 no. 1.
79 Brock 1957, 64 no. 694, pl. 45; Karageorghis and Kanta 2014, 106 no. 2.
80 Brock 1957, 75,190 no. 842; Hoffman 1997, 73 no. 84; Karageorghis and Kanta 2014, 123 no. 67.
81 Brock 1957, 72–3.
82 Coldstream and Catling 1996, 406.
83 Coldstream 1984, 129 nos. 20–2; Coldstream and Catling 1996, 245 nos. 45, 49, 52; Hoffman 1997, 74 nos. 86–7, and 78 no. 99; Karageorghis and Kanta 2014, 130–31 nos. 2–3 and 6.
84 Coldstream and Catling 1996, 239.
85 Coldstream 1984, 131; Coldstream and Catling 1996, 245 no. 39.
86 Coldstream 1984, 129 no. 30; Coldstream and Catling 1996, 247 no. 88; Karageorghis and Kanta 2014, 130 no. 1.
87 Coldstream 1984, 131.

by atomic absorption spectroscopy.[88] Although of a softer fabric with heavier walls and a thicker slip than the other samples, it proved to have a similar composition to other Cypriot imports, consistent with a provenance in southwestern Cyprus, probably in the area of Palaepaphos.

Knossos, therefore, provides few firm contexts for the second half of the 9th century that might confirm the presence of Cypriot BoR imports in central Crete in that period.[89] The missing link to those early BoR imports to Knossos is provided by another significant site in west central Crete, Eleutherna. Rock-cut chamber tomb A1K1 produced an extremely rich ceramic assemblage, dated from an advanced stage of Cretan LPG to to the Late Protoarchaic period, about 850 to 650 BC.[90]

The earliest evidence for Cypriot BoR imports to Eleutherna is provided by a heavy-proportioned trefoil-rimmed jug of BoR I or BoR I/II (A241).[91] It was found with local PGB pottery, indicating a date in the second half of the 9th century, ca. 850–810 BC. A second BoR import from the same site (A205b), also a trefoil-rimmed jug, is slightly more refined in proportions, and can be assigned to BoR I/II.[92] It was found inside a local MG necked jar (A205) decorated with a narrow hatched zigzag zone and small concentric circles,[93] suggesting a date in the first half of the 8th century BC. Kotsonas has argued that the early context of the two pieces from Eleutherna supports more recent views that raise the date of the first production of BoR in Cyprus to the late 10th instead of the mid-9th century BC.[94]

Published evidence from Crete, therefore, confirms that imports of Cypriot BoR reached the island in the second half of the 9th century.[95] This corresponds to PGB in the Cretan sequence, which is contemporary with MG I in other parts of the Aegean.

BoR imports in the rest of the Aegean

Crete, Rhodes and Cos have produced the vast majority of the BoR imports in Greece and are the only areas where this class of Cypriot pottery was systematically copied between the late 9th and 7th centuries BC. Albeit occasionally, BoR Ware reached as far as the northern Aegean, with two body fragments of BoR II juglets found at the settlement of Karabournaki at the tip of the Thermaic gulf.[96] They were stratigraphically associated with pottery dated between the late 8th and the mid-7th centuries BC, placing them among the latest BoR imports to Greece. Their presence at a coastal site in the northern Aegean, in a context that is early Archaic rather than LG, is probably the result of (east) Greek commercial activity.[97] One more, presumably Cypriot sherd from the same site was reported a few years ago.[98] Overall, the evidence for Cypriot wares in the northern Aegean during the 8th and 7th centuries BC is rather minimal. It includes a Phoenician-style Red Slip (RS) juglet with carinated shoulder dated to the first half of the 7th century, perhaps of Cypriot manufacture, and an isolated basket-handled amphora from Abdera, dated to the second half of the 7th century BC.[99] The route to the Thermaic

88 Coldstrean and Catling 1996, 407; Liddy 1996, 492, L106.

89 This is indicated also by the presence of BoR I (CG III) imports at the cemeteries of Knossos, e.g. Karageorghis and Kanta 2014, 123 nos. 67–8, 125 no. 1, 130 no. 1, 132 no. 1 etc.

90 Kotsonas 2008. The Cypriot element at Eleutherna is attested also by the typology of the metal armour from tomb A1K1, as was recently shown by Fadelli 2020.

91 Kotsonas 2008, 65–6, 284 no. 2581, 285, fig. 70, A241; Karageorghis and Kanta 2014, 36 no. 1 (where it is dated to CG III, although ascribed to BoR I–II).

92 Kotsonas 2008, 65–6, 284 no. 2581, 285, fig. 70, A205b; Karageorghis and Kanta 2014, 36 no. 2.

93 Kotsonas 2008, 106–7 and 108, fig. 18.

94 Kotsonas 2008, 284, following Schreiber 2003a, 252, table E.

95 Kotsonas 2012, 166.

96 For a recent discussion see Ilieva 2019, 78, with previous bibliography.

97 Tiverios 2017, 427–28.

98 Tiverios 2017, 422, fig. 5b. The sherd is difficult to identify based on the published photograph.

99 This subject was recently treated by Petya Ilieva (2019, esp. 79–80).

gulf probably passed by the island of Skyros, as a two-handled neck-ridge juglet of BoR II from a LG context indicates.[100]

The islands of the Cyclades were major stopovers along the Aegean maritime routes through which BoR pottery circulated. Evidence for BoR from the Cyclades, however, is sporadic and its chronological setting is in most cases poorly documented. Two Cypriot vessels of BoR II, a sack-shaped jug with pinched rim and a trefoil-rimmed globular jug, were found in the Purification Pit (*fosse de purification*) at Rheneia, where they had been transferred after the Athenian purification of Delos in 426/425 BC.[101] Consequently, their original funerary context cannot be reconstructed. Similarly, the mouth of a BoR II juglet was found in the votive deposit of the sanctuary of Aphrodite on Thera.[102] Although unstratified, it must belong to the earliest LG phase of the sanctuary.

Naxos is the main exception to this picture. Excavated in the early 1960s, the cemetery of Tsikalario in the area of Tragaia is the only systematically explored Iron Age cemetery in inland Naxos. The necropolis comprised 25 burial enclosures, mostly of circular type,[103] 17 of which were excavated. A significant number of these structures can be dated to the MG II period.[104] One of the burials excavated was Grave 11, an intact cist comprising three distinct groups (Group I–III). It was found close to the rectangular funerary structure of the necropolis.[105] Although it is uncertain if the interior of the grave represents a single burial, the ceramic assemblage is relatively homogeneous in style, whereas the small size of the funerary offerings indicates that this was an infant burial.[106] Group I was the central and most prolific component of the larger context and the one that interests us the most, as it contained one two-handled BoR II neck-ridge juglet decorated with encircling bands and concentric circles (Fig. 5).[107] In spite of the poor condition of its surface, it has been identified as possibly Cypriot, on account of its fine, well-levigated, light red clay, that clearly deviates from Naxian fabrics.[108]

The date of cist grave 11 is firmly fixed towards the end of MG II or the transition to LG I, which may indicate a date shortly after 750 BC. The date of group I is determined by a small jug with breast-like protrusions that fits better in the MG, a high-handled kantharos with bird-shaped terminals that can be no earlier than MG II, an oinochoe with banded decoration of a type that is thought to begin in MG II but becomes more common in LG I, and an amphoriskos-pyxis that is probably associated with "Argive monochrome" Ware, assigned to the LG period.[109]

If indeed a Cypriot import, then the BoR II two-handled juglet from this inland site on Naxos, dated around the middle of the 8th century BC, marks the beginning of a modest yet securely identified group of pottery found on Naxos, primarily from the sanctuary at Yria, which is characterised by features of Cypriot origin and dates to the late 8th and early 7th centuries BC.[110]

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100 Bourogiannis 2007, vol. 2, 330.

101 Dugas and Rhomaios 1934, 109 nos. 1 and 2, pl. L, B; Bourogiannis 2007, vol. 2, 337, ΔΗ1 and ΔΗ2.

102 Bourogiannis 2007, vol. 2, 333, ΘΗ1.

103 The Naxians still refer to the site as *στ'αλωνάκια* (the threshing floors) as an allusion to their shape.

104 Charalambidou 2017; 2018, esp. 165–87.

105 Charalambidou 2017, 380, figs. 5a–b. Group I was the central part of cist tomb 11, Group II was an assemblage of vessels found outside/north of the main tomb, and probably related to funerary rites, whereas Group III was a pithoid vessel inside a slab lined *theke* with a cover slab, situated south of the main tomb (Group I).

106 Charalambidou 2018, 165–67. This is also reflected in the presence in the same burial of a bird vessel and bird figurines, that are appropriate offerings for a juvenile (Charalambidou 2018, figs. 34, 38–9, 49).

107 Charalambidou 2017, 381, fig. 6; 2018, 171, fig. 33.

108 Charalambidou 2018, 174.

109 Charalambidou 2018, 168 no. 33. The "Argive monochrome" ware has koine connotations and may have been produced by various Greek workshops (I thank Dr Charalambidou for this clarification). Pottery from the adjacent Group II was also MG II to LG I in date, but included a flat Naxian Atticising pyxis of MG I, that has been dated around 820 BC. Such an earlier date poses the question of whether this vessel can be considered an heirloom: Charalambidou 2018, 168 no. 34.

110 See discussion in Charalambidou 2017, 387; Simantoni-Bournia 2011.

Fig. 5. Two-handled juglet from Naxos, inv. 3877: Ht 12 cm (© Xenia Charalambidou & Tsikalario Archaeological Project).

IN SEARCH OF CONTEXTUAL INFORMATION FOR THE TERMINATION OF BLACK-ON-RED IMPORTS IN GREECE

The 8th century marks the peak of BoR pottery in the Aegean. At the same time, the pottery of Cos, Rhodes and Crete is characterised by the production in local clay of close copies of Cypriot BoR, as well as by freer indigenous adaptations of the shape and decoration of the corresponding Cypriot class.[111] Although this phenomenon occurs already in the 9th century, it becomes more systematic from the middle of the 8th century BC and outlasts the attested presence of imports.

Defining the end of BoR imports in the Aegean is an equally, if not more complex task. This is not only because local pottery influenced by Cypriot BoR soon outnumbered imported vessels, but also because of the dearth of well-dated contexts. In the case of Cos, we are facing an additional difficulty: the unsatisfactory knowledge of the island's final LG style, due to the lack of (published) evidence dated after ca. 710 BC. For these reasons, the chronological definition of the latest BoR imports needs to consider not only the presence but also the absence of such imports from securely dated contexts.

8th century evidence from Euboea

Eretria is the main source of information for BoR pottery in 8th century BC Euboea. The considerable growth of the city during this period is echoed by its contribution to the colonisation of the north Aegean, Sicily and southern Italy, and reflected also in the wealth of its burial contexts.[112]

A rich cremation (Pyre 1) excavated in the ancient agora, not far from the sanctuary of Apollo Daphnephoros, has produced one two-handled neck-ridge juglet of BoR II.[113] Funerary offerings included a large sympotic set comprising no less than four kraters, 16 skyphoi, one oinochoe and one hydria; also pyxides, a

111 Bourogiannis 2000, esp. 10–4; 2009, 116–20; 2017b; Kotsonas 2013, 244–46.
112 Lemos 2020, 804–6.
113 Kaltsas et al. 2010, 354 no. 323.

faience scarab, a terracotta equine statuette and golden diadems. The pyre is firmly dated to the transition between MG II and LG I, around 760 BC, that coincides with the Atticising phase of Euboean pottery.[114] Its date is confirmed by the lavishly-decorated pedestalled "krater of the black horses" of a style which recalls the initial stages of the Cesnola Painter and can therefore be ascribed to the outset of LG I,[115] a cylindrical pyxis decorated with hatched battlements that stands close to Attic MG II prototypes although its somewhat shallower body connects it to Attic LG Ia pyxides,[116] and skyphoi with broad ring bases and offset vertical lips, decorated with hatched meander hooks. Their shape derives from Attic MG II prototypes but survives into the LG Ia pottery of Attica, Euboea and the Cyclades.[117]

Admittedly, it is unlikely that Euboea had stopped receiving BoR products from such an early stage, especially given that BoR remained popular in the Aegean throughout the LG. The MG II/LG I date of the Eretria cremation recalls the previously discussed funerary context from Naxos, which also contained a possibly Cypriot two-handled neck-ridge juglet of BoR II. This typological and chronological affinity between the two islands may reflect shared distribution patterns for Cypriot BoR within the Euboean-Cycladic area during the 8th century BC, for which an Euboean participation should not be excluded.[118]

In search of the latest BoR imports to Cos

Assigning a fixed date to the last BoR imports from Cos is difficult because our knowledge of the Coan LG style is incomplete, since the evidence stops almost halfway through the equivalent Rhodian sequence. The latter is marked by the consistent presence of Early Protocorinthian (EPC) kotylai –and their locally produced imitations– as well as the globular aryballos. Both shapes are entirely missing from the hitherto published Coan LG repertoire.[119] To associate their absence with the conservatism and isolation of Coan potters seems unwise, given the copious flow of Cypriot elements to the island during the same period. It therefore appears that the final stages of the LG tradition on Cos are yet to be discovered, even though recent –as yet unpublished– excavations will most likely change our view.

Based on available evidence, the last BoR imports to Cos occur in Fadil Tomb III. Together with Tomb San Pantaleo I, this inhumation of a juvenile is the latest Geometric burial excavated by the Italian mission on Cos in the 1930s and 1940s. It is dated to the penultimate decade of the 8th century, around 720/710 BC.[120] Fadil Tomb III contained at least one Cypriot neck-ridge juglet of BoR II, with the upper half of its neck and the rim missing.[121] The late 8th century chronology of Fadil Tomb III is confirmed by stylistic assessment of its contents,

114 Psalti 2010. For the funerary offerings of the cremations see Katsas et al. 2010, 354–57.

115 The central decorative panel on the two sides of the krater includes a large metope subdivided in two uneven sections. On one side two standing human figures, a male and a female, are depicted in an erotic composition, possibly a *ἱερογαμία* (sacral wedding). The subject is extremely rare in 8th century Aegean iconography, adding considerable dynamism to the krater's decoration (still, the scene is squeezed into a small panel, reflecting the painter's hesitation). On the opposite side of the krater, two mating horses are portrayed in the larger of the two metopes. The representation of horses became the most popular subject of Euboean pottery in the second half of the 8th century BC, and echoes the increasing power and wealth of the local aristocracy. The eminent role of *ἱπποτροφία* (horse breeding) is also reflected on a 12 cm high figurine found in the same burial, a clear allusion to the rites of the local aristocracy. The horse figurine was not free standing, but must have been initially joined to the lid of the pyxis from the same context, following the Attic MG II/ LG I pottery trend.

116 Coldstream 2008, pl. 9.

117 Coldstream 2008, pls. 5e, 9a, 38a.

118 This is further indicated by the two-handled BoR II juglet from a LG context on Skyros and the BoR fragments from Karabournaki in the Thermaic Gulf. See discussion above.

119 Coldstream 2008, 286, 288; see also Bossolino 2018, 57–8.

120 Morricone 1978, 30, 50; Coldstream 2003, 252.

121 Morricone 1978, 341 no. 21 and 342, fig. 742. Two more fragmentary juglets that possibly belong to BoR II are reported in the same publication (Morricone 1978, 342, figs. 740–41). Their surface is very eroded, hence their identification is uncertain. It was not possible to locate them during a visit to the Archaeological Museum of Cos (Bourogiannis 2007, vol. 2, 74, KΩγ 133–34).

in which neck-ridge lekythoi prevail. Several are decorated with the so-called tree ornament, one of the most common patterns of East Greek LG style.[122] In its simplest form, a double T-shaped hook emerges from the base or the apex of a hatched triangle. The late Coan examples of Tomb III feature a more complex variant, where the two main pairs of hooks are combined with two rounded versions on either side of the triangle. As a result, the schematic tree-ornament assumes an awkward, almost anthropomorphic shape, where four hooked limbs emerge from the base of the triangle, while the T-hook springing out of the apex does duty for the head. An even stronger indication of Fadil Tomb III's date close to the end of the 8th century BC is provided by the use of the stylised palm tree ornament and the cable pattern.[123] Both are of Levantine origin and were introduced to the pottery of the Dodecanese sometime in the final 8th century BC, probably through ivory prototypes.[124] These novelties may have reached Cos via Rhodes, where their use was more extensive.[125] Notably, Fadil Tomb III also included some Coan imitations of BoR, with their characteristic dark red slip and fugitive painted decoration.[126] On Cos, therefore, BoR imports seem to cease by around 710 BC.

In search of the latest BoR imports to Rhodes

Tomb 51(393) of the Tsambikos cemetery at Ialysos has produced the latest securely dated BoR imports to Rhodes. This prolific primary cremation contained three Cypriot imports: two globular trefoil-lipped jugs and one two-handled neck-ridge juglet, all of BoR II.[127] Tomb 51 falls entirely within the Rhodian LG tradition. Nevertheless, its precise chronological definition is rather complex, leading to slightly different views on its date. One of the most significant vessels is a large, lavishly decorated lekythos with globular body, funnel-shaped mouth and multiple ridges on the tall neck which echo metallic prototypes.[128] In his authoritative publication of the Exochi cemetery on Rhodes, Johansen dated the multiple-ridge lekythos from Tomb 51 to the final 8th century BC,[129] based on comparisons with two similar vases from Tomb X at Exochi, which he dated around 700 BC.[130] However, when compared to the multiple-ridge lekythos from Tsambikos Tomb 51, the two Exochi lekythoi are of a degenerate Geometric style and show a lack of discipline in the arrangement of their painted decoration, indicating that they are later than their Ialysian counterpart. Coldstream also dated Tsambikos Tomb 51 earlier than Exochi Tomb X, assigning the former to a medium stage of the Rhodian LG sequence.[131] Notably, the extravagant tree ornament on the central metope of the lekythos from Tomb 51 stands close to the same ornament on the neck-ridge lekythoi of Fadil Tomb III on Cos, indicating a date close to 720/710 BC.

In a recent discussion of the chronology of Tsambikos Tomb 51, D'Acunto dates the burial considerably earlier, around 750–735 BC, based on the presence of a shallow LG I Euboean skyphos with vertical rim, decorated with a combination of vertical strokes, dots and X-patterns.[132] Euboean LG I skyphoi were dated to ca. 740–725 BC by Coldstream, which is confirmed also by their similarities in terms of the shape and decoration with Attic LG Ib skyphoi decorated with quatrefoils and dots.[133] Although Tsambikos Tomb 51 is not among the latest LG Rhodian contexts, there is an additional element that could indicate a slightly later date for the burial. This is the presence of an ovoid oinochoe with a narrow cylindrical neck, coated in dark red slip and decorated

122 Morricone 1978, 335, fig. 722, 336, fig. 724, 345, fig. 749.
123 Morricone 1978, 337, fig. 726, 343, figs. 743–44.
124 Bourogiannis 2013, 168.
125 Coldstream 2008, 288.
126 Morricone 1978, 335, fig. 902, 341, fig. 739.
127 Jacopi 1929, 87 nos. 3–4, 6, fig. 75; Bourogiannis 2007, vol. 2, 122, IAγ28–9, pl. 87α–β and 124, IAγ31, pl. 88α.
128 Jacopi 1929, 85 no. 1, fig. 76; Bourogiannis 2007, vol. 3, pl. 88β–γ; D'Acunto 2019, 277, fig. 16.
129 Johansen 1958, 138.
130 Johansen 1958, 62–5, figs. 126–27, 129–32.
131 Coldstream 2008, 274, 282.
132 D'Acunto 2019, 276, fig. 15; 2020, 2:695.
133 Coldstream 2003, 192; cf. Coldstream 2008, pl. 10, b, e, f.

with small sets of concentric circles and encircling lines.[134] This oinochoe marks the starting point of a small but consistent group of Dodecanesian (probably Rhodian) LG jugs known from Dodecanesian, Cretan and Cycladic contexts, that freely mix morphological and decorative elements of Cypriot and Phoenician derivation.[135] Probably the work of one or two generations of potters, this short-lived phenomenon is dated to the last decades of the 8th and the early 7th century BC.

This indicates, in my view, that Tsambikos Tomb 51(393) can be dated towards the closure of Rhodian LG I and not much earlier than 720 BC.[136] Whether or not this chronological terminus also defines the end of BoR imports to Rhodes is hard to establish with certainty. It is more than likely, however, that they did not continue much later than this, as also suggested by the complete absence of BoR imports from the funerary contexts of Exochi,[137] the most consistent set of archaeological evidence we have for the final stage of the LG (and Sub-Geometric/SG) on Rhodes.

In search of the latest BoR imports to Crete

The area of Knossos is the main source of information for the latest BoR imports to Crete. Situated north of Knossos, chamber tomb A at Atsalenio contained 17 cremation burials in pithoi, ranging in time between the LPG and the LO period.[138] The tomb produced two Cypriot imports of BoR II: one trefoil-lipped jug with spherical body and one two-handled neck-ridge juglet.[139] The dating of the two-handled juglet in particular is secured by its context. It had been placed inside a large ovoid four-handled pithos that served as a cremation urn.[140] The pithos is decorated with hatched battlement, dotted lozenge chain, quadruple zigzag, bands and lines. Davaras placed the Atsalenio urn late in the LG sequence, implying a date close to the final 8th century BC.[141] The shape, fabric and to some extent also the decoration of the Atsalenio cremation urn are almost identical to that of pithos 700 from Tomb TFT at Fortetsa,[142] most likely a product of the same Knossian workshop. Both vessels are late in the sequence of LG Knossian pithoi and were dated around 720/710 BC by Coldstream.[143] The chief tool for the chronological assessment of Cretan LG and EO style is provided by associations with Corinthian pottery. The series of Cretan LG pithoi in particular ended at some time during EPC, whereas EO began not later than the end of EPC, around 700–690 BC.[144]

A similar chronological framework, towards the end of the 8th century BC, is indicated for Fortetsa Grave P2, a chamber tomb dated from the LG to the EO period.[145] It produced one of the last securely-dated BoR imports in Crete: a small trefoil-lipped juglet of BoR II, with ovoid body and short concave neck, decorated with three sets of concentric bands on the body.[146] This small and rather ungainly vessel, of a type that is not common among Cypriot BoR imports, had been placed inside a four-handled pithos (pithos 875), decorated with concentric circles, lozenges, guilloche panels on the shoulder and bands on the body.[147] Brock dated pithos

134 Jacopi 1929, 87 no. 5, fig. 75; Bourogiannis 2009, 130, fig. 7; 2017b, 64 no. 1.
135 The group is discussed in Bourogiannis 2017a.
136 For a recent chronological table, D'Acunto 2019, 279, fig. 18.
137 Johansen 1958.
138 Davaras 1968, 143–44; Antoniadis 2017, 89.
139 For the trefoil-lipped jug, Davaras 1968, 138, pl. 41c, A45; Coldstream 1984, 128 no. 40; Hoffman 1997, 80 no. 105; Karageorghis and Kanta 2014, 199 no. 1; Antoniadis 2017, 89. For the two-handled juglet, Davaras 1968, 139, pl. 63, A56; Karageorghis and Kanta 2014, 199 no. 2; Hoffman 1997, 78 no. 98; Antoniadis 2017, 89.
140 Davaras 1968, 134, pls. 32 and 35a, A2.
141 Davaras 1968, 134, 143, A2.
142 Brock 1957, 60.
143 Coldstream 2008, 245, Stage B.
144 Coldstream 2008, 254–55.
145 Brock 1957, 77; Antoniadis 2017, 87.
146 Brock 1957, 79:876, pl. 58; Hoffman 1997, 81–2 no. 110, pls. 95–6; Karageorghis and Kanta 2014, 115 no. 39.
147 Brock 1957, pl. 55, P2, 875.

875 to the Cretan EO, which corresponds to the first decades of the 7th century BC. Coldstream, however, suggested a slightly earlier chronology, around 710/700 BC, to the transition between the LG and EO styles, to which most pithoi from Tomb P2 were assigned.[148] He noted that truly Orientalising decoration first came to Knossos not with the appearance of curvilinear motifs, which had long been present in the Cretan Geometric repertoire, but in the form of an organically portrayed plant ornament, most commonly a "tree of life" or lotus flower. This development is not attested on pithos 875, which contained the Cypriot BoR II import, indicating a date around 710/700 BC.

In conclusion, BoR imports to Crete ceased or diminished after the end of the 8th/beginning of the 7th century BC, although local imitations of the Cypriot ware survived to the end of the 7th century.[149]

CONCLUSIONS

This examination has shed light on the occurrence and chronology of BoR Ware in the Aegean and contributed to a broader discussion on the origin of BoR, its distribution, chronological framework and contextualisation. My analysis was built upon securely dated archaeological contexts, primarily single undisturbed burials, or on multiple burials with sound contextual data for the associated BoR imports. Based on this analysis, the following concluding comments can be made:

1. BoR vessels were neither the first nor the only Cypriot vases to reach the EIA Aegean. They were, however, the most popular and most widely distributed Cypriot ceramic products in Aegean contexts of the early 1st millennium BC, and had the greatest influence on the ceramic production of certain Aegean areas, as evidenced by the many imitations from Crete, Rhodes and Cos. As such, Cypriot BoR bears witness to an intensification of contacts between Greece and Cyprus between the 9th and early 7th centuries BC. The distribution of Cypriot BoR in Greece, which is limited to coastal sites or sites within easy access from the coast, attests to the maritime circulation of BoR products in the region (Fig. 1).

2. All Cypriot BoR pottery in the Aegean belongs to BoR I (III) and II (IV), which correspond respectively to the CG III and CA I periods. They are easily distinguished in terms of fabric, shape and decoration from other imported wares originating in the eastern Mediterranean, as well as from local ceramic production. This distinction also applies to Aegean copies or looser imitations of Cypriot BoR produced on Crete, Rhodes and Cos from the late 9th to the middle of the 7th centuries BC. Their fabric, surface treatment and very often their decoration are easily discernible from those of their Cypriot models.

3. The shape range of Cypriot BoR imports from Greek contexts is astonishingly limited. Only small juglets, most commonly with a pronounced neck-ridge and funnel-shaped mouth, and a few trefoil-lipped jugs/oinochoai with globular body are represented. Other shapes are extremely rare, as in the case of a wide-necked BoR II amphoriskos from Tomb 219 of the Knossos North Cemetery.[150] The popularity of small BoR juglets (and their locally produced Aegean imitations) is undoubtedly related to the predominantly funerary usage of BoR pottery in the Aegean, with the content of juglets used for anointing the dead body. The close association of Cypriot BoR juglets with Greek burial customs of the Geometric period is further reflected in the almost exclusively funerary provenance of Cypriot BoR in the Aegean, although one should bear in mind the limited number of well-preserved EIA Greek settlement contexts.[151] Cypriot BoR jugs on the other hand, usually found in rich Greek burials, may have been used for wine consumption by local elites. This Aegean predilection for

148 Coldstream 2008, 245–46.
149 Kotsonas 2012, 166.
150 Coldstream 1984, 125 no. 7 (219.22).
151 See also Dickinson 2020 for a recent overview of the archaeological evidence for the time-period in question.

closed and slow-pouring BoR vessels is in sharp contrast to the occurrence of Cypriot BoR pottery in the Levant, where open shapes, mostly bowls, were also widely circulated, with many examples found in domestic contexts.[152]

4. Limited scientific analyses of BoR imports from Greek sites appear to confirm their Cypriot provenance and to associate them primarily with the area of Palaepaphos. The latter seems to have been the principal centre of production for BoR pottery on Cyprus, especially during CG III and CA I, with which BoR I and II are associated. Small neck-ridge juglets in particular were among the most common BoR products of the Paphian pottery workshops and, as recently argued, it was mainly from the area of Palaepaphos that they were distributed across the island and overseas, both to the Levant and to the West. First-hand macroscopic examination by this author of the vast majority of BoR imports in the Aegean confirms that the fabric of the Aegean imports is in most cases comparable to that of BoR products from the area of Palaepaphos. The possibility of a primarily Paphian provenance for BoR imports from EIA Greek contexts is further supported by their typology, since all, without exception, find close parallels among BoR pottery from the EIA tombs of Palaepaphos.[153] These preliminary observations suggest that Palaepaphos probably was the chief supplier of BoR pottery to the Aegean during the 9th and 8th centuries BC, as it was also for the Levant.[154] The Cypro-Syllabic graffito on the SOS amphora from Mende in Chalcidice, that probably belongs to the old Paphian syllabary, adds further support to the Paphian dimension of the Cypro-Aegean interplay during the 8th century BC.[155]

5. Regarding absolute chronology, the first BoR import to Greece was found at Lefkandi and dates to 875/850 BC, which corresponds to Euboean SPG II and Attic EG II. This early chronological setting, firmly fixed by the vessel's funerary context, seems to suggest that BoR pottery was produced on Cyprus already at the outset of CG III, traditionally dated between 900 and 750 BC, rather than at a later stage of the period. This is indicated also by a recent study of BoR from Megiddo in Israel, where the first BoR imports from Cyprus are securely dated around 900 BC by context,[156] and are therefore contemporary with the beginning of CG III.

In Greece, the BoR vessel from Lefkandi remains chronologically isolated and currently unparalleled in other areas of the Aegean. BoR imports became better established at a more advanced stage of the 9th century BC. Crete and Cos produced their first Cypriot BoR vessels around the last quarter of the 9th century BC, which corresponds to Attic MG I, Euboean SPG IIIA and Cretan PGB. In the case of Rhodes, the first BoR dates slightly later, around 800 BC, which is contemporary with the transition between Attic MG I and II. By the first half of the 8th century, which largely corresponds to MG II or the transition between MG II and LG Ia of the Attic sequence, BoR imports are securely attested also in other parts of the Aegean, as confirmed by the examples from Eretria and Naxos. Their inflow continued uninterrupted throughout the 8th century BC, and was supplemented by the production of local copies on Crete, Rhodes and Cos.

To establish when BoR imports to Greece ceased is more difficult, partly because sound archaeological contexts are less numerous. This matter is hampered also by our unsatisfactory knowledge of the latest LG style on Cos, which remains one of the main sources of Cypriot BoR in the LG period. Consequently, it seems more appropriate to identify when BoR imports to the Aegean diminished or became rare or occasional. The comparative examination of securely dated BoR imports from Crete, Rhodes and Cos appears to fix this transitional

152 E.g. Gilboa 2015, 487, pl. 4.2.4; Kleiman et al. 2019, figs. 3 and 4 nos. 5 and 10. Levantine taste for Cypriot open vessels predates the appearance of BoR imports in that area as it occurs already in the 10th century BC (Ir1b and Ir1/2) and has been understood as reflecting "personal taste" rather than a strictly commercial phenomenon; see Gilboa et al. 2015, 93–4.

153 Georgiadou 2016, 99–100. In truth, the fairly limited archaeometric analyses on Cypriot BoR pottery conducted thus far can only tentatively indicate Palaepaphos as the chief production centre on the island. However, the typological examination of BoR from Cyprus and the Levant also seems to argue for a primarily Paphian origin.

154 Georgiadou 2016, 100, 103; Kleiman et al. 2019, 540.

155 See Halczuk in this volume.

156 Kleiman et al. 2019.

point towards the end of the 8th century, around 720–700 BC, after which imported BoR seems to cease or reduce dramatically. In the case of Rhodes and Crete, where the end of the LG is better understood, BoR imports seem to stop by the end of the LG and the transition to the EO, dated around 700/690 BC. Noteworthy, also, is the absence of Cypriot BoR from Rhodian EO contexts,[157] largely defined by the presence of Protocorinthian (PC) pottery. After this, the presence of BoR imports in Greece becomes negligible, as in the case of the two BoR II fragments from Karabournaki, dated between the end of the 8th and first half of the 7th century BC. Local imitations influenced by the fabric, shape and decoration of Cypriot BoR survived well into the 7th century BC. However, they form a distinct ceramic phenomenon that is not the focus of this paper.[158]

In conclusion, Cypriot BoR Ware serves as a significant ceramic reflection of contacts between Greece and Cyprus, from the early 9th to the end of the 8th/beginning of the 7th centuries BC.

SOME FOOD FOR FURTHER THOUGHT

A final note is relevant to the current system of typo-chronological assessment of Cypriot BoR. The presence of BoR II imports of CA I, traditionally dated between 750 and 600 BC, in Greek contexts of the early 8th century BC indicates that the appearance of BoR II (IV) should be raised considerably earlier than the middle of the 8th century BC. At a minimum, this suggests that Gjerstad's allocation of types III of CG III and IV of CA I is in need of further revision. The discovery at Eleutherna of a Cypriot BoR oinochoe which belongs to a transitional stage between BoR I (III) and II (IV), together with Cretan PGB (ca. 850–810 BC) pottery, may also point in this direction, as it implies that the production of Cypriot vessels of type IV had begun by the late 9th rather than by the middle of the 8th century BC. Alternatively, as suggested recently,[159] BoR types I (III) and II (IV) may reflect different Cypriot workshops operating and distributing their products simultaneously, rather than distinct chronological and typological phases. The evidence from the Aegean cannot, at this stage, help investigate the latter but it does indicate the need to reconsider how and why the typological and chronological division between BoR I and II was established.

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157 Sergio 2018.

158 Kotsonas 2012, 166.

159 Kleiman et al. 2019, 547, 550; see also Nuñez this volume.

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The "Spaghetti Workshop" of Rhodes

Cypriot inspirations, Rhodian alterations

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ABSTRACT

One of the most recognised ceramic products of 7th century BC Rhodes, spaghetti aryballoi, were first identified during Italian excavations at Ialysos and Kamiros and by Knud Friis Johansen and have since received attention from a range of scholars. However, so far little attention has been paid to understanding their production in the context of the entire output of the "Spaghetti workshop", which produced a far wider range of goods than simply unguent vessels. This paper explores the whole repertoire of this workshop, charting its full development – from its Cypriot inspirations to Rhodian alterations and diversification.

Spaghetti aryballoi are one of the most recognised ceramic products of 7th century BC Rhodes. They were first identified by Knud Friis Johansen in his publication of the Exochi cemetery, near modern-day Lardos, and have since received attention from Coldstream, D'Acunto, Sergio and especially Bourogiannis.[1] Bourogiannis has explored their connection to Cypriot White Painted (WP) IV wares as an example of continuing Cypriot influence on Rhodian pottery after the Geometric period, despite the drop in Cypriot imports to the island. Given that they have been found in large quantities in graves at Exochi, Kamiros, and particularly at Ialysos, it is understandable that the focus of scholarship has tended towards these vessels. However, so far little attention has been paid to understanding their production in the context of the entire output of the "Spaghetti workshop", which produced a far wider range of goods than simply unguent vessels. This paper will explore the whole repertoire of this workshop, charting its development and distribution from the late 8th to the late 7th century BC. In doing so, it will demonstrate how the workshop modelled its production to take advantage of overseas trade while also catering to a domestic market at home.

Spaghetti aryballoi are named after the typically Cypriot combination of small concentric circles and vertical wavy lines, sometimes united in a single "spaghetti-like" ornament, that decorate their main body. Their fabric is pale greyish in colour, smooth to the touch, and relatively fine with little mica. There are three phases in the morphological development of spaghetti aryballoi on Rhodes. The first closely imitates its Cypriot prototypes. It is globular in shape and retains the characteristic neck-ridge of WP IV vessels.[2] A good example of this phase is provided by Exochi grave K, which includes a juglet, probably of WP IV, and two spaghetti aryballoi, one with

1 Johansen 1958, 155–56; Coldstream 2008, 276; D'Acunto 2012, 200–6; Bourogiannis 2013, 158; Sergio 2018.

2 On the development of this shape see Schreiber 2003, 286–305 and Bourogiannis 2009, 120. For Cypriot WP IV vessels, see Gjerstad 1948, fig. XXVIII.18; Jacopi 1929, 87, fig. 78; RHODES 11649; Laurenzi 1936, 162 no. 6, fig. 149.

a neck-ridge and another with no neck-ridge and a wider body.[3] The former is a close, albeit smaller, imitation of the Cypriot type.[4] This initial shape of spaghetti aryballos is only found on Rhodes, which, as Friis Johansen argues, is convincing evidence for their local manufacture.[5] In the absence of a varied ceramic assemblage to help date this type, a tentative chronology for this first phase may be offered by the upper bracket of the Cypriot WP IV wares, around 750 BC.[6]

The second phase of spaghetti aryballoi is also globular in shape, but has a squatter neck with no ridge. Examples of this series are more common, appearing in cemeteries at Exochi and Kamiros.[7] For example, the assemblage of Patelles 45 at Kamiros included a spaghetti aryballos;[8] a Black-on-Red (BoR) barrel flask decorated with cross-hatched triangles arranged in a circle, which may be locally made;[9] a Rhodian small oinochoe, also with cross-hatched triangles;[10] two chalice cups painted with concentric circles;[11] an undecorated cup with flaring rim;[12] and a clay weight.[13] The decoration of the small oinochoe and the barrel flask suggest a Late Geometric (LG) II date for the burial.[14] A similar date may also be suggested for the pair of spaghetti aryballoi found in Exochi grave C, which contained a Rhodian pedestalled krater with Atticising decoration among its large assemblage of pottery.[15] This series continues to appear in graves datable to the early 7th century BC. For instance, besides a spaghetti aryballos, Papatislures 10 included an Sub-Geometric (SG) oinochoe decorated with a griffin-like figure on its shoulder.[16] The figure, painted in silhouette, and the use of cross-hatched bands are not dissimilar to the decoration of the krater found in Papatislures 1 – and it is possibly from a local workshop.[17] The assemblage also included a pyxis, two alabastra with a pointed base, a further banded alabastron with a flat base and a fragment of an open vessel with geometric patterns.[18] A similar pyxis was found in Drakidis 257 at Ialysos, which also included a spaghetti aryballos and a Ionian bird-bowl.[19] Overall, this particular series of spaghetti aryballoi were produced on Rhodes from the last quarter of the 8th century to around the middle of the 7th century BC.

The third phase of spaghetti aryballoi is more conical in shape and has a flatter shoulder that tapers sharply towards the base. Two graves may be cited for establishing its chronology: the first is Zambico 53, which included a group of Protocorinthian (PC) aryballoi.[20] Its extensive pottery assemblage is discussed below. The second is Papatislures 14 (18), which included an Ionian bird bowl, an Ionian stemmed dish, a pyxis, a Late Protocorinthian (LPC) piriform aryballos and a spaghetti aryballos.[21] The bird bowl may be assigned to North Ionian Archaic Ic, 630–610 BC.[22] The PC aryballos belongs to the mid-7th century BC, while the stemmed dish

3 Johansen 1958, 44, figs. 96–8.
4 Johansen 1958, 44, fig. 97 (K2). See also Blinkenberg 1931, 304, pl. 41; Lund Antikenmuseum 61.
5 Johansen 1958, 158.
6 Gjerstad 1948, 56–7, 449–51. See also Schreiber 2003, 272.
7 RHODES 13731, 14079; Jacopi 1932–1933, 43, fig. 45; 129, fig. 148; Johansen 1958, 18, fig. 19 (A13); 27, figs. 50–1 (C3–C4); 69, figs. 142–43 (Z4).
8 RHODES 14079; Jacopi 1932–1933, 132.
9 RHODES 14078; Jacopi 1932–1933, 131, fig. 151.
10 RHODES 14080; Jacopi 1932–1933, 131, fig. 152.
11 RHODES 14076–14077; Jacopi 1932–1933, 131, figs. 149–50.
12 RHODES 14075; Jacopi 1932–1933, 131, fig. 148.
13 RHODES 14081; Jacopi 1932–1933, 132, fig. 148.
14 Cf. BM 1864,1007.1796 (from Kamiros acropolis); Coldstream 2008, 270–71.
15 Johansen 1958, 25, figs. 46–7 (C1); Cf. BM 1860,0404.9; Coldstream 2008, 272–73.
16 RHODES 13728; Jacopi 1932–1933, 42, fig. 44.
17 BM 1864,1007.1236; 1864,1007.1237; Cook and Dupont 1998, 29–31.
18 RHODES 13729–13732; Jacopi 1932–1933, 43–4, fig. 43.
19 RHODES 10669, 10672, 10675; Jacopi 1929, 46, fig. 33; 46, fig. 33; III 46, fig. 37.
20 Maiuri 1923–1924, 303–9, figs. 200–5.
21 RHODES 13764–13768; Jacopi 1932–1933, 58–9, fig. 70.
22 Cook and Dupont 1998, 26–8; Kerschner 1995, 20 (variant IV).

can be dated to 620–600 BC.[23] All considered, the assemblage ranges from 650–600 BC, with the burial probably occurring around 600 BC. The final series of spaghetti aryballoi therefore seems to have been made on Rhodes during the second half of the 7th century BC. Overall, spaghetti aryballoi –from the first to the third phase– were made on Rhodes from 725 BC to 600 BC. The shape of the vessel evolved considerably throughout this period, from globular to conical. In contrast to the development of PC aryballoi in the 7th century BC, Rhodian spaghetti aryballoi move toward a squat, as opposed to a piriform, profile.[24]

At first glance, the distribution of spaghetti aryballoi –as outlined by Johansen– suggests mass production for export. Examples have been found, primarily in graves, across Rhodes (Kamiros, Ialysos, Lindos, Exochi and Vroulia), on many Aegean islands such as Melos and Thera, as well as in western colonies of Rhodes such as Syracuse and Cumae.[25] However, not all the spaghetti aryballoi found at these sites were made on Rhodes. An X-ray Fluorescence Spectrometry (XRF) analysis of spaghetti aryballoi found in Italy and Sicily, Corinth and Rhodes has shown that each centre produced its own variety.[26] Moreover, localised production across the Aegean is apparent from their decorative variation across different sites. For instance, the aryballoi excavated at Thera are bulbous in shape and are decorated with separate concentric circles and wavy lines, in contrast to the combined motif on Rhodes. The decoration on the shoulder sometimes includes two friezes of concentric circles.[27] Similarly, those found at Cumae have bolder patterns, including thick black bands and zig-zag patterns lining the neck.[28]

Spaghetti aryballoi were made on Rhodes for a twofold purpose. Firstly, they served an internal market for unguent consumption on the island, which is evident in their frequent occurrence across the island's cemeteries. A concentration at Ialysos in their final, conical phase likely indicates a focus of production there during the mid-7th century BC. Prior to this, the globular form is found in large quantities at Exochi and Kamiros. Secondly, and more importantly, they served an external market of unguent exports across the Aegean. Finds at Delos, Aegina and the Athenian port of Phaleron include spaghetti aryballoi similar in shape and decoration to those found on Rhodes, including both the globular and conical variety.[29] It is therefore likely that spaghetti aryballoi were exported along a shipping route running from the Dodecanese towards mainland Greece via the Cyclades (Fig. 1).[30] With finds throughout the island and across the Aegean, it was undoubtedly a popular and exportable product that responded to the unguent trade on Rhodes. Evidence for this trade comes from the range and abundance of Cypriot, Phoenician, PC and Rhodian unguent vessels excavated primarily from graves, with the latter leading some scholars to suggest unguent production on the island.[31] That aryballoi are the most popular shape of vessel produced on the island and deposited at cemeteries and sanctuaries at Kamiros between 725 and 525 BC, along with the production of faience unguent vessels on the island, is further evidence of the island's importance in the unguent trade in the southeast Aegean.[32] However, a more articulate interpretation of this response arises from considering the full range of wares produced by a single Spaghetti workshop or related workshops, as demonstrated by the contents of one grave at Ialysos.

23 Cf. Payne 1931, cat. 1–17; BM 1864,1007.761; Kalaitzoglou 2008, 137 cat. 342–43, pl. 59.
24 Neeft 2008, 485, fig. 1.
25 On the distribution of spaghetti aryballoi see Johansen 1958, 155–56.
26 Grasso et al. 2004.
27 Marinatos 1969, 31, fig. 86; 58, fig. 195; 179, fig. 370; 314, fig. 502.
28 Blakeway 1932–1933, pl. 35, 97. For further references see also Johansen 1958, 155–56.
29 Dugas 1928, 153 no. 529, pl. VII.B; Furtwängler 1906, 435 no. 17, pl. 127.4; Pelekidis 1916, 21 no. 59, fig. 46.2.
30 On Rhodes' position within Aegean Sea routes see Stampolidis 2003, 68; Broodbank 2013, 338.
31 Coldstream 1969; Bourogiannis 2013; D'Acunto 2017, 461–65.
32 Webb 1978, 5–10; Bourogiannis 2013, 172–73.

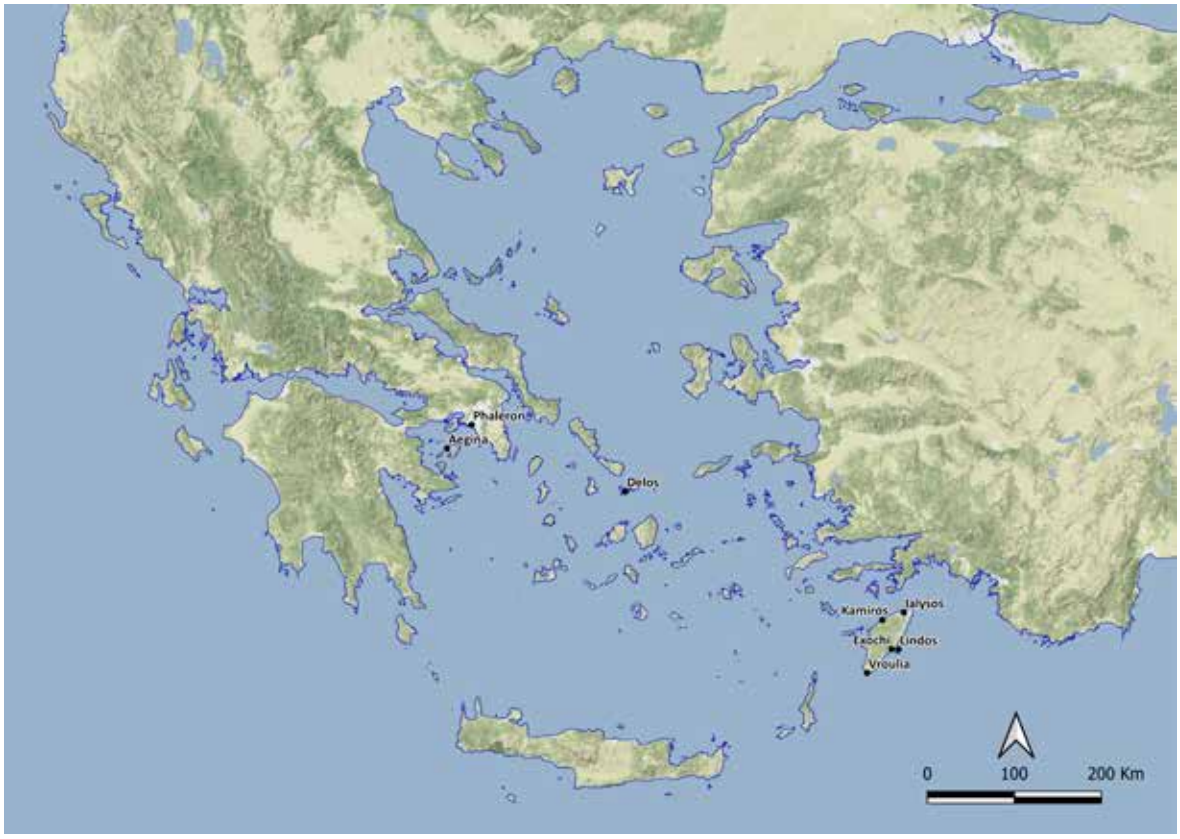

Fig. 1. Distribution of Rhodian spaghetti aryballoi across the Aegean.

ZAMBICO 53

Zambico 53 is a typical burial at Ialysos in the 7th century BC: a cremation area dug into the bedrock, measuring around two metres in length and half a metre in diameter.[33] The extensive assemblage of pottery found in this grave –consisting of over 50 complete pieces and many more fragments– led Maiuri to suggest multiple use.[34] However, I would argue that it was used for a single burial on two accounts. First, there is little evidence for multiple use of graves at Ialysos, whereas at Kamiros it is a common practice in chamber tombs.[35] And second, the pottery finds are relatively uniform and contemporaneous. The finds may be summarised as follows:

Protocorinthian aryballoi. Ht. 7–12 cm. Yellow, buff clay. Ten LPC and Transitional Corinthian aryballoi of ovoid and piriform shape. Four are decorated with bands, animal friezes and clumsy rosettes which may be compared to pieces by the Braunsberg Painter.[36] Others are decorated with plain brown bands.[37]

Faience aryballos. Ht. 6 cm. Ovoid aryballos with green glaze applied by efflorescence, attributed to Webb's "Low Relief Figured Style". Decoration is incised, consisting of a fish on the main body, dog-teeth on the shoulder and rays on the base. Further details are added in brown glaze.[38]

33 Maiuri 1923–1924, 303–4. See also discussion in D'Acunto 2020, 699–701.

34 Maiuri 1923–1924, 309.

35 See section 2.6; Mohr 2015, 253. Kinch (1914, 55) suggests that grave 2 at Vroulia is a multiple cremation on the basis of its thick layer of ash and large assemblage of grave goods.

36 Maiuri 1923–1924, 308 nos. 2–6, fig. 201. Cf. Amyx 1988, 51, pl. 17a–b.

37 Maiuri 1923–1924, 308 nos. 7–11, fig. 201. Cf. Amyx 1988, 51, pl. 17.1a–b.

38 Maiuri 1923–1924, 308 no. 12, fig. 202; RHODES 5072; Webb 1978, 61 cat. 216.


2.


3.


4.

Fig. 2. Spaghetti stamnos; Rhodes Archaeological Museum 5088; Ht. 30 cm (photo by author).
Fig. 3. Spaghetti aryballos; Rhodes Archaeological Museum 5077; Ht. 9 cm (photo by author).
Fig. 4. Spaghetti horn flask; Rhodes Archaeological Museum; Ht. 12 cm (photo by author).

Mushroom lipped lekythos. Ht. 12 cm. Fine, orangey clay. Little or no mica. A conical lekythos with a mushroom lip and single handle, reminiscent of Phoenician unguent vessels but in Rhodian fabric. It has a ridged neck. Traces of vertical lines on the shoulder and horizontal incised bands towards the base.[39]

Other finds include a small trefoil oinochoe and a small undecorated stamnos with vertical handles.[40] Most significantly, Zambico 53 yielded an interesting range of Rhodian Spaghetti wares:

Spaghetti stamnos. Ht. 30 cm. Fine, greyish clay. Little or no mica. Two handles rising from its shoulder (Fig. 2). The decoration is painted in silhouette on the shoulder and main body and consists of wavy lines (like those found on spaghetti aryballoi) as well as concentric circles, dice-eyes and stars.[41]

Spaghetti aryballoi. Ht. 7–9 cm. Fine, greyish clay. Little or no mica. Eight Rhodian spaghetti aryballoi of conical shape with broad, flat shoulders decorated with wavy lines and concentric circles in brown slip (Fig. 3). Thin bands are visible on the main body and rim of the spaghetti aryballos found in Papatislures 18.[42]

Spaghetti horn flasks. Ht. 12–13 cm. Fine, greyish clay. Little or no mica. Ten lekythoi with baggy bodies and curved necks with a single handle and horn-shaped rim (Fig. 4). There is a slight ridge at the join of the handle and neck. Decoration consists of thin bands painted in brown slip on the main body.[43] Earlier examples of Rhodian horn flasks have a more pronounced neck-ridge and incorporate the spaghetti motif.[44]

39 Maiuri 1923–1924, 309 no. 13.

40 Maiuri 1923–1924 nos. 36 and 40.

41 Maiuri 1923–1924, 304 no. 1, figs. 200, 223.

42 Maiuri 1923–1924, 306 nos. 14–21. Cf. RHODES 13768; Jacopi 1932–1933, 59, fig. 70; Stampolidis and Karageorghis 2003, 297, no. 272 (RHODES 5077).

43 Maiuri 1923–1924, 306 nos. 22–31, fig. 204; Cf. Kinch 1914, 59, pl. 34, fig. 2,5; Louvre NIII 1627; Coulié and Filimonos-Tsopotou 2014, 305 cat. 174.

44 Johansen 1958, 15, figs. 22–3 (A12); COPENHAGEN 12422; *CVA* Gotha ZV 3; *CVA* Gotha 1 [Germany 24] pl.5.1 (possibly found on Cumae).

Spaghetti oinochoai. Ht. 9 cm. Fine, greyish clay. Little or no mica. Six oinochoai with trefoil lips, globular bodies joined by a single handle with a central crease. Decoration is restricted to the main body, which is covered in concentric circles radiating from the centre.[45]

Spaghetti plates and bowls. D. 14–20 cm. Fine, greyish clay. Little or no mica. Eighteen dishes of varying size and shape. Some are flat plates with broad rims, while others are bowls with two handles or traces of handles. Decoration is prominent on the interior and exterior, including the spaghetti motif and thin bands in brown slip.[46] Spaghetti plates often have a flat base, except for a large example from Cuccia 344 with a raised foot.[47]

Since most of these Spaghetti wares do not occur in other datable contexts, the chronology of Zambico 53 must be established through the LPC and Transitional Corinthian aryballoi, faience aryballos and spaghetti aryballoi of conical shape. Given that low-relief faience vessels were deposited in votive and grave contexts dating to the late 7th and early 6th century BC, and that spaghetti aryballoi of conical shape can be assigned to the second half of the 7th century BC, I would place the lower bracket of the assemblage around 600 BC. Along with the LPC aryballoi, the whole assemblage ranges from 675–600 BC, with the cremation taking place towards the end of the 7th century BC. This date adds further credence to the final, conical stage of Rhodian spaghetti aryballoi production extending down to around 600 BC.

The total assemblage of Zambico 53 demonstrates that the Spaghetti workshop on Rhodes produced a repertoire of pots that ranged beyond unguent vessels. The fact that many of these products –including plates, bowls, stamnoi and horn flasks– have not been found outside of Rhodes suggests they were produced specifically for a Rhodian "home market".[48] Additional evidence for this market may be sought by considering the wider consumption context of related pottery shapes. For instance, spaghetti plates and bowls had prototypes insofar as incised bowls were being made on Rhodes in the late 8th and early 7th centuries BC.[49] The concentration of a range of Spaghetti wares at Zambico 53 says much about the location of the Rhodian Spaghetti workshop or related workshops in the middle of the 7th century BC. Whereas cemeteries at Exochi and Kamiros yielded many examples of Spaghetti wares from the late 8th and early 7th centuries BC, there is a noticeable drop towards the mid-7th century BC. Indeed, Papatislures 18 is the only grave at Kamiros to have included a spaghetti aryballos of conical shape.[50] By contrast, there is a clear concentration of later period Spaghetti wares at Ialysos, with stamnoi, plates and horn flasks appearing only at this site. I would therefore argue that the products of the Spaghetti workshop(s) circulated at Exochi, Vroulia and Kamiros, before becoming focused on Ialysos in the 7th century BC.

To conclude, the initial Cypriot-inspired products of the Spaghetti workshop –or workshops– circulated at Exochi, Vroulia and Kamiros, before becoming focused on Ialysos in the 7th century BC, where many catered towards a local Rhodian market. The production of Spaghetti wares should be set against a wider background of increasing Rhodian pottery production between the end of the 8th and the end of the 6th centuries BC,

45 Maiuri 1923–1924, 307 nos. 32–7, fig. 204. Cf. Kinch 1914, 78–9, pl. 42, 19.4.

46 Maiuri 1923–1924, 308 nos. 41–58, fig. 205.

47 RHODES 12061; Jacopi 1929, 65, fig. 55.

48 Further examples of Rhodian Spaghetti wares that have only been found on the island include a figure-vessel in the shape of a ram from Papatislures 11 (13) (Jacopi 1932–1933, 49, figs. 54–55; RHODES 13747; cf. BM 1860,0201.46) and a tall pyxis with a neck in shape of a human head from Lindos (Lund Antikenmuseum 62; Blinkenberg 1931, fig. 42; Bourogiannis 2019, 223, fig. 1).

49 For examples of Rhodian incised bowls see RHODES 11797 and 11799; Jacopi 1929, 102, fig. 93; RHODES 11670; Jacopi 1929, 88, fig. 80; BM 1864,1007.154. Similar bowls have been found on Astypalaia (Michalaki-Kollia 1988) and Kos (Morricone 1978, 87, figs. 84–85).

50 RHODES 13768; Jacopi 1932–1933, 58, fig. 70.

Fig. 5. Incised bowl (exterior); British Museum 1864,1007.154; D. 15 cm (photo © Trustees of the British Museum).

including a small quantity of incised bowls (Fig. 5) and so-called Protovroulian and Vroulian wares.[51] Rhodes' potters therefore contributed to the wider Mediterranean trade, while also producing wares for which there was a regional or local demand. Such variance in production is a symptom of the opportunities afforded by a connected pottery market, which supported different scales of production and various qualities of product that imitated or adapted imports, or else were distinct.

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51 Coulié and Villing 2014; Villing and Mommsen 2017.

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The artist and the donor

The inscribed statuettes of Cypriot type found in the Aegean revisited

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ABSTRACT

This paper discusses a class of limestone statuettes of Cypriot type with a dedicatory inscription in the Greek alphabet and language. Found primarily in the Eastern Aegean and Naucratis in Egypt during the Archaic period, these figurines repeat types and styles of Cypriot figures, but in a mixed Cypro-Aegean style. Scientific analysis of the limestone used has not been very revealing so far, which, together with the dedicatory inscriptions in the Greek alphabet, leaves their provenance issue still open. The style and iconography of statuettes of the Aegean and Naucratite classes are discussed against their contemporary Cypriot background and the problem of their origin is reviewed by taking into consideration also their inscriptions. The discussion aims to elucidate issues related to religious and social practices in major Archaic sanctuaries by focusing on inscriptions that seem to have been detached from the linguistic setting in which the object was actually produced.

Limestone statuettes of Cypriot type constitute a distinctive kind of votive in some Eastern Aegean sanctuaries during the Archaic period.[1] Their distribution is basically confined to a number of major coastal sanctuaries in the Eastern Aegean, as well as to Naukratis in the Nile delta. Outside these areas limestone figurines are represented only by a few isolated examples at the Apollo sanctuary on Delos, at the sanctuary of Apollo Daphnephoros in Eretria and at the sanctuary of Athena Aphaia on Aegina. They first appear towards the end of the 7th century BC and their dedication continues to about the middle of the 6th century BC. In the second half of the 6th century BC no limestone statuettes of this class appear in the Aegean, though they continue to occur on the Syro-Palestinian coast and in Cyprus, where the initial and basic production of the class is located. The distribution of the limestone statuettes in the Aegean basically coincides with that of their contemporary Cypriot terracotta figurines.[2] The relatively short time span during which the limestone figurines were dedicated in Aegean sanctuaries, some of them with a dedicatory inscription in Greek, when viewed against their large numbers, implies that some specific ties and commercial networks were active between Cyprus and the Eastern Aegean, possibly empowered by cultural and religious bonds and motivations. This paper reconsiders the small group of such inscribed limestone figurines of this class found in the Aegean and discusses them against their contextual and cultural background.

1 For this class of statuettes, cf. (selectively because of space restrictions in this volume): Schmidt 1968; Wriedt Sørensen 1978; Boardman 1980, 125–26; Senff 1994; 2009; Brijder and van Dorst 1993; Hermary 1990; 1991; 2009; Möller 2000, 154–61; Jenkins 2000; 2001; Fourrier 2001; Berges and Tuna 2000; Nick 2001; 2006; Berges 2002, 106–30; 2006; Kourou et al. 2002; Höckmann 2007; 2017; Andrioti 2016; Muşkara et al. 2021.

2 For the terracotta figurines of the Aegean class, cf. Fourrier 2009; Henke 2009; Karageorghis and Kouka 2009.

The large series of Archaic limestone statuettes found in and outside Cyprus may be split into three large classes, which principally correspond with their findspots. The largest is the *Cypriot* class, which includes not only the material from Cyprus, but also from the Syro-Palestinian coast. The *Aegean* class includes, beyond unmistakably Cypriot figures, some statuettes in a mixed Cypro-Aegean style, known also as "chypro-ionniene" or mixed style statuettes. The *Naucratite* class, the smallest, is formed by material excavated at Naukratis and it includes both Cypriot imports and limestone figurines in a mixed style. In every case, however, the raw material is a very fine limestone, soft, porous and usually of an ivory hue; their surface is covered by a lime-wash on which was applied a rich decoration in paint both from natural pigments, such as haematite, malachite etc., and from artificial ones, like Egyptian blue. This homogeneity in raw materials and technique, as discernible at first sight, has made workshop identification very complicated. Particularly controversial has been the provenance of the statuettes of the Aegean class.

THE PROVENANCE ISSUE: A BRIEF UPDATE

The limestone statuettes of the Cypriot class are frequently of a large size, measuring about 40 cm and sometimes reaching up to 70 cm in height. Those in the other two classes are usually of a smaller size ranging from 8 to 18 cm and only occasionally reaching 25 cm high. But differences attested among the three classes of statuettes are not confined to size; they extend to iconography and style. The usual figure types in all three classes basically repeat those known from large-scale Cypriot sculpture, such as the male votary carrying an animal or the female votary holding a flower, a bird or other small object. Common, too, is the male or female musician and the seated male or female figure, as well as animals or hybrid figures of monsters and demons. Egyptianising subjects, such as the hawk, the sphinx with a klaft or a double crown or the enthroned ram-headed god, also occur. The Aegean and the Naukratite classes also include figures with various Greek elements incorporated in their iconography and style. The most characteristic examples of these mixed-style statuettes are the nude kouros type, and versions of it, like the naked musician or lion-tamer. These types express concepts and ideas alien to Cypriot culture. Nudity was a highly accepted and expected element in Archaic Greek art for young beardless male figures, who represented the athletic ideal on display in the Olympic Games; but in Cyprus even young male figures were shown bearded, and frequently with a moustache, and always clad in a garment, short or long.[3] On the other hand, while nudity was not normally allowed on female figures in Archaic Greek art and marble korai were always represented draped, in Cyprus female nudity was a commonplace feature for Astarte and fertility goddess figures.

Such stylistic and iconographic differences between statuettes of the mixed style and their Cypriot counterparts have resulted in various controversial explanations for the provenance of the mixed-style statuettes. Several scholars have seen them as creations of Greek craftsmen influenced by Cypriot art; others as Cypriot imports or the products of itinerant craftsmen adapting their style to meet the taste of a Greek market.[4] Reaching an impasse, eventually scholars turned to the help of science to identify the raw material used for the statuettes, though only at a small scale in the beginning. In 1989, some petrographic analyses of statuettes from Rhodes and Syria kept in the Copenhagen National Museum were undertaken by Dr Poul Graff-Petersen in the University Museum of Geology, Copenhagen; the results suggested a Cypriot provenance for the sampled pieces.[5] In 2001, Ian Jenkins, after a chemical analysis of the so-called alabaster or gypsum figurines of the mixed style from Naukratis in the British Museum, claimed that they were not local, because their chemical compound

3 Cf. Jenkins 2001, 170, fig. 9 for the possible exceptional presence of isolated examples of nude, beardless kouroi statuettes in Cyprus. For a contrary view, cf. Berges 2002, 122 (with references).

4 Space restrictions in this volume do not allow detailed references, but n. 1 above covers all of them.

5 Riis et al. 1989, 32; cf. also, Jenkins 2000, 159.

was not calcium carbonate "that characterizes Egyptian limestone", but calcium sulphate, which is commonly found in parts of Greece and Cyprus.[6] Yet, a petrological survey in Lower Egypt proved the existence of this kind of limestone in Egypt as well,[7] while several archaeologists continued to claim a local Naukratite production.[8]

In 2002, a larger scientific project including petrographic, physical and chemical analysis using X-ray Fluorescence Spectrometry (XRF), Electron Paramagnetic Resonance Spectrometry (EPR) and Optical Microscopy (OM) concentrated on characterising the distinct qualities of limestone from local quarries in Cyprus, Samos, Rhodes and Lower Egypt. They then were compared with the values recovered from the limestone of statuettes from the sanctuary of Hera at Samos and the sanctuary of Athena at Lindos, as well as with statuettes of the same class from Cyprus.[9] The results identified the material of all sampled statuettes in Cypriot or mixed style as made of Cypriot limestone from the "Lympia-Kossi chalk" of the Pachna formation in Cyprus.[10] Rhodian quarries proved to contain limestone of a very hard type inappropriate for sculpture; Samian limestone was found to be of a soft variety that could be used for sculpture, as was the Milesian and also the Egyptian limestone of the Nile delta, but these types of limestone were shown to be distinct from that of the statuettes in mixed style found in the Aegean. These discoveries were an important step forward in the study of the statuettes of mixed style, implying a Cypriot origin at least for the sampled pieces from Samos and Lindos, as well as excluding the possibility of a Rhodian workshop and, to a degree, a Samian one. But the shortcoming of the project was that Cnidos was not included; thus the possibility of other production centres in the Aegean remained open.[11]

A positive answer for such a centre has recently been confirmed by scientific techniques from a team of experts working under the coordination of Numan Tuna, the excavator of the Apollo sanctuary at Emecik on the Cnidian peninsula.[12] They studied 85 limestone statuettes from Cnidos and Cyprus and tested them against Cypriot and local quarries on the Cnidian peninsula by using Inductively Coupled Optical Emission Spectroscopy (ICP-OES) and Inductively Coupled Mass Spectroscopy (ICP-MS) techniques.[13] The preliminary results of this project identify the use of a local Cnidian limestone for some Cypriot-type statuettes, although the majority of the tested pieces proved once again to have been made of Cypriot limestone, mainly of the Pachna formation. As a large number of kouroi are included in the sampled material, the final detailed publication is expected to be extremely valuable.

In view of these results, it is clear that the largest number of the mixed-style statuettes found in the Aegean, as indicated by the sampled pieces from the Hera sanctuary at Samos and those from the Athena sanctuary at Lindos, as well as of the majority of the Cnidos pieces tested, were made of Cypriot limestone. The good quality of the Cnidian limestone and the few statuettes in this material from the Apollo sanctuary at Emecik near Datça in the Cnidian peninsula do identify for the first time a local production in the Aegean,[14] as several scholars had argued before in view of the fine style of certain pieces like the Louvre lyre-player or the Amsterdam kouros.[15] But for the moment, and even though several stylistic analyses favour the existence of an Aegean production in one or more workshops, the study of the raw material used offers no conclusive answer, and only Cnidos starts modestly to enter the scene. A similarly complicated picture remains for the figurines of the mixed type from Naukratis, in spite of several stylistic and typological studies that strongly argue for a local production.[16]

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6 Jenkins 2001, 166.

7 Cf. Harrell 1992.

8 Cf. Fourrier 2001; Nick 2001; Berges 2002, 123; Höckmann 2007, 155–62; Hermary 2009.

9 Cf. Kourou et al. 2002, 36–72.

10 Cf. Kourou et al. 2002, 66–72; Polikreti et al. 2004.

11 Cf. Kourou et al. 2002, 74–5 (with references).

12 Cf. Tuna et al. 2009, 234–35 and also in this volume. I am most grateful to Numan Tuna for kindly sending me the preliminary results of his project prior to publication.

13 Muşkara et al. 2021.

14 Tuna et al. 2009, 234–35. For the sanctuary at Emecik, cf. also Berges 1995/1996.

15 Cf. Hermary 1990; 1991; 2009, 246; Brijder and van Dorst 1993; Berges 2002, 117–30; 2006, 71–2.

16 Cf. Kyrieleis 1989; 1996; Fourrier 2001; Hermary 2001; 2009; Berges 2002, 123; Höckmann 2004; 2007; 2017; Nick 2006.

Fig. 1. Limestone statuette from Lindos in Copenhagen, Nat. Museum, inv. no. 10440.

THE INSCRIBED STATUETTES

The surviving number of inscribed statuettes is small. In the Cypriot class, the few existing examples are always written in the Cypriot syllabary; the inscription normally provides the name of the dedicator and the name of the deity to whom the statuette was dedicated (usually of Paphian Aphrodite). The practice was taken over from large and medium size Cypriot stone sculpture, where inscriptions usually mention the name of the person represented or, in the case of dignitaries, the capacity in which they functioned in the sanctuary.[17] More eloquent dedications engraved in the Cypriot syllabary on the statuettes of this class are rare.[18]

In the Aegean class, there are six statuettes inscribed in the Greek alphabet and in the Doric dialect, one in Phoenician letters and another one in the Cypriot syllabary. They all come from the southeast Aegean and more specifically from Rhodes (Lindos, Kamiros, Vroulia) and Cnidos; there is also one example "from Cnidos or Kalymnos" and a statuette of unknown provenance in the Louvre inscribed in Doric script. More specifically they are the following:

1. Male votary carrying a small goat or ram; head and feet missing (Fig. 1). From the Athena sanctuary at Lindos, now in Copenhagen, National Museum, inv. no. 10440. The inscription, written in Dorian dialect, is vertically incised down the flat back and reads ΗΕΚΑΤΙΟΣ, the name of the dedicator.[19]

2. Lower part of a male votary in long dress; upper body and head missing (Fig. 2). From the Athena sanctuary at Lindos, now in Copenhagen, National Museum, inv. no. 10433. Inscribed on both sides. On the front it gives the name of the dedicator: ΣΙΤΕΑ[Σ] (or [Β]ΕΡΕΤΙΣ according to another reading). On the flat rear another inscription gives the reason for the dedication ΝΙΚΑΣΑΣ Π [---], probably ΠΥΘΙΑ, ΠΑΛΗΝ or ΠΥΓΜΑΧΙΑΝ, i.e. having won at Pythia or in wrestling or boxing.[20]

17 Cf. e.g. Karageorghis et al. 2000, 109 no. 172 for a colossal statue of a priest with the remaining part of an inscription in the Cypriot syllabic script which reads transliterated [-----] ΤΑΣ ΠΑΦΙΑΣ, i.e. the priest of the Paphian Goddess.

18 Cf. Kourou et al. 2002, 25.

19 Cf. Riis et al. 1989, 63; Karageorghis et al. 2001, 79–80 no. 146; Kourou et al. 2002, 2 no. 1, pl. IX:1.

20 Cf. Riis et al. 1989, 75 no. 59; Karageorghis et al. 2001, 81 no. 149; Kourou et al. 2002, 25–6 no. 2, pl. IX:2–3.

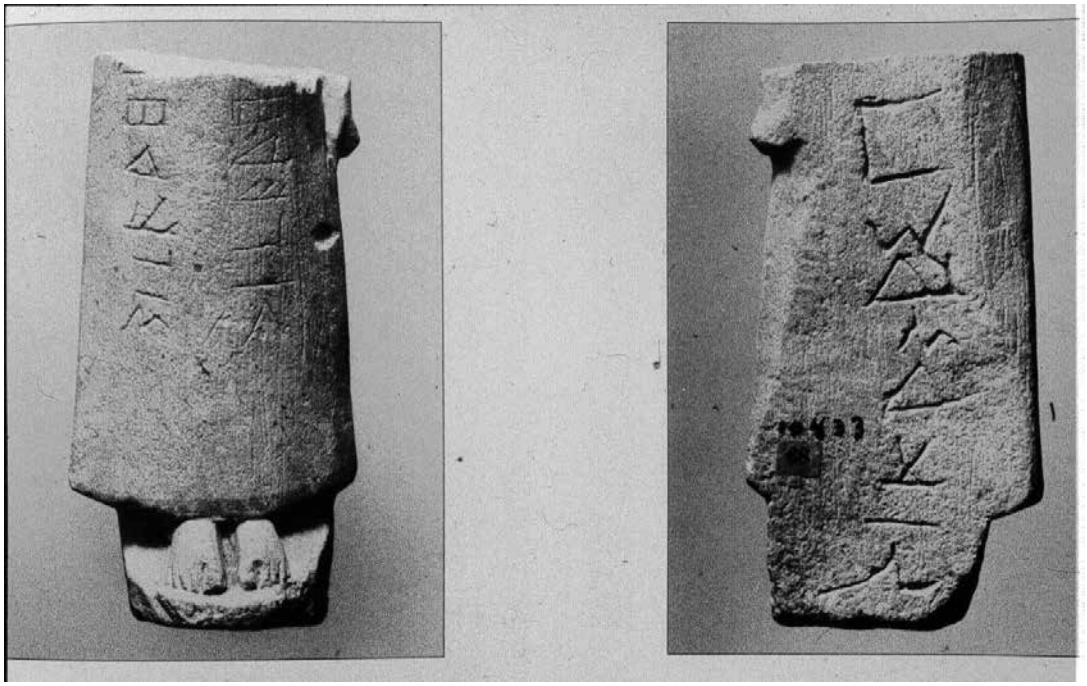

Fig. 2. Limestone statuette from Lindos in Copenhagen, Nat. Museum, inv. no. 10433.

3. Lower part of kouros statuette; upper body and head missing. From the sanctuary of Athena at Kamiros, now in Rhodes Museum, inv. no 14335. The inscription reads [...] ΧΟΣ Μ ΑΝΕΘΗΚΕΝ (….ΧΟΣ dedicated me).[21]

4. Feet with the inscribed foot plinth of a male votary (Fig. 3). From Cnidos, now in London, The British Museum, inv. no. B 321. The fragmentary inscription running around the foot plinth reads: ΕΥΑΡΧΟΣ ΜΕ ΑΝΕ[ΘΗΚΕ ΤΟΙΣΙ ΔΙΟΣ]ΚΟΡΟΙΣΙΝ- i.e. Euarchos dedicated me to the Dioskouroi sanctuary.[22]

5. Lower part of a votary carrying a small ram (Fig. 4). Said to be "from Cnidos or Kalymnos", now in Saint Petersburg, Hermitage Museum inv. no A 537. The inscription on the flat back giving the name of the dedicator in the genitive reads [Ε]ΥΜΕΘΙΔΟΣ (of [-]umethis).[23]

6. Fragmentary female votary carrying an offering of unknown provenance in Paris, Louvre Museum, inv. no. E21032. The inscription runs along the statuette's arm and is partially preserved; it is in Doric dialect and reads [---] ΑΙΣΤΑ.[24]

7. Sphinx statuette inscribed in Phoenician letters from Vroulia, now in Copenhagen, National Museum, inv. no. 11328. The inscription is on the right wing.[25]

8. Lion figurine from Rhodes, probably Lindos, now in Copenhagen, National Museum, inv. no. 7676. The statuette bears an inscription with two Cypro-syllabic signs.[26]

Two more Archaic limestone statuettes of Cypriot type and a plate in the same material inscribed in the Greek alphabet and in Ionic dialect are known from Naukratis; there is also a limestone statuette of the same class that is considered to be later and dated to the fourth century BC. They are the following:

21 Cf. Kourou et al. 2002, 26 no. 3, pl. IX:4.

22 Cf. Richter 1970, 73, fig. 150; Brijder and van Dorst 1993, 18, fig. 17; Berges 2002, 115–16, fig. 9; Kourou et al. 2002, 26 no. 4.

23 Cf. Hermary 1991, 175 no 9, pl. XXXVII: 1; Kourou et al. 2002, 27 no 5, pl. IX:5–6.

24 Cf. Hermary 1989, 483 no. 998; Kourou et al. 2002, 27 no. 6.

25 Cf. Riis et al. 1989, no 34; Karageorghis et al. 2001, 87 no. 165; Kourou et al. 2002, 27 no. 7; Kourou 2003, 256–57; 2004, 18; Bourogiannis 2019, 165, fig. 9.

26 Riis et al. 1989, 46 n. 29; Bourogiannis 2015, 163; 2019, 166, fig. 9.2.

Fig. 3. Plinth of a limestone statuette from Cnidos in London, BM, inv. no. B 321.

1. Large statuette of a hunter (Ht. 0.49 cm), almost complete. From the sanctuary of Aphrodite at Naukratis, now in London, The British Museum, inv. no. B451. The inscription engraved vertically on the rear of the right thigh partially survives and reads: Κ[Α]ΛΛΙΑ[Σ ΑΦΡΟΔ]ΙΤΗ (Kallias dedicated it to Aphrodite).[27]

2. Fragmentary female statuette; head and feet missing. From the sanctuary of Aphrodite at Naukratis, now in Boston, Museum of Fine Arts, inv. no. S 1625 (but considered lost). The inscription chiselled on the right side reads: ΠΟΛΥΕΡΜΟΣ Μ ΑΝ[ΕΘΗΚΕ] ΤΗ ΑΦΡΟΔΙΤΗ (Polyermos dedicated me to Aphrodite).[28]

3. Small plate from the same sanctuary of Aphrodite at Naukratis. The inscription engraved on the rim reads: [ΕΙ]Σ ΝΑ[Υ]ΚΡΑΤΙΝ [ΑΦΙΚΟΜΕΝ]ΟΣ [ΑΦΡΟΔΙΤ]Η ΚΑΙΣΟ[Σ ΑΝΕΘΗΚΕΝ] (on arrival at Naukratis Kaisos dedicated it to Aphrodite).[29]

4. Feet and plinth of limestone statuette in two fragments considered to be of a much later date (4th century BC). From Naukratis, now in London, The British Museum, inv. no. 1900.2-14.22. The inscription reads: ΣΙΚΩΝ [ΕΠ]ΟΙΗΣΕ ΚΥΠ[ΡΙΟ]Σ ΑΡΙΣΤΙ[ΩΝ] ΗΡΑΚΛΕΙ (Sikon from Cyprus carved it and Aristion dedicated it to Heracles).[30]

As the statuettes of Cypriot type in the Aegean and Naukratis are normally of small size, the inscriptions usually spread all over the body or the base of the figurine and occasionally occur on both sides of the figure. The dedicatory formula of all these inscriptions is usually very simple, following a consistent pattern that gives the name of the dedicator, as for instance HEKATIOS on the statuette cat. no. **1** from Lindos (Fig. 1), [---]ΧΟΣ (perhaps ΕΥΑΡΧΟΣ) on the statuette cat. no. **3** from Kamiros (Fig. 3) or [Ε]ΥΜΕΘΙΣ on the fragmentary statuette cat. no. **5** from Cnidos or Kalymnos (Fig. 4). Occasionally the dedication becomes more eloquent, giving information on the reason for the dedication, as on the statuette cat. no. **2** from Lindos, where the dedicator proudly

27 Nick 2001, 58, pl. 5,1; 2006, 35–9, pl. 4 (mentioning also other readings of the inscription, such as ΚΑΛΛΙΜ[ΑΧΟΣ] ΤΗ [---] or ΚΑΛΛΙΑ[ΡΧΟΣ] ΤΗ [--]; Kourou et al. 2002, 28 no. 8.

28 Gardner 1888, 58–9 no. 794, pl. XXI, 794; Kourou et al. 2002, 28 no. 9; Nick 2006, 116 no. 32.

29 Gardner 1888, 66, pl. XXI, 795; Kourou et al. 2002, 28 no. 10; Nick 2006, 81–2.

30 Hogarth 1898–1899, 32, pl. XIV, 9; Kourou et al. 2002, 30; Nick 2006, 76 n. 818.

Fig. 4. Fragment of a limestone statuette "from Cnidos or Kalymnos" in Leningrad, Hermitage Museum, inv. no. A 537.

mentions his victory in the Pythia or in wrestling (Fig. 2), while on the statuette cat. no. **4** from Cnidos the dedicator offers his votive to the Dioskouroi. At Naukratis, each of the dedicators offers his votive to Aphrodite, while Aristion on the probably later piece cat. no. **11** from Naukratis offers his gift to Heracles.[31] The dedicators all have Greek names, and all seem to have been male, although a female name has been argued for the dedicator of the statuette cat. no. **1** (i.e. Ἑκατίς instead of Ἑκάτιος) and for the statuette cat. no. **5** (Εὐμεθίς instead of Εὔμηθις).[32]

CRAFTSMEN, SCRIBES AND DEDICATORS

The Greek name, however, does not mean that the provenance of the statuette or its craftsman should necessarily be assumed to be Greek, as there are several confirmed imported Cypriot statuettes inscribed in Greek. For instance, the limestone of the small statuette cat. no. **1** from Lindos with the name ΗΕΚΑΤΙΟΣ was tested by analytical and experimental techniques (OM and EPR) and proven to be from Cyprus.[33] Evidently, then, the inscription simply indicates the linguistic identity of the dedicator, not the provenance of the statuette or of its craftsman. Inscriptions on statues and statuettes were incised when the piece was complete, and this could easily take place away from the location of manufacture. Masons' stalls to which the dedicators would turn to prepare the inscriptions for their votives are believed to have flourished in every major sanctuary. Most of the small limestone statuettes of Cypriot type found in the Aegean or Naukratis were probably engraved by a specialised mason on request, which explains the use of the Ionian dialect at Naukratis and of Doric at Rhodes and Cnidos. It also explains the simple and repetitive linguistic formula of the inscription, mentioning the name of the dedicator and the deity to which the votive was addressed.

31 Cf. Kourou et al. 2002, 30 (with references).

32 Cf. Kourou et al. 2002, 25 and 27, discussing this new reading by Ch. Kritzas. Cf. also Höckmann 2007, 143–45.

33 Cf. Kourou et al. 2002, 58, sample LI-6.

Possibly there were also attempts by the donor himself to scratch an inscription on his votive, as indicated, for instance, by the clumsiness of the letters and the repetition of the same inscription on the front of the statuette cat. no. **2** from Lindos (Fig. 2, left). The failure of the first attempt in this case suggests that a professional scribe was not involved, but rather a person not well acquainted with engraving, who was in all probability the dedicator himself; having won a contest, he wanted proudly to declare it to all. The unusual and very personal inscription on the plate from Naukratis, cat. no. **11**, announcing that Kaisos offers his votive to Aphrodite having arrived safely at Naukratis, might also be assumed to have been incised by the dedicator himself.

On the other hand, the two signs in the Cypriot syllabary engraved on a limestone lion statuette from Lindos, our cat. no. **8**, indicate a Cypriot linguistic identity at least for the person that handled the inscription. More perplexing is the case of the limestone sphinx statuette from the small extra urban sanctuary at the site of Vroulia in Rhodes, our cat. no. **7**, which was analysed by OM and EPR and shown to have been made of Cypriot limestone.[34] Yet, it bears an inscription in Phoenician lettering and language, evidently engraved by a person familiar with the Phoenician tongue. The inscription is very corroded and hence rather unintelligible,[35] but it portrays well the Cypro-Phoenician cultural environment of the dedicator and of the craftsman who produced it.

THE ARTIST AND THE DONOR

The concentration of the inscribed statuettes of the Aegean class in the southeastern Aegean, in the area of the Doric Pentapolis, can hardly be considered accidental. That mighty confederation was created at the frontiers of the Greek world as a reaction against the increasing expansion of the Assyrian empire, when the three flourishing city-states of Rhodes –Lindos, Ialysos and Kamiros– were joined with the three neighbouring Greek centres of Cos, Cnidos and Halicarnassos to create the powerful institution of the "Doric Hexapolis". Later, in the Archaic period, when Halicarnassos was expelled, the Federation became the "Doric Pentapolis". The centre of this powerful alliance, which ostensibly had a religious character, was at the Triopion of Cnidos. The federation members met every four years at the festival of the Triopian Apollo in his sanctuary for the Dorian Games in his honour.[36]

Sanctuaries played significant social, economic and political roles in ancient Greek society, including that of boosting a citizen's status or ethnic identity during the large festivals.[37] The quadrennial festivals at the Triopion sanctuary at Cnidos and the yearly festivals in the Rhodian sanctuaries offered the best opportunity for such advancement.[38] Cult in these sanctuaries was simple until almost the end of the 6th century, taking place at an altar in the open air, but the dedications of socially ambitious citizens were rich and competitive. Through such votives, which were frequently imported objects of types alien to the Aegean,[39] they became familiar with new artistic trends and ideas that eventually led to the creation of a new cultural background that reached its zenith in the 6th century BC. This was further enhanced by the appearance of the first coins and the spread of literacy that was now upgraded from graffiti and dipinti on vases to engraved inscriptions on other objects. The 6th century experienced a culmination and perfection of the art of writing that strongly affected and remodelled the economic capabilities of craftsmen, artisans and traders.[40] In a cultural milieu where people speaking different

34 Cf. Kourou et al. 2002, 59, sample VR-2. Cf. Kourou 2003, 255–57; 2014, 86 and 236–37 no 71.

35 Cf. Bourogiannis 2015, 163–64; 2019, 164–69.

36 For the Triopion, cf. Berges 2002, 116, fig. 9; Tuna 2012, 79–92.

37 Cf. Möller 2001, 1–3; Kourou 2014, 83–7.

38 Cf. Kourou 2015, 245.

39 Cf. e.g. the metal maces and sceptres in the Athena sanctuary at Lindos, which come from various parts of the Near East and Cyprus.

40 Cf. Kourou 2015, 247–48.

languages and of different ethnicity mingled within various commercial networks, writing became a useful tool and a popular means of expression. A number of surviving inscriptions in the Greek language on foreign objects and vice versa illustrate an aspect of this practice.[41] For instance, there is an inscription in Greek letters on a Syro-Palestinian vase from a grave at Kamiros giving the name of the deceased, while a Semitic inscription is engraved on a Greek, probably Cnidian cup, from Naukratis.[42]

This kind of writing practice, detached from the linguistic setting in which the object was actually produced, is perhaps better illustrated by some Egyptian stone statuettes that were dedicated at Greek sanctuaries. One is a very fragmentary statuette of a seated male figure in black basalt from the sanctuary of Athena at Kamiros; the statuette is small, ca 20 cm in height, and thus easily portable. Its partially surviving inscription in Greek gives the name of the dedicator.[43] Another Egyptian statuette of a kneeling figure in black basalt from the sanctuary of Zeus Attabyrios in the area of the city-state of Kamiros bears a Greek inscription that gives the name of the dedicator.[44] A more eloquent example is a block statuette in black basalt from a sanctuary at Priene with a long Greek inscription on the front, giving the name and patronym of the donor and details of his dedication.[45] As clearly mentioned in the inscription, Pedon the dedicator had brought the small statuette from Egypt, where he had served as a mercenary for Pharaoh Psameticus I.[46] The eloquence of the Pedon inscription attests to an act of pilgrimage by a Greek person, one who had been closely affiliated to Egypt, serving as an official of Pharaoh; on returning to his own country along with his votive, he wanted to have the dedicatory inscription in his own language.

More examples of this practice of writing a votive inscription on an object created in another linguistic environment are found in Egypt. The best known is the dedication by Melanthios on the base-sheath of an Egyptian bronze statuette said to be from Memphis, now in a private collection, which repeats the formula giving in the Greek language the dedicator's name and the deity to which it was dedicated, which in this case was Zeus of Thebes.[47] Exactly the same formula repeated by another Greek dedicator, Pythermos, on an Egyptian statuette dedicated to Isis,[48] indicates that it was a common practice for Greek dedicators both in Egypt and the Aegean.[49]

The use of large numbers of foreign objects as votives is not unknown in Greek sanctuaries, although some are devoid of religious significance in the strict sense; they simply serve as honorary gifts and tokens of respect in a rather diplomatic sense.[50] The Cypriot-type statuettes, however, belong to another class of votives; having rapidly become very popular in the relevant religious milieu, they served as purely religious offerings, as is implied by their large numbers, especially at Samos and Rhodes. But the trend for inscribed examples developed only, or perhaps mainly, in the areas where literacy was widespread and prompted written expressions. Against this background the inscribed statuettes of Cypriot type simply underline the multicultural background of eastern Greece and Naukratis. They undeniably identify the donor and the cultural context in which they were assigned, independently of the artist or the statuette's provenance.

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41 Cf. Bourogiannis 2015, 168–69.

42 Cf. Kourou 2015, 263, fig. 7 (for the Syro-Palestinian vase from Kamiros). Bourogiannis 2015, 166, fig. 8 (for the Cnidian cup from Naucratis).

43 [....] ΔΗΣ ΜΕ ΑΝΕΘΗΚΕΝ. Cf. Kourou 2015, 261, fig. 3.

44 ΣΜΥΡΔΗΣ Μ ΑΝΕΘΗΚΕΝ Ο ΣΥΝΔΟ. Cf. Kourou 2004, 14–7 figs 1-4; 2015, 262, fig. 4.

45 Höckmann and Vittmann 2005–2006, 100, fig. 2; Kourou 2015, 262, fig. 5.

46 According to Herodotus (I,42) Psameticus, who used Greek and Carian soldiers to prevail, rewarded them with some pieces of land in the Nile area and he also founded a school of interpreters to help their integration in Egypt. Cf. Boardman 1980, 114–15; cf. recently Höckmann and Vittmann 2005–2006, 97–103.

47 Cf. Jeffery 1963, 358 no. 49, pl. 70. Cf. also Kourou et al. 2002, 29.

48 Cf. Jeffery 1963, 358 no. 50, pl. 70.

49 Cf. also the graffiti in the Greek language at Abu Sibel commemorating the participation of Ionian mercenaries in Psameticus' II expedition against the Nubians, cf. Boardman 1980, 116, figs. 134–35.

50 Cf. Kilian-Dirlmeier 1985; Bumke 2007. Also, Kyrieleis 2009, 142.

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The connectivity of Cyprus and Knidia

Limestone votive statuettes found at the Archaic Apollo sanctuary

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ABSTRACT

The Apollo sanctuary at Emecik, in Knidian territory, which was active from the Geometric period and particularly during the Archaic period, produced a large number of objects, including Cypriot, Egyptian, Phoenician and Etruscan artefacts as well as limestone votive statuettes. Most of these statuettes are dated to the first half of the 6th century BC and were used as filling material for the Lower Terrace of the sanctuary. The variety of the objects reflects the sanctuary's ritual network within a regional and overseas context. Some votives are generic and are represented in parallel with material from other East Greek sites, such as Lindos, Kameiros, Vroulia, Samos, Miletus and Chios.

The subject of this paper is the limestone statuettes that show great variety and are commonly thought to be Cypriot or East Greek in origin. Archaeometric analysis indicates local production for some examples. Alongside the locally produced statuettes, the majority of those that were analysed in this study were made from limestone coming from quarries within the Pachna Formation in Cyprus.

INTRODUCTION

Due to the geographical location of Cyprus in the Eastern Mediterranean, the island has always been a cultural bridge between the Aegean, Anatolia, the Levantine coast and Egypt. The type of limestone statuette classified as Cypriot and dating to the Archaic period has been found in the Mediterranean region since the late 19th century. These statuettes, which are widely distributed, are mainly concentrated in western Anatolia and nearby islands and have been recovered in sanctuaries excavated at Lindos,[1] Samos,[2] Knidia,[3] Ialysos,[4] Kameiros,[5] Vroulia,[6]

1 Blinkenberg 1931, 402.
2 Schmidt 1968, 54.
3 Tuna et al. 2009, 234.
4 Di Vitta 1990, 91.
5 Pryce 1931, 162, 282–83.
6 Kinch 1914, 14–8.

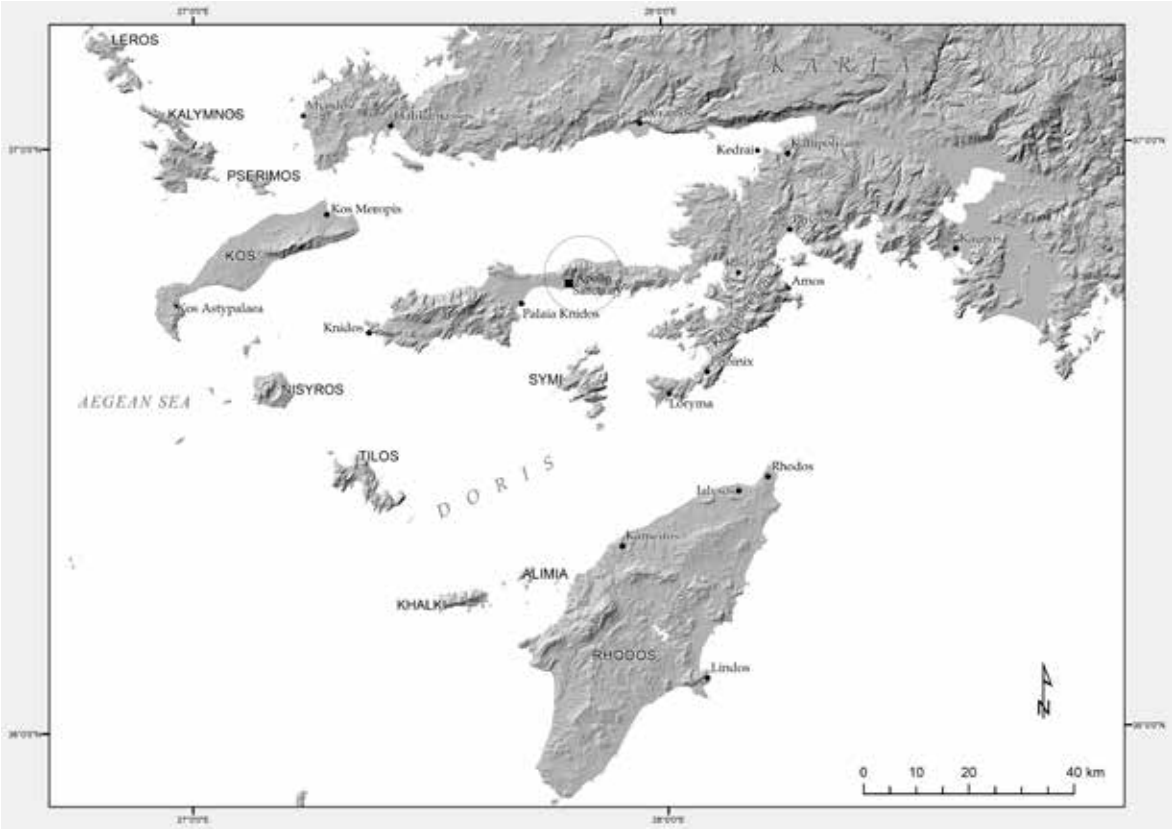

Fig. 1. Map showing the location of the Apollo sanctuary at Emecik in the Datça peninsula.

Miletus[7] and Chios.[8] Dating between the last quarter of the 7th century and the middle of the 6th century BC, the statuettes functioned as votive offerings and are frequently also found in votive pits or fills belonging to the reorganisation phase of sanctuaries.

The limestone statuettes found in Mediterranean sanctuaries have characteristics that are most closely related to those from Cyprus. The limestone is similar to that used to craft Cypriot statuettes, although the statuettes reflect a mixed character that reflects Cypriot, Ionian, Aegean and Egyptian elements. Because of the mixed character of these statuettes, scholars have been uncertain about their origin and significance. Provenance studies have been critical, and limestone statuettes from Samos and Lindos have been compared with raw material samples taken from quarries located on Samos, Rhodes and Cyprus and in Egypt. Results indicate that the statuettes are made of limestone from Cypriot quarries.[9]

In the Archaic period the type of limestone statuette classified as Cypriot, whether produced in Cyprus or locally, was common in the Aegean world, especially in sanctuaries as votive offerings. At the Emecik Apollo sanctuary these limestone statuettes, which were found extensively in fills related to the reorganisation of the area, raise questions about their origin. Provenance studies have been undertaken to resolve the debate.

7 Senff 2009, 218.
8 Boardman 1967, 181.
9 Kourou et al. 2002.

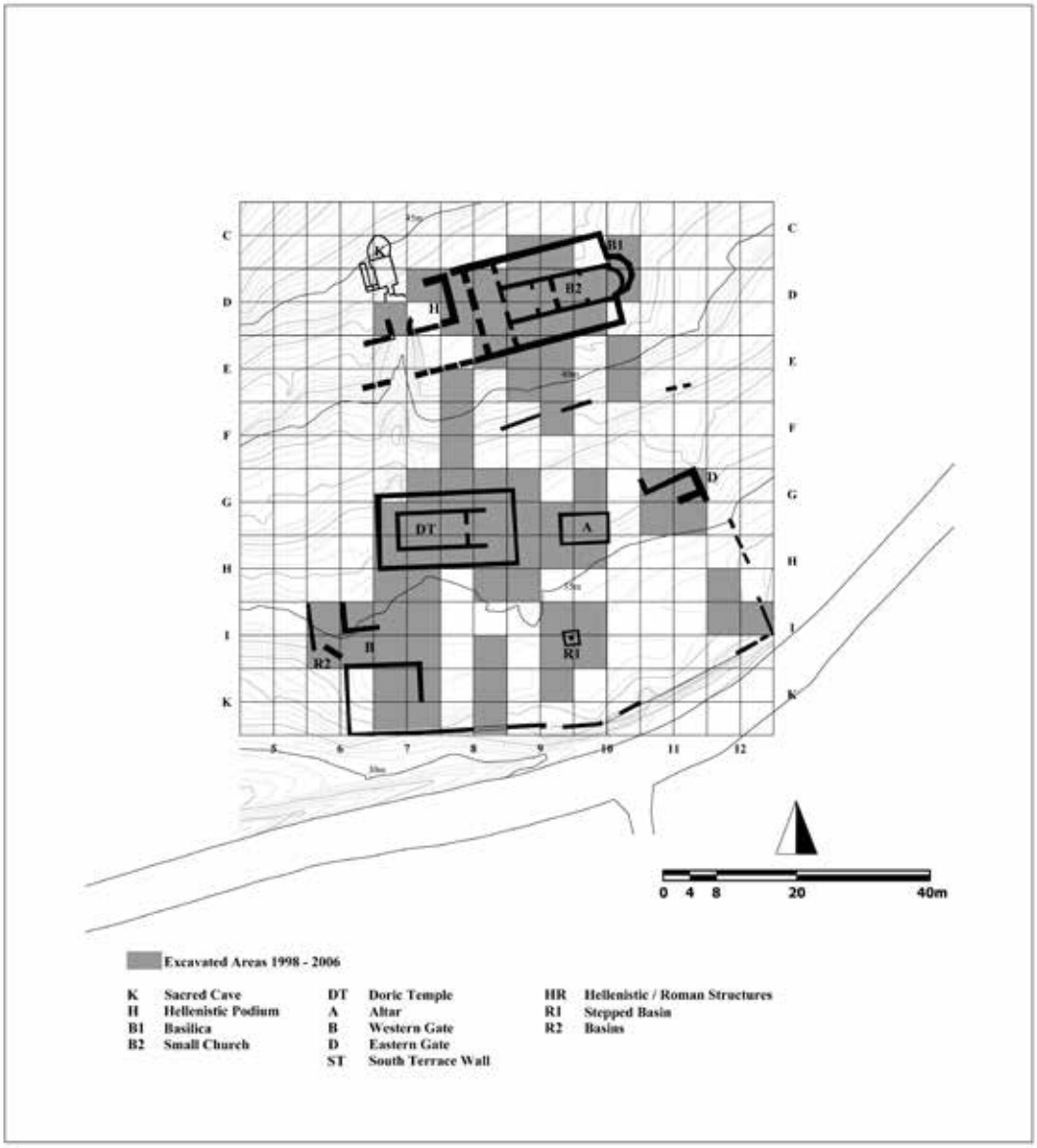

Fig. 2. Site plan of the Apollo sanctuary at Emecik.

THE SANCTUARY OF APOLLO AT EMECIK

The sanctuary of Apollo is situated near Emecik village in the Datça peninsula within the territory of Knidos in southeast Turkey (Fig. 1). Archaeological excavations carried out in the region between 1998 and 2006 have confirmed traces of cult activity and the establishment of a sanctuary dedicated to Apollo beginning in the Geometric period.[10] It is clear that the sanctuary continued in use and flourished in the Archaic period as part of a regional and overseas ritual network.[11] The diversity of the finds from the site –Cypriot terracotta and limestone statuettes, Etruscan bucchero pottery, Phrygian fibulae and Egyptian amulets, as well as some exotic items probably of Phoenician origin– is important in terms of showing the regional relations of the sanctuary.

10 Tuna and Berges 2001; 2002; Tuna et al. 2004; 2009; Berges 2006.

11 Tuna et al. 2009, 229.

Excavations at the sanctuary were primarily carried out on the upper terrace, in the Hellenistic Doric temple and on the lower terrace (Fig. 2). The lower part of the sanctuary is arranged as a terrace retained by a peribolos wall to the south, through which access to the temenos area was provided by a ramp. The southern terrace might have been used already when the sanctuary was founded as a place where communal sacrifices and offering rites were practised. This sacred place was later reorganised as a monumental Doric temple with an altar and eastern gate structure in the Early Hellenistic period. Typical of Doric temples dating to the Hellenistic period, the temple within the sanctuary had a peripteral plan with a *krepidoma* with a 6 x 11 column stylobate and three *krepi*.[12] Further east and aligned on the temple's axis, a partly preserved altar was identified.

The chronology of the sanctuary can be briefly summarised on the basis of the archaeological evidence:

- Early traces of ritual activities in the Geometric period: the sacred spring and cave
- Late Geometric/Early Archaic period: establishment of a well-defined temenos area
- Archaic period, prior to the construction of the south temenos wall: institution of an oracle and construction of the altar
- Construction of the south peribolos wall, ca 560 BC
- Archaic and Early Classical periods: organisation of rituals drawing on a Doric Greek koine
- Classical period: hiatus
- Late Classical period: 4th century revival
- The construction of the Hellenistic temple
- Roman period: construction of waterworks
- Early Byzantine period until the mid of the 7th century AD, Arab raids: building of the Basilica
- Late Byzantine period: erection of the small church
- Later period: establishment of the monastery/domestic work area

Excavations on the lower terrace, where most of the small finds were discovered, have provided valuable data on the stratigraphic development of the sanctuary and its relationship with the temenos wall and the temple. The small finds included Cypriot, Egyptian, Phoenician and Etruscan objects as well as limestone statuettes in great numbers that were used as fill material for the re-arrangement of the terraces during the Late Archaic period. It is the limestone figures, which show great variety, that are the main focus of this paper.

THE LIMESTONE VOTIVES

The limestone votives found in the Apollo sanctuary at Emecik can be classified into six main groups. The majority are lion and falcon statuettes associated with Apollo. Limestone lion votives (Fig. 3) are usually represented as seated on their back legs on a plinth. Their manes are indicated by means of an incised line; their jaws are open and the teeth and tongue are shown. The tails of the lions are always shown coiled up along the left or right hind leg. In terms of their sitting position and the representation of the head, the lion figurines from Emecik are comparable to those from Lindos, Samos, Chios and Salamis.[13] The falcon figurines (Fig. 4), which are often found in eastern Greece, especially in the Doris region,[14] and associated with the cult of Apollo, are also very common at Emecik. Portrayed as perched on a plinth, incised lines define their wings. Occasionally

12 Tuna and Berges 2001, 129; 2002, 91–3.

13 Blinkenberg 1931, 452 nos. 1830–34; Boardman 1967, pl. 68; Schmidt 1968, 65.

14 Pryce 1928, 169, B383–287, pl. 38; Blinkenberg 1931, nos. 1841–56; Schmidt 1968, taf. 112–14.

Fig. 3. ST.06.H12.A5.20 seated lion. Ht 15.7 cm.

Fig. 4. ST.06.H12A.2A.28 seated falcon. Ht 12.4 cm.

Fig. 5. ST.06. I12D.6B.18 kouros. Ht of head 7 cm.

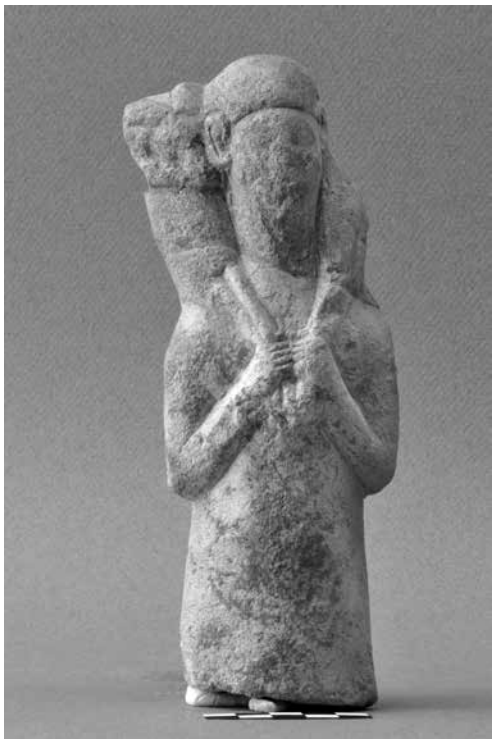

Fig. 6. ST.06.H12A.2A.24/3.14 worshipper. Ht of head 4.9 cm.

Fig. 7. ST.02.I8B.20.1 standing priest. Ht 13 cm.

Fig. 8. ST.02.K9C.26.1 enthroned deity. Ht 11.2 cm.

prey, often a snake, is grasped in the beak. The falcon, as the mantic messenger of Apollo,[15] may indicate that the sanctuary at Emecik served as an oracle centre. They can be dated from the late 7th to the first quarter of the 6th century BC.[16]

Limestone *kouroi* (Fig. 5), dating to the late 7th and early 6th centuries BC, have an important place among the limestone statuettes found at Emecik. They most probably signify certain rituals associated with a form of *rite de passage*, reflecting Apollo's role as protector of male youth and a god of virility.[17] The statuettes have long, attenuated bodies, elongated eyes, thick wigs, wide shoulders, arms that are not carved free and hands ending in fists. Reflecting Egyptian influence,[18] they also display features typical of the eastern Doric style.[19] The limestone *kouroi* from the sanctuary were fashioned from Cypriot limestone and carved in a local style. Quite likely Cypriot artists adapted a Cypro-Aegean style for the local market. Elsewhere, statuettes carved by Cypriot artists have been found at various Greek sanctuaries, and it is thought that they fashioned these statuettes abroad using Cypriot raw materials, which they had brought with them.[20]

Another typological category is that of worshippers (Fig. 6) depicted in a standing position while bearing a sacrifical animal, such as a sheep, goat or hare. Two sub-types can be identified on the basis of how the animal is held. One type of worshipper carries an animal, usually a ram, on the shoulder (*kriophoros*), while another type holds an animal against the chest or at the side.

The standing priest statuettes (Fig. 7) found at Emecik generally wear a long two-piece garment with a belt and a conical helmet made of leather. The ears are left free. The long hair falls over the neck and shoulders. They have bulging almond-shaped eyes, a small, closed mouth, a long, broad neck and narrow shoulders. The right arm is bent with the hand resting on the chest, while the left arm hangs alongside the body to which it is

15 Hermary 2010, 92.
16 Blinkenbereg 1931, 456 no. 1847; Riis et al. 1989, 54–6.
17 Simon 1986, 415.
18 Jenkins 2000, 155.
19 Boardman 1967, 68.
20 Jenkins 2001, 177.

attached, and terminates in a clenched fist. This statuette type may be dated to the late 7th century BC on the basis of its stylistic relationship to Neo-Assyrian/Cypriot figures as well as the eastern style dress.[21] The type of helmet may be interpreted as a symbol of authority or as a generally appropriate headgear for adult men.[22]

The final category of limestone votive found at Emecik depicts an enthroned deity (Fig. 8), which corresponds to Kleib's Type A Enthroned Ram Deity of Cyprus, dated to the first half of the 6th century BC.[23] They mostly represent male figures since the ram was the symbol of virility and power. There are two sub-types, depending on the type of throne depicted; one sits on a simple block-like throne with armrests, and the other on a throne flanked by rams. Although the Cypriot Ram-head Deity had Egyptian roots, the Emecik examples generally represent Apollo Karneios.[24] Similar examples have been found at Lindos and in Cyprus, but without the epithet of Karneios. They have been found in sanctuaries dedicated to Apollo at Golgoi *Ayios Photios*, Idalion, Lefkoniko, Athienou *Malloura* and Tamassos.[25] Although the enthroned deity statuette type has been linked to Apollo Karneios due to the association with the ram, it has also been found in sanctuaries devoted to female deities: at Lindos (Athena), Miletus (Aphrodite) and Samos (Hera). They have also been found at Salamis in the Zeus sanctuary.[26]

In sum, the Emecik limestone votives show similar traits to the Cypriot limestone votives in terms of attire, headgear and coiffure, posture and nudity.

PROVENANCE STUDY OF LIMESTONE STATUETTES

Based on the number and variety of types of similar craftsmanship, it was suggested that these statuettes could have been produced locally.[27] However, the fact that similar examples were found in different parts of the Aegean and that they were identified as Cypriot in origin made it necessary to re-evaluate the statuettes in terms of their materials. In order to clarify the issue of the connectivity of Cyprus and Knidia, provenance studies were undertaken using various archaeometric analyses.

Eighty-five statuettes recovered from the Apollo sanctuary were sampled for provenance analysis. Samples were chosen from different statuette types. They include 49 body or leg fragments, four priest body fragments, 12 lion fragments and more complete lion statuettes, seven bird fragments, three goat-carrying male statuettes, four kouros feet and base fragments, one miniature female statuette, one drapery fragment, one kouros head and body fragment, one decorated stone fragment, one carbonate stone fragment and one architectural fragment. Based on the assumption that local materials were used for architectural elements, the architectural fragment was selected to compare with the statuettes.

In order to investigate a local source, systematic surveys were carried out around the Datça peninsula. Based on the literature and the surveys in the area, the Kızlan region (Turkey) appeared to be a possible geological source. Samples were taken from the facies exposed near Akyazı and Rüzgarlı representing the continental and marine sediment of the Yıldırımlı Formation (Turkey).[28]

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21 Hrouda 1965, 36.
22 Senff 1993, 72.
23 Kleibl 2010.
24 Pettersson 1992, 61; Berges 2006, 86.
25 Kleibl 2010.
26 Kleibl 2010.
27 Tuna et al. 2009, 234.
28 To establish a comparative study, samples were also taken from geological sources in Cyprus (Muşkara 2013, 43–50; Muşkara et al. 2021). Since various scholars suggest Tremetousia, Kythrea and the Karpas peninsula as likely production centres for limestone statuettes found in the Mediterranean (Kourou et al. 2002; Polikreti et al. 2004.), geological samples were taken from these quarries

Eighty-five limestone statuettes were investigated by Inductively Coupled Optical Emission Spectroscopy (ICP-OES) and Inductively Coupled Mass Spectroscopy (ICP-MS) and micropaleontologic analysis by thin sections was undertaken to identify planktonic foraminiferal species in the samples.[29] The results showed that only four samples, including a miniature female statuette, a decorated stone base and an architectural fragment, were produced using local resources from different locations.[30] The rest of the statuettes were made of limestone from the same formation – Pachna in Cyprus, which is suggested by various studies as the source of limestone statuettes of either Cypriot type or of mixed style. Similar to the statuettes of local origin from the Apollo sanctuary, different limestone resources were used in Cyprus for statuette production.[31] It is clear, however, that most of the statuettes were produced from limestone obtained from Tremetousia. Analysis of the material from the Apollo sanctuary at Emecik further indicates that unworked limestone from among the sample came from Cyprus, leading to the conclusion that a trade in Cypriot limestone was conducted.

Archaic limestone statuettes found primarily at sanctuaries in the Mediterranean region have long been of concern to scholars in terms of their origin and place of manufacture. Generally, it has been accepted that Cyprus was a production centre. However, stylistic and foreign iconographic elements have led some researchers to assume that production may have taken place outside Cyprus.[32] It is also suggested that these statuettes were produced by Cypriot craftsmen in Cyprus for the Greek market[33] or by travelling Cypriot craftsmen[34] outside the island and that Cypriot craftsmen brought their own raw materials with them and produced limestone statuettes abroad.[35] The presence of unworked Cypriot limestone at Emecik supports the latter theory.

The results of our analyses also confirm that there were workshops where statuettes were produced using local limestone from different sources in Knidia. In addition, four examples among the 85 samples, which were produced from local limestone, indicate that limestone was used in the production of statuettes as well as in architecture. Whether imported as statuettes or as raw material, the origin of the other samples has been shown to be Cyprus. Recently, an Archaic period shipwreck was discovered near Bozburun (Turkey) in the Rhodos Channel, the most important transit area between the Eastern Mediterranean, Cyprus and the Aegean.[36] The main cargo of the shipwreck, thought to be of Cypriot origin, included mortaria, amphorae from Cyprus, Phoenicia, Chios and Miletus, as well as terracotta and limestone statuettes. Dated to the late 7th and early 6th centuries BC, the limestone statuettes show many similarities with the Emecik examples and show that statuettes produced in Cyprus were imported into the Mediterranean region as finished products.

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in Cyprus.

29 Muşkara, 2013, 54–6.

30 Muşkara, 2013, 134.

31 Muşkara, 2013, 135.

32 Sørensen 1978; Fourrier 1999; 2001; Berges 2006; Höckmann and Königs 2007; Hermary 2009; Senff 2009.

33 Riis et al. 1989; Jenkins 2000; 2001.

34 Gjerstad 1948, 327; Sørensen 1978, 119; Riis et al. 1989; Jenkins 2001, 177.

35 Senff 1994; Kourou et al. 2002; Berges 2006.

36 Özdaş and Kızıldağ 2017, 45.

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Transport containers and maritime networks

The case of Cyprus

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ABSTRACT

The emergence of Maritime Transport Containers (MTCs) on Cyprus during the Archaic period marks the first time in the history of the island that agricultural products were indisputably shipped in bulk. Widely known in the literature as basket-handled jars, these vessels were exported all around the Eastern Mediterranean but their presence outside the region is scarce. This paper discusses their main characteristics and places them in the context of the politico-economic landscape of Archaic Cyprus, emphasising the association between MTC production, maritime investment and administrative control mechanisms.

MARITIME TRANSPORT CONTAINERS: A UNIQUE MARKER OF SEABORNE TRADE MECHANISMS IN ANTIQUITY

The seaborne transport of people and goods has a very long history in the Eastern Mediterranean. It was only during the 3rd millennium BC, however, that a very important step was taken towards the development of what we call seaborne trade: instead of random transports, evidence suggests repetitive shipments of goods in significant quantities.[1] For such operations, important parameters had to be taken into consideration, such as the safe packaging of merchandise, in a way that allowed it to be moved by humans (i.e. not animals) and securely stowed in a ship's hold. At least ten different closed pottery vessel types, from both the Aegean and the Levant, dating from the 3rd to the end of the 2nd millennium BC, can be characterised as early MTCs, i.e. vessels that could be used for the safe transportation of organic goods on ships. Apart from their morphological features and size, their primary use in maritime transport can be demonstrated by their presence in considerable numbers far from their production centres and, in some cases, on shipwrecks and/or in storage installations.[2] As Tartaron has explained,[3] maritime commerce has many different levels, which depend on the scale of exchanges or transactions, the frequency of trips, the size of the boats and the distance between the exporting and importing harbours. Heavily capitalised large ships that transport cargoes over long-distance international routes are more visible in the archaeological record than boats of limited capacities, operating in local or regional waters. But it

1 Knapp and Demesticha 2017, 42–6, 70–5.

2 Knapp and Demesticha 2017, 36–42. Evidence from shipwrecks is provided by the Early Helladic deposits at Dokos, Argolid (Papathanasopoulos et al. 2000–2001) and at Yiagana, Cephalonia (Evangelistis 2000).

3 Tartaron 2013, 185–203, 186.

is exactly the large shipments that are mostly associated with the emergence of specialised containers for sea transport; the first MTCs in both the Aegean and the Levant coincided with the expansion of maritime networks in their respective region.[4]

The systematic production of pottery vessels used repeatedly or made exclusively to move bulk organic cargo over long distances by ship has a particular significance for maritime trade mechanisms, institutions and economies. Bevan has convincingly argued that, although the use of storage jars or household closed containers for the occasional shipping of goods was not an exclusively Mediterranean phenomenon, the tradition of packaging goods in specialised pottery containers was; i.e., such a mechanism had not developed anywhere else in the world during antiquity.[5] This is of key importance if we want to approach the socio-economic contexts of MTCs. Unlike all other ceramic vessels that were made to serve household needs and that could be exchanged by land and/or sea, MTCs were low cost, mass produced and manufactured to serve a specific maritime industry. In this respect, they should be properly distinguished from other ceramic assemblages, especially when issues concerning connectivity and economy are discussed.

More than 20 years ago, Mango made an incisive remark, prompting scholars to go *beyond the amphorae*, i.e. not take them as the sole indicator of exchange, especially concerning a higher level of financial investment, such as the Byzantine trade of metalware and glass.[6] Indeed, not only can transport amphorae not be associated with all scales of shipping, but also their trade seems to have been guided by "different rules" or undertaken with a different "economic logic" than that concerning the circulation of ceramic fine wares in the Roman period.[7] For instance, political or administrative borders may have played a key role in MTC's distribution.[8] Although these remarks were based on Roman containers, they are indicative of some particular attributes of MTC production and trade that could be worth investigating in earlier periods as well; for example, the emergence of certain Late Bronze Age (LBA) MTC types can be plausibly linked to an enhanced maritime agency of their place of origin.[9] Another instructive example of the MTC's idiosyncratic appearance in pottery repertoires is Classical Athens, a renowned maritime Greek city which functioned as an emporium and transhipment centre in the Aegean; despite the widely exported fine wares, the absence of a recognised Attic transport amphora type after the second quarter of the 5th century BC is indicative of an "absentee investment in long distance shipping".[10] With the above in mind, I turn now to discuss the case of Iron Age Cyprus, aiming to use MTCs to shed light on the island's maritime capacity and trade networks.

CYPRIOT MTCs

During the last four centuries of the LBA(1400 - 1100 BC), sea transport reached an unprecedented climax in the eastern Mediterranean. The production of Canaanite jars demonstrate how specialisation in seaborne trade developed in the Levant on a much larger scale than in any other part of the region. In Cyprus, locally produced Canaanite jars have been attested but only sporadically; so their presence might have been associated with local consumption rather than exports.[11] Later on, in the Early Iron Age (EIA), the only attested MTC production

4 Demesticha and Knapp 2016.

5 Bevan 2014.

6 Mango 2001.

7 Different trade patterns between transport amphorae and other commodities have been noticed by various scholars. See, for example, Lund 2014, 301–2, for the Roman Eastern Mediterranean; Rice 2011, 91, for the Roman central Mediterranean, and Berlin 1997 for Hellenistic Palestine.

8 For a similar suggestion about the Roman period in the Eastern Mediterranean, see Reynolds 2005.

9 Knapp and Demesticha 2017, 169–71.

10 Lawall 2005, 210.

11 For possible Cypriot Canaanite jars, see Jones and Vaughan 1988, 393 on material excavated at Maa *Palaeokastro*, and Georgiou

centres in the Eastern Mediterranean basin were in the Levant, although their spheres of interaction had significantly shrunk; most of their products have actually been found in Egypt and Cyprus.[12] In short, the maritime centres in the central and southern Levant played a predominant role in the systematic export of organic goods, within and beyond the region, for over a millennium. This does not mean that they monopolised seaborne trade. Cypriot oxhide ingots, for example, were another manifestation of specialisation in sea transport in bulk.[13] Metal exports might well have been a Cypriot enterprise during the EIA, too, when iron tools and weapons were exported along with decorated pottery vessels of various types.[14] Some of the latter, such as Black-on-Red (BoR) juglets,[15] were possibly containers for different kinds of liquids. But none of these vessels were *designed* for transport on ships. So, it seems plausible to suggest that if agricultural products had been shipped from Cyprus during the 2nd and early 1st millennium BC, they must have been transported either in non-ceramic containers or on a small scale by means of occasional enterprises, hard to identify in the archaeological record.

It was not before the end of the 8th century BC that the first Cypriot transport containers were manufactured for export. This was a milestone in the maritime history of Cyprus that has not yet attracted proper scholarly attention as such. This is not at all the case with the containers themselves, however. The large biconical jars with two arched horizontal handles that rise high above the rim are very hard to miss in the literature. They appear in several late 19th century publications,[16] and in the classification system of the Swedish Cyprus Expedition they were classified as "pithoid amphorae of Plain Ware Types IV–VI".[17] As they were largely exported to the Levant, they were included in most, if not all, typological classifications of Levantine pottery and, as a result, the word "jar" has been used more often than the word "amphora", since the latter has been mostly associated with the Greek world.[18] Despite the fact that the Cypriot provenance of the type has been widely acknowledged, they did not become known as Cypriot amphorae, mainly because of the several imitations of the series during the Classical and Hellenistic periods outside Cyprus.[19] Rather, their established name is related to their distinctive morphology: "loop handle jars", "jars with basket handles", "basket jars", "basket" storage jars or "amphores à anses de panier".[20] In this paper, the term Cypriot Maritime Transport Container has been adopted, because the focus is placed on the phenomenon of their emergence during the Cypro-Archaic (CA) period. In the course of the following centuries until the Hellenistic period, the history of the series becomes more complex, as production continued and expanded beyond the island.[21]

Cypriot MTCs appeared in five different sub-types during the Archaic period, according to Humbert's typology.[22] They developed out of a household transport vessel with horizontal arched handles, as Gjerstad

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2014 for Pyla *Kokkinokremos*. For Canaanite jars in Bronze Age Cyprus, see Knapp 2016. Crewe (2012) suggested that a type of early Plain White Handmade pithos may have been used for the transport of organic goods, but all examples thus far have been found only in Cypriot sites.

12 For the typology and distribution networks of Canaanite jars during the EIA see Gilboa et al. 2015, Pedrazzi 2016. For their presence in Cyprus, see Bikai 1983 and Martin 2017.

13 Sherratt and Sherratt 1991, 354.

14 Iacovou 2014b, 803–4; Georgiadou 2016.

15 For the exports to Crete, see Karageorghis and Kanta 2014, 36, 105.

16 See, for instance, Petrie 1888, 64.

17 Gjerstad 1948; 1960.

18 Marangou 2014.

19 See for example Wolff 2009, 137. Locally produced variants have been petrographically confirmed in Mendes, Egypt (De Rodriguo 1998) and Israel, at Tell-el Hesi (Bennett and Blakely 1980, 212–13) and Tel Michal (Singer-Avitz 1989, 116–18). Although we still lack a comprehensive overview of the series biography, the evidence thus far shows that production outside Cyprus was on a small scale and with no documented exports outside the production centres.

20 Salles 1980; Sagona 1982; Stern 1982; Buhl 1983; Humbert 1991; Lehmann 1996.

21 For short overviews of the series, beyond the ones in the previous note, see Calvet 1986; Winther Jacobsen 2002; Leidwanger 2005/2006.

22 Humbert 1991, Types A–E.

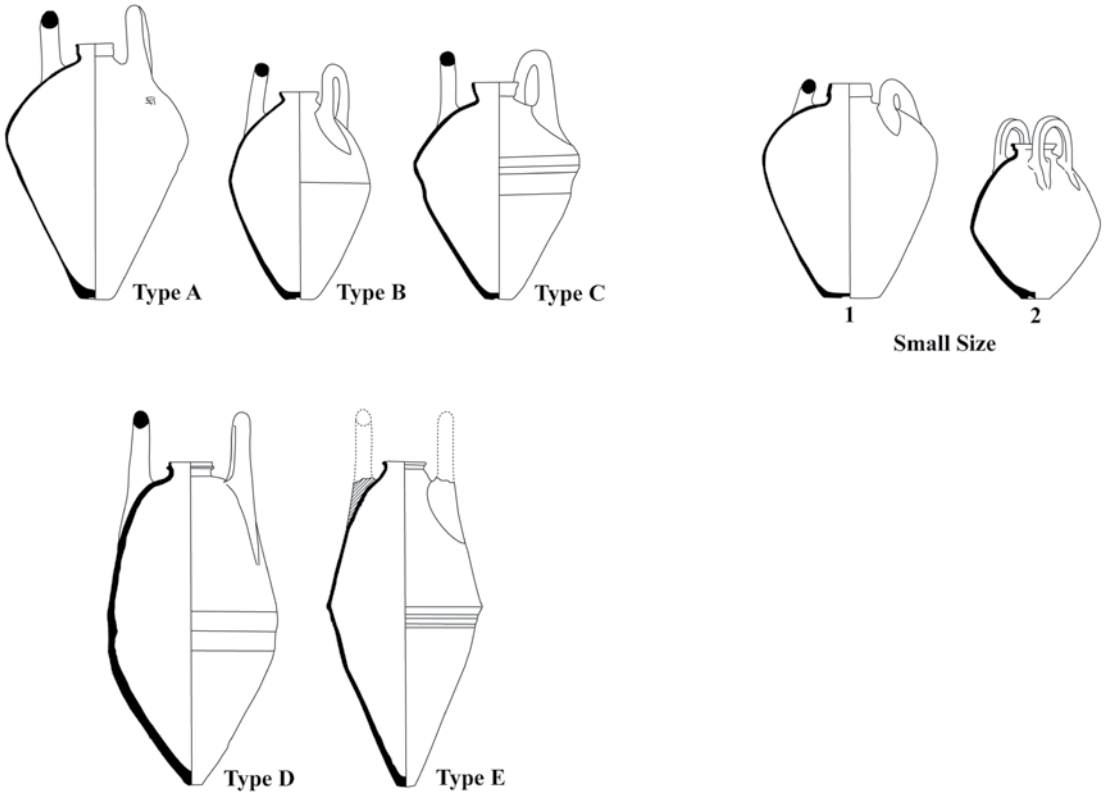

Fig. 1. Types of Archaic Cypriot MTCs (A-E), according to Humbert's typology. The small sized types (1-2) were classified as 'prototypes' by Humbert. All depicted examples from Cypriot contexts:
Type A: Kourion, Royal Tomb, no. KBT1/90/127 (Christou 2013, 228–30).
Type B: Salamis, Tomb 3, no. 97 (Karageorghis 1967, 38, pl. CXXVI).
Type C: Salamis, Tomb 79, no. 720 (Karageorghis 1974, pl. CCXXI).
Type D: Marion Tomb 96, no. 10 (Gjerstad et al. 1935, 448–49, pl. LXXXVI).
Type E: Salamis, Tomb 72, no. 1 (Karageorghis 1970, 112, pls XLIX, CCXLI).
Small Type 1: Salamis Tomb 2, no. 15 (Karageorghis 1967, 12, pl. CXI).
Small Type 2: Marion Tomb 96, no. 9 (Gjerstad et al. 1935, 448–49, pl. LXXXVI).

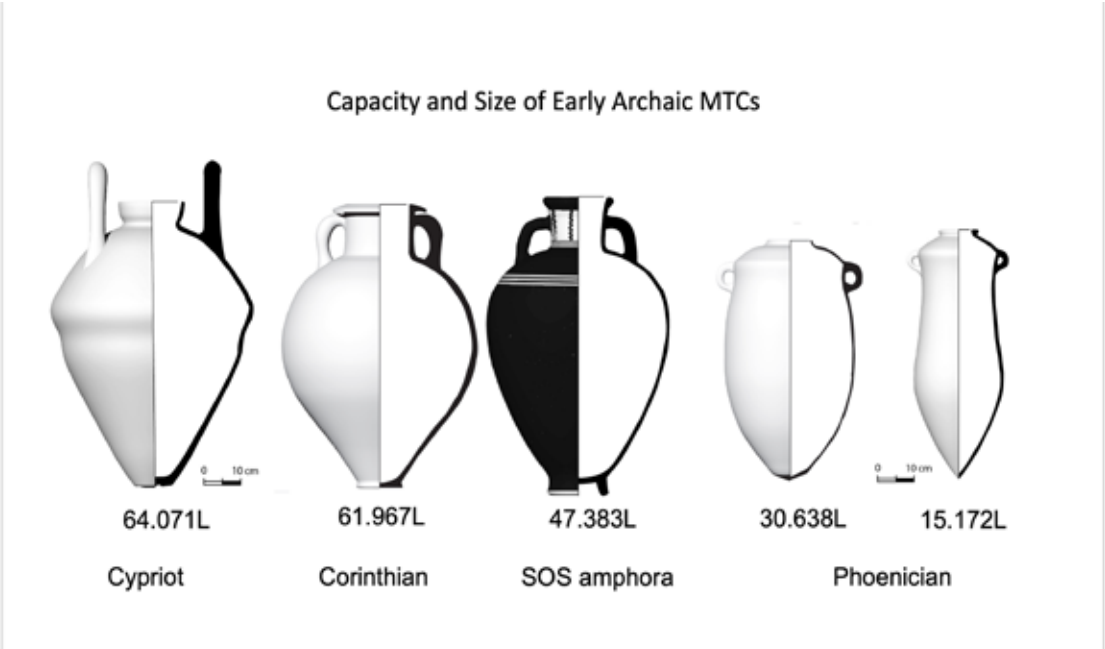

Fig. 2. Archaic MTCs from Cyprus, the Aegean and the Levant, with their respective capacities.

plausibly argued.[23] Not all of them are dated earlier than the transport container's first appearance, however, and two in particular could be classified as small sizes of the standard type (Fig. 1). The earliest variants (Humbert Types A to C and small sizes) are characterised by a biconical body that ends in a narrow flat base, with a shallow recession underneath. The largest diameter of Type A is at the upper body, whereas the bodies of Types B and C are almost symmetrical, with the largest diameter at the middle of the body. The capacity of Types A–C ranges between 65 and 85 litres (Table 1), which makes them the largest early Archaic MTC, followed by Aegean contemporary examples whose capacities average between 40 and 60 litres. The Levantine containers of the same period were of smaller and more elongated form, holding 15 to 30 litres (Fig. 2).[24]

Amphora Type	Capacity (L)	Find Site	Reference
Type A	65	Tell Keisan, Niveau 4, no. 5. 353	Salles 1980: pl. 24.1
Type B	85.1	Ashkelon, Grid 50, Phase 7. 11	Barako 2008, 441, fig. 23.11
Type C	64.071	Salamis Tomb 79, no. 720	Karageorghis 1973/1974, pl CCXXI; Knapp and Demesticha 2017, 181–82
Type C	80	Tell Keisan, Niveau 4, no. 4.434	Salles 1980, pl. 23.1
Type C	67	Tell Keisan, Niveau 4, no. 5.354	Salles 1980, pl. 23.2
Type C	78	Tell Keisan, Niveau 4, no. 5.215	Salles 1980, pl. 23.3

Table 1. Recorded Capacities of seventh century BC Cypriot MTCs types (Types according to Humbert 1991).

The morphological variations of the early Cypriot containers are not significant, but they could still be indicative of different contemporary workshops, either in the same or in different parts of the island. Although much more analytical work has to be done, there is already enough evidence to suggest that eastern Cyprus was the main or among the main production centres, at least in this early phase.[25] Salles thought that there was a local production at Kition as well, although the type's absence from local tombs seems too conspicuous.[26] Humbert Types D and E, dated to the 6th and maybe up to the early 5th century, bear clear features of change towards smaller and more elongated bodies. Flat bases became conical and the maximum body diameter smaller, at the mid-body of Type E and the lower body of Type D. In the present state of research, it is not possible to establish if these changes are associated with the expansion of production sites on the island, or with typological adjustments to meet the needs of systematic shipping.[27]

Cypriot MTCs were multi-purpose containers. Some inscriptions after firing have been interpreted as "olive oil"[28] but they are sporadic and could simply signify the contents of the inscribed jars only, to distinguish them

23 Gjerstad 1960, 120–21, fig. 15. Humbert (1991, 580, fig. 1c) classified them as "prototypes".

24 Knapp and Demesticha 2017, table A (Appendix). For an overview of the first Iron Age MTCs in the Aegean, see Demesticha and Pratt 2017, 132–47.

25 Petrographic (Courtois 1980, 358–60) and Neutron Activation Analysis (Gunneweg and Perlman 1991, 596–97) conducted on containers of this type excavated at Tell Keisan, suggested an eastern Cypriot provenance for the two fabric groups distinguished among the Archaic material. Petrographic analysis on seven fragments from the cargo amphorae of the 7th century BC Kekova Adasi shipwreck, Lycia (Leidwanger et al. 2012) demonstrated homogeneity and also suggested an eastern Cypriot provenance.

26 Salles 1991, 226. For the rarity of basket-handled amphorae among the grave goods of Kitian tombs, see Fourrier 2014.

27 During the Classical period, their production has also been attested in Amathus (Marangou 2019).

28 The word *e-la-i-wo* ("olive oil") in Cypro-Syllabic was written in black paint on a Type A amphora found in Tomb 2 at Salamis (Karageorghis 1967, 38 no. 101, pl. 126; Masson 1967, 132), whereas Puech (1980, 303) interpreted the Phoenician signs inscribed

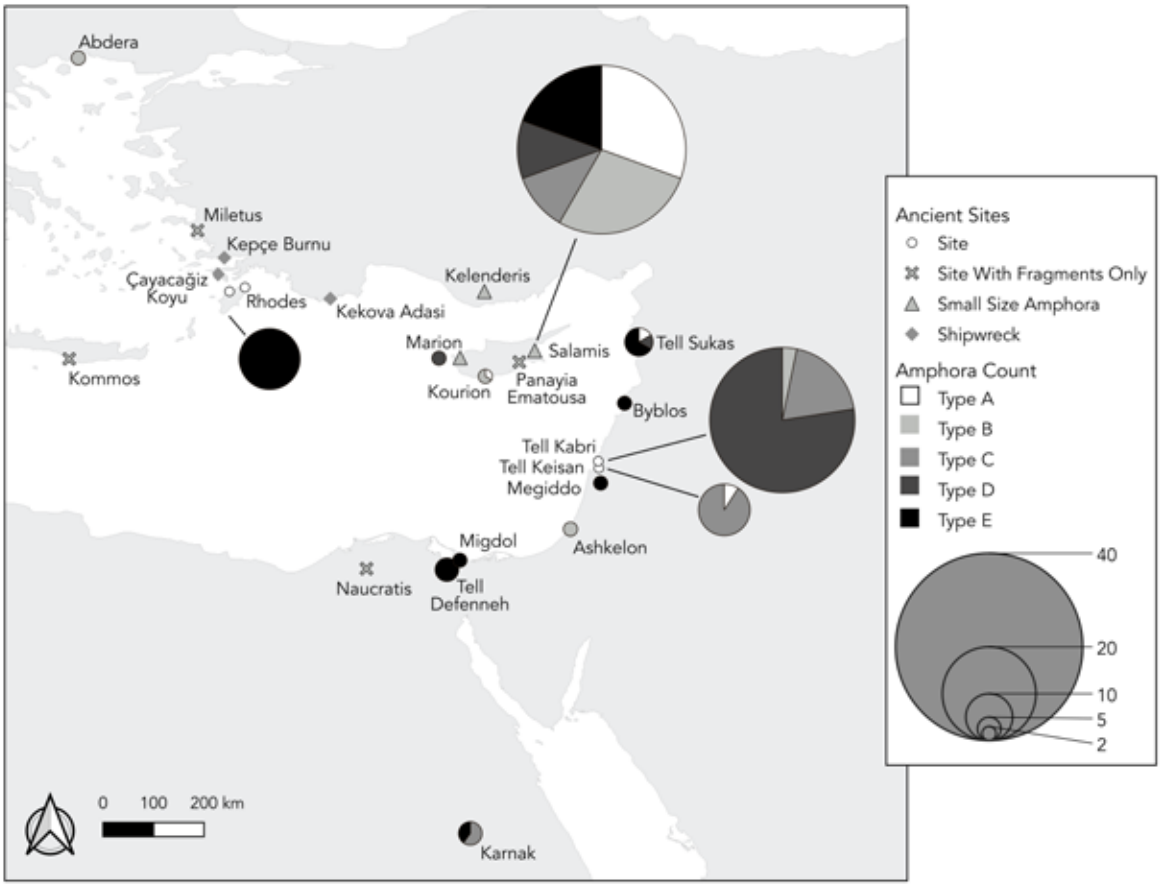

Fig. 3. Distribution map of the 127 Archaic Cypriot MTCs that could be classified under one of Humbert's Types (map drawn by Nathan Meyer).

from the rest of the lot that might have had a different content. Moreover, Humbert argued that the amphorae found at Tell Keisan contained wine, interpreting a thick coating found on their interior as the residue from fermentation. A similar coating was present on the walls of the vessels found at Panayia Ematousa, Aradippou, Cyprus.[29]

Variant-specific distribution maps can be very useful for the study of trade patterns and their fluctuations over specific periods or regions. Since the typological identification of partly preserved containers or fragments is not always possible, however, any such attempt can be only considered indicative. With this in mind, a distribution map of the Archaic Cypriot MTC variants –but not of later ones produced elsewhere in the Eastern Mediterranean– can be considered indicative of the island's trade networks, because any Cypriot MTC located outside the island was an export. One attempt to map these exports, illustrated in Fig. 3, shows that the trade networks of the island expanded during the 6th century BC (Humbert Types D–E). Still, exports outside the Eastern Mediterranean basin seems to be only sporadic and cannot be considered representative of regular shipping practices, at least with MTC cargoes.

after firing on two Type C amphorae from Tell Keisan as abbreviations of Greek *elaion* ("olive oil"), written with the Phoenician letter *lamed*.

29 Humbert 1991, 576–77; Winther Jacobsen 2002, 173–74.

MTCs, POLITICO-ECONOMIC SYSTEMS AND MARITIME NETWORKS

With the transition from aristocratic personal exchange to structured commerce, exchanges of semi-luxury goods, like wine and olive oil, played a central role in Archaic economies. Unlike trade in essential commodities, like grain or metal, they were generated by preferential consumption trends and are certainly attested between producers of the same products.[30] These new social conditions favoured maritime investment and had a profound impact on local economies. A unique boost of maritime exchanges in the Aegean, for example, was associated with urbanisation, colonisation episodes and long-distance trade, as well as with the emergence of the first MTCs exported in large quantities outside the region.[31] Cyprus' new maritime venture of shipping wine and/or olive oil was initiated with containers of large size that presuppose significant investment and low-risk transactions. The island, however, did not take part in colonisation episodes, either as instigator or as a recipient. Thus, the emergence of its first generic local MTCs cannot be associated with long-distance trade or with a previous tradition of trading such commodities, as was the case in the Aegean and the Levant. Therefore, we should probably turn our attention to a different politico-economic context if we want to understand the phenomenon.

The CA period starts with domination by, or at least strong influence from, the Neo-Assyrian state at the end of the 8th century BC. This was a turning point for the political landscape of the Eastern Mediterranean and the island in particular. Cyprus was likely part of the Neo-Assyrian state although it never functioned strictly within its provincial administration.[32] It was also during this period that local polities on the island were created or consolidated and established control mechanisms over their territorial resources.[33] Maritime investment and institutionalised control of agricultural produce, which are prerequisites for structured packaging and shipping commodities in large quantities, were amongst these changes. The unique Archaic Cypriot "fleet" of more than 50 clay ship models underscores the growing role that sea transport must have played in the new polities.[34] The provenance of Humbert Types A–C from Salamis, the first fully urbanised city-harbour of the island, fits very well in this picture, since the city responded to the challenges of a "globalised" Mediterranean with new economic activities.[35] In this respect, I argue that the emergence of the first Cypriot MTCs, as a new maritime side-industry, should be included in "the new phenomena" that characterise the politico-economic system of early Archaic Cyprus.[36]

Although no Archaic shipwreck is known from the Levantine, Egyptian or Cypriot coasts thus far,[37] two such deposits were found in the Aegean and one off Lycia, i.e. on the sea route from Cyprus to the Aegean (Table 2). Only one of the three sites, Çaycağız Koyu, could have been a homogeneous Cypriot cargo, whereas both Cypriot and Aegean amphorae were recovered at the other two, something that attests to redistribution rather than direct shipments.[38] One cannot be sure if these finds represent the norm during the 7th century, i.e. if

30 Salles 1991; Foxhall 1998.

31 For an overview of Greek colonisation see Osborne 2007. For wine consumption in the western Mediterranean in the period, see Riva 2010, and for the exports of Greek amphorae to Sicily, see Pratt 2015; 2016.

32 For a general overview of the archaeological evidence during the Archaic period, see Reyes 1994. On the political system within the Neo-Assyrian state, see Körner 2016.

33 For an extensive discussion of the Cypriot polities see, Iacovou 2013; 2014a; 2014b; 2018; Fourrier 2013, 104; Petit 2019.

34 Westerberg 1983; Basch 1987, 249–62.

35 For the term and a short overview of the Greek and Phoenician expansion to the west, see Sherratt 2016.

36 See Iacovou 2014a, 806, for a discussion on the material manifestations of the royal ideology, such as the architectural monumentality, built tombs and life-size terracotta sculptures and coinage.

37 Shipwreck sites with basket-handled amphorae from the Cyprus and the Levant are dated to the Classical period; e.g. the Ma'agan Mikhael (Kahanov and Linder 2004) and Cape Andreas, Cyprus Site 19A (Green 1973).

38 Proper quantification of these scattered sites is not easy and no detailed catalogues have been published thus far; Kekova Adasi,

Cypriot products were shipped directly within the Eastern Mediterranean but mostly redistributed further west. The evidence does suggest, however, that, unlike their Aegean and Levantine counterparts, the first Cypriot MTCs were mainly shipped within the regional commercial spheres of the island (Fig. 3, Table 2).

Distribution along the Eastern Mediterranean brings to mind the link between MTCs and political or administrative borders, mentioned above, although it still remains difficult to establish whether the MTC distribution that we are able to document today was the result of free or state-regulated entrepreneurial ventures by a new Cypriot merchant elite. If Fantalkin's argued *Pax Assyriaca* is correct, however, and especially if it indeed marked the "great divide" between the region and the Greek trading world,[39] then the Cypriot polities may have taken advantage of some new opportunities arising within a favourable economic trading environment. Moreover, Cypriot MTCs have been found together with a specific type of coarse open vessels, possibly *mortaria*, known as "Persian bowls", at terrestrial sites and shipwrecks.[40] These bowls have been associated with the presence of mercenaries or with military provisions, a condition which has always provided good opportunities for trade and profit.[41]

It is not unlikely that all the above were components of the new economic landscape of the Archaic Eastern Mediterranean. And although it may be pointless to try and identify maritime agents in the constantly mobile world of seaborne trade, it seems plausible that Cypriots traded their own agricultural products, and therefore they created their own MTCs. If this is correct, then the Cypriot merchant fleet must have operated for the most part within the island's regional sphere of interaction. Because, if Cypriot ships sailed beyond the Eastern Mediterranean, in the Aegean or farther west, during the 7th and 6th centuries, i.e. a period with a documented fashion for exotic tastes, then we have to wonder why their seamen and merchants chose not to carry their wines or oils with them…

off Antalya, seems to be the largest of the three sites, with an estimated cargo of 90–100 Cypriot containers, 20 "south-eastern" Aegean and 7–10 Corinthian ones (Greene et al. 2010). Still, Greene et al. (2013) saw a "direct exchange between Cyprus and south-east Aegean", with Cypriots acting as "intermediary traders between the Aegean and the Levant". See also Greene 2018.

39 Fantalkin 2006, 201.

40 Villing 2006, 37. See also Greene et al. 2013 for the shipwreck assemblages.

41 Salles 1991, Fantalkin 2006.

Table 2. The 127 classified examples of Archaic Cypriot MTCs discussed in this paper. Estimated cargo numbers have not been quantified. *Unknown Context.

	Type A	Type B	Type C	Type D	Type E	Small Size	References
Cyprus							
Salamis	11 Tomb 20: 5 Tomb 79: 721, 722, 729, 730, 735, 763, 779, 780, 810, 985	10 Tomb 3: 97, 99, 101 Tomb 14: 7 Tomb 79: 724, 760, 764, 776, 809, 814	4 Tomb 79: nos. 123, 720, 732, 815	4 Tomb 10: 13 Tomb 16: 4 Tomb 55A: 5 Tomb 84: 14	7 Tomb 12: 1 Tomb 14: 8 Tomb 72: 1 Tomb 73: 1 Tomb 115: 2 Squares near the surface: 107, 109	3 Tomb 2: 15–17	Karageorghis 1967, 12, 38, pls. XLI, CXXVI, CXI; Karageorghis 1970, 17–18, 26, 31, 35, 41, 88, 112, 128, 168, 215, pls. XLIX, LXVII–VIII, LXXII, LXX-VII, LXXX-IX, CLX Karageorghis 1973/1974, 52–55, 59, 115, pls. XLV–XLVI, CCXXI–CCXXIV
Kourion	1 Royal Tomb, KBT1/90/127	2 Royal Tomb, KBT1/90/ 121 and 128					Christou 2013, 228–30
Marion				1 Tomb 96: no. 10		2 Tomb 96: 9 Tomb 129: 2	Gjerstad et al. 1935, 448–49, pl. LXXXVI; Nicolaou 1964, 170, fig. 13
Levant							
Tell Keisan	1 Niveau 4, no. 5. 353		10 Niveau 4, 4.434, 5.215, 5.352, 5.354, 5.370, 5.374, 5.375, 5.376, 5.377, 5.378				Salles 1980: 136–41, pls. 23–24

	Type A	Type B	Type C	Type D	Type E	Small Size	References
Tell Sukas	1 TS 4722 (no. 54)			1 Urn Burial 26: no. 4527	4 TS 1431, 3703, 3164, 3165 (nos. 56–59)		Buhl 1983, 19–21, figs. IV, VI; Riis 1979, 20–21, fig. 52
Tel Kabri		1 Stratum E2	6 Stratum E2	24 Stratum E2			Lehmann 2002, 198, fig. 5.84
Byblos					1 No. Jbl 400 9335		Homsy 2003, 246, pl. 2
Megiddo					1 No. 63		Lamon and Shipton 1939, 166. pl. 12.
Ashkelon		1 Grid 50, Phase 7. 11					Barako 2008, 441, fig. 23.11
Egypt							
Defenneh					5 East of the Casemate Building, findspots 2, 3, 9, 51 and British Museum no. 18676		Petrie 1888b, 64, pl. 33.6; Leclère and Spencer 2014, pls. 44, 48, 49, 55
Migdol					1 No. 2993 (T. 21/2)		Oren 1984, 17, fig. 21, 1, 2, 11
Karnak			3 Treasury of Thut-mose I		2 Houses I and VII		Marangou, 2012, 153, 371, fig. 153; Masson 2007, 363; 2011, 306, fig. 96, 97
Southern Anatolia							
Kelenderis						2 Lower City (K.92AG001-2)	Zoroglu 2013, 40–41
Underwater finds	Kekova Adasi Shipwreck (off Lycia)			1* Off Cilicia		1* Off Kelenderis 13-252	Sibella 2002, 5, fig. 2 Zoroğlu 2013, 38, 43 Greene et al. 2013

	Type A	Type B	Type C	Type D	Type E	Small Size	References
Aegean							
Rhodes					13 Kameiros Tombs 129, 78 and 121 Ialysos Tombs 112, 129, 131, 142, 149, 158, 159, 210		Jacopi 1931, 261, pl. VII, Jacopi 1929, pl. IV
Abdera, Thrace		1 No. K 48					Dupont and Skarlatidou 2012, 260, fig. 31
Underwater finds		Kepçe Burnu Shipwreck (Çökertme) Çaycağız Koyu, Shipwreck (Off Marmaris)			1 * Off Caria (Bodrum Museum no. 4.1.95)	1 * Off Caria (Bodrum Museum no. 6.1.95)	Alpözen et al. 1995, 70–71; Greene et al. 2013 Greene et al. 2010
TOTAL (127)	14	15	23	31	35	9	

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Beyond Cyprus

The evidence from the Black Sea

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ABSTRACT

This contribution discusses a series of artefacts found in the Black Sea area and believed to be of Cypriot provenance. These include fragments of transport amphorae and other vessels, as well as votive terracottas that were excavated in the Greek settlements on the western and northwestern Pontic coasts and belong to the period between the Greek colonisation and the Roman conquest of the Black Sea.

Despite the fact that Black Sea material raises more questions than it provides answers to, it offers a unique insight into commercial and cultural exchanges in the Greek world. In particular, the study of this area contributes to a reassessment of the role of Cyprus in long-distance trade patterns from a broader and geographically comparative perspective.

Trade between the Mediterranean and the Black Sea, attested as early as the Chalcolithic period, intensified and regularised with the Greek colonisation of the latter region. Evidence shows that by way of the Greek colonies, the rich territories around the Black Sea exported to the Mediterranean metals and wood, slaves, livestock and food, especially grain[1] and salted fish,[2] but also honey, nuts and other, for the most part archaeologically invisible, provisions, while importing wine, olive oil and crafted products from the Mediterranean.[3] The study of this exchange is significantly impeded by the shortage of written evidence, with information in most cases limited to what can be inferred from excavated (and published) artefacts that allow iconographic or other provenance study. Given the nature of the exchanged goods, it is evident that these artefacts lack geographical coherence and are mostly located around the Black Sea. The research is hampered also by the small number of Black Sea

1 The peak in the international trade of the region occurred between the late 5th and early 3rd centuries BC with the development of a large-scale trade between the Bosporan kingdom and Athens. Bouzek 1989, 249–59; Kuznetsov 2000; Kakhidze 2005, 115–18; Braund 2007; Tsetskhladze 2008, 52–74.

2 Salted or pickled, Pontic fish were especially appreciated in the Hellenistic and Roman age (on the ways in which they were traded, Højte 2005, 138; on recent discoveries regarding the fishing industry, de Boer 2013, 112).

3 There is much dispute regarding the existence, character and volume of trade relations between Greeks and locals in the Archaic period (see e.g. the discussion in Tsetskhladze 2007). In the Classic and Hellenistic periods, for Greek products, the locals exchanged metal, different sorts of grain (wheat, barley, millet), slaves, livestock, fur, wood, honey, fruits, leather, beeswax, wine, timber, charcoal, linen, wax, etc. (among many, Tsetskhladze 1998; Hind 1995–1996, 121–23; Garlan 2007; on slaves Avram 2007, 239–51; on timber Hannestad 2007, 85–100; on hazelnuts Reger 2007, 274–75). The Greeks in the Euxine mostly provided wine and olive oil, along with weapons and tools, luxurious craftsmanship, books, furniture, marble, ivory, textiles, cosmetics, precious metals etc. to the local market (Tsetskhladze 2012, 315–74; Archibald 1983; Kacharava 1995; Ulitin 2013; Teleaga 2008; on glass, Kunina 1997; on olive oil Opaiţ 2010, 153–58; on fine pottery Bouzek 2007).

amphorae reported from the Mediterranean, which comprise only a negligible part of the overall exports.[4]

Comparable issues face the study of Cypriot trade in the Mediterranean, as the main exports of the island within Greek maritime networks consisted of raw materials such as copper and grain.[5] Also, there are many uncertainties regarding the locally produced amphorae,[6] with the exception of the early basket-handled types, and it seems that Cypriot merchandise transported in amphorae[7] was distributed outside of the island primarily during periods of elevated trade activity and/or excess, and shipped mainly to Egypt and the Levant.[8] In this respect, the export of Cypriot products to northern areas is probably best understood in terms of a broader (re) distribution of Levantine and Egyptian products. The traditional view that Levantine imports did not reach the Pontic markets is challenged by recent studies that have published Levantine and Cypriot sherds,[9] found on various settlements on the Black Sea coast, which shed new light on the patterns of connectivity across the Greek world in the context of the Greek colonisation of the Pontus. This paper aims to briefly review these findings and other evidence that contributes to expanding the current academic discourse on Cypriot exports in the Mediterranean.

During the period of Greek colonisation various commodities from the Mediterranean found their way to the Black Sea, among which were Cypriot products.[10] Specifically, around the end of the 7th century BC merchandise appeared in the region transported in basket-handled amphorae,[11] a type of transport container produced on the island of Cyprus and found mainly in the Levant,[12] but also reported from the southwestern coast of Turkey,[13] as well as in minor quantities from Rhodes, Kommos and Miletus[14] and further north in Abdera.[15] Fragments of such amphorae were also found during excavations at one of the major and most ancient archaic trade centres of the Black Sea, Berezan (Fig. 1).[16] This settlement was established during the first phase of colonisation around the last third of the 7th century BC and functioned as a trading point, receiving ceramic containers from all the leading export centres of the period.[17] Furthermore, the site produced fragments of Type 3 Phoenician jugs, also rarely attested beyond the Eastern Mediterranean.[18]

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4 For instance, there are ca 200 specimens of stamped Sinopean amphorae reported from the Mediterranean compared with more than 20,000 reported from the northern zone of the Euxine alone. Garlan 2007; Lund 2007; de Boer 2013, 109.

5 Markou and Stefanaki 2020, 364. The export of Cypriot copper is archaeologically indetectable after the 11th century BC, when the ox-hide ingot shape ceased to be used. Kassianidou 2014, 265.

6 Lawall and Lund 2013.

7 Most probably wine or olive oil, but no systematic scientific analyses have been conducted. Demesticha 2013, 70.

8 Winther Jacobsen 2002.

9 Alexandrescu Vianu 2004; Kerschner 2006; Lungu 2007; Papuci-Władyka 2012; Bujskikh 2017; Chistov et al. 2019.

10 On the archaic Greek imports in Berezan, see e.g. Bouzek 2008; Tsetskhladze 2012. On archaic Cypriot imports in the Black Sea, most recently Dimitrova (forthcoming).

11 Petrographic (Courtois 1980, 358–60) and NAA analysis (Gunneweg and Perlman 1991) of Tell Keisan samples verified the Cypriot provenance of the early types of basket-handled amphorae. On this type, see also Sagona 1982, 89–91 and Humbert 1991, 580–90.

12 On the origin and distribution of these amphorae see Knapp and Demesticha 2016, 131f.; Leidwanger 2005–2006, 25–6 and Fantalkin 2001, 95–6; cf. Winther Jacobsen 2002, 169 on the evidence from Cyprus and De Rodrigo 2004 on fragments from Egypt.

13 Greene et al. 2013, 23–34.

14 Johnston 2005, 358:179, 372:234.

15 Dupont and Skarlatidou 2012, 260.

16 An entire vessel and multiple fragments were discovered during various excavations at the settlement in the course of the 20th century but only studied in the last two decades. Bujskikh 2017; Chistov et al. 2019, 20.

17 Monakhov and Kuznetsova 2017, 66. On the archaeology of Berezan, Solovyov 1999; Chistov 2015. On the Greek-barbarian exchange in the Archaic period, Tsetskhladze 1998; Jonnekin 2008. On the distribution of Greek amphorae in the Euxine during the archaic period, Dupont 2001. On the distribution of Greek imports in the hinterland, Tsetskhladze 2012, 315–74; Samojlova 2009, 363–68.

18 Bujskikh 2017, 198.

Fig. 1. Map of the Black Sea indicating the centres mentioned in the text. Image by author.

Researchers have dated the Levantine imports from Berezan to the chronological period from the end of the 7th to the first half of the 6th century BC, with basket-handled amphorae appearing also in complexes that belong to the third quarter of the 6th century BC.[19] It is not known if they arrived with their original contents; however, their surprising presence on the northern Black Sea coast marks the establishment, with the formation of a "Pontic" market and through the main redistribution centres of the Aegean such as Miletus and Rhodes, of a new trading artery with the potential to transport merchandise between the remote zones of the Levant and the Black Sea. This process is related to Greek colonisation, which triggered the incorporation of the Black Sea in the transregional trade networks of the Mediterranean, and to the overall intensification of economic ties between eastern Greece and the Levant[20] – and illustrates the prominent role of Cyprus as a production and redistribution centre in Mediterranean trade during this period.

An interesting question is whether the Levantine merchandise that penetrated the archaic Black Sea area also sparked cultural exchange and the import of new ideas, including religious concepts. It is particularly tempting to consider this possibility, given that at Istros, a Greek colony located on the way from Apollonia to Berezan, several votive statuettes from the 6th century BC were found that recall Cypriot models.[21] Perhaps their import reflects the diffusion of the style in the Eastern Mediterranean, where from the first half of the 6th century BC figurines of Cypriot style "constituted one of the most popular types of votive offerings throughout East Greece",[22] with Greek centres such as Rhodes, Cnidus, Miletus, Samos and many others receiving hundreds

19 Dupont and Nazarov 2003; Il'ina and Chistov 2012, 24, table 14, 3; Bujskikh 2017; Chistov 2018, ris. 5, 6; Chistov et al. 2019, 20.
20 Morris 2000, 257–61; cf. Fantalkin 2006, 203–4.
21 Alexandrescu Vianu 2004; Hermary 2013, 48–51.
22 Hermary 2015.

Fig. 2. Dedication to Aphrodite Syria. Graffito incised on the base of a black-glazed cup, Olbia, 5th century BC. Hermitage Museum, inv.no. ОГ.1908-1. Image: Courtesy of the Hermitage Museum.

of these dedications.[23] More intriguing is the fact that in the 6th century BC on the West and North-West Black Sea coast spread the cult of Aphrodite Syria.[24] The goddess is referred to in a few archaic inscriptions from the 6th and the 5th centuries BC from Apollonia, Berezan and Olbia (Fig.2), which testify that she was venerated on the sea route from the Bosporus to the North Black Sea shore.[25] The absence of evidence for the existence of this cult outside the Pontus[26] seems to suggest that these important trading ports received cultural influences related to international trade but unrelated to Greek intermediation[27] and raises numerous questions about the identity of the archaic traders and colonists interested in the Black Sea markets, dominated by Ionian ships.[28] An interest in or even presence of individuals of Levantine background in the Black Sea area can be expected given the increased population and volume of trade in this region in the 6th century BC and especially its latter part.[29] However, information about the movement or relocation of persons between the Levant and the Black Sea in the Archaic period is lacking, not counting a single (identified?) Cypriot mortarium recently recovered in Berezan.[30] Individuals originating from the Levant and Cyprus, who were involved in the Black Sea trade, are recorded in the written sources from the 4th century BC, in the context of the growing export of grain from the Bosporan kingdom to Athens, which generated new possibilities for exchange between the Pontus and the Mediterranean.

23 Karageorghis 2009.

24 Hermary 2013, 47.

25 On the inscriptions from Olbia and Berezan, Dubois 1996, 122, nos. 73, 74; on the inscription from Apollonia Pontica, Baralis et al. 2019, 116, cat.103.

26 A divinity with this epithet is attested in other parts of the Greek world only in the Hellenistic and Roman periods. Turcan 1996, 133–34.

27 Ustinova (1998, 213–15) suggested that the appearance of this cult is related to the Scythian raid of the temple of Aphrodite in Ashkelon, recorded by Herodotus (1.103–5). Alexandrescu Vianu (1997, 15) saw in it an early attestation of Atargatis, while Budin (2004, 125) identified it as a reflection of the Phoenician influence on the Greek cult of Aphrodite. Baralis et al. (2019, 116) pointed out that the apparently non-Greek name of the worshipper from Apollonia (Zamo) may evidence the relation of the cult to foreigners residing there.

28 Alexandrescu Vianu 2004, 85.

29 Tsetskhladze 1994, 119–20.

30 Kerschner 2006, 151; Mommsen et al. 2006.

In the context of this trade, a series of five decrees was issued by the Athenians between 330/329 and 325/4 BC. These honour the wealthy entrepreneur Heracleides from Salamis, speaking of his generosity and the help he provided during a crisis within the city over these years.[31] Another Cypriot sailor, Aristokrates, was buried in Pantikapaion, the main *emporion* and capital city of the Bosporan kingdom located on the Crimean Peninsula, sometime between the 4th and 3rd centuries BC.[32] Involved in the Pontic trade was also Antipatros from Kition, resident in Halicarnassus, who around the same period financed a trip from Athens to Pantikapaion.[33] Large-scale traders such as Antipatros likely also served as intermediaries between their homeland and Athens, with archaeological evidence from Cyprus indicating that trade relations between the two strengthened in the second half of the 5th and early 4th centuries BC.[34] In this way, prominent entrepreneurs and merchants interested in the long-distance trade would have been able to facilitate the transformation and expansion of existing axes of connectivity within the Mediterranean, creating new commercial networks through important hubs such as Athens and Rhodes[35] and other actors like Chios[36] or even new direct exchange routes – there is evidence that the Hellenistic period saw traders conducting commercial trips from the Black Sea to the Levant,[37] affecting the tightening of relations between the Black Sea and Egypt.[38]

However, written testimonies of individual actions regarding the Black Sea trade are rare and, as seen above, relevant research relies primarily on the study of the distribution patterns of various vessels, especially transport amphorae. Amphora production in the Black Sea region starts in the late 5th/4th century BC, when Sinope, Heracleia Pontica and Chersonesos started manufacturing amphorae that can be traced within the Mediterranean basin.[39] Among the most ancient and most frequently reported Pontic amphorae are those of Sinope, an important centre of production and distribution located on the south coast of the Black Sea, whose amphora production started in the first quarter of the 4th century and ceased with the capture of the polis by Pharnaces I of Pontus in ca 183 BC.[40] Sinope exported various products and raw materials such as metals (iron, steel silver, copper, lead and mercury), pigments, timber, flax, wool and slaves, as well as foods such as olive oil, cereals, fresh vegetables, nuts and fish,[41] and its trade in amphorae was in all probability related

31 *IG* II^2 360. Bagnall and Derow 1981, 106–8 no. 62; Casson 1991, 110–11, with translation.

32 *CIRB* 236, Dimitrova 2018. Evidence about ordinary Cypriots abroad is not abundant, with attested individuals being mercenaries, artisans or merchants. Nicolaou 1986, 426–28; Raptou 1999, 160; 2000, 23ff.

33 Dem. 35.33. It is interesting to note that the names of these traders were common among Hellenised Phoenicians during the Classical and Hellenistic periods, who often adopted theophoric names such as Heracleides (Melqart), or names that contain aristos- or -kratos, and parts that indicate family relations, such as father, brother and son (e.g. Antipatros). Masson 1969, 699; Briquel-Chatonnet 1995.

34 For Attic pottery imports in Cyprus, Raptou 1999, 144ff. Evidence suggests that Cypriot exports to Athens were sporadic, possibly due to the unstable political situation of the period. Demesticha 2009.

35 Rhodes began trading with the Black Sea in the late 4th century BC, gradually replacing the northern Aegean centres. It remained a fundamental actor in the Euxine trade until the end of the 2nd century BC, when international trade in the Black Sea area generally declined (Belikov 2003, 36–7). The intensification of Rhodian and Egyptian imports in the Euxine in the 3rd century BC coincides with an increasing number of Rhodian amphorae in Cyprus, perhaps as a result of the Ptolemaic political alliances (Lawall and Lund 2013, 9). The large scale of Rhodian imports in Cyprus and the Black Sea during the Hellenistic period suggests that, as noted by Lund (2007, 189), Rhodes might have been an imperative intermediary in the movement of Pontic products to Cyprus, the Levant and Egypt.

36 The Mazotos ship's homogeneous cargo of Chian amphorae suggests a direct course from the north Aegean to Cyprus in the first half of the 4th century BC. Demesticha 2009.

37 Abramzon 2018, 8–10 draws on numismatic evidence in reconstructing the trip of a local trader from the grain producing region of Taman peninsula to Tyre in the 1st century BC. Bosporan traders are attested in the Hellenistic period at Athens, Chios, Rhodes, Delos and Egypt; see Koshelenko et al. 2010, 282–83; Dana 2011.

38 *IScM* III 155 testifies that the Alexandrian trader Theon, son of Potamon, died in Kallatis on the west Black Sea coast in the first half of the 3rd century BC. On the relations between the Ptolemaic and Bosporan kingdoms, Archibald 2007; Reger 2007, 274–78.

39 Tsetskhladze 1998, 43.

40 Saprykin 2002, 93–5.

41 Doonan 2003, 195; 2004, 123; Van Alfen 2002, 138; Hind 1995–1996, 115.

to the production of salted fish, for which it was renowned.[42] Fragments of Sinopean stamped amphorae are found throughout the Black Sea region and across the Mediterranean, mainly at Athens and Rhodes,[43] and also at Pella, Thasos, Corinth, Pergamon, Samos, Miletus, Delos, Cos, Cnidus, Crete, Cyprus (Paphos)[44] and Egypt (Alexandria). They have also been reported from Beirut, Maresha, Samaria, Akko-Ptolemais, the Beqaa Valley and the Jabbul plain on the Levantine coast,[45] as well as from sites in the western Mediterranean, namely Apollonia in Cyrenaica, Carthage, Tarentum and the El Sec shipwreck in the bay of Palma de Mallorca.[46]

It is worth noting that only stamped amphorae of Sinope have been reported from the centres listed above, and it is highly likely that a large proportion of Sinopean products exported to the Mediterranean remain invisible to scholars. However, the spread of these products over such a large territory indicates that Euxinian merchandise was exported or redistributed via various trade routes all around the Mediterranean basin, including the Levant. Evidence about exchange between the Levant and the Black Sea in the Hellenistic period is further provided by the distribution patterns of various vessels which penetrated the Black Sea region in the 3rd and 2nd centuries BC, such as, for example, the so-called Palestinian cups, a subgroup of Hellenistic colour-coated Ware A which originated in Rhodes with imitations produced in various Eastern Mediterranean centres, including Cyprus and Alexandria.[47] These were dispersed from the end of the 3rd century BC along the Syro-Palestinian coast and to Cyprus and Cilicia, as well as to more distant areas including coastal Aegean centres, Athens and the Black Sea, particularly the zone around Pantikapaion.

Similarly, specimens of a type of glass core-formed amphoriskos, produced in the 2nd–1st centuries BC and largely concentrated in Syria and Cyprus, are found in minor quantities in the Aegean, the northeast Black Sea region and Crimea, with single finds documented in North Africa, Italy and Spain.[48] Noteworthy, also, is the distribution of a popular type of amphoriskos known as type 2 of the Tel Anafa late Hellenistic semi-fine tapered amphoriskoi, produced from the second half of the 2nd century BC to the 1st century BC and used in the trade of oils and perfumes.[49] Examples have been recovered mainly from the late Hellenistic levels of Levantine centres (Tel Anafa, Sidon, Tel Kedesh, Dor, Beirut, Maresha, Shiqmona, Akko, Ashdod and Jerusalem), Cyprus (Polis, Amathus and Paphos, where 31 specimens were found in the House of Dionysus in a context dating from 150 to 100 BC), the Mediterranean (Tarsus, Delos, Aegina, Athens, Eretria, Olympia, Ambracia, Delos, Pithekoussai, Pompeii, Abdera and Pella) and the Black Sea (Tomis, Kallatis, Făgăraşul Nou, Bizone, Apollonia, Pantikapaion, Olbia, Chersonesos), in contexts of the second half of the 2nd century BC.[50] Lungu[51] explains the concentration of these jars in Tomis as due to the demands of a local Levantine community. The existing documentation is insufficient to validate this suggestion; however, it is interesting to note that during the 2nd century BC the cult of Theos Hypsistos spread in the polis, related in all probability to the presence of Jewish individuals settled there.[52]

In sum, the available evidence concerning the exchange between Cyprus and the Black Sea from the Archaic to the Hellenistic periods is very fragmentary. The study of the topic faces many limitations, such as the lack of

42 Doonan 2003, 187–92; de Boer 2013, 112.

43 Garlan 2007.

44 Barker 2004, 77, table 1; Nicolaou 2005, 258–59, nos 764–66; Dobosz 2013, 241, pl.2-18.

45 Lund 2007; Finkielsztejn 2011.

46 Garlan 2007, 147.

47 Ackermann 2017, 71–2. On Cyprus, Hayes 1991, 26–7.

48 Harden 1981, 129ff, groups B-iii, B-iv, B-v. On the locations where these were found in the Black Sea region, Kolesnichenko 2018, 106; on the possibility of their Cypriot origin, McClellan 1984, 326–27. See also Cosyns and Nys 2010, 242 with regard to glass production in Cyprus. Although no glass workshop has yet been detected on the island, the authors argue convincingly that a glass workshop existed in Amathus in the late 2nd and/or 1st century BC.

49 Berlin 1997, 54–5.

50 Papuci-Władyka 2012, with bibliography.

51 Lungu 2007, 112.

52 Gibson 1999.

written testimony and the scarcity of archaeological data, the impossibility, in many cases, of determining the place of origin of excavated "oriental", "Levantine", "Cypro-Phoenician" etc. artefacts found around the Black Sea, such as objects of glass/faience, the perishable nature of the Pontic exports, and the poor state of preservation of archaeological sites in the Black Sea region. The available data suggest that the flow of goods, people and ideas between Cyprus and the Black Sea was sporadic. It seems to have primarily resulted from secondary trade and was strongly dependent on economic conditions in the Eastern Mediterranean and individual choices. The question of whether goods were directly transported for trading or personal reasons cannot be resolved on the current evidence. It is possible that the direct exchange of objects and people occasionally took place; however, the main traffic of goods passed through intermediary centres such as Miletus, Athens and Rhodes in the framework of Greek long-distance networks transporting Levantine material in the Mediterranean. It appears that artefacts of Cypriot provenance travelled to the Black Sea along with other Levantine and, perhaps, Egyptian commodities as a result of various actions (trade, redistribution of goods, transport of personal items, export of cults and cult practices, gift exchange) performed by ethnically and culturally diverse actors (traders, entrepreneurs, sailors, pilgrims, visitors, colonists). The fact that their distribution in the remote lands around the Black Sea started from the first phase of Greek colonisation and continued throughout antiquity bears witness, above all, to the importance of the Black Sea market, which provided excellent possibilities for trade, while it also validates the role of Cyprus as an important stopover connecting the Levant with the Eastern Mediterranean.

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CIRB = Struve, V. V., ed. 1965. *Corpus inscriptionum regni Bosporani.* Moscow: Academia scientiarum URSS

IScM III = Avram, A., ed. 2000. *Inscriptiones Scythiae Minoris graecae et latinae,* Vol. III*: Callatis et territorium.* Bucarest: Institutul de Arheologia.

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The evolution of the specific contribution of Cypriot coins in the relations of the island with other geographic entities in the Eastern Mediterranean during the Achaemenid period

The case of Kition and Salamis

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ABSTRACT

In this paper I sketch the evolution of the presence of Cypriot coins of Kition, the Phoenician city-kingdom par excellence, and of philhellenic Salamis in the Eastern Mediterranean. First, the monetary policies in the two Cypriot kingdoms are briefly outlined, then their spread in southern Asia Minor, on the southern coast and to the south east, in the Near East, in Phoenicia and northwest Syria, and in Egypt. The number of coins and the percentage buried in hoards in these five distinct geographical entities are shown in relation to the total number of Cypriot coins in each hoard; then those of the two Cypriot mints are compared to each other. Each of the five regions discussed has its own characteristic economy, evolving in three consecutive periods towards a monetary economy or not. Suggestions and interpretations are formulated on the role of the coins of the two Cypriot mints in these regions, based on the available numismatic data, which future discoveries might alter to a greater or lesser extent.

THE GEOGRAPHIC SITUATION AND HISTORY OF CYPRUS IN THE EAST MEDITERRANEAN AND ITS EXCHANGES

The Mediterranean serves as a link for the regions around it. Maritime communications and exchanges along the coast of Cyprus had expanded and improved already before the Late Bronze period. Numismatic data, coins, are "newcomers" in the network, as no coins were struck in the East Mediterranean before the end of the 6th century BC. In this paper I propose to concentrate on the numismatic data of two important kingdoms in Cyprus, Salamis and Kition.[1]

1 This paper is based on my contribution to the website *kyprioscharacter.eie.gr* "The circulation of Cypriot coins during the Archaic and Classical periods", written in 2015, but not yet available due to technical problems.

NUMISMATIC EXCHANGES: SIMILARITIES AND DIFFERENCES IN THE HISTORY AND THE COINAGE OF KITION AND SALAMIS IN THE 5TH CENTURY BC

When Cyprus started to strike coins, at the end of the 6th century BC,[2] the island was already under Achaemenid rule.[3] The Empire included the whole Eastern Mediterranean. However, the Achaemenid kings did not interfere in the economic and monetary policies of each region. Each entity had its own monetary system and its own coin types.

In the case of Kition and Salamis –two kingdoms with a different historical background, Kition being the Phoenician city-kingdom *par excellence*, Salamis the philhellenic one– their first firmly identified coins looked different. Those of Kition represent a lion, those of Salamis a recumbent ram. The legends are in different scripts, in Phoenician in the former mint, in Cypriot syllabic characters in the latter (Fig. 1.1 and 1.2: coins of the kings Evelthon of Salamis and Ba'almilk I of Kition). However, in the 5th century they also have common characteristics: they are all silver coins struck on the same weight system, the large coins weighing about 11 grams.[4]

COINS INCLUDED IN HOARDS

In my attempt to reconstruct the circulation of the coins from these two mints in the East Mediterranean, I take into account coins included in hoards, a group of coins found together. This exercise is not without problems. Most of the listed hoards have not been found in scientifically controlled excavations. Many have been reconstructed from pieces found on the market. Their integrity is not beyond doubt. The hoards found outside Cyprus contain mainly large silver coins. In countries with a pre-monetary economy, as were all those in the East Mediterranean before about 460 BC, except for Cyprus and Lycia, the coins have only their intrinsic value. These hoards include intact and cut silver coins, coins with test cuts –incisions to verify their silver content– and "Hack-Silber", fragments of silver objects, for example jewellery etc.[5]

To correctly assess the numismatic data in the different regions, three periods are distinguished, marked by the evolution towards a monetary economy in each of the regions: from the last quarter of the 6th until about the mid-5th century, from then until the end of the century and from then to ca 370/60 BC,[6] when Cypriot coins were no longer buried in hoards in the East Mediterranean.

In a very simplified table (Table 1), based on a detailed study summarised in Table 2, the presence of the coins of Kition and Salamis in the hoards is indicated by their percentage, in five geographical regions from Cilicia to Egypt,[7] and in three periods. In the text, this order is reversed, from Egypt to Cilicia, to stress the growing role of Cypriot coins in countries with a monetary economy in the East Mediterranean that had relations of various kinds with the island.

In the case of Egypt, a region without a monetary economy at the time when Cypriot coins were hoarded there, that is from the end of the 6th century until about 450 BC, twelve hoards contained Cypriot coins struck in various mints, among them several at Salamis, many of them bearing test cuts (Fig. 1.3), but not a single one at Kition.

2 Markou 2015, 102; Destrooper-Georgiades 2007, 9–10.
3 Herodotos III.19.3.
4 Markou 2015, 104–6; Destrooper-Georgiades 2007, 11.
5 See *wikipedia.org/wiki/Hacksilver*: 3.10.2021.
6 All dates in the text are BC.
7 This is the geographical order followed in numismatics since Head 1911.

Fig. 1. No. 1. Siglos of Ba'almilk I of Kition, 479–449 BC: Hill 1904, pl. I.11. 22x24mm.
No. 2. Siglos of Evelthon or successor of Salamis, end of the 6th century BC. Roma e-sale 66, 09-01-2020, Lot 576. 22x18mm.
No. 3. Siglos of Salamis with test cuts, end of the 6th century BC, in the Asyut hoard *IGCH* 1644. Price and Waggoner 1975, pl. XXIX. 797. 19x22mm.
No. 4. Siglos of Azbaal of Kition, 450–425/20 BC, as found in hoards in northwest Syria dated 450–400 BC. CNG 434, 12.12.18, lot 119. 19x22mm.
No. 5. Siglos of Gorgos I (?) of Salamis, successor of Evelthon, ca 480 BC, in the Massyaf hoard *IGCH* 1483, northwest Syria, dated 425–400. Kraay and Moorey 1968, pl. XXVI.63. 22x19mm.
No. 6. Siglos of Azbaal of Kition, 450–425/20 BC, in the hoard of the century. Roma e-sale 67, 06.02.2020, lot 463. 24mm.
No. 7. Siglos of Salamis, Gorgos II (?), 450–440 (?) BC, in the hoard of the century. Roma Numismatics Ltd, Auction XIII, 23.03.17, lot 411. 22mm.
No. 8. Siglos of Kition, after 450, overstruck in Aspendos, Pamphylia, warrior to right/ triskeles of human legs; on left side, traces of the reverse of the overstruck coin of Kition, lion attacks stag, 440–430 BC. CNG 432, 14.11.2018, lot 80. 25 mm.
No. 9. Coin of Ba'almilk I of Kition, 479–449 BC, in the Jordan Hoard *IGCH* 1482, northwest Syria, dated soon after 450. Kraay and Moorey 1968, pl. XXI.67. 19x22mm.
No. 10. Tarsus, satrap mounted, helmeted hoplite with shield and spear. Kraay 1975, pl. 60.1036. 18x22mm.
No. 11. Siglos of Evagoras I of Salamis, 415–373 BC. Leu Numismatik AG Web Auction 9, 7-8.09.2019. lot 522. 19x21mm.
No. 12. 1/3rd siglos of Evagoras of Salamis, 415–373 BC. Leu Numismatik AG Web Auction 9, 7-8.09.2019. lot 524. 15mm.

Percentage of coins of Kition and Salamis in hoards in the East Mediterranean[8]										
Period	**Geographic area**									
	S Asia Minor coast		SE Asia Minor		NW Syria		Phoenicia		Egypt	
No. of hoards	12H		2+H		6H		2H		12H	
	K	S	K	S	K	S	K	S	K	S
End 6th–450	-	100	14	86	28	72	-	-	-	100
450–400	60	40	?	?	60	40	100	-	-	-
400–370/65	30	70	-	-	-	-	100	-	-	-

Table 1.

The situation is different in Phoenicia, where coins were struck from about 465 BC onwards. Two hoards, dated between 450 and 350 BC, each contain only one Cypriot coin, a small denomination struck at Kition during the second half of the 5th century. But east and north of Phoenicia (northwest Syria) and in southeast Asia Minor (east of Cilicia) the economic system was still pre-monetary. Among the Cypriot coins included in hoards during the oldest period, a few coins of Kition have been identified and more of Salamis while, between 450 and 400 BC, those struck at Kition are a little more numerous in northwest Syria; the coins in the latter hoards struck at Salamis are often older (Fig. 1.4 and 1.5). The ongoing study of the hoard recently uncovered east of southern Cilicia and also dated to the latter period, is starting to reveal unique and accurate evidence of the numismatic situation east of Cilicia (Fig. 1.6 and 1.7).[9]

In the coastal region of southern Asia Minor, where, from about 460 BC onwards, a monetary economic system and thus coinage were gradually introduced, the situation is more diverse, with a number of Cypriot coins, including examples struck at Kition and Salamis. I am aware of at least 12 hoards buried there from the end of the 6th century up to about 360/50 BC. Although the oldest hoard, still in a pre-monetary economy, does not include coins struck at Kition but does include those struck at Salamis, the coins of Kition are overall somewhat more numerous. In the last period (from 400 to about 360/50 BC), the situation is very different from the other regions, where almost no Cypriot coins were still hoarded. At this time, coins of Cyprus were included in relatively large numbers in many hoards in southern Asia Minor. However, the presence of coins from the two mints under consideration differs considerably, those of Salamis being more numerous if not the only Cypriot coins in two of the ten hoards I have listed (Table 2).[10]

OVERSTRUCK COINS AND STRAY FINDS

I mention also several coins of Kition and Salamis that, in the first half of the 4th century in particular, were used as flans in mints abroad, especially in southern Asia Minor.[11] This direct overstriking predictably left traces of the original types, revealing also the circulation of the coin, as, for example, a coin of Aspendos in Pamphylia, on the south coast of Asia Minor, which was overstruck on a coin of Kition (Fig. 1.8).[12] Stray finds of coins from

8 H. hoards; K. Kition; S. Salamis

9 See Table 2 no. 14 and below, 454 and n. 21.

10 See below, 454 and n. 17.

11 de Callataÿ 2018b, 132–136.

12 Destrooper-Georgiades 2013 *passim*; de Callataÿ 2018a; 2018b, 137; de Callataÿ and MacDonald, since 2013, *passim*. The

Kition, Salamis and other Cypriot mints seem to be very few in the East Mediterranean. In fact, they are rarely reported and have never been systematically inventoried.[13]

THE NUMISMATIC EVIDENCE COMPARED WITH OTHER TYPES OF CYPRIOT MATERIAL CULTURE

To return to the above, we may note that, like other artefacts, the coins of Kition and Salamis are not equally spread across the East Mediterranean before the Hellenistic period, either regionally or chronologically (Table 1).

THE PARTICULARITY OF THE NUMISMATIC DATA AND THEIR EVOLUTION DURING THE *ACHAEMENID* PERIOD

Considering the numismatic data in the network of the relations of Kition and Salamis in Cyprus with other regions in the East Mediterranean, we must take into account, on the one hand, the economic system in these regions and, on the other, the available coinage struck in the mints of Kition and Salamis during the three periods under study here.

The evolution of economic systems in the East Mediterranean

In non-monetary economies, the exact provenance of coins did not matter but the metal, in this case silver, did. The test cuts that mutilated the coins are a clear proof of this. So are most of the coins in hoards buried in the East Mediterranean before ca 460/50 BC (Table 2, Fig. 1.3 and 1.5), which contain only a few intact coins, e.g. a coin of Ba'almilk I, king of Kition between about 479 and 449 BC, which was buried about 450 BC in pre-monetary western Syria, east of Phoenicia (Table 2, Fig. 1.9).[14] The absence of intact coins is thus not proof of the lack of any form of relationship between the Cypriot city-kingdoms and the East Mediterranean, as artefacts identified as Cypriot products of this period testify. The Persian expedition under Cambyses to conquer the land of the Nile in 525 BC, involving the participation of the fifth satrapy in which Cyprus was included, also indicates this.[15]

The evolution of monetary policies in Cyprus and the East Mediterranean

It goes without saying that the existence or non-existence of coinage in the Cypriot mints explains the presence or absence of their coins in the hoards – for example the presence of coins of Salamis, where minting began at the end of the 6th century, and the absence of coins of Kition in the oldest hoards. Indeed, the first coins satisfactorily attributed to Kition, those of Ba'almilk I, are dated after 479 BC, more than 20 years later than the earliest coins from Salamis. This is why, for example, in Egypt no coins of Kition are included in hoards with Cypriot coins buried from the end of the 6th century to ca 450 BC (Tables 1, 2 nos. 23–31).

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number of overstruck coins has risen dramatically since 2018; they were part of a large hoard presumably found east of Cilicia: see below, 454 and n. 21.

13 A coin of Idalion was found during excavation in Israel, Markou and Farhi, this volume.

14 *IGCH* 1482 no. 67, here Table 2 no. 18.

15 Herodotos III.19.3.

In Phoenicia and southern Asia Minor, the monetary economy was introduced in the decade of the 460s BC, about half a century later than in Cyprus. In Phoenicia, no coins of Salamis have been found in the only two hoards listed here. The small Kitian coins in these two hoards, forming respectively less than two and a little more than three percent of the coins in the hoards (Table 2, nos. 21–22), are of course not sufficient to draw any firm conclusion. On the contrary, in southern Asia Minor we have a fair number of hoards and of Cypriot coins, especially in the first decades of the 4th century (Table 2 nos. 3–12). In this period, plenty of coins were also struck in Cilicia and Pamphylia. Several of their coin-types are associated with warfare, for example those of Tarsus which depict, among other things, a helmeted hoplite with shield and spear (Fig. 1.10). These are related to military preparations and the intervention of the Achaemenids in the region, attested in literary sources.[16] Indeed, coins were needed to pay troops and eventually for other military purposes. On the other hand, military events forced people to hoard and bury their coins.

The quite important number of coins of Evagoras I of Salamis (415–383 BC) among the Cypriot coins in the hoards –if these are not the only Cypriot coins as is the case in two hoards[17]– likely finds an explanation in the incursion of Evagoras into Cilicia in the 380s, mentioned only by Isocrates[18] but confirmed by the finds of sigloi and 1/3rd sigloi of Evagoras (Fig. 1.11 and 1.12).[19] It is interesting to note that many of these coins are 1/3rd siglos, a coin denomination that corresponds to the daily pay of a mercenary in the army of the 10,000 of Cyrus the Younger in 401–400 BC, as can be deduced from Xenophon's *Anabasis*, which mentions that the initial monthly pay was one golden daric.[20] In this case the coins have their face-value, not the intrinsic value of the precious metal as happens in non-monetary economies. Unfortunately, none of these hoards were found in regular excavations, so we do not know where exactly they were buried. Such knowledge would have allowed us to make suggestions about troop movements and the location of the battle fields.

CONCLUSIONS

It is clear that we must think carefully about our data in order to speak about the numismatic relations of Cyprus with other regions of the East Mediterranean. Economic policies in the countries where Cypriot coins have been found and the numismatic history of each of the Cypriot kingdoms must be taken into account. The spread of their coins was not dictated by the political regimes of the countries they reached, nor by the Phoenician status of Kition or the Greek status of Salamis, but by economic needs of many kinds in the host countries and the availability of coins in the Cypriot mints.

These conclusions are based on the numismatic material at our disposal now. They will be challenged by new information that will refine the impact of the numismatic evidence –and the date and volume of the coins– on the relations of Cyprus with the East Mediterranean. I am wondering what consequences the new evidence of a very large hoard or hoards "of the century", that have come to light on the market since 2018, will have on the suggestions presented here concerning the spread of the coins of Kition and Salamis. This (these) hoard(s) include(s) more than 2000 coins, according to Bekircan Tahberer who will publish the hoard(s).[21] Many coins

16 Diodorus of Sicily XIV. 39.2–4; 79.8; 98; XV. 2–4; 8–10.2; 38; 41–3 e.g. for the Cypriot implication: Destrooper-Georgiades 2004, 256 no. 32–4 and others.

17 *IGCH* 1260 with *CoinH* II.36; *CoinH* IX.394; here Table 2, nos. 8 and 12; see above, 252 and n. 10.

18 Isocrates IX, *Evagoras*, 62; IV, *Panegyricus*, 161; for doubts about the veracity of Isocrates, see Destrooper-Georgiades 2004, 256 n. 35.

19 Destrooper-Georgiades 2004, 251, 252 and no. 20, 253 n. 22, 256–57; for the important role of the movement of the armies in coin circulation: de Callataÿ (forthcoming b).

20 Xenophon, *Anabasis* I. 3.21; Destrooper-Georgiades 2004, 257 n. 41; the reference to Xenophon is not so explicit in the above article.

21 Tahberer 2021; see above, 452 and no. 9.

are from Pamphylia, Cilicia and Phaselis (Lycia) as well as from several Cypriot city-kingdoms, including Kition and Salamis (Fig. 1.6 and 1.7). They are said to have been discovered on the Turkish-Syrian border, but their exact find place and context are unknown. These discoveries will shed new light on the numismatic relations of Cyprus with the East Mediterranean.

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Table 2. Coins of Kition & Salamis in hoards in the East Mediterranean

No.	Find-place[1]	Reference[2]	Date	TTL of coins	TTL of Cypriot coins/% in hoard		KITION TTL & % on TTL Cypriot coins		SALAMIS TTL & % on TTL Cypriot coins		KITION TTL & % on TTL coins Kition + Salamis		SALAMIS TTL & % on TTL coins Kition + Salamis	
SOUTH ASIA MINOR: 12 hoards, nos. 1–12														
end 6th–450: 1 hoard														
01	Adana; F, I, H	1.4	500/490	010+	03/4	30/40	-	-	01(?	33?/25?	-	-	01?	100
450–400: 1 hoard														
02	South Asia Minor (?)[3]; F, I, H	1252	430/20?	033	11	33.33	03	27	02	18	03	60	02	40
400–360/50: 10 hoards														
03	Side	1254	c. 400	017	01	05.88	01	100	-	-	01	100	-	-
04	Kelenderis; F, I, H	1255+1.21	c. 400	1375+	17?	01.23	10/12?	59	01	06	10+	91	01?	09
05	Cilicia (?)[4]; F, I, H	1259	c. 380	c.100	04	04.00	02	50	02	50	02	50	02	50
06	Nagidos	8.91;9.390	c. 380	435	11	02.53	08	73	02	18	08	80	02	20
07	Cilicia	9.393	c. 380	064+	09	14.06	05	55	02	22	05	72	02	28
08	Cilicia	1260+2.36[5]	380/75	075	53	70.66	-	-	53	100	-	-	53	100
09	Cilicia	8.165	380/75	041	04	09.76	03	75	01	25	03	75	01	25
10	Kelenderis	8.100,173[6]	380/75	052	05	09.61	02	40	02	40	02	50	02	50

1 F, I, H: hoards with fragmented coins, coins bearing test cuts and/or "Hack-Silber".
2 The numbers refer to those in *IGCH*; those preceded by a number from 1. to 10. to the respective *CoinH*.
3 The find place, in Asia Minor or further to the east, is not certain.
4 Neither the number of coins nor their find place in Cilicia or elsewhere can be confirmed. In all cases, the number of Cypriot coins remains the same.
5 In *CoinH* II Vlamis refers only to the Cypriot coins in the hoards. He adds three sigloi of Evagoras I to the 50 1/3rd sigloi.
6 The two different entries in *CoinH* refer in fact to only one hoard.

11	Cilicia (?) 1901	1263;8.99	375	137	24	17.52	13	54	9/10	37?	13	59	09	41
12	Cilicia 1983	NFA 1983; 9.394	370	113	32	28.32	-	-	32?	100	-	-	32?	100
SOUTHEAST ASIA MINOR: 2 (?) hoards, nos. 13–14														
end 6th–450: 1 hoard														
13	'Eastern Mediterranean'; F, I, H	8.19;9.347	c. 500	066	28	42.42	--02(?	07?	12	43	02?	14	12	86
450–400: 1 hoard														
14	Hoard 2018; F, I, H	Web 2021.11.30	c. 400	thousands	c. 500?	Many hundreds	??	??	??	??	??	??	??	??
NORTHWEST SYRIA: 6 hoards, nos. 15–20														
end 6th–450: 4 hoards														
15	Ras Shamra; F, I, H	1478	510/500	039+	06	15.79	-	-	06	100	-	-	06	100
16	Antilebanon; F, I, H	6.4-5; 7.12;8.45	480/75	c70	02(?	02.86+	-	-	01	050	-	-	01	100
17	Near East; F, I, H	7.16	c. 480/75	005+	01	20.00	-	-	01	100	-	-	01	100
18	Jordan; F, I, H	1482	c. 450	113	c22	19.47	05	23	05	23	05	50	05	50
2 hoards: 450–400														
19	Massyaf; F, I, H	1483	425–400	c100	04	04.00	02	50	02	50	02	50	02	50
20	Levant; F, I, H	CNG 97.2014	420–400	029	01	03.45	01	100	-	-	01	100	-	-
PHOENICIA: 2 hoards nos. 21–22														
450–400: 1 hoard														
21	Byblos; F, I, H	Elayi hoard LXXXIII[7]	425–420	054	01	01.85	01	100	-	-	01	100	-	-
400–360/50: 1 hoard														
22	Beirut	1500	c. 366/332	033	01	03.03	01	100	-	-	01	100	-	-
EGYPT: 9 hoards nos. 23–31														
end 6th–450: all the hoards														
23	Mit Rahineh; F, I, H	1636;3.2	c. 500	023	01	04.35	-	-	01	100	-	-	01	100

7 Elayi and Elayi 2009, 65–75.

24	Demanhur; F, I, H	1637	c. 500	174+	17+	09.80	-	-	05	29	-	-	05	100
25	Egypt; F, I, H	2.10	c. 500	009+	02	22.22	-	-	01	50	-	-	01	100
26	Delta; F, I, H	1638	500-480	028+[8]	02	07.14	-	-	02	100	-	-	02	100
27	Fayum; F, I, H	1646	c. 490[9]	015	04	26.66	-	-	02	50	-	-	02	100
28	Egypt; F, I, H	1.7	490/80	005	01	20.00	-	-	01	100	-	-	01	100
29	Asyut; F, I, H	1644[10]	(490) 475/60	880+/ 890+ 920+[11]	44	04.78	-	-	22	50	-	-	22	100
30	Zagazig; F, I, H	1645;10.436	470/50	084[12]	01	01.19	-	-	01	50	-	-	01	100
31	Delta mummy hoard Delta (?); F, I, H	8.57	450/30	016/18	01	06.25/05/55	-	-	01	100	-	-	01	100

8 The two coins of Tyre are more recent in the archaic context, so they probably do not belong to this hoard (Elayi and Elayi 1993, 401).
9 For this high date see already Price and Waggoner 1975, 20.
10 See also CoinH II.17; IV.11; VIII.44; IX.680; X.435.
11 Van Alfen 2009, 141–56; *CoinH* VIII.44; *CoinH* IX 680; *CoinH* X. 435 for different number of coins in the hoard.
12 Date and content of the hoard are contested.

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A rare coin of Idalion from Israel and Idalion's coin production and circulation in the 5th century BC

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ABSTRACT

The paper offers a general overview of the coins minted by the kings of Idalion in Cyprus during the first half of the 5th century BC. The kings of Idalion adopted the local Cypriot weight standard for their silver coins, based on a siglos of ca 11 g and its divisions. The characteristic type of Idalion represents a sphinx on the obverse and an irregular incuse square on the reverse, replaced later by a lotus flower.

Coin production in Idalion ended in the middle of the 5th century, when Idalion lost its autonomy and was integrated into the areas under the control of the kings of Kition.

Particular attention is given to a rare silver-plated coin of Idalion, discovered at Khirbet Qeiyafa, Israel, which allows us to raise questions regarding coin circulation in Cyprus and in the Southern Levant and address the use of foreign plated coins in Judea in the 5th century.

AN OVERVIEW OF THE COINS MINTED BY THE KINGS OF IDALION

The coins produced in Cyprus by the kings of Idalion during the first half of the 5th century BC[1] are limited in number, compared to that of the other local kingdoms. This is because the life span was limited for the autonomy of this specific kingdom, as it lost its autonomy as well as its privilege to issue coins in the middle of the 5th century.[2]

The dating of the coin issues of Idalion is secured with the help of hoard evidence brought to light in Cyprus and abroad, as well as overstrikes on other Cypriot coins, that give us some relative chronology.[3] Only one king of Idalion is mentioned in the other primary sources such as inscriptions; Stasikypros appears to be the last king, before the conquest of the city by Kition.[4]

1 All dates in the text are BC.

2 Destrooper-Georgiades 2002, 351–62; Markou 2015, 114–15.

3 On the smaller denominations of various kings, such as the twelves and twenty-fourths of a siglos, the head of Athena is represented on the obverse and the lotus flower on the reverse. Only a few examples survive of this denomination. See examples in Zapiti and Michaelidou 2008, 99–100 nos. 1, 4 and 7.

4 Masson 1983, 235–44 no. 217.

The earliest coins attributed to Idalion bear no legends and represent a seated sphinx on the obverse with curled wing and raised forepaw and an irregular incuse square on the reverse with no legends.[5] The dating of the series is placed around 500, based on a coin of this type which was included in the Asyut hoard (see Fig. 4.b)[6]

Another series without a legend and with the same types, but with a circle of dots with a pellet in the centre of the left field behind the sphinx, is probably of the same period.[7]

Then follows a series of inscribed coins bearing the same iconography; four Cypriot syllabic signs are visible on the obverse of these issues but their meaning remains unclear, although different readings have been proposed.[8] That two coins of this type, which were included in the Larnaca hoard, are overstrikes, one over a coin from an unidentified Cypriot mint and another over a coin of Paphos, places the series between 500 and 480.[9]

The following series shows an important change of the reverse type. A lotus flower with two symmetrical tendrils on the base is now represented on the reverse, and is surrounded by the Cypriot syllabic signs pa-si ki (-), that is of a king Ki (-). The royal name cannot be completed, because of the absence of any other mention of this king in literary or epigraphic sources, but the dating is rather secure because of an overstrike. One of his sigloi was struck using as a flan a siglos issued by Baalmilk I, king of Kition, who reigned from ca 475 to 450. This observation places the rule of king Ki (-) of Idalion after 480.[10]

The following king, also exclusively known through the coin legends, is the king Gra (-), whose name is partially engraved on the obverse of his coins with the Cypriot syllabic signs *pa* (for the royal title) and "*ka-ra*" (for the name) and therefore cannot be completed securely. Sigloi and sixths of a siglos are attributed to this king who adopts the previous iconography, but now with the sphinx facing left and the lotus flower surrounded by an ivy leaf in the left field and an astragalos (knuckle bone) on the right. His coins are vaguely dated after 480, since no coins from this ruler were included in the Larnaca hoard, whose burial date is placed around 480, but were included in the Dali I hoard (*IGCH* 1275) found in Cyprus and buried between ca 425 and 400.[11]

The last coins issued by the kings of Idalion are dated before the middle of the 5th century and are attributed to the king Stasikypros based on the presence of the Cypriot syllabic sign "*sa*" on the obverse of a series that preserves the same iconography. Thirds and twelfths of a siglos, which bear the initial of this king's name and are attributed to this king of Idalion, are mentioned in the famous Idalion tablet, dedicated to Athena, which was discovered in situ in the goddess' temple in the acropolis of the city.[12] The bronze tablet, the most extensive document in Cypriot syllabic script, commemorates the victory of the city against the unsuccessful attack of the Kitians and the Medes.

Most of Stasikypros' coins surviving today are thirds of a siglos weighing ca 3.50 g which explains why only the sign "*sa*" is apparent on them, while the twelfths of the siglos, fewer among surviving coins, represent the head of Athena wearing an Attic helmet on the obverse and a lotus flower on the reverse with the sign "*sa*" in the left field. Coins of this king were also included in the Dali I hoard.[13]

Finally, there is another series with a peculiar, to the Cypriot numismatics at least, coin legend. The types maintain the sphinx on the obverse and the lotus flower on the reverse (with an ankh in the place of the astragalos) but the legend in Cypriot syllabic script reads *"e-ta-li".* There have been several discussions regarding

5 Hill 1904, li and 24 no. 1.
6 Price and Waggoner 1975, 105–6 no. 777.
7 Hill 1904, li and 24 no. 2.
8 Dikaios 1935, 167; Masson 1983, 250 no. 225.
9 Dikaios 1935, 167 no. 4 and no. 20; Destrooper-Georgiades 1984, 143–44.
10 Hill 1904, 25 no. 6 n. 2, pl. V, 5.
11 Hill 1904, 26–27 nos. 10–19, pl. V, 9–12.
12 Masson 1983, 235–44 no. 217; Georgiadou 2015.
13 *IGCH* 1275; Hill 1904, 28 nos. 20–28, pl. V, 13–16 (named erroneously Stasioikos rather than Stasikypros).

the meaning of this legend, which refers to the name of the coin "*i-da-li-kon*", which is common in the Greek world and in Cyprus is attested in other kingdoms.[14]

The silver coins minted by Idalion ended in the middle of the 5th century when the kingdom was included in the areas of control of the kings of Kition by Ozibaal. This is attested by Phoenician inscriptions of the kings of Kition, who include Idalion in their territory until the demolition of Kition by Ptolemy in 313, as well as by the fact that, having lost its autonomy, Idalion no longer existed as a kingdom and issued no more coins after that date.[15]

CIRCULATION OF IDALION COINS (TABLE 1)

The coins of Idalion are absent from many hoards that included Cypriot issues and were buried at the end of the 6th century, such as the Ras Shamra hoard in Syria (*IGCH* 1478) and the Demanhur hoard in Egypt (*IGCH* 1637). This is an indication for the dating of the earliest issues at the end of the 5th century. Idalion coins are common in hoards found in Cyprus. The Larnaca hoard (*IGCH* 1272), buried around 480, included 39 examples from Idalion, where both the irregular incuse square (29 specimens) and the lotus flower reverses (10 specimens) were present. Thirty coins from Idalion were also included in the Dali I hoard (*IGCH* 1275). Idalion coins were also incorporated in hoards discovered overseas, in Asia Minor, Egypt and Jordan.[16]

Burial date	Hoard name	Area	*IGCH* No.	Total of coins	No. of Idalion coins	Denominations
c. 485	Behna el Asl	Egypt	1640	92+	1	Siglos
c. 480	Larnaca	Cyprus	1272	700	39	Sigloi
c. 475	Asyut	Egypt	1644	681+	1	Siglos
c. 460	Fayum	Egypt	1646	c. 15	1	Siglos
c. 445	Jordan	Jordan	1482	82	4	3 Sigloi / 1 third
c. 430	Asia Minor	Asia Minor	1252	32+	1	1 third
c. 425–400	Dali I	Cyprus	1275	122	30	20 Sigloi / 1 fraction
c. 380	Vouni	Cyprus	1278	252	1	1 fraction

Table 1. Coins of Idalion discovered in hoards (5th–early 4th centuries).

As one can see from Table 1, only eight coins of Idalion have so far been discovered in hoards outside Cyprus, and not one is said to be plated. Only two of them are thirds, which makes the discovery of the coin that will be discussed below especially interesting.

14 Masson 1996, 39.

15 Iacovou 2002 on the documentation of the Cypriot kingdoms. On the Phoenician epigraphic documents regarding the kings of Kition and their areas of control, see Yon 2004.

16 For the hoard evidence see Destrooper-Georgiades 1995; 2004; Markou 2011a.

Fig. 1. Khirbet Qeiyafa: view to the north (photograph by Sky View).

INTRODUCTION TO KHIRBET QEIYAFA – THE SITE AND ITS NUMISMATIC FINDS

The excavations at Khirbet Qeiyafa in Israel (Fig. 1) have disclosed occupation layers from various periods, among them layers dating from the late Persian and early Hellenistic periods (Stratum III) rich with small finds.[17] The strategic location of this site –above the fertile Elah Valley, close to the border between Judea, Philistia and Idumea and adjacent to major routes leading to Jerusalem and to the north, south and west– support the assumption that this was an important site under successive Persian, Macedonian and Ptolemaic rule. On the basis of the numismatic evidence the site is presumed to have been abandoned ca 260.

The numismatic finds from Khirbet Qeiyafa, from the Persian-Hellenistic periods, are so far unique, both in quantity and variety, compared to other sites in Judea and in the region in its entirety. This, however, might be the result not only of the site's strategic location and its possible foreign population during these periods, but also of the method of retrieval of the finds during the Khirbet Qeiyafa excavations. A metal detector, which assists archaeologists in finding tiny metal objects, was systematically used by one of the authors (Y.F.) and hundreds of coins and various metal objects were retrieved thanks to this method, which is not standard in all archaeological excavations. These finds shed light upon the various types of coins that were in circulation in the region of Judea during the transitional period from Persian to Hellenistic domination and allow us to reconstruct the local and regional circulation patterns.

The finds from Khirbet Qeiyafa Stratum III (Late Persian-Early Hellenistic period) include local and foreign coins, primarily of silver and bronze (very few are silver-plated bronzes), as well as various *hacksilber* (irregularly

17 The excavations at Khirbet Qeiyafa, conducted from 2007 to 2013, were directed by Y. Garfinkel, S. Ganor and M. Hasel on behalf of the Hebrew University of Jerusalem. For the final publication series, see Garfinkel and Ganor 2009; Garfinkel et al. 2014. For the final publication of the numismatic finds, see Farhi 2016. We wish to thank the directors of the excavation for permission to use the photos of the coins and the site which are included here.

Fig. 2. Other Archaic coins from Khirbet Qeiyafa (scale 2:1).
a. A stater/didrachm of Chios, dating from the beginning of the 5th century (5.18 g, 15.5 mm; Israel Antiquities Authority, no. 153926).
b. A quarter of an Athenian tetradrachm of the mid-5th century (3.51 g, ca 20 mm; Israel Antiquities Authority, no. 153927).
c. A drachm of Samos of the late 5th or early 4th century (3.45 g, 15x16 mm; Israel Antiquities Authority, no. 153928).

cut silver) pieces.[18] The coins range from the late 6th to the second quarter of the 3rd century and have been divided into several groups according to their chronology and provenance: Archaic and Classical Greek coins (late 6th to late 5th centuries); Athenian tetradrachms (5th to late 4th/early 3rd centuries); local coins from the mints of Philistia (Gaza, Ashdod and Ashkelon), Judea, Samaria and possibly Idumea (4th century); coins from Phoenicia (late 4th century); coins of the early Hellenistic period (mainly Macedonian and "satrapal") struck in the names of Alexander the Great and his successors (late 4th to early 3rd century); and Ptolemaic coins (late 4th to the second quarter of the 3rd century).

The coin of Idalion belongs to the earliest group, which includes four Archaic and Classical Greek coins, originating from various extra-regional mints.

In addition to the coin from Idalion the group includes: a cut stater/didrachm of Chios, dating from the beginning of the 5th century (Fig. 2a); a quarter of an Athenian tetradrachm of the mid-5th century (Fig. 2b); and a drachm from Samos of the late 5th or early 4th century, with a deep test cut (Fig. 2c).[19] Such early coins are quite rare in the region, with only a dozen Archaic and early Classical issues reported from controlled archaeological excavations in Israel.[20] The fact that three of the coins were deliberately cut in antiquity and the fourth has a deep test cut suggests that they were used not as actual coins but as *hacksilber*, that is, as bullion to be weighed in commercial transactions.[21] Such coins, especially cut ones, are usually found in hoards alongside silver ingots and other silver pieces used as bullion, rather than as strays.[22]

18 The term *hacksilber* (irregularly cut silver) describes broken pieces of silver ingots, coins, jewelry and other silver objects that were used as currency. Material in this form was weighed on scales against standardised weights for the purposes of exchange or payment, and this usage continued after coinage became the main means of exchange and different coinage systems had developed. The excavations at Khirbet Qeiyafa yielded nine pieces of silver ingots and other silver pieces, as well as 15 pieces of silver jewelry, either complete or broken (Farhi 2016, 161–66; Shalev and Shilstein 2016).

19 Farhi 2016, 35 nos. 2–4.

20 Gitler and Tal 2006, 13–6; Farhi and Gadot 2012. Some 30 additional Archaic and early Classical issues are listed as stray finds (Gitler and Tal 2006, 17–22).

21 See discussions in Gitler and Tal 2006, 14; Farhi and Gadot 2012, 4.

22 See, e.g., Kraay and Moorey 1968; Price and Waggoner 1975; van Alfen 2004–2005.

Scale 1:1.

Scale 3:1.

Fig. 3. The coin of Idalion from Khirbet Qeiyafa (1.92 g, 16 mm; Israel Antiquities Authority, no. 153925).

These four coins were found in Area C,[23] within Stratum III, dated to the Late Persian and Early Hellenistic period. Many coins were found in Area C. The most recent are dated to the mid-4th century; none belong to the Macedonian or Ptolemaic periods.[24] All the ceramic vessel forms found in Area C are well-known types traditionally dated to the 6th–4th centuries, especially to the 4th.[25] Taking in conjunction the numismatic and ceramic evidence, it seems that the final occupation phase in Area C should be dated to the late 4th century. The construction date of the buildings in Area C cannot be determined. However, the fact that all the coins of this early group derive from Area C may indicate that this was the first area occupied by the new settlers of Khirbet Qeiyafa during the Persian period, probably in the early 4th century.

These early coins from Khirbet Qeiyafa may have arrived in Judea soon after their minting, in the late 6th or 5th centuries – that is, during the transitional stage predating the beginning of a monetary economy in the Southern Levant, or as late as the 4th century. The lack of any remains dated to the 6th or 5th centuries at Khirbet Qeiyafa suggests that this early group of coins, including the coin of Idalion, arrived at the site during the latter part of the Persian period, as late as the 4th century.

THE COIN OF IDALION FROM KHIRBET QEIYAFA

The coin under discussion was found during the 2010 excavation season (Fig. 3).[26] It represents on the obverse a sphinx seated right with curled wing and raised forepaw and an incuse square on the reverse. The coin was intentionally cut in half and thus only half of the coin survived. It is silver-plated and weighs 1.92 g. An X-ray

23 For the stratigraphy of Area C see Freikman and Garfinkel 2014.

24 Farhi 2014, 377–83; 2016, 57, map 3.

25 Typical forms of the Early Persian period, such as carrot juglets and certain forms of jugs and cooking-pots, are absent from Khirbet Qeiyafa. The scanty amount of imported pottery is securely dated to the late 5th–4th centuries (Sandhaus and Kreimerman 2015, 261).

26 The coin was found in Area C, locus 6081, basket 8227. See Farhi 2016, 35 no.1. It is now in storage at the Israel Antiquities Authority (IAA) coin department, no. 153925. The authors wish to thank Anne Destrooper-Georgiades and Nicholas Hardwick for discussing the coin with one of them (Y.F.).

Fig. 4. Sigloi and thirds of sigloi from Idalion (scale 1:1).
a. Oxford, the Ashmolean Museum, no. 11729, silver siglos (10.83 g, 22 mm) from the Fayum Hoard.
b. Numismatic Lanz München, Auction 106, November 27, 2001, no. 167. Silver siglos (11.05 g, 20 mm) from the Asyut Hoard (no. 777).
c. ANS, no. 1944.100.57996 from the E.T. Newell Collection. Siglos (10.94 g, 19 mm).
d. ANS, no. 1944.100.57997 from the E.T. Newell Collection. Silver third of a siglos (3.60 g, 16 mm).

Fluorescence Spectrometry (XRF) analysis of the coin revealed that it is made of tin bronze and coated with silver,[27] with no traces of Au or Pb, which usually appear in archaic coins.[28]

The diameter of the coin (16 mm) and its suggested original weight (ca 3.80 g) attest that it was initially a third (1/3) of a siglos (ca 25 mm, 11.16 g).

This coin can be included in the first issues of Idalion which have on their obverse a sphinx facing right with raised forepaw while the reverse has been struck by an incuse which produces a shallow irregular pattern. The reverse of the coin from Khirbet Qeiyafa is slightly different from the first issues of the mint –since it was not struck by an incuse which produces a shallow irregular pattern– and from the later issues as well –since it does not present a clear stylised lotus flower within an incuse square. Thanks to the almost uncirculated condition of the Khirbet Qeiyafa specimen, one can also see that the chest of the sphinx is decorated with dots, as is the third of a siglos from the American Numismatic Society (ANS) coin collection.[29] The reverse of this coin might suggest that this specific specimen should fit between the early known issues (in which no flower is seen on the reverse) and the later issues (in which the stylised lotus flower is clear), but this sequence is not totally secure.

Examples of this early type are relatively rare.[30] The Khirbet Qeiyafa coin can be compared with two coins discovered in hoards from Egypt; one coin from the Fayum hoard (*IGCH* 1957), currently kept in the Ashmolean Museum in Oxford (Fig. 4a), and one coin that has been sold in auctions in the past years (Fig. 4b). A close parallel can also be found in a siglos from the collection of the ANS (Fig. 4c), which also holds a third of a siglos (Fig. 4d).

27 Shalev and Shilstein 2016, 170–71 no. 1.

28 See for example Shalev and Shilstein 2016, 170–71 nos. 2–3.

29 The other known specimens are too worn to see if the sphinx is decorated in the same way or not.

30 Coins of this type were included in hoards such as the Asyut hoard (Price and Waggoner 1975, 105–6 no. 777), and in another hoard, probably from Egypt (Van Alfen 2004–2005, 10 no. 15); it is also possible that two other specimens of this type were part of a hoard from Jordan (Kraay and Moorey 1968, 189 nos. 73–4), and three are in the British Museum (Hill 1904, 26 nos. 8–9; Sheedy 1999, 282).

THE IMPORTANCE OF THE DISCOVERY IN THE UNDERSTANDING OF CIRCULATION AND COIN USAGE PATTERNS

This discovery from Israel is exceptional, since the coin from Idalion seems to be the first archaic silver-plated coin from this mint to be found in excavations outside Cyprus. Although no specific study on silver-plated Cypriot coins has been conducted to date, it is clear from the number of surviving coins in private and public collections that a large number of Cypriot silver coins, from various kingdoms, especially from the 5th century, are silver-plated,[31] as evidenced by the test cuts made in antiquity, and this has been explained by the lack of silver in the island.[32] The tradition of saving precious metal by mixing it with less precious metals continues for the Cypriots in the classical period, with their issues in gold, especially during times of war.[33]

Silver-plated coins of the late 6th–4th centuries, usually large denominations, both from local mints (Samaria, Philistia and Phoenicia) and foreign ones (Athens, Aegina), are known from hoards and stray finds in the Southern Levant.[34]

Two explanations are given for the presence of silver-plated coins; they may be official issues coined in periods of financial crisis, or they may be fraudulent imitations.[35] The occurrence of silver-plated coins can also be explained as deriving from the need to produce a specific number of coins from a given amount of silver. Thus, if the minter had difficulty in dividing the given amount of silver into the correct number of coins, or if the given amount of silver bullion did not suffice to produce the requested number of coins, or if he wished to steal part of the silver, he would supplement his production with coins that had bronze-alloy cores. When dealing with locally minted currency serving the local market, it is possible that such "counterfeits" were tolerated by the authorities, as long as they did not upset the stability of economic conditions.[36] Foreign silver-plated coins could have been treated in a similar way by the local authorities in Judea, especially in periods when no local coins were struck, e.g. the late 6th and early 5th centuries, and possibly even later into the 4th century.

Whether this silver-plated coin of Idalion was minted by the authorities in certain circumstances (e.g. a shortage of silver bullion), or produced as fraudulent coin, is impossible to know, as contemporary historical references to the production of silver-plated coins in Idalion are unfortunately not available. However, its discovery in Khirbet Qeiyafa, alongside other intentionally cut silver coins from foreign mints, suggests that this coin was possibly treated during local transactions similarly to the non-plated silver coins and not removed from circulation, even though it was obvious that it is plated.

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31 If not mentioned in the description of the image and without an autopsy, identifying silver-plated coins requires either a test cut or a clear alteration in the metal consistency. Few examples of such coins (none from Idalion) have been published so far (Hill 1904, 46 no. 4; Sheedy 1999, 284; Pilides and Destrooper-Georgiades 2008, 317 no. 36). These silver-plated coins as well as the bronze core of silver coins (Hill 1904: 58 no. 58) and the evidence of test cuts on other Cypriot coins (see for example Kagan 1994, 31, 33) prove that plated coins were known in Cyprus as in other areas such as the Levant (Pilides and Destrooper-Georgiades 2008, 324–25, 327).

32 Kassianidou 2009, 49.

33 Gold coins of king Evagoras I of Salamis included an important amount of bronze that was intentionally added by this king in order to produce more coins with a limited amount of precious metal, pay his mercenaries and finance the Cypriot war (391–380/79) (Markou 2011b, 216–18, 260–63; 2013, 121–22).

34 See for example: Meshorer and Qedar 1991, 67; Gitler and Tal 2006, 10, fig. 1; 17, fig. 1.4 no. 1; 19, fig. 1.5 no. 2; 27–29, fig. 2.3 nos. 6, 12, 15; 54; 122 cat. V.10Db; 126 cat. V.16Dc; 132 cat. VI.1Db; 148 cat. VII.2HDa; 160 cat. XI.6Da–b; 184 cat. XIII.16Da–b; 312–13; Farhi 2010; 2016, 22; 2021, 107, fig. 7.5 nos. 1–2.

35 Kroll 1993, 7, 9–10; Gitler and Tal 2006, 313.

36 Gitler and Tal 2006, 313.

CLOSING REMARKS

This rare find from Khirbet Qeyiafa is another missing piece in the puzzle of the classical coins of Idalion. Its discovery emphasises the importance of excavation finds and their publication for supporting ongoing numismatic research, especially for mints such as Idalion, with a limited coin production and difficulties in attribution and dating. This find also contributes to a better understanding of the circulation patterns of the coins of Idalion outside Cyprus. In addition, this coin, being not only from a foreign mint but also plated, gives another insight into the use of coins from distant mints in a region which lacks local silver coins during the 6th and 5th centuries.

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Mercenaries

Cypriots abroad and foreigners in Cyprus before the Hellenistic period

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ABSTRACT

Among the vectors of cultural interaction, mercenary activities are particularly well documented in the ancient Mediterranean. Epigraphic evidence concerns Cypriot mercenaries abroad but also foreign mercenaries in Cyprus, especially but not exclusively during the Hellenistic period. Before the end of the 4th century, Cypriots serving as mercenaries are documented in the Near East and in Egypt in literary sources, administrative texts and inscriptions. Foreign soldiers in Cyprus are sporadically attested before the second part of the Classical period, but their number increases during the 4th century. A turning point seems to be represented by the Cypriot War, during which Evagoras I opposed the Great King and his allies.

Within the framework of human, social and cultural mobility in the ancient Mediterranean, mercenaries deserve a leading role. Mercenary armies and soldiers are a particularly well documented phenomenon in the Greek world, notably in the Classical and Hellenistic periods, which has been extensively studied in regard to its historical, political, economic, social and cultural implications.[1] For a long time, the emergence of mercenary activities was seen in relation to the particular political and historical context of 4th-century Greece. Recent studies, however, have challenged this view and placed emphasis on the diffusion of mercenary activities during the Archaic period, on a more widespread level than previously admitted, when the accent was on their "elitarian" character.[2]

Among Archaic-period mercenaries, Ionians and Carians are frequently mentioned: the evidence is provided by Neo-Assyrian documents, on one side, and the literary, archaeological and epigraphic testimonia on the mercenaries serving in Egypt under the 26th dynasty on the other.[3] Cypriots are barely mentioned in this context, and some scholars even deny the existence of Cypriot mercenaries.[4] Closer to the truth, the enduring cliché of Cyprus as an interface between the Greek world and the Near East in antiquity[5] has the merit of putting the focus on the strategic importance of the island, at the centre of the area where Ionian and Carian mercenaries were active, that is southeastern Anatolia, the Levantine coast and Egypt. It is of some utility to recall the evidence linking Cyprus to the wider Archaic-period mercenary network, before more closely examining the (limited)

3 Bettalli 1995, 43–73, 109–11; Fischer-Bovet 2014, 18–43. A new, long-awaited edition of the Elephantine stela (a crucial Egyptian document on the war between Amasis and Apries, ca. 570 BC, where Greek mercenaries were involved) has been published by Jansen-Winkeln 2014.

4 E.g. Luraghi 2006, 25 n. 18.

5 Bettalli 1995, 49.

Fig. 1. Detail from the outer register of the Amathus bowl, illustrating the siege scene (© The Trustees of the British Museum).

presence of Cypriot mercenaries outside the island and the (larger but mostly later) presence of foreign mercenaries in Cyprus.

Greek activity in the Levant, linking trade with piracy, is well documented.[6] Neo-Assyrian texts of the second half of the 8th century (from the reigns of Tiglath-pileser III, Sargon II and Sennacherib) repeatedly refer to "Ionian" (*Iamnaia*) pirates ravaging the Cilician coast: as has been correctly pointed out, these "Ionians" are most probably Greeks, from Euboea, the Cyclades and Asia Minor.[7] Even if no explicit evidence of Greek soldiers serving in the Assyrian army exists, prestige goods of Near Eastern origin, possibly obtained as war booty and consecrated in Greek sanctuaries (Eretria, Samos, Miletus), point to the participation of Greek mercenaries in the Assyrian military conquests and plundering of the second half of the 8th century.[8]

An object of Cypriot origin is frequently cited to prove that the iconography of the Greek-armed soldier was known in the Near East, thus suggesting the effective presence of Greek mercenaries in the area.[9] The so-called Amathus bowl, a 7th-century fragmentary silver bowl of (Cypro-)Phoenician manufacture decorated in repoussé and engraved, shows on the outer register a siege scene in which warriors in Assyrian dress fight close to Greek hoplites and soldiers carrying pointed shields of a type well known in Cyprus (Fig. 1).[10] The scene probably depicts a mythical episode which is difficult to identify, but of great interest here is the mixture of ethnicities illustrated by the soldiers' dress. As suggested, the hoplite-type warriors are most probably inspired by Ionian and Carian mercenaries, known to have fought on the side of Psammetichus I when he took power in 663 BC (Herodotus 2.152), but possibly already active in the wider area some decades before.[11] The discovery

6 Waldbaum 1997; Niemeier 2001; Rollinger 2001.

7 Rollinger 2007 on the identification of the "Ionians" (*Iamnaia*) in the Neo-Assyrian texts.

8 Luraghi 2006, 38–41.

9 E.g. Bettalli 1995, 45–6; Niemeier 2001, 21; Luraghi 2006, 36–8; Hale 2013, 182–84; Fischer-Bovet 2014, 21.

10 Barnett 1977; Markoe 1985, 172–74, 248–49; Hermary 1986 (all with previous references): notably, a pointed shield of the type represented in the scene (a parade piece of fine manufacture, possibly from the same atelier) was found together with the bowl, in the same tomb.

11 Hermary 1986, 189, 192; Luraghi 2006, 38.

of the bowl in Cyprus does not demonstrate, of course, the presence of such mercenaries in the island, but only that their iconography was known and familiar in the historical and cultural milieu of the member of the elite who received the bowl as a diplomatic present, as well as of its Phoenician creator (whether the bowl was produced in Cyprus or elsewhere for the Cypriot market).[12] No evidence allows us to suppose the actual presence of mercenaries in Cyprus at this time.

Evidence for the existence of Cypriot mercenaries in the Archaic period is also poor.[13] Philagoras (transcribed Pilagura), king of Chytroi in Esarhaddon's and Assurbanipal's lists of Cypriot kings and kingdoms, is sometimes quoted in older literature as a Cypriot mercenary who had served Esarhaddon and been rewarded by the Assyrian king with the kingdom of Chytroi.[14] This assumption is, however, highly uncertain, as it is based on a problematic text by Abydenus (who does not mention Philagoras, but Pythagoras, the philosopher), and it cannot be taken as anything more than erudite speculation.

As far as we know, the most reliable evidence concerning the existence of Archaic-period Cypriot mercenaries comes from the Arad ostraca, late 7th-century archival documents in Hebrew from a Judean border fortress in the northern Negev which was destroyed by the Babylonians at the very beginning of the 6th century. Several ostraca mention KTYM (*Kittim*) men receiving quantities of oil and wine.[15] The assumption that KTYM (the plural form of the ethnic "Kitian") must refer to Greeks and not to Cypriots (or even to people from Kition) has no precise linguistic or historical grounding, but is frequently proposed since the existing evidence concerns Greek mercenaries in the Archaic Near East, and never Cypriot ones.[16] The parallels for the use of this ethnic in Hebrew texts, particularly in the Bible, indicate however that it can still refer, at this stage, to people from Cyprus, and possibly specifically from Kition.[17]

The evidence is safer for the Classical period. Cypriot mercenaries, together with Greeks, Carians and Phoenicians, left several graffiti on the walls of the Memnonion, the mortuary temple of Seti I at Abydos.[18] Some of the graffiti left by Cypriots are alphabetic, but the majority are syllabic (Fig. 2a–c). Composed of a simple name, sometimes accompanied by the ethnic and the patronym, they are interpreted as the signatures of mercenaries, rather than pilgrims or "tourists" or voyagers.[19] Although some are impossible to read and understand (because of the bad state of the text, or of the copies: no revision of the syllabic texts has been undertaken since the first publications by Sayce in 1884–1886), we can safely assume that most date from the Classical period,[20] and that Salaminians were predominant among the people who left their signatures. Some mercenaries came from Soloi or Paphos;[21] one graffito seems to be non-Greek, possibly Eteocypriot (Fig. 2c). The presence of Cypriot, and particularly Salaminian, soldiers in Egypt is generally connected with the good relations which existed between the king of Salamis, Evagoras,[22] and the Egyptian king, Akoris (cf. Diodorus 15.2.3), who pursued

12 The representation of soldiers with typical Cypriot equipment (pointed shields) suggests that the bowl was produced specifically for the Cypriot market: Hermary 1986, 192.

13 On the much-discussed Iamani of Ashdod and his alleged Greek or Cypriot origin, see the very balanced views expressed by Lanfranchi 2000, 13 n. 20 and Rollinger 2001, 235–36, 245–48.

14 Bettalli 1995, 48–9 and Rollinger 2001, 252–53, with references; note that Bettalli considers the interpretation to be well founded.

15 Aharoni 1981.

16 E.g. Niemeier 2001, 18; Luraghi 2006, 25 n. 18; Na'aman 2011, 87–8.

17 Cannavò 2018 with references.

18 Perdrizet and Lefebvre 1917; Masson 1976 (alphabetic Greek graffiti); Sayce 1884; 1885; 1886 (syllabic graffiti); Masson 1983, 356–73, 404, 422–23 (syllabic graffiti). Cf. Rutherford 2003, 175 and n. 7 with additional references. There is no extant edition of all the graffiti from the Memnonion in the different languages.

19 On this issue, and more generally on the graffiti from the Memnonion, see Rutherford 2003 (esp. 175–79).

20 It is surprising that one alphabetic graffito from a man of Salamis, possibly named Stasioikos, is considered to be Archaic (Perdrizet and Lefebvre 1917, 77 no. 426; cf. Masson 1983, 356): alphabetic script was not really used in Cyprus before the second part of the Classical period. I do not see anything in the facsimile published by Perdrizet and Lefebvre (cf. Fig. 2b) that suggests such an early date for this graffito. I consider it dates from the beginning of the 4th century, as the others do.

21 Cf. Masson 1971, 36–37; Launey 1987, 488.

22 Here and in the entire text Evagoras is Evagoras I, king of Salamis between ca. 410 and 374 BC.

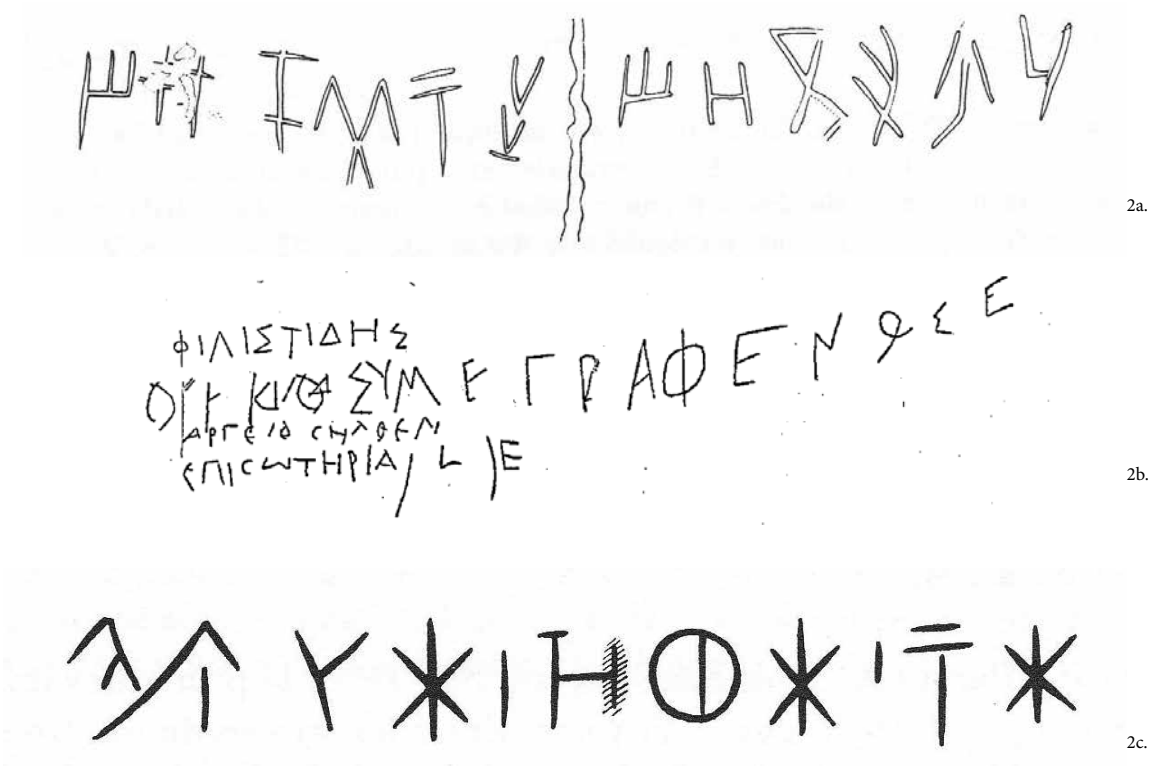

Fig. 2. Graffiti from Abydos: a) Syllabic graffito of Sawoklewes from Salamis: *sa-wo-ke-le-we/e-se-o-na-u-pa-mo-se* (after Masson 1983, 361, fig. 124). b) Alphabetic graffito of a man from Salamis: Στασί(?)]οικος μ᾽ ἔγραφεν ὁ Σε(λαμίνιος), partially covered by the later graffito of a man from Argos (after Perdrizet and Lefebvre 1917, 77 nos. 425–26). c) Syllabic, possibly Eteocypriot graffito (after Masson 1983, 362, fig. 126).

a common anti-Persian policy in the first decades of the 4th century.[23] It is, however, unsafe to associate the Cypriot mercenary presence at Abydos with specific historical or political events.

Another consistent set of evidence comes from the so-called chapel of Akoris at Karnak, a small religious building bearing on its outer walls decades of Cypriot graffiti (Fig. 3).[24] Mostly syllabic (with a few Greek alphabetic), they were left by Cypriot mercenaries serving in Egypt under the orders of Akoris, within the framework either of his anti-Persian war or of internal struggles for the accession to the throne, in both cases no later than the second decade of the 4th century.[25] The graffiti are all very similar, both typologically and paleographically. No other people added their signatures to this monument, so the whole ensemble must be related to the presence, on a single occasion, of a specific contingent of soldiers. If this is the case, the ethnics, more extensively used than at Abydos, provide interesting information on the composition of the contingent. At Karnak, too, we find one Salaminian, signing several times both in the syllabic and the alphabetic script,[26] Paphians,[27] a man from Lapithos,[28] one coming maybe from Kition,[29] and several people from Ledra, signing in the syllabary but also in the alphabet.[30] Some mercenaries employ, instead of the ethnic, a more precise indication of prove-

23 Masson 1983, 357 with references; on the historical context: Körner 2017, 249–62.

24 Traunecker et al. 1981.

25 Traunecker et al. 1981, 254–55; cf. Masson 1983, 375.

26 Traunecker et al. 1981, 260–1 nos. 2–2a (alphabetic), 262 no. 7, 265 no. 15 (syllabic).

27 Traunecker et al. 1981, 274–75 nos. 42–4, 279–80 no. 53, 280–81 no. 55.

28 Traunecker et al. 1981, 273 no. 38.

29 Traunecker et al. 1981, 276–77 no. 49.

30 Traunecker et al. 1981, 260 no. 1, 261 no. 3, 261–62 no. 5 (alphabetic); 262 no. 6, 262–63 no. 8, 263 no. 9, 270 no. 29, 270–71 nos. 30–1 (syllabic). One of the Ledrians who signed in the alphabet (graffito no. 1) has a Phoenician name, Balsamon (but a Greek patronym, Philodemos). One signing in the syllabary (graffito no. 31) takes care to identify himself as a Ledrian from Cyprus, *le-ti-*

Fig. 3. View from the northeast of the chapel of Akoris at Karnak in 1972 (© CNRS-CFEETK n 7577 / A. Bellod).

nance, from the name of a village or locality ("demotics"),[31] or some kind of phyletics (formations, through the suffix -ιδέος, from names of tribes or phratries issued from anthroponyms).[32] No parallels are known for the use of ethnics or other comparable indications of provenance in Cyprus, and no rule is apparent in their use

ri-yo-se-ta-se-ku-po-ro-ne: this is the only attestation we have of the toponym Cyprus in the syllabary.

31 Traunecker et al. 1981, 264 no. 12, 265–66 no. 16 (Limnisians), 267–68 nos. 18–19 (Soliopotamians), 283–84 nos. 59–60 (Kariopotamians): all refer to places in the region of Soloi; cf. Masson 1979, 218–20. As no soldier signs as "Solian" at Karnak (one is possibly known at Abydos, cf. Masson 1983, 358–59 no. 378), the possibility that the use of these "demotics" instead of the ethnic is related to particular and unknown political circumstances affecting the kingdom of Soloi at the beginning of the 4th century cannot be completely excluded. On the very limited and ambiguous numismatic, archaeological and historical evidence for Soloi before the mid-4th century, see Satraki 2012, 309–18; Markou 2015, 127–28. Other possible "demotics", of difficult interpretation: Traunecker et al. 1981, 268 no. 22, 274 no. 41.

32 Traunecker et al. 1981, 268 no. 20 (*Εὐρυσθεάδας*), 277–78 no. 51 (*Εὐρυλαϝιδέος*), 281–82 no. 57 (*Κορητεάδας*), 282–83 no. 58 (*Φιλοναιδέϝος*), cf. 276 no. 48a (*Φιλοναϝιδέος*): cf. Heubeck 1976.

at Karnak. They most probably have a basically identitarian value.[33] In any case, the Cypriot contingent seems composed of people from various kingdoms and regions of Cyprus (Salamis, Paphos, Ledra, Lapithos, Kition, Soloi).

We do not know of any other massive recruitment of mercenary soldiers from Cyprus before the one, ordered by Eumenes of Kardia in 318, recorded by Diodorus (18.61.4). We know, however, that Cypriot engineers (μηχανοποιοί) and mariners were highly appreciated in Alexander the Great's army and navy (Arrian 2.21.1, 6.1.6, *Indica* 18.1), as they were by the Persians, but no precise evidence about their recruitment and status is available. It is impossible, in such cases, to distinguish between soldiers recruited as mercenaries and troops provided by the different Cypriot kingdoms in the framework of a relationship of alliance or subjection: the participation of Cypriot ships in the Persian fleet at the battle of Salamis in 480 (Herodotus 7.90), and at the siege of Tyr on the side of Alexander in 332 (Arrian 2.20.3) eloquently illustrates the issue.[34]

On the other side of the mercenary network, the presence of foreign soldiers in Cyprus is also limited before the Hellenistic period. The available evidence, however, suggests that mercenary presence in the island increases in importance during the Classical period, particularly in the 4th century.

The first mercenary soldier documented in Cyprus is Idagygos of Halicarnassos. His funerary stela was found in the Eastern necropolis of Amathus by the British mission in 1894 (site E), above Tomb 110; another stela of a later date, on the same tomb, commemorates a man from Naxos, in the first Hellenistic period.[35] The material found in the tomb included several jewels and metal (gold, silver and bronze) objects, amulets and pendants, a mirror and a strigil, an Attic white-ground lekythos, black-glazed kylikes and kantharoi, as well as local pottery, mostly Archaic in date (lattice amphorae, trefoil jugs, etc.). The tomb was clearly used several times from the Archaic period on, as is frequently the case at Amathus.[36] The white-ground lekythos, dating from the second quarter or the middle of the 4th century, might be associated with the almost contemporary stela of Idagygos.[37] This is a limestone slab (height 165, width 28, thickness 11 cm), engraved with a ten-line inscription, commemorating with an elegiac couplet Idagygos of Halicarnassos, son of Aristokles, servant of Ares (Ἄρεος θεράπων) (Fig. 4).[38] The presence of a Carian soldier in the island in the years following the Persian wars is possibly to be associated with the campaign led by Cimon against the Persians in Cyprus, in the mid-5th century.[39] But Carians were perhaps more numerous in Cyprus than this limited evidence allows us to suppose: within the royal court of Kition in the 4th century BC the title of *mlṣ hkrsym*, "interpreter of the Carians", carried by a certain *Ršpytn*, possibly indicates a systematic and stable presence, at least in some kingdoms or cities.[40]

In the 4th century, Cypriot kingdoms, like several Greek cities, start to employ mercenary soldiers in a more systematic manner. The richest evidence concerns the kingdom of Salamis, particularly during the reign of Evagoras. As Diodorus records (15.2.3), in addition to the alliance with Akoris, Evagoras could count on support for his anti-Persian campaign from several other sources, including the Carian dynast Hecatomnus, who secretly provided Evagoras with "a large sum of money in order to support mercenary troops" (χρημάτων...

33 Fourrier 2006, also proposing (106) that the use of indications of provenance of a local character could denote the administrative practice of recruiting the mercenaries on a local (village or district) base.

34 The same ambiguity is at the origin of the erroneous belief (Fischer-Bovet 2014, 37) that Cypriot mercenaries participated in Cambyses' conquest of Egypt according to Herodotus 3.19.

35 Murray et al. 1900, 121 (Tomb 110), 95 nos. 1–2 (stelas).

36 Cannavò 2016.

37 Hermary 2011, 374. On the chronology of the stela: Jeffery 1990, 353, 358 no. 41.

38 The profession of the deceased is indicated by a formula of Homeric inspiration (cf. e.g. *Il.* 2.110).

39 Hermary 2015, 29. On the historical context: Körner 2017, 224–29.

40 The title is attested in three inscriptions: Yon 2004, nos. 1009, 1070, 1125. On the translation as "interpreter of the Carians": Zadok 2005, 83; Caubet et al. 2015, 343 n. 46. Note that a Carian (*krsy*) is possibly mentioned on a 6th-century ostracon of accounting/administrative nature from Kition *Bamboula*: Caubet et al. 2015, 343 no. 6-13.

Fig. 4. The funerary inscription of Idagygos of Halicarnassos, "servant of Ares" (Ἄρεος θεράπων), found in the necropolis of Amathus (© The Trustees of the British Museum / A. Cannavò).

πλῆθος εἰς διατροφὴν ξενικῶν δυνάμεων).[41] At the beginning of the war Evagoras "enlisted many mercenaries, since he had funds in abundance" (μισθοφόρους πολλοὺς ἐξενολόγει, ἔχων χρημάτων δαψίλειαν: Diodorus 15.2.4). But this favourable situation had to change after the defeat at the naval battle of Kition in 387/6 BC (Diodorus 15.3.4–6).

A numismatic confirmation of the importance of military spending in the budget of Evagoras, and of the difficulties encountered by the Salaminian king at some point during his expensive war is provided by E. Markou's analysis of his gold issues. Evagoras, together with Milkyaton of Kition, was the first Cypriot king to issue gold coins, based on a unit of 8.44 g (conventionally called a stater but certainly inspired by the Persian daric), of which various fractions were minted in Salamis during his reign (1/4, 1/10, up to 1/20 stater).[42] The gold content of the coins issued by Evagoras is significantly lower than that found in the contemporary gold coins issued by Milkyaton, as well as in the gold issues of Evagoras' successors; silver and copper, in not insignificant quantities, were added in order to economise on the most precious metal.[43] At the same time, Evagoras issued coins of irregular weight.[44] This manipulation was, however, not applied to all the gold issues, but essentially to smaller denominations, intended to circulate within the island, for which the issuing authority was enough to guarantee acceptance. The heaviest coins, issued for the payment of mercenary troops and intended to be exported outside the island, were weighed and appreciated for their real metallic average and could not be manipulated to such a degree.[45] Evagoras' monetary policies explicitly reflect the difficulties encountered by the king during the war, as echoed by literary sources (Diodorus 15.8.1): Evagoras certainly had to lower the quality of his gold coins in order to meet the high demand for precious metals when his allies (Egypt, Athens) ceased to support him. His resources were essentially concentrated in the payment of military expenses.[46]

We may know one of the mercenaries fighting for Evagoras from his funerary monument. A limestone stela, found in a necropolis area close to the village of Lysi, represents in low relief an armed hoplite soldier (height 76, width 55, thickness 12 cm). The style of the relief is explicitly inspired by Greek models, but the stela was locally produced during the first quarter of the 4th century.[47] The soldier is represented in three-quarter view towards the right, armed with spear, sword, helmet and shield. The equipment indicates that the soldier is a Thracian (particularly, the ponytail crest of the helmet and the μαχαίρα-type sword), although its somehow hybrid character (mostly evident in the armour) suggests that the sculptor was not familiar with all the elements represented.[48] A two-line inscription, in the upper right corner, attributes the relief to Dionysios from Kardia (on the northern coast of Thracian Chersonesos). Even though, paleographically, the inscription could date as late as the 3rd century, it is most probably contemporary with the relief.[49] In this case, Dionysios of Kardia was possibly a mercenary fighting for Evagoras under the orders of Chabrias, the Athenian general who led a contingent to Cyprus in 388 BC (Xenophon *Hellenica* 5.1.10).

No further conclusive evidence later than the examined sources related to the period of the Cypriot War is known about a mercenary presence in Cyprus before the Hellenistic period. The multiplication of gold issues during the 4th century is nevertheless in itself a clear sign of the more and more systematic use of mercenary troops by the Cypriot kings, even if, as already noted, gold coinage was not exclusively intended to pay war expenses but circulated widely (particularly the smaller fractions) within the island. Salamis, Kition, Paphos,

41 Markou 2011b, 262, particularly n. 5 (on the doubts expressed about the support provided to Evagoras by Hecatomnus: it should be noted that Artaxerxes II had entrusted Hecatomnus with the war against Evagoras according to the same Diodorus, 14.98.3).

42 Markou 2011a, 281–82.

43 Markou 2011b, 216–18; Markou et al. 2014.

44 Markou 2011b, 156–65.

45 Markou 2011b, 260–63, 304–05.

46 Markou 2013, 121–22.

47 Pogiatzi 2003, 13–4, 163–64 no. 73 with previous references.

48 Pogiatzi 2003, 65–7.

49 Kantirea 2019, 213–17 with previous references. Note that T.B. Mitford and I. Nicolaou preferred the lower chronology, while M. Kantirea, together with V. Wilson and A.W. Johnston (Jeffery 1990, 371 no. 34a), considers the inscription contemporary with the relief.

Soloi and Marion are known to have issued gold coins: study of their various aspects (iconography, metrology, chemical composition) provides essential information on the political and economic history of the island in the crucial second part of the Classical period, and during the troubled years leading to the abolition of the autonomous kingdoms in Cyprus.[50]

As Cyprus passed under the control of the Lagids, at the beginning of the 3rd century, a military presence at the orders of the central power was systematically imposed as a means to establish the authority of the new masters on the island. Many honorary inscriptions, especially from the middle of the 3rd century on, provide us with the names and the origins of some of the military and administrative cadres of the Lagids on the island, the two functions mostly going together, as the administrative system was based on the presence of garrisons and military leaders were in charge of civil affairs. The island, unified, was governed by a *strategos* (at least from a certain point), who also became *archiereus* (religious leader) from the 2nd century on, and *navarchos* (leader of the fleet) from the second half of the same century. Immediately below the *strategos*, a *grammateus* of the troops acted as general commander, each regiment having its own leader (*hegemon* or, in the case of cavalry troops, *hipparches*). The garrisons stationed in the main towns were under the authority of a *phrourarchos*, who over time became a sort of prefect (with more civilian than military powers).[51]

The Lagid army stationed in Cyprus, made up of professional mercenary soldiers of different origins, was organised into regiments on a national basis, most of them in a *koinon*; since we know several inscriptions from these *koina*, we therefore have information on the origin of many foreign soldiers serving in Cyprus. Most of the epitaphs attesting to the presence of foreign mercenaries on the island date from the 3rd century or from the 3rd/2nd century transition.[52] They are known from different parts of the island but are particularly numerous at Kition and above all at Amathus. As these two cities were the operational base of the Antigonids during their ephemeral control of the island for a few years at the transition from the 4th to the 3rd centuries, the Lagids may have felt it necessary to impose over them a more substantial foreign military presence, at least in the first phase, in order to stabilise their power.

Less visible, Cypriot presence outside the island during the Hellenistic period is rarely the result of mercenary activities, with some possible exceptions (at Demetrias, in Thessaly, or in Egypt).[53] But an account of the history and prosopography of mercenary activity (Cypriot abroad and foreign in Cyprus) remains to be written.

50 Markou 2011b, 2013.

51 On Lagid Cyprus, after the classical study by Bagnall 1976 (38–79), see most recently Michel 2021, as well as Cayla 2018 (on Paphos, the administrative capital of the island).

52 The study by Michaelidou-Nicolaou 1967 has never been really updated. Even if not every foreigner who died in Cyprus during the Hellenistic period can be considered a mercenary soldier, we can assume that a significant number of them were.

53 Launey 1987, 487–89, 1227–29; Hermary 1999.

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Paphians outside Paphos

Inscriptions in the Paphian syllabary found outside Cyprus

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ABSTRACT

The aim of this paper is to examine the inscriptions written in the Paphian syllabary discovered outside the island of Cyprus. Even though the epigraphic material is sparse, often fragmentary and geographically scattered, it sheds significant light on commercial expeditions abroad, the presence of Paphians in various areas of the Mediterranean and on the literacy of citizens of the ancient city-kingdom of Paphos. Firstly, the corpus of Paphian inscriptions originating outside of Cyprus is presented. The circumstances of their discovery and their content are analysed to determine in what context writing was used outside Cyprus. The supports of these documents and types of inscriptions (funerary, religious, ownership marks etc.) are also taken into consideration. Furthermore, the question of literacy and of the role the Cypriot script played in expressing local identity are examined. Finally, conclusions are drawn regarding the corpus of Paphian documents from outside Cyprus.

INTRODUCTION

The Cypro-Syllabic script was a privileged writing system in the island of Cyprus from the 8th to the 4th century BC.[1] It is difficult to determine precisely when Cypro-Minoan (CM), a writing system of Bronze Age Cyprus, was replaced by the Cypro-Syllabic script. The site of Palaepaphos provides us with valuable clues about the advent of the Cypriot syllabary as it yielded some significant documents that can be interpreted as transitional between CM and Cypro-Syllabic.[2] These texts, dating from the 10th and 9th centuries BC, show that the Bronze Age script underwent a number of modifications before it finally became what we call today the Cypriot syllabary.[3]

Approximately 170 Cypro-Syllabic inscriptions have been found outside Cyprus.[4] Most of them come from Egypt, where Cypriot mercenaries, hired by Egyptian pharaohs in the 4th century BC, left their written traces on the temples of Abydos and Karnak. Other Cypriot documents were discovered in neighbouring countries such as modern Turkey, Israel and Syria. Single inscriptions originate from more distant countries, for instance Greece and Italy. This paper will focus exclusively on Paphian inscriptions found outside Cyprus.

1 The exact moment of the appearance of the Cypriot syllabary on the island is still a subject of debate. The Opheltas inscription, often regarded as the first one written in the Cypriot syllabary, was shown by Olivier (2007, 423; 2013, 17–8) to have actually been written in CM, even though the language of this inscription is Greek.

2 Egetmeyer 2017, 180–201.

3 The name "Cypro-Greek syllabary" has been proposed by Egetmeyer (2013, 107–9) for this script.

4 This number refers to the repertory of syllabic inscriptions elaborated by Egetmeyer (2010, 840–77).

IDENTIFYING PAPHIAN INSCRIPTIONS

Over 500 syllabic inscriptions were uncovered in the territory of the ancient city-kingdom of Paphos.[5] This abundant epigraphic material enabled the identification of a local version of the Cypriot script, known as the Paphian syllabary, which differs to a great extent from the so-called "common syllabary" used in the rest of the island. The inscriptions from Palaepaphos are written mostly from left to right and characterised by a specific sign repertoire. Three variants of the Paphian writing system can therefore be distinguished.[6] Old Paphian is attested essentially for texts dating from the 6th century BC. It is characterised by disconnected *hastae* and the rounded shape of the signs. As far as the direction of the writing is concerned, the majority of Archaic Paphian inscriptions are dextroverse. Even though this direction was most common, it seems that it was not definitively established until the Classical era. For example, a considerable number of inscriptions from Rantidi are written from right to left. It is therefore possible that both directions were acceptable within the Archaic Paphian kingdom. This Archaic syllabary evolved into Middle Paphian during the 5th century BC. Some of the signs in use in the Archaic period were simplified at this time. It seems that this version of the writing system of Paphos was first developed in the capital of the kingdom and then spread elsewhere.[7] It is worth mentioning that Middle Paphian is sometimes called into question due to the limited number of inscriptions attesting this variant. Finally, the Late Paphian signary developed during the last quarter of the 4th century BC under the rule of Nicocles, the last king of Paphos. Its appearance may be directly related to the political and cultural program of the Paphian monarch.

THE CORPUS

Before presenting the inscriptions in detail, it is important to outline some of the main characteristics of this small corpus, as they influence, to a great extent, the interpretation of these texts. The corpus of Paphian inscriptions is not only geographically scattered but also stretched over time.[8] The oldest examples are contemporary with the advent of the Paphian syllabary and the most recent with its disappearance. The inscriptions are also diverse in terms of supports, types and palaeography. They appear on ceramic vessels, bones, coins, seals, marble stelae and temple walls. In most cases, we are dealing with simple signatures, sometimes with a patronymic. Other types of inscriptions are also attested, however. They can be divided into three groups: votive inscriptions, graffiti and ownership marks.

Votive inscriptions

The votive inscriptions found outside Cyprus are the least numerous group. There are only two specimens that present the votive formula *κατέθηκε* and can therefore be considered as votive beyond any doubt. The

5 Egetmeyer 2010, 7.

6 Mitford 1961.

7 This hypothesis was put forward by the author based on a chronological analysis of sign distribution and evolution in the various parts of the city-kingdom of Paphos, Halczuk (forthcoming).

8 The geographical and chronological distribution of the inscriptions in the common syllabary found outside Cyprus is similar to those written in the Paphian script. The common syllabary documents are, however, attested in greater numbers. A great many of the foreign documents were found in Egypt (approximately 130 texts). Other examples were discovered in Greece, the Phoenician area and ancient Anatolia.

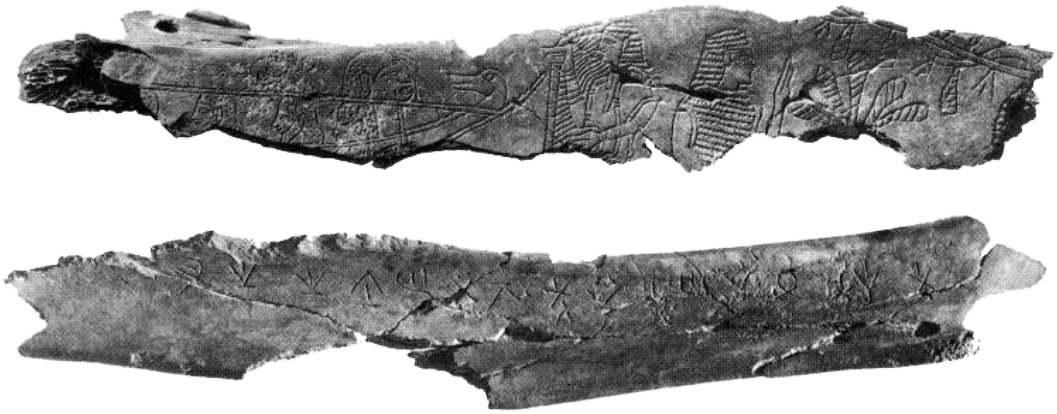

Fig. 1. The inscribed scapula (Stern 1994, 1).

first one was discovered at the ancient site of Tel Dor.[9] The text is engraved on the right scapula of a large mammal, probably a cow (Fig. 1). The scapula was found in numerous fragments and restored by A. Cohen.[10] It is decorated on one side with incision, depicting a maritime scene, while the other side bears a Cypro-Syllabic inscription. The small perforation on the edge of the scapula shows that the bone was originally attached to something.

The inscription was studied by O. Masson, who proposed the following reading of the text.[11] It consists of two anthroponyms and the verb *κατέθηκε*. The initial sequence *a-ri-ta-ko-ra-se* represents the name of the dedicant, most probably Aristagoras. The syllabogram *si* is missing, however. The name of the father of Aristagoras is revealed next. This second anthroponym is difficult to interpret. Egetmeyer suggested Puwator.[12] This name is, however, unknown in the Cypriot anthroponymy. Finally, the verb *κατέθηκε* is the regular general word for consecration. The name of the deity honoured by the inscription is, however, unknown as the right part of the inscription is missing.

The inscription is sinistroverse, which is rather an uncommon phenomenon in the Paphian syllabary of the Classical period. However, several signs, such as *ra*, *pu*, *to* and *ro*, are typically Paphian, which allows us to assume that the author of this inscription was of Paphian origin.

The second votive document written in the Paphian script comes most probably from Sidon.[13] The circumstances of its discovery are vague. It was acquired in 1924 from an antique dealer, A. Guibril.[14] The latter indicated that the object had been found in the temple of Eshmoun, situated near Saida.

The inscription is engraved on a marble stele and is severely damaged. The text consists of two lines written from left to right, which is a typical direction for the Paphian version of the syllabary. The initial sequence *sa-ma-tu-nu-se* most likely refers to the name of the dedicant. Those signs do not form any recognisable anthroponym, however. At the end of the first line it is possible to read *κατέθηκε*. The second line states that the dedication is addressed to the goddess and good fortune. *Ἴ(ν) τύχαι* is an important element here as it depicts a local Cypriot custom: such a traditional dedication formula is typically found at the end of Cypriot dedicatory inscriptions.

9 Masson 1994, 87–92; Stern 1994, 1–12; Egetmeyer 2010, 847 no. 23.
10 Stern 1994, 1.
11 Masson 1982, 45–9.
12 Egetmeyer 2010, 848.
13 Masson 1983, 343.
14 Masson 1982, 47.

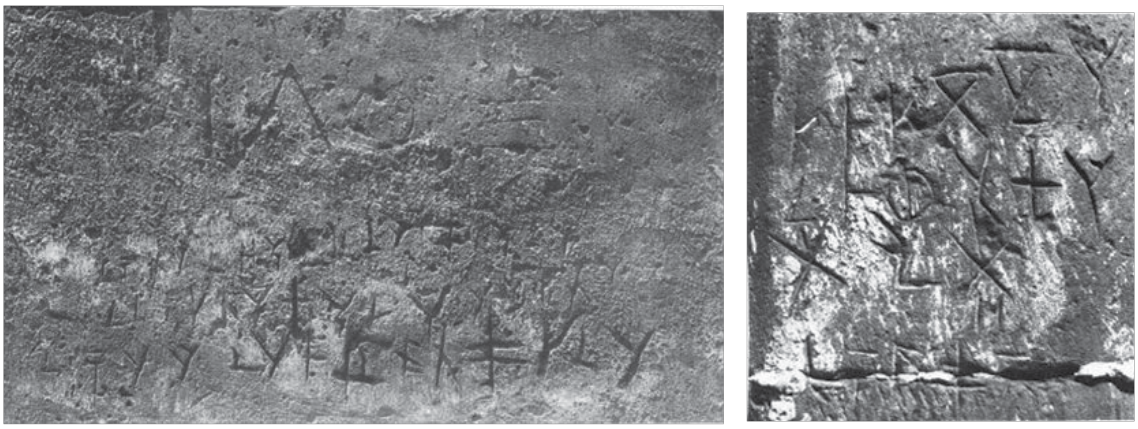

Fig. 2. Graffiti on the temple of Achoris (Masson 1981, pl. IV; 1983, pl. LXIX, 1).

Graffiti

Graffiti in the Paphian characters were discovered in Egypt and in ancient Nubia. The inscriptions from Egypt were found mostly on the walls of the temple of Achoris at Karnak (Fig. 2). It is a particularly important source of evidence because here a number of Cypriot graffiti were made in a relatively small space on the temple's walls. From the way the graffiti fill in the space close to each other but do not overlap it appears that they were made around the same time by a group of mercenaries stationed together near the temple. The mercenaries stationed at Karnak were from different parts of Cyprus and were most probably organised in divisions based on their origin.[15] Paphian soldiers used their local script flawlessly. They indicated their names and the names of their fathers as well as their origin. Five signatures can be identified as Paphian based on the ethnics mentioned in the inscriptions.

Three graffiti are almost identical in terms of their content. There is the name of the soldier, followed by a patronymic and the ethnic. Three inscriptions of this type are unfortunately incomplete. The first one mention Onasas, son of Epi…, the Paphian.[16] The name of Onasas' father cannot be restored. A similar inscription was found just below the first text. Once more, the graffito is rather damaged. The name of the author is no longer visible. However, we can read that he was the son of Onasas and of Paphian origin.[17] The third inscription in this group was written in large characters and is more legible. It was written by Onasas, son of Stasi… the Paphian.[18] It is worth mentioning that these three graffiti incised one above the other are all written from right to left, but present some typical forms of the Paphian syllabary nonetheless. Furthermore, all three inscriptions attest the name Onasas.

Another inscription in Paphian characters found on the walls of the temple of Achoris is written in four lines.[19] Its meaning is unclear as some significant parts of the text are no longer visible. The signs were incised by Stasagoras, as we read in the first line. The second line is difficult to interpret. The syllabic sequence *o-ta-mo-pi-lo-se* can be translated as "son of Demophilos". It is impossible to offer any plausible interpretation of the third line. The fourth, however, presents a well-known Cypriot name Onasiphantos. Unlike the three previous inscriptions, this one is dextroverse. Even though the ethnic "Paphios" is not mentioned here, the direction of writing as well as some typical Paphian syllabograms, such as *ko*, *ni*, *ra*, *se* or *si*, clearly indicate that the author of the inscription was of Paphian origin.

15 Fourrier 2006, 106–7.
16 Masson 1981, 274 no. 42.
17 Masson 1981, 274 no. 43.
18 Masson 1981, 275 no. 44.
19 Masson 1981, 279 no. 53.

The last Paphian graffito from Karnak consists of two lines written from left to right. The signs are small and partially damaged, yet we can still decipher the inscription. It was engraved by Stasikrates, the Paphian, son of Charidamos.[20] The following part of the text is no longer visible. The syllabogram *a* is still recognisable but it is impossible to guess which word is represented. Stasikrates is a common Cypriot name while Charidamos does not appear in other syllabic documents. Masson argues that the only existing parallel might be a name incised on a Paphian coin from the 4th century BC.[21] However, the first character is too damaged to be interpreted as *ka*. We can therefore assume that in the current state of knowledge there is no other example of the name Charidamos.

Another graffito found in Egypt was discovered in the tomb of the pharaoh Amenmesse I situated in the Theban necropolis.[22] The inscription, which is mostly erased, is incised on a limestone slab depicting the goddess Maat. The object was found right next to the entrance to the tomb.[23] The only word we can decipher is the name Echedamos. His name was most certainly followed by a patronym beginning with the syllabogram *pi*. The second line of the inscription is impossible to interpret.

As far as the Nubian graffito is concerned, it is written on one of the columns of the temple of Tuthmosis III.[24] The inscription consists of five syllabic signs written from left to right. The sequence *ta-we-ta-re-se* is difficult to interpret. Egetmeyer argues that the name represents a non-Greek language, most probably Eteocypriot,[25] whereas Masson suggests that it is a Greek anthroponym, Tawetares.[26] The latter claims that the first element of this name runs parallel to *Θαϝήσανδρος*, which was identified by Bechtel.[27] As for the second element of this name, we can quote the example of *Θάρσης*, also listed by Bechtel.[28] In the current state of knowledge, however, Tawetares remains unparalleled in the Cypriot epigraphic evidence.

Ownership marks

The last category of inscriptions comprises the ownership marks. Syllabic inscriptions appear mostly on transport amphorae, but they can also be found on coins and seals.

The SOS amphora from Mende was found in 1989 in the seaside cemetery of the ancient city on the peninsula of Kassandra, Chalcidice (Fig. 3). It contained the remains of a baby and a one-handled cup.[29] The study conducted by Johnston and Jones leads us to believe that the amphora is Attic in origin.[30] It belongs to the early SOS group, and one could plausibly argue for a date in the last quarter of the 8th century BC.[31]

The graffito appears on the shoulder of the amphora. It is incomplete, as a substantial part of the body is missing. The part that has survived consists of five signs, engraved after firing. The incision is relatively regular and fairly deep. The size of the signs ranges from 1.5 to 1.0 cm. The text is organised in three groups of signs. The right-hand group is separated from what follows by an intentional space and a separation mark in the form of a dot situated at the bottom of the line. The second group is separated from the final sign by a vertical stroke. All the *hastae* appear connected. The sign *se* has a leftward stance and the interpretation of the syllabic sequence also assumes a sinistroverse direction for this inscription.

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20 Masson 1981, 280 no. 55.
21 Masson 1983, 28.
22 Sayce 1884, 221 no. 43; Masson 1983, 420.
23 Sayce 1884, 221.
24 Masson 1983, 455.
25 Egetmeyer 2010, 877 no. 141.
26 Masson 1983, 455.
27 Bechtel 1917, 196.
28 Bechtel 1917, 198.
29 Vokotopoulou and Christidis 1995, 5.
30 Johnston and Jones 1978, 123–25.
31 Vokotopoulou and Christidis 1995, 6.

Fig. 3. Inscription on an SOS amphora from Mende (Vokotopoulou and Christidis 1995, pl. 2).

The first group of signs is the most difficult to read. It seems that the first syllabogram is a *la* shared by the common and the Paphian syllabaries. As for the second character, it is most probably a *si* typical for Old Paphian.[32] *Si* is followed by a dot and two more syllabic signs – *te-mi*. After a vertical stroke there is the last sign of this inscription – *se*. The group *te-mi* | *se* can be convincingly interpreted as consisting of an abbreviated name *θεμις* followed by another abbreviation *Σε-*. There are numerous Archaic inscriptions from the city-kingdom of Paphos that attest this kind of abbreviated formula. They consist of two signs separated by a vertical stroke.[33] It is plausible that these signs represent two personal names abbreviated by their first initials. If we assume that the abbreviated inscriptions were always written in the same manner (X | X), it would explain why two different kinds of dividers were used in this inscription. The vertical stroke is characteristic of the abbreviated formula, whereas a dot might be interpreted as a regular divider placed between words. As for the fragmentary *la-si*, we can argue that this sequence represents a name, perhaps of the trader or producer.

Another SOS amphora from the Policoro cemetery is a highly relevant epigraphic document for the Mende inscription.[34] The graffito incised on this vessel is almost identical in content to the inscription from Mende. Moreover, it is very similar epigraphically and almost contemporary. The signs are written from right to left and we can read *?-la-si* | *te-mi-[(?)*. It is interesting to note that two amphorae found in two distinct locations carry almost identical inscriptions. Both texts are too incomplete to draw any final conclusions, but it is probable that they belonged to the same trader whose name began with the element "themi". The signs are incised with less precision than on the amphora from Mende, however. The syllabograms *te* and *si* are characteristic of Old Paphian, whereas the forms of *la* and *mi* are identical in the Paphian and common syllabaries.

It is important to mention the discovery of four stamped amphora handles with Cypro-Syllabic inscriptions at Tel Dor. These handles belong to transport amphorae, most probably the so-called "Kouriaka" group produced in Cyprus from the end of the 4th or early 3rd century into the 2nd century BC.[35] These vessels are well known in Cyprus, especially at Kourion, Kition, Salamis and Paphos, where many stamped and unstamped handles have been found.[36] Four specimens present signs that can be identified as Paphian.

32 It is worth mentioning that this graffito was discussed by Karnava (2013, 160–63), who did not ascribe it with any certainty either to the Paphian or to the common syllabary.

33 Masson and Mitford 1986, 74–82 nr. 116–32; Mitford and Masson 1983, 75–78 nr 66–73.

34 Pugliese Carratelli 1971, 589–91.

35 Shalev and Matskevich 2014, 270.

36 Shalev and Matskevich 2014, 270.

The first amphora handle has four syllabograms incised from right to left. The first three signs are *to-a-ra* and their shapes are characteristic of the Middle and Late Paphian syllabaries. The last sign, however, is difficult to read. If its long line is straight, we will read it as *ti*, but if it has a slightly inclined "tail", it can be read as *wo*. The inscription consists most probably of two words: a definite article and a noun. Two reading options may be suggested. The first sign is the masculine definite article in the genitive or dative case. The following word could be *a-ra-ti* that stands for an anthroponym, perhaps the name of a manufacturer. Since the reading of the last sign is doubtful, no known Cypriot anthroponym can be proposed with certainty. The second interpretation assumes that the fourth sign can be read as *wo*. In this case we obtain the sequence *a-ra-wo*. We know the name *Ἀρϝάτω* from a dedicatory inscription from Rantidi.[37] It is the genitive form of *Ἄρατος*.[38]

The second handle bears an inscription composed of two signs separated by a divider. It is worth mentioning that the *hastae* composing the syllabogram *ti* are disconnected, which is typical for Old Paphian. The shape of *pe* is very uncommon but attested in Middle Paphian. This peculiar inscription might also be seen as the signature of a specific manufacturer.

The third specimen presents a disconnected form of *pi* known mostly from Cypro-Archaic (CA) Paphian inscriptions. This stamp may belong to the same category of manufacturers' marks as the previous impressions.

The last stamped handle from Tel Dor has one sign which is barely readable. It is difficult to suggest any interpretation for the shape of this sign.

Y. Shalev and S. Matskevich claim that Handles 1, 3 and 4 originate from various clay sources in Cyprus. The provenance of Handle 2, however, seems to be outside the island, most probably the Northern Levant, which might indicate a secondary manufacturing centre outside Cyprus.[39] It might be an excellent example of a local imitation of imported vessels or even a forgery.

Two more ownership marks were discovered on objects from the Near East. A silver coin struck by Ptolemy Soter bears a syllabic incised graffito indicating the owner of this object: Raphael.[40] The syllabic sequence ra-*pa-e-lo-se* was written from left to right in small characters. The coin was discovered in Meydancıkkale (Turkey) during French excavations directed by A. Davesne. The hoard of bronze and silver coins was found in 1981 in a Hellenistic building resting on an earlier, possibly Persian structure, which must have had some public function.[41] The treasure had been deposited in three different vases, designated by letters following the order of their discovery: A) contained 2,298 coins, B) 1,786 and C) 1,131. The coins are of mixed denominations. They are stored in the museum of Silifke in Turkey. A very interesting feature of the Ptolemaic coins from this hoard is the great quantity of private countermarks and graffiti. They represent markings by private individuals who perhaps intended to recover their coins after using/spending them, as suggested by A. Davesne.[42] We cannot exclude that these graffiti were markings of temporary revalidation of an obsolete currency.

The precise origin of a last object, an agate seal inscribed in the Paphian syllabary, is unknown (Fig. 4). In 1996 and 1997 Poncy, Casabonne and Lemaire studied the seals stored in the museum of Adana. Over 2,500 items were in the possession of the museum and among them one specimen inscribed in the Cypriot syllabary. The inscription is difficult to read and interpret. It is composed of two lines written from left to right. This dextroverse direction of writing might suggest that the author of the inscription was of Paphian origin. However, the analysis of the signs does not necessarily corroborate this hypothesis. The syllabogram *to* belongs to the common syllabary. As for the rest of the signs, they are identical to both the Paphian and common sylla-

37 Mitford and Masson 1983, 42 no. 12a.
38 Bechtel 1917, 63–64.
39 Shalev and Matskevich 2014, 273.
40 Masson 1989, 359.
41 Davesne 1990, 7.
42 Davesne and Masson 1985, 31.

Fig. 4. Agate seal from the Near East (Egetmeyer 2001, pl. II).

baries. Therefore, the interpretation of this text as Paphian is plausible but cannot be confirmed. The first line of the inscription presents a sequence *ma-to-te-?-?*. The following line consists of the signs: *ti-we-i-pi-lo-to-?*. Egetmeyer suggested a possible translation of the text.[43] At the beginning of the second line we can find an anthroponym Diweiphilos and the article *τό*. The rest of the inscription is barely comprehensible. Egetmeyer argues that we could interpret this inscription as follows: *Διϝειφίλω [τὸ] [σῆ]μα τόδε* (this is the sign/seal of Diweiphilos). Even though the reading of this inscription is uncertain, we can safely assume that it contains the owner's name, Diweiphilos.

LITERACY OF THE ANCIENT PAPHIANS

This small but significant corpus of Paphian inscriptions found outside Cyprus raises some important questions concerning local writing practices, the circulation of people and objects and finally the levels of literacy of ancient Cypriots.

In order to understand who was able to write it is important to determine where the inscription was written. In some cases we can answer this question. For instance, Egyptian and Nubian graffiti were certainly inscribed in situ. Votive inscriptions from ancient Phoenicia were most probably written there as well. However, it is *impossible* to state where the ownership marks were engraved. Two possibilities can be taken into consideration. The syllabic inscriptions on the amphorae discussed above could have been incised while the objects travelled through Cyprus by their owner, but we cannot exclude that the texts were written abroad, for example by a literate merchant.

This brings us to the question of the authors of the inscriptions. It can safely be assumed that the graffiti from Karnak were written by the Cypriot soldiers themselves. The 4th century BC graffiti from this site show that mercenaries, for whom writing is unlikely to have been a specialist activity, not only could write, but also were interested and proficient enough in writing to observe particular writing customs and even to experiment in

43 Egetmeyer 2001, 19.

different writing systems. It gives us a valuable indication that levels of literacy in ancient Cyprus may have been slightly higher than we might guess from most other surviving inscriptions. Perhaps a widespread education system, in which soldiers learned to read and write, existed in Cyprus. However, we cannot exclude that their knowledge of the script was limited to marking their name and city of origin.

Our knowledge of literacy among ancient Cypriots is very limited. From the CA until the Hellenistic period representations of scribes occur in small numbers in Cyprus. They sit on a chair or throne with a scroll or a tablet resting on their knees. Information about Cypriot scribal schools, a phenomenon well documented in Egypt and the Near East, is very scattered. In Tomb M1 at Marion British archaeologists discovered the epitaph of a schoolmaster that can be translated as follows: "I am [the gravestone] of Onasagoras, son of Stasagoras, the schoolmaster".[44] In the same tomb was also found the epitaph of his wife: "I am [the gravestone] of Timowanassa, the wife of Onasagoras".[45] The fact that the wife of the schoolmaster had her own epitaph seems to indicate that the schoolmaster had an important social position in the late Archaic – Classical period.

The lack of archaeological and written data makes it impossible to determine with certitude who the authors of the Cypriot inscriptions from outside the island were. The inscriptions from Egypt were made by the mercenary soldiers themselves. As for the documents from the Phoenician area, we may assume that the pilgrim from Sidon was of Paphian origin and that it was important for him that the text was written in Paphian characters. The same assumption can be made about the dedicant from Tel Dor.

As for the ownership marks, any plausible assumption about their authors can be put forward. They could have been either incised by their authors or by a specialised scribe. Writing on coins or seals must have required specific tools and knowledge. Given the precision of the writing on the coins, it is possible that the signs were incised by a specialist.

The marks on the SOS amphorae were engraved after firing, while the impressions on amphora handles from Tel Dor were made on the curve of the handles using a stamping device before firing. We may therefore argue that the inscriptions on the SOS amphorae were engraved by the trader of the vessels, whereas the stamps on transport amphorae were most probably placed on the vessels by the manufacturer.

CONCLUSIONS

To conclude, the corpus of Paphian inscriptions found outside Cyprus is chronologically and geographically scattered. Even though the number of these inscriptions is small, they provide valuable information concerning writing practices outside Cyprus and they reflect the importance attached to the use of the local script. Despite the fact that writing was used in different contexts outside the island, it is safe to assume that traditional Cypriot formulas were applied. We may also suggest that Paphian pilgrims travelled to foreign sanctuaries where they made dedications to local deities in their mother tongue and local writing system. Finally, some conclusions regarding the levels of literacy in ancient Cyprus may be proposed. The graffiti from Karnak clearly show that Cypriot mercenary soldiers were familiar with writing and used it with great proficiency. Moreover, we can assume that the Cypriot syllabary was used to mark Cypriot identity by Cypriots when abroad.

44 Masson 1983, 143, *IG* XV 1, 172.
45 Masson 1983, 144, *IG* XV 1, 173.

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Incoming goods and local writing

The case of classical Marion in Cyprus

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ABSTRACT

Archaeology can track the connectivity of ancient lands through the mobility of objects. Both incoming and outgoing objects tell the story of contact, demand, commercial ties and cultural encounters. It is with this view that this paper examines inscribed pottery found in tombs of the 5th–4th centuries BC in the extensive necropoleis of Marion in northwestern Cyprus. The inscribed vases were manufactured in Attica and imported in great quantities to the port site of Marion. Sometime after their arrival, inscriptions were incised under their bases in the Cypriot writing system, the syllabary. The graffito inscriptions contain usually either full names or abbreviated forms of names. The vases were ultimately placed in tombs, excavated mostly in the second half of the 19th century. The paper discusses old and new epigraphic evidence collected for the purposes of the corpus of Cypriot syllabic inscriptions of the 1st millennium BC, edited under the auspices of the Berlin-Brandenburg Academy of Sciences and published as part of the Inscriptiones Graecae (IG) series.

INTRODUCTION

One of the ways in which archaeology tracks connectivity between places in past societies is through the mobility of objects.[1] Objects move as people take them along, when they themselves are on the move. Besides objects, we can trace the mobility of people through ancient evidence that is intangible for us, such as linguistic data, or even the transfers of viruses. Additionally, nowadays, new, scientific techniques, such as strontium isotope analysis, can potentially tell us where people came from, if they travelled, and where they ended up. These new technologies have not yet been implemented in the case of studies on ancient Cyprus, but the situation could be changing.[2]

Focusing on objects, or things, can help narrate stories of mobility. Although objects are inanimate and seemingly lack agency, they also appear to function as an incentive for people to move. It is when objects function as the desired end of an exchange that they cause people to move, in order to transport them and bring them from their place of production to an intermediary location, or their final destination. It is in this instance that "imported" objects are usually listed in archaeological publications. The term does not, however, do full justice to

1 Following Horden and Purcell (2000, 123, 342–400), connectivity is "the various ways in which microregions cohere", as opposed to mobility, which can be traced through the movement of people and objects. In other words, connectivity is the possibility, whereas mobility is what ultimately happened when connectivity was taken advantage of.

2 For a most recent application on Cypriot material, see Voskos et al. 2021.

the whole picture. The mobility of objects has, at times, complicated stories to tell, and these start to become evident when one tries to connect the dots between where they came from, and where we, modern archaeologists, find them. It is also the case that the story does not simply end, when an object reaches what appears to have been its final destination, and there are more stories to be investigated and told about what happens to objects once they leave "home". For these reasons, we are busy nowadays with drafting object "biographies".[3]

On this note, this paper proposes to examine inscribed pottery found in tombs of the 5th–4th centuries BC in the extensive necropoleis of Marion in northwestern Cyprus.[4] The inscribed vases were black-glazed, most probably manufactured in Attica and imported in great quantities to the port site of Marion. Sometime after their arrival, inscriptions were incised, usually under their bases, in the local, Cypriot writing system, the syllabary. These post-firing inscriptions are usually either full names or abbreviated forms of names. The vases ultimately found their way into tombs, which were excavated mostly in the second half of the 19th century. Old and new epigraphic evidence was collected for the purposes of the corpus of Cypriot syllabic inscriptions of the 1st millennium BC, which was edited under the auspices of the Berlin-Brandenburg Academy of Sciences and recently published as part of the *IG* series.[5] The volume contains inscriptions from the regions of Amathus, Kourion and Marion, but it is the Marion material that concerns us here.[6] Among classical epigraphists it is debatable what constitutes an "inscription", and humble pottery inscriptions, usually known as "graffiti", are often overlooked or omitted from inscriptions' corpora. Yet, this is not the case in the instance of the Cypriot syllabic material included in this *IG* corpus.[7]

MODERN MOBILITY STORIES

Before the story of the transport of black-glazed pottery from Attica to Marion in Cyprus, there are some modern mobility stories to be told. The first one concerns when and how these vases were discovered and retrieved in modern times. In 1885–1886 a Prussian, Max Ohnefalsch-Richter, followed up on indications by Luigi Palma di Cesnola or maybe Ludwig Ross.[8] Ross was the modern traveller who identified Polis Chrysochous, the city today overlying the ancient ruins, with ancient Marion. Ohnefalsch-Richter was the first to excavate the Marion necropoleis, where he discovered numerous graves with abundant grave goods dating to the Greek Archaic period onward.[9] He excavated what he called Necropolis I, II and III, clusters of tombs that appeared to surround the ancient and modern settlement in the area.

A British mission continued the exploration in 1890 under John Munro and Henry Tubbs for the Cyprus Exploration Fund (CEF).[10] After these missions, the identification of the excavated site with ancient Marion-Arsinoe became secure. Then, at the beginning of the 20th century, the Cyprus Museum in Nicosia sent its curator Menelaos Markides to continue the investigation in order to deter looting.[11] The last systematic

3 Kopytoff 1986.

4 The most recent, general account of the city's long history of modern exploration and the status of research in Childs et al. 2012.

5 *IG* XV 1,1.

6 *IG* XV 1, 165–410.

7 A more extensive account on why the specific volume entries were decided and how they were arranged in Karnava and Markou (2020, 115–16).

8 Lewandowski 2018.

9 Herrmann 1888; Ohnefalsch-Richter 1893, *passim*, but esp. 496–511. The inscribed vases found by Ohnefalsch-Richter: *IG* XV 1, 254–351.

10 Munro and Tubbs 1890; Munro 1891. The inscribed vases found during the CEF mission: *IG* XV 1, 352–57.

11 Markides never published his excavation results. A detailed account is preserved, however, in an unpublished manuscript kept at the Cyprus State Archives in Nicosia (Markides 1916). The inscribed vases found during Markides' tenure: *IG* XV 1, 358–68.

exploration of the necropoleis was directed by the Swedish mission in 1929.[12] Since then, more tombs have been unearthed by the Department of Antiquities, but they were investigated during rescue excavations.[13] The total number of tombs detected during these investigations is more than 700. The systematic exploration of the area is to this day ongoing by a Princeton University mission that primarily explores the habitation remains of the site.[14]

This account that shows where these exploration missions originated from also explains where most excavation finds, and vases in particular that are of interest to us here, are kept nowadays: Berlin, London, Stockholm and, naturally, Nicosia. According to the antiquities laws enacted by the British administration at the time, the excavator should split the finds three-ways: one third to stay in Cyprus, one third to go to whoever funded the excavation and one third as compensation to the owner of the land where the excavation was taking place. The cunning Ohnefalsch-Richter appears also to have bought the owner's share. He therefore had more antiquities in his possession to sell.[15] The reason why a significant number of vases are kept today in Berlin is not that some Berlin-based body funded Ohnefalsch-Richter's excavations in Marion, but because the Berlin museums bought afterwards some of the antiquities discovered by him.[16]

But there is additional mobility generated on account of these inscribed vases. It was in Strasbourg, belonging nowadays to France, that a 19th century scholar, Wilhelm Deecke, was based. Deecke participated in one of the two teams that completed the decipherment of the Cypriot syllabary in 1874,[17] and he was therefore well-known in Prussian philological circles. It seems that Ohnefalsch-Richter would dispatch to him documentation of inscribed material from his excavations in Marion, in order for him to study and publish the inscriptions. This practice of his is documented in other instances, whereby Ohnefalsch-Richter sent photos to the British Museum in London, which, back then, was a potential excavation funding body as well as a potential mass buyer of antiquities.[18] Through these publications of inscriptions, which Deecke did in fact carry out,[19] Ohnefalsch-Richter was hoping that his finds would be, in a sense, advertised, and thus become more marketable.

But what kind of documentation did Ohnefalsch-Richter send to Deecke? Deecke's bequest is kept today in Strasbourg University Library (BNU), and contains notebooks and note cards, paper squeezes of inscriptions and photographs.[20] That such material was in Deecke's possession was a known fact, but it was considered lost.[21] The paper squeezes are primarily of Cypriot inscriptions and were mostly sent to him by Ohnefalsch-Richter – but other scholars also sent him squeezes. The photographs, an expensive study aid of the 19th century, were sent to him exclusively by Ohnefalsch-Richter and they contain Cypriot material.

Among the many surprises the archive contained, as archives always do, was a trove of minute paper squeezes, that copied inscriptions incised on the vases of Marion (Fig. 1). Before I saw the paper squeezes of these vase inscriptions, it had never occurred to me that pottery inscription squeezes were even possible. But apparently Ohnefalsch-Richter meticulously made squeezes of vase inscriptions as his excavations in the Marion tombs progressed, duly numbered them and then sent them off to a scholar who could publish them –

12 Gjerstad et al. 1935, 181–459. The inscribed vases found during the Swedish mission: *IG* XV 1, 369–74.

13 An important paper on these investigations: Nicolaou 1964.

14 Childs et al. 2012, 24–44.

15 A rich volume on Ohnefalsch-Richter's investigations in Cyprus describes his adventures on various occasions (Schmid and Horacek 2018).

16 The most recent, detailed account on Ohnefalsch-Richter's excavations in Marion, in Lewandowski 2018. The author adds that some of the objects that were in Ohnefalsch-Richter's private possession were inherited by the Berlin Museums after his passing.

17 Deecke and Siegismund 1875.

18 Lewandowski 2018, 296, ft. 54.

19 Deecke 1886a; 1886b; 1886c; 1886d.

20 I traced its existence in Strasbourg through an online search in 2018. Since then, I documented all the material relevant to Cypriot inscriptions on two occasions (July 2018; January 2019), thanks also to the precious assistance offered by one of the head librarians of the BNU, Claude Lorentz.

21 Masson 1991, 34, ft. 21.

Fig. 1. Paper squeezes made in 1885–1886 by M. Ohnefalsch-Richter, kept today at the Strasbourg University Library-BNU Strasbourg. Lower part: one such squeeze (front and rear), of inscription now published as *IG* XV 297 (1), attested on a vase kept in the Louvre Museum, Paris (AM 85); on the front side of the squeeze, the tomb number and vase number were written in pencil by Ohnefalsch-Richter ("XVI 91") (courtesy of the Strasbourg University Library-BNU Strasbourg).

in this instance, Deecke. Deecke received 187 squeezes of pottery inscriptions. As it turned out, for 97 of these 187, we (the corpus editors) had no idea they existed, since the vases that carry them are now lost, so they were added to the *IG* XV 1,1 corpus. The relevant entries in the corpus indicate that they are only known through a paper squeeze ("ex ectypo tantum notum"), and they are accompanied by a drawing-like photograph of the squeeze, because that is all the documentation that we have for them. The cumulative dating given in the corpus is "5th–4th century", and this is of course because a more narrow dating would be provided by the chronology of the pot, which we are missing.[22] The squeezes also made it into the photographic tables of the volume.

In terms of epigraphic testimonies, it is important to have these precious squeezes at our disposal. Firstly, we see that the signary used in these inscriptions was the common one, we can measure the size of the signs on the squeezes, and we have a rare opportunity to see more complex sign ligatures in action. Sign ligatures, the combination of various signs of the syllabary in a monogrammatic fashion, seem to have been a favourite of the syllabary scribes, and the vases under examination here attest extensively to this practice.[23]

22 Attic pottery is the most meticulously studied category of pottery from the ancient world. There is a huge body of literature that discusses typology and dating, but the fundamental classification is based on the Athenian Agora volumes. With some refinements, the volume used to date undecorated pottery remains Sparkes and Talcott 1970.

23 See more on the ligatures in Karnava and Markou 2020, 130–31. The practice was probably not limited to Marion, since evidence from a different site is also known (Palaepaphos, in Halczuk and Peverelli 2018, 61–2).

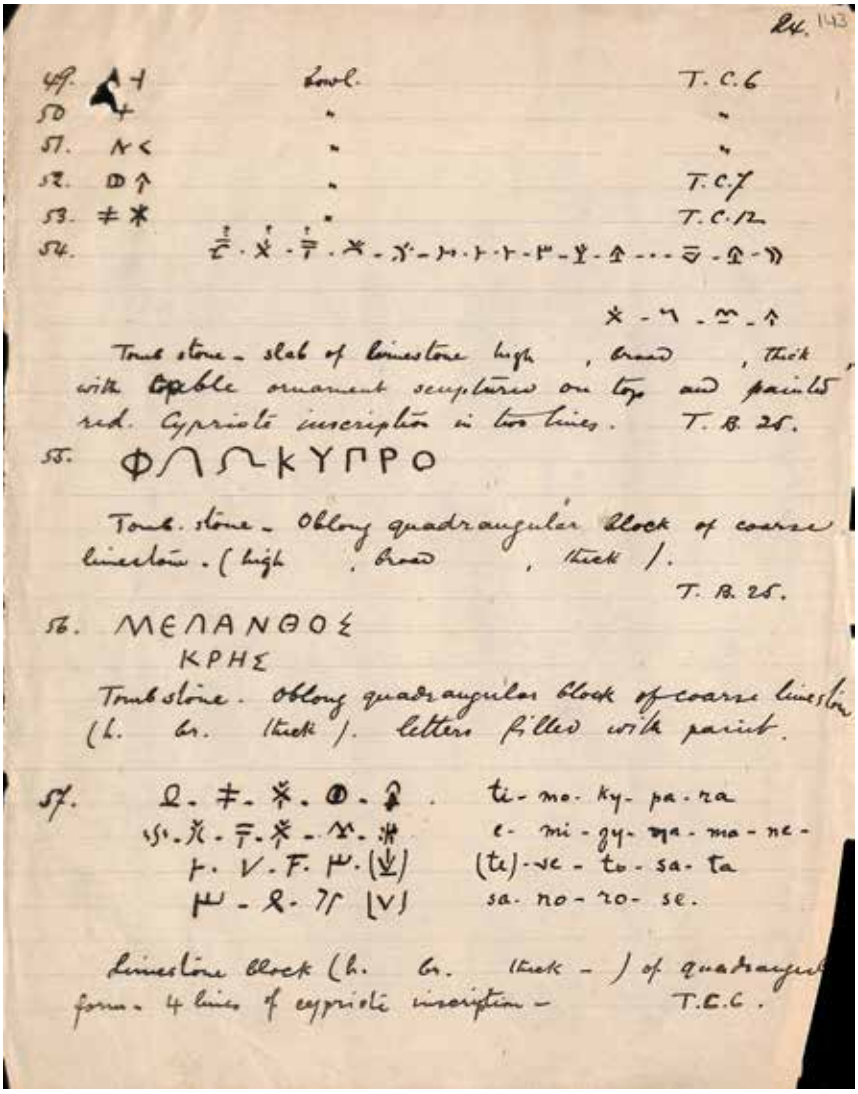

Fig. 2. A page of M. Markides' excavation report on his excavations at Marion-Polis Chrysochous from 1912 onward (courtesy of the Cypriot State Archives/ Department of Antiquities, Cyprus).

A number of these inscriptions, although limited, appeared therefore in Deecke's 19th century publications, and were also copied in subsequent editions, such as Masson's collection of Cypriot syllabic inscriptions,[24] and Egetmeyer's grammar.[25] Yet, some of the actual vases are nowhere to be found nowadays, and the inscriptions had been seen by no-one other than Ohnefalsch-Richter himself, and obviously by Deecke through these squeezes.

Furthermore, there is yet another set of archival documentation that provided us with precious evidence. The excavation records of the investigations carried out by Menelaos Markides in 1916 are kept in the Cyprus State Archives in Nicosia, and I was able to consult them with the permission of the Department of Antiquities (Fig. 2).[26] Although this all happened after the corpus material had been submitted for publication, we managed to insert some of its information in the corpus. Markides was apparently most thorough and meticulous in his recording of the excavations of the Marion tombs, and his excavation daybooks are among the most detailed and helpful I have ever come across.

24 Masson 1983, nos. 110–17, 122, 127–29.

25 Egetmeyer 2010, II, 696–97 nos. 18–25.

26 Markides 1916. Some of Ohnefalsch-Richter's Marion documentation records are also kept in Nicosia, split between the archives of the Department of Antiquities and the Cyprus State Archives.

Both these archives, Deecke's bequest in Strasbourg and Markides' excavation daybooks in Nicosia, have enriched the material added to the corpus. Ohnefalsch-Richter would number his vases in pencil. With a Latin numeral he would indicate the tomb number, and with an Arabic numeral he would indicate the serial number that was assigned to the vase within the tomb. All this was already evident on a number of vases we already had, but it made little sense, and one could go no further than this. After the Strasbourg material resurfaced, random information such as this suddenly became relevant.[27]

And maybe in the instance of a tomb containing just one inscribed vase, all this information was not of much consequence, at least for epigraphy. But for archaeology it is, because by understanding this detail we know that a vase numbered as "no. 14" immediately reveals that 13 more vases were discovered in the same tomb. And it is possible that, with the combination of Ohnefalsch-Richter's daybook information and the corresponding marking of other vases or finds kept in various museums, researchers will be able to reconstruct, to a certain degree, the tombs' contents and put them together, either as a virtual or written study. And this is something that an archaeologist should do in the future.

LESSONS THAT WERE LEARNED: SOME CASE STUDIES

Because of the information discovered in Strasbourg, it was decided to arrange the corpus entries according to their find context, i.e. to not separate the inscribed vases found in each tomb. The decision was to group all inscribed vases and present the total of inscribed material for each tomb in the corpus, Greek alphabetic inscriptions as well as the odd Phoenician one included. So, among *IG* XV 1, 254–393 one will find all the inscriptions recovered in each Marion tomb, i.e. the ones for which it was possible to understand that they belonged to the same tomb context. In terms of absolute numbers, the corpus has 140 numbers reserved for the inscribed Marion Attic vases, but the actual number of vases recorded is 324, since the tombs contained from one to 23 inscribed vases each.

The instance of entry *IG* XV 1, 284 (1)–(4) is indicative of how the corpus entries work (Fig. 3). It includes four inscriptions on four different pots, all kept in the Cyprus Museum in Nicosia and all found in Necropolis I, in a tomb numbered 27. Two of the pots bear a Cypriot syllabic sign each, indicating the beginning of a name starting with o-, one has Greek numerals, and another has a Phoenician inscription. These pots were buried in the same tomb, along with, I assume, numerous other grave goods. Ohnefalsch-Richter gave them the numbers 36 to 39, which means that the tomb contained at least 35 more pots. As is evident in multiple cases, the pots did not accompany just one deceased person, but more. It was also the case that a person at times received more than one inscribed pot.

The two syllabic o- are found on two *askoi*, which are small pouring vessels. It seems too much of a coincidence to think that the two *askoi* with the same syllabic initial were destined for two different deceased persons. Their dating in the last quarter of the 4th century BC makes the hypothesis that both *askoi* accompanied one and the same deceased person more likely. The Greek alphabetic numeral is found on a partially preserved cup, and the Phoenician one on a badly eroded handleless cup, both also dating to the last quarter of the 4th century. Although the types of all these inscribed vases constitute a heterogeneous group, and the pots are inscribed in different scripts and languages, they all seem nonetheless to date to the same time frame and were placed together in the same tomb: these are all points worth taking into consideration.

27 The Strasbourg squeezes, along with observations by my colleague Caroline Huguenot in Berlin, who studies material from Ohnefalsch-Richter's excavations and has examined his finds in Berlin, helped me understand the reasoning behind his registrations. Ohnefalsch-Richter's documentation methods are also reconstructed in Lewandowski 2018, 288–89.

Fig. 3. Entry *IG* XV 1, 284 (1)–(4). The vases were found in Tomb 27 of Necropolis I of Marion and were given by their excavator, M. Ohnefalsch-Richter, consecutive numbers (nos. 36–39) (courtesy of the Department of Antiquities, Cyprus).

Graffiti on Greek vases in the Greek alphabet-using world have been given multiple interpretations. When found in habitation contexts, it is, firstly, uncertain whether the inscription was written when the pot was complete and therefore functional, or whether the inscription was incised on an *ostrakon*, a sherd broken off a pot and used *per se* as a writing medium, such as a piece of paper would be nowadays.[28] In the instance of the Marion vases, the *ostraka* hypothesis can be readily discarded even when an inscribed sherd is all we are left with. Among post-firing inscriptions on Attic vases found in the Agora of Athens are names, numbers and texts (dedications or laconic correspondence), but their commercial use seems to overrule all others: commercial and tax notations abound and generally speaking they are considered as trademarks, i.e. as notation connected to trade activities.[29]

The vases inscribed in the Cypriot syllabary appear to be uniform in their registrations: they bear a person's name, either in full or in an abbreviated form. They are found exclusively on the imported Attic cups that were part of the grave offerings at Marion, pointing to the importance of marking the vase as someone's possession. The same habit is attested in the Greek alphabet-using world: when discussing the so-called owner's marks from the Agora, Lang mentions in passing: "There are vast numbers of pots or fragments with only one or two letters, but because the scope for interpretation is so wide they can give us little or no information."[30] In terms of Greek

28 This basic question permeates the relevant Athenian Agora volume (Lang 1976).

29 The term used in Johnston (1979).

30 Lang 1976, 26.

alphabetic graffiti, more are attested on imported Attic pottery from different areas of the Mediterranean and even the Black Sea, all the places therefore that such pottery was popular because it was considered a somewhat luxurious import. In contexts other than tombs, the names could also be dedications to deities.[31] In the Cypriot environment, there are Cypriot syllabic and Phoenician inscriptions on such Attic vases, not judging only by the few specimens found in Marion, but from relevant evidence from other parts of Cyprus.[32] The common element in all the above instances is the urge to inscribe these Attic vases, denoting in all probability ownership and demonstrating the high value these vases had among the different cultures of the Eastern Mediterranean.[33]

Studies on the import and use of Attic pottery in Cyprus focus primarily on decorated black- and red-figured pottery. Early studies on the export of black-figured pottery towards the Eastern Mediterranean markets already stress the economic and social changes experienced in Athens, the producer of this pottery, around the mid-6th century, when the Peisistratids were in power.[34] The oldest piece of Attic decorated pottery found in Cyprus appears to date to 580 BC and was found at Salamis,[35] and Marion has also provided Attic pottery of the same period.[36] Kition imported Attic pottery after the last quarter of the 6th century, and Amathus is also known for a non-negligible percentage of Attic pottery. Marion always occupies the top spot in such frequency charts, with the result that it is considered to have been more "hellenised" than the rest of Cyprus. Yet the prominent position of these sites as receivers of Attic pottery could be accidental. It has been established that at sites such as the Marion necropoleis, excavated in the 19th century, there was a definite bias on the part of the excavators in favour of collecting only Attic pottery rather than local pots. Percentages therefore are surely distorted to an unknown degree.[37] A comparison between the percentages of Attic pottery collected from tombs at Marion of the Cypro-Classical (CC) period by Ohnefalsch-Richter results in Attic pottery occupying 78.8% of the total assemblage, whereas the same pottery type collected by the Swedish Cyprus Expedition some 40 years later from the same site comprised 38.2%.[38]

It is also likely that the study of plain, undecorated Attic pottery imported in droves during the 5th and 4th centuries will change the picture of cultural habits and norms, as we have formed it through the study of decorated black- and red-figured pottery.[39] The Marion rock-cut tombs, that were in use for decades and centuries, were opened, closed and then re-opened for more deceased Marion inhabitants. Some of these deceased persons were interred with one or more Attic plain black-glazed vases. The majority of these were cups, without, or with one or two handles. Some appear to have been obtained in order to be placed in a tomb. In favour of this explanation is the fact that some are in pristine condition, often in pairs, bearing what appears to be palaeographically similar inscriptions. But the wear marks of some vases make us suspect that the vases were not acquired in order to serve only as grave goods, but had previously been used by the deceased during his/her lifetime. The retrieval of Attic inscribed pots in settlement contexts from different parts of the island points to the use of these vessels as other than mere grave offerings. Such observations speak for the popularity

31 The instance of a graffito in the Greek alphabet on a black glazed cup from Byblos, Johnston and Chirpanlieva (2016–2017).

32 Relevant evidence from Amathus (*IG* XV 1, 68–74), Kourion (*IG* XV 1, 146–53), Salamis (Pouilloux 1978, 97–109), Palaepaphos (Halczuk and Peverelli 2018), Tamassos (Michaelidou-Nikolaou 2010). Most of this evidence comes from habitation sites, not cemeteries.

33 Such could be the instance of a graffiti inscription in the Cypriot syllabary found on a sherd in the Athenian Agora, an environment where obviously few, if any, people could read the syllabary (Karnava 2013, 166–67).

34 Bailey 1940, 69.

35 Stavrou 1994.

36 Padgett 2009, 220.

37 An explanation for this phenomenon in a more poetic garb: "The superior quality of Attic black-glazed ceramics, potted in a variety of shapes and fired to a glossy black, clearly was as evident to ancient consumers as it is today: in a box of native Cypriot shards even the smallest Attic fragment stands out like a flower in the desert." (Padgett 2009, 224).

38 Lewandowski 2014, 162.

39 The patterns are probably more easily discernible through the study of decorated pottery, where the identification of workshops, specific potters and painters allows for more refined accounts of the market movement for these products, e.g. Osborne 2021.

Fig. 4. Entry *IG* XV 1, 300 (1)–(5). The vases were found in Tomb 117 of Necropolis I of Marion and were given by their excavator, M. Ohnefalsch-Richter, consecutive numbers (nos. 95–99) (courtesy of the Department of Antiquities, Cyprus).

of Attic pottery as part of household equipment. A question that arises is to which social class the households that had access to this high-quality imported pottery belonged. Eventual interpretations for such a preference should probably include the recognition of the top quality of Attic pottery, a sort of Bohemian glass of its time, and its consequent high demand in Cypriot and Mediterranean markets.[40] In favour of widening the scope of our investigative area and dispensing with oversimplified theories of "hellenisation" on the basis of the presence of Attic pottery is the fact that the same Attic black-glazed pottery is found in different cultural contexts, such as Phoenician-inhabited Kition in southeast Cyprus, where corresponding consumption phenomena of Attic black-glazed pottery can be observed among sanctuary debris.[41] Other sites within the Achaemenid empire, simple provincial centres with no direct access to the sea, also show a preference for Attic tableware, a fact which shows that the market domination of black-glazed Attic tableware should be examined in a much wider sense.[42]

Another investigative strand could arise from vases from one and the same tomb and dating, this time, to distinct time periods, but with the same name initials. The entry *IG* XV 1, 300 (1)–(5) contains vases that come from Tomb 117 of Necropolis I and date between 460 and 325 BC. They all refer to a name (or more?) beginning with *ni-ka*, such as Nikandros or Nikanor (Fig. 4). Are we to assume that one and the same person was receiving all these different vases, and when? After 325 BC? Or are we seeing different members of the same family, from a grandparent to a grandchild, all bearing the same name? Or could it be that the abbreviated name form hides different names that begin with the same first composite, as could be expected from related ancestors and offspring, regardless of whether they are male or female, on the basis of what we know from Greek onomastics?

Ohnefalsch-Richter assigned consecutive numbers to these vases (from 95 to 99), which means that not only did he find them in the same tomb, but he most likely found them close by each other inside the tomb. The high number of vases deposited (at least 99) probably points to a tomb that was used for a lengthy period of time, a

40 The beginning of the preference for imported wine-drinking cups and tableware is exemplified by the cargo of the sunken vessel in Pointe Lequin 1A off Marseille dating to 515 BC, which carried mainly 1,600 "Ionian" cups and some 800 Attic cups (Osborne 2007, 86). This cargo is considered unusual for its time and is unique among cargos of the period that consisted of subsistence goods (as shown by the predominance of transport amphorae) or elite, high-value commodities (Krotscheck 2015, 180).

41 Chirpanlieva (2012, 244) presents evidence from the sanctuaries at Kition *Kathari* and Kition *Bamboula* dating from the second half of the 6th century BC into the third quarter of the 4th century BC. A more eloquent case against oversimplification of our data, in this instance epigraphic and historic, is made by Seibert (1976).

42 Attic imports from the 5th–4th century BC levels at Seyitömer Höyük in western Anatolia include mostly tableware (Grave et al. 2016, 701). The same image arises from the most recent evidence from Palaepaphos (Peverelli 2018, 162, figs. 3–4).

suspicion that is reinforced by the lengthy span of dating of the Attic pots. It is not difficult to imagine a niche in this collective tomb that was reserved for members of the same family. As the decades went by, mourning relatives would come in and place new offerings for their new dead. They would bring in new vases, inscribed with their name again, so as to mark them and distinguish them from the dozens of vases in the same tomb.

CONCLUSIONS

One of the ways in which archaeology tracks ancient connectivity is through the mobility of people and objects. In the instance of Marion, a city-state in classical Cyprus, the imported Attic vases that were deposited in graves are the objects we are interested in here: their high numbers show that they functioned as an incentive for people to move, in order to accompany or acquire them. Other than their origin story, however, which is a lengthy discussion on its own, our main interest lies in what happened to these commodities after they were acquired by the inhabitants of a city in Cyprus: their second "life" in a "foreign" place, and their eventual "death" through interment.

The paper has discussed a series of modern mobility stories that resulted in the dispersion of the archaeological objects in question between different countries and museum storerooms. It was the dispersal of the material that has hampered their study so far, but this has been remedied: the inclusion of all the inscribed pots under the roof of a corpus has united them in a metaphorical sense, in a way they were never physically united in modern times since they were excavated by different archaeological missions from the late 19th century onward. The addition of the testimony of paper squeezes dispatched by the first excavator of the Marion tombs, M. Ohnefalsch-Richter, to Strasbourg, copies of the graffiti on pots that have miraculously survived the perils of time, has helped fill in the picture. Important clues recovered from Markides' 1916 excavation report further demonstrate the unique value of painstakingly going over legacy data.

Some case studies among the Marion inscribed material discussed here show its potential for our understanding of Cypriot social and burial habits of the Classical period. The names and the name abbreviations they attest to provide us with discussion starting points: how many inscribed specimens were found in the same tomb, what other inscribed material were they found with, when do they date? Were they possessions that accompanied the living and, subsequently, the dead? How do they fit into the use patterns of corresponding inscriptions in the Greek or the Phoenician alphabet? Was there a difference in their use depending on the place Attic black-glazed pots were found (Attica, Cyprus, the Mediterranean, even the Black Sea), or depending on the script and language that was used? Are there common elements across time, place, scripts and languages, and what are the latent idiosyncrasies, if any?

The closer study of this evidence, of the humble and seemingly unimportant pottery graffiti, has the potential to enhance the elaboration of interpretations. But the story to be told is not as important in terms of the seller of objects or of the objects' mobility itself: it is much more interesting to figure out the complicated why and how of their presence in their buyers' hands. It is certain that, mobility testimonies aside, these inscribed Attic black-glazed cups can reveal a lot more about connectivity patterns, otherwise untraceable in the archaeological record: graffiti that were inscribed in the Cypriot syllabary, in the Greek alphabet and in the Phoenician alphabet; graffiti that are attested across habitation and burial sites; graffiti that are found all over Cyprus, and of course beyond, in multiple sites of the Eastern Mediterranean. And all this is something that archaeologists should discuss in the future.

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Cypro-Archaic and Cypro-Classical pottery from the Knossos Unexplored Mansion

New evidence on connections between Crete and Cyprus

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ABSTRACT

According to the current scholarly consensus, the importation of Iron Age Cypriot ceramics to Crete and their local imitation came to an end in the 7th century BC, and the following 300 years were characterised by an absence of Cypriot and Creto-Cypriot shapes on the island. The impression is a corollary to the traditional assumption that the communication and exchange networks between the Near East and the Aegean collapsed around 600 BC. The present paper reconsiders these consensus views in light of Cypro-Archaic (CA) and Cypro-Classical (CC) pottery found at the Unexplored Mansion at Knossos. On the basis of previously unpublished pottery, as well as a reconsideration of the published record from the site in question and the Eastern Mediterranean, I argue for contact between Cyprus and Crete during the CA and CC periods.

INTRODUCTION: THE "RUPTURE" OF 600 BC

A rich record of imported Cypriot pottery and local imitations of Cypriot ware exists at the cemeteries of Knossos and Eleutherna, as well as at other Cretan sites of the Geometric and Orientalising periods.[1] Cypriot pottery is attested on Crete from the late 9th[2] through the early 7th centuries BC,[3] while Cretan reproductions of Cypriot vessels are thought to have been produced from the 10th century BC[4] until ca 600 BC[5] – the conventional beginning of the CA II period. As regards the most common shapes and types of wares imported and copied at Cretan sites, the overwhelming majority consists of Black-on-Red (BoR) and Bichrome pinched-rim jugs and juglets with globular, oval or sack-shaped bodies, while Red and Black Slip Bucchero juglets are also attested among the local reproductions.[6] Most specimens derive from funerary contexts.[7]

1 Coldstream 1984; Bourogiannis 2007, 1:310, 312; 2:237–319; Kotsonas 2008, 65–9, 164–67, 170–74, 181–82, 284–87; 2012, 165–68; Karageorghis et al. 2014, 16–292.

2 Coldstream 1984, 123, 125–26 nos. 1–3; Bourogiannis 2007, 1:295–96.

3 Coldstream 1984, 137; Bourogiannis 2007, 1:95, 297–98, 377; Karageorghis et al. 2014, 13.

4 Brock 1957, 14 no. 92; Kotsonas 2008, 284. However, Karageorghis (et al. 2014, 12) has expressed doubts on the Cypriot affinities of some of these vessels.

5 Brock 1957, 108–9, 190 nos. 1251, 1262, pl. 109; Karageorghis et al. 2014, 182–84 nos. 34–6 and 39, 240 no. 91.

6 Cf. Coldstream 1984, 131; Coldstream and Catling 1996, 2:406–8; Schreiber 2003, 294, 298, 306; Bourogiannis 2007, 1:312, 2:237–319; Kotsonas 2008, 164–67, 170–74, 181–82, 286; Karageorghis et al. 2014, 13, 16–292.

7 Cf. Karageorghis et al. 2014, 16–63, 95–211, 245–47, 255–57.

It is generally believed that Cypriot imports to Crete became scarce soon after 700 BC.[8] At the same time, no local copies have hitherto been dated after the end of the 7th century[9] or classified later than Gjerstad's type IV and the CA I period. The following 6th century BC is thought to present a watershed in the history of Crete's external relations with Cyprus and other regions of the Near East. According to conventional wisdom, the Neo-Babylonian conquest of Tyre in 573 BC precipitated the collapse of Phoenician trade networks in the Eastern Mediterranean[10] and led Crete into economic and artistic decline and isolation from which the island did not recover before the end of the 4th century BC. This traditional view is premised upon the currently poor archaeological record of central Crete for the Archaic and Classical periods, the dearth of imported ceramic finds and on literary sources, which paint a picture of Cretan isolation.[11]

PURPOSE, METHOD AND SCOPE OF THE STUDY

In view of these considerations, the four Cypriot fragments discussed in this paper, which were recovered during the excavations of the 1960s and 1970s at the site of the Unexplored Mansion in Knossos, appear to be quite unusual and to present new information regarding the connections between Cyprus and Crete during and after the close of the 7th century BC. They represent domestic finds and comprise a new range of shapes, different from those attested in Early Iron Age (EIA) Cretan cemeteries. Most importantly, they can be ascribed dates within the CA and CC periods and hint at a more continuous flow of imports from the 7th to the 4th centuries BC. The objective of this paper is to apply traditional methods of typological analysis to highlight the difficulty of identifying CA and CC material outside Cyprus, as well as the influence that established historical theories can exert on the classification of published material. Furthermore, reference is made to recent ceramic studies and isolated finds on Crete and beyond, which also point to more continuous and unified relations between Crete and both Cyprus and the Near East in the 6th and 5th centuries BC.

THE ARCHAEOLOGICAL CONTEXT

The Unexplored Mansion is a Late Bronze Age (LBA) residential building situated ca 400 m northwest of the Minoan Palace of Knossos. As well as extensive Final and Postpalatial remains, the area yielded extensive traces of domestic activity for the EIA and historical Greek periods, mainly in the form of wells, as well as of quarrying and rubbish pits. The excavations of 1967–1977 were published in two monographs dealing with the Bronze Age and post-Bronze Age remains respectively.[12] These works render the Unexplored Mansion one of the best published excavations in the Knossos valley.

While conducting research on the material from the Unexplored Mansion in search of overseas imports of the Archaic and Classical periods in the summer of 2017, I identified macroscopically four Cypriot imports that most likely date between the 6th and 4th centuries BC. Unfortunately, all of them were recovered in contaminated Hellenistic and Roman layers and cannot be associated with well-dated material.[13] What is more, two of

8 The production of BoR juglets, bowls and other shapes is thought to decline in Cyprus itself after the middle or end of the 7th century: Schreiber 2003, 283; Bourogiannis 2007, 1:67.

9 The latest known Cretan vessel imitating Cypriot Black Slip juglets derives from Well 12 of the Unexplored Mansion at Knossos (ca 600 BC): Coldstream 1992, 79, GH 124, pl. 73.

10 Demargne 1947, 352–53; Morris 1992, 170–72; Erickson 2005, 627–36.

11 For an overview see: Erickson 2005, 619–22; 2010, vii–viii n. 2, 1–42, 235–45, 298–345.

12 Popham 1984; Sackett 1992.

13 **1**: II RE II. **2**: V 4B, RH I, 32, Pit XIc, I 23c. **3**: VI 10. **4**: VIII unknown level.

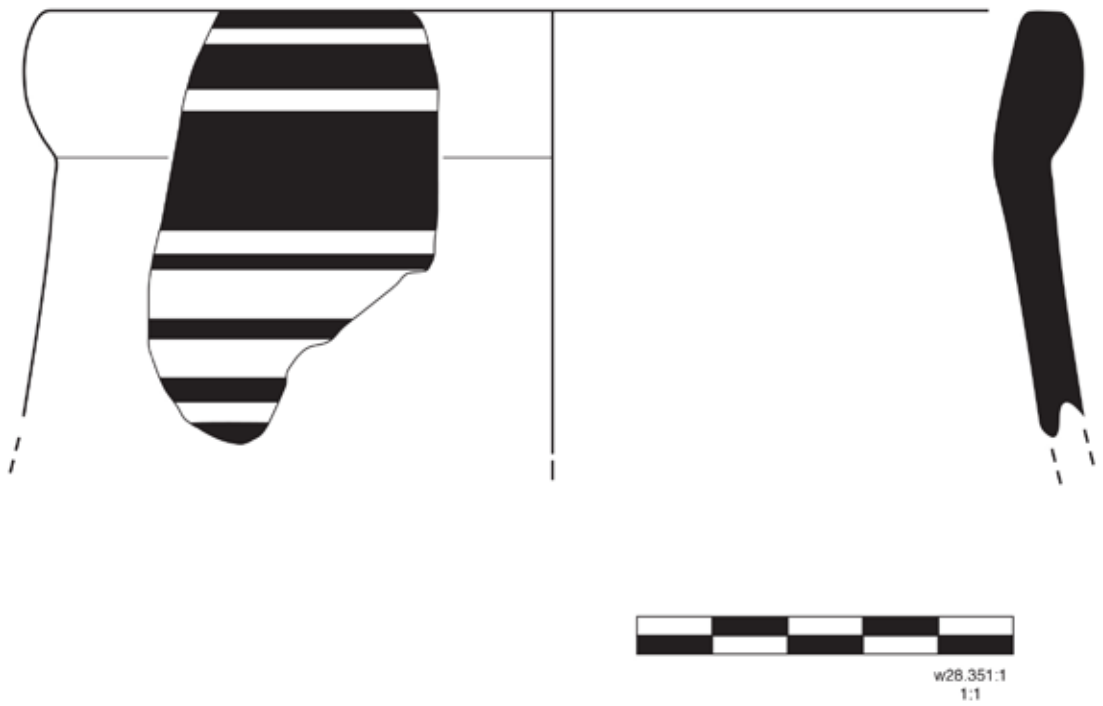

Fig. 1. Drawing of fragment **1** by the author.

these sherds (**1** and **4**) were not included in Sackett's volume on the post-Bronze age finds recovered above the Minoan Unexplored Mansion. The other two fragments (**2** and **3**) were published by Peter Callaghan under pottery group "H38".[14] Group "H38"[15] is an assortment of Hellenistic pottery from various contexts.[16] However, the fabric and decoration of the sherds suggest that the unspecified origin and Hellenistic date proposed by Callaghan need to be re-examined.

The Archaic and Classical material from the Unexplored Mansion in general, and especially in the case of the Cypriot imports, is very fragmentary. Joins between sherds are rare and no complete vases survive. However, the surface of the sherds is not very worn, which suggests that they had neither been lying for long exposed to the elements, nor eroding downhill. The pottery gives the impression of belonging to mixed fills, perhaps collected from nearby domestic areas and redeposited for construction purposes.

THE MATERIAL

The four fragments discussed below were assigned a Cypriot origin on the basis of their fabric, surface treatment and decoration. They come from closed shapes, except for fragment **4**, which was part of large bowl. The wares represented are White Painted (WP), Bichrome and BoR. Detailed catalogue entries are provided at the end of the paper.

Fragment **1** is a rim fragment from a large, closed WP vessel, most probably an amphora or jug. Amphorae with a wide, straight neck and a swollen ring-shaped rim, such as **1**, occur principally in Gjerstad's types V

14 Callaghan 1992, 132, H38 nos. 77–8, pl. 117.

15 I use "group" to replace Callaghan's arbitrary term "deposit" for this collection of pottery. Cf. his use of "deposit" for Group H11, which presents a similar case: Callaghan 1992, 90, 97.

16 Callaghan 1992, 89, 127.

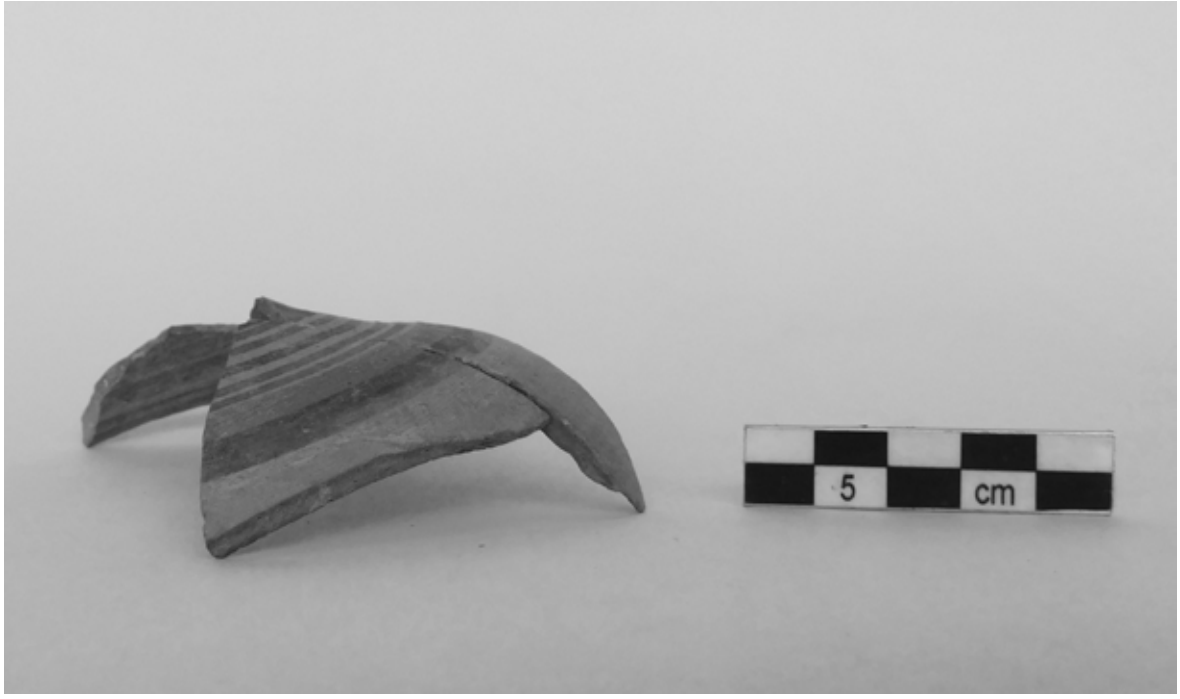

Fig. 2. Fragment **2**, photograph by the author.

and VI[17] and are chiefly belly-handled. Close parallels for the upright, cylindrical neck, the annular rim and the banded decoration on the outside and inside of the lip exist among Bichrome Red III (V) amphorae from the drainage channels of the settlement at Kition *Bamboula*, which were in use from the second through the last quarter of the 4th century BC.[18] Further comparanda come from contexts dated to the 6th and early 5th centuries BC.[19]

It is difficult to find amphorae that parallel the neck of fragment **1**, which flares downwards. Alternatively, fragment **1** could be identified as belonging to a large, oval-shaped jug with a straight neck and vertical handle from rim to shoulder, but the development and typology of this shape are poorly understood.[20] Taking into account these parameters, the fragment is best classified as a WP V–VI amphora or large jug and dated between the CA II and CC II periods. The absolute dates for these phases currently correspond to the 6th through 4th centuries BC.[21]

The site of the Unexplored Mansion has also yielded fragments of Cypriot Bichrome vases. Vase **2** consists of several wall fragments from a barrel-shaped jug. To my knowledge, this form is previously unattested at Knossos and in the rest of Crete. Although a full profile is lacking, it was probably elongated, egg-shaped, tapering towards the sides and with pointed tips. This form is typical of Gjerstad's type IV–V barrel-shaped jugs.[22]

17 Gjerstad 1960, 119–20.

18 Salles 1983, 61 no. 160, fig. 23. On the find context and its chronology see: Salles 1983, 56–8.

19 Karageorghis and Raptou 2014, 18, 102, 108, Tomb 135 nos. 2 and 120, pl. LXVI; Karageorghis 1970, 152, 155, Tomb 105 no. 16, pl. CCXLVI; Fourrier 2009, 6–7, 49, fig. 118, 54–5.

20 Neither in his typology of Cypriot ceramics (Gjerstad 1948), nor in his later refinement of shape types and their evolution (Gjerstad 1960, 114–19, figs. 7–12) did Gjerstad establish a standard terminology and typology for this type of vessel. One of his jugs classified as WP VII has a similar neck and rim profile to fragment **1**, albeit the decoration points to a later date than the specimen from Knossos: Gjerstad 1948, 59, fig. LXIV, 11.

21 For the correlation between absolute and relative chronology, see: Gjerstad 1948, 195, 200–1, 427.

22 Gjerstad 1960, 114. See especially: Gjerstad 1948, fig. XLVI, 7 (WP V), fig. XLIX, 1–2 (Bichrome V); Karageorghis 1970, 10,

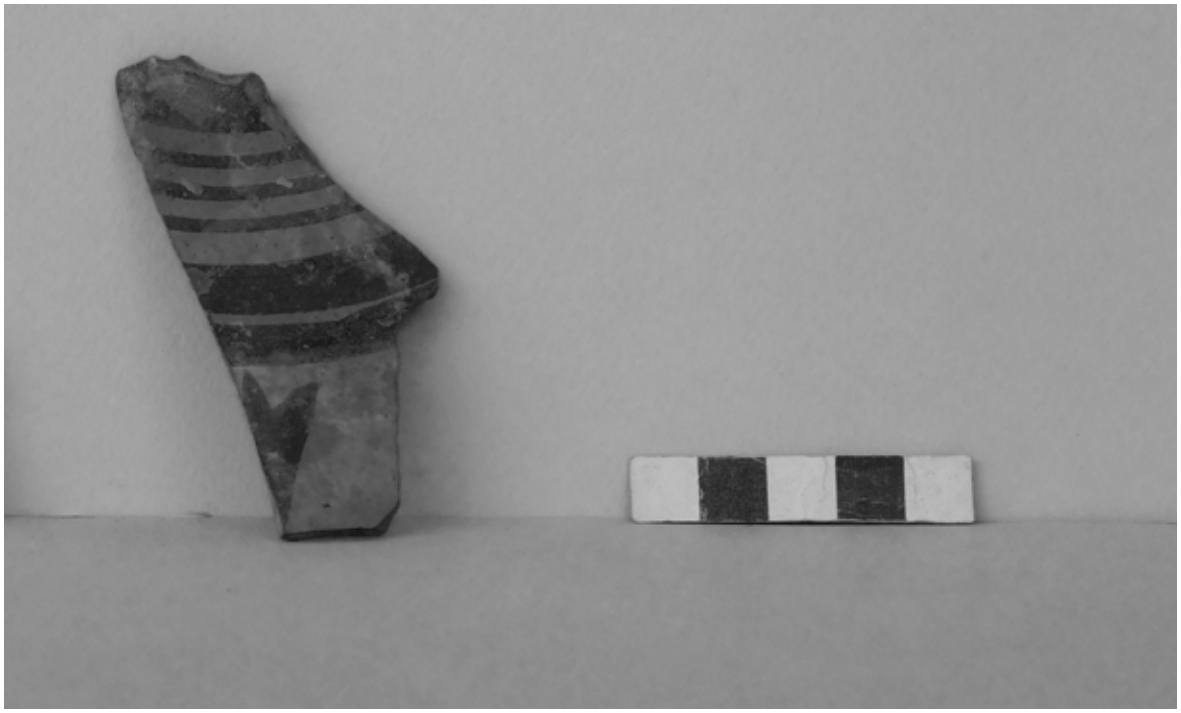

Fig. 3. Fragment **3**, photograph by the author.

The decoration leads to a similar conclusion: the series of concentric circles of different thickness and colour, which fill most of the jug's round sides and leave little unadorned space, is characteristic of the circle style of types IV and V.[23] Parallels for **2** can be found among Bichrome V jugs published by Einar Gjerstad[24] and on a WP V specimen from the necropolis of Salamis.[25] Taking into consideration potential inaccuracies in the relative and absolute chronology of the shape and the contexts of its parallels, I believe that the safest attribution for the jug would be a date within the CA I and CA II periods (750–475 BC).

The second Bichrome fragment (**3**) is part of the shoulder of a medium-sized closed vessel, perhaps a pinched-rim jug or a small amphora. Although no diagnostic portion of the vessel's profile is preserved, the decorative motif depicted on it is of chronological importance. The lotus or trefoil ornament in the shoulder zone of the vessel, which underlies a series of black and red lines and bands covering the neck, does not appear in this highly stylised form before Gjerstad's type V, with which it reaches its greatest popularity,[26] and type VI.[27] The stylistic parallels include numerous pinched-rim juglets from the necropolis of Salamis, all classified as Bichrome V and attributed to the CA II[28] and CC IA horizons.[29] All things considered, fragment **3** probably comes from a Bichrome V–VI vessel of the CA II to CC I periods, and can therefore be dated between the 6th and 5th centuries BC according to the current chronological scheme.

Tomb 7 no. 11, pl. CCIV (WP IV), 21 no. 108, pl. CCVIII (WP V), 153 no. 23, pl. CCLVI (Bichrome IV).

23 Gjerstad 1948, 56–58, 64–65, 67; 1960, 105.

24 Gjerstad 1948, fig. XLIX, 1–2; 1960, fig. 7, 5.

25 Karageorghis 1970, 21 no. 108, pl. CCVIII (Tomb 10), 22–3.

26 Gjerstad 1948, 67, figs. XLVI, 13 (WP V), fig. XLIX, 8–9 (Bichrome V).

27 Gjerstad 1948, fig. LIX, 3 (Plain White VI).

28 Karageorghis 1970, 71–2 nos. 5, 23 (Tomb 41), pl. CXXIII, 101–2 no. Ch. 5 (Tomb 62), pl. CXLVI, 132–33 nos. 5–6 (Tomb 85A), pl. CLXVII. The absolute date of Tomb 62 is based on Attic imports (Karageorghis 1970, 102).

29 Karageorghis 1970, 84 no. Dr. 1, pl. CXXXIV and 128 no. 15 (Tomb 84), pl. CCXLVI. On the date of their find contexts see: Karageorghis 1970, 85 and 129 respectively.

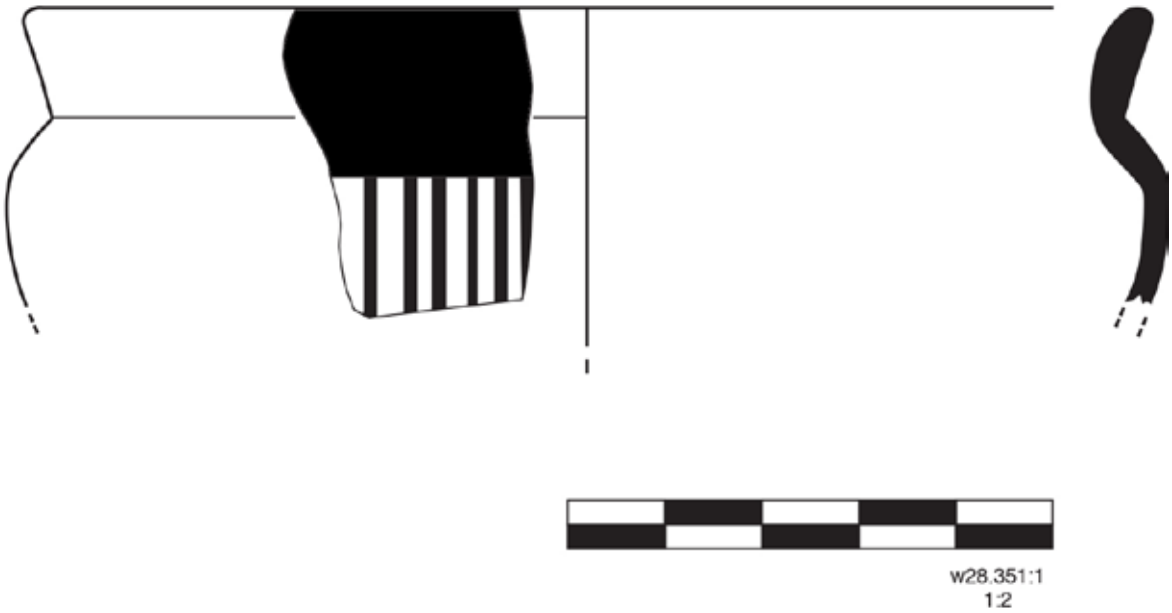

Fig. 4. Drawing of fragment **4** by the author.

The final Cypriot fragment (**4**) is from a large BoR bowl with an offset or raised, contracted rim. The oblique, straight and upward-flaring profile of the rim finds parallels among Gjerstad's handled BoR II (IV) specimens.[30] The same is true for the decoration: a black band on the rim followed by a reserved zone running around the upper body with groups of vertical stripes probably alternating with some other motif. The bowl can thus be generally dated within the CA period, from ca 750 to 475 BC. Problematic, however, is the fact that the carination on the shoulder of bowl **4** does not appear on typical examples of the type. This may suggest that the typology of the shape requires refinement.

FURTHER EVIDENCE FOR CRETO-CYPRIOT CONNECTIONS IN THE ARCHAIC AND CLASSICAL PERIODS

The fragments from the Unexplored Mansion are perhaps not the sole evidence we have for Cypriot imports to Crete during the Archaic and Classical periods. A CA juglet is said to have been found at the east corner of room A1200 of the Communal Dining Building in Azoria, eastern Crete.[31] The floor deposit of this room is firmly placed in the Late Archaic period, which renders an early 5th century BC date for the juglet highly possible.[32] Nonetheless, since the site is rich in 7th century BC material, and since the deposition of earlier objects in later contexts was practiced at the site,[33] one would need to wait until the final publication of the vessel in order to draw a more secure conclusion with regard to the origins and date of the vase.

Evidence for Creto-Cypriot connections during the 5th and 4th centuries BC exists also on the other side of the Eastern Mediterranean. In 2017, Ayelet Gilboa and her collaborators published a series of neutron activation and petrographic analyses, which they conducted on imported ceramics recovered in Levantine contexts of the

30 Gjerstad 1948, pl. XXXVII, 25–6.
31 Haggis et al. 2004, 377. The vessel is not yet illustrated or described.
32 Haggis et al. 2004, 375–78.
33 Haggis and Mook 2011, esp. 519–20.

5th–4th centuries BC.[34] Most of this pottery was previously thought to be of eastern Greek[35] or even local origin. Nevertheless, the authors identified a group of closed shapes, the clay of which is compatible with the geology of central Crete, and the decoration of which also suggests a Cretan provenance.[36] In addition to discussing other Cretan exports to the Eastern Mediterranean,[37] the authors emphasise that a common ceramic tradition for tableware was shared by Crete, Cilicia, Cyprus and the Levant in the Classical period.[38]

CONCLUSION

The abundance of ceramic imports from Cyprus found in EIA contexts on Crete has traditionally been explained as a byproduct of Phoenician commercial activity in the Eastern Mediterranean. According to this scholarly consensus, Crete was a stopping point for Phoenician merchants on their route from North Syria to North Africa or the southern Aegean from the 9th through the 7th centuries BC.[39] In the beginning of the 6th century BC, military upheavals led to the fall of the Assyrian Empire and, consequently, to the siege and conquest of Tyre by the Babylonians under Nebuchadnezzar II. This blow to the Phoenician East is thought to have caused the collapse of Phoenician trade networks and to have had "an indirect but drastic effect on the 'gateway communities' of Crete, which lost their Oriental sponsor".[40]

As discussed in this paper, fragments of four Cypriot vases found at the Unexplored Mansion of Knossos present limited but not negligible evidence that ceramic imports from Cyprus continued to reach Crete during the Archaic and Classical periods. The Bichrome barrel-shaped jug (**2**) and the BoR bowl (**4**) belong stylistically to types that are most commonly encountered in Cyprus during the CA period (mid-8th to early 5th centuries BC). The Bichrome jug with the stylised trefoil motif (**3**) is most likely a type V specimen (6th–5th century BC) and the WP V–VI amphora or jug (**1**) can be placed within a slightly wider range of dates, between the 6th through 4th centuries BC.

Leaving aside the discussion on absolute chronology, these Cypriot imports from Knossos suggest that Crete was receiving Cypriot vessels of later types than previously acknowledged. These types add to our knowledge of Cypriot shapes imported to Knossos, alongside the omnipresent BoR and Bichrome juglets associated with the perfume trade mainly dating to the 8th century BC.[41] The bowl and at least some of the jugs presented here testify to the circulation of tableware between the two islands in later periods as well. Finally, the pottery in question derives from a domestic context, albeit not from well-stratified layers, and underscores the difficulties of recognising and correctly classifying highly fragmented Cypriot pottery outside Cyprus. Nonetheless, the identification of Cypriot ceramics in well-dated domestic strata associated with other Greek pottery classes outside its place of origin is of paramount importance for the refinement and better understanding of CA II and CC ceramic typology, and it is to be hoped that this goal will be achieved to a larger extent in future studies of better contexts.

The results of the present analysis align well with other recent ceramic studies pertaining to the relations of Archaic and Classical Crete with Cyprus and the Near East during the CA and CC periods. In view of the results of the chemical analyses conducted on ceramics imported to the Levant, for which a Cretan origin is now

34 Gilboa et al. 2017, 560–71.
35 Gilboa et al. 2017, 560.
36 Gilboa et al. 2017, 560–81.
37 Namely, the banded hydriae (Gilboa et al. 2017, 572–75). I am grateful to Professor Ayelet Gilboa for explaining this detail to me and the rest of the audience during discussion of this paper at the conference.
38 Gilboa et al. 2017, esp. 577, 581, 589.
39 Erickson 2005, 627–36 with references.
40 Morris 1992, 170.
41 Coldstream and Catling 1996, vol. 2, 406; Schreiber 2003, 298–99; Kotsonas 2008, 68–9.

advocated, Ayelet Gilboa and her colleagues have postulated that, despite the "detrimental" effects of the fall of Tyre on the relations between Greece and the Levant in the Archaic period, trade seems to have recovered in the 5th–4th centuries BC.[42] In light of the CA and CC imports from Knossos and Crete presented in this paper, I would like to propose that, if our ability to identify Cypriot pottery in stratified domestic contexts outside Cyprus improves, we may be able to observe a more continuous flow of Cypriot exports to Crete during the CA and CC periods.

CATALOGUE

1. WP amphora (or jar with raised neck) (Fig. 1).

Preserved ht. 5.4 cm; estimated rim diameter 12–16 cm. Pinkish-red clay (2.5YR 6/4), porous, with few white and dark inclusions. Fragment of rim and upper body. Thickened rim and vertical neck walls. Decoration in black and brownish paint on white ground. Black, brown and black bands on the exterior of the rim and the transition to the neck. One black and two brown lines below the rim. On the interior: white glaze only on the upper part. Black band at the height of the rim. Parallels: Fourrier 2009, 6–7, 49, fig. 118, 54–55; Karageorghis 1970, 152, 155, Tomb 105 no. 16, pl. CCXLVI; Karageorghis and Raptou 2014, 18, 102, 108, Tomb 135 nos. 2 and 120, pl. LXVI; Salles 1983, 61 no. 160, fig. 23. WP V–VI, CA II–CC II (600–325 BC).

2. Bichrome barrel-shaped jug (Fig. 2).

Maximum preserved ht. 6.1 cm. Pinkish-brown clay (5YR 6/4), grey at the core, with a few white inclusions. Three body fragments survive, the largest one mended from three sherds. Squat body. Smoothed exterior with traces of thin white slip. Reserved zone at the point of maximum diameter; purple and red bands of uneven width on the shoulder and the transition to the neck. Parallels: Gjerstad 1948, fig. XLIX, 1–2; 1960, fig. 7, 5; Karageorghis 1970, 10 no. 11, pl. CCIV, 21 no. 108, pl. CCVIII, 153 no. 23, pl. CCLVI; Georgiou and Karageorghis 2013, 10 no. 70, colour pl. VIII. Bibliography: Callaghan 1992, 132, H38 no. 77, pl. 117. Bichrome IV–V, CA (750–475 BC).

3. Bichrome jug or small amphora or jar (Fig. 3).

Preserved ht. 6.9 cm; estimated diameter ca 12 cm. Pinkish clay (7.5YR 7/4). Fine fabric with few white and dark inclusions. Some blackened spots on the outside and inside indicate some burning. Shoulder fragment. Ovoid body. The exterior is smoothed and decorated with a trefoil lotus in red slip in the shoulder zone and bands on the upper shoulder and the lower part of the neck (one of the bands in red but most in black). Parallels: Karageorghis 1970, 71–72 nos. 5, 23, pl. CXXIII, 84–85 no. Dr. 1, pl. CXXXIV, 101–2 no. Ch. 5, pl. CXLVI, 128 no. 15, pl. CCXLVI, 132–33, nos. 5–6, pl. CLXVII. Bibliography: Callaghan 1992, 132, H38 no. 78, pl. 117. Bichrome V, CA II–CC I (600–400 BC).

4. BoR bowl with offset rim (Fig. 4).

Preserved ht. 4 cm; estimated rim diameter >29 cm. Pinkish-brown clay (2.5YR 7/6), porous, with few white, dark and red inclusions. Fragment of rim and upper body with chipping. High, flaring rim, offset from the body. The maximum diameter is on the shoulder, which is carinated. Below the carination the body begins to taper towards the base. Decoration in violet-black paint on red mat glaze. Exterior of the rim and transition to the shoulder black. Zone with irregularly spaced vertical strokes below. Red glaze on the interior and black band at the height of the rim. Parallels: Gjerstad 1948, fig. XXXVII, 25–6. BoR II (IV), CA (750–475 BC).

42 Gilboa et al. 2017, 586–87.

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Omnium eorum ars urbibus excubabat, pictorque res communis terrarum erat[1]

Artists' mobility in the Mediterranean from the Archaic era to the end of the Classical period

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ABSTRACT

There is much information in the ancient sources (texts as well as epigraphical references) for artists who were active during the Archaic and the Classical periods on an "international" level; meaning that they travelled far away from their hometowns, indeed all over the Mediterranean world to earn their living. This is of particular interest, considering that in ancient times travel conditions were anything but easy. The present analysis is based on sculptors and not on architects or painters, since in their case mobility was not mandatory. It aims to examine the terms of this "international" job market, to discover if artists came from particular regions or if this phenomenon was independent of origin. It also discusses the employers. The ancient texts tell us about commissions by clients (public and private) who hired specialists from abroad to decorate their temples and theatres or design their monuments. A great number of sculptors were also engaged by the panhellenic sanctuaries of Delphi and Olympia. Where did these professionals come from? What can be determined about the mobility of artists in the Mediterranean area? Were there restrictions on mobility, perhaps as a result of political conflicts between an artist's home polis and that of the employer? Did clients prefer to employ artists from particular areas?

The quotation in the title of this paper derives from Pliny the Elder's *Natural History*. In the 35th book he says –when discussing ancient painters– that their works of art were especially made to serve the glorification of the cities, whereas the artists themselves were "the common property of the world".[2] Based on this citation, it is the aim here to analyse the mobility of artists in the ancient world, to see if there is any evidence in the ancient texts for an "international" working environment. The term "international" is, of course, anachronistic, since there is no ancient equivalent to the modern term. The present research is concerned with those professionals who left their home poleis as well as their regional surroundings and travelled, often over long distances, to earn their living. Given that in ancient times travel conditions were anything but easy,[3] it is of significant interest to see if there was, indeed, an "international" job market for Greek craftsmen.[4]

1 Plin. *Nat.* 35.118.

2 See the translation of Rackham 1952.

3 See Schäfer 2016.

4 For a discussion about ancient artists' living conditions see Bourriot 2015.

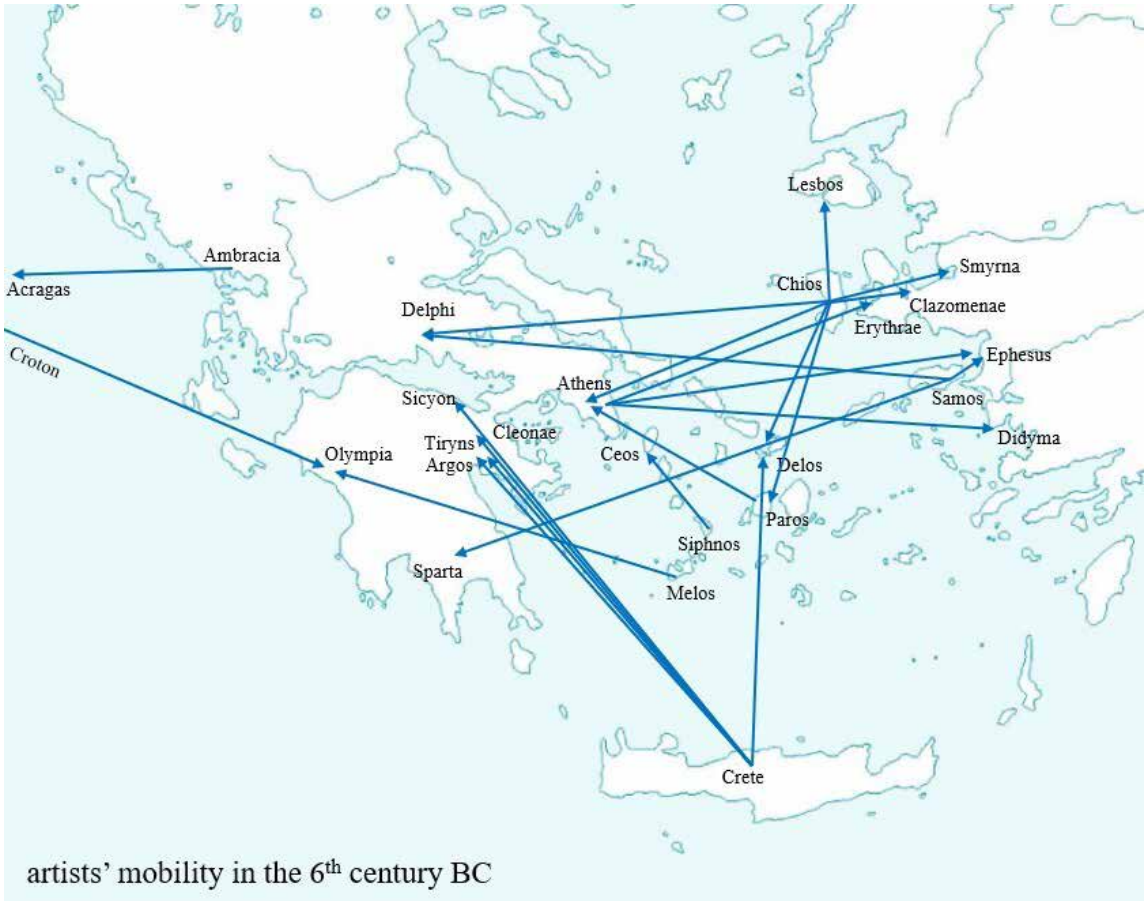

Fig. 1. Map of the artists' mobility in the 6th century BC.

Given the frequent references in the available sources and, especially, the mobility required by their work, this research concentrates solely on sculptors and their engagements, with a specific focus on the Archaic to Classical periods. It will not deal with architects or painters, for whose employment mobility was not mandatory.[5] The database, which comprises references to 64 individuals (see Tables 1–3), is drawn from references in the ancient Greek and Roman literary sources, supplemented by inscriptions.[6] The evidence for the activities of artists comes primarily from the work of Pliny the Elder (*Natural History*), Pausanias (*Description of Greece*) and Plutarch (*Parallel Lives*). Other artists are mentioned by Herodotus, Strabo and Cicero and in the lexicographical works (*Suda*, *Anthologia Graeca*). Only ten percent of the data is based on inscriptions, specifically artists' signatures on votive offerings, monuments etc.

For this research relevant artists are persons of whom we know the following: the period of their career, their hometown, their home region and the place where the engagement(s) took place.

For the 6th century BC there are 18 sculptors in total,[7] eight whose work is dated to the first half and ten to the second half of this period (see fig. 1): five come from Chios, four from Crete, where there seem to have been prominent art schools, and the remainder from the Cyclades (Paros, Melos, Siphnos) and the northeast Aegean (Chios, Samos) with only a small number from Mainland Greece, namely Athens, Sicyon and the Ambracian area. Only one sculptor is from Sicily, Dameas of Croton (no. XIII), who was commissioned to work at the panhellenic sanctuary of Olympia.

5 Cf. Tanner 1999, 138–39.

6 This data is mainly adapted from the artists' dictionary of Kansteiner et al. (2014), where the modern literature is cited as well.

7 See nos. I–XVIII (Dipoinus, Scyllis, Glaucus, Theodorus, Angelion, Tectaeus, Polystratus, Micciades, Achermus, Aristion, Athenis, Bupalus, Dameas, Rhoecus, Alcidamas, Grophon, Endoius, Canachus).

What is most striking is the fact that most of the artwork done by Cretan artists is concentrated in the Argolid (Argos, Cleonae, Tiryns).[8] As indicated by an inscription dated around the middle of the 5th century BC,[9] the Cretan poleis Cnossos and Tylissus were part of a federal structure alongside Argos. Maybe this arrangement goes back to a close relationship which already existed in the Archaic period. The preference for Cretan artists in the Argolid could be evidence for such a long-lasting diplomatic connection.

Compared to the 5th and 4th centuries BC, as will be shown below, there is much less data available on sculptors of the Archaic period, but this is due to the state of the source material which is poor and incomplete. The information in the ancient sources shows that sculptors travelled all over the Mediterranean world. Their employers were mostly from Mainland Greece (mainly Athens, Sicyon and the Argolid)[10] and Asia Minor (Ephesus, Clazomenae, Smyrna, Erythrae, Didyma),[11] but they were also commissioned by clients from the Cyclades (Delos, Paros, Ceos)[12] and to create works to be installed in the panhellenic sanctuaries of Delphi and Olympia.[13]

For the first half of the 5th century BC (see fig. 2) most of the mobility took place in the Eastern Mediterranean area because the majority of the artists (there are altogether 12 individuals)[14] came from the Ionian territory (Magnesia, Miletus, Ephesus, Phocaea, Samos, Cos),[15] and the remainder from the Cyclades (Naxos, Paros),[16] with two from Rhegium (Magna Graecia)[17] and one from Aegina.[18] Sparta employed sculptors from Ionia (Magnesia) and Magna Graecia (Rhegium).[19] There is evidence that even the Persians –sworn enemies of the Greeks[20]– hired foreign artists, notably from Ionia (Cos, Phocaea),[21] a fact that can be explained by a lack of skills among their own craftsmen.[22] The archaeological evidence demonstrates that before the reigns of Darius and Xerxes there were no real "palace constructions" in the Persian empire.[23] In order to build and decorate their palaces, which functioned as representative buildings, the Persian kings had therefore to hire Greek experts,[24] irrespective –as the evidence demonstrates– of any potential or actual political tensions.[25] Nationality obviously did not matter for these Persian clients. They sought the best available artists for the glorification of their kingdom.

At Olympia and Delphi, artists were primarily engaged from Magna Graecia (Rhegium) and Ionia (Miletus, Samos),[26] whereas the Athenians employed specialists from Ionia (Ephesus, Miletus) and the Cyclades (Paros).[27] People from Larissa (Thessaly) also commissioned a sculptor from Ionia, specifically from Phocaea (no. XXV). Clients from Boeotia (Orchomenus), the Thracian territory (Abdera) and the north Aegean area (Ikaria) seem

8 See nos. I–II (Dipoinus, Scyllis).
9 For further information on the content of the inscriptions see Tod 1946, no. 42.
10 See nos. I–II (Dipoinus, Scyllis), IX–XI (Achermus, Aristion, Athenis).
11 See nos. IV (Theodorus), XI–XIII (Athenis, Bupalus, Dameas), XVII–XVIII (Endoius, Canachus).
12 See nos. V–VI (Angelion, Tectaeus), VIII–IX (Micciades, Achermus), XV (Alcidamas).
13 See nos. III–IV (Glaucus, Theodorus), XIII (Dameas), XVI (Grophon).
14 Nos. XIX–XXX (Bathycles, Clearchus, Bion, Alxenor, Nicon, Euenor, Telephanes, Pythagoras of Rhegium, Pythagoras of Samos, Euphron, Onatas, Palion).
15 See nos. XIX (Bathycles), XXI (Bion), XXIII (Nicon), XXIV (Euenor), XXV (Telephanes), XXVIII (Euphron).
16 See nos. XXII (Alxenor), XXVIII (Euphron), XXX (Palion).
17 See nos. XX (Clearchus), XXVI (Pythagoras of Rhegium).
18 See no. XXIX (Onatas).
19 See nos. XIX–XX (Bathycles, Clearchus).
20 For the conflict between the Greeks and the Persians in late Archaic and Classical times see Green 1996.
21 See nos. XXIII (Nicon) and XXV (Telephanes).
22 For this phenomenon see Boardman 2003, 25–7.
23 See Knauss 2006, 103–6.
24 Cf. Goossens 1949, 36–8; Guépin 1963–1964, 35–9; Farkas 1974, 86; Fleischer 1983, 33–4; Funck 1985, 25–7.
25 See the discussion below.
26 See nos. XXVI (Pythagoras of Rhegium), XXI (Bion), XXVII (Pythagoras of Samos).
27 See nos. XXI (Bion), XXIV (Euenor), XXVIII (Euphron).

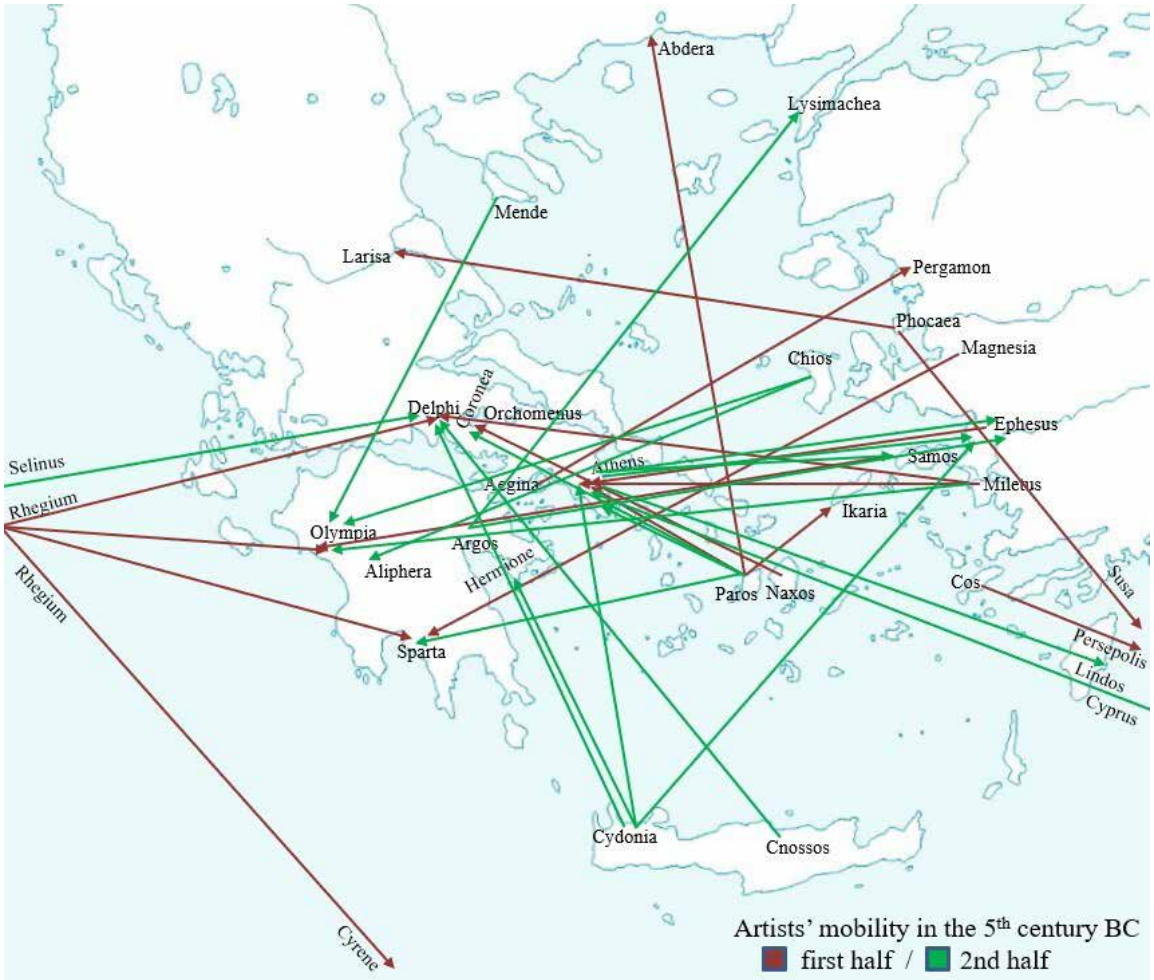

Fig. 2. Map of the artists' mobility in the 5th century BC.

to have "favoured" Cycladic artists (Paros).[28] According to Pausanias (8.42.7), the people of Pergamon engaged a prominent sculptor from the Greek mainland, namely the famous Onatas of Aegina (no. XXIX), to create a colossal statue of Apollo.

In the second half of the 5th century BC (see fig. 2) –for which a total of 16 persons can be identified[29]– there are three Athenian artists who were internationally active, but solely in the Ionian territory (Ephesus, Samos, Lindos),[30] whereas Parian sculptors were engaged in Mainland Greece (Athens, Sparta and Coronea/Boeotia).[31] The panhellenic sanctuaries of Delphi and Olympia attracted specialists from Crete (Cydonia, Cnossos) and Sicily (Selinus), as well as the Thracian area (Mende) and Ionia (Miletus, Chios).[32] The Ephesians hired artists from Athens, Argos and Crete (Cydonia),[33] while the Athenians employed sculptors from Cyprus, Crete (Cydonia) and Paros.[34] Sostratus of Chios (no. XXXII) worked at the Arcadian polis of Aliphera, the famous Polycletus of Argos (no. XXXV) was hired by –among others– the people of Lysimachea in Thrace, and Cresilas

28 See nos. XXII (Alxenor), XXVIII (Euphron), XXX (Palion).

29 Nos. XXXI–XLVI (Pheidias, Sostratus, Styppax, Myron, Polycletus, Amphion, Cresilas, Locrus, Phradmon, Agoracritus, Paeonius, Ca[…], Pantias, Acron, Aleuas, Aristandrus).

30 See nos. XXXI (Pheidias), XXXIV (Myron), XLV (Aleuas).

31 See nos. XXXVIII (Locrus), XL (Agoracritus), XLVI (Aristandrus).

32 See nos. XXXVI–XXXVII (Amphion, Cresilas), XLI–XLIV (Paeonius, Ca[…], Pantias, Acron).

33 See nos. XXXI (Pheidias), XXXIV–XXXV (Myron, Polycletus), XXXVII (Cresilas), XXXIX (Phradmon).

34 See nos. XXXIII (Styppax), XXXVII–XXXVIII (Cresilas, Locrus), XL (Agoracritus).

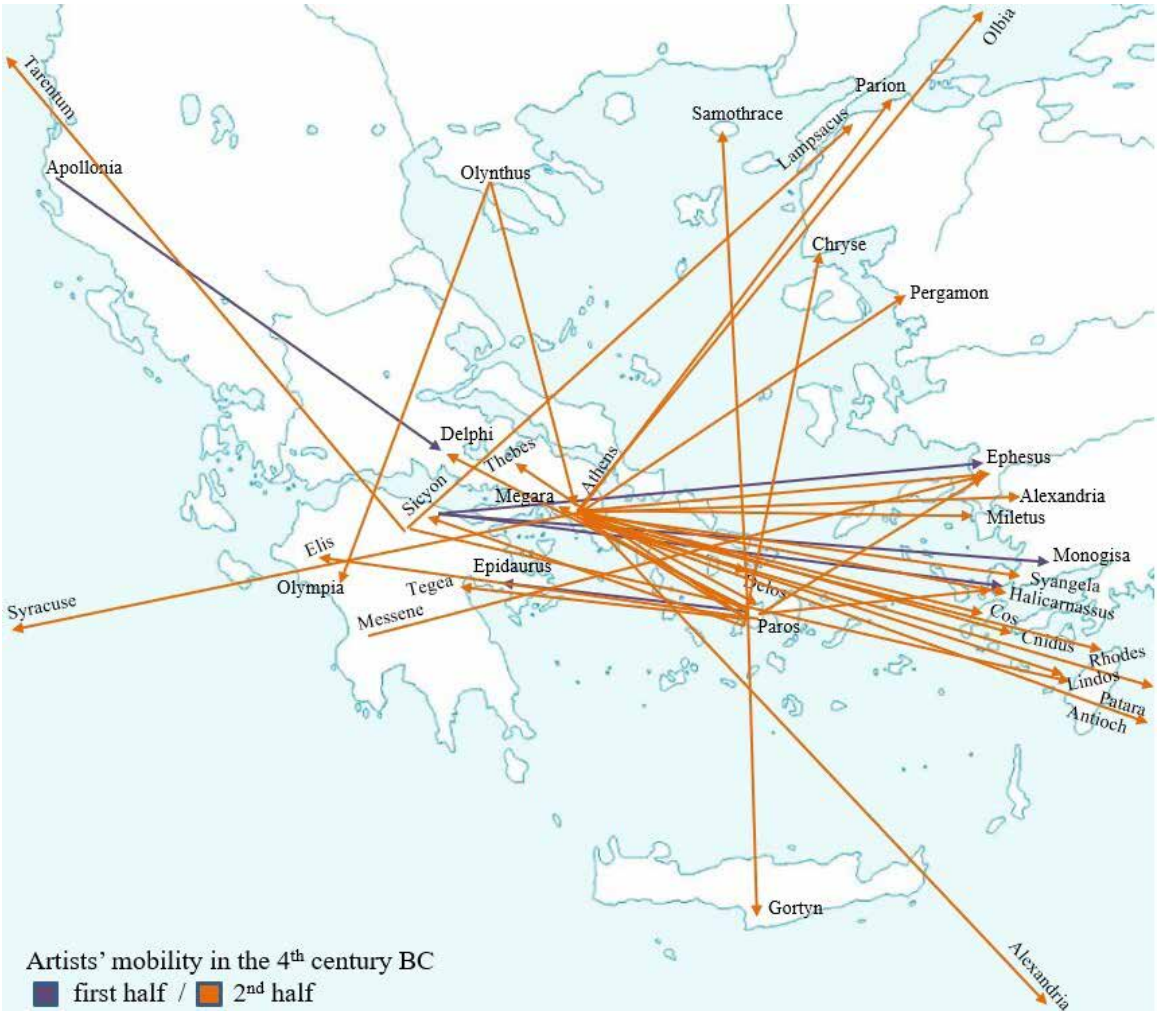

Fig. 3. Map of the artists' mobility in the 4th century BC.

of Cydonia (no. XXXVII) was commissioned to create an artwork for a man named Alexis, citizen of the polis Hermione in the Argolid. The latter is reminiscent of the Archaic period (see above) when Cretan artists were favoured by Argolid clients.

The mobility of artists in the 4th century BC appears extraordinary, compared to the preceding periods (see Fig. 3). In the first half of the century there is only marginal evidence for artists acting on an international level. Daedalus, an artist from Sicyon (no. XLVII), only worked in the Ionian territory (Ephesus, Halicarnassus, Monogissa/Caria). His colleague from Paros, Thrasymedes (no. XLVIII), was commissioned by a single client from Epidaurus (Charmantidas)[35] as well as by the demos of Epidaurus itself. In the first case he was privately engaged, in the second it was a public hiring, according to Pausanias (2.27.2), in order to create the cult statue of Asclepius. The third example is Pausanias of Apollonia in Illyria (no. XLIX), who was hired to fabricate –as part of a team with colleagues from Argos and Sicyon– a work of art at Delphi, namely a dedication of the Arcadians which was erected to glorify the victory of Epaminondas and the Arcadians over the Spartans.[36] Based on what we know about the historical background of this period, there is no obvious reason for this striking decline in the mobility of artists.

35 See *IG* IV^2 1, 198.

36 For the monument and the historical background, see Ioakimidou 1997, 322–23 and Paus. 10.9.5–6; cf. Xen. *Hell.* 6.5.23–32; Plut. *Pelop.* 24.

The second half of the 4th century BC shows the exact opposite. There is a remarkable number of references to sculptors who were internationally active, altogether 15 individuals.[37] Three of them stand out compared to their peers, namely the well-known Praxiteles (no. L) and Bryaxis (no. LVIII), both from Athens, and, last but not least, Scopas of Paros (no. LIII). These three artists travelled all over the Mediterranean world and were hired by various clients, probably due to their skills and their prominence. Praxiteles mainly worked for clients from Ionia (Ephesus, Cnidus, Cos, Alexandria/Caria, Parion/Mysia, Pergamon), but he was also active in the Thracian territory (Olbia Pontica) as well as in the Cyclades (Delos).[38] His countryman, Bryaxis, worked for employers from Ionia (Halicarnassus, Cnidus, Patara/Lycia, Rhodes) and there is also evidence for engagements in Egypt (Alexandria) and Syria (Antioch).[39]

What is most striking is that the majority are Athenian artists. Apart from the two sculptors mentioned above, the ancient sources give evidence of a further eight artists of Athenian origin. Mostly they were hired by Ionian employers (Ephesus, Miletus, Pergamon, Cos, Lindos, Syangela/Caria)[40] but they were also active in Magna Graecia (Syracuse, Tarentum),[41] the Thracian area (Olbia Pontica, Thasos)[42] and the Cyclades (Delos).[43] Two other sculptors are from Mainland Greece, namely from Messene and Sicyon.[44] They were commissioned by clients from Ionia (Ephesus, Lindos, Lampsacus/Mysia) and Magna Graecia (Tarentum). The remaining artists came from the Thracian area (Olynthus)[45] and the Cyclades (Paros)[46] and worked at the panhellenic sanctuaries of Olympia and Delphi, as well as at Athens. The question is, why were so many Athenian artists working on an international level? Of course, it could be explained by the fact that the surviving sources are predominantly concerned with the polis of Athens and its affairs.[47] Given, however, the economic struggles which afflicted Athens around 360 BC and during the following years[48] –as a result of the energy-sapping war against their former allies (Rhodes, Cos, Chios etc.)– we may assume that the job situation at Athens was deplorable and this may have been a reason for the local sculptors to try their luck abroad.

Regarding the activity of these professionals from the Archaic to the Classical periods, there are, surprisingly, not as many examples of international artists working at the panhellenic sanctuaries of Delphi and Olympia as one would suppose. After all, the sanctuaries functioned as global Greek cult sites as well as a kind of centre of knowledge transfer.[49] Hence, it is remarkable that, while the basic idea of these cult centres was to be welcoming to all foreign matters, the evidence shows that only the minority of active on-site sculptors came from distant Greek poleis. The majority were from Mainland Greece, and specifically from Argos, Sicyon, Athens, Aegina and Thebes.[50]

We only have only one example of a sculptor of Cypriot origin. Styppax (no. XXXIII) can be dated to the 2nd half of the 5th century BC, and he was known –as recorded by Pliny the Elder– as the creator of a bronze statue, namely a "splanchnoptes", which means "roaster of entrails". Pliny reports further that this Cypriot artist was a slave of the famous Athenian politician Pericles, while Plutarch (*Per.* 13.12.) tells us that he was killed

37 Nos. L–LXIV (Praxiteles, Pyrilampes, Sthennis, Scopas, Menestratus, Satyrus, Praxias, Stratonides, Bryaxis, Lysippus, Philistides, Silanion, Ephedrus, Cephisodotus, Timarchus).

38 For the oeuvre of Praxiteles, see Corso 2007; 2010.

39 For the details of Bryaxis' artworks, see the monograph of Schwarz 1961 and Kansteiner et al. 2014 nos. 2342–66.

40 See nos. XLI–XLIII (Paeonius, Ca[…], Pantias), LX–LXIV (Philistides, Silanion, Ephedrus, Cephisodotus, Timarchus).

41 See nos. XLIX (Pausanias) and LXI (Silanion).

42 See nos. XLVI (Aristandrus) and XLVII (Daedalus).

43 See no. XLVI (Aristandrus).

44 See nos. LI (Pyrilampes) and LIX (Lysippus).

45 See no. LII (Sthennis).

46 See no. LIII (Scopas).

47 Cf. Dreyer 1999, 13–6.

48 For this conflict and its aftermath, see Hornblower 1982, 136–38, 209–12 and Jansen 2007, 156–60.

49 On this, see Schmidt 1997, 186–91; cf. Stein-Hölkeskamp 1989, 120–21; Ulf 1996, 40, 56.

50 See Linder 2014, 373–75.

accidentally while working as a sculptor on the Acropolis of Athens and that this was a great tragedy because he was very talented. Considering that Cypriot sculpture was highly favoured in Archaic and Classical times, as shown by the fact that such artworks have been found all over the Mediterranean world,[51] it is astonishing that only one Cypriot sculptor is mentioned in the ancient sources (texts as well as inscriptions), firstly by name and, secondly, as working "internationally". Furthermore, it is unclear if Styppax is cited as a representative of his craft, out of both authors' special interest in this profession, or –more probably– solely based on his connection to the illustrious demagogue Pericles. In sum, there is a dearth of named sculptors who both originated in Cyprus and were active far away. There are two possible reasons why there is no evidence of further examples: it may be due to the incompleteness of the ancient sources, or there were no other sculptors from Cyprus who worked beyond their homeland. Both answers are unsatisfying. So far there is, unfortunately, no explanation for this phenomenon.

The main findings of this research, based on information provided by the ancient texts as well as the inscriptions, is that ancient sculptors were highly mobile at an international level, continuously from the Archaic to the Classic periods, and, as far as can be determined, there were no political restraints concerning their employment. Of the 64 examples in all, there are 15 persons who were commissioned against the background of a so-called "politically and diplomatically precarious" situation. For example, Glaucus of Chios (no. III), dated to the first half of the 5th century BC, was hired by Alyattes, king of the Lydians, to create a bronze pedestal for a silver krater to be installed at Delphi.[52] At the same time the artist's hometown, Chios, helped to defend Miletus against a Lydian attack.[53] Given this inimical situation, it is surprising that the Lydian king favoured an artist from a hostile Greek polis. There is also the case of Aleuas of Athens (no. XLV), who created two votive statues at the sanctuary of Lindos at the end of the 5th century BC at a time when Lindos –a member of the Athenian League– was in revolt against Athens.[54] The last example, from the 4th century BC, is the sculptor Satyrus of Paros (no. LV), who was hired by the Carian dynasty to make two portrait statues of Idrieus and Ada, the siblings of Mausolus of Caria. This engagement can be dated around 350 BC, shortly after the disastrous war the Athenians fought against some of their former allies (Rhodes, Chios, Cos) who for their part were supported by Mausolus.[55] On the other side, the artist's home polis, Paros, was known as a loyal *symmachos* of the Athenians.[56] So, Satyrus was commissioned by a client, namely the Carian court, who was at war with the ally of his hometown.

When it comes to the sphere of art, politics seems to have been relatively unimportant, meaning that whether an artist originated from an ally or an enemy appears to have been irrelevant. Artists could work wherever their skills were needed and for whomever they wanted, without any kind of restriction.[57] We can, then, conclude that, inasmuch as their talents were required, artists were entirely free to choose the location of their engagement as well as their clients, independent of their origin and completely uncoupled from the political situation of the day. In fact, there is no evidence for any kind of restraint with regard to the mobility of artists or their employment. They were able to travel all over the Mediterranean world, wherever their talents were in demand. Based on the literary and epigraphical sources, it appears that the world of qualified professionals, like sculptors, was an open one, a fact that, obviously, promoted an ancient "international" job market.

51 Hereto, see the monographies of Gaber-Saletan 1982; Brönner 1990; Hermary 1990; Hermary and Mertens 2014.
52 Hdt. 1.25; cf. Paus. 10.16.1–2.
53 Hdt. 1.18.3; see Tausend 1992, 245.
54 Thuc. 8.44.2–4; see Gehrke 1985, 33–4.
55 Demosth. 15; Diod. 16.7.3.
56 *IG* II/III^3 43 A 89.
57 See Linder 2020, 230–42.

No.	Artist (name)	Provenance	Date (BC)	Site(s) of Installation	References
I	Dipoinus	Crete	1th half 6th cent.	Sicyon, Argos, Cleonae, Tiryns	Plin. *nat.* 36.9-10; Paus. 2.15.1, 2.22.5; Clem. Al. *protr.* 4.47.8
II	Scyllis	Crete	1th half 6th cent.	Sicyon, Argos, Cleonae, Tiryns	Plin. *nat.* 36.9-10; Paus. 2.15.1, 2.22.5; Clem. Al. *protr.* 4.47.8
III	Glaucus	Chios	1th half 6th cent.	Delphi	Hdt. 1.25
IV	Theodorus	Samos	1th half 6th cent.	Ephesus, Sparta, Delphi	Plin. *nat.* 36.90; Diod. 1.98.5-9; Athenag. *leg.* 17.4; Diog. Laert. 2.103; Paus. 3.12.10; Hdt. 1.51
V	Angelion	Crete	1th half 6th cent.	Delos	Paus. 2.32.5, 9.35.3; Athenag. *suppl.* 17.4
VI	Tectaeus	Crete	1th half 6th cent.	Delos	Paus. 2.32.5, 9.35.3; Athenag. *suppl.* 17.4
VII	Polystratus	Ambracia	1th half 6th cent.	Acragas	Tat. *orat.* 34.1
VIII	Micciades	Chios	1th half 6th cent.	Delos, Paros	ID 9; *IG* XII 5. 147
IX	Achermus	Chios	2nd half 6th cent.	Delos, Athens, Lesbos	ID 9; *IG* I^3 683; Plin. *nat.* 36.13
X	Aristion	Paros	2nd half 6th cent.	Athens	*IG* I^3 1208, 1211, 1261, 1269
XI	Athenis	Chios	2nd half 6th cent.	Athens, Clazomenae	*IG* I^3 756; Plin. *nat.* 36.12; Suda, s. v. Hipponax
XII	Bupalus	Chios	2nd half 6th cent.	Athens, Clazomenae, Smyrna	*IG* I^3 756; Plin. *nat.* 36.12; Suda, s. v. Hipponax; Paus. 4.30.6, 9.35.6
XIII	Dameas	Croton	2nd half 6th cent.	Olympia	Paus. 6.14.5
XIV	Rhoecus	Samos	2nd half 6th cent.	Ephesus	Paus. 10,38,5
XV	Alcidamas	Siphnos	2nd half 6th cent.	Ceos	*IG* XII 5. 611
XVI	Grophon	Melos	2nd half 6th cent.	Olympia	IvO 272
XVII	Endoius	Athens	2nd half 6th cent.	Ephesus, Erythrae (Ionia)	Plin. *nat.* 16.213-214; Athenag. *suppl.* 17.4; Paus. 7.5.9
XVIII	Canachus	Sicyon	2nd half 6th cent.	Didyma	Plin. *nat.* 34.75
XIX	Bathycles	Magenesia (Ionia)	1th half 5th cent.	Sparta	Paus. 3.18.9
XX	Clearchus	Rhegium	1th half 5th cent.	Sparta	Paus. 3.17.6
XXI	Bion	Miletus	1th half 5th cent.	Athens, Delphi	*IG* I^3 685; Syll.^{3} 34
XXII	Alxenor	Naxos	1th half 5th cent.	Orchomenus (Boeotia)	*IG* VII 3225
XXIII	Nicon	Cos	1th half 5th cent.	Persepolis	Inscription: Caratelli 1966, 33 No. 3
XXIV	Euenor	Ephesus	1th half 5th cent.	Athens	*IG* I^3 786-788
XXV	Telephanes	Phocaea	1th half 5th cent.	Larissa (Thessaly), Susa	Plin. *nat.* 34.68

Table 1. List of analysed artists (in chronological order).

No.	Artist (name)	Provenance	Date (BC)	Site(s) of Installation	References
XXVI	Pythagoras	Rhegium	1th half 5th cent.	Olympia, Delphi, Cyrene	Plin. *nat.* 34.59; Paus. 6.4.3-4, 6.6.1, 6.13.1, 6.13.7, 6.18.1
XXVII	Pythagoras	Samos	1th half 5th cent.	Olympia	IvO 144
XXVIII	Euphron	Paros	1th half 5th cent.	Abdera (Thrace), Athens	*IG* I³ 856-857, 1018
XXIX	Onatas	Aegina	1th half 5th cent.	Pergamon	Paus. 8.42.7
XXX	Palion	Paros	1th half 5th cent.	Ikaria	Inscription: Daux 1956, 334 fig. 13
XXXI	Pheidias	Athens	2nd half 5th cent.	Ephesus	Plin. *nat.* 34.53
XXXII	Sostratus	Chios	2nd half 5th cent.	Aliphera (Arcadia)	Paus. 8.26.7
XXXIII	Styppax	Cyprus	2nd half 5th cent.	Athens	Plin. *nat.* 34.81
XXXIV	Myron	Athens	2nd half 5th cent.	Samos, Ephesus	Strab. 14.1.14; Plin. *nat.* 34.58; Vitr. 10.2.13
XXXV	Polycletus	Argos	2nd half 5th cent.	Lysimachea (Thrace), Ephesus	Plin. *nat.* 34.53, 34.56;
XXXVI	Amphion	Cnossos	2nd half 5th cent.	Delphi	Paus. 10.15.6
XXXVII	Cresilas	Cydonia	2nd half 5th cent.	Athens, Ephesus, Hermione (Argolis), Delphi	*IG* I³ 843, 883, 885; *IG* IV 683; FDelphes III 4. 194; Plin. *nat.* 34.53;
XXXVIII	Locrus	Paros	2nd half 5th cent.	Athens	Paus. 1.8.4
XXXIX	Phradmon	Argos	2nd half 5th cent.	Ephesus	Plin. *nat.* 34.53
XL	Agoracritus	Paros	2nd half 5th cent.	Athens, Coronea (Boeotia)	Plin. *nat.* 36.17; Paus. 9.34.1
XLI	Paeonius	Mende (Thrace)	2nd half 5th cent.	Olympia	IvO 259; Paus. 5.26.1
XLII	Ca[…]	Miletus	2nd half 5th cent.	Olympia	IvO 272
XLIII	Pantias	Chios	2nd half 5th cent.	Olympia	Paus. 6.14.12
XLIV	Acron	Selinus	2nd half 5th cent.	Delphi	FDelphes III 1. 506
XLV	Aleuas	Athens	2nd half 5th cent.	Lindos	Lindos II 29-30
XLVI	Aristandrus	Paros	2nd half 5th cent.	Sparta	Paus. 3.18.8
XLVII	Daedalus	Sicyon	1th half 4th cent.	Ephesus, Halicarnassus, Monogissa (Caria)	IK 12. 111; Marcadé 1953, 24 (inscription); Steph. Byz., s. v. Monogissa
XLVIII	Thrasymedes	Paros	1th half 4th cent.	Epidaurus	*IG* IV² 1. 198; Paus. 2.27.2
XLIX	Pausanias	Apollonia (Illyria)	1th half 4th cent.	Delphi	Paus. 10.9.5-6

Table 2. List of analysed artists (in chronological order).

No.	Artist (name)	Provenance	Date (BC)	Site(s) of Installation	References
L	Praxiteles	Athens	2nd half 4th cent.	Olbia (Thrace), Ephesus, Cnidus, Cos, Alexandria (Caria), Parion (Mysia), Pergamon, Delos	Marcadé 1957, 114-115 and 117 (inscriptions); Strab. 14.1.23; Plin. nat. 36.20-22; Lukian. *Iupp. trag.* 10; Cic. Verr. 4.135; Ath. *deipn.* 13.59.21-26; Steph. Byz., s. v. Alexandreia
LI	Pyrilampes	Messene	2nd half 4th cent.	Ephesus	Paus. 6.3.13
LII	Sthennis	Olynthus (Thrace)	2nd half 4th cent.	Olympia, Athens	*IG* II/III^{2} 3829; Paus. 6.16.8, 6.17.5
LIII	Scopas	Paros	2nd half 4th cent.	Tegea, Halicarnassus, Athens, Ephesus, Thebes, Elis, Megara, Samothrace, Gortyn, Chryse (Troas), Sicyon	Paus. 1.43.6, 2.10.1, 6.25.1, 8.28.1, 8.47.1, 9.10.2, 9.17.1; Vitr. 7 praef. 12-13; Plin. *nat.* 36.25, 36.30-31; Clem. Alex. *protr.* 4.47.3; Strab. 13.1.48, 14.1.20;
LIV	Menestratus	Athens	2nd half 4th cent.	Ephesus	Plin. *nat.* 36.32
LV	Satyrus	Paros	2nd half 4th cent.	Delphi	Inscription: FDelphes III 4. 176; Syll.^{3} 225
LVI	Praxias	Athens	2nd half 4th cent.	Delos, Thasus	Inscriptions: ID 52; Marcadé 1957, 112
LVII	Stratonides	Athens	2nd half 4th cent.	Olbia (Thrace)	Inscription: I. Olbia 65
LVIII	Bryaxis	Paros	2nd half 4th cent.	Halicarnassus, Alexandria, Cnidus, Patara (Lycia), Rhodes, Antioch	Vitr. 7 praef. 12-13; Plin. *nat.* 34.42, 36.22, 36.30-31; Clem. Alex. *protr.* 4.47.4-5, 4.48.5-6;
LIX	Lysippus	Sicyon	2nd half 4th cent.	Lindos, Lampsacus (Mysia), Tarentum	Plin. *nat.* 34.40, 34.63; Strab. 6.3.1, 13.1.19;
LX	Philistides	Athens	2nd half 4th cent.	Syangela (Caria)	Inscription: Foucart 1890, 375-376
LXI	Silanion	Athens	2nd half 4th cent.	Miletus, Ephesus, Pergamon, Syracuse	Cic. *Verr.* 4.125-126; Inscriptions: Wiegand 1904, 85; Keil 1912, 208; IvP I 50
LXII	Ephedrus	Athens	2nd half 4th cent.	Lindos	Lindos II 43
LXIII	Cephisodotus	Athens	2nd half 4th cent.	Cos, Pergamon	Plin. *nat.* 36.24; Herond. 4.22-26
LXIV	Timarchus	Athens	2nd half 4th cent.	Cos	Herond. 4.22-26

Table 3. List of analysed artists (in chronological order).

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I. Olbia: Knipovich, T.N., and E.I. Levi. 1969. *Inscriptiones Olbiae (1917–1965)*. Leningrad: Nauka.

ID: Dürrbach, F. 1926–72. *Inscriptions de Délos*. 7 vols. Paris: Leroux.

IG I³: Lewis, D., and L. Jeffery. 1994. *Inscriptiones Graecae*, I. *Inscriptiones Atticae Euclidis anno anteriores*. Editio tertia. Berlin: De Gruyter.

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Equestrian scenes from Kerameikos to Cyprus

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ABSTRACT

Attic pottery was exported throughout the Mediterranean from the beginning of the 6th century until the end of the 4th century BC, and also reached Cyprus. Attic wares soon dominated pottery imports in Cyprus and have been found all over the island, primarily in graves, but also in sanctuaries and domestic deposits both in the hinterland and in the coastal region.

The popularity of Attic pottery was based not only on the high quality of its clay but also on its iconography. This allowed purchasers and owners to use the vessels in different ways, at funeral rites, religious festivals, as votive gifts to the gods and during feasts.

This paper presents equestrian scenes associated with sporting activities illustrated on Attic black-figured vases housed in the Cyprus Museum, Nicosia. Hippic agons, very popular in the Greek world, constituted an essential part of local as well as of Panhellenic festivals. Such scenes are depicted in numerous works of art, including on pottery. This study discusses the resonance of equestrian imagery beyond the Mediterranean and explores how the iconography connects Athens and Cyprus.

INTRODUCTION

It is well known that Cyprus had close early commercial relations with other states in the East Mediterranean.[1] These economic relations included a significant trade in pottery. From the beginning of the 6th century BC, Attic wares produced at Kerameikos were exported to the entire Mediterranean and soon displaced all the other workshops from the markets.[2]

One of the greatest strengths of Attic vases, in addition to the superior quality of the clay, is undoubtedly their iconography, although it is inherently difficult –even impossible– to know the extent to which this iconography was appreciated by trading partners. Nevertheless, the study of the imagery on the ceramics suggests that a degree of cultural meaning was transferred, and that these images or the messages they carried were generally understood by the users, viewers and in general by society.[3]

Among the imported black-figure Attic vases found in Cyprus there are a few which depict equestrian scenes.[4] Based on this material, the aim of this paper is to demonstrate the impact of this imagery on local society and examine how this iconography reflects the connection between Athens and Cyprus.

1 On the early commercial trading connections, see Steel 2012, 804–19; 2013, 571–86.

2 Beazley 1989; Stavrou 1994, 65–74; Raptou 1999; Eriksson 2011.

3 For information on the trade in Attic pottery, see Dyfri 2008, 39–60; Osborne 2007, 85–95.

4 See catalogue no. 1.

Fig. 1. Panel-amphora Type B, Nicosia, CM C436 (image by the author, courtesy of the Department of Antiquities, Cyprus).

EQUINE ICONOGRAPHY

Horsemen alone appear on a panel-amphora of type B (**C436, no. 1**, Fig. 1) and six little master lip cups in the Cyprus Museum. On the amphora **C436**, a naked jockey is shown on both sides of the vessel. The horses gallop to the right. Unlike in other representations, additional elements (e.g. an eagle or a hare) do not appear here. Similarly, the riders are depicted on the little master lip cups with minimal differences between them. The horses gallop in vivid motion, indicated by their outstretched bodies; only the youth on the cup **C644** (**no. 3**) rides at an easy trot. The riders are mostly naked, but on the vessels **C649** (**no. 4**) and **C665** (**no. 5**) they wear a short chiton, in this case clearly visible in white colour.

Representations of horses have a long tradition that goes back to the Mycenaean period in mainland Greece.[5] Horses did not appear, however, in Attic black-figure vase painting until the end of the 7th century BC.[6] Right from the start, they are shown as domesticated animals, always with a halter or bridle. The horses on the so-called "horse amphorae" are presented in a vivid way with riders,[7] just as on the amphora **C436** (**no. 1**, Fig. 1) in the Cyprus Museum.

5 Hemingway 2017, 11–4, fig. 10; Chariot krater, New York, Cesnola MMA, Collection 74.51.964; Bell 1989, 16; Weisenhorn 2007, 1; Equestrian iconography: Schäfer 2002, 51–74, 179–81.

6 The oldest race could possibly be that depicted on the skyphos by the Nessos Painter in the Louvre and Athens, *BAPD* 300052; Filser 2017, 406, fig. 246.

7 Scheibler 1987, 76–83.

Fig. 2. Band cup, Nicosia, CM C437 (image by the author, courtesy of the Department of Antiquities, Cyprus).

Images with chariots or riders appear in Attic vase painting mainly in connection with war, hunting and sport.[8] However, until the middle of the century it is difficult to distinguish them from each other. The representations on the vases in the Cyprus Museum do not show any evidence of military activity (hoplite, lance) or hunting (the hunted animal). An agonistic context should rather be considered, although a horse race is not explicitly depicted.[9] Nevertheless, the nudity of the jockeys and the wearing of the typical equestrian cloth (short chiton) indicate a sporting activity.[10]

Hippic agons –chariot (ζεῦγος, ἅρμα, τέθριππον) and horse races (κέλης)– were extremely popular in the Greek world.[11] They were part of the Olympic[12] and other Panhellenic Games,[13] as well as part of city festivals like the Panathenaic festival in Athens.[14] Skills and speed, in combination with the display of wealth, gave these events a special position. In contrast to the gymnic agons, the hippic races required the active participation not only of the athlete but also of the animal.

Two band cups show riders together with other figures, but the painters accentuate the main subject by placing the riders in a central position. In the middle of each side of the band cup **C437** (**no. 6**, Fig. 2) a rider appears, wearing a short white chiton on side A and naked on side B. He gallops to the right. The next athletic group is made up of two runners who show their speed by using the so-called "knielauf" (kneeling-running position) and have gesticulating arms. Between the athletes, the onlookers are standing in richly decorated, long robes.

8 Filser 2017, 404–504.

9 Objects that indicate a hippodrome or a race are missing, i.e. columns, "terma" or victory prizes, Dinos (second frieze) Paris, Musée du Louvre: E875, *ABV*, 104, no. 123, 684; *BAPD* 310122, *CVA* Paris, Louvre 2, III Hd pl. 18–20.

10 Weisenhorn 2007, 2–3; Filser 2017, 411–12, 433.

11 Weisenhorn 2007, 1–9; Schmölder-Veit 2004, 195–204; Ancient sources that mention the hippic races: Homer (Homer, Iliad XXIII), Sophocles (Soph. El. 698–760), Pindar (Pind. Pyth. 5), Xenophon, on the Cavalry Commander; on the Art of Horsemanship (Xen. Cav.; Xen. equ. *rat.*); Bell 1989, 12–14.

12 Paus. 5.8.8, cf. Petermandl 2013, 62; Maul-Mandelartz 1990, 20–1.

13 Pevnick 2017, 68; Bentz 1998, 76 n. 398. On the political contribution of equestrian victories, see Dimopoulou 2019, 355–65.

14 Bell 1989, 30–3; Bentz 1998, 75–7; Pevnick 2017, 69–70.

On the fragmentary cup **C674** (**no. 7**), the three athletes –a rider between each runner– form a group in the centre of the depiction, flanked by clothed figures (only the left figure is preserved). The two runners take long strides, whereas the jockey is riding a tranquil horse.

Riders and figures wearing long garments were already depicted on cups of the previous generation, i.e. on the Siana cups.[15] These figures can be recognised either as relatives, trainers, spectators, or even the owners of the horses, based on their rich robes.[16] The reorganisation of the Panhellenic Games and of the Panathenaic festival in Athens a few years before these cups appeared required a systematisation and professionalisation of the events. The figures on the band cups can be directly related to the preparation or organisation of these agons. Although it is not possible to identify every figure depicted, a narrative scene is shown in the context of activities of the upper class, in which their attendance is highlighted directly (through the figures) or indirectly (through the horses).

The scene on the cup **C437** (**no. 6**, Fig. 2) records a moment during the race with the horses galloping and the runners running in knee-running position, while the scene on the cup **C674** (**no. 7**) is a quiet one.[17] The moment before the race may be shown on the cup **C674** (**no. 7**), in which the participants take their position. In this context, the first person could then be the leader who shows the way to the start, as he is the only one who looks back. However, it is also possible to regard this representation as a cavalcade, an activity that played a central role at various festivals in Athens and especially at the Panathenaea.[18]

Figures running alongside horse-riders are also depicted on other band cups.[19] Here the painter either shows several scenes taking place simultaneously on a sports ground[20] or a specific event or even a specific festival[21] of a type unknown to us. It rather seems to be about a specific event since all the depicted persons are apparently involved with each other, something that can be deduced from Philostratos, who records that runners measured their speed against horses.[22]

Each side of the cup skyphos **C650** (**no. 8**, Fig. 3) depicts an athletic event. In the middle a naked youth rides at a walking pace, holding not only the reins in his left hand, but also a long stick.[23] To the right and left a figure walks with a long stride to the right. They also hold a long stick or spear; the figure in front looks back. The scene is flanked by two figures standing in long robes, who also hold a cane.

Horsemen with spears are related to war and hunting as documented on numerous vases[24] and likewise single running javelin throwers (Acontists) are depicted similarly on other vases.[25] However, there was a sporting discipline in which the two athletic activities, riding and javelin, were combined. This is known in the ancient

15 Siana cup, Taranto, Museo Archeologico Nazionale, C-Painter, *ABV*, 54, no. 63; *BAPD* 300440; Filser 2017, 433–36, fig. 275.

16 Filser 2017, 483.

17 Band cup, Taranto, Museo Archeologico Nazionale 51323, *BAPD* 13885; *CVA* Taranto, Museo Archeologico Nazionale 2, III He, pl. 6, 2.

18 Vierneisel and Fellmann 1990, 128 n. 17.9–17.10.

19 Band cup from Marion, Larnaca, Collection Zenon Pierides, Gjerstad 1977, 47 n. 438, pl. 41, 4–5.

20 Representations with athletes at various activities in the palaestra are shown frequently on red-figure vases; cup, Carpenter Painter, Malibu, The J. Paul Getty Museum, 85.AE.25, *BAPD* 31619.

21 Filser 2017, 483; Maul-Mandelartz 1990, 172–75.

22 Maul-Mandelartz 1990, 175–85; Philostr. peri gymnastikis 43; http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A2008.01.0600%3Asection%3D43

23 The spear is usually shown with the ankyle and during training without the tip; Knauss 2004, 128.

24 Warrior scenes: Lekythos, Copenhagen, National Museum CHRVIII833, *BAPD* 10973. Filser 2017, 412–18. Hunting scenes: Siana cup, Copenhagen, National Museum CHRVIII959, *BAPD* 300480; *CVA* Copenhagen, National Museum 3 II He pl. 114, 2a–b. Hunting with horse riders and spears: band cup in New York, Market, Heesen 2011, n. 528, pl. 132b.

25 The amphora in Leiden shows a Hippacontist and a running youth with lances looking back and on side B two acontists "fighting" each other; Amphora, Leiden, Rijksmuseum Van Oudheden PC59, *BAPD* 613; *CVA* Leiden, Rijksmuseum Van Oudheden 1, pl. 40, 1–2.

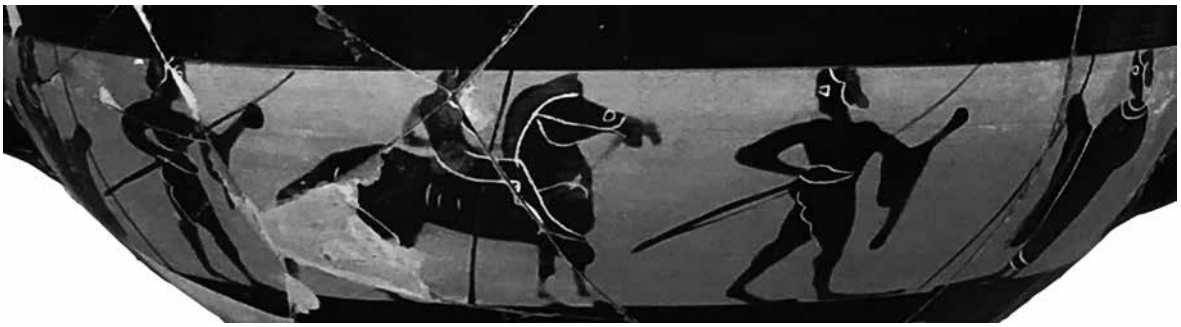

Fig. 3. Band skyphos, Nicosia, CM C650 (image by the author, courtesy of the Department of Antiquities, Cyprus).

sources as "ἀκοντίζειν ἀφ 'ἵππου",[26] and took place as a part of the Panathenaic festival. During this event, the riders had to throw their spears at a target and to stab it.[27] Such representations appear on Attic red-figure vases and Panathenaic prize amphorae of the 4th century BC.[28]

These early depictions and the absence of targets lead to the conclusion that there was an agon in which both horsemen and running youths equipped with spears competed, demonstrating their skills in speed and strength,[29] and, although no specific festival has been identified so far, this special sport may have been part of the training of youths. On the cup skyphos in Cyprus Museum the scene is shown either before or after the athletic activity.

Notably, a robe hangs down from the left arm of the three running youths with lances,[30] a motif which can also be found on other band cups.[31] Hippacontists on vases wear either a chlamys, which, however, leaves the right arm free, or a short chiton.[32] Acontists are shown naked, with a chlamys or with a robe hanging down from the shoulder.[33] With these cloths hanging over both the neck and throat it was difficult for the runners to move swiftly. Nevertheless, there are hunting scenes, some even on band cups, in which the running figures hold a cloth in their outstretched arm.[34] The hunters usually have one arm outstretched and with the other they carry a weapon.[35] The cloth presumably has the function of a shield used in military activities, which served for covering and protection. Although runners' cloths may have been influenced by these activities, it seems that this was part of their usual clothing.[36]

In Athens images of riders on horses appear in strikingly large numbers, in contrast to the actual number of such animals, suggesting that their appearance on vessels does not reflect reality. A lot of land was required for "ἱπποτροφία" (horse breeding) and the costs were very high, so that only a limited number of people could afford this activity,[37] a good reason why the winners of these games were not the jockeys or the charioteers, but

26 Bell 1989, 62–64, 106; Maul-Mandelartz 1990, 176; Weisenhorn 2007, 6; Pevnick 2017, 76.

27 Maul-Mandelartz 1990, 176–78; Pevnick 2017, 76.

28 Bentz 1998, 75, 216; Maul-Mandelartz 1990, 175–76 n. S1–S7; Pevnick 2017, 75–6.

29 Band cup from Cyprus, Amasis Painter, Paris, Musée du Louvre CA2918, *ABV*, 157, no. 85; *BAPD* 310514.

30 Kyathos, Vatican City, Museo Gregoriano Etrusco Vaticano 35497, *BAPD* 352250.

31 Band cup, Munich, Antikensammlungen Inv. 2218. 2216, *BAPD* 31954; *CVA* München 11, pl. 50, 1–4.

32 Chlamys: Band cup (frg.), Brussels, Musées Royaux, R430Y *BAPD* 2951; *CVA* Brussels, Musées Royaux 3, III.H.E.20, pl. 27.14; short chiton: Band cup (frg.), Brussels, Musées Royaux, R430X, *CVA* Brussels, Musées Royaux 3, III.H.E.20, pl. 27.13.

33 Hanging cloth, black-figure amphora in Leiden, see above note 25.

34 Band cup, Tarquinia, Museo Nazionale, RC 7949; band cup, Orvieto, Museo Civico 722; band cup, Atlanta Emory University, Michael C. Carlos Museum 1986.8.145, *BAPD* 9045215; Heesen 2011, n. 519, 540, 570, pls. 128d–e, 136, 145g.

35 Band cup, Munich Antikensammlungen Inv. 2160, Heesen 2011, n. 568, pl. 145d–e.

36 These clothes were used as protection during the attack: skyphos, Cambridge, Fitzwilliam Museum GR180.1910, *BAPD* 12782.

37 Ellinghaus 1997, 197–99; Filser 2017, 399–401.

the owners and their horses.[38] At the *Keles* race the jockeys had to ride directly on the horses and had therefore to be young and relatively short in stature. Jockeys had no special social status; they were not even named.[39] Much later, however, the ancient authors inform us about aristocratic children, as young as six years, who learned how to handle horses and had riding lessons.[40]

Apart from the first Solonian class, the second censorship class of the "Ἱππεῖς" or the horse-owning class were also in a position to own horses. Since horses were not used for work (oxen, mules and donkeys were used for agriculture, transport, etc.), they had something in common with their owners, the leisure class.

The discrepancy between status symbol and reality shows that the preference for this "useless" animal derives mainly from the economic background that they reflect. The fact, however, that these animals were the protagonists in races made them extremely valuable. Power and status being characteristic concerns of aristocrats, they organised and enjoyed these "fights for the best" or "agons".[41]

THE EVIDENCE FROM CYPRUS

If we switch our attention to Cyprus, we see that equids and equestrian scenes were not unknown on the island (Fig. 4). Ancient sources record a trade in horses between Cyprus and Egypt in the Late Bronze Age (LBA)[42] and relevant references appear also in three texts from Ugarit.[43] During this period, chariots rather than mounted horses were depicted in several media, including the so-called chariot kraters.[44] These were produced on the Mycenaean mainland and most were exported to Cyprus. The kraters have been found primarily in funerary settings and depict processional scenes. Many (whole or in fragments) were found at Enkomi, and two at Kition, Hala Sultan Tekke and Kalavasos *Ayios Dhimitrios* respectively. From the early excavations there are exemplars from other sites, i.e. Klavdia, Kourion, Maroni, Pyla *Verghi*, Arpera, Nicosia *Ayia Paraskevi* and Aradippou.[45]

There are also rhyta in the shape of horseheads from Enkomi.[46] Two cylinder seals with hunting scenes, including chariots, come from the same site.[47] Hunting is illustrated in impressions on large pithoi from Analiontas *Palioklichia*, Maa *Palaeokastro* and Alassa *Paliotaverna* dating from the later years of the LBA.[48] A bronze stand in London, which perhaps originally served a ritual purpose, depicts a chariot scene, but without any indication of the context of this activity.[49] Even on precious objects, such as the ivory gaming box from Enkomi, narrative hunting scenes with chariots appear.[50]

In Cypriot coroplastic horses alone, horses and riders and chariots are depicted. These first appeared in the LBA and are widespread on the island. The material from this early period is limited, but some examples

38 Pevnick 2017, 71 n. 37; Bell 1989, 27–36, 89–95.

39 Bell 1989, 95; Dimopoulou 2019, 356; Filser 2017, 483.

40 Xen. equ. rat. 2, 1; Plat. leg. 7, 794c; cf. Schmölder-Veit 2004, 198; Vierneisel and Fellmann 1990, 126; Schäfer 2002, 74–5.

41 Their liking for competitions was evident also at symposia where they played the Kottabos game; red-figure cup, London, BM 1836.0224.212, *BAPD* 204623, *ARV*[2] 421, n. 78.

42 EA 34, one chariot and two horses are mentioned; Feldman and Sauvage 2010, 67–181, and especially 50, 87.

43 FS 18.111; RS 34.153; RS 94.2447+2588+259, Feldman and Sauvage 2010, 87.

44 Feldman and Sauvage 2010, 95–9, 110–13, 137, figs 17, 18, 39; Karageorghis 2000, 46–51 n. 70, 71; Hemingway 2017, 12–3.

45 Feldman and Sauvage 2010, 97–8, 108.

46 https://www.britishmuseum.org/collection/object/G_1897-0401-1217
https://www.britishmuseum.org/collection/object/G_1897-0401-1217

47 London, BM 1897,0401.779, Feldman and Sauvage 2010, 142, fig. 43a; Nicosia, CM (without inv. no.), Feldman and Sauvage 2010, 142, fig. 43b.

48 Feldman and Sauvage 2010, 140–42, fig. 42a–b. Perhaps the iconography refers to political authority.

49 London, BM 1946,1017.1, Feldman and Sauvage 2010, 143, fig. 39.

50 London, BM 1897,0401.996, Feldman and Sauvage 2010, 140, fig. 41.

Fig. 4. Map of Cyprus showing the sites mentioned in the text (created by the author).

come from Hala Sultan Tekke and others are of unknown provenance.[51] Terracotta statuettes with horses alone (Kition, Kazaphani, Lapithos)[52] or horses-and-riders continue to appear during the Cypro-Geometric (CG) period (Kition *Bamboula*, Palaepaphos *Skales*, Kourion *Kaloriziki*)[53] and primarily during CG III (Palaepaphos *Skales*, Kato Dheftera *Chrysospiliotissa*, Salamis[54] and Amathus).[55]

During the Archaic period, following urbanisation and the establishment of the new city-kingdoms, coroplastic production was enhanced, due to the increased number of sanctuaries and the necessity of offering votives.[56] Salamis had an outstanding relationship with horses, as the royal tombs (8th–7th century BC) with sacrificed horses demonstrate. Many figurines were found in graves at the necropolis of Cellarka, as well as votive offerings in a sanctuary deposit from the city site, dating from Cypro-Archaic (CA) II.[57] Figurines were also found in abundance in funerary contexts at Amathus, dating from the early 6th century BC.[58]

The statement that "only 110 pieces" of around 2000 statuettes found in a votive pit "were not horse riders or chariot groups" reflects the large scale use of such statuettes in the sanctuary of Apollon Hylates in Kourion, as well as the exceptional significance these objects played in the cult of the sanctuary over centuries.[59] Additionally,

51 Recht 2018, 66–79; Averett 2021, 298–300.

52 Vandenabeele 1991, 62–63. There are also unprovenanced examples in Geneva, Budapest and Oxford. Horses-and-riders are also depicted in BR II and Proto WP pottery.

53 Vandenabeele 1991, 61.

54 Crouwel 1991, 115–27. Such models have been found all around Cyprus and the Eastern Mediterranean. In Cyprus, their date ranges from the 9th to 6th centuries BC.

55 Karageorghis 1993, 88–90, pls. 38–39; Vandenabeele 1991, 61–62; Averett 2021, 300, 304.

56 Averett 2021, 307–9, 313–14.

57 Karageorghis 1970; 1995, 62, 82–83; Karageorghis et al. 2004, horsemen: 58–64 n. 94–106; horses: 66–8 n. 109–13, 255–56; Averett 2011, 139; Walter 2014, 52, 54–8; Young and Young 1955, 189. Karageorghis (in Karageorghis and Des Gagniers1974, 12–4) also mentions that horse riders are not a common motif in the pottery of the Iron Age, because the painters were not able to reproduce the third dimension.

58 Averett 2011, 139; Karageorghis 1987, 24–5, 33–4, pls. 29–7, 33–6; Karageorghis 1995, 62, 76–82.

59 Young and Young 1955, 54–169, 220; Walter 2014, 58–63; Winter 1991, 221–24, pls. 58–63; Karageorghis 1995, 62, 70–1, some

over 150 statuettes found in a sanctuary in the ancient city of Marion[60] belong to a cultic context associated with a male divinity. Furthermore, the military context of the horse and rider statuettes from the sanctuary of Ayia Irini, based on their appearance, is obvious.[61] While the chariot groups at the sanctuary of Malloura are soldiers and connected to warfare, the votive offerings present an opposite picture, by featuring unarmed riders in a peaceful attitude.[62]

Another noteworthy group of horse-and-rider statuettes shows them performing or rather engaging in acrobatic activities.[63] Either the rider stands on the horse or sits on two horses. These figurines are certainly not associated with war or hunting but refer to social events, which require a location, participants (involved actors) and an audience.

The 8th century is associated with the rise of the aristocracy. The horse and its imagery were considered a symbol of prominence, wealth and power.[64] In addition, the appearance of the horse in place of the bull in Cypriot iconography reflects a social shift from an agrarian society to a more militaristic one. The horse was the inseparable companion of those wealthy enough to be able to afford this luxury.[65]

CONCLUDING REMARKS

Alongside military equestrian scenes there are some that refer to peaceful social events, although we lack an understanding of such festivals and ceremonies in Cyprus. In the Eastern Mediterranean, only Hittite texts provide a little information on the subject, referring to horseraces among other athletic activities during rituals.[66] Even though horses were not used for agrarian purposes, they were valuable in terms of status and display and closely associated with the nobility. Horse races, in which the animal has a crucial function, were an important part of society. Notably, the development of games in the sanctuaries in Greece coincided with the establishment of the aristocracy[67] and it seems that in Cyprus, also, the sanctuaries played a political role in the establishment of regional territories.[68]

On the basis of the existing material, it can be assumed that social events involving sporting competitions, including equestrian events, took place in Cyprus, probably in a religious context, even if they were scheduled on a small scale or in a local setting. The evidence of the acrobatic figurines, in particular, suggests that horses were used in social events.

Places designed for athletic activities on Cyprus, such as the typical palaestrae and gymnasia at Salamis and Kourion (though horse racing was not just practiced in these places), date to a later period, but the evidence of sporting scenes on Attic vases (especially those with equestrian iconography) and in other media supports the thesis that athletic as well as equestrian activities and competitions had already developed in Cyprus before these facilities were built. The scenes depicted on the Attic vases are likely, therefore, to have been familiar and firmly embedded in Cypriot society.

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dated to the late 7th century come from a tomb at Episkopi.

60 Serwint 1991, 213–18; Walter 2014.

61 Törnkvist 1972, 7–55; Averett 2011, 139; Karageorghis 1995, 84.

62 Averett 2011, 139–43. Horses, mounted and in chariots, were used in warfare from the 9th century onward in Assyria.

63 Karageorghis 1995, 68–9; Karageorghis et al. 2004, 58, 256, n. 95–6.

64 Averett 2011, 140–43; Feldman and Sauvage 2010, 97–9; Karageorghis 1995, 68; Karageorghis et al. 2004, 256; Walter 2014, 76.

65 Karageorghis 1991, 163–68. The remarkable Amathus sarcophagus with its chariots and riders depicts a procession on the long sides; Karageorghis 2000, 201–3 n. 330; https://www.metmuseum.org/de/art/collection/search/242006. For a military scene on the main long side of the Palaepaphos sarcophagus, see Raptou 2007, 312, 316–18, fig. 3.

66 Catalogue of Hittite Texts 604, within the AN.TAI_I.SUM festival, Hutter-Braunsar 2008, 28–9.

67 The origin of the Olympic Games goes back to the chariot competition between Pelops and Oinomaos. This episode was illustrated on the east pediment of the Zeus temple in Olympia, Paus. 5.10, 6–8.

68 Bell 1989, 28–30.

CATALOGUE

Riders alone on an amphora:

1. CM C436, Panel-Amphora Type B (middle of the 6th century BC) from Marion Tomb 216, Necropolis II, Manner of Lydos (Gjerstad); BAPD 15554; Gjerstad 1977, 52 n. 499, pl. 55, 3; Eriksson 2011, 134 n. 2; ca 550 BC (Fig. 1).

Riders on lip cups:

2. CM C659 from Marion Tomb 68, Necropolis II, *BAPD* 15397; Gjerstad 1977, 45 n. 414, pl. 36, 8; Eriksson 2011, 136, n. 28.

3. CM C644, unknown find spot, *BAPD* 15399; Gjerstad 1977, 45 N. 415, pl. 36, 9; Eriksson 2011, 144 n. 2.

4. CM C649 from Marion, 1886 Necropolis II Tomb 244, *BAPD* 15393; Gjerstad 1977, 45 n. 412, pl. 36, 4–5; Eriksson 2011, 135 n. 26.

5. CM C665 from Marion, Tomb 244, 1886, Necropolis II erroneously published as side B of the cup CM C649, Gjerstad 1977, 45 N. 412 pl. 36, 5.

There are also two other cups: CM C1017 from Marion Tomb 245 (identical to CM C649) and CM C1037 (identical to CM C659), third quarter of the 6th century BC, Flourentzos 1992, 152–53.

Riders and other figures on band cups and on a band skyphos:

6. CM C437 from Marion Tomb 214, 1886 Necropolis II, Wraith Painter (Gjerstad), 530 BC, *BAPD* 15377; Gjerstad 1977, 47–48 n. 445, pl. 43, 2; Eriksson 2011, 137, n. 58 (Fig. 2).

7. CM C674, Marion 1886 Necropolis II Tomb 218, Manner of Elbows Out (Gjerstad), 550–525 BC, *BAPD* 15543; Gjerstad 1977, 48 n. 448, pl. 44, 1; Eriksson 2011, 137, n. 58.

8. Band skyphos: CM C650, Marion Tomb 2, Excavations 1889–1890, Group of Rhodes 11941 (Gjerstad), 530–500 BC, *BAPD* 350952; Paralipomena 90, 45; Gjerstad 1977, 48 n. 452, pl. 44, 6–7; Eriksson 2011, 141 n. 124; *CVA* Amsterdam 2, Allard Pierson Museum 92 (Fig. 3).

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Cypriot antiquities in Austrian collections and Cypriot archaeology in Graz

An update

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ABSTRACT

The paper offers an update of the 2012 published survey of Cypriot collections in Austria and outlines current research in Cypriot archaeology at Graz University. The Kunsthistorisches Museum in Vienna completed the publication of its Cypriot pottery in 2019 with a Corpus Vasorum Antiquorum volume on Iron Age vases. Graz University holds within its numismatic collection several coins minted in Cyprus, among them a silver stater of Evagoras I. The Graz collections also contain casts of inscriptions donated by the botanist Franz Unger, who explored Cyprus in 1862. The Landesmuseum Kärnten holds several objects from Cyprus. Some, however, have been missing since World War II, among them terracotta figurines donated by Anton Prokesch von Osten. Collections held by the Cistercian Abbey Heiligenkreuz in Lower Austria and by the Scots Abbey in Vienna include Ptolemaic and Roman coins minted in Cyprus. A bronze cast relief in the abbey of St Florian in Upper Austria might be a Renaissance plaquette depicting a mythological scene. In the last decade, Graz University has strengthened its focus on studies of Cypriot limestone sculptures and terracottas and widened its research to include Attic vases in Cyprus. Since 2019, a field survey project at Amargeti, in the Paphos District, has been investigating the area diachronically. This focus on Cypriot archaeology is supported by a new professorship of Early Eastern Mediterranean Archaeology, covering the pre-Iron Age periods.

INTRODUCTION

This paper aims to introduce collections of Cypriot artefacts in Austria hitherto unknown to the scientific community, including ongoing projects in Graz, and to update the short contribution published in 2012[1] on Austrian collections holding Cypriot objects in Vienna,[2] Graz,[3] Innsbruck,[4] Klagenfurt,[5] Baden[6] and Horn.[7] In

1 Koiner 2012. Koiner 2012.

2 Kunsthistorisches Museum (Bernhard-Walcher 1984; Bernhard-Walcher et al. 1999), University of Vienna (Brein 1997), Austrian Academy of Sciences, Collection Fritz Schachermeyr (Reinholdt 2001, 12, 17–20, 37 cat. 088–090, pl. 1) and Sigmund Freud Museum in Vienna (Gubel 1994; Marinelli 2001, 125–27 cat. 40–45).

3 Universalmuseum Joanneum (Erath-Koiner 2005; Koiner 2006; 2009; 2020, 301–2, figs. 1–2) and the University of Graz (Koiner 2007, 2014).

4 Landesmuseum Ferdinandeum: Koiner 2012, 129–30, fig. 4; for the lamp inv. no. U 5021 type Type Loeschke IV cf. Noll 1937, 229 no. 13, fig. 71; Zemmer-Plank 1985, 220, cat. 337; Schumacher 2008, 75 no. 13, pl. 3, 13.

5 Landesmuseum Kärnten: Koiner 2012, 128.

6 Rollettmuseum: Zavadil 2002.

7 Höbartmuseum: Rihl 1992.

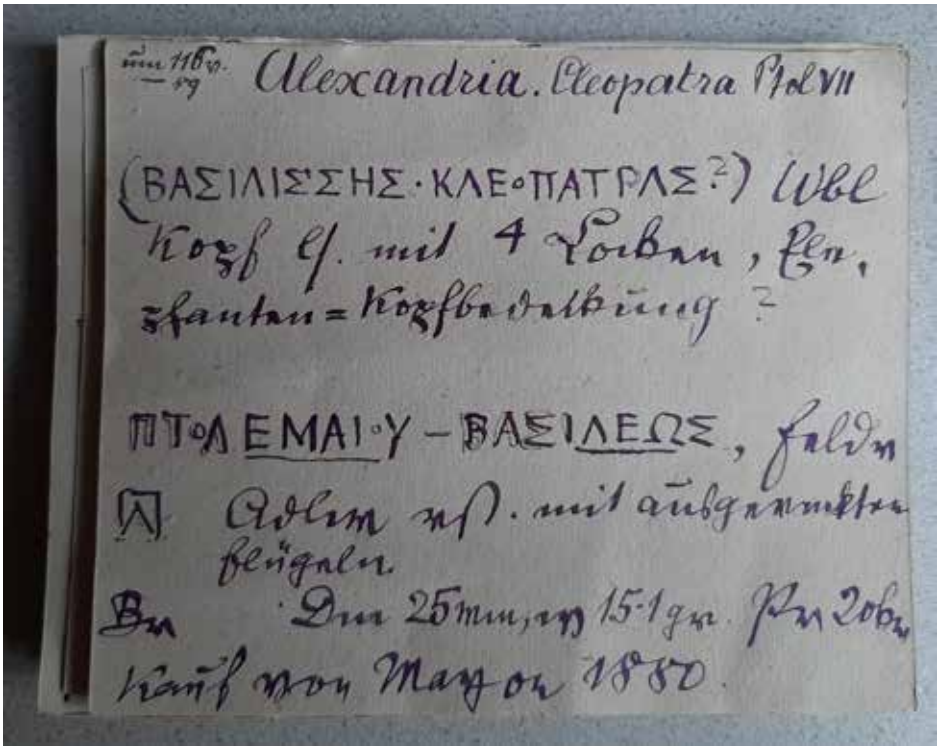

Fig. 1. University of Graz, Collection of Antiquities, Institute of Classics, file of the card catalogue written by Friedrich Pichler for coin inv. no. 616, AE, Ptolemy VI, Paphos. Obv: head of (Kleopatra I as) Isis with corn wreath right (© Institute of Classics, University of Graz, photo G. Koiner 2021).

the meantime, the Kunsthistorisches Museum in Vienna published a complete catalogue of the Cypriot Iron Age and hitherto unpublished Bronze Age pottery by Claudia Lang-Auinger in 2019.[8]

SOUTHERN AUSTRIA – GRAZ AND KLAGENFURT

The University of Graz owns collections containing Cypriot pottery and sculpture[9] as well as coins and casts of inscriptions from Cyprus. The Collection of Ancient Coins at the Institute of Classics in Graz includes seven coins minted in Cyprus, one silver stater of Evagoras I[10] and six Ptolemaic issues[11] (Figs. 1–2). Remarkably, the

8 Lang-Auinger et al. 2019. Selected pieces have been published by V. Karageorghis (in Bernhard-Walcher et al. 1999, 102–17 cat. 34–44) and by C. Lang-Auinger (2017; 2018; 2020). The Bronze Age pottery has been presented by Bernhard-Walcher (1984).

9 Koiner 2007, 2014; web portal archaeological collections: http://gams.uni-graz.at/context:arch.

10 Online catalogue in Numismatische Sammlung: http://gams.uni-graz.at/context:numis. An unpublished typescript catalogue (U. Schachinger, 2008) is part of the collection. Inv. no. 525, Salamis, AR, Evagoras I, donation of Prokesch von Osten 1868, Obv: head of Herakles with lion skin, Rev: goat and corn. However, Pichler described the head as Venus, the goat as a dog. Donated by "B Prokesch", "Botschafter" or Ambassador Anton Prokesch von Osten in 1868.

11 Cf. n. 11 for the documentation of the collection. Inv. no. 610, rather Kition than Alexandria, AR, Ptolemy II, donation Prokesch von Osten 1868, Obv: diademed head of Ptolemy I, Rev: eagle on thunderbolt. – Inv. no. 614, Paphos, AR, Ptolemy IV, donation Prokesch von Osten 1868, Obv: diademed head of Ptolemy I, Rev: eagle on thunderbolt. – Inv. no. 616, Fig. 1, rather Paphos than Alexandria, AE, Ptolemy VI, acquisition from the dealer Mayon 1880, Obv: head of (Kleopatra I as) Isis with corn wreath right, Rev: eagle on thunderbolt. – Inv. no. 617, rather Paphos than Alexandria, AE, Ptolemy VI, acquisition from Dr. (Leopold) Eger in Vienna 1872 no. 83, Obv: head of (Kleopatra I as) Isis with corn wreath, Rev: eagle on thunderbolt. – Inv. no. 639, Fig. 2, Salamis, AR, Ptolemy VIII, donation of Prokesch von Osten 1871 no. 65, Obv: diademed head of Ptolemy I, Rev: eagle on thunderbolt. – Inv. no. 640, Paphos, AR, Ptolemy VIII, acquisition from Dr. (Leopold) Eger in Vienna 1872 no. 83, Obv: diademed head of Ptolemy I, Rev: eagle on thunderbolt. For the history of the coin collection see Numismatische Sammlung. http://gams.uni-graz.at/context:numis.

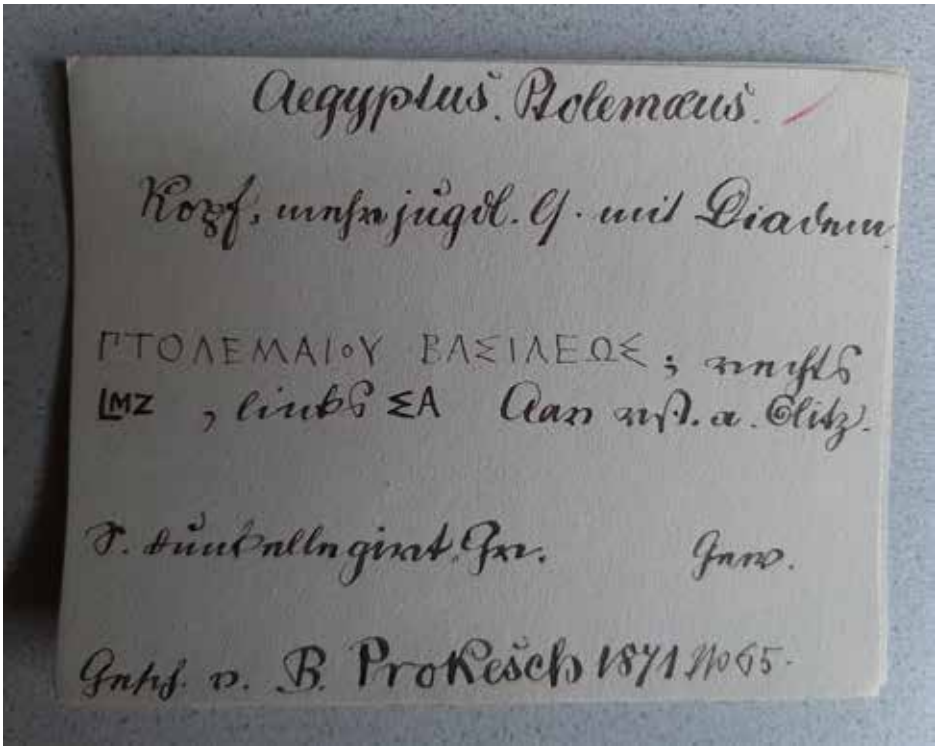

Fig. 2. University of Graz, Collection of Antiquities, Institute of Classics, file of the card catalogue written by Friedrich Pichler for coin inv. no. 639, AR, Ptolemy VIII, Salamis. Obv: diademed head of Ptolemy right (© Institute of Classics, University of Graz, photo G. Koiner 2021).

Institute has preserved the acquisition and inventory files[12] as well as the card catalogue in its original boxes, written by Friedrich Pichler (1834–1911), historian, archaeologist, poet, Professor of Numismatics and Heraldry and Head of the Numismatic and Archaeological Cabinet at Joanneum in Graz.[13] Casts of Cypriot inscriptions were brought to Graz by Franz Unger (1800–1870), an Austrian botanist, who visited several archaeological sites in Cyprus in 1862 where he made casts of inscriptions.[14] These casts, which are kept at the Institute of Classics, are currently being processed by Christian Wallner and Martin M. Bauer.[15]

In Klagenfurt, Landesmuseum Kärnten holds several Cypriot objects donated by private individuals in the 19th century.[16] The collection comprises a Middle Cypriot bronze spearhead with hooked tang[17] and a Roman glass perfume bottle.[18] An amphora with horizontal handles is of uncertain provenance and could also come from Melos.[19] No photographs have yet been taken of a donation by Anton Prokesch von Osten (1795–1876), an Austrian diplomat and collector who spent several years in Constantinople and Greece.[20] He donated approximately 40 terracotta figurines from the coast of Anatolia, but with possible Cypriot iconography, as the descriptions in the inventory tell us: "Votive figurines, made of terracotta, Cypriot sculptures". Prokesch von

12 The Cypriot coins are listed in "Akten des Archaeologischen Institutes 1865–1885".

13 The Cyprus files are stored in the box "Bithynia – Cyrene". For Pichler's academic career, see Modl 2015, 78–82; 2016, 47–50 and Modl and Peitler 2016, 21–3.

14 Unger and Kotschy 1865. His bibliography in Reyer 1871.

15 Bauer 2015, 5 n. 1. Epigraphische Sammlung. http://gams.uni-graz.at/context:epsg.

16 Koiner 2012, 128; Glaser 2014, 152.

17 Inv. no. 3891. Donation of Inspector Wurianek.

18 Inv. no. 786. Donation of Inspector Wurianek. Inv. N. 787, a pottery vessel, also donated by him, is missing.

19 Inv. no. 1244. Donation of Mrs. Clementine v. Vest. The provenance given on the Schedeblatt is "Cypern", in the inventory book, however, "Milo".

20 Cf. Bertsch 2005; 2009; Peitler and Trinkl 2019.

Fig. 3. Bronze plaquette, front, Monastery of the Canons Regular of St Augustine's Order at St Florian in Upper Austria, inv. no. F 144 (AN 10) (with kind permission of the Monastery's Art Collections, photo G. Koiner 2021).

Osten's donation also comprised "Altkyprische Kannen", i.e. ancient Cypriot jugs,[21] as well as the marble head of an Archaic *kouros* in Cypriot style.[22] The whereabouts of the Prokesch von Osten objects are not known. They might have been lost as the museum was the target of a bomb attack in World War II, which caused severe damage to the collection.

CLOISTER COLLECTIONS

The Roman Catholic Church and its orders and cloisters, with their long tradition of collecting, hold many artworks, not only of sacred character, but also antiquities of the pre-Christian period. So far, three collections include Cypriot antiquities, namely the Monastery of St Florian, the Monastery of Heiligenkreuz and the Scots Abbey in Vienna.

The Monastery of the Canons Regular of St Augustine's Order at St Florian in Upper Austria, first mentioned in 819 and since 1071 home of the Canons Regular of St Augustine, has preserved among its vast collections a single object from Cyprus, a small bronze cast relief with an unknown history of acquisition (Figs. 3–4).[23] It was published by Erwin Ruprechtsberger, who identified a seated male with a sceptre on the right side, served or venerated by several male figures to the left.[24] Two naked male figures in profile- and back-view on the left side carry oblong shields with pointed bases, and one holds a lance. They are flanked, on their left side, by a group of other warriors (?) and bushes or rocks, depicted as a uniform mass in the distant background. A naked male figure in the centre picks fruits or leaves from a tree, and a fourth naked male bows towards the seated figure on the extreme right, presenting him with a basket, bowl or flat object. The seated male figure is naked, bearded and maybe wreathed, holding a lance or sceptre upright in his left hand, his right arm outstretched to receive the gift. He is seated comfortably with his left leg bent back in front of a wall (?), and at his feet are two objects, perhaps a helmet and shield. The relief is bordered by a profiled frame. The format, the frame, the cast, the

21 Egger 1921, 112.

22 Egger 1921, 113–14: "153. In der rechten Ecke Inv.-Nr. 3277, fig. 94. Archaischer Apollokopf aus weißem Marmor, hoch vom Kinne zum Scheitel 0.25m, die rückwärtige Partie abgeschlagen; Fundort unbekannt, dem Stile nach wahrscheinlich kyprischer Herkunft. Arbeit des späten VI. Jahrhunderts v. Chr."

23 Inv. no. F 144 (AN 10), dimensions: w 9.52 cm, h 2.5 cm, d 0.35 cm. The Chorherr Ernst von Marinelli (1824–1887) visited Cyprus during a pilgrimage to the Holy Land and Egypt in 1853 without bringing objects from there. His friar Johann B. Langthaler (1846–1913) had travelled to the Holy Land but seen Cyprus only from the sea (Langthaler 1894, 127–28).

24 Ruprechtsberger 1986, 41–2 cat. 62, pl. IV.

Fig. 4. Bronze plaquette, rear, Monastery of the Canons Regular of St Augustine's Order at St Florian in Upper Austria, inv. no. F 144 (AN 10) (with kind permission of the Monastery's Art Collections, photo G. Koiner 2021).

whole composition including the stout figures, the form of the shields and, especially, the composition of several warriors (?) fading into the background at the left border have no close comparisons in ancient Greek or Roman reliefs. Instead, the relief resembles bronze plaquettes of the Renaissance period or later, which were sought after by collectors and sometimes attached to other objects, such as boxes, inkwells or mirrors.[25] The armed figures on the left side clearly have a martial character. However, their pointed shields do not resemble ancient Greek or Roman types but rather medieval and 16th century forms. The picking of fruit or leaves and the donation of a gift to the seated figure can be associated with a sacrifice or dedication to a deity, perhaps in order to ask for a successful military expedition or offer thanks for a successful enterprise. This would be corroborated by elements of armour lying on the ground near the seated figure. The wall behind the deity may depict a temple or altar. Ruprechtsberger also recognised the armed figures and the dedication scene. He proposed that the scene should be interpreted as showing veneration of a god, possibly Zeus. In fact, it could refer to a scene from Homer's *Iliad*,[26] where the Achaeans are in a desperate mood after having unsuccessfully fought for nine years at Troy. Odysseus encourages the leader of the Achaeans, Agamemnon, and recalls the sacrifice at Aulis, offered to all the gods, at the outset of the Achaean campaign. During this sacrifice, which took place under a plane tree,[27] an evil omen occurred –a snake devoured a mother bird with its nestlings– and Kalchas, the priest, realised that this was the prophecy of one particular god, Zeus, who had predicted that the Achaeans would spend nine fruitless years besieging Troy.

Founded in 1133, the Cistercian Abbey of Heiligenkreuz in Lower Austria owns a copious numismatic collection as well as other collections.[28] At least six coins are of Cypriot origin.[29] Four bronze coins were struck under the Ptolemaic kings in Paphos,[30] and two bronze coins were minted under the Emperor Claudius (AD

25 Triangular inkwells: Bange 1922, 40 cat. 299, pl. 42; 1922, 51–2 cat. 376, pl. 43. A Dutch (?) mirror, late 16th century AD: Weber 1975, pl. 175. Similar formats: Weber 1975, 124 cat. 148: w 9.7 cm, h 3.7 cm, southern Germany, 2nd third 16th century AD; 251 cat. 509, pl. 148: w 9.3 cm, h 2.3 cm, southern Germany (?), 3rd quarter 16th century AD. Similar proportion: Weber 1975, 178 cat. 307 pl. 91: w 12.5–12.7, h 3.3–3.4, Nuremberg, ca AD 1560–1580. Similar tree: 242–43 cat. 479.3, pl. 141, southern or central Germany, after AD 1550. Assembling of plaquettes: Leino 2013, 129–55. For fading figures e.g. Krautheimer 1982, pl. 112 (Gates of Paradise); Weber 1975, 208–9 cat. 400.6, pl. 110, workshop of Christoph Lencker or "Umkreis", end of 16th century AD.

26 *Iliad* II, 295–329.

27 *Iliad* II, 307.

28 Sammlungen Stift Heiligenkreuz. Münzen und Medaillen. Münzen und Medaillen - Stift Heiligenkreuz SammlungenStift Heiligenkreuz Sammlungen (stift-heiligenkreuz-sammlungen.at). Nägele 2018.

29 Baer et al. 2020.

30 Inv. no. S00501, Paphos, AE, Ptolemy VI together with Ptolemy VIII, Obv: head of Zeus Ammon, Rev: two eagles on thunderbolt. – Inv. no. S00516, Paphos, AE, Ptolemy VI, Obv: Head of (Kleopatra I as) Isis; Rev: Eagle. – Inv. no. S00546, Paphos, AE, Ptolemy III, Obv: head of Zeus Ammon, Rev: archaising statue of a goddess (Aphrodite?). – Inv. no. S01236, Paphos, AE, Ptolemy IV (in

41–54) by the Koinon Kyprion.[31] The coins entered the collection through the activities of Pater Dominik Bilimek OCist (1813–1884),[32] member of the Cistercian Abbey Neukloster in Wiener Neustadt and, after the closure of Neukloster, from 1882 a member of the Abbey Heiligenkreuz with residence at the Heiligenkreuzer Hof, the abbey's agency in Vienna, where he died in 1884. He was an ardent researcher and collector, travelling and collecting even in the New World with the unfortunate Emperor of Mexico, Archduke Maximilian of Habsburg-Lothringen (1832–1867). Upon Maximilian's appointment, and after Maximilian's execution in 1867, Pater Dominik became director of the Museum at Miramare Castle in Trieste. Still friar of the Abbey Neukloster, he built up a coin collection which, when he became a member of Heiligenkreuz Abbey, he incorporated into the numismatic collection of his new home, situated at the Heiligenkreuzer Hof. The collection of coins from Neukloster is said to include 32,000 pieces in a letter of 1939 or 1940,[33] a number which was later considered doubtful.[34] The coins are being processed by the Department of Numismatics at Vienna University under the direction of Martin Baer.[35]

The third monasterial collection is located at the Abbey of Our Beloved Lady of the Scots in Vienna, named after Iro-Scottish Benedictine monks who founded it in 1155. The abbey houses a museum, and its coin collection comprises over 5000 coins which were published in 1920 by Pater Dr Albert Hübl OSB (1867–1931), historian, librarian, archivist, director of the "Schottengymnasium" and curator of the museum.[36] It is a meticulous publication, which deserves great admiration given the fact that the then main reference on Ptolemaic coins, by Svoronos,[37] had been published only a few years earlier. In the preface, the author hinted at a monetary shortage which prevented the publication of illustrations. The coin collection contains 26 bronze coins minted in Cyprus, all of them Ptolemaic issues.[38]

ARCHAEOLOGICAL RESEARCH IN GRAZ

The study of stone sculpture and terracotta figurines has been part of the author's scholarly life for the last 20 years.[39] In recent years, substantial support was given by Nicole Reitinger,[40] an expert in limestone and terracotta sculptures. Projects on sculptures from ancient Ledra and terracotta figurines are in preparation. 3D-scanning[41] and the analysis of the polychromy of sculptures will help to better understand and reconstruct the objects. In particular, 3D scanning and analysing the scans of life-size and larger-than-life-size limestone sculptures may reveal new insights on the sculptural workshops of ancient Cyprus.[42] A doctoral thesis at the University of Graz, undertaken by Sabine Sturmann,[43] is investigating ancient reliefs and friezes in Cyprus, their function, dating and meaning. An outstanding member of the Graz Cyprus team is Maria Christidis, who has been working on

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literature sometimes Kleopatra VII), Obv. head of Arsinoe III (or Kleopatra VII), Rev: double cornucopia with diadem.

31 Without inv. no. Cf. Amandry 2015, fig. 1.

32 H.J. Roth, Dominik Bilimek OCist. http://www.zisterzienserlexikon.de/wiki/Bilimek,_Dominik.

33 Letter from Dr. E. Holzmair to P. Hofmeister, 8 January 1939 or 1940.

34 W. Richter, Münzsammlung Stift Heiligenkreuz, 12. Juni 1986.

35 Wolters 2017.

36 Hübl 1920.

37 Svoronos 1904–1908.

38 Hübl 1920, 391 no. 4284 (Ptolemy I), 395 nos. 4344–47 (Ptolemy IV), 397 nos. 4358–68 (Ptolemy VI), 398 nos. 4415–18 (Ptolemy VIII), 398–99 nos. 4421–24 (Ptolemy X), 400 nos. 4438–39 (Kleopatra VII).

39 See the author's publications on ORCID: https://orcid.org/0000-0002-8394-5872.

40 Reitinger 2015; 2017; 2019; Koiner et al. 2020a; Koiner and Reitinger 2018; 2019; Reitinger et al. 2020.

41 3D scans done by Paul Bayer in the Cyprus Museum in 2018.

42 In cooperation with András Patay-Horváth, Eötvös Loránd University in Budapest, who is the key investigator using this method.

43 S. Sturmann, Figürliche Kalksteinreliefs aus Zypern (in progress).

Attic vases in the Cyprus Museum since 2016. She focuses on their themes and shapes, the contexts they were used in, the number of imported vessels and whether interaction took place between the users of local and Attic wares.[44] She will publish the vases as part of the *Corpus Vasorum Antiquorum* series. In 2019 the University of Graz started an archaeological field survey project near the village of Amargeti in the Paphos District in order to investigate the area diachronically and to locate ancient domestic and sacred places.[45] One of these, a sanctuary of *Apollon* or *Opaon Melanthios*, was excavated by D.G. Hogarth on behalf of the Cyprus Exploration Fund at the site of *Petros Anthropos* in 1888. Its exact location, however, is unknown.[46] The focus of the survey was on several sites north of the village of Amargeti, especially at *Asomatos*, where there are ruins of a church once dedicated to one of the Archangels in an area renowned for yielding high numbers of statuettes and figurines; and *Petros Anthropos*, called "man of stone" in the 19th century due to its "richness" in ancient statuettes. The survey yielded pottery of Hellenistic, Roman and Medieval date, as well as several fragments of terracotta figurines, mainly on the site of *Asomatos*, ranging in date from the Archaic to the Hellenistic period. The archaeological survey was supported by Ground Penetrating Radar[47] and the analysis of satellite data and aerial photographs.[48] The results were highly encouraging, and further research campaigns will follow.

After the fusion of three departments and one centre to form the Institute of Classics ("Institut für Antike")[49] in October 2019, a new professorship for Early Eastern Mediterranean Archaeology, "Frühe Hochkulturen", was created. Laerke Recht[50] has held this professorship since October 2020, specialising in the Cypriot Bronze Age and the interaction of humans and animals in daily life and cult. The members of the Institute are happy to welcome her, with the support of her assistant, Eirini Paizi,[51] as a new, vital and visionary member of the Cypriot branch at the Institute!

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44 Christidis 2017; 2020; forthcoming; also Christidis in this volume.

45 Many thanks to the Director of the Department of Antiquities, Cyprus, Dr Marina Solomidou-Ieronymidou, as well as to Dr Margarita Kouali, Archaeological Officer, Archaeological Museum of the Paphos District. Survey Project, Graz University (Austria), 2019, Website of the Department of Antiquities, http://www.mcw.gov.cy/mcw/DA/DA.nsf/All/C818C368AF7E077BC22584E40032273E?OpenDocument; Koiner et al. 2020b; Koiner forthcoming.

46 Hogarth 1888; Hogarth et al. 1888. For the site, see Masson 1994 and Ambros 2016.

47 The investigation was carried out by Ing. Rainer Morawetz, Technisches Büro für Geophysik, Schalchen, with the support of Ing. Andreas Milchrahm.

48 I would like to thank Vassiliki Lysandrou and Athos Agapiou, Cyprus University of Technology.

49 Homepage of the Institute of Classics. https://antike.uni-graz.at.

50 Her publications on ORCID: https://orcid.org/0000-0002-3772-5924.

51 Her publications on Academia.edu: https://trustlaws.academia.edu/EiriniPaizi.

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Cypriot connectivity from the Late Classical to the Roman periods

A diachronic perspective

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ABSTRACT

The paper examines Cypriot connectivity from ca 400 BC to AD 300 through an analysis of the evidence for Cypriots active outside the island, and of the exportation of Cypriot-made ceramics. Judged by these criteria, the number of Cypriots overseas declined steadily from the 4th century BC onwards, reaching a low point in the Roman period and the export of Cypriot ceramics followed a similar pattern. This is surprising, firstly because an active involvement in maritime trade has been attributed to the Cypriots in the Bronze and Iron Ages, and secondly because the Mediterranean otherwise experienced a peak of connectivity in the Late Hellenistic and Early Imperial periods. It is suggested that one reason for this apparent paradox might be that an active Cypriot involvement in the overseas metal trade became irrelevant, when the Ptolemaic kings at first and later the Roman emperors assumed control of the island's copper mines.

The aim of this contribution is to investigate fluctuations in Cypriot connectivity from ca 400 BC to AD 300, in order to throw light on aspects of the history of the island during these centuries. Connectivity may be studied using a variety of methods; the concept is closely connected to mobility and network theories.[1] The present paper approaches it through an analysis of evidence for the presence of Cypriots outside the island (inscriptions made by –or referring to– Cypriots, and references by ancient authors), and of exports of Cypriot ceramics, building on the scholarship of Jean Pouilloux, Ino Nicolaou, Antoine Hermary and Eustathios Raptou.[2] As noted by Hermary, the whole issue is in need of a new comprehensive study,[3] but such an attempt is outside the scope of this contribution, which focuses on the chronological distribution of the evidence.[4]

1 See Lund 2015, 215–16 and Gordon 2018, 19–20. For connectivity and maritime networks, see Leidwanger and Knappett 2018; Leidwanger 2020, 2–9 and now also Knapp et al. 2021.

2 Pouilloux 1973; 1976; 1988; Michaelidou-Nicolaou 1976; Nicolaou 1986; Hermary 1999; Raptou 2000.

3 Hermary 1999, 45. A more comprehensive investigation would also need to address the presence of foreigners in Cyprus and imports to the island. For these, see Nicolaou 1986 and Lund 2015, 164–210.

4 Cypriot inscriptions or stamps on movable objects found outside Cyprus have not been taken into account. Likewise, examples of uncertain date or authenticity have been omitted, for instance Masson 1961, 355 nos. 372, 355–56, 373 no. 420, 388 nos. 454–55. For methodological issues involved in defining "foreigners and travellers", see Handley 2011, 21–36.

My point of departure is a statement made by Einar Gjerstad in 1960: "in the Cypro-Classical period new *koine* tendencies appear, preparing the uniform civilization of Hellenistic and Roman times".[5] This implies that Cyprus became so immersed in a supposed Hellenistic and Roman *koine* that the arts and crafts of the island ceased to follow local traditions and should no longer be regarded as expressions of a true Cypriot character. Several scholars have echoed this notion,[6] though some are now advocating a subtler approach.[7] Moreover, our understanding of the *koine* concept has advanced considerably since Gjerstad's day,[8] and current knowledge of the archaeology of Cyprus suggests that regional differences continued to make themselves felt in Hellenistic and Roman times.[9] I therefore agree with Mark van der Enden's statement: "*koine* is perhaps better described as a superficial veneer masking the variety present underneath".[10]

It is nevertheless reasonable to link the perception that the Hellenistic and Roman periods differed in some way from what went before with the fact that Cyprus was set on a fundamentally different trajectory, when the island was unified under foreign powers: at first the Ptolemaic Kingdom, and later the Roman Empire.[11] The abolition of the autonomous polities in about 306 BC was followed by the destruction of one of the former royal centres, Marion[12] and some of the others, for instance Kition, went into decline.[13] But the change was also accompanied by the foundation of Arsinoe in the early 3rd century BC,[14] and the emergence of the new capital, Nea Paphos.[15] Indeed, surveys have consistently shown that the Hellenistic and Roman periods were characterised by settlement expansion and increasing prosperity nearly everywhere – a decline only setting in at some time during the 2nd century AD (broken by an upsurge in the Severan period).[16]

THE PRESENCE OF CYPRIOTS OUTSIDE CYPRUS

In the 4th century BC, there is documentation for ca 162 Cypriots overseas,[17] the vast majority (125) in the form of *graffiti* and inscriptions found in Egypt (mostly made by mercenaries): some 60 syllabary and five alphabetic inscriptions from Karnak,[18] and close to 50 syllabary and five or six alphabetic ones from Abydos.[19] In addition, there is an inscription naming two individuals on the pyramid of Cheops at Gizeh,[20] and one each from Thebes and Naukratis.[21] Thirty-seven instances are known from other parts of the Mediterranean, mainly epitaphs

5 Gjerstad 1960, 105.

6 Karageorghis 1982, 175, 187; Connelly 1988, 111–12; Monloup 1994, 20; Flourentzos 2007, viii; Knapp 2008, 30; Karageorghis and Kiely 2010 [2012], 501; Gordon 2012, 194 no. 807, 203 nos. 831, 207–10, 213, 233, 316, 321, 504 no. 197; Michaelides 2012, 69; Koiner and Reitinger 2019, 44.

7 Michaelides and Papantoniou 2018, 268–69, 177, 289. See also Cayla and Hermary 2003, 243; Papantoniou 2012, 41–5, 358–61; 2013, 18; Winther-Jacobsen 2014, 102.

8 Laftsidis 2018; 2019; Poblome et al. 2013, 5484.

9 Lund 2015, 230–36.

10 van der Enden 2013, 30.

11 Iacovou 2007, 48; Papantoniou 2013, 170, 178–81; Körner 2020, 152.

12 Bekker-Neilsen 2000, 197–98; Childs 2008, 68; 2012, 104.

13 Georgiou 2020, 7.

14 See Childs 2008, 68–74; Najbjerg 2012: Olson et al. 2018; Raptou 2019; Serwint 2019.

15 See Bekker-Nielsen 2000; Raptou 2016.

16 For an overview of the archaeology and history of Hellenistic and Roman Cyprus, see Lund 2015, 20–31; 2020.

17 Neither Rhoikos, the king of Amathus, who was taken prisoner by the Athenians, nor the Cypriots who took part in the campaigns of Alexander the Great have been included in the count, cf. Nicolaou 1986, 426, 428–29.

18 Masson 1961, 373–87 nos. 421–53; Nicolaou 1986, 428; Halczuk 2019, 615–20 KAR 1-3; Steele 2019, 78, 216–19, 225, 229.

19 See Masson 1961, 356–73 nos. 374–419; Nicolaou 1986, 428; Hermary 1999, 45–51; Steele 2019, 137, 213, 214–16, 223.

20 Masson 1961, 354–55: "v^{e} ou iv^{e} s."; Nicolaou 1986, 427–28; Steele 2019, 213–14.

21 Thebes: Masson 1961, 373 no. 420; Halczuk 2019, 631–32 TH 1; Steele 2019, 214 no. 43; Naukratis: Nicolaou 1986, 428.

found in Piraeus, Athens and Eleusis.[22] One of the deceased was a doctor,[23] but the majority were presumably merchants and their wives, and an inscription testifies to a Cypriot *koinon* at Piraeus.[24] Most of these individuals originated from Kition and Salamis, but persons from Marion, Soloi, Paphos and Amathus are documented as well, and inscriptions referring to Cypriots have also been found in Chalkis, Delos, Delphi and Pantikapaion.[25]

In the 3rd century BC, the number drops to 44, the decrease being particularly steep in Egypt, where 13 inscriptions or *graffiti* made by Cypriots have been recorded at Abydos and Thebes (mercenaries from Paphos, Salamis and a pilgrim (?) from Soloi).[26] In addition, we have the epitaph of a Salaminian in Alexandria, home also to the Paphian comic poet Sopatros, and another Salaminian is mentioned in a legal papyrus in the Tebtunis archive.[27] But a decline in occurrences of Cypriots overseas is also evident elsewhere, with a total of 30 instances, mainly Salaminians and Paphians in Rhodes, home to *koina* of Laphiastai and Paphiastai.[28] Paphians, Amathusians and Salaminians are also documented at Delphi,[29] and to these may be added four epitaphs found at Demetrias in Thessaly, naming individuals from Paphos, Amathus and Kourion,[30] as well as evidence from Delos (Kition, Karpasos),[31] Athens (the philosopher Zenon from Kition and his pupil Persaios),[32] Amorgos and Syria.[33]

Of 34 examples dated to the 2nd century BC, Egypt only accounts for about six: two elephant hunters from Kourion at Abu Simbel, two soldiers from Paphos at Koptos, at least one mercenary at Alexandria and a further individual at Thebes.[34] There are 28 instances from the rest of the Mediterranean, with Delos taking a clear lead with 16 Cypriots (from Salamis, Karpasos and Paphos), followed by Rhodes, Athens and Delphi with three each (from Salamis, Karpasos and Paphos), and Rome (two ambassadors).[35]

Only 13 cases are known from the 1st century BC, of which a mere two come from Egypt: a mercenary at Hermopolis Magna, and a physician from Kition in Alexandria.[36] The remaining 11 comprise two Salaminians and one Paphian each in Athens and Rhodes,[37] a Paphian and a Salaminian each in Kos,[38] a Salaminian in Delos, a Paphian in Orchomenos,[39] and a victor in the Tamynian Games at Eretria.[40]

Nicolaou noted that the "presence of Cypriots abroad … is not that strong" in the Roman period, and the number of such cases amounts in fact to no more than about 20, which translates into an average of less than

22 Nicolaou 1986, 426–27; Raptou 2000, 21–4. For a discussion of the funerary inscriptions from Attica relating to Cypriots and dating to the 5th and 4th centuries BC, see Rosell 2012, 100, 327–39 nos. 450–81.

23 SEG XXII no. 196 (b); Michaelides 2013, 326–27.

24 Nicolaou 1986, 425–26; Raptou 2000, 23 no. 25; Kloppenberg and Ascogh 2011, 26–32. The Cypriots were far from the only resident aliens in Athens and Piraeus, see Stager 2005, 443–45.

25 Nicolaou 1986, 427 nos. 46–8; Hermary 1999, 52 no. 44; Pouilloux 1976, 161 no. 1; 1988, 96 no. 24. For the inscription from Pantikapaion, see Dimitrova 2018.

26 Nicolaou 1986, 430; Hermary 1999, 46–7; La'da 2002, 225 E1934 and E1937, 279 E2385, 288 E2453.

27 Michaelidou-Nicolaou 1976, 115 Σ 49 and 119 T 39; Nicolaou 1986, 430; La'da 2002, 225 E1935, 279 E2384 and E2386.

28 Nicolaou 1986, 430–1; Pouilloux 1988, 96; Raptou 2000, 24 no. 31. See also Fraser 1970.

29 Pouilloux 1976, 161; Nicolaou 1986, 431; Hermary 1999, 52; Raptou 2000, 25.

30 Michaelidou-Nicolaou 1976, 43 A 114 and A 138, 56 Δ 68, 115 Σ 4; Nicolaou 1986, 431; Raptou 2000, 28.

31 Nicolaou 1986, 431; Pouilloux 1988, 96; Raptou 2000, 24.

32 Nicolaou 1986, 431; Pouilloux 1988, 98,

33 Michaelidou-Nicolaou 1976, 31 A 20; Nicolaou 1986, 430.

34 Michaelidou-Nicolaou 1976, 96 Π 13; Nicolaou 1986, 430; Hermary 1999, 48 nos. 20, 22; La'da 2002, 128 E1055–1056, 225 E1938–1939, 279 E 2283; Fischer-Bovet 2020, 136–40.

35 Michaelidou-Nicolaou 1976, 42 no. 131, 43 no. 122, 46 A 163; Pouilloux 1973, 405–6; 1976, 159; Bruneau 1978, 36; Nicolaou 1986, 430–31; Raptou 2000, 24–5.

36 Michaelidou-Nicolaou 1976, 96, Π 14; Nicolaou 1986, 430; Pouilloux 1988, 98; La'da 2002, 124 E1019.

37 Michaelidou-Nicolaou 1976, 118 T 25; Nicolaou 1986, 431.

38 Michaelidou-Nicolaou 1976, 36 A 64, 114 Σ 41.

39 Michaelidou-Nicolaou 1976, 64, Z 22, 108 Σ 2.

40 Michaelidou-Nicolaou 1976, 44 A 149; Pouilloux 1976, 161; Nicolaou 1986, 430.

seven for each of the first three centuries AD. There seems to be no evidence from Egypt, but three Salaminians, a Kitian and a Paphian are documented at Athens and Piraeus,[41] plus two Paphians, one Salaminian and a Chytrian at Delphi,[42] and a Salaminian at Oropos, Sparta, Paros, Stratonikea and Antioch, though some of these might come from the island of Salamis rather than Salamis in Cyprus.[43] Interestingly, there is also evidence of three, perhaps four, Cypriots in Rome, and one each at Naples and Messena.[44] Reference should, finally, be made to inscriptions referring to a *Cohors Cypria*, which served in the Black Sea region from the second half of the 1st century into the 2nd century AD.[45]

The figures quoted for each century must be approached with a good deal of caution, because not all inscriptions need imply the actual presence of a person from Cyprus.[46] Moreover, they only represent a minimum, because it is hard to estimate the number of members of a given Cypriot *koine* or of the *Cohors Cypria*. For the sake of consistency each has been attributed the number 1, which is certainly too low. The *Cohors Cypria* thus originally comprised ca 500 men, who were initially enrolled in Cyprus, but it later came to include recruits from elsewhere.[47] However, even if all mercenaries (and presumed mercenaries)[48] are omitted from the calculation, a steady decline in the number of Cypriots outside the island is still evident. The figure drops from ca 40 in the 4th century BC to ca 32 in the 3rd century BC, ca 30 in the 2nd century BC, ca 12 in the 1st century BC, and ca 20 in the first three centuries of our era.

CYPRIOT CERAMIC EXPORTS IN THE HELLENISTIC AND ROMAN PERIODS

In the Hellenistic period, Cypriot black gloss and colour-coated fine wares were mainly exported to sites on the Levantine coast and Egypt, but apparently in limited quantities, and the bulk of the finds dates from the 3rd and the 2nd centuries BC.[49] This assessment may in part be caused by our inability to identify pottery made in Cyprus found outside the island, but it is supported by the distribution of the more readily recognisable Cypriot amphora stamps from (mainly) the 3rd century BC in Egypt and the Levant.[50] In Alexandria, the major find spot, Cypriot amphora stamps comprise 10% of the total stamped handles dating to the late 4th and 3rd centuries BC, but only 4% of the Hellenistic amphora types from rescue excavations.[51] As far as ceramic fine wares are concerned, Sandrine Élaigne noted in Alexandria "tout au long des IIe et Ie siècles av. J.-C. l'amenuisement des importations chypriote. Le phénomène s'exprime jusqu'à l'époque tibéro-claudienne".[52]

In the Roman period, the situation becomes even more obscure, not least because we are unable to identify with certainty Cypriot Roman amphora types on the export markets, if –as now seems likely– the bulk (if not all) of the so-called "pinched-handle" amphorae were made in Rough Cilicia rather than in western Cyprus as

41 Nicolaou 1986, 434.
42 Pouilloux 1976, 163–64; Nicolaou 1986, 434.
43 Nicolaou 1986, 434.
44 Pouilloux 1976, 163; Nicolaou 1986, 434.
45 Bekker-Nielsen 2002; Summerer and Christodoulou 2021.
46 It is, for instance, far from certain that Cypriots who were granted *proxenia* outside the island ever visited the cities in question, as pointed out by Hermary 1999, 52.
47 I am grateful to Tønnes Bekker-Nielsen for enlightening me on the *Cypria cohors* and for drawing my attention to the publication by Summerer and Christodoulou.
48 In the case of Egypt, it is not always easy to distinguish between the two categories, cf. Steele 2019, 213–14.
49 In Beirut, for example, Sandrine Élaigne (2007, 122) notes that Cypriot imports diminished by the beginning of the 2nd century BC. For more references, see Lund 2015, 206–7.
50 For Cypriot amphorae in the Hellenistic period, see Kaldeli 2013; Lund 2015, 206; Dobosz 2016, 191. Finds from Israel are discussed by Finkielsztejn 2013.
51 Cankardeş-Şenol and Şenol 2013, 62 and Diagram 1.
52 Élaigne 2012, 162 and fig. 92.

previously thought.[53] We cannot be sure, either, that the so-called *Cypriot Sigillata* was actually produced in the island, and the widespread distribution of this ware can accordingly no longer be considered unambiguous evidence for a substantial export of Cypriot pottery in the Roman period.[54]

A PRE-HELLENISTIC PERSPECTIVE

The archaeologically visible Cypriot exports may, of course, only represent the tip of an iceberg, since evidence for grain, textiles and other organic materials are largely lost,[55] but one is nevertheless left with the impression that exportation of Cypriot pottery was at a rather low –and ever decreasing– level throughout the Hellenistic and Roman periods,[56] mirroring the drop in the number of Cypriots who were active overseas in the same periods. This is rather surprising, because the opposite is often claimed for the Bronze and Iron Ages. Susan Sherratt has thus suggested that "Cypriots were largely responsible for carrying out" the thriving pottery trade in the Levant in the 14th and 13th centuries BC,[57] and Bernard Knapp argued that we are dealing with "a diverse, highly specialised and well organised polity that coordinated if not controlled transport, communication and exchange within and beyond the island" between ca 1750/1700 and 1100/1050 BC.[58] An active role has also been attributed to the islanders in the Iron Age,[59] and the presence of Cypriots outside the island from the Archaic to the Classical periods is also well documented.[60]

It is admittedly hard to reliably relate the connectivity in one period to that of another due to the diversity of our data. But if it is, nevertheless, accepted as a working hypothesis that the number of Cypriots active outside the island in the Hellenistic and Roman periods was smaller than before and even decreasing, the logical next question must be to ask the reason for this.

An observation made by Louise Steel concerning the active involvement of Cypriots in the maritime trade of the Late Bronze Age (LBA) holds in my view the clue to an explanation: "The Late Bronze Age was also characterized by increased Cypriot involvement in maritime trade around the eastern basin of the Mediterranean, reaching a peak in the 14th and 13th centuries BC … Cypriot participation in this trade was dependent on exploitation of the rich copper resources located in the foothills of the Troodos Mountains".[61] As is well known, the exploitation of these copper resources was central to the island's economy, at least from the 2nd millennium BC onwards, and copper continued to be a major resource for the Iron Age kingdoms,[62] even if a part of the revenue was presumably paid as tribute to the island's Assyrian and later Egyptian and Persian overlords. The corollary of the observation made by Louise Steel is that one might expect a diminished involvement of Cypriots in the overseas maritime trade, if the island was to lose control of its mines, which was precisely what it did in the Hellenistic and Roman periods.[63]

53 Lund 2015, 172–74.
54 Cf. Lund 2015, 207 and the references there cited.
55 See Michaelides 1996; Leonard 2005, 782–85; Lund 2015, 220–21.
56 Lund 2015, 206.
57 Sherratt 2015, 77.
58 Knapp 2013, 432.
59 See, for instance, Raptou 1999, 136; Bourogiannis 2013, 140; Ioannou 2017, 437; Ilieva 2019, 67, 70–1, 90–4.
60 Nicolaou 1986, 423–33.
61 Steel 2013, 572.
62 Kassianidou 2013. See, however, Petit 2019, 33 for a possible hiatus in the copper production between ca 1150 and 750 BC.
63 Raptou 1996; Burnet 1997; Hauben 2005, 184–88; Leonard 2005, 824, 829–32; Raptou 2016, 54.

THE PTOLEMAIC AND ROMAN EXPLOITATION OF THE COPPER AND TIMBER OF CYPRUS

It is generally assumed that ownership of the Cypriot mines fell to the Ptolemaic kings when the island became part of the Ptolemaic Empire,[64] and this is confirmed by an inscribed statue base from Palaepaphos, which refers to a certain Potamon as *antistrategos* and chief administrator of the mines.[65] They later became the property of Rome, and Augustus gave King Herod "half the revenue of the copper mine of the Cypriots, and management of the other half", according to Josephus (Jewish Antiquities XVI.128).[66] They reverted to Rome after the death of Herod, and archaeological field work in the mining districts of Cyprus has shown that the mines in this area continued to operate –even at an increased level– through the Hellenistic and Roman periods.[67] This is confirmed by radiocarbon dates and actual finds made at some of the ancient mines and copper production sites,[68] and also by the eyewitness account by Galen, the famous doctor from Pergamon, who visited the Cypriot mines in AD 166 (De Temp. Fac. Simp. Med.9).[69]

Timber was another economic resource, of which the Cypriots lost control when the island became part of the Ptolemaic Empire. The felling of trees was a royal prerogative,[70] and the forests of Cyprus assumed great importance to the Ptolemies,[71] since the island was allegedly the only wooded area under Ptolemaic control.[72] It became a centre for Ptolemaic shipbuilding,[73] in an age characterised by an arms race involving increasingly large size warships,[74] and this industry continued to be important to Roman Cyprus.[75] Timber was, of course, also in heavy demand by the mining industry.[76]

It is hard to assess the value of the timber and copper resources in absolute terms, but according to Plutarch, the younger Cato confiscated no less than 7,000 talents from the last Ptolemaic ruler in Cyprus, a huge sum that may in part have accumulated from exploitation of the mines.[77] Herod in turn presented Augustus with 300 talents, which some scholars think correspond to the revenue of the Cypriot mines, though this is far from certain,[78] and Shimon Dar has even suggested that the income derived from Herod's lease on the Cypriot mines was an important factor in financing "his grandiose construction projects", including the harbour at Caesarea.[79] This claim is probably exaggerated,[80] but it is difficult to believe that the loss of two of the island's key natural resources did not impact its economy negatively.

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64 Mitford 1980, 1297 no. 23; Michaelides 1996, 141; Raptou 1996, 252; Kassianidou 2000. For mines being the property of the Ptolemaic kings, see Cayla 2018, 258.

65 Papantoniou 2013, 185; Cayla 2018, 255–59 no. 134 where it is dated either between 58 and 48–47 BC or between 48–47 and 31 BC; Michel (2020, 59, 181 no. 40) dates it to the second half of the 1st century BC.

66 Wallace and Orphanides 1990, 167 no. 8; Hauben 2005; Cayla 2018, 226–28 no. 105; Dar 2018, 360.

67 Winther-Jacobsen 2013, 329–30; Kassianidou et al. 2021.

68 Buchholz 2004, 67–77; Kassianidou 2013, 72–73, 75.

69 Wallace and Orphanides 1990, 222–29; Michaelides 1996, 144–45; 2009, 94; Hauben 2005, 187–88.

70 Thomsen 1995, 31–3; Hannestad 2007, 93.

71 Papantoniou 2013, 181.

72 Hauben 1987.

73 Michaelides 1996, 141–42; Leonard 2005, 249–50.

74 Murray 2012, 3–6.

75 Leonard 2005, 824–25; Mehl 2016, 251–53.

76 Raptou 1996; Kassianidou 2013, 36.

77 Oost 1955; Wallace and Orphanides 1990, 189 no. 35; Dar 2018, 360.

78 Thus also Hauben 2005, 193–94.

79 Dar 2018, 357, 360, 364.

80 The exchange of gifts between Augustus and Herod seems to have taken place in 12 BC (Hauben 2005, 176–77), less than a decade before the death of Herod, which probably occurred around 4 BC.

CONCLUSION

To conclude: the presently known evidence suggests that the number of Cypriots who were active outside the island decreased from the 4th century BC onwards, reaching a low point in the Roman period. The exportation of Cypriot ceramics seems to have followed a similar pattern. We are, admittedly, dealing with a complex situation, because Cypriots seem to have ventured further from home (to Rome, Messina and Naples) in the Roman period than before, when the corresponding evidence from Egypt and Rhodes appears to have dried up. But the decline is nonetheless extremely surprising, because the Mediterranean otherwise experienced a peak of connectivity in the Late Hellenistic and Early Imperial periods.[81]

Perhaps the main reason for this was that an active Cypriot involvement in the metal trade overseas became irrelevant, when the Ptolemaic kings and the Roman emperors gained control of the island's copper mines. This hypothesis would also account for the reduced export of Cypriot ceramics, especially if credit is given to the "piggy-back" theory: that ceramics and other goods were transported overseas as space-fillers in cargoes of more expensive –but archaeologically invisible– commodities.[82] Evidence for Cypriot merchants overseas also decreased from a robust presence in Piraeus and Athens in the 4th century BC, through the 3rd and 2nd centuries, when most of the relevant documentation comes from Rhodes and Delos, and there were hardly any merchants among the Cypriots abroad afterwards.

Previous scholarship has not, of course, failed to notice that Cyprus was deprived of income from the mines under Ptolemaic and Roman rule, but the suggestions put forward in this paper imply that the negative consequences might have been more severe than is generally assumed.[83] This is not, however, to suggest that the island was impoverished in consequence. As mentioned at the outset, the archaeological evidence indicates that Cyprus flourished during most of the Hellenistic and Roman periods, presumably because the island was largely self-sufficient, as recognised by Strabo in the early 1st century AD (XIV.8.l4).[84]

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81 Cf. A.J. Parker's frequency graph of shipwrecks in the Mediterranean (1992, fig. 3), which has been brought up to date and discussed by Andrew Wilson (2011, 33–6, fig. 2.5). See also Lund 2015, 216–17 and Robinson et al. 2020.

82 Lund 2015, 213–14.

83 Cf. Hunt 1982, 122.

84 Wallace and Orphanides 1990, 131 no. 11; Michaelides 1996, 139. See also Mitford 1980, 1297 and Lund 2015, 220.

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